

Global HVAC Equipment Growth Outlook: Revenue and Regional Shifts to 2031

An analytical outlook on how climate-driven cooling demand, efficiency regulation and retrofit cycles, and digital service models will reshape the HVAC equipment market and growth opportunities

FOCUS POINTS

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2 NORTH AMERICA OVERVIEW

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6 LATAM OVERVIEW

7 GROWTH OPPORTUNITIES & CALL TO ACTION

8 KEY TAKEAWAYS

HVAC EQUIPMENT OVERVIEW

Top 3 Strategic Imperatives



Innovative Business Models

WHY IT MATTERS

Customer expectations are pushing HVAC makers from product-centric models to service and outcome-based offers such as HVAC as a service and cooling as a service (CaaS).

FROST PERSPECTIVE

Companies that redefine revenue models through service innovation and customer-focused value delivery will secure a future-ready competitive edge.



Disruptive Technologies

WHY IT MATTERS

IoT and AI are digitalizing HVAC, with intelligent sensors, predictive analytics and cloud controls enabling remote monitoring, energy optimization and predictive maintenance.

FROST PERSPECTIVE

OEMs that embrace AI-driven controls and green refrigerants will achieve stronger differentiation and long-term resilience.



Transformative Megatrends

WHY IT MATTERS

Climate change, urbanization and sustainability commitments are lifting demand for efficient HVAC. Buildings use about 40% of global energy, a key net-zero focus.

FROST PERSPECTIVE

Companies that embed sustainability, digital integration and affordability at the core of their strategies will lead the shift to a resilient HVAC ecosystem.

HVAC EQUIPMENT OVERVIEW

Growth Drivers and Challenges

DRIVERS

1. Tightening Emissions and Efficiency Norms

- Carbon reduction mandates
- Low-emission equipment
- High impact from year three

2. Energy Efficiency and Indoor Air Quality

- Lower operating costs
- Better ventilation and IAQ
- Preferred by building owners



3. Smart Buildings and IoT Integration

- Remote monitoring and control
- Smart building platforms
- Rising IoT-enabled adoption

4. Urbanization and Sustainability Pressure

- Rapid urban expansion
- Infrastructure investment
- Climate and ESG mandates

CHALLENGES

1. High Upfront and Lifecycle Costs

- Installation capex
- Annual maintenance burden

2. Costly R&D and Slow Time to Market

- Heavy R&D spend
- Delayed revenue growth

3. Shortage of Skilled Technicians

- Ageing installer workforce
- Limited technical talent

4. Low Awareness of IoT-Enabled HVAC

- Limited end-user understanding
- Slow smart system uptake

HVAC EQUIPMENT OVERVIEW

Competitive Environment

**100+**
Active competitors, 2025

**38.0%**
Revenue share held by top 5

**3**
Commercial | Residential | Industrial

 **LEADING COMPETITORS**

Daikin

Midea Group

Gree Electric Appliances

Carrier

Samsung

Trane Technologies

Mitsubishi Electric

Haier

Bosch

Johnson Controls

Hisense

Panasonic

LG Electronics

Also active: Lennox International, Systemair, Vaillant, Voltas, General, Blue Star

 **COMPETITIVE FACTORS**

Cost

Performance

Schedule

Support

Technology

Reliability

Brand

Contractor relationships

Customer relationships



 **RECENT M&A** Bosch – JCI residential and light commercial HVAC, plus JCI-Hitachi JV | Daikin Applied – Chilldyne | Samsung – FläktGroup | Trane – BrainBox AI

HVAC EQUIPMENT OVERVIEW

Global Revenue Outlook

WHAT IS DRIVING THE MARKET



Demand Base Broadens
Construction and retrofits keep demand firm.



Cooling Leads the Mix
Cooling is 56.4% of 2025 revenue.



Ventilation Fastest
IAQ demand lifts ventilation to a 7.3% CAGR.



