

## Industrials/Multi-Industry

## Latest HVAC datapoints going into 4Q23 earnings

Industry Overview

## 1Q guides could disappoint on resi and light commercial

Overall, we see some risk to HVAC numbers into 1H24 based on residential weakness and slowing light commercial demand. Applied demand appears to be strong. HVAC 1Q24 guides and 4Q23 order data may come in weaker than expected. CARR's European heat pump exposure is front and center for investors with whom we've spoken; the key will likely be Viessmann operational guide and we sense that expectations for Viessmann 2024 guide is for flat y/y EBITDA, with cost savings offsetting revenue declines.

## US residential weak into 2024

At the AHR Expo we heard residential 4Q23 volumes were weaker than expected. We also heard that residential unit production was likely down 20-30% in 4Q ([see our 1/23 note here](#)). There seems to be limited resi visibility into 2024 with easy 2H23 comps potentially allowing for growth to re-emerge in 2H24. Residential demand may be aided by rebates created in the Inflation Reduction Act. As of 1/23, four states have applied for the funds. The AHR show takeaways are consistent with the recent AHRI data that came out on 1/12. Residential shipment volumes fell (36)% y/y in November off a year ago comp of +4.5%. October shipments were down (31)% y/y off an easier year ago comp of down (4)%. HARDI distributor data showed broadly improving sales-to-inventory ratio in the West, Southwest, Central and Northeast regions in November. Overall, days inventory remains elevated compared to pre-COVID levels, but fell sequentially. Distributor sales were up 4.7% in October and 2.0% in November. The producer price index for HVAC equipment rose +4.7% in November, implying (2.7)% y/y volume declines. We view these 4Q23 data points as a negative read across for TT and CARR. CARR has flagged resi weakness into the year-end. JCI noted on its 4Q23 earnings call on 12/12 that resi declined 30% in North America and for Q1 it was seeing some weakness in Global Products, particular residential HVAC.

## German heat pumps sales falter and industry responding

Despite heat pumps sales growth of 50% y/y in Germany in 2023, the German Heat Pump Association put out a statement on 1/22 noting sales declining since last June and an "alarming" slump in December (sales down 40% y/y). On 1/22 the EHPA and 18 other organizations called on the European Commissioner to publish the Heat pump Action Plan which was originally set to be published in 1Q24 and was delayed until after EU elections. The coalition says not publishing the Plan threatens Europe's energy transition. Daikin (covered by Kenjin Hotta), noted on 1/22 that it was readjusting its European expectations for 2024 down and cutting European production capacity. Earlier on 1/12, Daikin announced a 15% price cut in the UK on air/water heat pumps. We view the data points on as a negative for CARR. CARR closed on its acquisition of Viessmann, a German heat pump manufacturer, on 1/2.

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Equity  
Americas  
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AHR: Air-Conditioning, Heating,  
Refrigerating

AHRI: Air-Conditioning, Heating, and  
Refrigeration Institute

HVAC: heating, ventilation, and air  
condition

HARDI: Heating, Air-conditioning &  
Refrigeration Distributors  
International

EHPA: European Heat Pump  
Association

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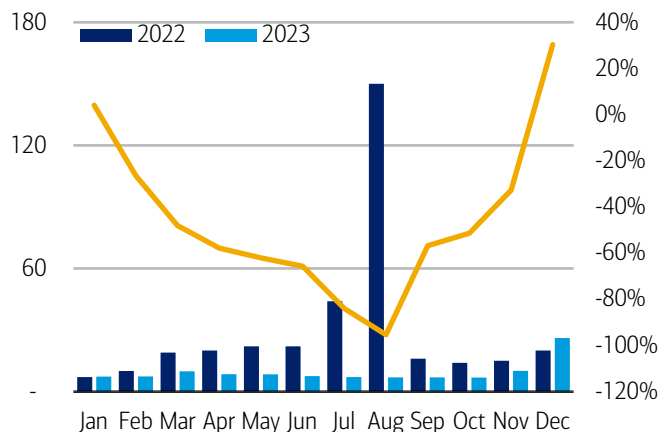
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## Heat pump applications in Germany weak, improve sequentially

