

Sunex

Heat pumps producer braving the storm

We initiate coverage of Sunex with a HOLD recommendation and a Fair Value of PLN 12.00, which implies 8.1% downside. The company is a Polish producer of heat pumps, solar collectors and many other types of products sold in the renewables sphere. Sunex predominantly designs and manufactures most of the products in its portfolio itself. It sells either under own brand or O&M brands, primarily in Germany, Austria and Poland. Its heat pumps are eligible for state subsidies in those countries. It also owns an on-line shop, where various products of primarily global brands are on offer. The e-commerce channel allows the company to not only place their own product but also provides an insight into the current demand of customers for various products. Sunex is heavily dependent on macroeconomic and construction growth in Germany, Austria and Poland, as well as the subsidies scheme for improving energy efficiency on the particular markets. Last year's record-high results were driven by i) the boom sparked by the war in Ukraine and ii) the desire to abandon fossil fuels in heating systems rapidly and lower the dependence on gas prices. The current year is a period of growth through M&A on the Austrian market, although the next three to four quarters are likely to be tainted by the economic slowdown that is already visible in Europe. Overall, we expect the firm to post EBITDA of PLN 38.2m (-31.1% y/y) in 2023E, PLN 33.5m (-12.5% y/y) in 2024E and PLN 39.9m (+19.2% y/y) in 2025E, with the upward trajectory stemming from rising macroeconomic growth, higher spending for heat pumps across the region, lower sales under O&M and rising sales under own brands.

The quarters ahead: Sunex has already reported its 3Q23 sales, namely PLN 81.7m (down 3% y/y and down 7.3% q/q at the consolidated level). We expect gross profit at PLN 17.9m (down 20% y/y and 24.3% q/q) in 3Q23. The company's operating leverage is relatively high, hence we expect EBITDA at PLN 7.7m (down 57.5% y/y) and the bottom line at PLN 4.6m (down 64.7% y/y and 52.9% q/q) in 3Q23. The level of G&A costs rose by PLN 5m in 2Q23, which we believe was triggered primarily by the full consolidation of Krobath Heizung, the Austrian subsidiary acquired in 1Q23. We expect sales to deteriorate a further 24% q/q to PLN 62m in 4Q23. This would lead to EBITDA at a mere PLN 3.5m (down 54.4% q/q) in 4Q23.

New products on the horizon: The company is undergoing an investment programme: it aims to implement the production of an autonomous heating system (ASG) which will consist of a PV installation, an integrated heat accumulation and distribution system in the building and an air-water heat pump. Sunex is also working on the use of hydrogen for smaller customers. It has applied for a subsidy to Polish state-owned vehicle NFOŚiGW to develop the production of composite tanks for hydrogen. The solution will be based on the use of hydrogen as a store for energy generated by photovoltaics, then using this to supply buildings with heat (i.e. using a heat pump and electricity).

Figure 1. Sunex financials (PLN m)

	2020	2021	2022	2023E	2024E	2025E
Revenue	84.6	130.5	289.5	332.3	316.8	339.6
EBIT	10.1	10.2	51.4	32.3	27.5	32.0
EBITDA	12.4	13.8	55.4	38.2	33.5	39.9
Net profit	6.5	6.2	39.0	25.4	20.9	24.8
EPS	0.5	0.3	1.9	1.3	1.0	1.2
DPS	0.0	0.0	0.1	0.3	0.2	0.2
P/E (x)	24.3	42.6	6.8	10.4	12.7	10.7
EV/EBITDA (x)	14.8	22.0	5.8	8.9	10.3	8.6

Source: Company, IPOPEMA Research

Technology

Sunex

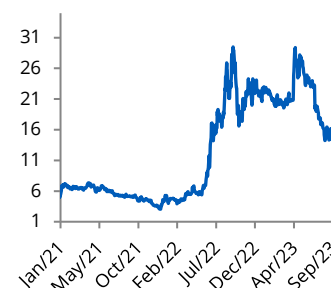
HOLD

FV PLN 12.00

8.1% downside

Price as of 12 October 2023 PLN 13.06

Initiation of coverage



Share data

Number of shares (m)	6.6
Market cap (EUR m)	157.5
12M avg daily volume (k)	31.2
12M avg daily turnover (EUR m)	0.8
12M high/low (PLN)	187.8/58.2
WIG weight (%)	0.07
Reuters	SNXP.WA
Bloomberg	SNX PW

Total performance

1M	-4.91%
3M	-16.87%
12M	+60.83%

Shareholders

Polska Ekologia	58.01%
Romuald Kalyciok	17.26%
Others	24.73%

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SUNEX**SNX PW****HOLD FV 12.00**

Mkt Cap EUR 58.8m

8.1% downside

Valuation multiples	2020	2021	2022	2023E	2024E
P/E (x)	24.3	42.6	6.8	10.4	12.7
EV/EBITDA (x)	14.8	22.0	5.8	8.9	10.3
EV/Sales (x)	2.16	2.33	1.11	1.02	1.09
P/BV (x)	4.22	6.19	3.31	2.65	2.27
FCF yield (%)	0%	-6%	-5%	-5%	1%
DY (%)	0%	0%	1%	2%	1%

Per share	2020	2021	2022	2023E	2024E
No. of shares (m units)	12.2	20.3	20.3	20.3	20.3
EPS (PLN)	0.54	0.31	1.92	1.25	1.03
BVPS (PLN)	3.09	2.11	3.95	4.92	5.76
FCFPS (PLN)	0.00	-0.72	-0.67	-0.67	0.14
DPS (PLN)	0.02	0.04	0.10	0.28	0.19

Change y/y (%)	2020	2021	2022	2023E	2024E
Revenues	35.9%	54.4%	121.8%	14.8%	-4.7%
EBITDA	161.7%	11.5%	302.0%	-31.1%	-12.5%
EBIT	114.0%	0.7%	404.6%	-37%	-15%
Pre-tax	84.4%	4.4%	460.9%	-36.1%	-24.4%
Net profit	88.4%	-4.9%	526.5%	-34.8%	-17.9%

Leverage and return	2020	2021	2022	2023E	2024E
Gross margin (%)	20.2%	16.8%	25.4%	22.8%	22.6%
EBITDA margin (%)	14.6%	10.6%	19.1%	11.5%	10.6%
EBIT margin (%)	12.0%	7.8%	17.7%	9.7%	8.7%
Net margin (%)	7.7%	4.8%	13.5%	7.6%	6.6%
Net debt / EBITDA (x)	1.91	2.80	1.04	1.97	2.42
Net debt / Equity (x)	0.63	0.90	0.72	0.75	0.69
Leverage Ratio (x)	0.36	0.33	0.26	0.24	0.26
ROE (%)	18.9%	15.5%	63.4%	28.2%	19.2%
ROA (%)	52.0%	46.2%	243.3%	117.7%	74.2%
ROIC (%)	10.7%	7.6%	28.3%	14.5%	10.5%

Assumptions	2020	2021	2022	2023E	2024E
Revenues	84.6	130.5	289.5	332.3	316.8
Poland	33.7	52.8	88.5	49.9	49.0
Germany	45.6	70.6	177.9	166.2	157.7
Austria	0.0	0.0	0.0	99.7	94.6
Poland	40%	40%	31%	15%	15%
Germany	54%	54%	61%	50%	50%
Austria	0%	0%	0%	30%	30%
Poland GDP (%)	-2.0%	6.8%	4.8%	0.1%	2.7%
Poland CPI (%)	3.4%	5.1%	14.3%	13.4%	5.2%
Constr. activity(%)	-2.2%	2.8%	1.9%	1.9%	2.9%
USD PLN (avg)	3.89	3.86	4.46	4.27	4.18
EURPLN (avg)	4.44	4.56	4.68	4.67	4.60

P&L (PLN m)	2021	2022	2023E	2024E	2025E	2026E
Revenues	130.5	289.5	332.3	316.8	339.6	363.6
Costs	-108.5	-215.8	-256.5	-245.1	-260.1	-277.0
Gross profit	22.0	73.7	75.8	71.7	79.4	86.6
Sales costs	-8.5	-18.6	-21.4	-20.4	-21.8	-23.4
Administration costs	-3.8	-7.6	-28.4	-27.1	-29.0	-31.1
Other revenues	3.3	6.2	6.8	6.3	6.8	7.3
Other costs	-2.8	-2.3	-0.5	-3.2	-3.4	-3.6
EBIT	10.2	51.4	32.3	27.5	32.0	35.8
Financial gains	0.1	0.3	2.7	0.5	0.5	0.5
Financial costs	-1.7	-3.6	-4.4	-4.7	-4.8	-4.4
EBITDA	13.8	55.4	38.2	33.5	39.9	44.8
Financial income (cost) net	-1.6	-3.3	-1.7	-4.3	-4.4	-3.9
Pre-tax	8.6	48.0	30.7	23.2	27.6	31.8
Tax	-2.3	-9.0	-5.3	-2.3	-2.8	-3.2
Net profit	6.2	39.0	25.4	20.9	24.8	28.6

BALANCE SHEET (PLN m)	2021	2022	2023E	2024E	2025E	2026E
Non-current assets	54.9	73.3	99.4	125.5	139.5	147.7
Intangible assets	3.5	3.7	6.4	6.4	6.5	6.5
PP&E	44.8	61.4	84.2	110.4	124.0	131.8
Others	6.6	8.2	8.9	8.6	9.0	9.4
Current assets	61.7	125.8	149.3	142.5	151.8	161.9
Inventories	39.4	83.8	98.4	94.0	99.8	106.2
Trade receivables	16.5	37.3	42.8	40.8	43.7	46.8
Cash and equivalents	0.8	2.9	3.3	3.2	3.4	3.6
Other current assets	5.0	1.9	4.8	4.6	4.9	5.2
Total assets	116.6	199.1	248.7	268.0	291.2	309.6
Equity	42.8	80.2	99.9	117.0	138.7	159.9
Minorities	0.0	0.0	0.0	0.0	0.0	1.0
Non-current liabilities	22.7	32.8	35.5	34.7	35.9	37.2
Loans and leasing	15.5	23.4	24.4	24.0	24.6	25.1
Other non-current liabilities	7.2	9.4	11.1	10.6	11.3	12.1
Current liabilities	51.1	86.2	113.3	116.4	116.7	112.5
Trade payables	24.7	39.7	47.8	45.7	48.5	51.6
Loans and leasing	23.9	37.0	54.3	60.1	56.9	48.9
Other current liabilities	2.5	9.4	11.1	10.6	11.3	12.1
Equity & liabilities	116.6	199.1	248.7	268.0	291.2	309.6
Inventories turnover (days)	132.4	141.7	140.0	140.0	140.0	140.0
Receivable turnover (days)	46.1	47.1	47.0	47.0	47.0	47.0
Net debt (PLN m)	38.6	57.6	75.4	81.0	78.1	70.3

CASH FLOW (PLN m)	2021	2022	2023E	2024E	2025E	2026E
Operating cash flow	-12.7	2.9	19.1	30.6	27.6	32.0
Net income	6.2	39.0	25.4	20.9	24.8	28.6
D&A	3.6	4.1	5.9	6.0	7.9	9.0
Change in WC	-22.6	-49.2	-14.9	4.5	-6.2	-6.7
Other	0.0	9.1	2.8	-0.8	1.0	1.1
Investment cash flow	-1.9	-16.5	-31.3	-32.3	-21.5	-16.9
CAPEX	-2.6	-17.0	-31.3	-32.3	-21.5	-16.9
Dividends received	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.7	0.5	0.0	0.0	0.0	0.0
Financial cash flow	13.9	15.6	12.6	1.6	-5.8	-14.9
Change in equity	0.0	0.0	0.0	0.0	0.0	0.0
Change in debt	12.6	18.0	18.3	5.4	-2.7	-7.5
Dividend	-0.8	-2.0	-5.7	-3.8	-3.1	-7.5
Other	2.1	-0.3	0.0	0.0	0.0	0.0
Change in cash	-0.8	2.0	0.5	-0.2	0.2	0.2
Cash as of eop	0.8	2.9	3.3	3.2	3.4	3.6

Source: Company data, IPOPEMA Research

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Investment overview

We initiate our coverage of Sunex with a HOLD recommendation. On a 2024E EV/EBITDA of 10.3x, Sunex trades almost at par (at a 0.9% discount) to other heat pumps and air conditioning providers in Europe. Using the discounted cash flow (DCF) and dividend discount (DDM) models, we estimate the firm's fair value at PLN 12.00 per share, which implies 8.1% downside. The company is exposed to general macro conditions and the heat pumps and photovoltaic and construction segment outlook in the CEE. The company is also linked to governmental subsidies for heat pumps, PV and solar modules whose volumes have thrived in 2022 but have experienced a slowdown in 2023. According to Der Spiegel, submissions for heat pump subsidies dwindled in Germany in 1H23, which in our view is the result of the decrease in gas prices to pre-war levels. The slowdown of the economy and construction markets is also taking its toll: we expect Sunex to experience a decrease in results in the quarters ahead. A rebound in earnings is likely to come along with better GDP prints in the coming year.

Figure 2. Sunex share price (PLN)



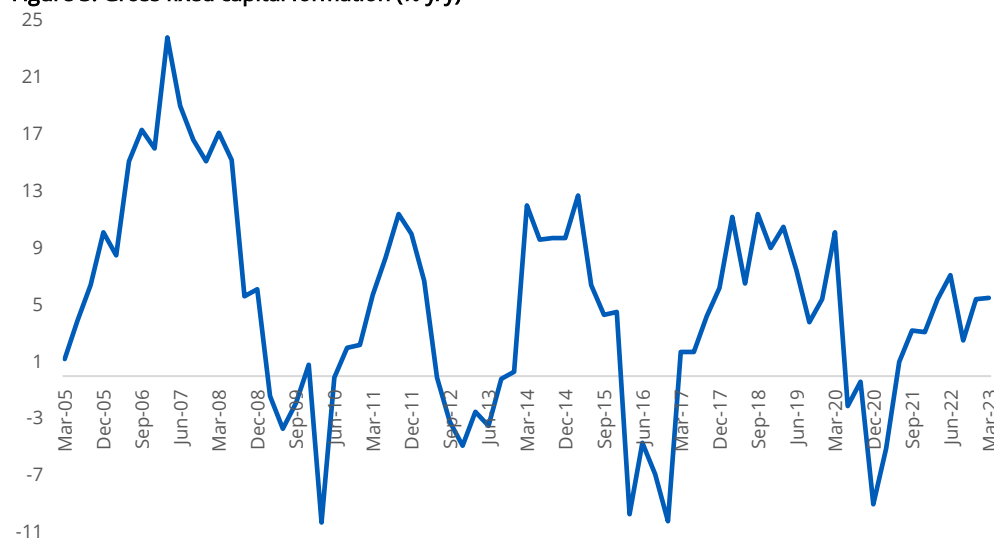
Source: Reuters, IPOPEMA Research

GDP outlook for Poland

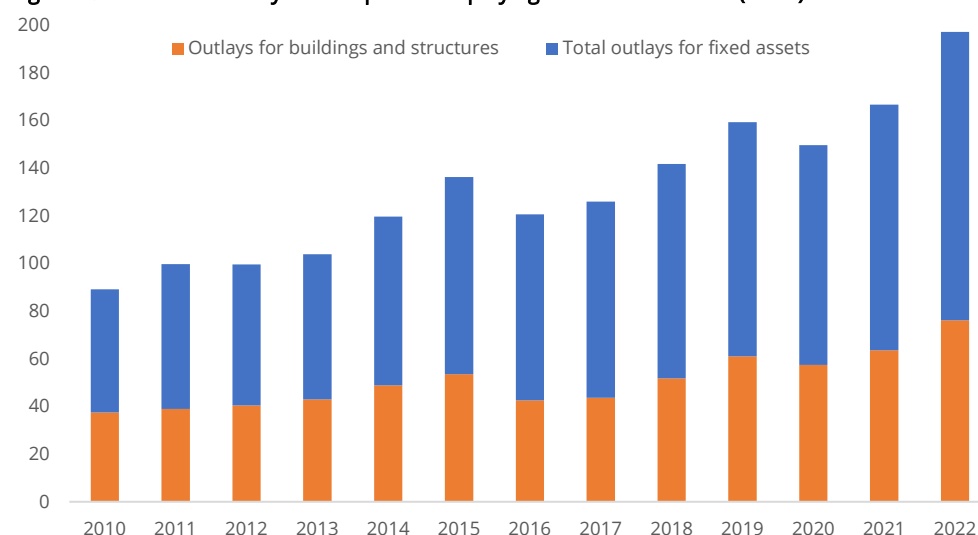
We expect Polish GDP to rise 0.1% y/y in 2023 and around 2% y/y in 2024. We expect the bottom of the cycle to occur in 2H23. In the first half of 2023, overall economic activity has been under pressure primarily from weakening private consumption. Burdened by high interest rates and the cost of living, the activity of consumers might bottom out in mid-2023 as the inflation down-trend proceeds. Gross fixed capital formation should remain decent in 2023 as started projects will continue but the lack of EU funds and the economic slowdown abroad do not bode well for 2024. Fixed investments may continue to decelerate until early 2024, but the annual growth rate should remain in positive territory (we expect 4.8% in 2023 and 2.7% in 2024). In the construction sector, activity has decelerated over the last two years; the state-run housing support programs should prevent any further slowdown in the sector.

