

ENERGY STAR® 2016 Emerging Technology Award Criteria:  
Low-Global Warming Potential (GWP) Refrigerant Systems

<p><b>Scope:</b> Refrigerant systems used in ENERGY STAR certified residential and commercial equipment. This award does not apply to refrigerant systems that are used in products not recognized by ENERGY STAR.</p>		
Performance Characteristic	Requirements	Required Documentation
Global Warming Potential	< 15 GWP	100-year GWP as listed in (1) the IPCC 2007 Fourth Assessment Report <b>or</b> (2) EPA SNAP Federal Register determination of acceptability or final rule
Efficiency Performance	Energy efficiency gain of 5% of greater	Test data on (1) product using conventional HFC refrigerant system and (2) product using alternative refrigerant system. All components and design elements other than those needed to support and properly operate the refrigerant system must be identical (e.g., cabinet, insulation, lights). Comparison data should reflect performance using the test method and metric(s) referenced in the relevant ENERGY STAR specification.
Approval for use in U.S. Market	Listed as Acceptable by the U.S. EPA Significant New Alternatives Policy (SNAP) Program*	None required of manufacturer. Alternative must be listed in EPA SNAP determination of acceptability or final rule as acceptable alternative for chosen end use application.
<b>Additional Documentation Requirements</b>		
Commercialization Plan	Required for any company that does not yet sell equipment with the alternative refrigerant system in the U.S. market but has plans for product launch in 2016.	Company must submit a commercialization plan for the U.S. market that includes a list of commercialization partners and date of product availability.

\* **Note:** ENERGY STAR certified models that use low GWP refrigerants but are not listed with SNAP due to the category not traditionally using refrigeration (e.g. heat pump clothes dryers and water heaters) will be reviewed by EPA on a case-by-case basis.