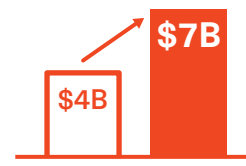




Trane® Air-to-Water Cascade Heat Pump System

Solve the impossible boiler retrofit.

Trane systems provide all you need to update your boiler system with a high-temperature, efficient heating solution using multiple heat pump chillers.



\$7B

The electrified heating market is expected to nearly double **from \$4 billion to \$7 billion*** by 2024 – 2033

3X

 Up to **3X** more efficient than traditional boilers

210°F

Achieve hot water temperatures to **210°F (99°C)**

Easy to retrofit boiler jobs

0

 Zero distribution and infrastructure disruptions

365

Heat and cool reliably 365 days a year

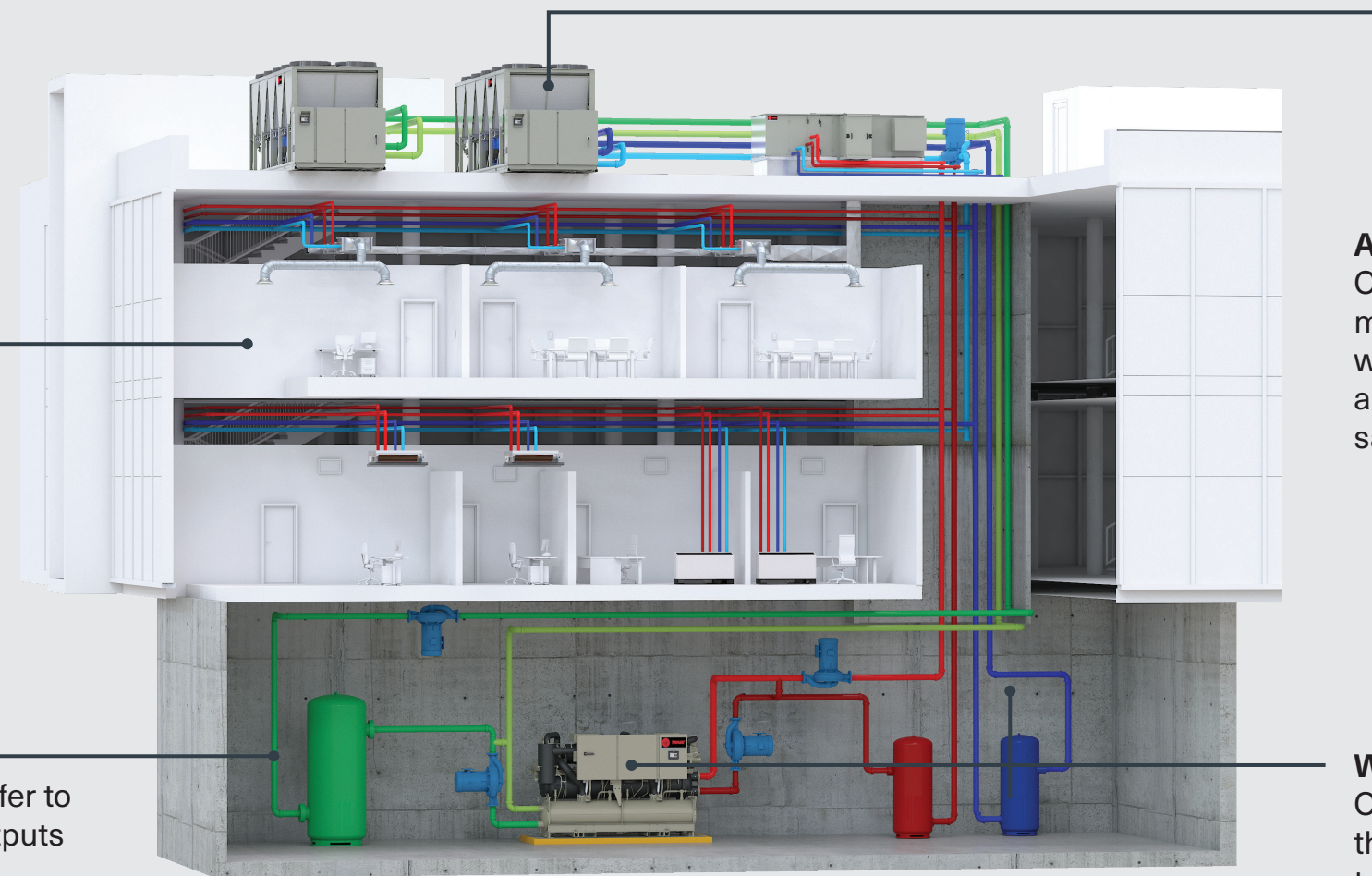
*Commercial Building Electrification. Guidehouse Insights. 3Q 2024.

How it Works

Trane air-to-water heat pumps source energy from the outdoor ambient air, even when it's cold outside, to provide a stable source of heat for the building. Then our packaged water-to-water heat pump increases the heat temperature to 210°F (99°C) — the same operating temperatures as boilers — to heat the building.



Tracer® Controls
Uses Trane applied control sequences to balance multiple priorities: reliability, carbon reduction, efficiency, and energy cost savings during heating and cooling.



Intermediate Loop
Enables efficient and flexible heat transfer to achieve precise higher temperature outputs and improved system performance.



Air-to-Water Heat Pumps
Operates in heating or cooling mode. Multiple units are used when heating and cooling loads are expected to occur at the same time.



Water-to-Water Heat Pumps
Operates in heating mode. Increases the air-to-water heat pump leaving temperatures and enhances heating capabilities for boiler replacement.

Benefits

Take your heating system to new heights with heat pumps, pre-engineered systems layouts, digital controls, applications knowledge, and services.



High-Temperature Performance

Delivers hot water supply temperatures through a cascade heat pump design that supports demanding heating applications.



Retrofit-Ready Electrification

Supports boiler replacement with an electrified solution that works with existing building infrastructure.



Cost-Effective Heating and Cooling

Uses large, packaged heat pump equipment to provide a more cost-effective solution for large buildings.



Expert Support and Application Guidance

Backed by Trane expertise, tools, and resources to help teams design, implement, and operate with confidence.



Simplified System Design

Combines pre-engineered layouts, integrated components, control sequences, and specifications to reduce complexity and streamline implementation.



Integrated Energy and Building Services

Extends support beyond equipment with local energy and building services expertise with optional 24/7 monitoring.