



Stelrad Radiator Group Limited

Market report

6 November 2021

Private & confidential

This report was commissioned by Stelrad Radiator Group Limited ("Stelrad") in connection with the IPO (the "Project") under the terms laid out in our engagement letter dated 15th September 2021.

The report has been prepared for the sole use of Stelrad and any other party to our engagement letter or a reliance letter issued by us and solely for the purposes of the Project and should not be relied upon by anyone else or for any other purposes. The report is given in confidence to the parties to our engagement letter or a reliance letter issued by us and should not be quoted, referred to or shown to any other parties without our prior consent. We assume no duty of care in relation to any person who is not a party to our engagement letter, or a reliance letter issued by us.

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The report and our advice are primarily based upon information gathered from management, primary and secondary sources. We have inevitably relied on data and information provided to us by third parties and management, and on enquiries and discussion with them. We have not verified the accuracy of the data or the information and explanations provided by third parties and management and we do not accept liability to any person for any inaccuracies in information given to us.

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Segmentation

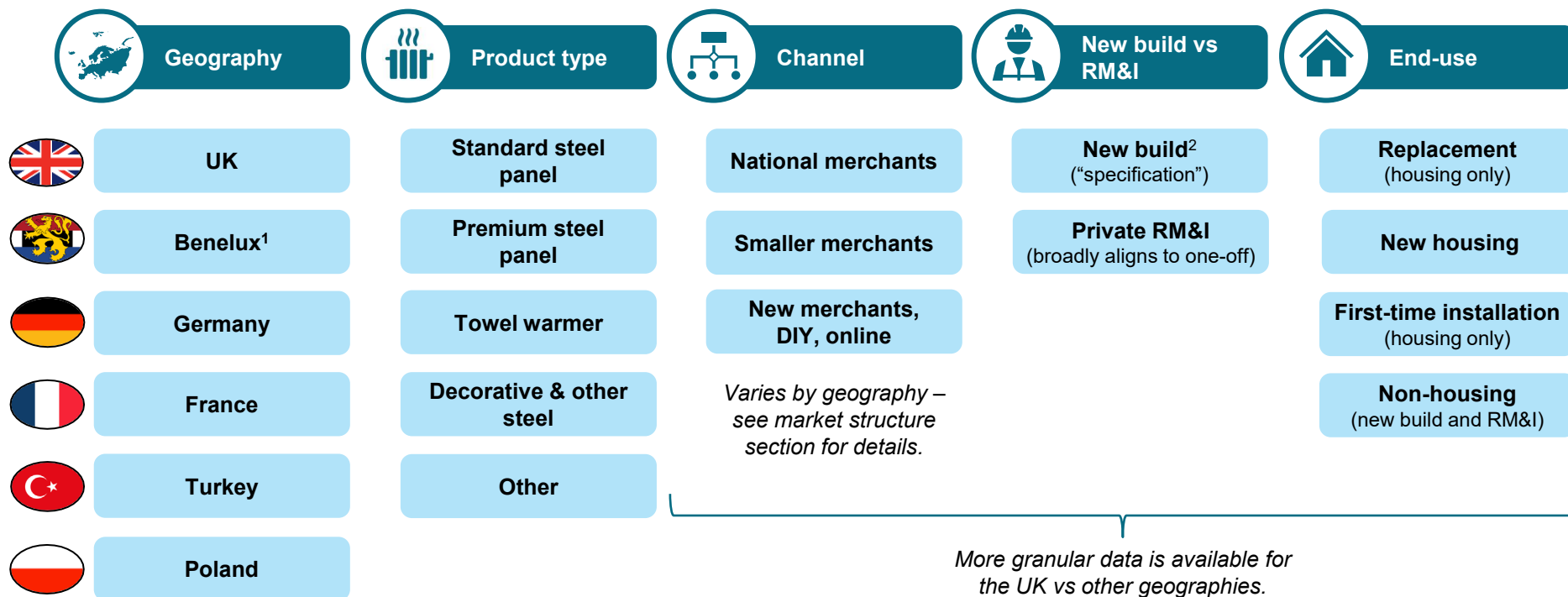
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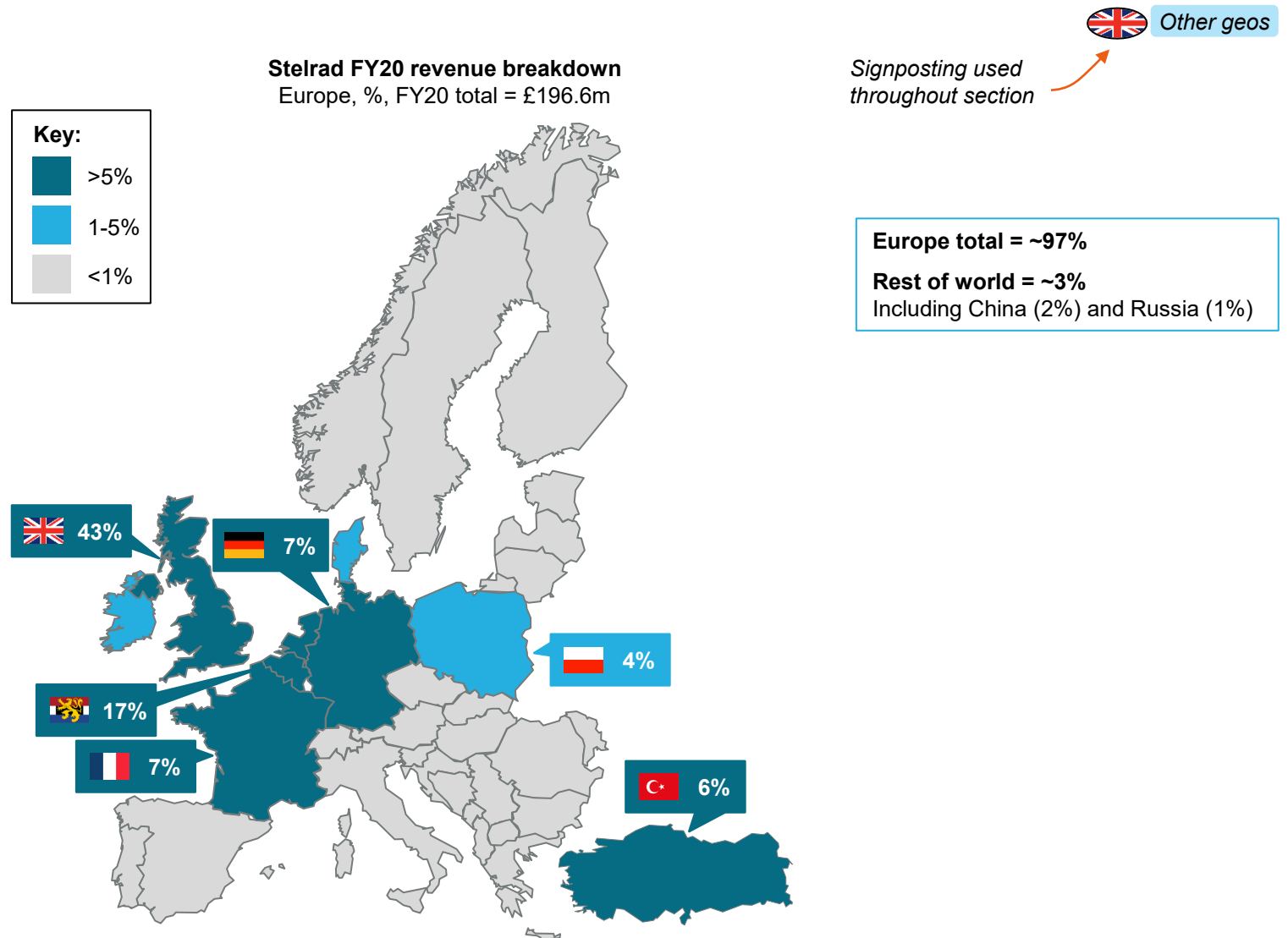
CIL's modelling segments Stelrad's market by geography and product type, with some segmentation by channel, new build vs RM&I, and end-use.

Radiator market segmentation




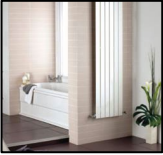



Note: 1) Benelux excludes Luxembourg (only ~2% of total population). 2) Includes social housing.

CIL's model focuses on Stelrad's key geographies, accounting for ~84% of FY20 sales.

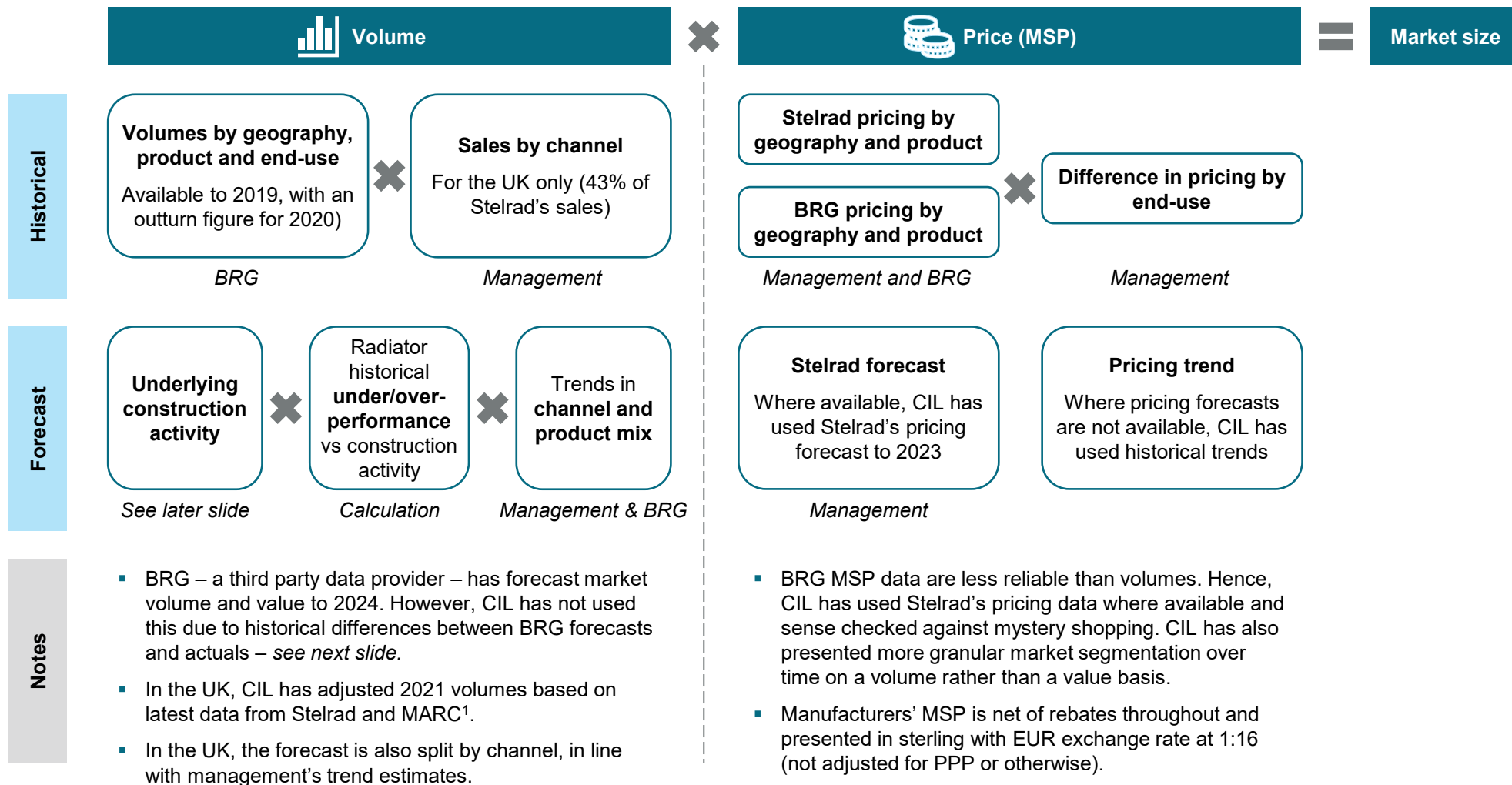


CIL's model segments by five radiator product categories.