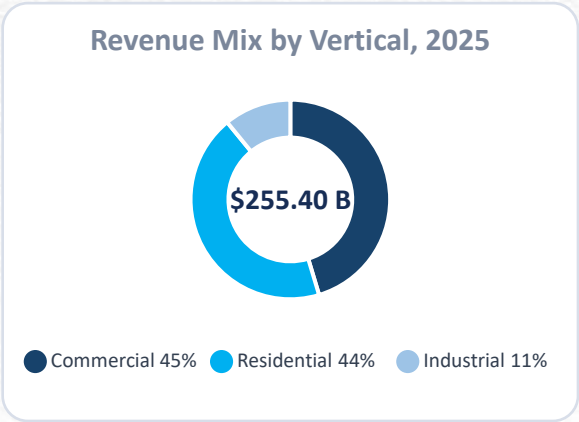
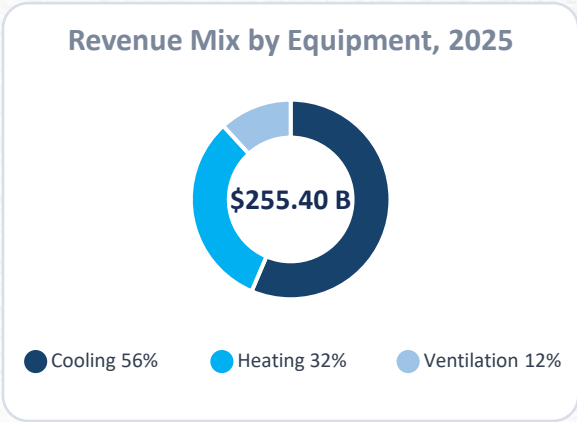
Smart HVAC Scales
IoT and AI enable predictive maintenance.

REVENUE BY REGION, 2025

APAC leads at 42.2% in 2025

APAC \$107.8 B	North America \$60.0 B
Europe \$53.9 B	MEA \$18.4 B
Latin America \$15.3 B	

Global HVAC Equipment	2025	2031
Total Revenue	\$255.40 B	\$383.60 B
Revenue CAGR 2025 to 2031	7.0%	
Cooling Revenue	\$144.06 B	\$216.98 B
Ventilation Revenue	\$30.19 B	\$45.98 B
Heating Revenue	\$81.15 B	\$120.63 B



NORTH AMERICA OVERVIEW

HVAC Equipment Revenue Outlook



Mature, Established Market

North America is a well-established HVAC market with steady demand across new build and retrofit.



Global Majors Set the Pace

Trane Technologies, Daikin, Carrier, Bosch, and Lennox lead, with Johnson Controls, Samsung, and Haier also active.



Heating Leads the Mix

Electrification and heat pump incentives favour heating, while IAQ technology lifts ventilation to a 7.3% CAGR.



Smart, Efficient Systems Win

Connected controls, efficiency rules, and data centre cooling carry revenue to \$90.14 billion by 2031.

North America HVAC Equipment	2025	2031
Total Revenue	\$60.02 B	\$90.14 B
Revenue CAGR 2025 to 2031	7.0%	
Heating Revenue	\$27.85 B	\$41.92 B
Cooling Revenue	\$24.91 B	\$37.14 B
Ventilation Revenue	\$7.26 B	\$11.09 B

Revenue Mix by Equipment, 2025

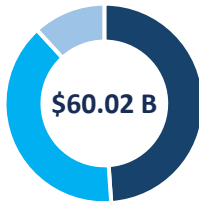


Cooling 41%

Heating 46%

Ventilation 12%

Revenue Mix by Vertical, 2025



Commercial 49%

Residential 39%

Industrial 12%

NORTH AMERICA OVERVIEW

HVAC Equipment Market Insights



Heating Leads on Electrification

Electrification and declining natural gas use in buildings are shifting demand toward heat pumps, with tax credits and rebates supporting adoption across diverse climates.



Ventilation Sets the IAQ Agenda

Multi-stage filtration, HEPA, and UVGI are being built into systems to remove airborne contaminants, making ventilation the fastest-growing equipment segment.



Cooling Follows the Heatwaves

Intensifying heatwaves across western North America, together with round-the-clock data centre cooling needs, keep cooling demand climbing.



Commercial and Residential Both Advance

Commercial buildings adopt smart, efficient systems to meet green building and energy codes, homes prioritise comfort and efficiency, and industry needs precise temperature and air quality control.

