



**EMBARGOED UNTIL JUNE 20 @ 10:00 (KST)**

**LG ESTABLISHES GLOBAL R&D TRIANGLE TO DEVELOP  
HIGH-PERFORMANCE HEAT PUMPS IN EXTREME COLD**

*Company Partners With Norwegian and Italian Universities to Establish the European Consortium for Advanced Heat Pump Research*

**SEOUL, June 20, 2024** — LG Electronics' (LG) is establishing a global R&D triangle connecting North America, Europe and Asia to lead the global heat pump market and secure next-generation heat pumps specifically designed for cold climate zones. The company aims to develop regionally specialized core technologies optimized for the cold climate of Northern Europe through the establishment of the European Consortium for Advanced Heat Pump Research (ECAHR).

The collaboration with leading European universities follows the foundation of the LG Advanced Cold Climate Heat Pump Laboratory in Alaska last year, and the company plans to expand efforts to enhance the performance of its Heating, Ventilation and Air Conditioning (HVAC) products in low-temperature climate conditions. This August, LG will also continue its research on cold climate heat pumps in Harbin in partnership with a prestigious Chinese university.

LG held a signing ceremony on June 18 at the main auditorium of Oslo Metropolitan University in Norway to mark the commencement of the consortium. Members include Oslo Metropolitan University, the Norwegian University of Science and Technology (Norges Teknisk-Naturvitenskapelige Universitet), and the University of Naples Federico II, an institute in Italy actively pursuing research in cold-climate HVAC.

During the winter of this year, Northern Europe experienced record-breaking cold weather, with temperatures dropping below minus 40 degrees Celsius. In these regions, achieving high heating efficiency is challenging due to the difficulty of compressing refrigerants at lower pressures. To address this, LG established a consortium to develop heat pumps that deliver top-tier heating performance even in extreme cold conditions.



Furthermore, the company is looking to enhance its core technologies to lead global electrification efforts and expand supplemental heating availability in Europe.

In 2022, the EU launched the REPowerEU plan, aiming to reduce dependence on Russian fossil fuels and expand new and renewable energy sources by 2030. As a result, the demand for high-efficiency electric appliances and heat pump heating and cooling systems has surged across Europe, fueling efforts to lower energy consumption and achieve carbon neutrality.

What's more, LG is in the process of establishing a comprehensive local operation system for its HVAC business, which is expected to drive growth in its business-to-business (B2B) operations. The system covers all stages locally, from research and development to sales, maintenance and operations.

In the announcement of LG's Future Vision 2030 last year, CEO William Cho highlighted B2B capability enhancement as one of three major growth factors. Aligning with this vision, the HVAC business has set an ambitious goal to more than double its sales by 2030 and become a top-tier global heating and cooling company.

“We aim to expand our presence around the world by developing next-generation heat pump technology tailored to the diverse climate conditions of each region,” said James Lee, head of the Air Solution Business Unit at LG Electronics Home Appliance & Air Solution Company. “We will continue to expand our footprint in the global market, adding value to drive growth in our HVAC business.”

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**About LG Electronics Air Solution Business Unit**

LG air conditioning provides optimized solutions for every sector and climate with a wide range of cutting-edge systems that bring exceptional heating, ventilation and air conditioning performance to buildings worldwide. Through our unmatched expertise and industry knowledge, we respond directly to the needs of businesses seeking digitalized



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and eco-conscious HVAC solutions. We are the partner your business has been looking for, and are well prepared to integrate our leading technology into your day-to-day operations, supporting you and your business every step of the way. For more information, please visit [www.lg.com/global/business/hvac](http://www.lg.com/global/business/hvac).

*Media Contacts:*

LG Electronics, Inc.  
Léa Lee  
+82 2 3777 3981  
lea.lee@lge.com  
www.LGnewsroom.com

LG Electronics, Inc.  
Jenny Shin  
+82 2 3777 3692  
jungin.shin@lge.com  
www.LGnewsroom.com