CIL market model categories		BRG reporting categories	Commentary
Standard steel panel		<ul style="list-style-type: none"> Steel panel 	<ul style="list-style-type: none"> The most popular radiator category across residential and commercial use.
Premium steel panel			<ul style="list-style-type: none"> Steel panel radiators differentiated by design.
Towel warmer		<ul style="list-style-type: none"> Towel warmers 	<ul style="list-style-type: none"> Increasingly popular radiator category, growth is driven more by end-users than other categories.
Decorative & other steel		<ul style="list-style-type: none"> Decorative steel tubular Other steel 	<ul style="list-style-type: none"> Mainly used for commercial applications but also gaining traction in high-end residential.
Other		<ul style="list-style-type: none"> Aluminium Cast iron Convector (steel / bimetal) Electric convectors Oil filled 	<ul style="list-style-type: none"> More than 80% of volumes in this category are aluminium radiators, which can sustain the high water heat and pressures required in some countries' collective heating systems.

Source: BRG, IM.

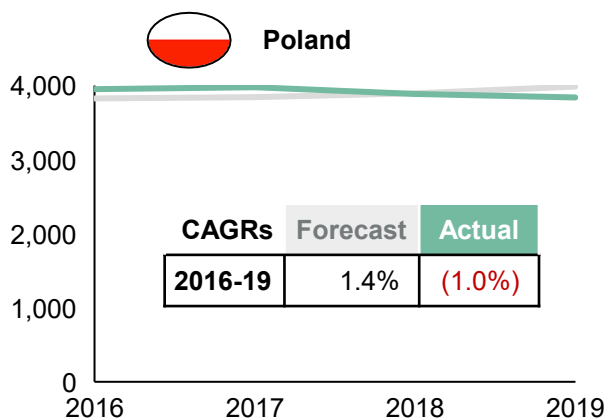
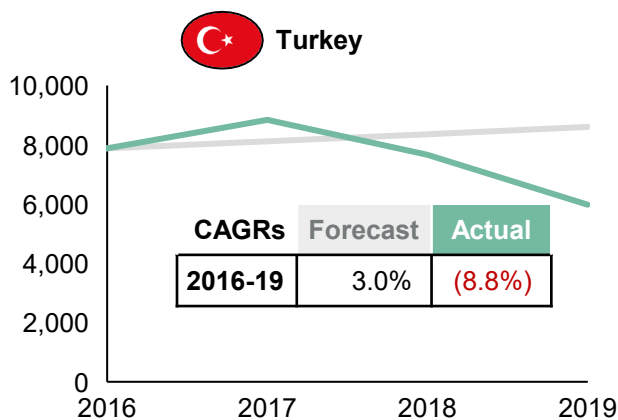
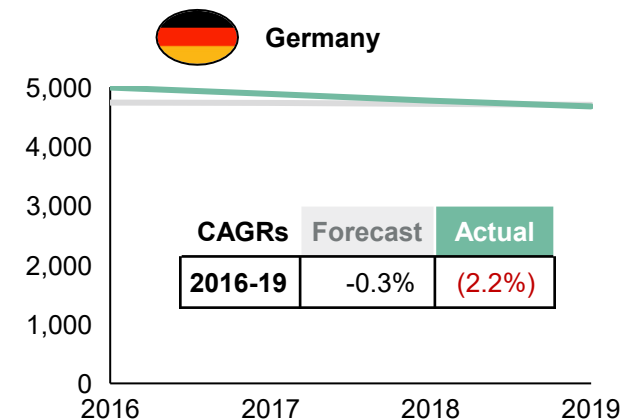
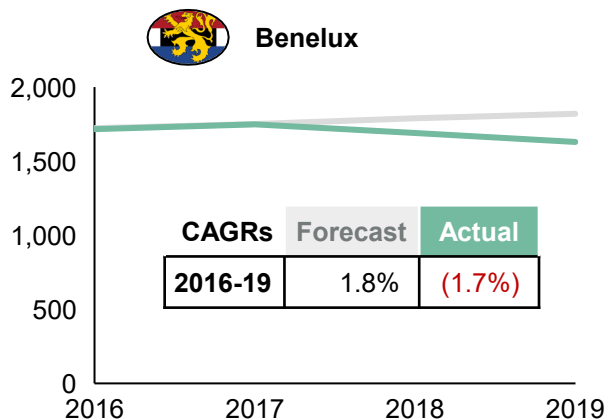
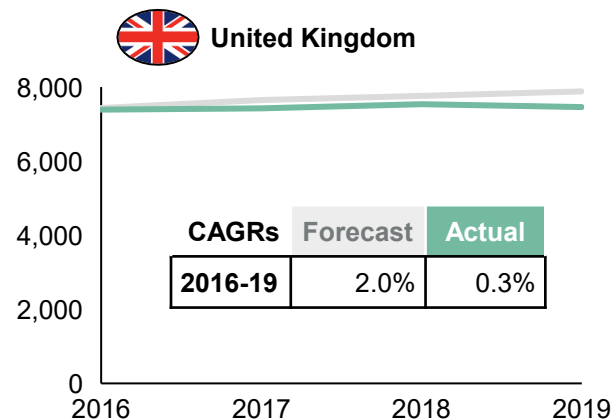
CIL has drawn on a number of sources to model market size and growth. Due to the significance of the UK market and data availability, more detail is presented here.



Note: 1) The Manufacturers' Association of Radiators and Convectors (MARC) does not provide as comprehensive a radiator dataset as BRG but offers relatively up-to-date indicators on market movements.

BRG uses macroeconomic indicators to forecast volumes - in mature markets, this methodology works relatively well. However, CIL has identified more specific drivers that better correlate with market performance and has used these to drive the forecasts.

BRG 2016 forecast vs actual radiator volumes
2016-19, by geography, k¹



- BRG has compared 2016 volume projections vs its latest estimates to show relative forecasting accuracy.
- Various events have occurred that are likely to have caused overforecasting:
 - Germany and Poland – historical market sizes revised.
 - Benelux - impact of underfloor heating previously underestimated.
 - Turkey – lira devalued in Jun-18.

Note: 1) French data omitted due to significantly different methodology (removal of pure electric towel warmers from historical trends in 2019 edition).
Source: BRG.

CIL’s market model uses various measures of underlying construction activity to drive volume forecasts by geography and end-use.

Geography	End-use	Underlying construction activity measure used in CIL market model	Sources
UK	First-time installation	Public and private housing RM&I	CIL construction model
Others			Euroconstruct and EECFA
UK	New housing	Dwellings completed	ONS, CIL construction model
Others			Euroconstruct and EECFA
UK	Non-housing	Non-housing RM&I, private commercial, industrial and public works	CIL construction model
Others			Euroconstruct and EECFA
UK	Replacement	Housing stock	ONS, CIL construction model
Others			Euroconstruct
Turkey		Public and private housing RM&I	EECFA

















- **Measures** – for each segment, CIL has selected the measure of underlying construction activity that appears to best explain historical radiator volumes and is likely to help forecast.
- **Sources** – for the UK, CIL has used its proprietary construction model. In other geographies, historical data and forecasts have been taken from Euroconstruct (for Europe) and EECFA (for Turkey).
- **Reliability** – the Turkish economy and radiator market is especially volatile; hence the forecast is less reliable. BRG historical data may also be less reliable here. As the radiator market is less mature, the replacement segment is likely to be driven more by RM&I spend than housing stock.

Stelrad makes four times as much revenue and eight times as much profit per premium radiator as per standard panel radiator. Therefore, the segmentation of the market by value differs from the split by volume and contribution.

Market
Size:
Margins

Overview of Stelrad products

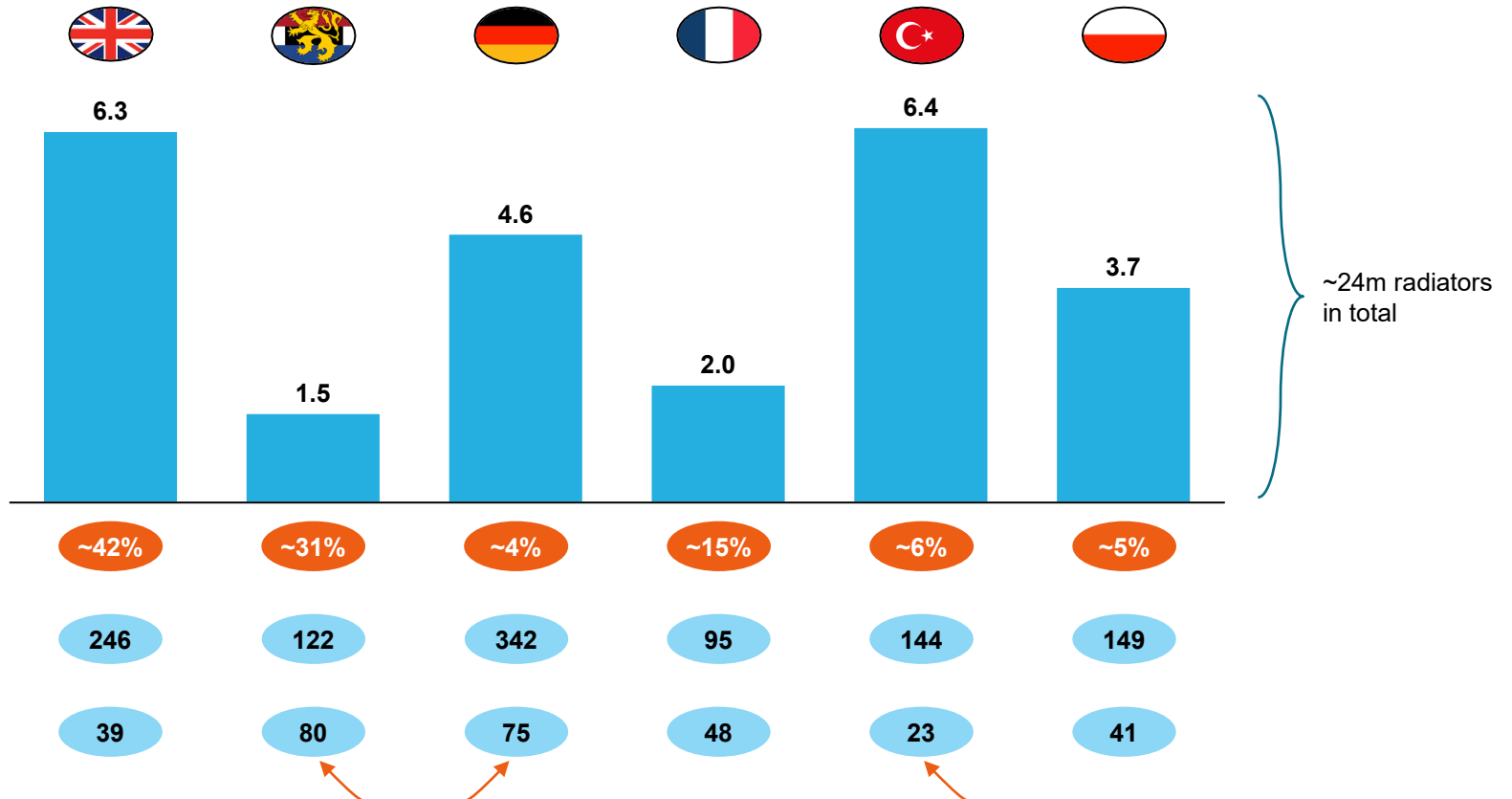
Non-exhaustive

Product categories		FY20 per radiator financials, £		Examples of Stelrad's range		
		Revenue	Contribution ¹			
Standard steel panel		30.7	7.5	 <i>Softline</i>	 <i>Vita</i>	 <i>Compact</i>
Premium steel panel ²		125.1	60.1	 <i>Softline</i>	 <i>Vita</i>	 <i>Compact</i>
Towel warmer		46.4	19.8	 <i>Classic</i>	 <i>Caliente</i>	 <i>Arc</i>
Decorative & other steel		202.6	54.8	 <i>Concord</i>	 <i>Caliente</i>	 <i>Softline</i>

Note: 1) The profitability of Stelrad's individual products. 2) Includes LST.
Source: Management, company websites.