Construction sector outlook

Gross fixed capital formation rose 5% y/y in 2022 versus 1.2% y/y in 2021, demonstrating resilience to the outbreak of war, aggressive monetary policy tightening as well as the outlook for a significant economic slowdown in Poland and abroad. In 1Q22 and 4Q22 the annual growth rate was at 5.4%. In 2022, the average annual growth rate in total construction output amounted to 9.6% y/y; in the construction of buildings 20% y/y; in civil engineering works 4.2% y/y; and in specialized construction activities 5.2% y/y. Total nominal investment outlays on fixed assets in companies employing at least 10 workers amounted to PLN 197.4bn in 2022 versus PLN 166.8 in 2021 (up 18.3% y/y at current prices and up 6% in constant prices). Construction of buildings accounted for nearly 40% of the total, rising 6.4% y/y in real terms in 2022.

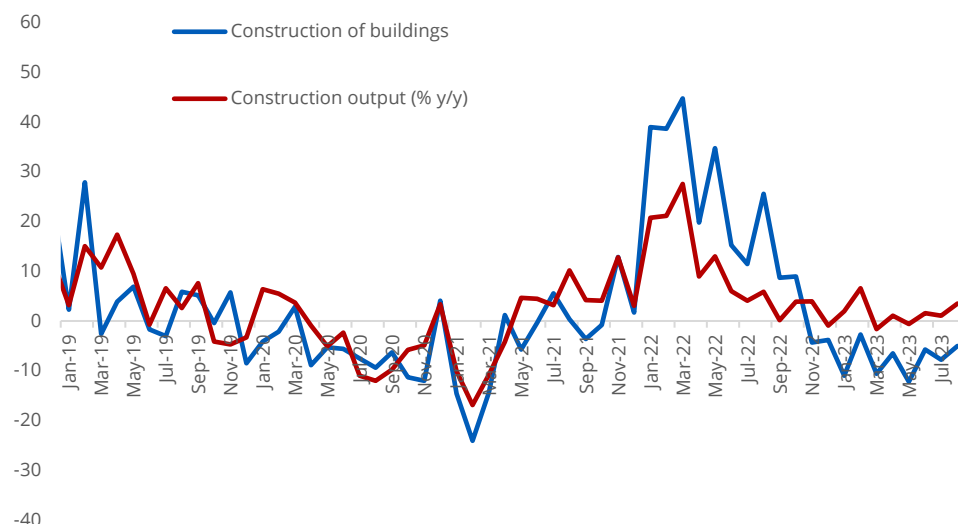
Figure 3. Gross fixed capital formation (% y/y)

Source: GUS, IPOPEMA Research

Figure 4. Investment outlays in companies employing at least 10 workers (PLNb)

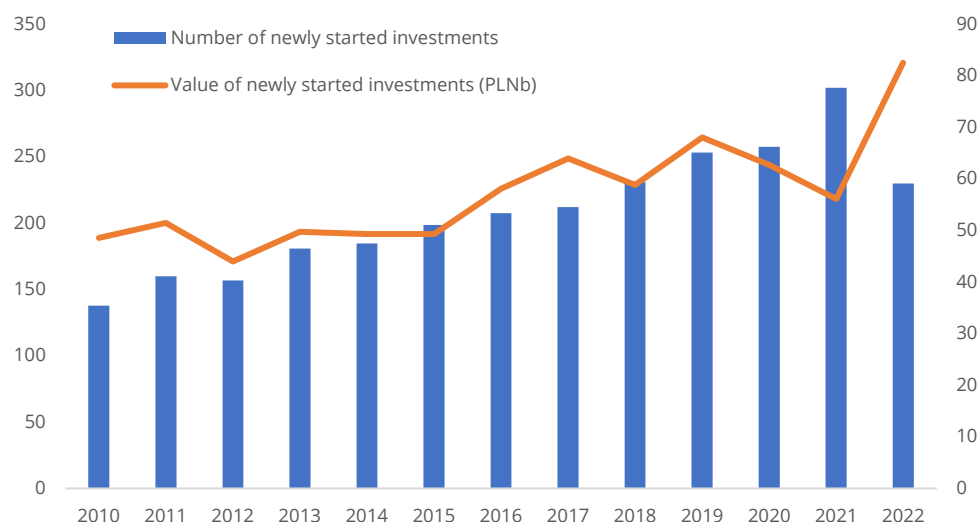
Source: GUS, IPOPEMA Research

However, after decent activity in 2022 the impetus has started to fade in 2023. Construction of buildings started with a robust growth rate of +39% y/y in 2022 but ended with a 3.7% y/y drop as tighter mortgage conditions curbed demand and cost pressure encouraged developers to limit their activity. The contraction accelerated in 2023 (down 7.7% y/y on average in January-August) and we believe the cyclical bottom might have been reached in mid-2023.

Figure 5. Construction output in constant prices (% y/y)

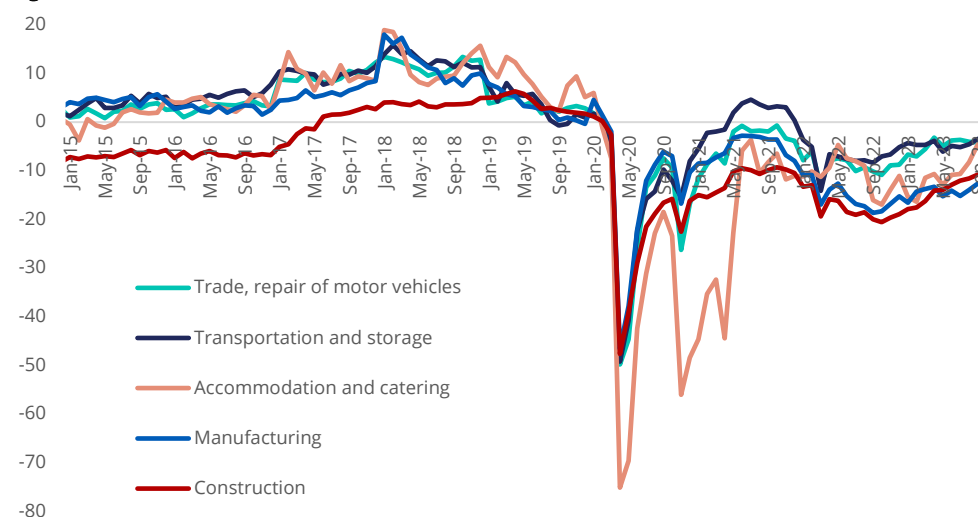
Source: GUS, IPOPEMA Research

The number of investment projects started in 2022 was lower than in 2021 and 2023 revealed the full consequences of this. Only thanks to inflation was the nominal value of new outlays higher in 2022 than in 2021.

Figure 6. Newly started investments

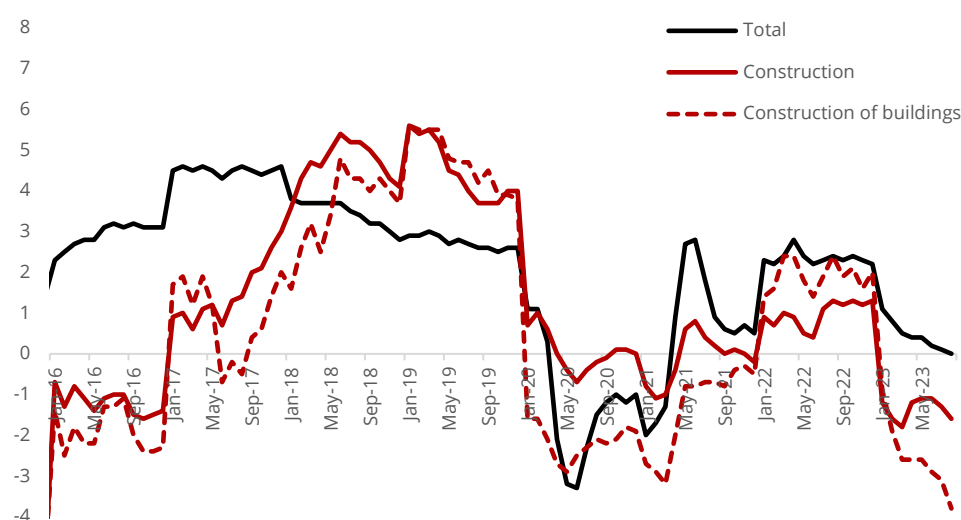
Source: GUS, IPOPEMA Research

Sentiment index calculated by the Polish statistical office shows that in September 2023 companies in the construction sector were the second most pessimistic (measured by the general business climate indicator) in the survey. Furthermore, companies in the construction sector were the second most pessimistic when a present financial situation diagnosis was concerned. Forecasts for employment in the construction sector look the most pessimistic, according to the statistical office survey.

Figure 7. General business climate indicator

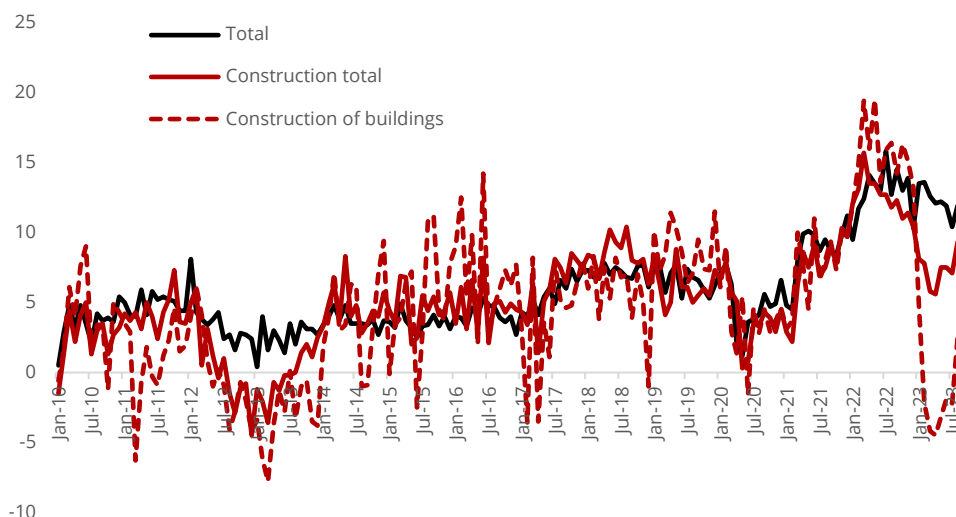
Source: GUS, IPOPEMA Research

Lower business activity resulted in less demand for labour and less appetite to increase wages. Employment growth rate for the whole corporate sector eased from above 2% in 2022 to zero in mid-2023. Detailed data on employment show that companies in the construction sector are reducing staff faster amid a lower number of projects started.

Figure 8. Employment in the corporate sector (% y/y)

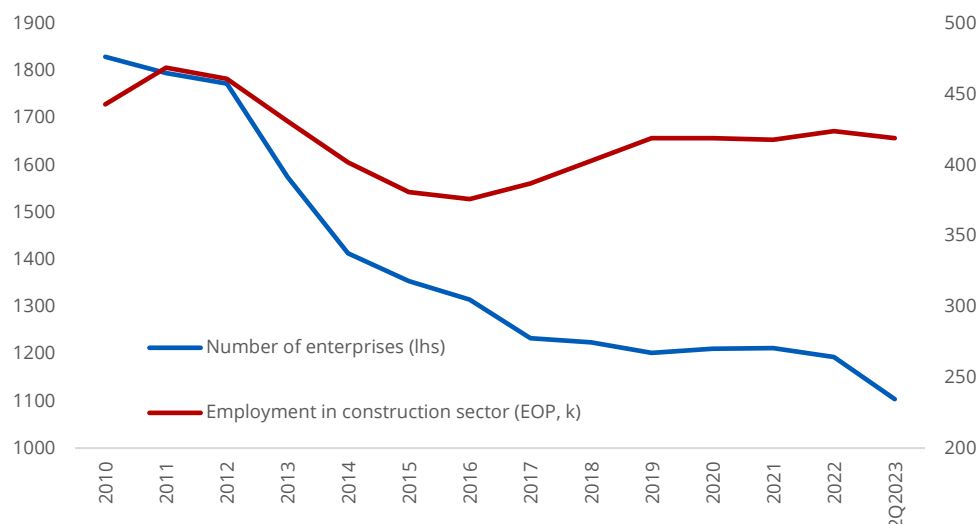
Source: GUS, IPOPEMA Research

Lower demand for labour in the construction sector has already started to exert negative pressure on wages. Although some slowdown was recorded in the total corporate sector, wages in construction are slowing faster. The most pronounced deceleration was recorded in construction of buildings.

Figure 9. Wages in the corporate sector (% y/y)

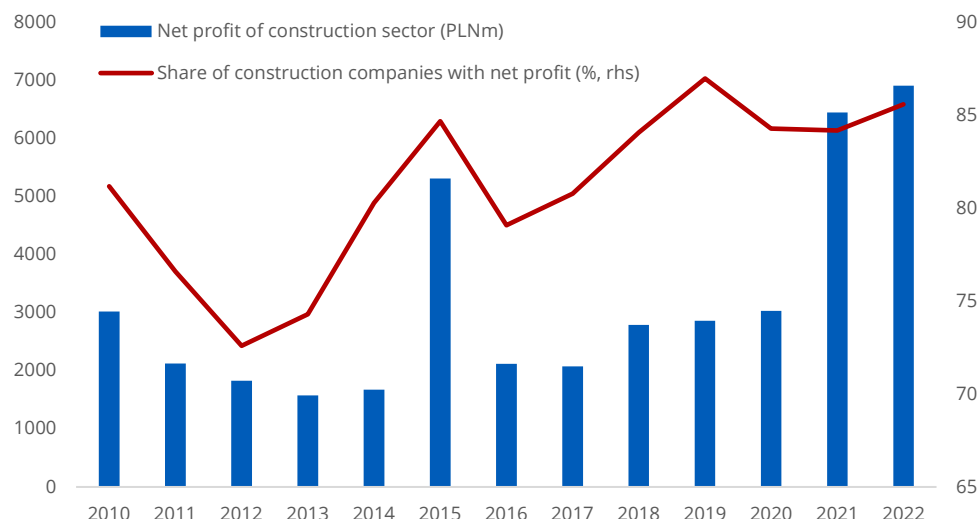
Source: GUS, IPOPEMA Research

Looking at the bigger picture, over the last ten years the number of employed in the construction sector has been quite stable at around 400k. This is despite the fact that the number of enterprises in this category has been on a downtrend since 2010.

Figure 10. Number of enterprises and employment in construction sector

Source: GUS, IPOPEMA Research

The number of companies in the construction has been falling despite the reversal of the negative trends in the sector's net profit after 2014.

Figure 11. Net profit of construction sector and share of profitable companies

Source: GUS, IPOPEMA Research

Apparently, those businesses that were unable to gain enough market share are being closed down, while employees managed to find work at bigger, more diversified entities in a better financial position.

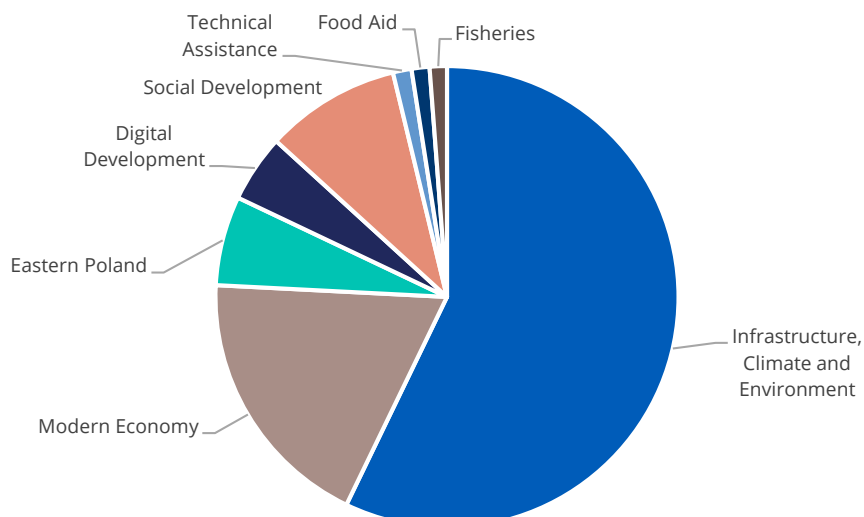
Delay in EU funds crippling construction outlook

Next to the weaker activity in the real estate sector, the ongoing slowdown in construction could have been caused by a delay in the disbursement of EU funds and elevated uncertainty as to what the flow of cash will look like in the nearest future. In June 2022, the European Commission endorsed Poland's Resilience and Recovery Facility (RRF), but the cash has still not been disbursed. In late March 2023, part of the cohesion funds allotted to Poland in the 2021-2027 budget were suspended. The EU claims Poland has not yet met all agreed milestones, including reform of the judiciary system and the Charter of Fundamental Rights.

