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**Global Sales of Air Conditioners and heat pumps Using Low GWP HFC-32 Refrigerant Surpass 10 Million in More Than 50 Countries**

Daikin Industries, Ltd., announces that sales of its air conditioners and heat pumps using HFC-32 (R32), a refrigerant with a low global warming potential (GWP), have recently reached the milestone of 10 million units.

This feat reflects its commitment to developing environmentally-conscious products that aim for both environmental contribution and business expansion. In recent years, in response to global warming, it is an urgent matter to convert to refrigerants with low environmental impact. Daikin has comprehensively examined the various refrigerants and concluded that HFC-32 strikes the most balanced and is currently the most suitable refrigerant for residential- and commercial-use air conditioners and heat pumps. In November 2012, Daikin was the first company to launch an air conditioner using HFC-32, and, in the approximately four and a half years since introduction of the refrigerant, the company has achieved sales of 10 million units.

Not only has it been promoting HFC-32 air conditioners in Japan, Daikin has also been promoting their acceptance worldwide. To allow manufacturers around the world to manufacture HFC-32 air conditioners and contribute to its further dissemination, since 2011 we have offered free access in emerging countries to a cumulative total of 93 patents related to the manufacture and sale of HFC-32 air conditioners. In September 2015, we extended this access to all countries<sup>\*1</sup>, thus embarking on the free access to those patents in developed countries. In addition to that, Daikin has provided technical assistance in emerging country, such as India and Thailand. For example, upon request of Thai government, we conducted training in the installation and maintenance of HFC-32 air conditioners to local manufacturers, so that they could gain proficiency in the proper handling of HFC-32. Not only is Daikin involved in distribution channels and sales promotion, it is laying the foundation so that HFC-32 air conditioners can gain widespread acceptance and maintain steady growth in global sales.

Currently, all manufacturers in Japan sell HFC-32 air conditioners, allowing the refrigerant to become the industry standard. Like Japan, Thailand and India have also experienced strong sales of HFC-32 air conditioners, and significant results for reduction of global greenhouse gases are expected in the future.

When the sales results of other companies are included, Daikin estimates that more than 27 million HFC-32 air conditioners had been sold as of March 2017, and estimates show a reduction in consumption of approximately 47 million tons<sup>\*2</sup> of CO<sub>2</sub> equivalents by use of HFC-32 air conditioners.

Daikin's response in confronting environmental problem to date has been based on the policy of "The Sooner, The Better, for the Future." As a manufacturer that handles both refrigerant and air conditioning equipment, we will continue as part of our contribution to the mitigation of global warming to dedicate ourselves to the exploratory development of refrigerants with lower environmental impact and the development of air conditioning equipment while promoting widespread acceptance of low GWP refrigerants.

\*1 For further details, please refer to the press release on 10 September 2015;

[https://www.daikin.com/csr/pdf/press\\_20150910.pdf](https://www.daikin.com/csr/pdf/press_20150910.pdf)

\*2 Comparison in the case that use of conventional refrigerant of HFC-22 and R-410A is continued.

### 【HFC-32 AC Progression in reaching 10 million units】

Sept 2011	Free access was granted to emerging countries for 93 patents relating to the manufacture and sale of air conditioners using HFC-32 refrigerants.
June 2012 to March 2014	In India, demonstration tests was conducted to verify the effectiveness of HFC-32 inverter air conditioners to reduce CO2 emissions and support was provided for training in the installation and maintenance of HFC-32 air conditioners to approximately 3,600 technicians on 76 occasions in 12 cities as well as support for establishment of an energy-saving legislation in India.
Nov 2012	Sales began for Urusara 7, the world's first room air conditioner using HFC-32.
March 2013	Sales began for HFC-32 room air conditioners in India.
Nov 2013	Sales began for FIVE STAR ZEAS, the world's first commercial-use air conditioner using HFC-32.
Nov 2013	Sales began for HFC-32 room air conditioners in Europe.
Jan 2014	Sales began for HFC-32 room air conditioners in Australia.
April 2014	Sales began for HFC-32 room air conditioners in Thailand.
April 2015 to March 2017	Daikin participated in the refrigeration conversion project in Thailand based on the policy of the Ministry of Economy, Trade and Industry (METI) to promote international cooperation. Installation and maintenance training and related activities were implemented for 10 air conditioner manufacturers in Thailand, and all 10 manufacturers started the manufacture and sale of HFC-32 air conditioners.
Sept 2015	Free access was granted to all countries for 93 patents relating to the manufacture and sale of air conditioners using HFC-32 refrigerants.
Oct 2015	Daikin was recognized by the U.S. government as a company contributing to the environment for its commitment to the reduction of greenhouse gases.
Dec 2015	Daikin published Environmental Impact of Refrigerants, a position paper summarizing Daikin's policy toward environmental issues related to refrigerants.
Dec 2015	In promoting energy conservation through worldwide expansion of high efficiency HFC-32 air conditioners, Daikin was awarded 2015 Environment Minister's Award for Global Warming Prevention Activity in Japan.
Feb 2016	Technical assistance to HFC-32 in Malaysia was provided at the request of the Malaysian government.
March 2017	Global sales of air conditioners using HFC-32 reached 10 million air conditioners and extended to 52 countries.

### 【Sales Trends of HFC-32 Air Conditioners】