Stelrad's market size is estimated at ~24m radiators and ~£1.1bn across its core geographies.

Estimated market size – by geography
m radiators, 2020



High prices in Benelux and Germany are driven by both higher prices for steel panel radiators and a larger % of high-value products.

The Turkish market is highly opportunistic and competitive.

Note: 1) Stelrad's share as a % of market volumes. 2) Weighted average across all products.
Source: CIL market model.

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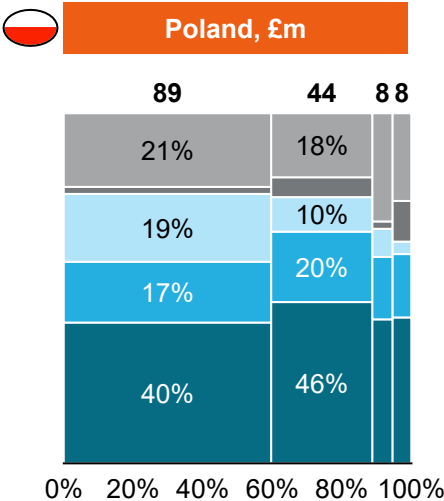
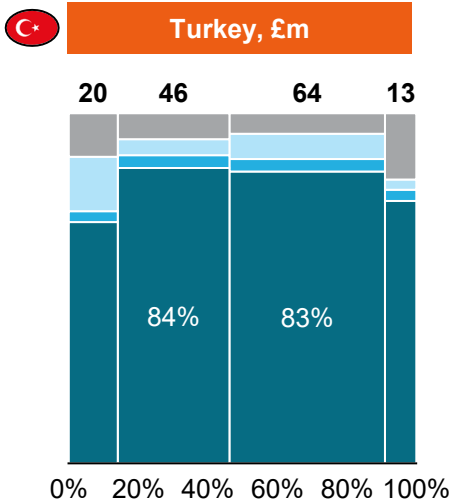
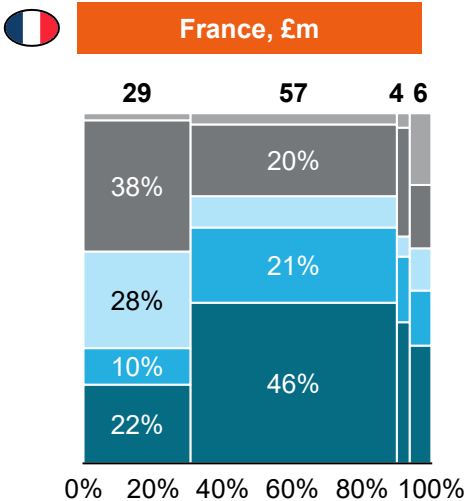
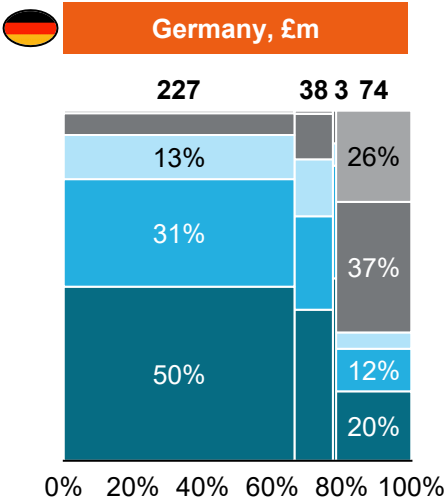
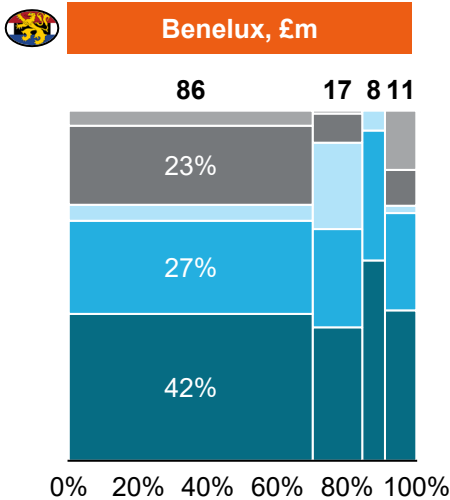
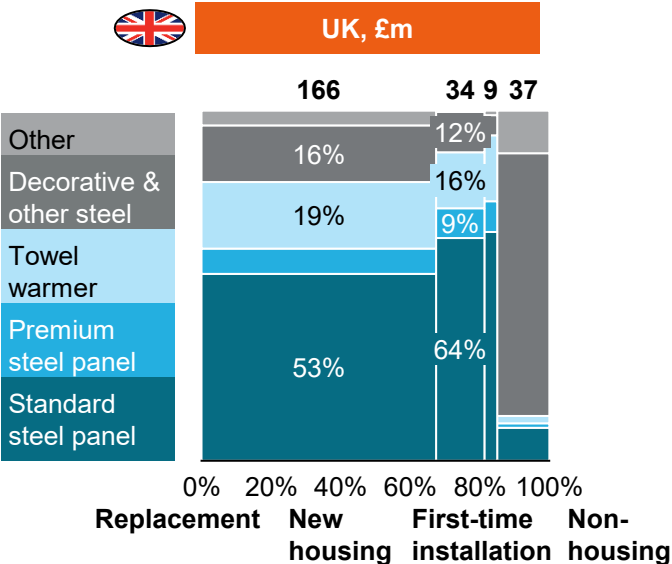
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Stelrad's markets differ in product mix and end-use. The UK, Germany, Benelux and Poland are all relatively mature, whereas France is characterised by more new housing radiators and Turkey by more first-time installs.



Source: CIL market model.



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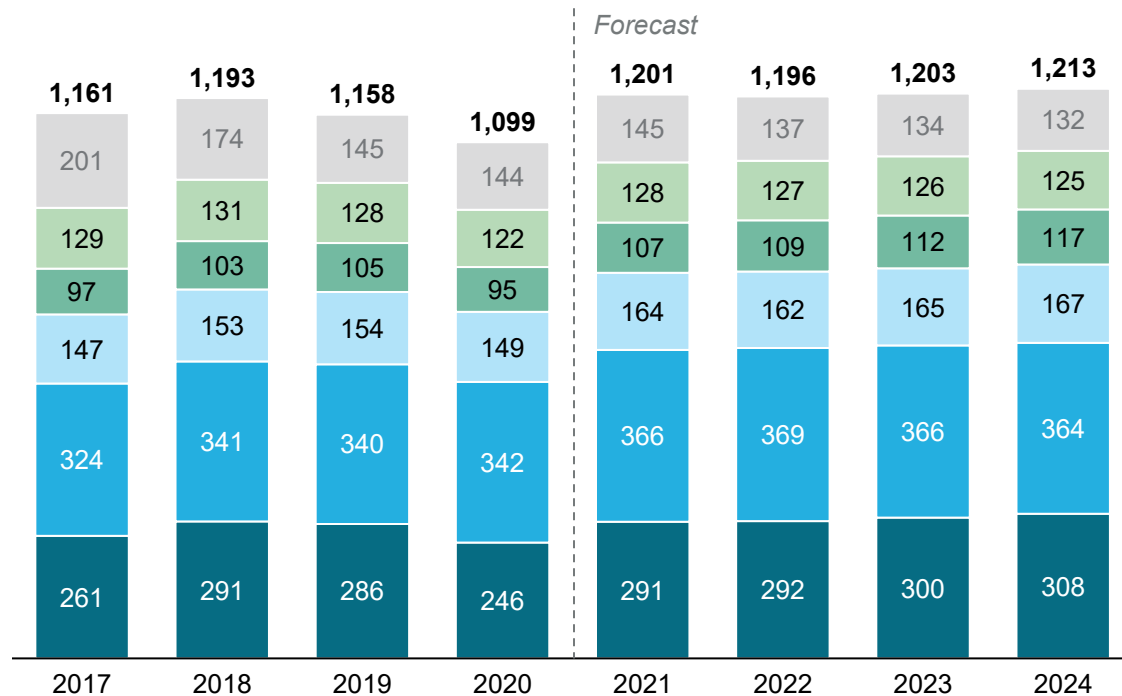
Drivers extracts

Appendix

Market value was stable 2017-19 due to the rising steel price and move towards premium products. These trends are expected to support a broadly stable market from 2021.

Market Growth:
Value – by geography

Estimated size for radiators in Stelrad geographies, value – by geography
£m



CAGRs	2017-19	2019-20	2020-24f
Total	0%	(5%)	3%
Turkey	(15%)	(1%)	(2%)
Benelux	(1%)	(5%)	1%
France	4%	(9%)	5%
Poland	2%	(3%)	3%
Germany	2%	1%	2%
United Kingdom	5%	(14%)	6%

Key trends 2017-19:

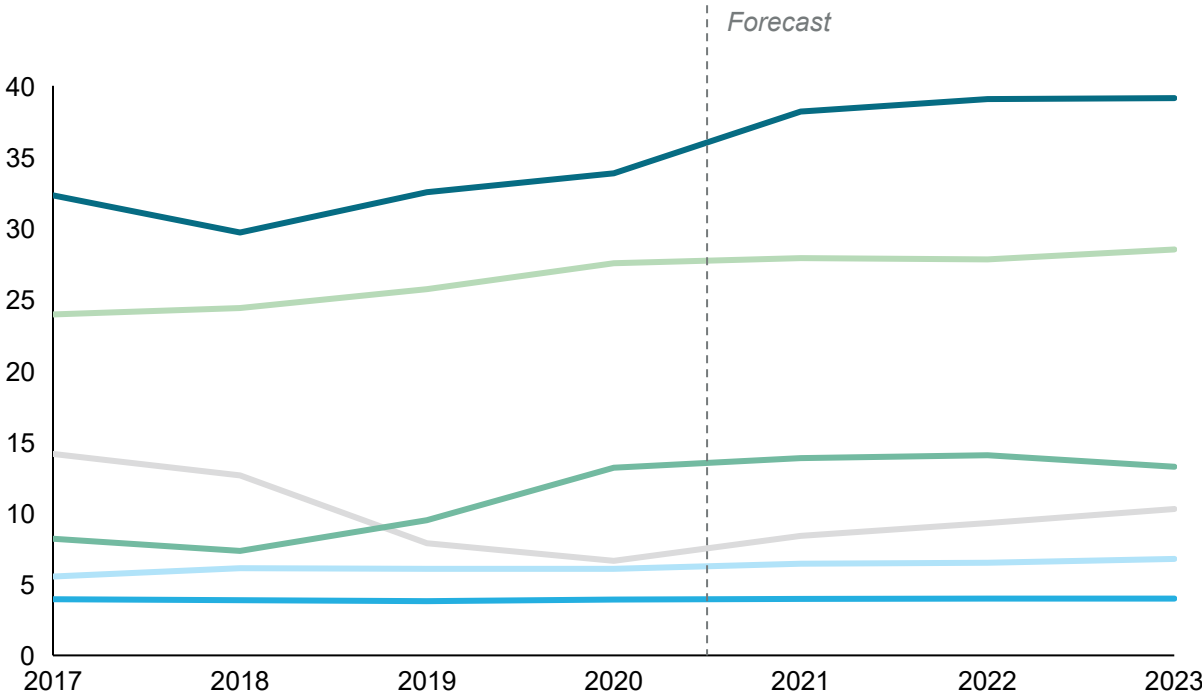
- Rising steel price – the largest component in the cost of manufacturing a radiator.
- Move towards higher-value products (including premium steel panel).