In early 2023, Poland's Parliament approved a bill aimed at fulfilling the EU's requirements; however, President Andrzej Duda decided that the Constitutional Tribunal first had to check whether the bill was in line with the Polish constitution. Due to the internal conflict at the Tribunal, no ruling has been announced so far. It is not certain whether the European Commission will consider that the bill addresses all of its concerns regarding the rule of law in Poland. Even if the funds are made available this year, their utilization would generate a negligible impact on overall economic growth, hence this becomes a crucial issue for 2024.

Poland's RRF is worth EUR 35.4bn to be spent by 2026. Around 12% of this amount (i.e. EUR 4.4bn) is expected to be allotted to upgrading energy efficiency in buildings and the construction of new energy-efficient residential buildings. This target also includes the replacement of ineffective heating systems, thermo-modernization of residential buildings and the installation of renewable energy facilities (mainly solar panels). According to the RRF plan submitted by Poland to the European Commission, an additional EUR 1.1bn will be provided by the state to cover the objectives of this target. The plan also assumes that EUR 2.8bn (8% of the total) will be allotted to the green transformation of cities, including the development of city infrastructure (i.e. roads, recreation areas, etc.). Overall, around 20% of the whole RRF (i.e. EUR 7.2bn) could support varied kinds of construction activity until 2026.

Poland is also expected to receive EUR 76bn from the 2021-2027 EU budget. According to the Partnership Deal, more than EUR 24bn will be allocated to the Infrastructure, Climate and Environment Program (i.e. EFICE, Polish FENIKS) to be disposed of at the central level. Around EUR 33bn will be channelled to regional level and some of this amount is also likely to be spent on infrastructure projects. Funds from the EU budget are more likely to be spent on road/rail projects rather than housing (EUR 1.3bn on improving energy efficiency of buildings and EUR 7.8bn on building new and improvement of existing roads under the FENIKS program, according to our rough calculations).

Figure 12. Cohesion funds to be distributed at national level (EUR 42.3bn in total)

Source: Polish government, IPOPEMA Research

Paving way for the undisturbed flow of EU funds should improve the business climate in Poland and support investment activity. In our forecasts for investments and construction activity, we assume that all obstacles will be removed up until the end of 2023, while 2024 will be the year when a decent amount of the EU funds are transferred to Poland.

GDP outlook for Germany

Germany's GDP growth rate has been on a downtrend since mid-2021, amid waning private consumption and a slowdown in global foreign trade volumes. Both total GDP and private consumption contracted in y/y terms in 1H23, while imports and exports growth rates became negative in 2Q23. The German economy has come under pressure from interest-rate hikes delivered by the European Central bank (from 0% in mid-2022 to 4.50% in September) and elevated inflation that puts an additional strain on household consumption. The real wages growth rate has been negative for most of the time since late-2020: this was also one of the factors behind the private consumption growth rate becoming negative for the first time since 2010 (excluding the Covid period).

Heat pump and solar collector market overview in key companies markets

Heat pumps

Heat pumps use electricity to transfer heat from a cool space to a warm space using a refrigeration cycle. This allows for both warming up of the interior when the weather is cool outside, as well as cooling it down in warmer temperatures. Thanks to transferring the heat rather than generating it, heat pumps are considered a more eco-friendly solution compared to e.g. gas boilers. This technology is able to not only heat spaces, but also water, and can be used for dehumidification. Sunex produces various types of heat pumps beginning with the most common which are air-source heat pumps (absorbing heat/cold from the air outside), ground source heat pumps (transferring heat/cold from the ground) and exhaust air heat pumps (variation of an air pump). Heat pumps are not a recent discovery as they have previously been used in dryers, car engines, washing machines and refrigerators. They can be used not only in housing, but also in various other applications including commercial, industrial, district heating and for skyscrapers.

Figure 13. Various applications for heat pumps



Source: EHPA, IPOPEMA Research

Heat pumps are considered eco-friendly because by linking them with PV panels on the top of the building, they can provide an energy-efficient carbon neutral system that can be installed even within a single-family house.

EHPA additionally demonstrates how heat pumps have contributed to reducing air pollution in Beijing.

Figure 14. State of air in Beijing, comparison between 2015 and 2019



Source: EHPA, IPOPEMA Research

In 2020 there were 103 manufacturing sites in Europe, most of them in Germany.

Figure 15. Heat pumps production plants in Europe (2020)



Source: EHPA, IPOPEMA Research

EHPA estimated that Europe had 115-120m buildings in 2020 including 90m single-family residential, 15m multi-family residential and 10-15m commercial and office buildings. If heat pump reach market penetration of all boilers at 75% that would require 86m heat pumps by the end of 2050 translating to 2.9m every year (around 2.5x 2020 annual sales, but in line with 2022 figure).

Solar collectors

Solar collectors are devices designed to capture and convert the sun's radiant energy into usable heat or electricity. They offer a range of applications for both residential and industrial use. Solar collectors require minimal maintenance and have long lifespans, often exceeding 25 years.

Differences between solar collectors and PV panels

Solar collectors and photovoltaic (PV) panels are both technologies that harness solar energy from the sun but serve different purposes and have distinct mechanisms of operation. Solar collectors are primarily designed for capturing and utilizing solar thermal energy. They absorb sunlight and convert it into heat, which can be used for heating water, space heating, or industrial processes. Solar collectors are not used for directly generating electricity. PV panels serve that purpose by converting sunlight into electrical energy through the photovoltaic effect, where photons from the sun's rays knock electrons loose from semiconductor materials within the panel, creating an electrical current. Solar collectors tend to have higher efficiency at over 70% compared to 15-20% of typical solar panels.

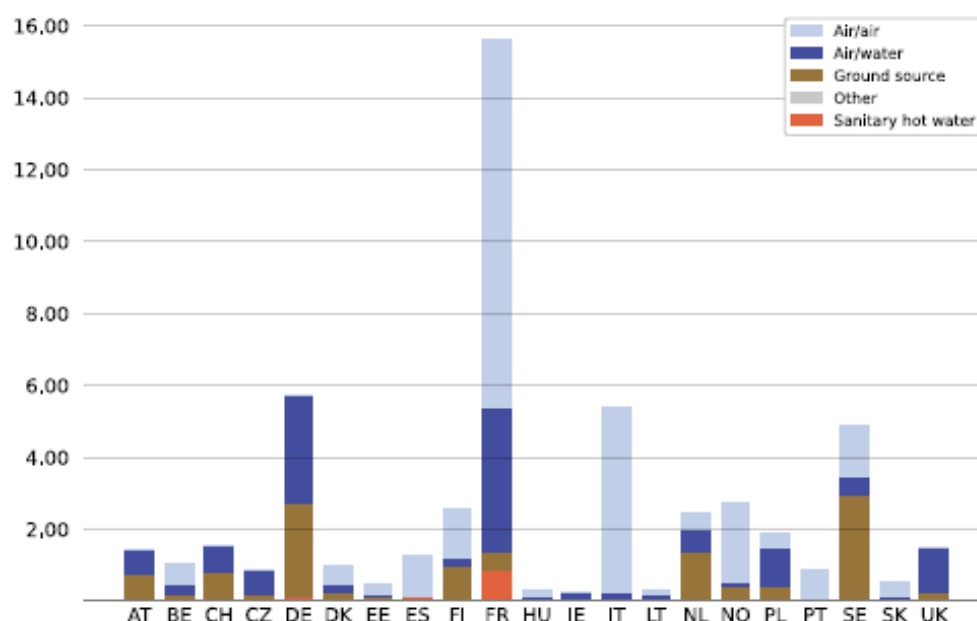
European heat pump sector

Heat pump as a means to reach carbon neutrality

Demand for heat pumps is driven by the EU policy to reach decarbonisation in Europe's heating and cooling sector. Heat Roadmap Europe (HRE) – a project sponsored by the EU – claims that this can be achieved via the use of district heating in urban areas and heat pumps at an individual building scale in rural areas (both areas are estimated to account for 50% of heating demand each). Experts point to the importance of policies and strategies encouraging switching from individual boilers to heat pumps. An additional advantage is the possibility to combine them with solar, thermal and biomass boilers. HRE is focusing on 14 EU countries that by the end of 2050 are supposed to represent 90% of total European heat demand. These are Austria, Belgium, the Czech Republic, Finland, France, Germany, Hungary, Italy, Netherlands, Poland, Romania, Spain, Sweden and the UK.

According to EHPA, heat pumps significantly contribute to savings in the case of greenhouse gas emissions.

Figure 16. Greenhouse-gas emission savings based on stock in 2022, per country (in Mt)

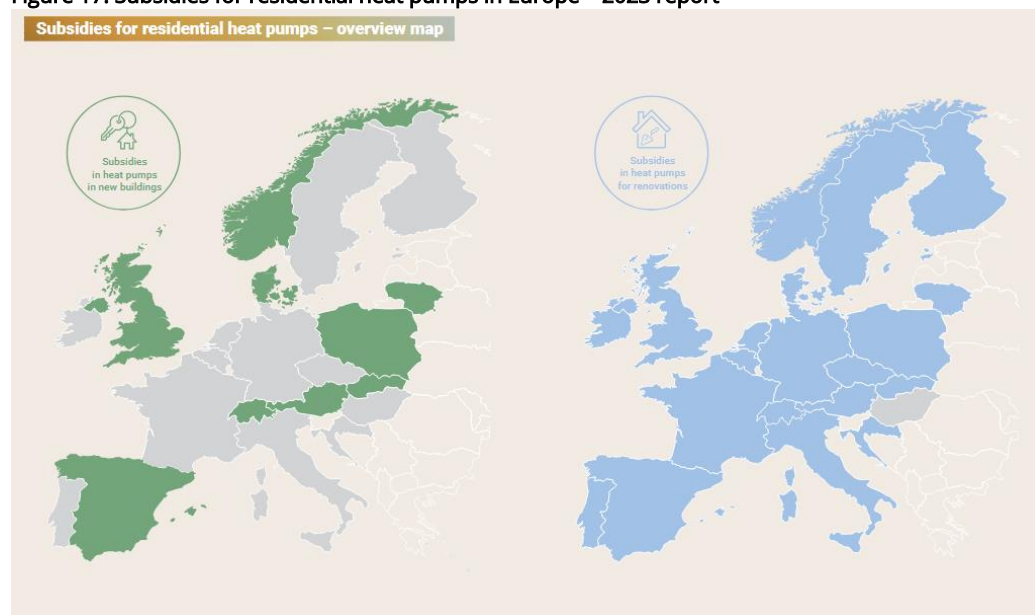


Source: EHPA, IPOPEMA Research

Based on stock in 2022 (total heat pumps sold over the last 20 years) products contributed to a total reduction of 52.52 Mt of greenhouse gas emissions. However, EHPA is lobbying for bolder moves by governing bodies in the EU aimed at a distorted price mechanism favouring the use of fossil fuels. EHPA estimates that 6.5% of global GDP or USD 5tn is being spent in various forms for fossil fuel subsidies.

In order to promote heat pump sales, the EU provides financing to member countries that provide grants to home owners.

Figure 17. Subsidies for residential heat pumps in Europe – 2023 report



Source: EHPA, IPOPEMA Research

While most of the EU member states provide grants for heat pumps installed in old buildings that are being renovated (right-hand side of the map), some of them also subsidize heat pumps in new buildings (these are Poland, Austria, UK, Spain, Norway, Denmark, Switzerland, Lithuania and Slovakia).

Heat pump demand in Europe

Globally the heat pump market grew by over 13% in 2021 (according to IEA). Europe had the largest market share in heat pump sales. In 2022 in France, Italy and Germany sales increased by over 35% y/y, exceeding 2.2m units. Overall in Europe sales totalled more than 3m - up 38.9% y/y. Markets with the strongest growth were Belgium, Czechia, Slovakia and Poland with sales almost doubling compared to 2021. Heat pumps gained more popularity following Russia's invasion of Ukraine as an alternative to gas-powered boilers heavily dependent on natural gas deliveries from Russia. Arizton estimates that the heating sector in Europe will grow from USD 24.8bn in 2022 to USD 35.4bn in 2028, representing a 6.1% CAGR. **Bosch expects (citing objectives of the REPowerEU programme by the EC) the number of heat pumps installed to increase to 10m in 2027 and 30m in 2030 from the current 5m (according to EHI). The expected growth until 2025 is 25-35% y/y.** Bosch also conducted a survey on 2k residential property owners in Germany and France. According to the results, 8% of respondents in Germany own a heat pump while in France, 15%. 45% of respondents in Germany plan to purchase a heat pump while for France the percentage amounts to 31%. This implies quite a low penetration ratio of the product. This is confirmed by the data from EHPA which indicate that 19.8m heat pumps in Europe provide heating & cooling for 16% of residential and commercial buildings in Europe.

Heating system equipment has high traction in the cold climatic conditions of Europe. It is characterized by fierce competitors and an abundance of local vendors given the bulkiness of the products. Maintenance service is a substantial add-in revenue in this business. The demand is positively impacted by the EU goal of substantially limiting carbon emissions by 2050, as heating accounts for around 40% of energy consumption. Water/air heat pumps as well as ground-source ones are considered a key growth driver being especially strong for single and two-family houses. One of the advantages of heat pumps is their efficiency as their output is four times the amount of energy they consume.

Figure 18. Heating equipment market in Europe 2022–2028 (USDbn)

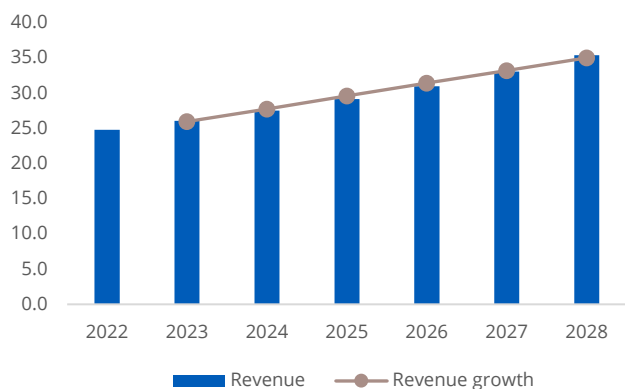
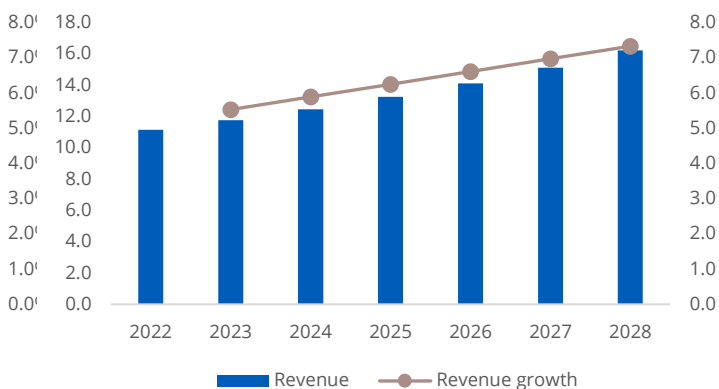


Figure 19. Heat pump market in Europe 2022–2028 (USDbn)



Source: Arizton, IPOPEMA Research

Figure 20. Heat pumps sold in 2022 per country (in k units)

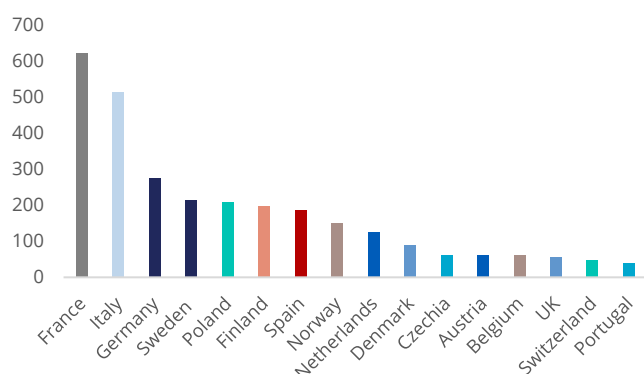
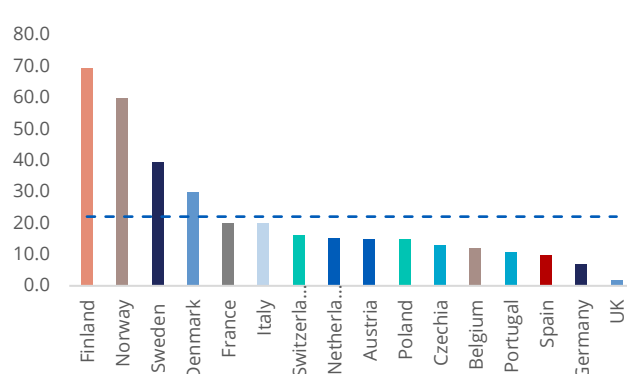


Figure 21. Heat pumps sold per 1,000 households in 2022 (in units)



Source: EHPA, IPOPEMA Research

The heat pump market in Europe is expected to grow from USD 11.2bn in 2022 to USD 16.2bn in 2028, indicating a CAGR of 6.4%. The highest growth is expected in Nordic countries, followed by Western Europe and CEE.

