WHAT IS CEDA?

The California Energy Design Assistance (CEDA) program promotes the electrification and decarbonization of new building construction or major renovation. CEDA works in collaboration with project teams to reduce energy demand, consumption, and carbon emissions.

CEDA serves commercial, public, high-rise multifamily, industrial, and agricultural projects in Pacific Gas & Electric (PG&E), Southern California Edison (SCE), SoCalGas (SCG), and San Diego Gas & Electric (SDG&E) service areas.
WHY PARTICIPATE IN CEDA?

- Receive complimentary custom **decarbonization** analysis to identify and evaluate opportunities
- Gain analysis of **energy costs and paybacks**
- Receive **financial incentives** to help offset the costs of decarbonization measures for qualified projects
- Demonstrate commitment to high performance building practices and design

DESIGN TEAM INCENTIVES

Design teams are stretched thin on time and budget, but that doesn't mean decarbonization needs to be put on the back burner.

CEDA is now offering design team incentives on top of the incentives your project will get for implementing decarbonization measures. It's a win-win!

$2,800 incentive
INCENTIVE SUMMARY

• Based on net\(^1\) first year energy savings beyond standard practice baseline\(^2\)
  
  • Fixed incentive rates for kWh, therms saved (bonus for electrification)
  
  • Incentives are capped at the lesser of 100% of incremental measure costs or 50% of full measure costs
  
  • Incentives may be capped for buildings with onsite generation exceeding usage on an hourly basis.

---

1 Net savings are based on CPUC determined net-to-gross ratio to account for free-ridership and program influence
2 The All-electric program’s standard practice baseline is mixed fuel for buildings with natural gas available nearby

---

Energy Savings:

- $0.20/kWh
- $0.30/therm
- $1.00/therm (electrification)

---

HAVE A PROJECT TO DISCUSS?

For more information, please contact one of our program outreach specialists:

Jeff Glover
Program Outreach Lead
JGlover@Willdan.com
952.938.1588

Tina Hendrix
Program Outreach Specialist
THendrix@Willdan.com
760.585.7577

https://californiaeda.com/
Air Source Heat Pumps

Introduction
- Heat Pump Market Landscape
- Advancing Heat Pumps (NEEA)

Manufacturer Presentations
- LG
- Carrier
- Mitsubishi
- Daikin

Roundtable with Q+A
Heat Pump Efficiency + Grid Decarbonization

Heat Pump Growth in the US

Heat pump sales in U.S. surged past gas furnaces in 2022

Top 10 states for heat pumps

U.S. states with the highest percentage of households using central heat pumps

<table>
<thead>
<tr>
<th>State</th>
<th>% of housing units with heat pumps</th>
<th>Number of housing units with heat pumps</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Carolina</td>
<td>46</td>
<td>910,000</td>
</tr>
<tr>
<td>North Carolina</td>
<td>42</td>
<td>1,690,000</td>
</tr>
<tr>
<td>Alabama</td>
<td>42</td>
<td>800,000</td>
</tr>
<tr>
<td>Tennessee</td>
<td>39</td>
<td>1,030,000</td>
</tr>
<tr>
<td>Florida</td>
<td>32</td>
<td>3,540,000</td>
</tr>
<tr>
<td>Mississippi</td>
<td>32</td>
<td>340,000</td>
</tr>
<tr>
<td>Virginia</td>
<td>30</td>
<td>980,000</td>
</tr>
<tr>
<td>Georgia</td>
<td>29</td>
<td>1,140,000</td>
</tr>
<tr>
<td>Arizona</td>
<td>28</td>
<td>760,000</td>
</tr>
<tr>
<td>Kentucky</td>
<td>23</td>
<td>410,000</td>
</tr>
<tr>
<td>Rest of the country</td>
<td>11</td>
<td>6,680,000</td>
</tr>
</tbody>
</table>

2022 figures include sales data for Jan–Nov and projected sales for Dec.

