

8th December 2023

New R&D building in Malaysia, responsible for development of air-conditioning equipment for ASEAN and Europe, begins operations

Panasonic Corporation Air Quality & Air Conditioning Company recently commenced operations of a new building constructed at Panasonic Appliances Air Conditioning R&D Malaysia Sdn. Bhd. (PAPARADMY). The new building will introduce state-of-the-art facilities, including the Company's first "simultaneous hot water and air conditioning multi-test laboratory", to shorten the development lead time of air conditioning equipment for the global market, mainly in ASEAN and Europe, and to accelerate development tailored to local needs.

Our company has two companies in Malaysia: Panasonic Appliances Air Conditioning Malaysia Sdn. Bhd. (PAPAMY), a production and sales base for room air conditioners, commercial air conditioners, and heat pump water heaters ("A2W"); PAPARADMY, a research and development base in Malaysia. PAPAMY was founded in 1973 and celebrates its 50th anniversary this year.

YBhg. Tan Sri Dato Seri Dr. Sulaiman Bin Mahbob, Chairman of the Malaysian Investment Development Authority (MIDA), applauded Panasonic's decision to establish their new R&D building in Malaysia. "Panasonic stands as a shining example of corporate transformation and growth, adeptly navigating the dynamic landscape of manufacturing technology. Operating nine manufacturing facilities and twelve entities engaged in R&D, sales, and management, Panasonic's comprehensive approach fosters economic growth across diverse sectors, generating around 17,000 job opportunities."

"The R&D centre in Malaysia is set to be upgraded from a supporting role to a global leadership role, spearheading R&D for new products and emerging technologies for Panasonic's global business. This transformation is a testament to Panasonic's commitment to innovation and development. With the support of the Ministry of Investment, Trade, and Industry (MITI) and MIDA, Panasonic Group's achievements in Malaysia are made possible through a strategic alliance aimed at transforming the Malaysian electrical and electronics (E&E) industry and contributing to its technological advancement." he further added.

In ASEAN, the construction of buildings and other large properties is progressing along with population growth, and demand for commercial air conditioning is growing steadily. In addition, the global market for air conditioning using heat pump technology with high energy-saving performance, A2W, and "water circulation air conditioning" in the commercial domain is expanding. In this environment, we will strengthen research and development by operating a new R&D building. The new building is adjacent to PAPERADMY's current experimental and office building, and has three floors with a total floor area of 10,900 m². In the building, there are offices on the third floor considering hiring more staffs in the future, and various laboratories on the first and second floors. The outline of the building is as follows

1. The company's first "simultaneous hot water and air conditioning multi-test laboratory" has been introduced to shorten development lead time

Normally, one outdoor unit is required for air conditioner and hot water heater each, but if the installation space for an outdoor unit is limited, we sell the Aquarea EcoFlex, which can operate both with a single unit, in regions such as Southern Europe. Since the start of sales in 2022, we aggressively promote sales as new category products. The new building, the first of its kind in the company's history, houses a multi-laboratory that can simultaneously measure the operating efficiency of air conditioners and hot water heaters. Previously, it was necessary to conduct experiments on each device separately, but by conducting them all at once, development lead time will be shortened.

In the field of air conditioning, more efficiency and less energy consume by the advancement of IoT are pursued. To verify compliance with regulations regarding electromagnetic waves emitted from equipment during communication, a "semi-anechoic radio wave anechoic chamber" is used in which radio wave absorbers are attached to the walls of the room. Until now, measurements of water-using equipment such as A2W and water-circulation air-conditioning systems have been conducted by an outside organization. This time, by establishing a semi-anechoic anechoic chamber equipped with water supply and drainage facilities for the first time in our company, we will establish a system for quick in-house verification and accelerate the speed of development.

Including these facilities, the size of the laboratory will be expanded approximately 1.6 times in addition to the current building to strengthen research and development.

2. Installing equipment capable of conducting various experiments on commercial air conditioning, and strengthening local development capabilities.

In addition to expanding the lineup of multi air conditioners for buildings that reflect local living environments and needs, we will reinforce the development of various indoor units such as inverter type air conditioners for offices and stores, duct type, cassette type, and wall-hung type. We will also develop fan coil unit, which is indoor unit of commercial water circulation type air conditioner for European market.

3. Accelerating the development of heat pump water heater with natural refrigerant (Air to Water) for European market

In May 2023, we became the first Japanese manufacturer (*1) to launch the A2W for the European market, which uses the natural refrigerant R290. To expand our product lineup in the future, we accelerate development in collaboration with our newly established R&D center in Milan, Italy, by establishing an R290-compatible laboratory where verification can be performed in actual use environments.

*1: Within cooling and heating functions equipped A2W for housing adopting natural refrigerant R290 in whole Europe. According to our research, as of October 3, 2022

■ The New R&D Building

Address	Lot 2, Persiaran Tengku Ampuan, Section 21, Shah Alam, Selangor Darul Ehsan, Malaysia.
Total floor area	10,900m2

[Image]



【New R&D Building】



【New R&D Building】



【simultaneous hot water and air conditioning
multi-test laboratory】



【 Aquarea EcoFlex 】

The images can be downloaded from 「Panasonic Newsroom Japan」

<https://news.panasonic.com/jp/press/>