Figure 22. Heating equipment market by geographical area 2019–2028 (USDbn)

Region	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	CAGR
Western Europe	12.1	12.6	13.1	13.7	14.4	15.3	16.2	17.2	18.4	19.7	6.2%
Nordic	6.7	7.0	7.3	7.7	8.1	8.6	9.1	9.7	10.4	11.2	6.4%
CEE	3.1	3.2	3.3	3.4	3.5	3.7	3.9	4.0	4.3	4.5	4.9%
Total	21.9	22.7	23.7	24.8	26.1	27.5	29.2	31.0	33.0	35.4	6.1%

Source: Arizton, IPOPEMA Research

Heat pumps are being bought most intensively in Nordic Europe as Finland, Norway, Sweden and Denmark note the biggest amount of unit sales per household. At the same time it looks like the biggest markets are France, Italy, Germany and Sweden.

According to EHPA, growth of the sector is influenced by three trends:

- Looking at technological advancements, heat pumps can currently cover a wider temperature range (operating at -25°C and efficiently providing water heated up to 65°C). This allows for usability in a wider range of home types.
- Current building standards with maximum heating demand per m² mandate integration of renewable energy. This is usually supported and subsidized by the state.
- Growing sales are enabling economies of scale to kick in and lower the cost of products. A similar trend also applies to PV systems. Combined systems using a heat pump and PV panels ensure that a building has the most cost-effective heating/cooling system.

European solar collector sector

In 2021 there were 10.7m solar thermal systems in operation across Europe. In 2021 alone, 1.45 GW of capacity (equivalent to almost 2.1m sqm) was added. The total installed capacity reached 37.8 GW, covering over 53.9m square meters.

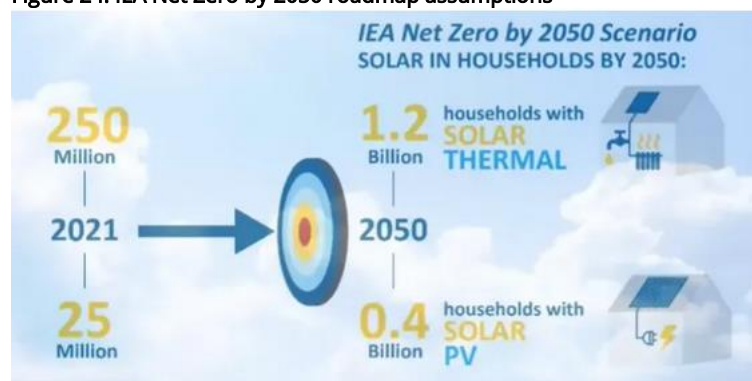
Figure 23. Total capacity of solar heat market in Europe in 2013-21 (in GW & %)



Source: Solar Heat Europe, IPOPEMA Research

France has experienced 130% growth in newly installed capacity due to large solar district heating and process heat systems. Italy's market increased by 84% due to a Superbonus program offering a 110% tax reduction for energy efficiency measures, including solar thermal systems. Austrian and Spanish markets were positively affected in 2022 following improved funding.

Figure 24. IEA Net Zero by 2050 roadmap assumptions



Source: Solar Heat Europe, IPOPEMA Research

The International Energy Agency Net Zero by 2050 roadmap flagged that in order to reach carbon neutrality by 2050 which is pursued by many EU countries, solar thermal energy would have to be installed in 1.2bn households compared to 250m in 2021.

Heat pumps in Germany

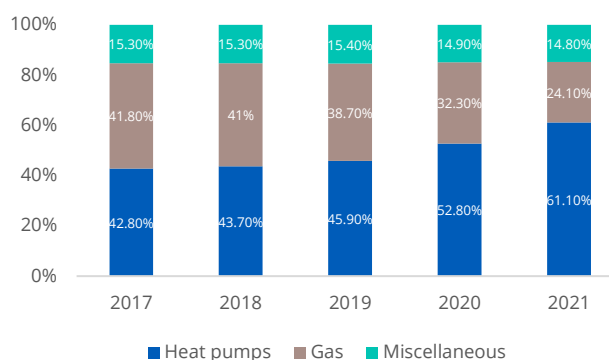
Market outlook

According to BDH, in regards to heating systems in Germany, renewable alternatives are gaining in popularity. Over the last ten years heat pumps and district heating have grown by 10%, while natgas and biomethane lost approximately 15%. Data from BWP indicates massive growth in sold heat pumps in 2022. The **Federation of German Heating Industry expects that heat pump sales may increase to 500k units annually in 2024 from 236k in 2022.**

Figure 25. Sales of air-water and ground-coupled heat pumps in Germany 2016-22 (in units)



Figure 26. Share of heat pumps in authorized new buildings (in %)



Source: BWP, BDH, IPOPEMA Research

Heat pumps are also increasingly used in new residential buildings. According to BWP, 61.1% of house building permits assumed the installation of heat pumps as a heating system in 2021 compared to 42.8% in 2017.

Government green policy to support sales of eco-friendly solutions

With regard to greenhouse gas emissions, the German Federal Government (based on the amended Climate Act from 2021, [source](#)) targets 65% less CO₂ by the end of 2030 (vs. a 55% reduction assumed earlier), 88% less by 2040 and climate neutrality by 2045 (the earlier plan assumed 2050). To achieve that, the government launched the Climate Action Programme 2030, that since 2020 has awarded home owners for replacing oil-fired central heating to more eco-friendly solutions. The programme also assumes that from 2024 solar panels should be installed on every roof (at least every commercial roof) and that every new heating system should be powered at least in 65% by renewable energy. In November 2022 during the meeting of stakeholders in the heat pump sector with Vice-Chancellor and Federal Minister for Economic Affairs and Climate Action Robert Habeck and Federal Building Minister Klara Geywitz, participants reaffirmed the plan to install 500k heat pumps in 2024.

Grants

The summary below proves that heat pump systems are the ones that are most subsidized by the German government.

Figure 27. Grants for heating with renewable energy

Heating system	Building stock		
	Subsidy rate	Subsidy rate/bonus replacement of heating system	Additional
Heat pump	25-30%	35-40%	no 19% VAT (from 2023)
Solar collector	25%	-	
Biomass	10%	20%	

Source: BDH, IPOPEMA Research

In the case of heat pumps, they are mostly subsidized via the BAFA programme.

Figure 28. Subsidies for residential heat pumps in Germany



Name of subsidy & more info	Type of subsidy	Single-family houses	Type of heat pump** & grant (in euros)		Extra info on subsidy grant (in euros)	Are other measures or schemes*** in place, that indirectly support heat pump deployment?	Start and end dates of subsidy
Die bisherige Förderung des Bundesamtes für Wirtschaft und Ausfuhrkontrolle (BAFA). More information	Grants	Renovation	ATA	€15,000.	Up to 5%.	<input checked="" type="checkbox"/> Energy efficiency subsidy scheme <input checked="" type="checkbox"/> Carbon price <input checked="" type="checkbox"/> Existing ban on fossil fuel heating	From 2023 to 2030.
			ATW	€15,000.	Up to 25% for heat pump. 5% bonus for GHSP. 10% for replacement of fossil fuel boiler.		
			GSHP	€18,000.			

Source: *EHPA, IPOPEMA Research*

Subsidies apply to houses to be renovated, with various criteria determining the final amount of the grant. Air-to-air (ATA) and air-to-water (ATW) heat pumps may be subsidized even up to EUR 15k, though the subsidy should amount to up to 5% to 25% of the heat pump's cost. The potential beneficiary may take advantage of up to a 40% share in the total cost assuming it is a ground source heat pump (GSHP). Subsidies will be granted until 2030.

Demand in 2023

Even though the outlook for heat pump sales looks optimistic, applications for building permits with heat pumps in Germany dropped 48.8k in 1H23 compared to 97.8k in 1H22. Applications were at their peak in August 2022 before the flagged lowering of the upper subsidy limit (from 35% to 25% in BAFA support). Der Spiegel also underlines that municipal plans for decarbonizing heat may take until 2028 and hence there should be a slow-down in sales of heat pumps. Moreover, the German government announced that it will subsidize up to 70% of the costs of new green heating systems from 2024, which might have stalled some applications. The new percentage cap will be paired with the maximum lump sum of EUR 21k for the whole house, which is EUR 3k lower than in the previous scheme.

Does the cost-benefit analysis add up?

Heat pumps are quite popular heating systems in Germany. According to a Deutsche Umwelthilfe (non-profit environmental and consumer protection association) report, more than half of residential buildings constructed in 2021 used a heat pump as a core heating system. Furthermore, around half of the existing ones are equipped to have a heat pump installed. Experts claim that while the initial cost is higher than the gas boiler alternative, the operating costs and environmental advantage swing the scales in favor of heat pumps. The report provides an example of a detached house built in 1999. Calculations look as follows.

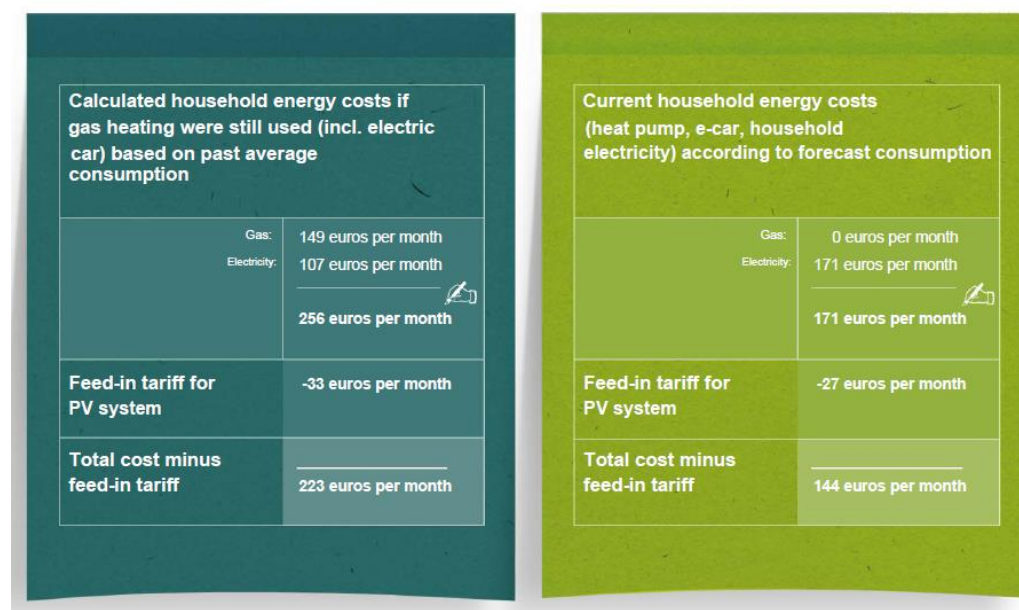
Figure 29. Cost of installing a heat pump

Costs incl. VAT (rounded): <ul style="list-style-type: none"> » Heat pump including accessories (effective energy meter, heat measuring device, protective grille, heating kit, electric reheater, heat pump heating set, insulated connection pipes outside): €20,200 » Buffer and heat storage including pipes: €5,330 » Installation costs for heat pump and storage tank: €4,140 	Funding amount for heat pump: 10,385 euros
	Investment costs for the heat pump installation: 29,670 euros
	Total amount minus funding: 19,285 euros

Source: *Deutsche Umwelthilfe, IPOPEMA Research*

The initial cost of a heat pump is lowered by 35% thanks to government subsidies.

Figure 30. Household energy cost comparison



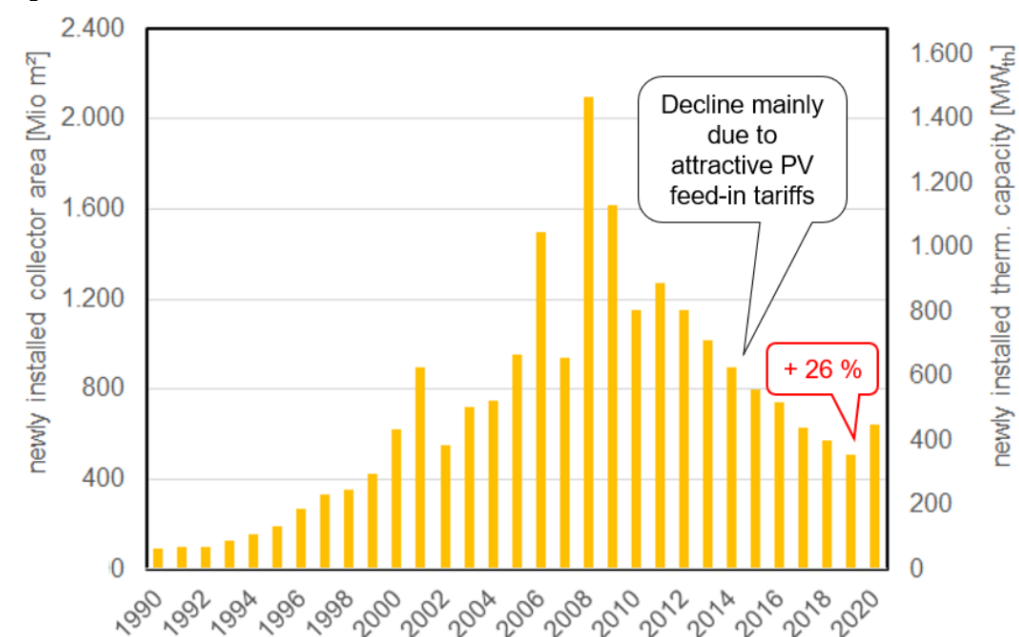
Source: Deutsche Umwelthilfe, IPOPEMA Research

According to Deutsche Umwelthilfe, installing a heat pump provides EUR 79 in savings monthly compared to a gas boiler alternative. Calculations assumed a price of gas at EUR 0.1 per kWh together with a EUR 108 annual basic price gross and EUR 125 for chimney sweeping and maintenance. Electricity costs included EUR 0.3245 per kWh gross together with a EUR 13.97 gross monthly basic price.

Solar collectors in Germany

Like many other markets, the German one is highly dependent on subsidies and favourable energy settlement clauses. While the solar thermal market has experienced declines since a record-high 2008, in 2020 it reversed. As the key trigger for that turnaround, experts are pointing to the BEG funding that provided homeowners with subsidies that could offset as much as 45% of the expenses related to the replacement of oil boilers with solar-assisted heating systems.

Figure 31. German solar thermal market in 1990-2020 (in MWh)

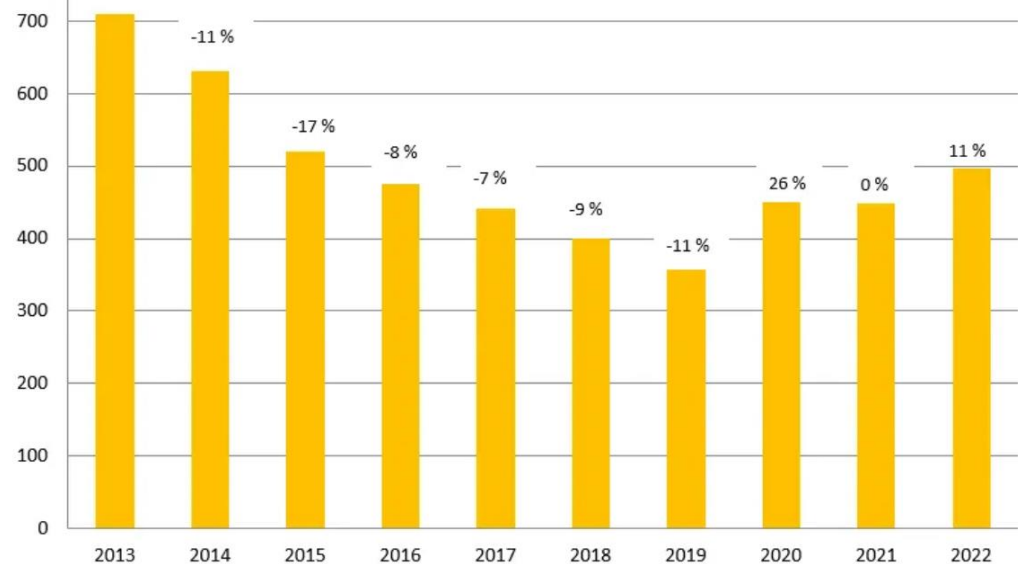


Source: Solar Heat Worldwide 2021, IPOPEMA Research

What distinguished the BEG regulations introduced at the beginning of 2020 is that the 45% funding rate encompassed a broader range of eligible costs. These costs were the purchase and installation of both the heating and solar thermal systems, as well as new radiators, underfloor heating, and improvements to heat distribution such as chimneys.