Chart: Canary Media • Source: U.S. Energy Information Administration, Residential Energy Consumption Survey (June 2022)
California's Goal of 6 Million Heat Pumps by 2030

Heat Pump Adoption is Much Higher in Other (Colder) Countries

Countries with much higher heating needs have much higher percentages of heat pumps. Source: Nature

Source: Heat Pump and Thermal Storage Center Japan, Nature article and EIA.
Today's Panelists

- **Suzi Asmus, Senior Program Manager, Northwest Energy Efficiency Alliance** | Suzi has been managing NEEA's Residential HVAC programs since 2015, initially with the Ductless Heat Pump Program and now with the newly-launched Advanced Heat Pump Program.

- **Mark Thomson + William Robertson, LG Electronics** | Mark and William are experienced energy demand side management leaders.

- **Shawn LeMons, Performance Construction Manager, Mitsubishi Electric Trane U.S.** | Shawn is focused on efficient cooling and heating systems for residential new construction.

- **Jonathan Moscatello, Business Development Manager, Daikin North America** | Jonathan is a nationally regarded expert in residential contracting and heat pumps and has worked at Daikin since 2021.

- **James Momperousse - Energy & Utility Sales Manager - Carrier** | With over 10 years of HVAC experience, James plays an active role in maximizing clean energy opportunities for Carrier Ductless and VRF products.

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**Advanced Heat Pumps**

**Suzi Asmus**

*Senior Program Manager, Northwest Energy Efficiency Alliance*

*November 15, 2023*

CLASSIFICATION LEVEL: PUBLIC
The Alliance

What Does NEEA Do?

- EMERGING TECHNOLOGIES
- PORTFOLIO EXECUTION
- CODES & STANDARDS
- CONVENE AND COLLABORATE
- MARKET INTELLIGENCE
**NEEA’s Resources**

**BetterBuiltNW**

Your Home for N  
Construction Efficiency Resources

BetterBuiltNW works to accelerate the use of energy-efficient building practices in residential construction.

- Find a Professional
- Find a Utility

---

**The Northwest Market & Priorities**
Heat Pump Research

- Efficient features & capabilities
- Testing and rating procedure
- Quality installation practices
- Micro heat pumps (room/window)
- Thermal battery combo heat/water heating
- Dual fuel gas/electric heat pumps

https://www.mwalliance.org/advanced-heat-pump-coalition
Northwest Energy Efficiency Alliance (NEEA) | Product Council

NW Residential Heat Pump Incentives

- NEEA aims to help regional utilities improve the efficiency of all residential heat pumps installed in the Northwest.
  - Ducted & ductless
  - Electric & dual fuel
  - Primary & supplemental
  - Replacement, displacement & upgrade
**Total System Performance Vision**

**Today**

- Better Installation and Operation
- Equipment Performance
- Better Design and Adaptation
- Rating Uncertainty Loss

**2030**

- Better Install and Operation
- Equipment Performance
- Better Design and Adaptation
- Rating Uncertainty Loss

better equipment performance + Improved ratings

---

**Improvements**

- Low Load Efficient
- Cold Climate Capable
- Connected Commissioning
- Adaptive Defrost
- No Duct Losses
- Minimize Auxiliary Heat
- Auto Demand Response
**Intervention Approach**

- Make qualifying products for each improvement identifiable in the market
- Build adoption among manufacturers and efficiency program partners
- Influence specification and standards bodies to include improvements

---

**Suzi Asmus**
Senior Program Manager, NEEA
sasmus@neea.org
ASHP PRODUCT OVERVIEW

Mark Thomson, Senior Business Development Manager Utilities
Bill Robertson, Senior Account Manager / CAC Distribution Sales Northeast
November 15, 2023
KEY FEATURES

- **LGE® HEAT TECHNOLOGY**: Advanced technology that maintains 100% of the rated heating capacity performance down to 0°F and continuous heating performance down to -12°F.

- **DEHUMIDIFYING MODE**: Glass sensor in the indoor unit to accurately maintain room temperature and control humidity by adjusting fan speed and air flow.