EUROPE OVERVIEW

HVAC Equipment Revenue Outlook

COMPETITIVE AND FORECAST OVERVIEW

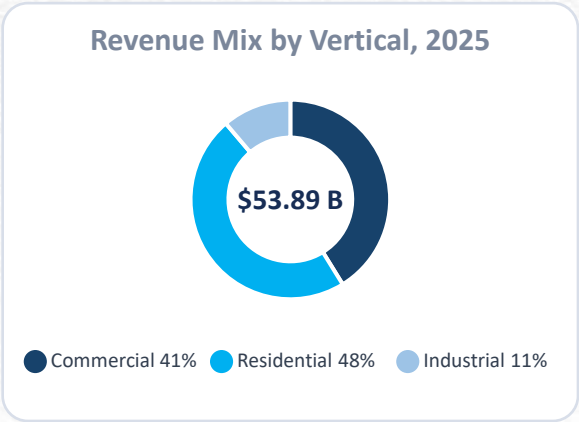
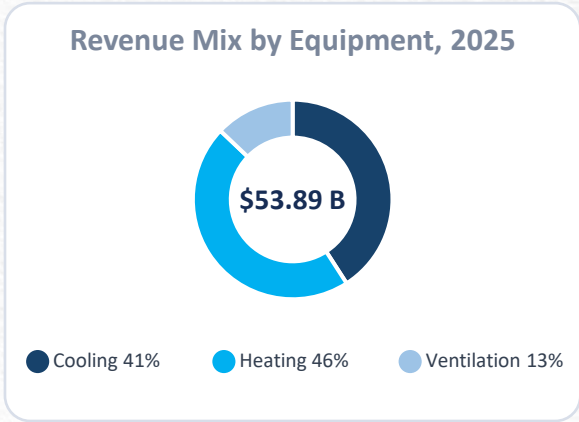
 **Regulation Sets the Agenda**
The EU Green Deal and the revised EPBD are pushing buildings away from fossil fuel heating toward electrified solutions.

 **A Broad Competitive Field**
Daikin, Carrier, Bosch, Midea, and Samsung lead, with Vaillant, Panasonic, and Swegon also active across the region.

 **Heat Pumps Lead the Mix**
Germany's renewable heating mandate drives heat pumps, while HRV and DCV systems lift ventilation to a 7.1% CAGR.

 **Renovation Drives Demand**
Retrofit of ageing buildings, residential subsidies, and a strong industrial base carry revenue to \$80.17 billion by 2031.

Europe HVAC Equipment	2025	2031
Total Revenue	\$53.89 B	\$80.17 B
Revenue CAGR 2025 to 2031	6.8%	
Heating Revenue	\$24.90 B	\$37.12 B
Cooling Revenue	\$22.04 B	\$32.55 B
Ventilation Revenue	\$6.95 B	\$10.50 B



EUROPE OVERVIEW

HVAC Equipment Market Insights



Heat Pumps Lead on Regulation

Germany's Building Energy Act requires new heating systems to draw at least 65% of their energy from renewables from 2025, driving strong demand for electric heat pumps.



Ventilation Sets the IAQ Agenda

Emissions reduction and energy optimisation lift heat recovery and demand-controlled ventilation, making ventilation the fastest-growing equipment segment.



Cooling Demand Turns Seasonal

Record heatwaves in Spain and France are lifting air conditioner sales, though demand stays largely seasonal rather than year-round.



Renovation and Subsidies Lift Verticals

Retrofit and public building investment drive commercial demand, heat pump subsidies support homes, and a strong industrial base in automotive, pharma, and food processing needs precise climate control.

APAC OVERVIEW

HVAC Equipment Revenue Outlook

COMPETITIVE AND FORECAST OVERVIEW



Largest Regional Market

APAC is the largest HVAC equipment market, lifted by rising temperatures, rapid urbanization, and infrastructure development.



Regional Champions Compete

Midea Group, Gree Electric, Daikin, Mitsubishi Electric, and Samsung lead, with Haier, Hisense, and LG also active.



Cooling Dominates the Mix

Heatwaves across China, India, and Thailand drive cooling, while air quality concerns lift ventilation to a 7.7% CAGR.



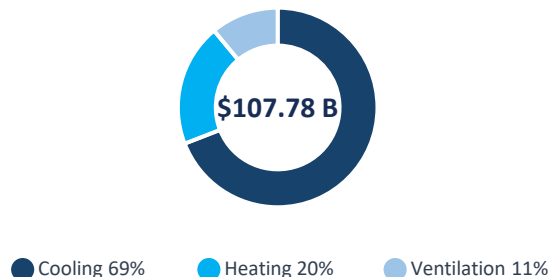
Urbanisation Powers Verticals

Green building policy and retrofits drive commercial demand, urban migration lifts homes, and manufacturing investment carries revenue to \$164.95 billion by 2031.