Following the rebound in 2020, the newly installed capacity remained virtually the same in 2021 and grew once again in 2022 by 11% y/y. Sales were driven by evacuated tube collectors

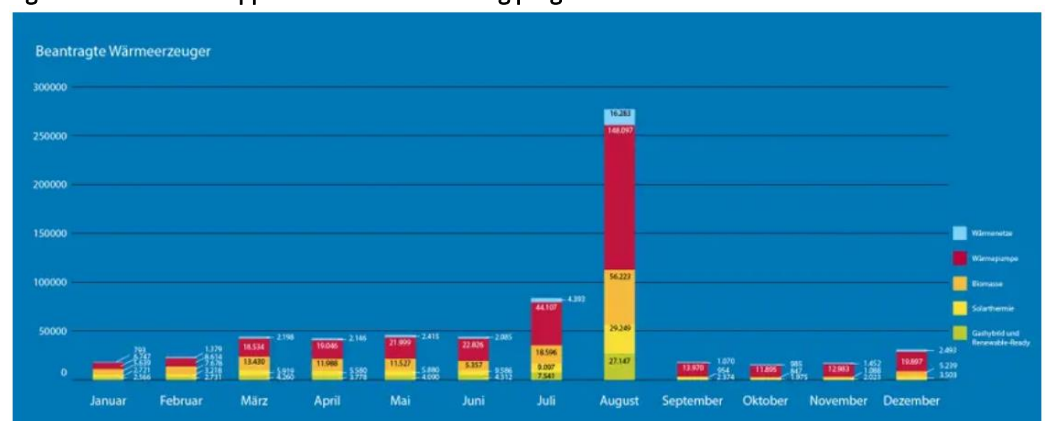
Figure 32. Newly installed solar thermal capacity in Germany 2013-22 (in MWh)



Source: Company, IPOPEMA Research

that accounted for 26% of newly installed capacities in 2022 (compared to 15% in 2020 and 18% in 2021). According to the industry associations, an estimated 91k new solar thermal systems have been put in place. The predominant portion of these systems consists of small rooftop installations carried out by homeowners of private residences. Sales in 2022 were boosted by the change in subsidies. Until August 2022 building owners could take advantage of a subsidy for gas boiler systems that could be replaced with, among others, solar thermal generators within two years. Moreover, another subsidy was available for gas condensing boilers with gas hybrid heating system coupled with renewable sources.

Figure 33. Number of applications for BEG funding programme in 2022



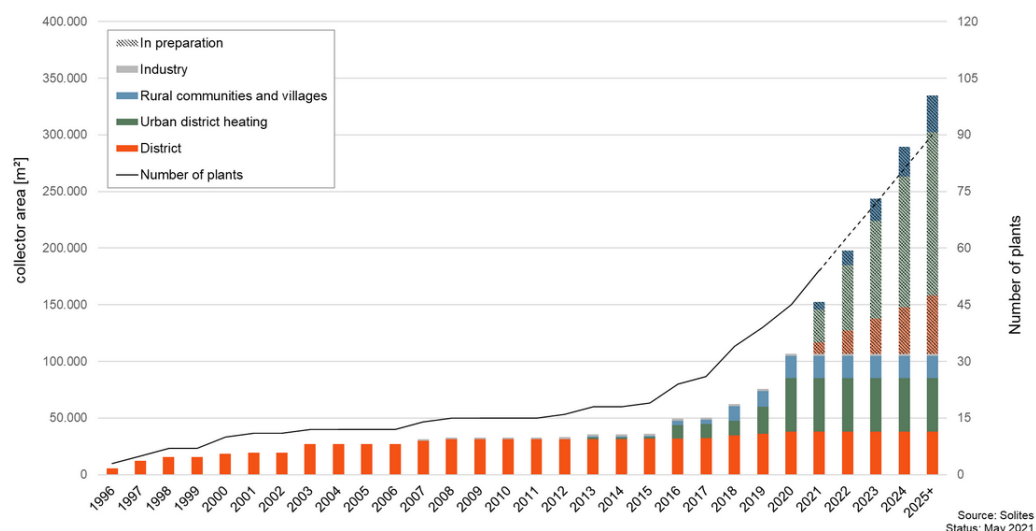
Source: BAFA, IPOPEMA Research

Outlook for 2023 and beyond

As for 2023, BSW survey results indicate that 11% of homeowners intend to install solar heating systems. Moreover, not all of the applications for subsidies were used in 2022, which may positively impact 2023 sales (in 2022 the number of applications amounted to 658k vs. 233k in 2021). At the same time, experts point to economic uncertainty that may limit

unnecessary spending. Still, the long-term outlook as suggested by German institute Solites seems to be optimistic, driven mostly by the growth in urban district heating.

Figure 34. Increase in solar district heating capacity until 2025



Source: Solites, IPOPEMA Research

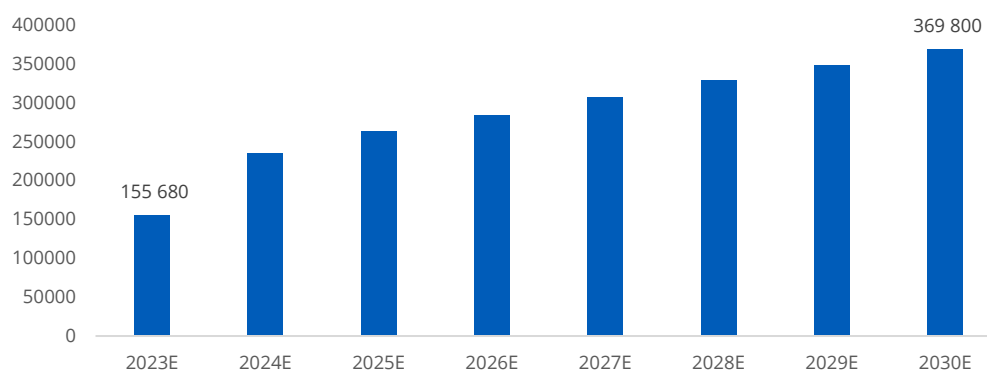
New subsidies to trigger growth?

Until 2026, the German Ministry of Economics is allocating a total of EUR 3bn to support the decarbonization of the district heating sector. Starting from September 15th 2022, municipalities, energy providers, and energy communities have the opportunity to seek financial assistance. The BEW program, which stands for "Federal Funding for Efficient Heating Networks," will provide funding for various activities, including the construction of new heating networks that source at least 75% of their heat from renewable energies or waste heat. It will also support the expansion, intensification, and reduction of carbon emissions in existing heating networks.

Heat pumps in Poland

Similarly to other EU countries, Poland implemented policies to promote eco-friendly heating systems and the heat pump sector is riding on this trend. Port PC (heat pump sector lobby in Poland) estimates that unit sales in Poland may reach 369.8k units by 2030 from 203,300 in 2022. Calculations were prepared in March 2022.

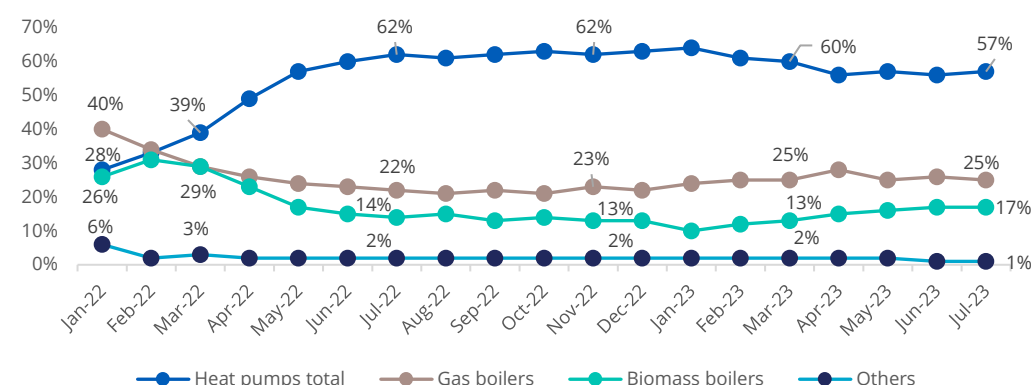
Figure 35. Forecasts for heat pump sales in Poland in units (2023-30)



Source: Port PC, IPOPEMA Research

According to NFOSIGW, heat pumps continue to maintain the highest share in applications in the “Clean Air” subsidy programme, followed by gas and biomass boilers.

Figure 36. Applications in “Clean Air” programme divided by type of heating system in % (2022-23)



Source: Company, IPOPEMA Research





One of the drivers of growth on the Polish market is that 70% of the approximately 14m buildings in Poland are energy inefficient (according to the Long-term Building Renovation Strategy). PSBE (Polish Green Building Council) claims that buildings are the source of almost 40% of greenhouse gas emissions. On the one hand, this creates additional funding needs for renovation, but also a high potential for heat pump installations.

Grants

The funding is quite substantial in Poland and sourced from four different programmes. The “Clean Air” programme provides funding for house renovation for ATA, ATW and GSHP heat pumps with lump sum payments dependent on income divided into three levels. Buildings are also required to fulfil certain energy efficiency standards (A+ or A++). The programme will run until 2029 with the final date for signing contracts in 2027. The second one, “My Electricity”, provides a fixed lump sum for ATW and sanitary hot water (SHW) heat pumps with a PV system and energy storage. In this programme both existing and new building may participate. However, the programme lasts only until the end of this year only. The third one, “My Heat”, assumes one-off grants for new buildings only for ATA, ATW and GSHP. This programme will run until 2027 with the last year for signing up being 2026. Finally, the government has decided on providing tax reliefs related to

Figure 37. Subsidies for residential heat pumps in Poland



Name of subsidy & more info	Type of subsidy	Single-family houses	Type of heat pump*** & grant (in euros)		Extra info on subsidy grant (in euros)	Are other measures or schemes*** in place, that indirectly support heat pump deployment?	Start and end dates of subsidy
Clean air. More information	Grants	 Renovation	ATA	A+: €930/€1,650/€2,300.	Grants vary depending on income in three levels.	✓ Energy efficiency subsidy scheme ✓ Building codes and standards	2018 - 2029. Last date for signing contract - 2027.
			ATW	A++: €4,100/€5,950/€7,450.			
			GSHP	A++: €5,930/€8,600/€10,750.			
My Electricity. More information	Grants	 New building	ATW	€1,060.	Grants for photovoltaic system with the energy storage: - ATW with hot water tank, - SHW with integrated hot water tank.	✓ Energy efficiency subsidy scheme ✓ Building codes and standards	2021 - 2023. Last date for signing contract - 2023.
			SHW	€1,060.			
		 Renovation	ATW	€1,060.			
			SHW	€1,060.			
			My Heat. More information	Grants			
ATW	€1,500.						
GSHP	€4,500.						
Retrofit tax relief. More information	Tax deduction.	 Renovation	ATA		According to tax scale (12% or 32%) the max level from €1,350 up to €3,600.	✓ Energy efficiency subsidy scheme ✓ Building codes and standards	1 January 2019.
			ATW				
			GSHP				
			HHP				
			SHW				

Source: EHPA, IPOPEMA Research

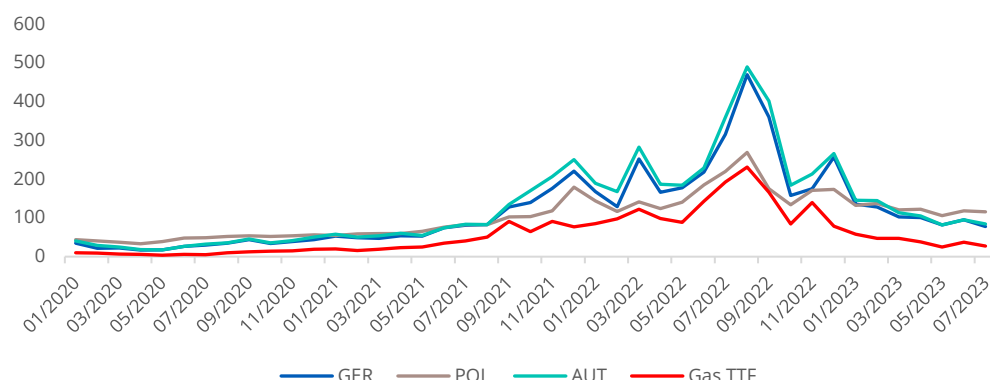
purchase of a heat pump heating system. The tax-payer, depending on his tax bracket, can take advantage of lower taxation over the next 6 years following the investment. Relief is directed only to renovated buildings. What is interesting is that Poland is one of the few countries in Europe in which boilers for fossil fuels are co-financed. This is expected to change following the ban on fossil-fuel powered boilers beginning in September 2029.

Electricity vs. gas costs

The reason for higher sales of heat pumps last year was not only political – the need for lower dependence on Russian gas – but also economic. With record high gas prices and a lower

spread between electricity costs and gas, it became more beneficial to invest in heating systems powered by electricity, at least in Poland.

Figure 38. Wholesale electricity price in Germany, Poland and Austria vs. price of gas TTF futures in EUR/MWh (2020-23)



Source: Company, IPOPEMA Research

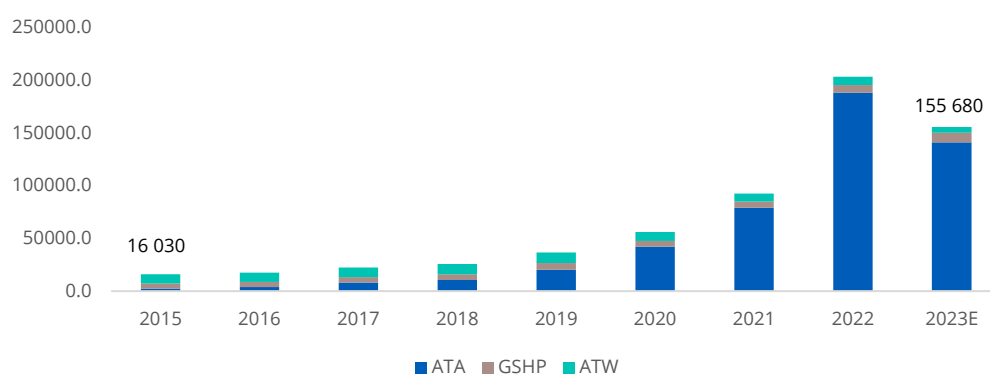
It can be seen that while in Germany and Austria the spread actually widened in 2022, it did not stop record-high sales.

Demand in 2023-24, regulatory environment and cost-benefit analysis

In the latest report from August 2023, Port PC disclosed that on the Polish heating systems market in 1H23, unit sales decreased by 40% y/y (in 2Q23 alone they were down 55% y/y). As for heat pumps, the ground source ones increased by 19% y/y in 2Q23 (up 37% y/y in 1H23), while air-to-water units were down 30% y/y in 2Q23 (up 3% y/y in 1H23). Port PC underlines that there is a shift in sales of heating system towards heat pumps with a 60% share in systems sold to single-family homes and 45% out of total systems sold.

Port PC decided to revise its heat pump unit sales forecast for 2023 to 155,680 compared to 196,200 assumed in March 2022.