- **OPTIMIZED AIRFLOW**: Auto Cool / Auto Fan Mode operates the unit on a high-speed fan to cool or warm the room.

- **AUTO SLEEP MODE**: Automatically lowers the temperature setting 2°F in 90 minutes towards the preset temperature. Afterward, the thermostat returns to the original setting.

- **DEFOURST CONTROL**: Removes frost from the outdoor unit and defrosts at night or whenever outdoor temperature is low and condensate drip point is not reached.

- **NOISE-FREE DESIGN**: LG Air Conditioning solutions come in a variety of indoor units, including the Art Cool™ Gallery, which includes a cabinet with a decorative glass front. The cabinet is made of tempered glass with a decorative design to match any home’s interior, appropriately volume maximizing the aesthetics of any room it is located.

SINGLE ZONE SYSTEMS

Air Conditioning Technologies
CONTROLS

Individual Control

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREMTC00U</td>
<td>Simple Wired Remote Controller</td>
</tr>
<tr>
<td>PREMB100</td>
<td>Standard Wired Remote Controller</td>
</tr>
<tr>
<td>PREMRA200</td>
<td>Deluxe Wired Remote Controller</td>
</tr>
<tr>
<td>PWLSB21H</td>
<td>Wireless Remote Controller</td>
</tr>
<tr>
<td>PREMBTC2</td>
<td>LG MultiSITE™ Remote Controller</td>
</tr>
<tr>
<td>PREMBTC3</td>
<td>LG MultiSITE™ Remote Controller with Motion and Humidity Sensor</td>
</tr>
<tr>
<td>PREMBTC4</td>
<td>LG MultiSITE™ Remote Controller with ZigBee® Pro Wireless Network</td>
</tr>
<tr>
<td>ZRTBS01</td>
<td>Room Temperature/Brightness Sensor</td>
</tr>
</tbody>
</table>
## The Power of Partnerships

### Existing LG Lineup Single Zone

**EnergyStar 6.1 cold climate**

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Model Name</th>
<th>Efficiency</th>
<th>External</th>
<th>Capability</th>
<th>Optional</th>
<th>Energy Star</th>
<th>Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Zone</td>
<td>LAC1210R1S</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>LAC1220R1S</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

### Existing LG Lineup Multi-Zone

**EnergyStar 6.1 cold climate**

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Model Name</th>
<th>Efficiency</th>
<th>External</th>
<th>Capability</th>
<th>Optional</th>
<th>Energy Star</th>
<th>Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Zone</td>
<td>LM405465</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>LM405466</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>LM405467</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

*Note: Red arrow indicates "LG Star".
LG’s New Hydronic Product Line is Well-Timed for Electrification Growth of DHM (Domestic Hot Water)

LG’s new products, in new market segments with high growth potential:

- HPWH (Heat Pump Water Heater)
- AWHP (Air to Water Heat Pump)
- Hydro Kit (VRF Water Heating Indoor Unit)
NBI Manufacturer Round Table
Mitsubishi Electric
November 15, 2023

Shawn LeMons
Performance Construction Mgr
(Former BPI, IECC, RESNET, LEED, PHIUS, Thermography)

www.mitsubishicomfort.com

Double Check Your Specs

Both are on the NEEP ccASHP list. Which one is right for your client?

Cold Climate
100% @ 5°F
80% @ -13°F
Opp @ -22°F

Standard
66% @ 17°F
57% @ 5°F
Opp @ -8°F

https://neep.org/heating-electrification/ccashp-specification-product-list
Double Check Your Specs

Which is right for the client?