The Federal Office of Economics and Export Control in December received 26,071 applications for heat pump subsidies, German applications for heat pumps were up 30% y/y. December's applications were more than 2x any month since Dec'22. Our European colleague, Alexander Virgo's view is that the applications could foreshadow the trough or have been on applications coming from consumers unlikely to benefit from the new subsidy framework. Total heat pump applications in 2023 were 113,000 or down 69%. In 2H applications for heat pump subsidies were 64,000, this compares to the 350,000 units actually installed.

### Exhibit 1: Applications for heat pump subsidy in Germany ('000s)

Applications in Dec were up 30% y/y

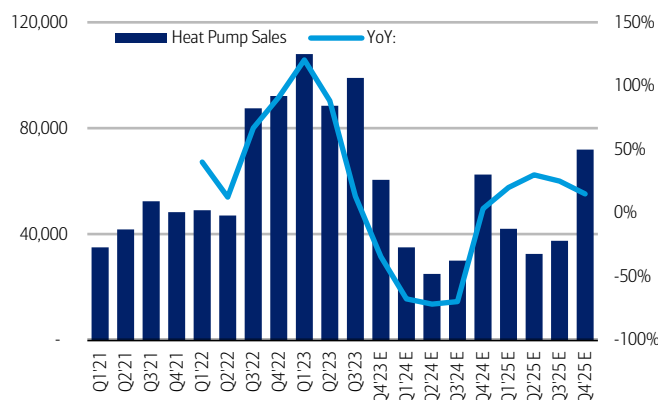


Source: Federal Office for Economic Affairs & Export Control (BAFA)

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### Exhibit 2: Germany heat pump sales over time

We expect heat pumps sales to heavily decline following a period of strong growth



Source: BofA Global Research estimates, BDH

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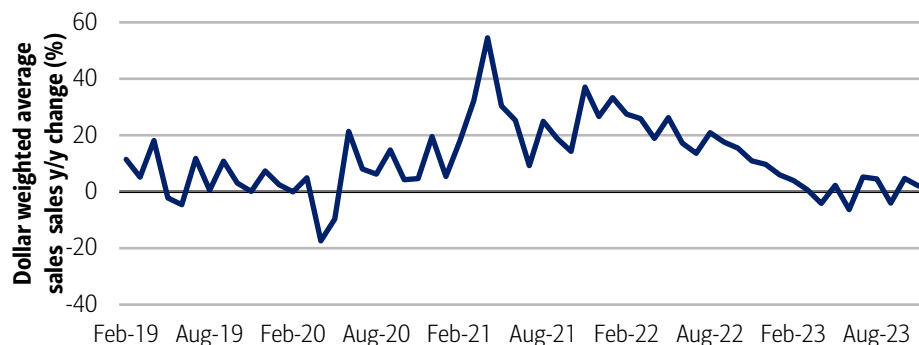
## US HVAC data

### HARDI

Below, we show the y/y growth of average distributor sales as reported by HARDI. We note that this refers to the "Regional Growth" value that HARDI reports in the monthly trends, based on the y/y change in the total dollar number of sales from reporting distributors. Sales were up +2.0% y/y in November, decelerating from +4.7% in October.