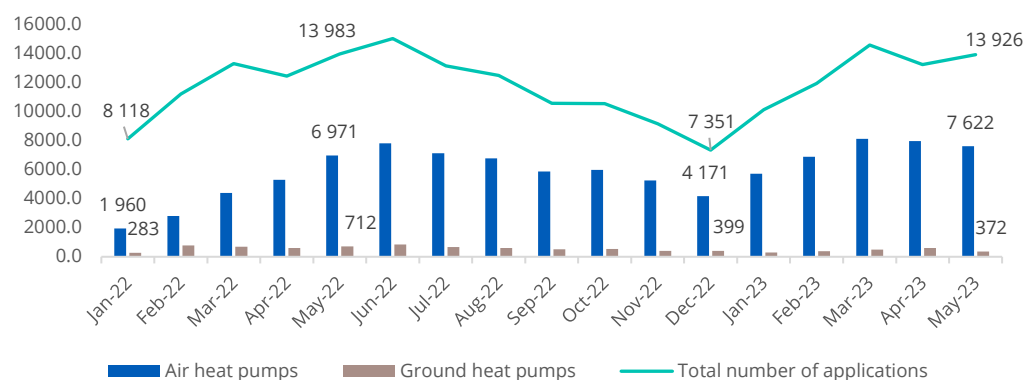
Figure 39. Heat pumps sales divided by type in units (2015-23)



Source: Port PC, IPOPEMA Research

It is worth mentioning that sales of heat pumps on the Polish market look decent when compared to the results of gas boilers, which fell by 60% y/y in 2Q23. Pellet boilers decreased even further at more than -70% y/y in 1H23.

At the same time, applications for financing in the "Clean Air" programme are growing. Port PC estimates that approximately 110k of the installed heat pumps in 2023 will be partially financed by government programmes.

Figure 40. Number of applications in “Clean Air” programme in units (2022-23)

Source: Company, IPOPEMA Research

The key challenges for heat pump sales in 2023 is a decrease in GDP and lower activity in the construction sector in terms of new investments and modernizations. Port PC also points to regulatory hurdles like funding gas boilers and persisting high energy prices. What's more, there is a growing body of opinion in the public sphere that nowadays, when using a heat pump, even a photovoltaic system does not always work as an antidote to inflated electricity prices. In this case, apart from the obvious issues that every investor can influence - such as tailoring the entire heating system to the needs of a particular building and family, choosing a high-quality heat pump with the right capacity and parameters confirmed by accredited testing laboratories, while ensuring the right conditions for its operation and, finally, selecting a sufficiently large PV installation capacity - the fundamental problem, no longer in the hands of investors, remains the Polish net-billing system, which in its current form results in less favourable energy price settlements for prosumers. The introduction of a photovoltaic electricity trading system based on the current market price of energy (net-billing) is a necessary solution from the point of view of European Union law, but in Poland the system has been formatted in such a way that it is not conducive to combining a customer's own energy production with the use of a heat pump. **In the area of energy prices, one piece of positive news** is the mandatory introduction of so-called dynamic tariffs into the offer of Polish energy companies from July 2024, in which the price of supplied energy is updated every 15 minutes and is supposed to reflect the current, momentary situation on the market. These tariffs will be a voluntary option for household consumers in general, but will be treated as default for prosumers with net-billing. This gives users the opportunity to manage the electricity they use at home more economically.

Some additional regulatory tailwind that may emerge is implementation of the European Commission's plan for the widespread use of heat pumps. Its publication is expected in the fourth quarter of 2023. This plan, supported by a comprehensive monitoring system, will certainly help to remove many barriers related to the development of the heat pump market in Poland and other European countries. **Based on that, Port PC expects a return to growth in the Polish heat pump market in 2024.**

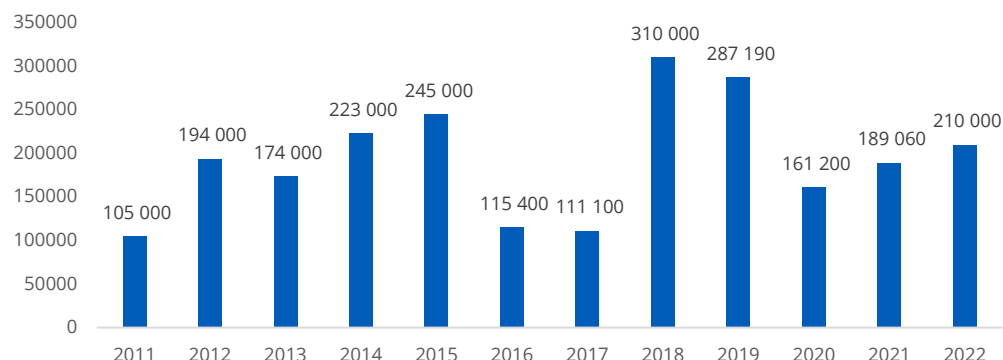
Due to persistently high electricity prices and their unfavourable relation to natural gas prices, **many investors planning to install or replace a heating device are not convinced that a heat pump will be a cost-effective solution.** And it is hardly surprising, because despite the fact that heat pumps are several times (3-4 times) more efficient than, for example, condensing gas boilers, their operating costs in a relatively well-insulated (by Polish standards), single-family building (according to WT 2017 standards, i.e. EU = 80 kWh/(m² - year)) are currently at a comparable level. Of course, the situation changes dramatically when photovoltaics are installed, as the heating bills for a house using a heat pump can fall by up to half, but for investors this means further start-up costs.

Solar collectors in Poland

After several years of declines, the solar collector market in Poland in 2022 experienced a notable resurgence with a significant 11% y/y increase in sales. This positive trend came after a period of instability in the Polish market, which primarily relied on communal tenders

funded through EU resources. The majority of these sales were attributed to small-scale rooftop installations carried out by private homeowners. Despite these promising developments, it's important to note that the market structure in Poland has remained

Figure 41. Sale of solar collectors in Poland 2011-2022 (in sqm)



Source: SPiUG, IPOPEMA Research

somewhat unstable. Although there had been some positive signals of increased retail sales of solar collectors, particularly for hybrid systems, these figures were still relatively low to establish a secure and stable market for such systems.

Product mix

In terms of product types, flat collectors continued to dominate the market, while vacuum collectors accounted for a mere 1% share of sales. This imbalance was largely influenced by the market structure, where tenders heavily favoured price considerations, often to the detriment of vacuum collectors, which were typically sold outside of tender-based programs. Efforts were being made to promote solar collectors, but there was still a need for more extensive promotional and informational campaigns to highlight their benefits as clean, low-cost energy sources.

Areas with potential for growth

There is growing interest in utilizing solar collectors for industrial process heat applications, as well as expanding their use beyond hot water preparation, aligning with trends observed in other European countries. Hybrid systems, particularly those combining solar collectors with heat pumps, are gaining popularity, driven by high energy prices. Towards the end of 2022, there was a surge in sales of solar collectors, especially for hybrid systems designed to reduce the costs associated with purchasing conventional energy sources.

Sales in 2023 under pressure; potential rebound in 2024?

According to SPiUG, in 2Q23, the solar thermal collector group saw a 32% y/y drop in sales, which was not confirmed by signals from the market concerning an increase in enquiries for installations of solar collectors for both domestic hot water and heating support. Solar collectors have seen an upturn in the retail market for the last two years. SPiUG claims that a country the size of Poland still has unused potential, but positive signs are noticeable. The technology of solar collectors as such seems to be heavily underestimated by consumers, but one can assume that, with such a deluge of misinformation, they may struggle to judge properly.

A very big obstacle to faster development and thus popularisation of solar collectors and heat pumps are the forthcoming national programmes to support RES. 'My Electricity' programme supports funding for virtually any type of source, but on the condition that a photovoltaic installation is set up. Even if a particular home has a solid-fuel boiler or a gas boiler and has no need to install PV, but would like to place a solar thermal system to reduce the consumption of the fuels, it cannot be done without a PV installation.

As per SPiUG, there is an upcoming program in the works focused on harnessing renewable heat for district heating networks, titled 'RES – a source of heat for district heating.'

Its anticipated launch is scheduled for either the end of 2023 or possibly as late as 2024. Notably, this program is expected to encompass solar thermal solutions as well.

Heat pumps in Austria

Austria is the second biggest market for Sunex. The company decided to accelerate its sales there via acquisition of a 100% stake in Krobath Bad Heizung Service for EUR 4.3m. Krobath operates in the heating and sanitary installation business. It mainly deals with the installation and servicing of heat pumps, solar and photovoltaic installations.

In Austria heat pump sales in units reached almost 62k in 2022, a significant rise compared to 38.6k in 2021.

Figure 42. Heat pumps sales in Austria 2007-2022 (in units)

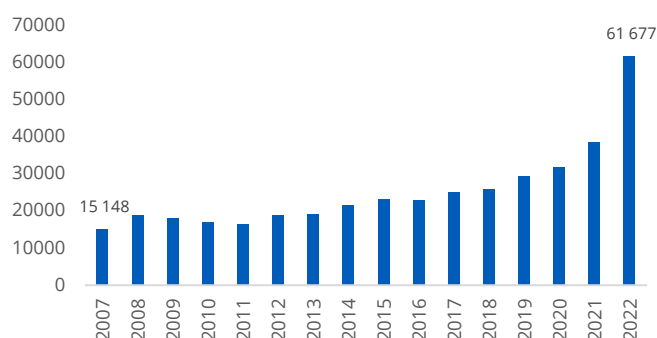
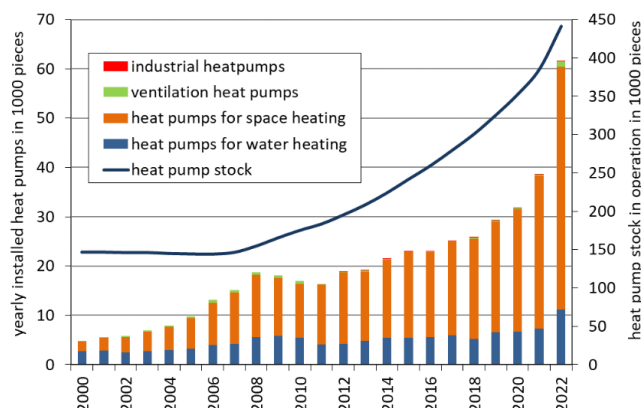


Figure 43. Types of heat pumps sold in Austria 2000-2022 (in units)



Source: Statista, ENFOS, IPOPEMA Research

According to a report by Nachhaltig Wirtschaften, the heat pump market has expanded rapidly since 2000 together with the market diffusion of energy efficient housing which were perfect for heat pump systems given low heating energy demand and low heating flow temperature. The 2008 crisis slowed down the development of the market, which returned to green in 2012. 2021 already saw quite substantial growth in units sold at 21.6%, but 2022 exceeded expectations with almost 60% growth y/y. When it comes to different types of heat pumps sold in 2022, out of a total of 61,677 sold, 49,192 were heat pumps for heating, 11,153 were hot water heat pumps, 1,201 were ventilation and air heat pumps and 131 were industrial ones. The biggest challenge to the market as seen by the researcher is not only to maintain the current dynamic and stabilize it in the mid-term, but also enable substitution of oil and gas based heating installations in which profitability may increase in 2023 and the ensuing years.

Grants

Austrian home owners can take advantage of a programme with a catchy name "Raus aus Öl und Gas" ("Getting away from oil and gas"). It assumes grants both in new buildings and in renovated ones. When it comes to new buildings, beneficiaries may count on up to a 20% subsidy for ATW and GSHP pumps with a requirement of eco-friendly refrigerant used in the heating/cooling process. For the houses being renovated, the max lump sum is lower at EUR 5k, but the share in investment is higher at 35%. Also, only ATW pumps are subsidized. The programme runs until the end of next year (2024).

Figure 44. Subsidies for residential heat pumps in Austria



Name of subsidy & more info	Type of subsidy	Single-family houses	Type of heat pump** & grant (in euros)	Extra info on subsidy grant (in euros)	Are other measures or schemes*** in place, that indirectly support heat pump deployment?	Start and end dates of subsidy
Raus aus Öl und Gas. More information and links to regional subsidies.	Grants	New building	ATW	Max 20% subsidised and up to €7,500 if GWP is between €1,500 and €2,000.	When installing an eligible heat pump whose refrigerant has a global warming potential (GWP) of over 1,500, the calculated subsidy is reduced by 20%.	From 3 January 2023 to 31 December 2024.
			GSHP			
		Renovation	ATW	Max. of €5,000 and up to 35% subsidised.		

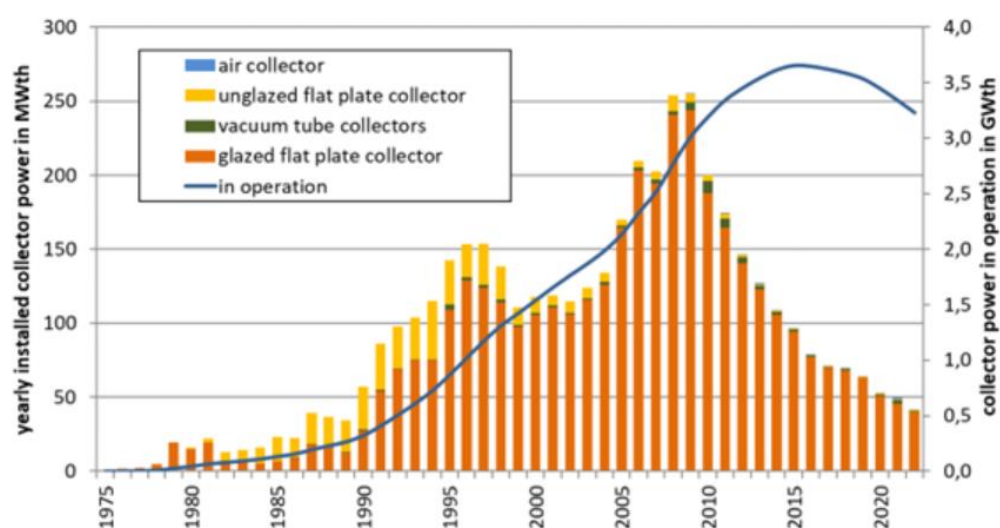
Source: EHPA, IPOPEMA Research

Solar collectors in Austria

As early as the 1980s, thermal solar energy experienced its initial surge in applications, particularly in water heating and swimming pool heating. By the early 1990s, a significant market had developed for solar combi systems, catering to both hot water and space heating needs. Between 2002 and 2009, the solar thermal market saw substantial growth, reaching its zenith in 2009. This growth was driven by escalating oil prices and the emergence of new applications in various sectors, including multi-family housing, tourism, solar-assisted district heating, and industrial process heat.

Following this period of robust expansion up to 2009, the domestic market experienced a continuous decline for more than thirteen years. This trend is not unique to Austria but has been observed across most European countries, with a few exceptions. Over the past two years, some European countries have witnessed a resurgence in installation figures. However, the Austrian domestic market has not followed suit, recording a 16% decline in 2022 compared to the previous year.

Figure 45. Market development of solar thermal collectors in Austria 1975-2020



Source: AEE INTEC, IPOPEMA Research

As of the conclusion of 2022, Austria boasted 4.6m sqm of operational solar thermal collectors, equivalent to an installed capacity of 3.2 GWth. These solar thermal systems collectively generated a solar yield of 2,063 GWth and contributed to avoiding the emission

of approximately 369,890 tons of CO₂. In 2022, a total of 59,160 square meters of new solar thermal collectors were successfully installed, translating to an added thermal capacity of 41.4 MWth, as depicted in the aforementioned figure.

Similarly to Germany and Poland, the market is dominated by single-family homes as key clients. In 2022 those accounted for 71% of sales.

Subsidies to the rescue

The Austrian federal government is intending to accelerate the expansion of photovoltaics (PV) by allocating a historic budget of EUR 600m for subsidies. Alongside the increased subsidies, the government also aims to streamline the approval process for PV systems. Until now, the authorities have incorporated two funding avenues within the Renewable Energy Sources Expansion Act (EAG): funding for rebates and market premiums. However, the government now intends to introduce an additional program dedicated to PV projects. PV Austria referred to this as a "fast-track" funding initiative, which will encompass EUR 268m.

Valuation

Our valuation approach uses two methods: the discounted cash flow (DCF) and the dividend discount model (DDM). We calculate our Fair Value for Sunex by taking the average of the two results. The two methods are aligned, as they are both based on the same financial model. The model assumes cashflow projections over a 10-year period for the firm based on our forecasts for the photovoltaic and construction markets, and GDP in Poland as well as other parameters including volume growth, product mix changes, changes in the financing model, efficiency gains, production cost increases, capital expenditures and working capital needs. Our dividend projections are a derivative of the earnings forecasts in our financial model. Payout levels are determined by corporate policy in the short term (10%) and then drift towards a target payout ratio of 50% in the long-term. The DDM is also a useful tool for understanding P/E multiples $[P/E = (D/E)/(k-g)]$, with differences explained by a combination of earnings growth and dividend payout. Both our DCF and DDM models have terminal values with a growth rate of 1%.

Our assumptions for cost of equity were established by using a variable risk-free rate (equal to the 12-month forward interest rate) and adding a 5.0% equity risk premium each year. The 12-month forward interest rates were derived from the yield curve of the 2021-2028 period. Thereafter, we use a flat 4.5% rate, which represents our estimate of a through-the-cycle interest rate for Emerging Europe. We also consistently use a beta of one (1) so as not to distort the WACC and the comparability of our valuations.