See drivers section for more details.

Stelrad has taken market share historically across most geographies, especially in the UK and France. In the UK, share has grown from ~30% in 2018 to 33% in 2020 and this share take is forecast to continue.

Market Growth:
Value – Stelrad share

Estimated Stelrad share of radiator market, value – by geography %



%Δ market share	2017-19	2019-20	2020-23f
Total	0%	0%	3%
Total (excl. Turkey)	1%	0%	2%
Turkey	(6%)	(1%)	4%
Benelux	2%	2%	1%
France	1%	4%	0%
Poland	1%	0%	1%
Germany	0%	0%	0%
United Kingdom	0%	1%	5%

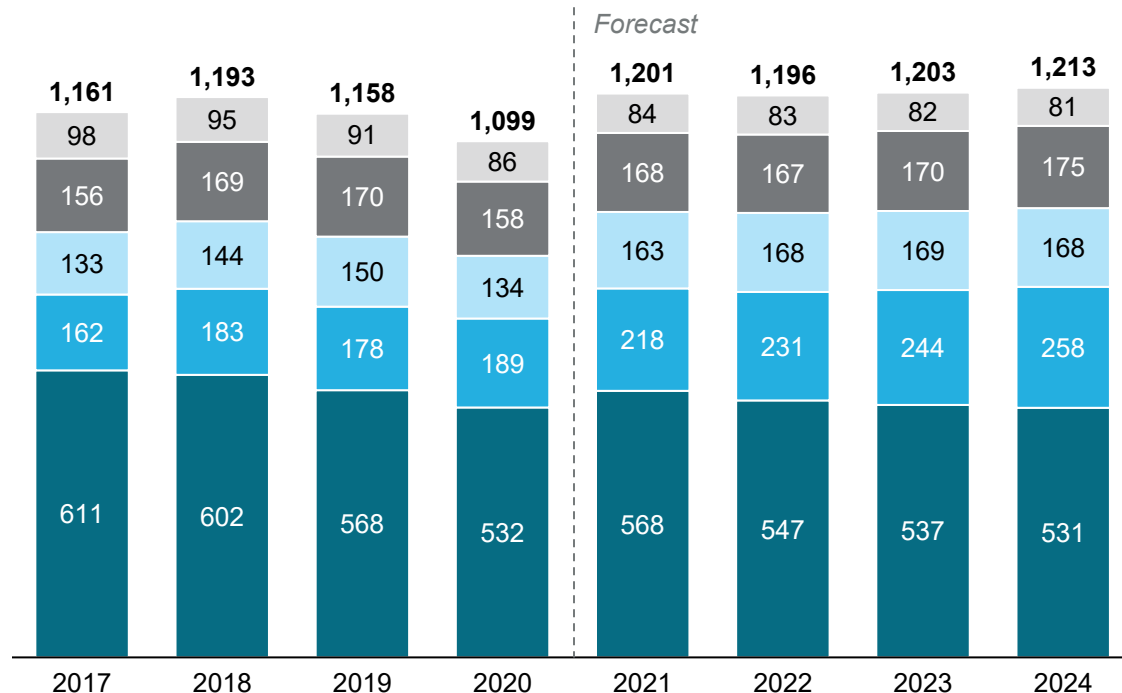
See forecast analysis section for CIL’s assessment of expected market share take by geography.

Source: CIL market model.



While Standard steel panel radiators are in decline, higher-value products are growing.

Estimated size for radiators in Stelrad geographies, value – by product
£m



CAGRs	2017-19	2019-20	2020-24f
Total	0%	(5%)	3%
Other	(4%)	(6%)	(1%)
Decorative & other steel	4%	(7%)	3%
Towel warmer	6%	(11%)	6%
Premium steel panel	5%	6%	8%
Standard steel panel	(4%)	(6%)	0%

Key trends:

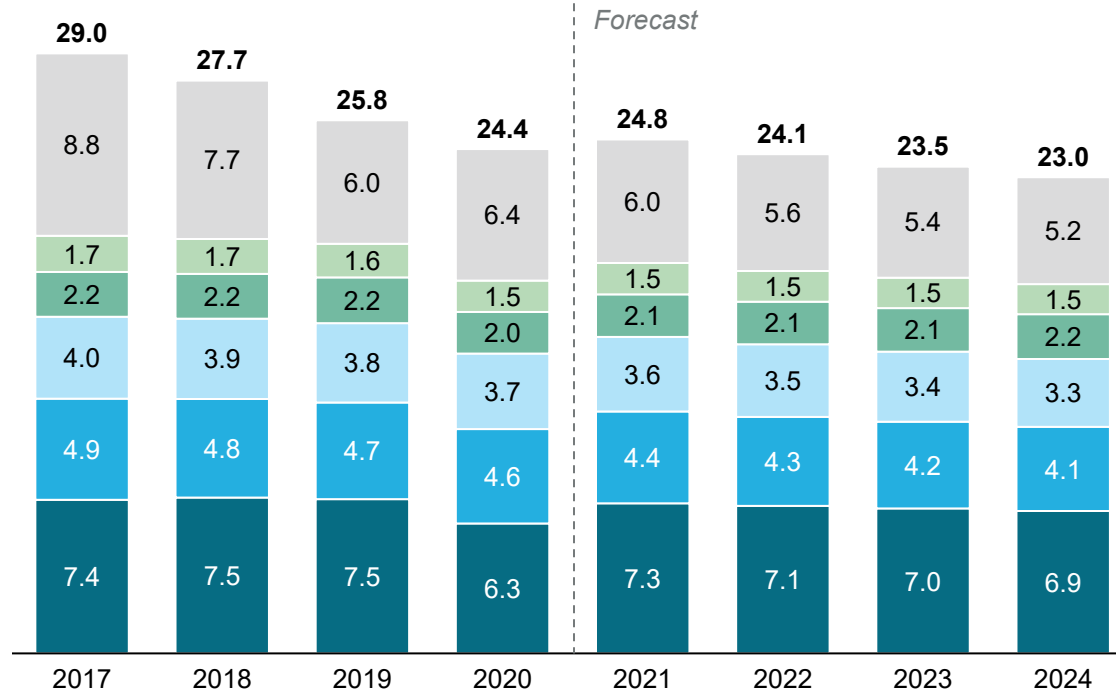
- The trend towards higher-value products (e.g. premium steel panel and other decorative radiators) is expected to continue.
- Some radiators continue to be replaced with towel warmers.

See drivers section for more details.

Across Stelrad's core geographies, radiator volumes decreased 2017-19 due to Turkish economic instability, then again in 2020 with COVID-19. The outlook is a gradual decline although this is being offset at a margin level by mix shift to premium products.

Market Growth:
Volume – by geography

Estimated size for radiators in Stelrad geographies, volume – by geography
m radiators



CAGRs	2017-19	2019-20	2020-24f
Total	(6%)	(5%)	(1%)
Turkey	(18%)	7%	(5%)
Benelux	(3%)	(7%)	(1%)
France	1%	(10%)	2%
Poland	(2%)	(5%)	(3%)
Germany	(2%)	(2%)	(3%)
United Kingdom	0%	(16%)	2%

Key trends 2017-19:

- Declining replacement radiator volumes in European countries, offset in France and the UK by growth in new housing.
- The end of a construction boom in Turkey due to economic instability.

See drivers section for more details.

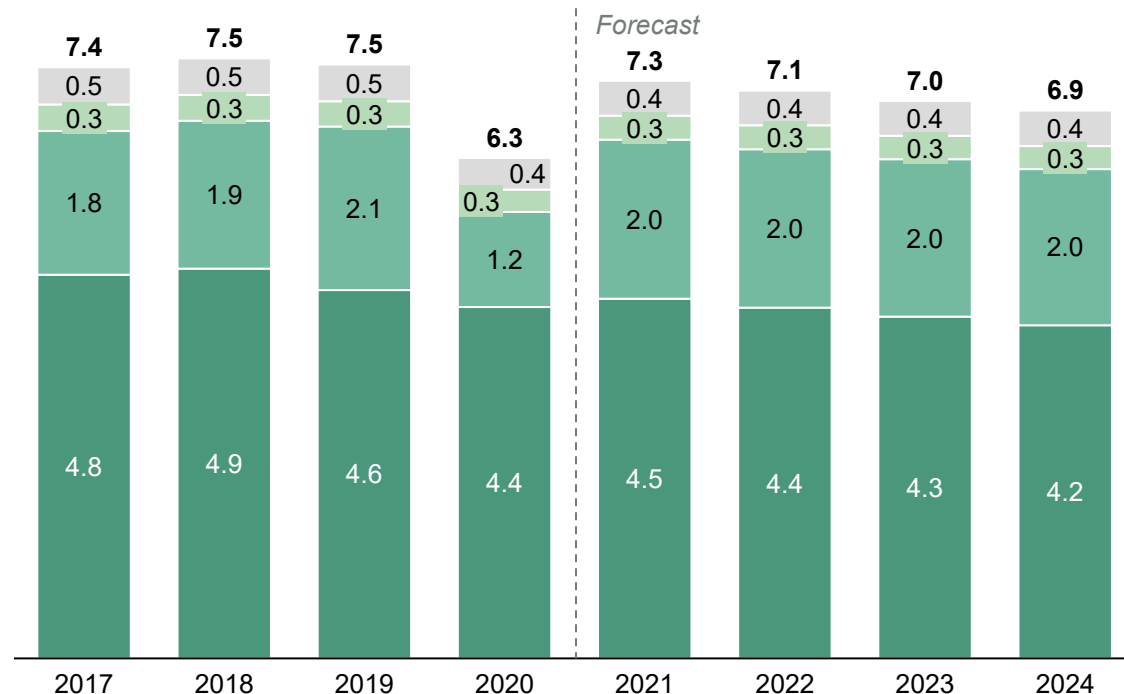


The UK new housing segment was most affected by COVID-19 as construction sites temporarily closed. However, it is forecast to experience a relatively strong recovery while the structural decline of the replacement market continues.