### Exhibit 3: Dollar average distributor sales, y/y change

+2.0% y/y in November



Source: HARDI, BofA Global Research

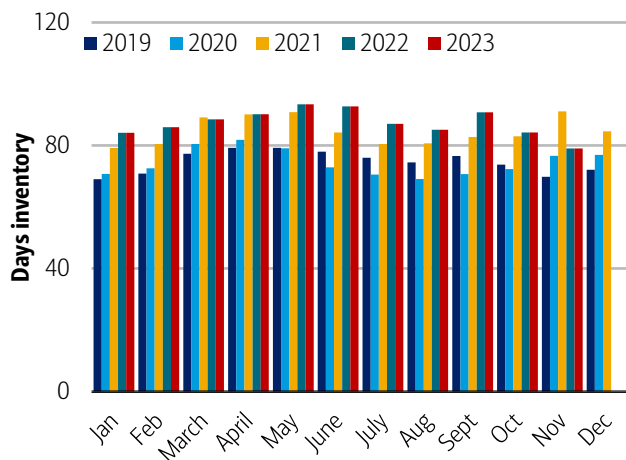
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The charts below show days inventory since 2019. We also compare days inventory to the pre-COVID average. The average HARDI distributor had 79.1 days of inventory in

November 2023. This is below the year-to-date average of 87.4 but remains elevated versus pre-COVID days inventory of ~75.

#### Exhibit 4: HARDI distributor days inventory, 2019-2023

November 2023 days inventory was 79.1

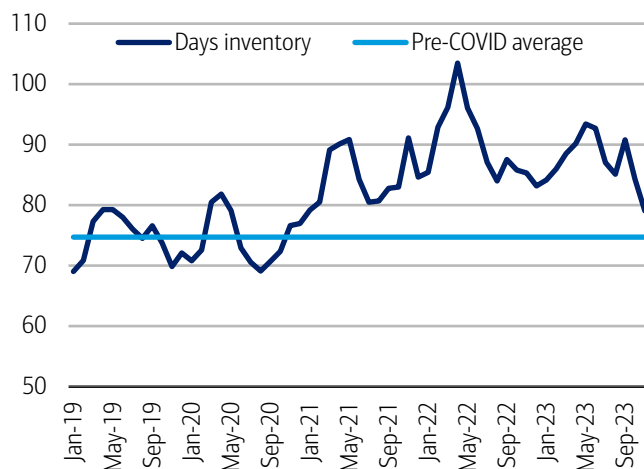


Source: HARDI, BofA Global Research

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#### Exhibit 5: Days inventory vs. pre-COVID days inventory average

