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Â New plant in Geismar, Louisiana, will help meet growing global demand for environmentally-friendlier automobile refrigerant with global warming potential of less than 1, a 99.9% improvement over the current refrigerant. MORRIS TOWNSHIP, N.J., Dec. 10, 2013 Â Honeywell (NYSE: HON) announced today that investments of approximately \$300 million will be made by the company and key suppliers to increase production capacity for HFO-1234yf, a new refrigerant for automobiles with a global-warming potential (GWP) of less than 1. This GWP is 99.9 percent lower than that of HFC-134a, the current refrigerant in use, and even lower than that of carbon dioxide.

Among these investments, Honeywell will construct a high-volume manufacturing plant using new process technology at the company's existing Geismar, Louisiana, refrigerants manufacturing site, which is expected to be fully operational in 2016. The exact size of the plant will depend on supply agreements that Honeywell is putting in place with major customers.

Â Demand for HFO-1234yf is increasing around the world in response to concerns about greenhouse gas emissions and the need to comply with the Mobile Air Conditioning (MAC) Directive in Europe and Corporate Average Fuel Economy (CAFE) regulations in the U.S., Â said Andreas Kramvis, president and chief executive officer of Honeywell Performance Materials and Technologies. Â After many years of analysis by the automotive industry, policymakers and environmental groups, it is clear that HFO-1234yf is a safe, effective and robust solution to address global warming and fuel efficiency. Honeywell's investments will ensure adequate supply to meet growing demand.

Â A significant portion of European demand for the current automobile refrigerant, HFC-134a, is currently supplied from the U.S., so our new production plant in Louisiana will mirror this arrangement, Â Kramvis said. Â However, Honeywell is also looking at the possibility of building a plant in Europe, but this will be driven by demand and the requirements of that market. Â

HFO-1234yf is being adopted by automakers in part to meet the EU MAC Directive, a landmark piece of legislation that aims to reduce greenhouse gas emissions of air-conditioning systems in passenger cars and light commercial vehicles. The directive requires that refrigerants in all new vehicle types sold in Europe after Jan. 1, 2013, have a global-warming potential (GWP) below 150. GWP is a relative measure of how much heat a greenhouse gas traps in the atmosphere, with carbon dioxide setting the comparison with a GWP of 1. HFO-1234yf offers a GWP that is less than 1, giving it even less of an environmental impact than carbon dioxide. (See Â Comparison of Greenhouse Impact Â table below.) All cars sold in Europe after 2017 must meet the new GWP requirement of less than 150. HFO-1234yf, with a GWP below 1, not only meets this requirement but is more than 99 percent below the new, stricter regulation.

Automakers in the U.S. are also adopting HFO-1234yf to help comply with CAFE and vehicle greenhouse gas standards, which aim to improve the average fuel economy and reduce greenhouse gas emissions associated with cars and light trucks. Because HFO-1234yf has an extremely low environmental impact (a GWP of less than 1 compared with a GWP of 1,300 for the current refrigerant, HFC-134a), the U.S. Environmental Protection Agency (EPA) allows automakers to receive credits for using HFO-1234yf.

Nearly half a million cars are on the road today using HFO-1234yf. Third-party data shows that HFO-1234yf's widespread adoption globally would have the greenhouse gas equivalent of permanently removing more than 30 million cars from the road worldwide, or about 3 percent of the total global fleet. Earlier this year, Honeywell announced the launch of packaging operations for HFO-1234yf in Japan to better serve the market in Asia.

HFO-1234yf has the proven ability to perform as an effective automotive refrigerant in all regions of the world, and Honeywell continues to develop a global infrastructure to support its global customer base.

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Honeywell Performance Materials and Technologies is a global leader in developing and manufacturing advanced materials and process technologies. These materials and technologies are used by people every day in a wide range of industries and applications, from petroleum refining to environmentally friendlier refrigerants to bullet-resistant vests. Our advanced materials are critical in the manufacture of products ranging from nylon to computer chips to pharmaceutical packaging. Process technologies developed by our UOP business form the foundation for most of the world's refiners, efficiently producing gasoline, diesel, jet fuel and petrochemicals. UOP is now pioneering technology to produce real fuels from renewable energy sources. Â Honeywell ([www.honeywell.com](http://www.honeywell.com)) is a Fortune 100 diversified technology and manufacturing leader, serving customers worldwide with aerospace products and services; control technologies for buildings, homes and industry; turbochargers; and performance materials. Based in Morris Township, N.J., Honeywell's shares are traded on the New York, London, and Chicago Stock Exchanges. For more news and information on Honeywell, please visit [www.honeywellnow.com](http://www.honeywellnow.com). Â

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