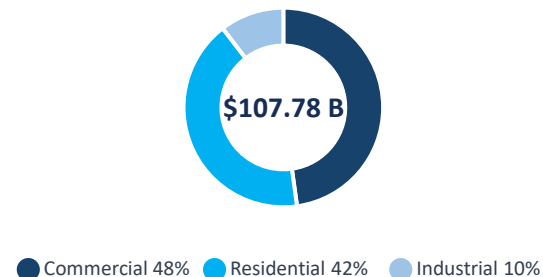
APAC HVAC Equipment

	2025	2031
Total Revenue	\$107.78 B	\$164.95 B
Revenue CAGR 2025 to 2031	7.4%	
Cooling Revenue	\$74.47 B	\$114.64 B
Heating Revenue	\$21.45 B	\$31.83 B
Ventilation Revenue	\$11.86 B	\$18.47 B

Revenue Mix by Equipment, 2025



Revenue Mix by Vertical, 2025



APAC OVERVIEW

HVAC Equipment Market Insights



Cooling Dominates Demand

Rising temperatures and frequent heatwaves across China, India, and Thailand are accelerating adoption of advanced cooling solutions.



Air Quality Lifts Ventilation

Rising air pollution and its health impact are driving demand for high-efficiency ventilation that protects occupant health and indoor comfort.



Heat Pumps Gain in North Asia

China and Japan lead the region in adopting heat pumps across both residential and commercial buildings.



Urbanisation Powers the Verticals

Retrofits and efficiency goals keep commercial ahead, urban migration and rising living standards lift homes, and manufacturing investment across China, India, Vietnam, and Indonesia drives industrial demand.

MEA OVERVIEW

HVAC Equipment Revenue Outlook

COMPETITIVE AND FORECAST OVERVIEW



Climate-driven cooling demand

Summers above 45°C keep cooling the anchor of MEA demand, with district cooling and high-efficiency AC scaling fastest across the Gulf.



Competitive landscape

Daikin, Midea, Carrier, Samsung and Trane lead the field, with Johnson Controls, Hisense and Panasonic active through local partners and assembly.



Regulation and retrofit

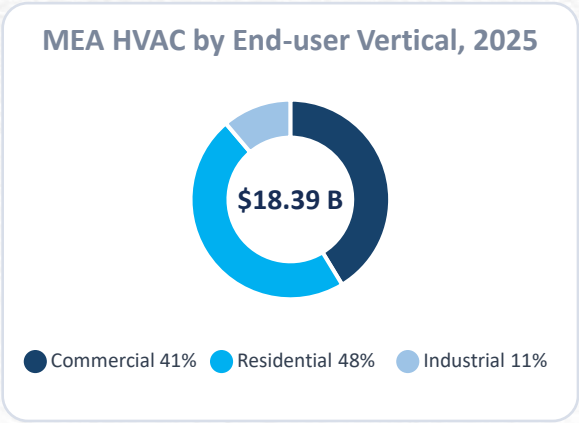
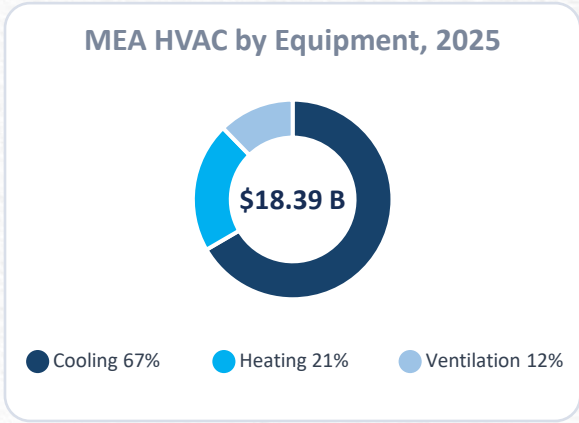
Green building codes, low-GWP refrigerant transition and Dubai's ~30,000-building retrofit programme are lifting replacement-cycle value.



Revenue outlook to 2031

Saudi giga-projects, tourism and industrial investment carry revenue from \$18.39 billion to \$26.85 billion by 2031, a 6.5% CAGR.

MEA HVAC Equipment	2025	2031
Total Revenue	\$18.39 B	\$26.85 B
Revenue CAGR 2025 to 2031	6.5%	
Cooling Revenue	\$12.25 B	\$18.04 B
Heating Revenue	\$3.88 B	\$5.53 B
Ventilation Revenue	\$2.26 B	\$3.28 B



MEA OVERVIEW

HVAC Equipment Market Insights



Extreme Heat Anchors Cooling

Temperatures regularly above 45°C in Saudi Arabia, the UAE and Kuwait keep air conditioning essential, and district cooling is becoming the default solution for large developments.