Market Growth:
UK – by end-use



Estimated size for radiators in UK, volume – by end-use
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	0%	(16%)	2%
Non-housing	(1%)	(14%)	3%
First-time installation	(2%)	(12%)	1%
New housing	7%	(42%)	13%
Replacement	(2%)	(5%)	(1%)

Key trends:

- The replacement market is in structural decline (replacement volumes were 5.3m in 2011) as radiator lifespans are extended.
- The new housing market has benefited from an increase in house building and underlying trend towards more radiators per dwelling. It was most affected by COVID-19 as construction sites temporarily closed during the first lockdown.

See drivers section for more details.

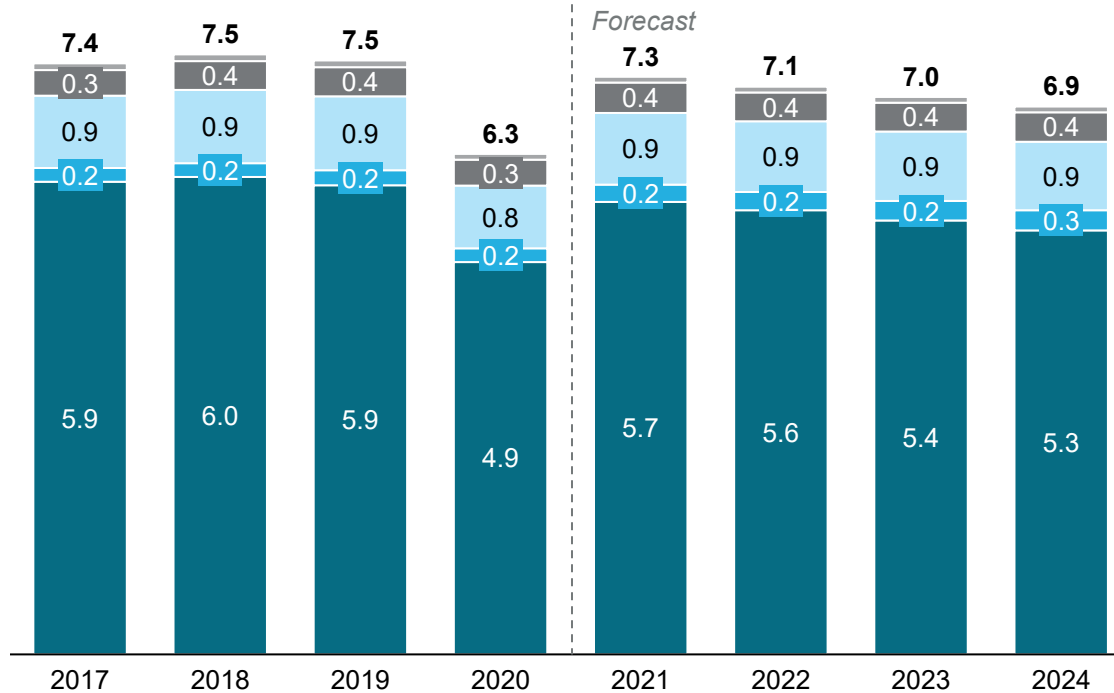
Source: CIL market model.



Standard steel panel will continue to account for most UK radiator volumes. However, higher-value products appear likely to outperform between 2020-24f.



Estimated size for radiators in UK, volume – by product
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	0%	(16%)	2%
Other	(2%)	(15%)	1%
Decorative & other steel	7%	(11%)	3%
Towel warmer	1%	(15%)	2%
Premium steel panel	4%	(8%)	10%
Standard steel panel	0%	(16%)	2%

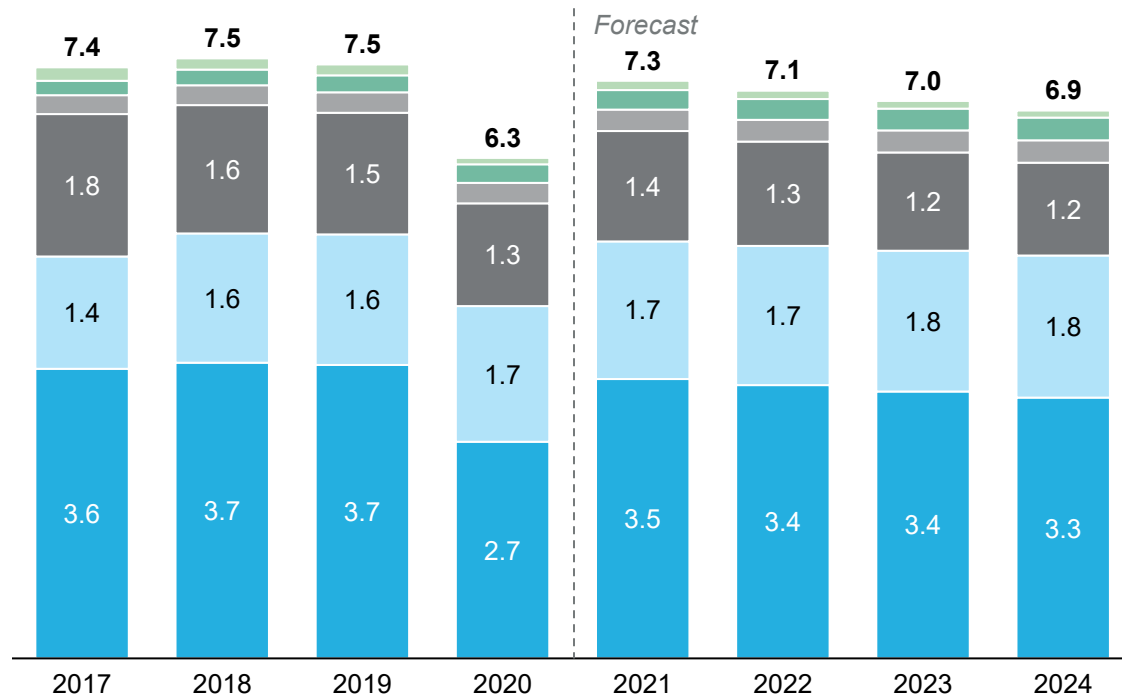
Key product trends as for other core geographies.

*"I think that the trend towards designer and decorative products will continue to grow in the future – people will want to spend more money. It is the homeowners who promote these products from an RM&I perspective."
Category director heating, Primaflow F&P, UK*

New merchants/DIY retailers and internet retailers are expected to continue to take share in the UK, particularly of the one-off segment.



Estimated size for radiators in UK, volume – by channel
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	0%	(16%)	2%
Direct	(11%)	(41%)	1%
Internet retailers	8%	11%	5%
Bathroom & kitchen	4%	(1%)	2%
Independent merchants	(8%)	(16%)	(3%)
New merchants / DIY retailers	8%	4%	1%
National merchants	1%	(26%)	5%

Key trends:

- New merchants such as Screwfix and Toolstation have gained share of the one-off segment and this is expected to continue.

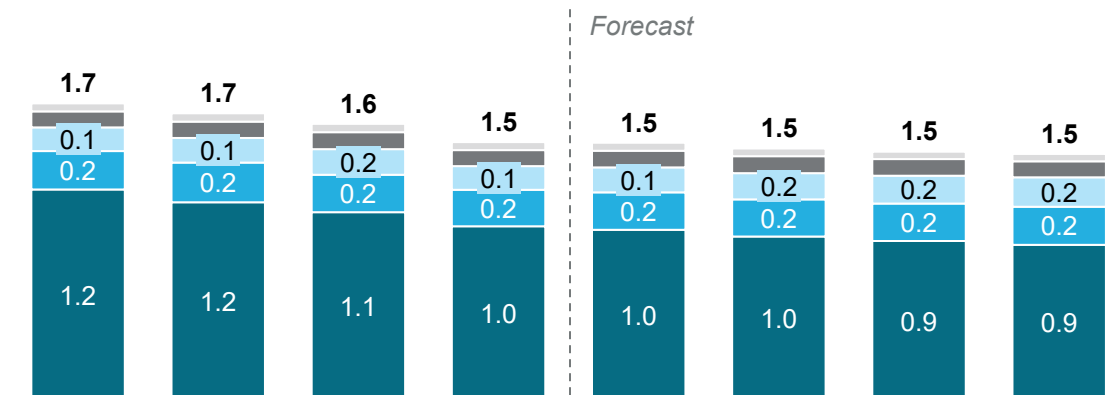
See structure section for more details.

Benelux radiator volumes are expected to decline slowly to 2024 as the replacement market is affected by decarbonisation and increasing radiator lifespans. There is expected to be a more consistent product mix over time vs the UK.

Market Growth:
Benelux – by product and end-use

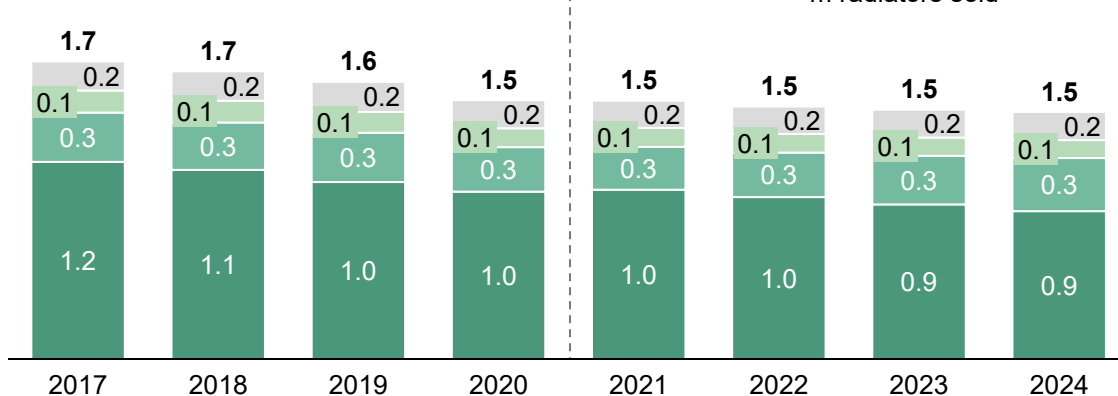


Estimated size for radiators in Benelux, volume – by product
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	(3%)	(7%)	(1%)
Other	2%	(6%)	(2%)
Decorative & other steel	3%	(5%)	0%
Towel warmer	4%	(7%)	5%
Premium steel panel	(1%)	(3%)	1%
Standard steel panel	(6%)	(7%)	(3%)

Estimated size for radiators in Benelux, volume – by end-use
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	(3%)	(7%)	(1%)
Non-housing	2%	(7%)	0%
First-time installation	(3%)	(9%)	(2%)
New housing	0%	(10%)	4%
Replacement	(5%)	(5%)	(3%)

Source: CIL market model.

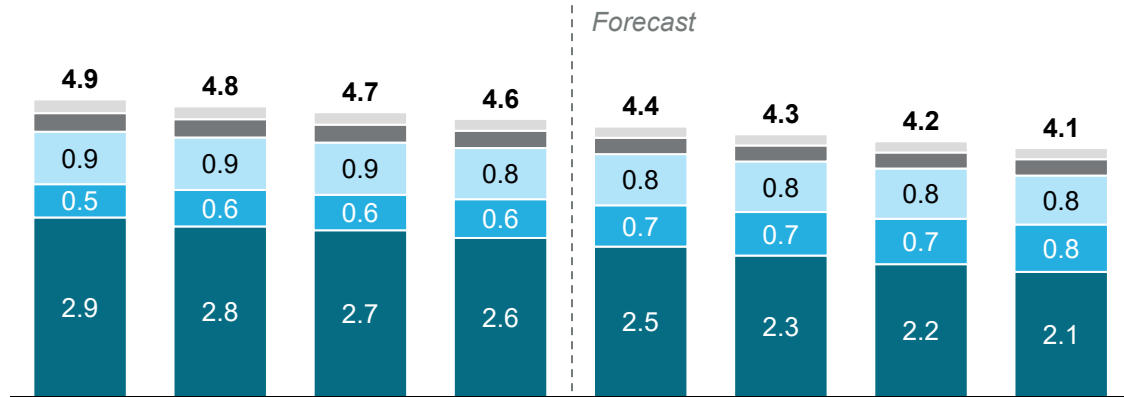


German radiator volumes are expected to continue to decline at 2-3% p.a. due to decarbonisation and increasing radiator lifespans, with limited impact from COVID-19.