Figure 46. DCF Valuation

PLN m	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	Terminal Year
Revenues	332.3	316.8	339.6	363.6	388.9	416.0	445.0	476.0	509.2	544.7	544.7
EBIT	32.3	27.5	32.0	35.8	40.2	46.2	52.8	60.1	69.3	80.4	80.4
Tax on EBIT	5.5	2.7	3.2	3.6	4.0	8.8	10.0	11.4	13.2	15.3	15.3
NOPLAT	26.8	24.7	28.8	32.2	36.2	37.5	42.8	48.7	56.2	65.1	65.1
Depreciation	5.9	6.0	7.9	9.0	9.9	10.6	11.5	12.3	13.1	13.9	13.9
Capital expenditures	-31.3	-32.3	-21.5	-16.9	-14.2	-15.3	-16.5	-15.1	-14.9	-14.6	-14.6
Change in working capital	-14.9	4.5	-6.2	-6.7	-7.0	-7.3	-7.7	-8.2	-8.5	-8.9	-8.9
Free cash flow	-13.5	2.8	8.9	17.6	24.8	25.5	30.0	37.7	45.8	55.5	55.5
Risk-free rate	5.77%	5.92%	6.08%	6.24%	6.34%	6.44%	6.65%	6.65%	6.65%	6.65%	6.65%
Equity risk premium	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%
Beta	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Cost of equity	11.27%	11.42%	11.58%	11.74%	11.84%	11.94%	12.15%	12.15%	12.15%	12.15%	12.15%
Cost of debt (pre-tax)	8.3%	8.4%	8.6%	8.7%	8.8%	8.9%	9.1%	9.1%	9.1%	9.1%	9.1%
Effective tax rate	27.3%	18.8%	17.1%	10.0%	10.0%	10.0%	10.0%	19.0%	19.0%	19.0%	19.0%
After-tax cost of debt	6.0%	6.8%	7.1%	7.9%	8.0%	8.0%	8.2%	7.4%	7.4%	7.4%	7.4%
Weight of debt	23.9%	23.3%	20.9%	17.8%	13.6%	12.0%	10.5%	9.7%	9.3%	7.9%	7.9%
Weight of equity	76.1%	76.7%	79.1%	82.2%	86.4%	88.0%	89.5%	90.3%	90.7%	92.1%	92.1%
WACC	10.0%	10.4%	10.6%	11.1%	11.3%	11.5%	11.7%	11.7%	11.7%	11.8%	11.8%
Discount fact	0.91	0.82	0.74	0.67	0.60	0.54	0.48	0.43	0.39	0.35	0.31
PV of FCF	-12.3	2.3	6.7	11.8	14.9	13.8	14.5	16.3	17.8	19.2	17.2
Sum of FCF PV's	105.0										
FCF terminal growth rate	2.0%										
Terminal value	579.1										
PV of terminal value	179.6										
Unwind of discount	22.1										
Enterprise value	306.7										
Net debt 2022	57.6										
Employees liabilities	-0.5										
Dividend paid out in 2023 (ytd terms)	-5.7										
Share issue	0.0										
Per share value (PLN)	11.97										

Source: Company, IPOPEMA Research

Figure 47. DDM Valuation

PLNm	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E	2033E	Terminal Year
Dividends	3.8	3.1	7.5	8.6	16.7	17.8	31.7	36.7	42.9	50.4	50.4
Discount rate	11.4%	11.6%	11.7%	11.8%	11.9%	12.1%	12.1%	12.1%	12.1%	12.1%	12.1%
Discount factor	0.90	0.80	0.72	0.64	0.57	0.51	0.46	0.41	0.36	0.32	0.29
Discounted dividend	3.4	2.5	5.4	5.5	9.6	9.1	14.5	15.0	15.6	16.3	14.6
Sum of DD PV's	96.9										
DIV terminal growth rate	2.0%										
Terminal value	507.0										
PV of terminal value	146.5										
Discount unwind	0.8										
Equity value	244.2										
Per share value (PLN)	12.03										

Source: Company, IPOPEMA Research

Figure 48. Valuation Summary

PLN	
DCF	11.97
DDM	12.03
Average	12.00

Source: Company, IPOPEMA Research

Relative valuation

There is no listed heat pumps producers however there is ML System, a PV producer which we include in the table below. Sweden is one of the most developed countries in terms of listed heat pumps/air conditioning solutions country.

Compared to the international peers' median of 2024E EV/EBITDA of 10.4x, Sunex trades almost at par (at 10.3x, which constitutes a 0.9% discount).

Figure 49. Relative Valuation

PRICE	Ticker	NAME	P/E			EV/EBITDA			EV/SALES		
(LCU)			2023	2024	2025	2023	2024	2025	2023	2024	2025
206.9	TT	TRANE TECHNOLOGIES PLC	23.3	21.2	19.0	16.5	15.4	14.2	2.9	2.8	2.6
88.2	LEGD.PA	LEGRAND SA	18.7	18.4	17.0	12.8	12.6	11.7	3.0	3.0	2.8
69.6	NIBEB.ST	NIBE INDUSTRIER AB	25.7	25.1	19.9	14.3	13.9	11.2	2.7	2.5	2.2
67.2	SYSR.ST	SYSTEMAIR AB	14.9	16.5	15.2	8.8	9.2	8.6	1.3	1.2	1.2
109.0	BEIJ.B.ST	BEIJER REF AB	24.5	22.0	19.9	12.2	11.0	10.3	1.6	1.4	1.3
424.0	BEAN.S	BELIMO HOLDING AG	39.8	34.9	30.5	25.5	22.6	20.3	5.7	5.3	4.8
22.4	CRLI.MI	CAREL INDUSTRIES SPA	28.5	26.3	22.9	17.2	15.0	13.4	3.6	3.2	2.9
138.7	MTRS.ST	MUNTERS GROUP AB	23.4	17.8	17.4	14.8	12.0	11.9	2.2	1.9	1.9
28.5	UPONOR.HE	UPONOR OYJ	24.8	20.4	18.5	11.1	10.2	9.7	1.7	1.7	1.6
379.8	FAN.L	VOLUTION GROUP PLC	15.2	14.7	13.8	10.8	10.2	9.8	2.6	2.4	2.3
51.8	ZEH.N.S	ZEHNDER GROUP AG	12.0	10.9	9.6	5.6	5.2	4.7	0.7	0.6	0.6
187.5	NMAN.ST	NEDERMAN HOLDING AB	18.2	NaN	12.8	9.6	9.6	8.2	1.3	1.3	1.3
21.8	LUVE.MI	LU-VE SPA	14.5	12.0	10.0	7.9	7.0	6.2	1.0	0.9	0.8
40.0	METG.S	MEIER TOBLER GROUP AG	14.5	12.7	12.1	NaN	8.1	7.9	0.8	0.8	0.8
153.7	ATCOA.ST	ATLAS COPCO AB	26.5	24.9	23.1	17.2	16.4	15.6	4.5	4.3	4.1
382.1	ALFA.ST	ALFA LAVAL AB	22.8	19.9	18.3	14.7	13.1	12.6	2.8	2.5	2.4
33.6	G1AG.DE	GEA GROUP AG	13.1	13.0	12.4	7.9	7.6	7.3	1.1	1.1	1.0
5.9	ARIS.MI	ARISTON HOLDING NV	9.5	9.5	8.7	3.1	3.1	2.8	0.4	0.4	0.4
7.7	ARBNO.S	ARBONIA AG	121.6	22.7	14.7	8.2	6.8	5.9	0.7	0.7	0.6
62.4	MLSP.WA	ML SYSTEM	-101.8	103.7	48.7	18.1	10.6	8.1	2.4	1.8	1.3
		MEDIAN	20.8	19.9	17.2	12.2	10.4	9.7	2.0	1.7	1.5
13.1	SNXP.WA	SUNEX	10.4	12.7	10.7	8.9	10.3	8.6	1.0	1.1	1.0
		Premium/discount to median									
		SUNEX	-49.8%	-36.2%	-38.0%	-26.8%	-0.9%	-11.7%	-48.0%	-37.1%	-31.5%
		Our valuation									
		SUNEX	9.56	11.65	9.78	8.33	9.68	8.05	0.96	1.02	0.95
		Premium/discount to median									
		SUNEX	-53.9%	-41.5%	-43.2%	-31.5%	-7.3%	-17.4%	-51.4%	-41.2%	-35.9%

Source: Reuters, IPOPEMA Research

Company profile and business model

Sunex was established in Racibórz, Poland, in 2002. The company operates in the industry of renewable energy sources, offering a wide range of devices used in both heating and solar technology, as well as a wide range of components and assembly elements used in both of these techniques. The company was founded by Mr Romuald Kalyciok, whose activity since 1995 in Poland and abroad has allowed Sunex to become one of the leaders in renewable devices production companies.

Sunex has been listed on the Warsaw Stock Exchange since 30 July 2015, while the company's shares were previously traded on the NewConnect market.

Sunex SA – parent company – the firm's main area of activity is the production and supply of innovative devices from the renewable energy and heating industries; these include heat pumps, hot water tanks, solar collectors, pump groups, and the installation of systems for PV installations.

Polska Ecology Tenders sp. z o. o. – subsidiary – the main area of activity is the supply and installation of renewable energy solutions for local government units, based on public tenders.

Vessun Sp. z o. o. – an associated entity whose main area of activity is the packaging of liquids used in renewable energy installations.

Sunex GmbH was established on 28 January 2022; this is a subsidiary based in Germany in which Sunex SA has acquired all shares. The company's main area of activity is trade and assembly services in the renewable energy industry.

On 20 January 2023, Sunex acquired 100% of shares in Krobath Bad Heizung Service GmbH, a limited liability company under Austrian law. The activity of Krobath Heizung is the commercial implementation of all activities in the field of heating and ventilation installations, gas and water installations in buildings. The company has five locations: Graz, Feldbach, Fürstenfeld, Jennersdorf and Straden. The company's results have been subject to consolidation from 1 February 2023. The Austrian brand has been present and recognized on the market for more than 100 years; the ready-made structure ensures profits and provides a good foothold to deepen Sunex's presence on the local Austrian market. Thanks to the extension of Krobath's offer to include a range offered by Sunex, the company has had the opportunity to effectively use its new sales channel on the Austrian market to place its own products.

Polska Ekologia Sp. z o. o. is the parent company of Sunex SA: as of 31 December 2021 it holds 58.01% of the capital and 66.31% of votes at the General Meeting.

For years, devices and systems manufactured by Sunex have been characterized by high quality: this has been confirmed by the implemented PN-EN ISO 9001:2015 quality systems, PN-EN ISO 14001:2015 PN-EN ISO1090-1, PN-EN ISO1090-2, PN-EN ISO1090-3 or Production Control Plant.

Shareholder structure

Mr Romuald Kalyciok, Sunex's CEO, directly owns 17.26% of the company and indirectly owns another 58.01% through Polska Ekologia. In total, this gives the CEO 75.27% of the company's capital. Class A shares in Polska Ekologia have double the voting power at the EGM, hence Mr Kalyciok controls 80.16% of votes.

Figure 50. Shareholder structure (% of capital)

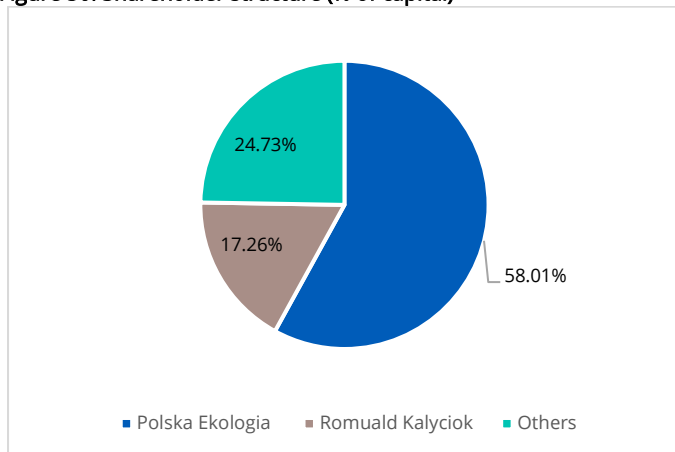
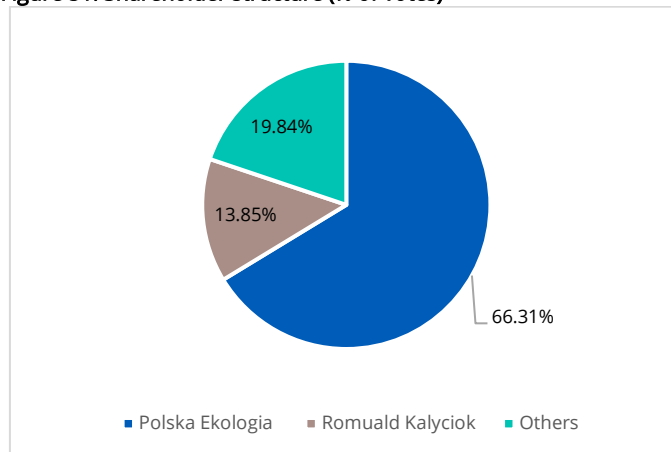


Figure 51. Shareholder structure (% of votes)

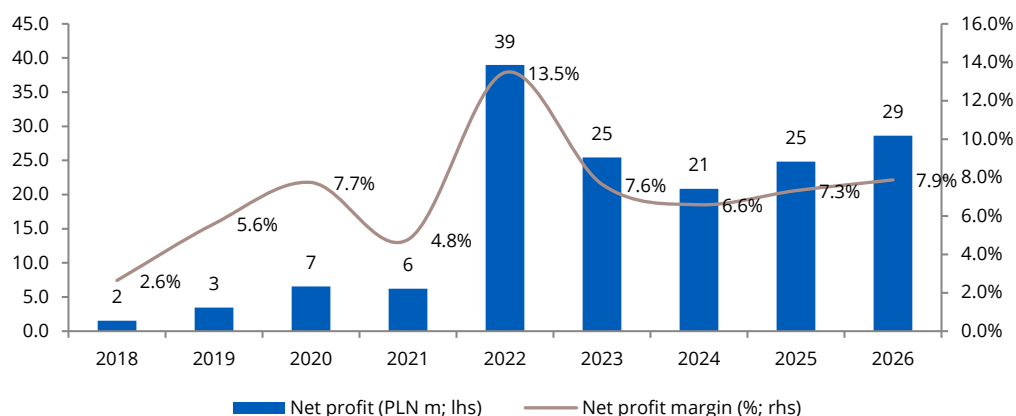


Source: Company, IPOPEMA Research

Earnings outlook

We expect Sunex's bottom line to fall 34.8% y/y to PLN 25.4m in 2023 and by a further 17.9% y/y to PLN 20.8m in 2024, before rebounding 19.1% y/y to PLN 24.9m in 2025. The drop in the 2023 results should be due to lower sales of heat pumps (especially on the German market) compared to the stunning results achieved in 2022. The acquisition of Bad Krobath in Austria is likely to add around PLN 100m to sales in the FY 2023; the decline in the bottom line was barely visible in 1H23. With earnings hitting a trough in 4Q23, we expect net profit to fall to PLN 1.2m (down 89.3% y/y and down 73.4% q/q) in 4Q23. The year ahead is likely to bring a stabilization of economic activity on the markets of Germany, Austria and Poland, with a rebound likely to stretch into 2H24. Sunex aims to sell more products under its own brands and fewer under O&M brands (especially on the German market); hence we expect margins to gradually increase over the long term. The company's investment programme aims to deliver a new production line, which will allow Sunex to produce an autonomous heating system as well as composite containers for hydrogen storage; overall, this should lead to an improvement in the bottom line beyond 2025.