MXZ-SM48NAMHZ
+ 2 duct systems

Up to 23 SEER, 12 HSPF
54,000 Max Btu/h @5°F
COP 1.9 @5°F

- 3kW heat strip below -4°F
- Heat pump to -24°F
- Maintains efficiency
- 65A total breakers
  (50A+15A)

Two high efficiency ducted heat pumps

Up to 24 SEER, 13 HSPF
39,600 Max Btu/h @5°F
COP 2.48 @5°F

- 18k heat strip below 9°F
- Heat pump off at 7°F
- Efficiency plummets
- 190A total breakers
  (2x30A, 2x15A, 2x50A)

The RIGHT Heat Pump - Winter

Beyond Spec Performance

4T ccASHP + 2 duct systems
200amp SPAN panel

-18°F @ 8am 12/22/2022
Denver design temp 0°F
3700 sf home, 46 kBTU/h load

“...expected it to be much colder,
but it was great... evenly heated”
- Sekhar Paladugu
  www.heliohome.io

Max ampacity 42A (10 kW)
Stayed below 25A (6 kW)
Ceiling Mounted Heat Pump

Slim Design

**EZ FIT® Ceiling Cassette**

The MLZ-KP EZ FIT® fits between 2x8 ceiling joists providing a clean flush-mount appearance. A popular selection for room upgrades or new construction projects. Fully serviceable from below, no access panels needed.

Capacities: 6,000 to 18,000 BTU/H
Sound: as low as 21 dB(A)
Condensate: Drain lift mechanism 19”

Intelligent Hybrid Heat Pump

The Award Winning

**intelli-HEAT™**

Upgrade your current HVAC system to a Hybrid **Dual Fuel Heat Pump** and significantly reduce gas usage and CO2 emissions. This smart system not only improves AC efficiency on hot days, but also determines the best source of heat (gas or electricity) on cold days.
All-Climate SMART MULTI

6, 8, 10 ton MXZ-SM 3-phase

M&P-series
Up to 12 indoor units

City-Multi
Up to 30 indoor units

IEER: up to 24.5
COP: up to 4.2
Max total piping: 1,017 ft
Max furthest pipe: 425 ft

Less Refrigerant, Air or Water Source

Future Proof
Hybrid VRF

The world’s only two-pipe Hybrid Variable Refrigerant Flow (VRF) system that exchanges heat between refrigerant and water. Air or water source units connect to the Hybrid Branch Controller (HBC) allowing for simultaneous heating and cooling.

30-40% less refrigerant charge per system
No refrigerant in occupied spaces
Future Proof and adapt to market regulations
IRA Guide

The Inflation Reduction Act (IRA)
Unprecedented Federal energy efficiency improvement incentives for homeowners, builders and building owners

The Inflation Reduction Act of 2022 (IRA) is the largest ever climate investment by the Federal Government in American history, projected to reduce greenhouse gases (GHGs) by 31% to 44% below the 2005 levels by 2030. The IRA will bring energy bill relief to U.S. households by incentivizing the adoption of more efficient, all-electric appliances. Importantly, the IRA recognizes the key role of highly efficient, variable-capacity heat pumps in slashing domestic GHG emissions and lowering energy costs for Americans.

Explore Benefits For:
U.S. Homeowners
Builders and Contractors

https://www.mitsubishicomfort.com/inflation-reduction-act

Performance Construction

National team to support building professionals

Shawn LeMons
Performance Construction Manager
AZ, CO, UT, WY
slemons@hvac.mea.com
720-648-0505

http://mitsubishicomfort.com/commercial/performance-construction

Click Here
Crossover Solution – What is it?

• “Crossover” = Bridging the gap between two formerly incompatible systems

• Maintain unitary characteristics while leveraging elements of ductless technology

• With both gas and electric options available, a Carrier/Bryant/ICP crossover system is great for any space or application

  – High performing
  – Fit-for-purpose
  – Consistent comfort
  – Small size
  – Whisper quiet operation
  – Third-party thermostat compatible

Crossover Solutions - How it works

• Conventional DLS outdoor
• ODU has a 24V interface built-in
• No additional accessories are required
• Only the suction line needs to be insulated
• Uses conventional unitary line-set sizes
Crossover Solutions – 38MURA