Avg. HARDI distributor had 79.1 days of inventory in Nov vs. ~75 pre-COVID



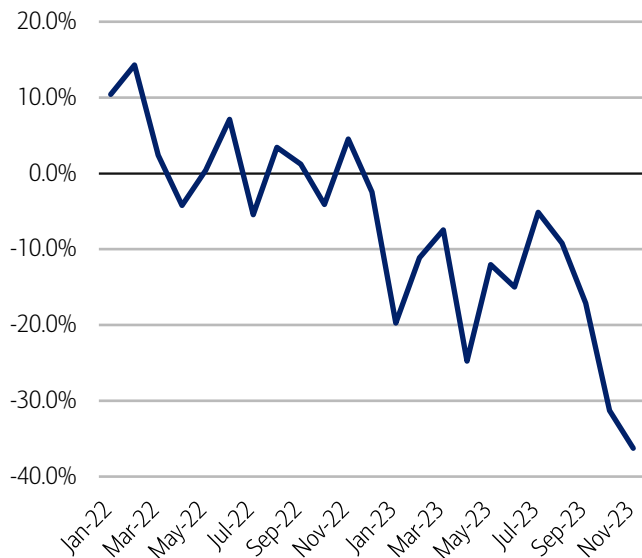
Source: HARDI, BofA Global Research

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### AHRI

#### Exhibit 6: Resi HVAC shipments y/y (Jan 2022 – Nov 2023)

Resi shipments were down 36%y/y in November 2023

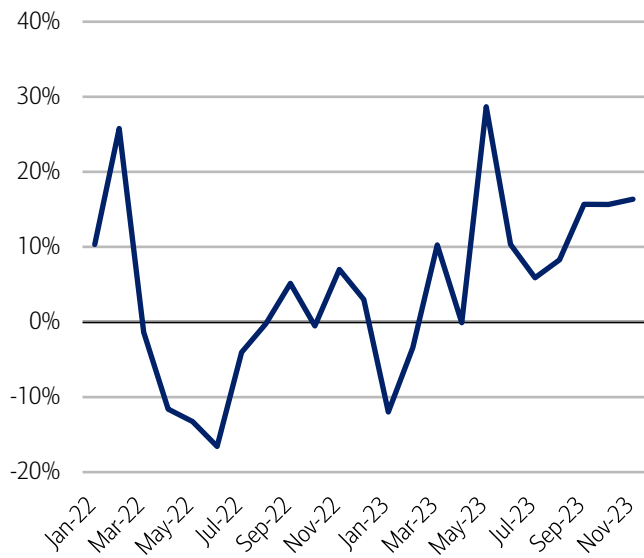


Source: AHRI, BofA Global Research

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#### Exhibit 7: Light commercial HVAC shipments y/y (Jan 2022 – Nov 2023)

Shipments were up 16%y/y in November 2023

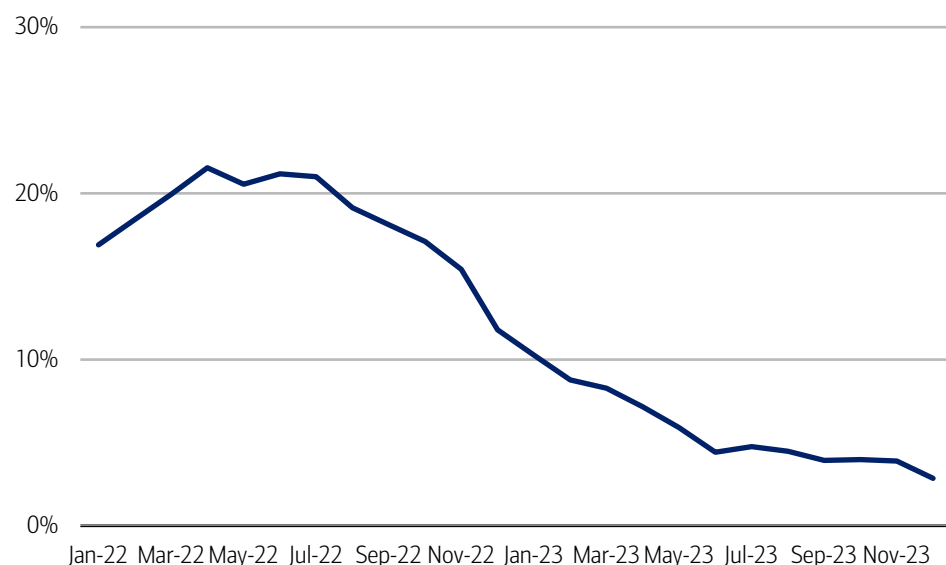


Source: AHRI, BofA Global Research

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**PPI data****Exhibit 8: PPI for HVAC equipment y/y 2022-2023**

PPI data for December was up 2.9% y/y



Source: US Census

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**Stocks mentioned**

Prices and ratings for stocks mentioned in this report

BofA Ticker	Bloomberg ticker	Company name	Price	Rating
CARR	CARR US	Carrier	US\$ 55.59	B-3-7
TT	TT US	Trane Technologies	US\$ 252.01	B-2-7

Source: BofA Global Research

**Price objective basis & risk****Carrier Global Corp. (CARR)**

We base our \$55 price objective on 11x EV/EBITDA of our 2025 estimates. Our 11x target multiple is at a discount to peers, trading at 12x on 2024 estimates. We believe that the discount is warranted given the potential for destocking across res and non-res.

Upside risks to our price objective are: 1) continued solid execution in 2023, 2) non-residential markets take longer to crack than our thesis, and 3) price increases offset impact of destocking cycle.

Downside risks to our price objective are: 1) slower-than-expected macro recovery, 2) inability to execute on announced cost savings plan, and 3) lost market share to competitors.

**Trane Technologies PLC (TT)**

We base our \$265 price objective on 17x 2025E EV/EBITDA. Our 17x target multiple is above the peer group average trading at 13x on 2024 estimates. We believe the premium is warranted given above-average performance.