Comfort and Air Quality Lift Ventilation

Building owners and facility managers increasingly treat thermal comfort and indoor air quality as core requirements, making ventilation the fastest-rising equipment priority.



Industrial Process Needs Sustain Heating

Heating grows more slowly, but oil and gas, chemicals and pharmaceuticals depend on precise temperature control, sustaining demand for reliable, energy-efficient systems.



Giga-projects and Industry Drive the Verticals

Saudi giga-projects across housing, tourism, sport and government infrastructure, alongside green hydrogen and Qatar's North Field expansion, underpin commercial and industrial demand.

LATAM OVERVIEW

HVAC Equipment Revenue Outlook



Core markets and climate

Brazil, Mexico, Argentina and Chile lead the region, where a predominantly tropical climate keeps energy-efficient cooling the anchor of demand.



Competitive landscape

Trane Technologies leads, with Carrier, Daikin, Samsung and Midea close behind; Johnson Controls, LG Electronics and Hisense are also active across the region.



Urbanisation and efficiency rules

Rapid urbanisation, infrastructure build-out and stricter efficiency standards are accelerating adoption in both new construction and renovation projects.



Revenue outlook to 2031

Commercial real estate, Brazilian residential demand and Plan Mexico industrial parks carry revenue from \$15.32 billion to \$21.48 billion by 2031, a 5.8% CAGR.

LATAM HVAC Equipment	2025	2031
Total Revenue	\$15.32 B	\$21.48 B
Revenue CAGR 2025 to 2031	5.8%	
Cooling Revenue	\$10.39 B	\$14.61 B
Heating Revenue	\$3.08 B	\$4.23 B
Ventilation Revenue	\$1.85 B	\$2.64 B

LATAM HVAC by Equipment, 2025



Cooling 68%

Heating 20%

Ventilation 12%

LATAM HVAC by End-user Vertical, 2025



Commercial 34%

Residential 56%

Industrial 10%

LATAM OVERVIEW

HVAC Equipment Market Insights



Tropical Climate Drives Cooling

A predominantly tropical climate across Brazil, Mexico and the Andean markets makes energy-efficient cooling the core of demand for indoor comfort.



Efficiency Standards Reshape Purchases

Stricter energy efficiency standards and infrastructure modernisation are steering buyers toward higher-efficiency equipment in both new build and renovation.



Commercial Construction Broadens Demand

Hospitals, hotels and resorts, data centres, research facilities, schools and universities are expanding the commercial installed base across the region.



Housing and Industrial Parks Add Momentum

Urbanisation in Brazil lifts residential air conditioning, while industrial park development under Plan Mexico creates steady demand across industrial infrastructure.

GROWTH OPPORTUNITIES & CALL TO ACTION

GO 1



HVAC Maintenance with Remote IoT and Cloud

- Embed IoT sensors in equipment and run cloud predictive-maintenance analytics for early fault detection, remote diagnostics and less unplanned downtime.
- Monetise connectivity through service subscriptions, remote monitoring and digital maintenance agreements as smart building adoption accelerates.

GO 2



HVAC with AI and ML Capabilities

- Embed AI and ML across the portfolio for self-tuning control that adapts to occupancy, weather and dynamic energy pricing.
- Use predictive analytics to redistribute loads across zones, cutting energy use and pre-empting maintenance needs.

GO 3



Precision Cooling Solutions for Data Centres

- Develop liquid cooling (direct-to-chip and immersion) for high-density racks to lower PUE and improve sustainability outcomes.
- Offer in-row and modular cooling that targets heat at the source and scales with edge and hyperscale build-outs.

KEY TAKEAWAYS

1

Market Reaches \$383.6 Billion By 2031

Global HVAC equipment revenue climbs from \$255.4 B in 2025 at a 7.0% CAGR, led by cooling at \$217.0 B by 2031.

2

Cooling Dominates, Heating Holds Scale

Cooling is 56% of 2025 revenue and heating 32%, with ventilation the smaller but fastest-rising comfort and air-quality play.

3

Asia-Pacific Leads, Gulf and LATAM Accelerate

APAC reaches \$165.0 B by 2031 at 7.4%, while MEA grows 6.5% to \$26.9 B and LATAM 5.8% to \$21.5 B.

4

Regulation and Retrofits Drive Replacement

Efficiency codes, low-GWP refrigerants and large retrofit programmes are pulling forward replacement demand across regions.

5

Digital Services Decide The Winners

IoT-connected maintenance, AI-driven optimisation and precision data-centre cooling are the growth opportunities that separate leaders.