Features/Benefits

- Compatible with Res Fan Coils and Furnaces
- Increased Coverage 1.5 – 5 ton
- Small footprint
- Inverter-Driven Compressor
- Add-on Replacement Opportunities
- Available in Standard Heat and High Heat
- Conventional Line-set Sizes

*Available in Q2 2023

Toshiba Carrier VRF U-Series

Enhancements

- Efficient new outdoor unit chassis design
- Triple & twin rotary compressors and new inverter
- Elite Heat model offering (Ratings to -30F)
- Communication Wave Tool for remote data trending

Indoor units *Launched*

Heat Pump

- Production – June 2023
- Q3 Availability subject to PIPO

Heat Recovery

- Production – Dec 2023
- Q2 Availability subject to PIPO
# u-Series Heat Pump Offering

<table>
<thead>
<tr>
<th>Items</th>
<th>SMMS-e</th>
<th>SMMS-u</th>
<th>SMMS-u (Elite Heat)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>Chassis (mm)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>6 ton</td>
<td>6, 8 ton</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>W39.0&quot; x D30.7&quot; x H72.9&quot;</td>
<td>W39.6&quot; x D31.0&quot; x H66.5&quot;</td>
<td>-</td>
</tr>
<tr>
<td>Medium</td>
<td>8, 10 ton</td>
<td>10, 12, 14, 16 ton</td>
<td>6, 8, 10 ton</td>
</tr>
<tr>
<td></td>
<td>W47.6&quot; x D30.7&quot; x H72.9&quot;</td>
<td>W51.4&quot; x D31.0&quot; x H66.5&quot;</td>
<td>W51.4&quot; x D31.0&quot; x H66.5&quot;</td>
</tr>
<tr>
<td>Large</td>
<td>12, 14 ton</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>W63.0&quot; x D30.7&quot; x H72.9&quot;</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Max combination capacity</strong></td>
<td>38 ton</td>
<td>40 ton</td>
<td>30 ton</td>
</tr>
<tr>
<td><strong>Max combination units</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Piping length (m)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total length</td>
<td>3281 ft</td>
<td>3937 ft</td>
<td>3937 ft</td>
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<tr>
<td>Farthest Equivalent</td>
<td>771 ft</td>
<td>771 ft</td>
<td>771 ft</td>
</tr>
<tr>
<td>Height (ODU-IDU)</td>
<td>295 ft</td>
<td>361 ft</td>
<td>361 ft</td>
</tr>
<tr>
<td><strong>Max number of IDU</strong></td>
<td>64</td>
<td>74</td>
<td>64</td>
</tr>
<tr>
<td><strong>Operating Temperatures (Cooling)</strong></td>
<td>14 F ~ 122 F</td>
<td>-10 F ~ 125 F</td>
<td>-10 F ~ 125 F</td>
</tr>
<tr>
<td><strong>Operating Temperatures (Heating)</strong></td>
<td>-4 F ~ 60 F</td>
<td>-22 F ~ 60 F</td>
<td>-30 F ~ 60 F</td>
</tr>
</tbody>
</table>

Ref. [https://www.shareddocs.com/hvac/docs/1001/Public/00/TCTC-E23-VRF004-2.pdf](https://www.shareddocs.com/hvac/docs/1001/Public/00/TCTC-E23-VRF004-2.pdf)
About Daikin

Daikin is focused on both profit and environmental goals—and heat pumps are our core technology.

1. Heat Pumps
   Daikin Core Technologies
   - Inverters
   - Refrigerant Flow
   - IoT and Controls
   - SkyAir
   - Aurora
   - Vrv

2. Manufacturing Capability
   - More than 90 global production bases for localized production
   - More than 76,000+ employees, 80% are outside Japan
   - Business development in more than 150 countries
   - 76% of our sales are from outside Japan
   - Comprehensive AC Manufacturer
     Handling both AC equipment and refrigerants

3. Mission
   Environmental Vision 2050
   We will reduce the greenhouse gas emissions generated throughout the entire life cycle of our products.
Main Global Production Bases for Heat Pumps