Figure 52. Net profit (PLN m) and net profit margin (%)



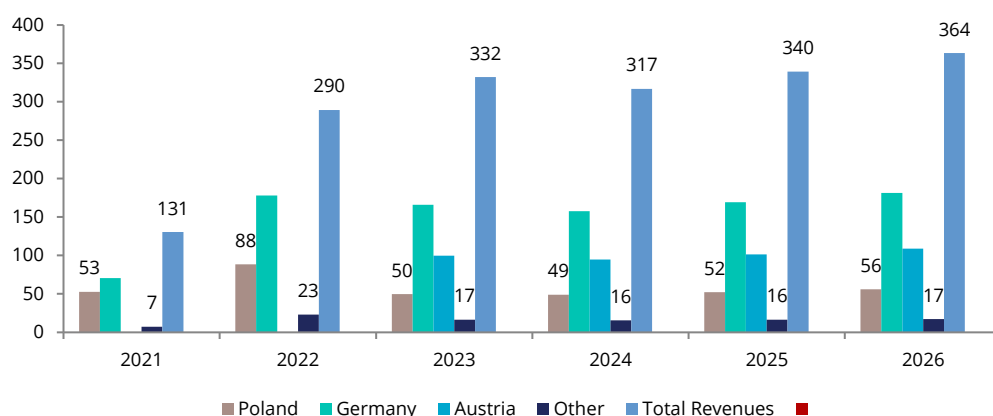
Source: Company, IPOPEMA Research

Revenue outlook

Sunex is active primarily on three main markets: Germany, Austria and Poland. In FY 2022, the share of domestic revenues reached 30.6%, while sales in Germany constituted 61.5% of group sales. After 1H23 and the acquisition of Austrian subsidiary Bad Krobath, Polish revenues fell to 12.8% of total group sales, the German share fell to 48.7% while the Austrian share of revenues amounted to 35.9% (up from 0.8% in 1H22). This clearly demonstrates that the company is dependent primarily on the German and Austrian economies and the subsidy schemes available for customers on these markets.

The company does not provide an exact split of revenues into particular categories. These are, however, mostly derived from the photovoltaic segment (mostly holders and aluminium assembly parts), heat pumps (in-house designed by engineers hired by the company and patented solutions, in-house manufactured), solar collectors, cooling liquids, and hybrid systems which include heat pump + boiler + solar collector. The company is developing its own hydrogen solutions (i.e. composite tanks for hydrogen storage), which over time would ideally suit to its business model: Sunex will be able to provide customers with fully renewable system, making independent generation units available to anyone. As far as we understand, there are global manufactures of particular solutions and companies which specialize in heat pumps or PV or hydrogen solutions; for now, however, retail customers are forced to combine various solutions in their homes, which could possibly be cumbersome.

Figure 53. Revenue split (PLN m)

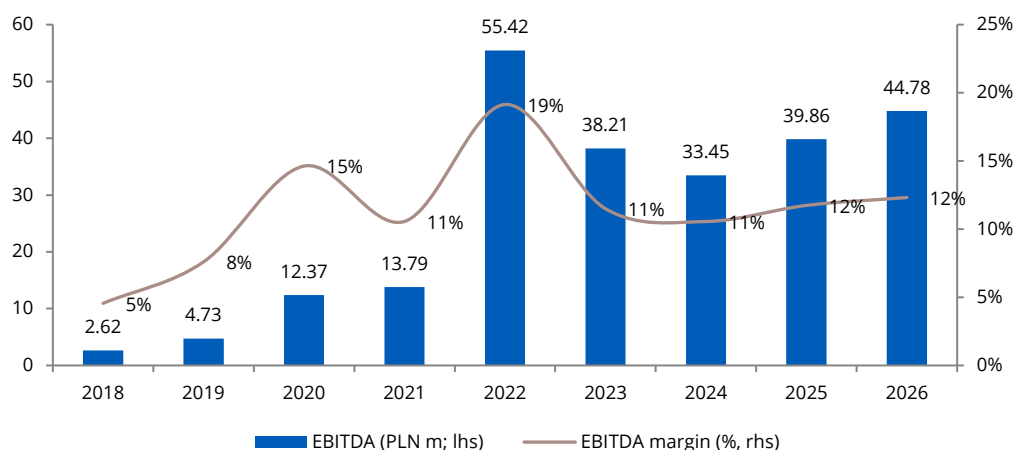


Source: Company, IPOPEMA Research

EBITDA outlook

We expect Sunex's EBITDA to decrease at a 2022-2026 CAGR of 5.2%, a result of the stunning outcome achieved in 2022. As the war in Ukraine started and gas prices shot up, many people in Western Europe started to look for alternative solutions to gas boilers. This propelled demand for heat pumps. We believe this demand is now stabilizing. As gas prices retract to pre-war levels (although still inflated by the Middle East crisis and the strike on Israel), German clients have reverted to gas boilers. According to Der Spiegel (20 Jul. 2023), the number of motions for subsidies for heat pumps on the German market dwindled in 1H23. In our opinion we are unlikely to see any change in 2H23. This situation is only likely to alter with the new subsidy scheme scheduled to start in early 2024: this will exclude fossil-fuel boilers from the subsidy scheme in Germany. (In order to receive a subsidy, the system will have to source at least 65% from renewable energy, which excludes gas boilers.) Hence we expect to see the emergence of an incremental demand for heat pumps. After a staggering 302% y/y EBITDA growth in 2022, we expect EBITDA to fall 31.1% y/y to PLN 38.2m in 2023 and by a further 12.6% y/y to PLN 33.5m in 2024; this should be due to the profound and prolonged macroeconomic slowdown in Germany. We expect the EBITDA line to rebound by 19.2% y/y to PLN 39.9m in 2025, reflecting better macroeconomic prints.

Figure 54. EBITDA (PLN m) and EBITDA margin (%)



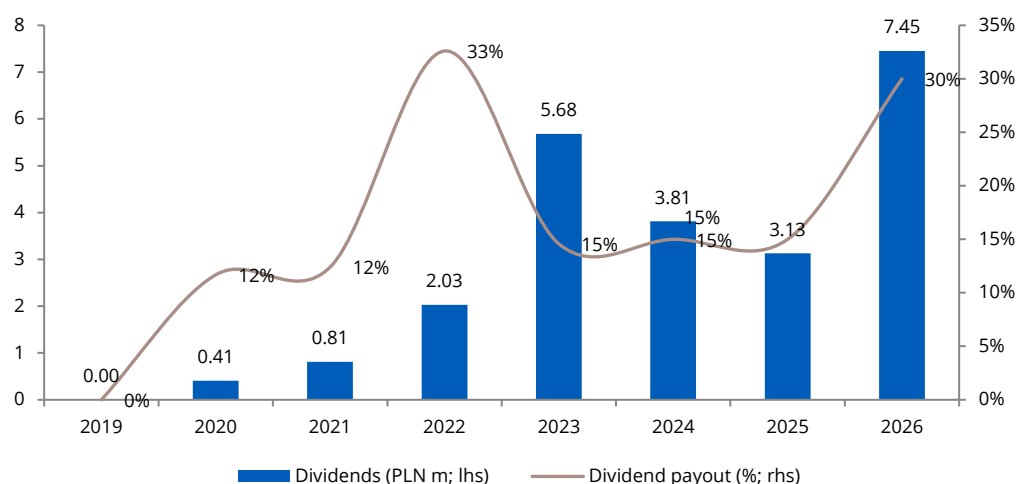
Source: Company, IPOPEMA Research

Balance sheet and dividends

Sunex recorded net debt/EBITDA of 1.0x at the end of 2022; however, we expect this to rise to 2.0x in 2023 due to the investment programme implemented in the early part of this year which is set to be finalized in 2024. We expect leverage at 2.4x net debt/EBITDA in 2024, falling back to 2.0x in 2024 on the back of new revenue lines. In our projections we do not expect any further M&A activity; however, the company may go through an acquisition procedure if it finds a suitable target (most likely on the German or DACH market).

We expect the company to continue to pay dividends in the years ahead.

Figure 55. Dividends (PLN m) and dividends payout (%)

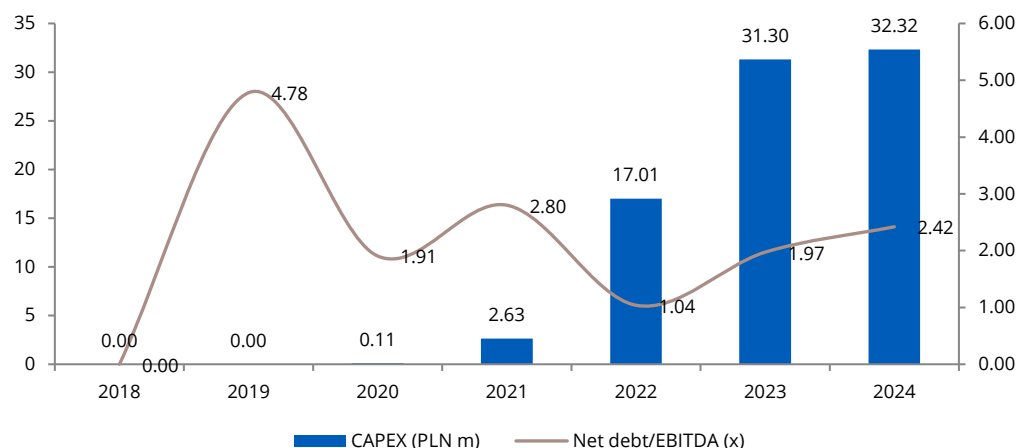


Source: Company, IPOPEMA Research

CAPEX forecast and net debt

We expect Sunex's capital expenditures to rise in 2023 as the company ramps up spending on its new production facility. We expect CAPEX to reach PLN 31.3m in FY 2023. Thereafter, we forecast spending to rise to PLN 32.3m in 2024E before falling to PLN 21.5m in 2025E. The company has applied for a PLN 15m subsidy from state-owned vehicle NFOŚiGW for the R&D part of the project. For now, however, this remains an unknown. In our model we do not yet include this subsidy.

Figure 56. CAPEX (PLN m) and net debt/EBITDA (x)



Source: Company, IPOPEMA Research

Risks to fair value

Demand volatility

Sunex is exposed to the heat pump, PV and solar collector market, which currently is undergoing a slowdown. Subsidies, gas prices and expectations about electricity bills are to a large extent driving demand for the company's products.

Unfavourable trend in prices of materials and services

Adverse trends such as rising raw material costs and inflation in employees' wages may hamper the company's profitability.

Potential rise in competition

The company is exposed to competition from both global and local heat pump producers.

Workforce

At the moment the economy is slowing down, hence wage pressure is likely to ease slightly; however this could change over time with the resurgence of the economy.

Economic slowdown

Estimates for Poland, Germany and Austria suggest lower economic growth rates going forward. As a result, some investments might be suspended, which would raise questions about the level of Sunex's future production. Decreasing EU funds are likely to accentuate the problem.

Judicial reform in Poland

Reform of the judicial system in Poland was executed in a controversial manner and in many ways has worked against the country's existing constitution. This has drawn the attention of the EU Commission, which has threatened to withhold EU proceeds arriving in the form of cheap loans and subsidies. If this stalemate between the Polish government and the EU persists, we could see a negative influence on the funding of many construction projects beyond 2023; this would hamper Sunex's ability to grow its revenues on the domestic market.

Financials

Figure 57. INCOME STATEMENT (PLN m)

	2019	2020	2021	2022	2023E	2024E	2025E	2026E
Sales	62.2	84.6	130.5	289.5	332.3	316.8	339.6	363.6
Cost of goods & products sold	-51.1	-67.4	-108.5	-215.8	-256.5	-245.1	-260.1	-277.0
Gross profit	11.1	17.1	22.0	73.7	75.8	71.7	79.4	86.6
SG&A	-6.0	-7.1	-12.3	-26.1	-49.8	-47.4	-50.9	-54.4
Other operating activity	-0.3	0.1	0.5	3.8	6.3	3.2	3.4	3.6
EBIT	4.7	10.1	10.2	51.4	32.3	27.5	32.0	35.8
Net financial activity	-0.3	-1.9	-1.6	-3.3	-1.7	-4.3	-4.4	-3.9
Pre-tax profit	4.4	8.2	8.6	48.0	30.7	23.2	27.6	31.8
Tax	-1.0	-1.6	-2.3	-9.0	-5.3	-2.3	-2.8	-3.2
Minorities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net income	3.5	6.5	6.2	39.0	25.4	20.9	24.8	28.6
EBITDA	4.7	12.4	13.8	55.4	38.2	33.5	39.9	44.8

Source: Company, IPOPEMA Research

Figure 58. BALANCE SHEET (PLN m)

	2019	2020	2021	2022	2023E	2024E	2025E	2026E
Long-term assets	47.9	52.8	54.9	73.3	99.4	125.5	139.5	147.7
Tangible assets	37.0	42.9	44.8	61.4	84.2	110.4	124.0	131.8
Goodwill	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Intangible assets	5.3	4.3	3.5	3.7	6.4	6.4	6.5	6.5
Others	3.2	3.2	4.2	5.8	6.5	6.3	6.6	7.0
Current assets	22.2	31.1	61.7	125.8	149.3	142.5	151.8	161.9
Inventories	10.3	12.7	39.4	83.8	98.4	94.0	99.8	106.2
Receivables from construction activities	0.0	0.0	4.2	1.7	4.6	4.3	4.7	5.0
Trade receivables	11.2	16.0	16.5	37.3	42.8	40.8	43.7	46.8
Cash	0.1	1.6	0.8	2.9	3.3	3.2	3.4	3.6
Other	0.7	2.4	1.7	3.1	3.6	3.4	3.6	3.9
Total assets	70.1	83.9	116.6	199.1	248.7	268.0	291.2	309.6
Equity	31.5	37.7	42.8	80.2	99.9	117.0	138.7	159.9
Long-term liabilities	13.2	18.6	22.7	32.8	35.5	34.7	35.9	37.2
Interest bearing	7.1	9.1	11.1	17.0	17.0	17.0	17.0	17.0
Leasing	1.4	3.0	4.4	6.5	7.4	7.1	7.6	8.1
Subsidies	2.5	4.3	4.1	5.7	6.6	6.3	6.8	7.3
Others	2.1	2.2	3.1	3.7	4.5	4.3	4.6	4.9
Short-term liabilities	25.4	27.6	51.1	86.2	113.3	116.4	116.7	112.5
Interest bearing	13.9	12.6	23.1	35.7	52.8	58.7	55.4	47.2
Trade liabilities	8.9	12.0	24.7	39.7	47.8	45.7	48.5	51.6
Provisions	0.9	0.0	0.2	0.8	0.9	0.9	1.0	1.0
Leasing	0.2	0.4	0.8	1.3	1.5	1.4	1.5	1.6
Others	1.4	2.5	2.3	8.6	10.2	9.7	10.3	11.0
Total liabilities & equity	70.1	83.9	116.6	199.1	248.7	268.0	291.2	309.6

Source: Company, IPOPEMA Research

Figure 59. CASH FLOW STATEMENT (PLN m)

	2019	2020	2021	2022	2023E	2024E	2025E	2026E
Net profit	3.5	6.5	6.2	39.0	25.4	20.9	24.8	28.6
Depreciation	0.0	2.3	3.6	4.1	5.9	6.0	7.9	9.0
Change in net working capital	0.0	0.0	-22.6	-49.2	-14.9	4.5	-6.2	-6.7
Other items	-1.8	-3.7	0.0	9.1	2.8	-0.8	1.0	1.1
Operating cash flow	1.6	5.1	-12.7	2.9	19.1	30.6	27.6	32.0
Purchases of tangibles & intangibles	0.0	-0.1	-2.6	-17.0	-31.3	-32.3	-21.5	-16.9
Others	-12.8	-5.0	0.7	0.5	0.0	0.0	0.0	0.0
Investing cash flow	-12.8	-5.1	-1.9	-16.5	-31.3	-32.3	-21.5	-16.9
Change in interest-bearing debt	0.0	0.0	12.6	18.0	18.3	5.4	-2.7	-7.5
Dividends	0.0	-0.4	-0.8	-2.0	-5.7	-3.8	-3.1	-7.5
Other	11.3	1.9	2.1	-0.3	0.0	0.0	0.0	0.0
Financing cash flow	11.3	1.5	13.9	15.6	12.6	1.6	-5.8	-14.9
Total cash flow	0.1	1.5	-0.8	2.0	0.5	-0.2	0.2	0.2
Cash at beginning of period	0.0	0.1	1.6	0.8	2.9	3.3	3.2	3.4
Cash at end of period	0.1	1.6	0.8	2.9	3.3	3.2	3.4	3.6

Source: Company, IPOPEMA Research

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LLP – loan loss provisions – an expense set aside as an allowance for bad loans.

NPL – non-performing loan – loans that are in default or close to be in default.

Cost/Income – operating expenses divided by total banking revenue.

ROE – return on equity – net income (or adjusted net income) divided by the average shareholders' equity.

ROA – return on assets – net income (or adjusted net income) divided by the average assets.

EBIT – earnings before interests and tax.

EBITDA – earnings before interests, tax, depreciation and amortization.

EPS – earnings per share – the net income (or adjusted net income) divided by the number of shares outstanding.

P/E – price to earnings ratio – price divided by earnings per share.

PEG – P/E ratio divided by the annual EPS growth, usually over a certain period of time.

CAGR – compound annual growth rate.

BVPS – book value per share, the book value of the Company's equity divided by the number of shares outstanding.

P/BV – price to book value - price divided by the BVPS.

DPS – dividend per share – dividend of a given year divided by the number of shares outstanding.

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Rating History – Sunex

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