Market Growth:
Germany – by product and end-use

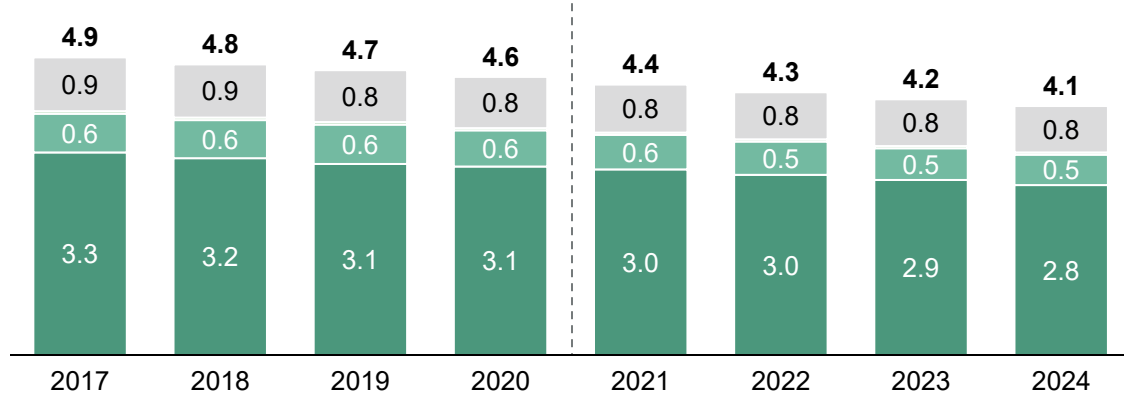


Estimated size for radiators in Germany, volume – by product
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	(2%)	(2%)	(3%)
Other	(5%)	(6%)	(1%)
Decorative & other steel	(2%)	(3%)	(1%)
Towel warmer	0%	(2%)	(1%)
Premium steel panel	3%	9%	5%
Standard steel panel	(4%)	(5%)	(6%)

Estimated size for radiators in Germany, volume – by end-use
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	(2%)	(2%)	(3%)
Non-housing	(2%)	(1%)	(2%)
First-time installation	(1%)	(12%)	(4%)
New housing	1%	(8%)	(4%)
Replacement	(3%)	(1%)	(3%)

Source: CIL market model.

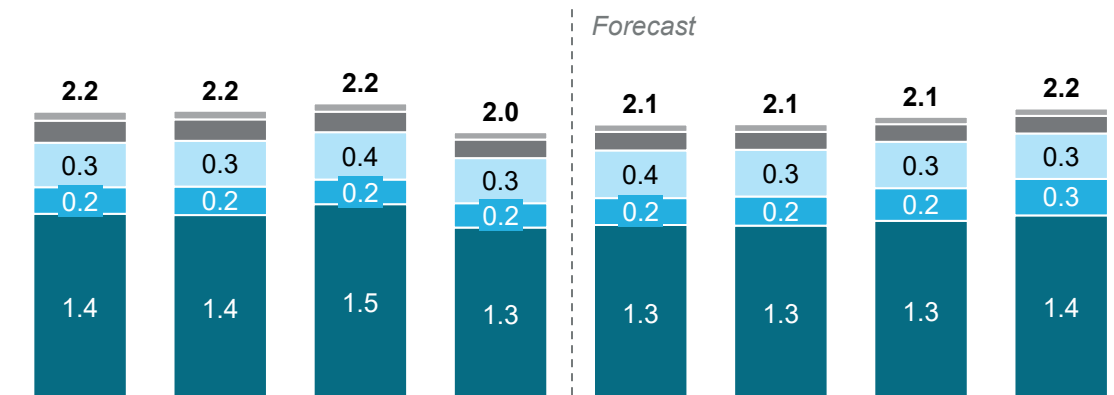


French radiator volumes decreased ~10% in 2020 but are forecast to recover to near 2019 levels by 2024, due to increasing construction activity. Premium steel panels are expected to drive the increase in volumes sold.

Market Growth:
France – by product and end-use

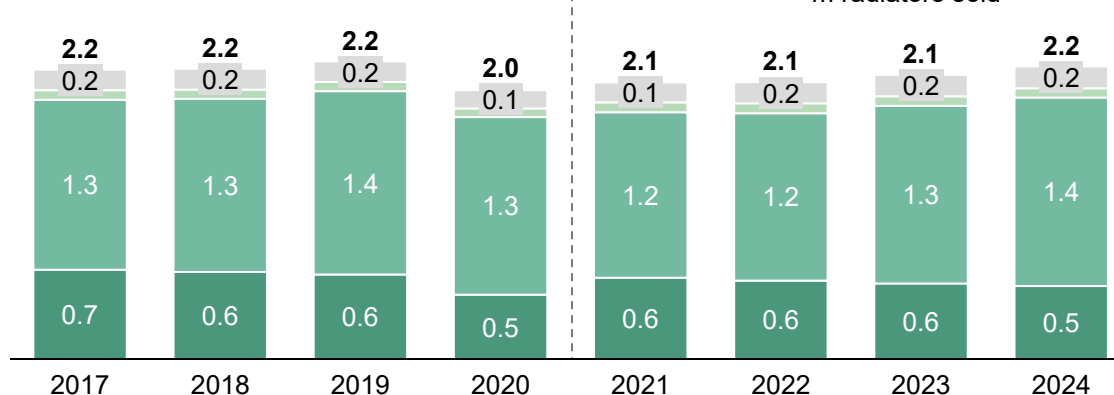


Estimated size for radiators in France, volume – by product
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	1%	(10%)	2%
Other	(3%)	(10%)	(1%)
Decorative & other steel	(4%)	(11%)	(1%)
Towel warmer	3%	(4%)	0%
Premium steel panel	(4%)	(2%)	11%
Standard steel panel	3%	(12%)	2%

Estimated size for radiators in France, volume – by end-use
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	1%	(10%)	2%
Non-housing	0%	(12%)	4%
First-time installation	(2%)	(7%)	2%
New housing	4%	(3%)	1%
Replacement	(3%)	(24%)	3%

Source: CIL market model.

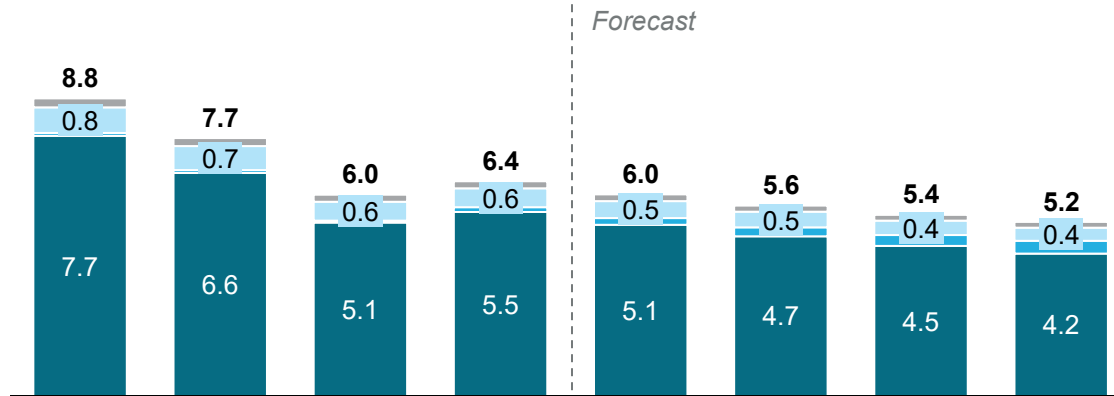


The end of the Turkish construction boom reduced radiator volumes, with some recovery in 2020. Volumes are expected to be relatively flat to 2024 due to the decline in first-time installation.

Market Growth:
Turkey – by product and end-use

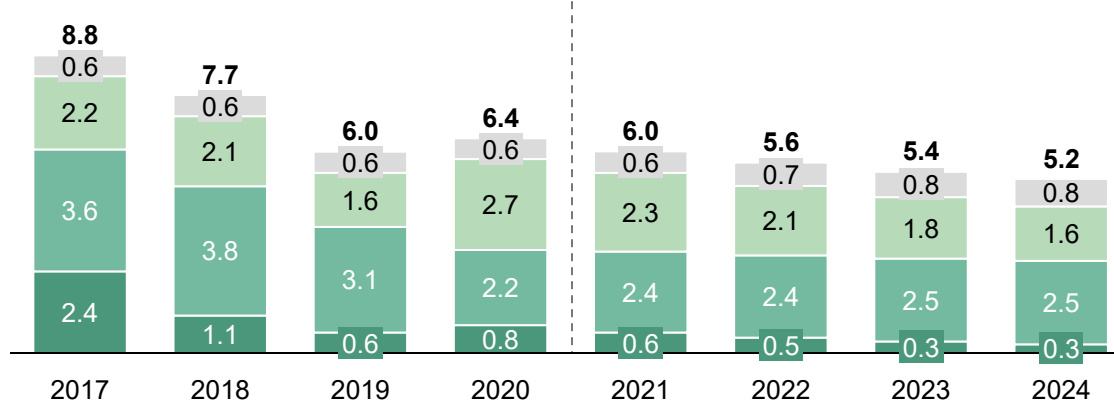


Estimated size for radiators in Turkey, volume – by product
m radiators sold¹



CAGRs	2017-19	2019-20	2020-24f
Total	(18%)	7%	-5%
Other	(11%)	(5%)	(4%)
Decorative & other steel	n/a	n/a	n/a
Towel warmer	(14%)	1%	(9%)
Premium steel panel	(21%)	158%	29%
Standard steel panel	(18%)	6%	(6%)

Estimated size for radiators in Turkey, volume – by end-use
m radiators sold



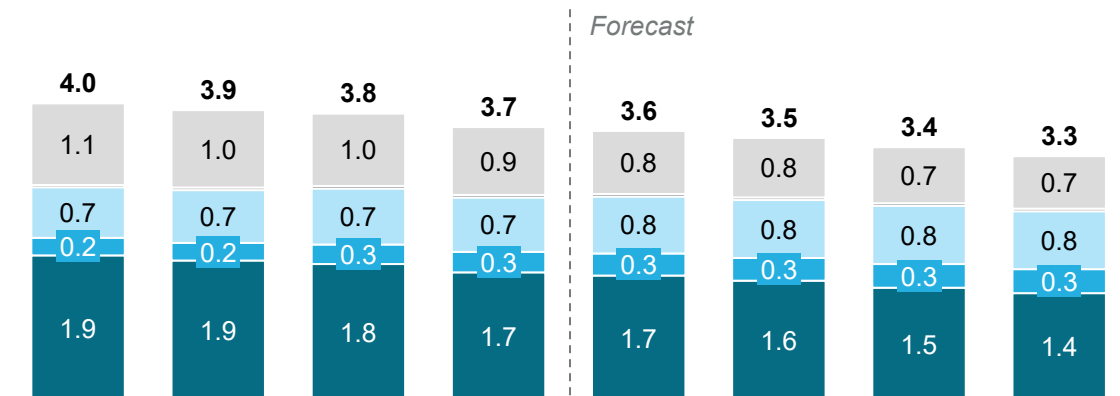
CAGRs	2017-19	2019-20	2020-24f
Total	(18%)	7%	-5%
Non-housing	1%	(2%)	7%
First-time installation	(14%)	68%	(12%)
New housing	(7%)	(29%)	3%
Replacement	(50%)	36%	(25%)

Note: 1) The market data available for Turkey appears less reliable than for other geographies.
Source: CIL market model.