In total, production has been established at more than 100 locations in 28 countries

Europe
- Daikin Europe N.V. (Belgium: 1972) - Commercial ACs, Heating products
- Daikin Industries Czech Republic (2003) - Residential ACs
- Daikin Turkey (2011) - Residential ACs, Heaters

Japan
- Shiga Plant (Kusatsu, Shiga: 1970) - Residential ACs
- Sakai Plant (Osaka, Osaka: 1937) - Commercial ACs

U.S.
- Daikin Applied Americas INC. (Staunton, VA; acquired in 2007) - Large Screw Chillers, Centrifugal Chillers
- Goodman Global Group Inc. (Houston, TX; acquired in 2012) - Residential Unitary Systems, Gas Furnaces, Commercial ACs

India
- Daikin Air Conditioning India (2009) - Residential and Commercial ACs

Asia
- Daikin Industries (Thailand) (1990) - Residential and Commercial ACs
- Daikin Malaysia Sdn. Bhd. (Acquired in 2007) - Residential ACs, Commercial ACs
- Daikin Air Conditioning Vietnam (2018) - Residential ACs

China
- Daikin Air-Conditioning (Shanghai) (1995) - Commercial ACs, Heat Exchangers, Air Cooled Chillers
- Daikin Air-conditioning (Suzhou) (2011) - Residential and Commercial ACs
- Daikin Air-conditioning (Shenzhen): (acquired in 2007) - Air Cooled Chillers, Fan Coil Units
- McQuay (Wuhan; acquired in 2007) - Water Cooled Chillers, Centrifugal Chillers
- McQuay (Shenzhen; acquired in 2007) - Air Cooled Chillers, Fan Coil Units

South America
- Daikin Air-Conditioning (Brazil) (2011) - Residential and Commercial ACs

Daikin Texas Technology Park—Houston

VISION: Become a leading center for heat pump innovation in North America

- Continually provide environmentally friendly, high-performance products to meet the unique needs of North American customers
- To grow sustainably while building solid relationships with all stakeholders such as customers, regional and local communities, governments, industry, academia, and our employees

About DTTP
- Total investment >$500M
- Daikin’s largest facility investment
- No public funding
- 497 acres for the full site
  - 94 acres under roof
- >12,000 employees on site
Types of Daikin Inverter Heat Pumps

For Commercial Buildings

Variable Refrigerant Flow (VRF)

- These are designed as central systems and use ductwork to distribute conditioned air
- Available in all-Electric Heat Pump or Dual-Fuel: Heat Pump with Gas Furnace

Ducted Split Systems

- Designed as zonal systems and distribute conditioned air with or without ductwork.

Ductless Split Systems

Commercial Applications

- Space conditioning for people:
  - Ideally for offices and institutional
  - Sometimes used in multi-family
- Features:
  - Multi-zonal—up to 128 zones per system
  - LARGE capacities and lots of options
  - WHAT’S NEW: adding domestic hot water heating
Residential Applications—Ducted Splits Systems

**USES**
- Mainly used in single family homes
- Sometimes used in multifamily
- Connects to the existing ductwork
- Available as a heat pump system (all electric) and as an “add-on” to a furnace (dual fuel)

**WHAT’S NEW? More Technology!**
- Variable Speed Heat Pumps (VSHP)
- Cloud connectivity for better service

Choose this more modern technology going ahead.

Avoid this technology going ahead.

---

Residential Applications—Ductless Splits Systems

**USES**
- Great for use in single and multifamily homes to:
  - Replace methane gas or electric resistance heat
  - Reduce use (or displace) for any existing heating source, especially electric resistance
  - Increasingly used in new construction as a sole source of heating and cooling.

**WHAT’S NEW? Lots!**
- New “low GWP” refrigerant called R32
- Major product revisions in 2024 and 2025 with higher efficiency ratings.

---

https://www.r32reasons.com/

https://daikincomfort.com/go/atmosphera/