Downside risks are 1) slower-than-expected macro recovery, 2) lower-than-expected productivity improvement and cost synergies, 3) loss of market share to competitors.

Upside risks are 1) continued solid execution in 2023, 2) non-residential markets take longer to crack than our thesis, and 3) price increases offset impact of destocking cycle.

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	AspenTech	AZPN	AZPN US	Andrew Obin
	Atmus Filtration	ATMU	ATMU US	Andrew Obin
	Dover Corp	DOV	DOV US	Andrew Obin
	Eaton Corp PLC	ETN	ETN US	Andrew Obin
	Emerson Electric Co	EMR	EMR US	Andrew Obin
	Flowserve	FLS	FLS US	Andrew Obin
	General Electric Company	GE	GE US	Andrew Obin
	Honeywell International Inc.	HON	HON US	Andrew Obin
	ITT Inc.	ITT	ITT US	Andrew Obin
	Montrose Environmental Group, Inc.	MEG	MEG US	Andrew Obin
	Parker Hannifin Corporation	PH	PH US	Andrew Obin
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	Rush	RUSHA	RUSHA US	Andrew Obin
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	AMETEK Inc	AME	AME US	Andrew Obin
	Fortive Corporation	FTV	FTV US	Andrew Obin
	Johnson Controls International PLC	JCI	JCI US	Andrew Obin
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	Trane Technologies PLC	TT	TT US	Andrew Obin
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	Illinois Tool Works	ITW	ITW US	Andrew Obin
	John Bean Technologies	JBT	JBT US	Andrew Obin
	Keysight	KEYS	KEYS US	David Ridley-Lane, CFA

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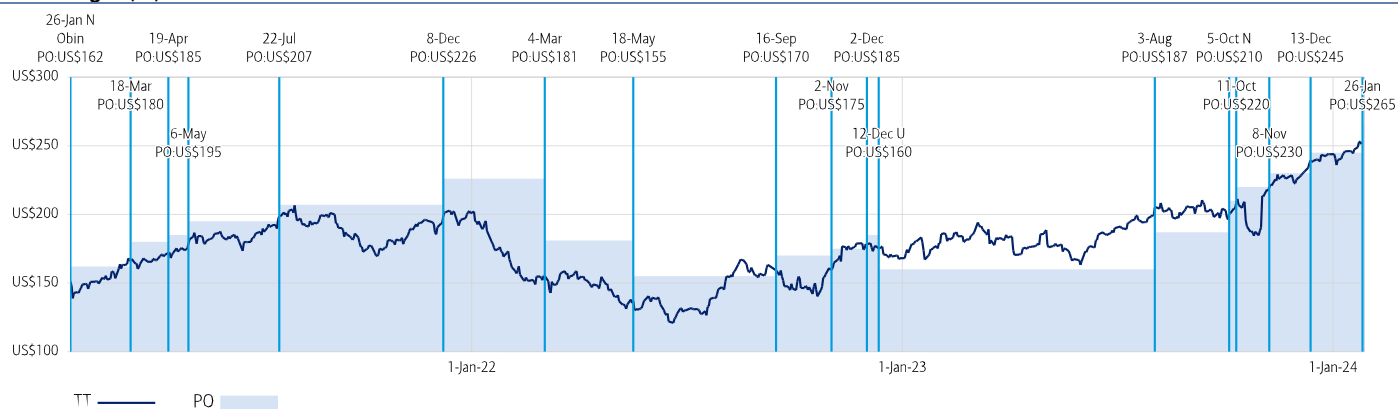
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B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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## Trane Technologies (TT) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
Buy	45	50.56%	Buy	25	55.56%
Hold	26	29.21%	Hold	13	50.00%
Sell	18	20.22%	Sell	7	38.89%

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Coverage Universe	Count	Percent	Inv. Banking Relationships <sup>R1</sup>	Count	Percent
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Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

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