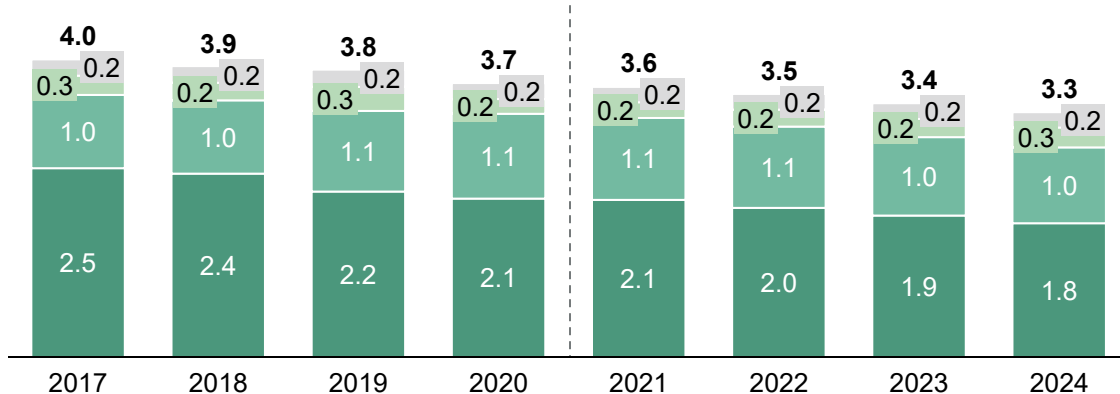
Polish radiator volumes were in decline prior to COVID-19 and this trend is expected to continue. However, towel warmers and premium steel panel may continue to grow.

Estimated size for radiators in Poland, volume – by product
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	(2%)	(5%)	(3%)
Other	(6%)	(6%)	(6%)
Decorative & other steel	2%	(5%)	1%
Towel warmer	5%	(2%)	1%
Premium steel panel	5%	4%	4%
Standard steel panel	(3%)	(6%)	(4%)

Estimated size for radiators in Poland, volume – by end-use
m radiators sold



CAGRs	2017-19	2019-20	2020-24f
Total	(2%)	(5%)	(3%)
Non-housing	2%	(7%)	(1%)
First-time installation	12%	(39%)	7%
New housing	5%	5%	(3%)
Replacement	(6%)	(4%)	(4%)

Source: CIL market model.

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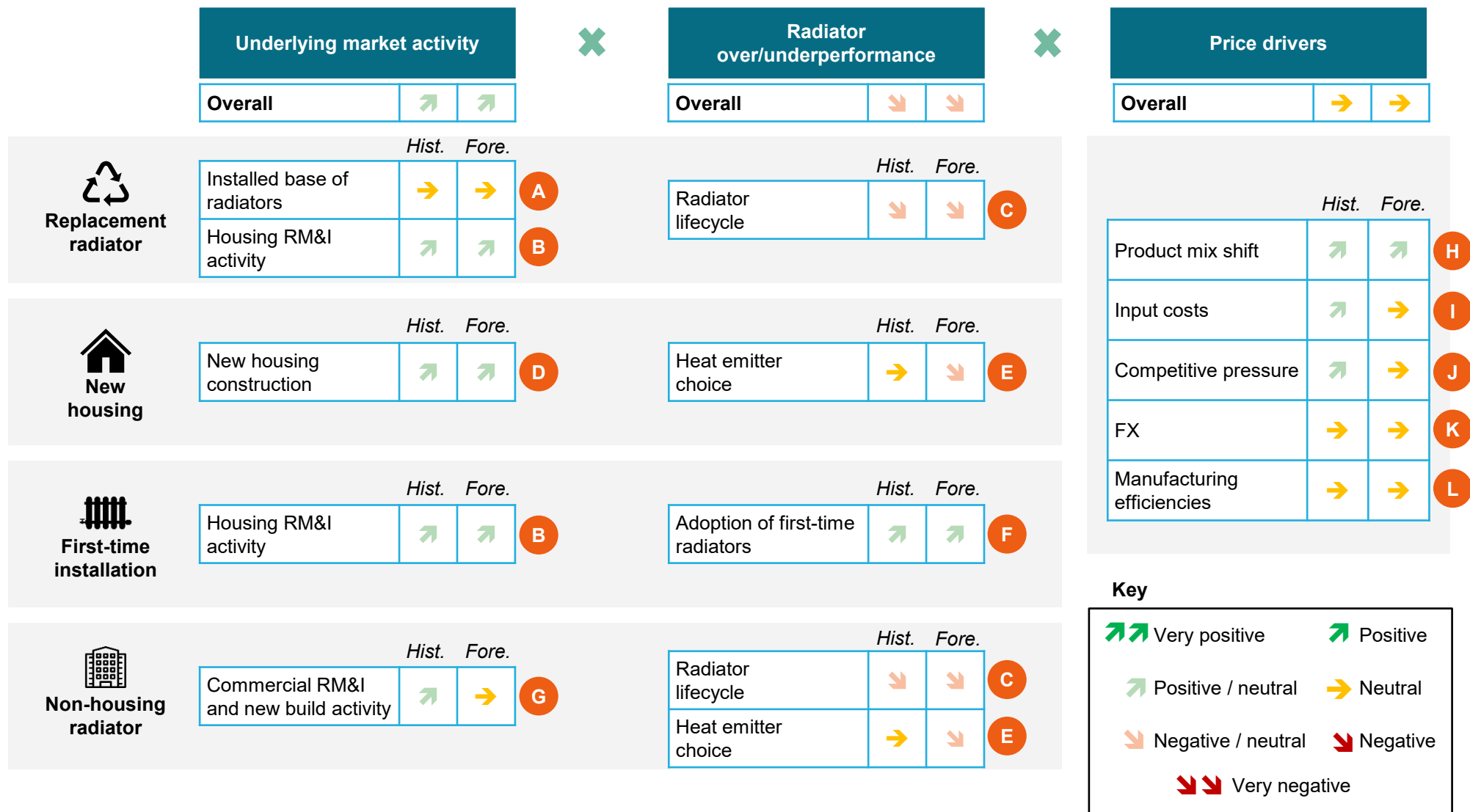
Appendix

Each radiator end-use has its own separate market drivers.

Radiator end-use	Estimated proportion of UK market by volume (2020)	Definition and description	Core driver(s)
 Replacement radiator	~70%	<ul style="list-style-type: none"> A new radiator replaces an existing radiator in an existing residential dwelling. Usually installed when a radiator has broken, developed cold spots or where the paint has corroded. Renovation of a room is also a trigger. 	<p>Installed base</p> <p>Radiator lifecycle</p>
 New housing	~19%	<ul style="list-style-type: none"> A radiator goes into a new residential dwelling either as part of a single house build or larger development. Installed by the developer as part of a wider hydronic system and often purchased at scale as part of a specification sale. 	<p>New housing construction</p> <p>Heat emitter choice</p>
 First-time installation	~4%	<ul style="list-style-type: none"> A new radiator is installed into a residential dwelling where there was previously no radiator. In mature markets this is rare and usually part of an extension. In nascent markets, these radiators are likely the first heat emitter installed in the dwelling. 	Residential RM&I spend
 Non-housing radiator	~6%	<ul style="list-style-type: none"> Any radiator installed into a non-residential dwelling, regardless of build type. These commercial radiators are often larger and part of a wider fit-out in existing commercial buildings or a new commercial development. 	Commercial RM&I spend

Source: CIL market model.

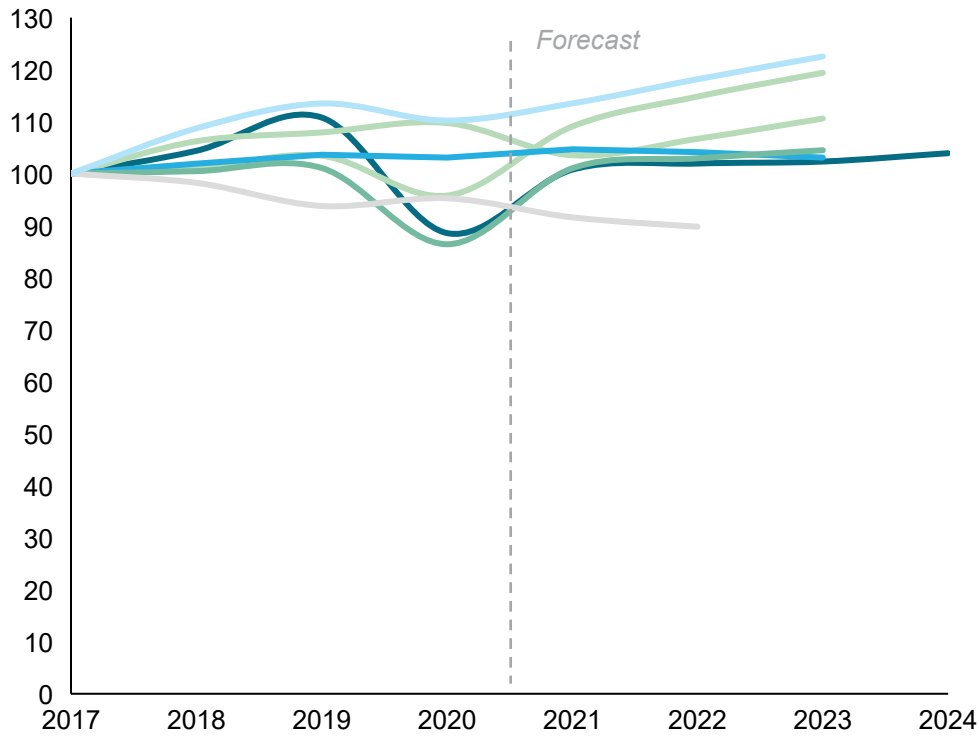
Overall, the radiator market is driven by fairly positive underlying market activity, though radiator performance drivers are somewhat negative and pricing is flat.



Housing RM&I grew in each of Stelrad’s core geographies 2017-19, other than Turkey – where the construction boom ended in 2018.



Estimated public and private housing RM&I
Constant prices, indexed, 2017 = 100, by geography



Geography	CAGR 2017-19
Turkey ¹	(3%)
Netherlands	4%
Belgium	2%
France	1%
Poland	7%
Germany	2%
UK	5%

Note – the “replacement” radiator market is driven primarily by the installed base of radiators rather than RM&I spend.

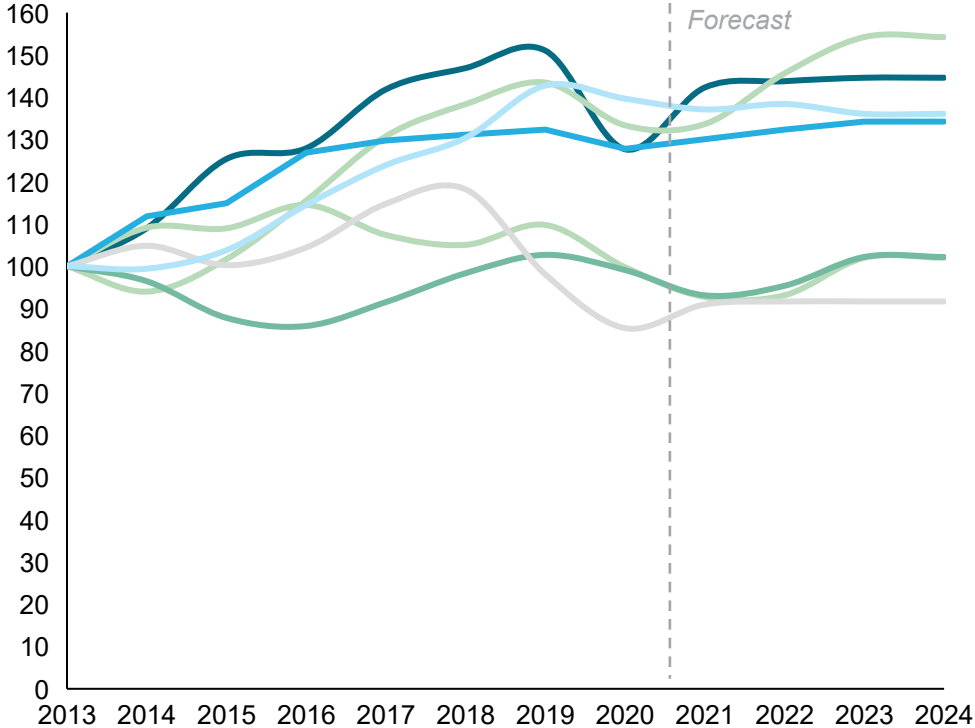
Source: CIL market model.



House building has grown across most of Stelrad’s core geographies, supporting growth prospects in the new housing segment.



Estimated dwelling completions¹
Indexed, 2013 = 100, by geography



Geography	CAGR 2013-19
Turkey ¹	0%
Netherlands	6%
Belgium	2%
France	0%
Poland	6%
Germany	5%
UK	7%

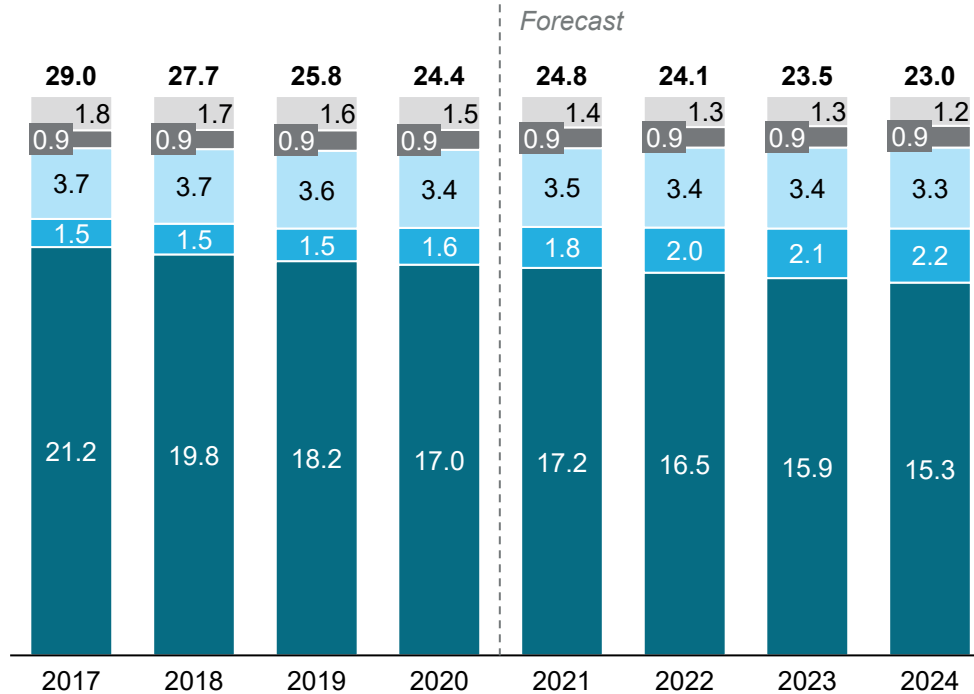
Note: 1) Completions shifted 60 days earlier to better match when radiators are put into dwellings vs when dwellings are “completed”.
Source: CIL market model.





There is an ongoing mix shift from standard steel panel towards premium products, helping drive market value which we expect to continue over the medium term.

Estimated size for radiators in Stelrad geographies, volume – Product mix
m radiators



CAGRs	2017-19	2019-20	2020-24f
Total	(6%)	(5%)	(1%)
Other	(6%)	(7%)	(5%)
Decorative & other steel	2%	(8%)	1%
Towel warmer	(1%)	(5%)	0%
Premium steel panel	1%	8%	8%
Standard steel panel	(7%)	(6%)	(3%)

Source: CIL market model, CIL interviews.



Chapter

Market

Appendix

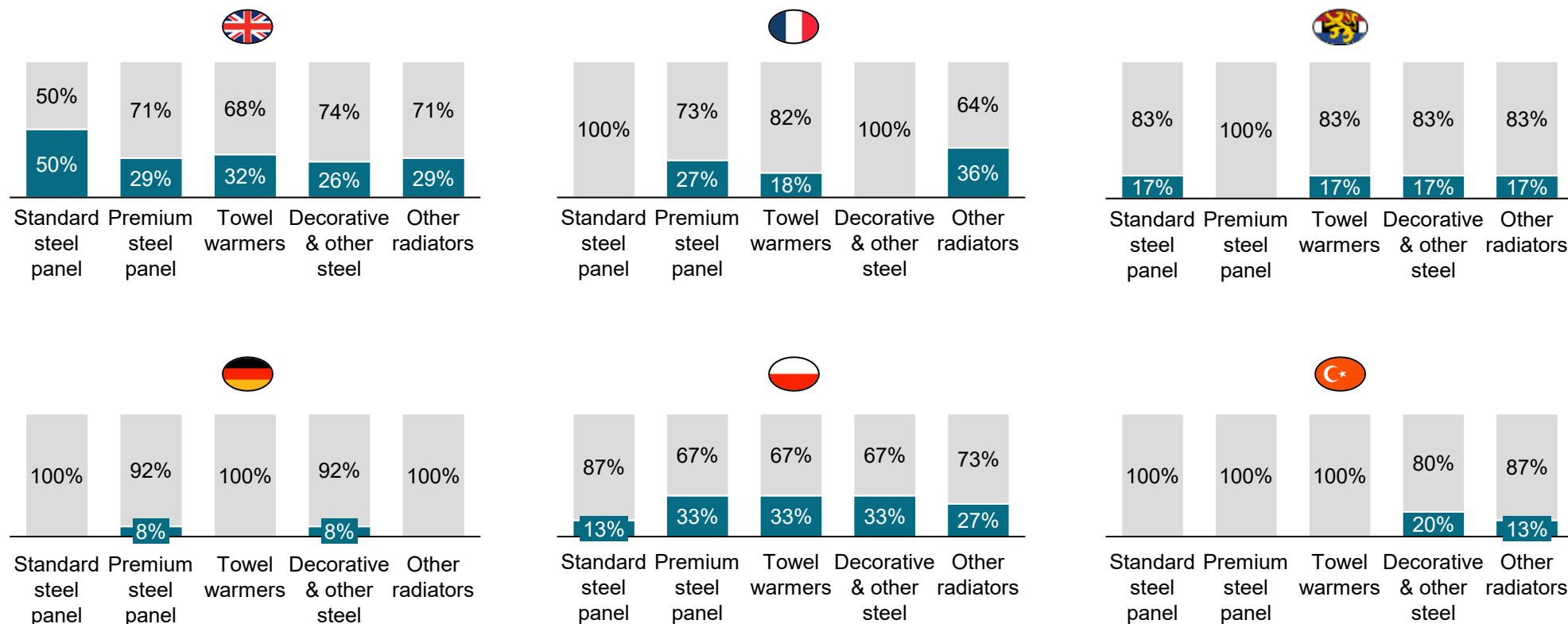
Plumbers perceive Stelrad most highly in the UK, but there is recognition of the brand across all geographies.

UK & Europe

Plumbers

Plumber trade survey: Who do you think is the best in the market for the following radiators?
by product type, n=97¹

■ Stelrad ■ Other



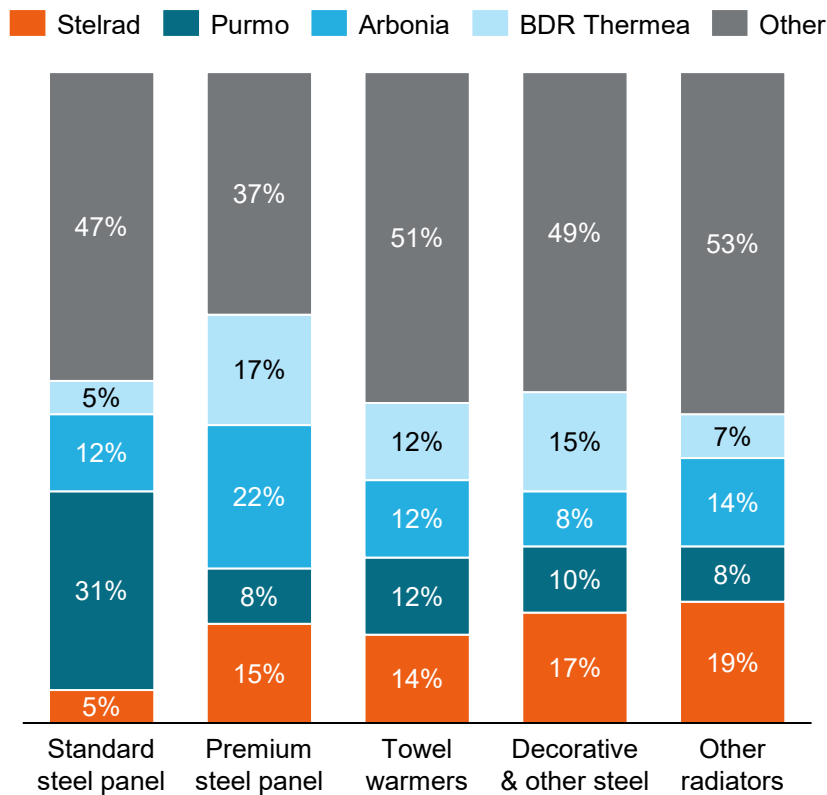
Note: 1) UK respondents n=38, Benelux respondents n=6, France respondents n=11, Germany respondents n=12, Poland respondents n=15, Turkey respondents n=15.
Source: CIL plumber trade survey.

Across Europe, Stelrad has a solid representation in the decorative and premium steel panel segment. Other brands capture the biggest share across all product types.

Rest of Europe

Plumbers

Plumber trade survey: Who do you think is the best in the market for the following radiators?
by product type, n= 59¹



Notes: 1) Benelux respondents n=6, France respondents n=11, Germany respondents n=12, Poland respondents n=15, Turkey respondents n=15.
Source: CIL plumber trade survey.