

**Briefing to Analysts and Investors  
on Sustainability Q&A Session  
(December 8, 2020)**

**Q: Could you describe the latest trends for refrigeration regulations in the United States?**

**A:** To comply with the refrigerant regulations for the state of California (CARB regulations), which will be applied from 2023, we have been converting to R32 refrigerant. However, because the amount of R&D investment to comply with CARB for refrigerant and equipment is substantial, many companies are hesitating to act. For this reason, the timing for the start of the regulations may be slightly delayed from 2023. There is also an assumption that environmental regulations will be accelerated under the policies of the next president.

**Q: With regard to modular design, specifications for some products may be excessively high or low for the market depending on the region. What type of measures do you have in place for managing this situation?**

**A:** Basic modules are the parts that remain the same worldwide and are used at all bases. In addition to those, functional modules are assembled at each base according to local preferences and environment. In this way, we do our best to prevent specifications from being excessively high or low. Compressors and heat exchangers are key to functional modules. For example, in the case of compressors, we develop them to be selectable by size and capacity for each region.

**Q: Under the modular design concept, would it be possible to change the sales strategy, such as for volume zone development, while aiming for cost reductions in development and production? Would there be any benefit for modular design in commercial use?**

**A:** In residential use, we are promoting development corresponding to each price range, such as volume zone and high-end products, and regional needs. Modular design shortens development time, but because the production technology is complicated and requires a sophisticated approach, product development, manufacturing, and sales must all work closely together to ensure that top-selling products can be provided. Applying the modular design concept in commercial use presents many complex, difficult points, but we would like to actively work on incorporating it into commercial use.

**Q: Development of artificial intelligence and ICT-related technologies would appear to be important even in the air conditioning business, but how does that development affect R&D initiatives?**

**A:** While developing artificial intelligence that is uniquely our own is currently difficult for us, we have been collecting and analyzing air conditioner operation data in Japan on a trial basis since autumn of this year. In the future, we would like to obtain not only equipment data but also data for people and buildings, derive new value from the data, and provide that value to customers. Because data scientists with the knowledge to effectively collect and analyze data for that purpose will be necessary, our focus is on human resource development at the Daikin Information and Communications Technology College (in-house university).

**Q: HR development seems to be the key in R&D, but what are some of the specific initiatives for that? What type of KPIs are established in support how is the PDCA cycle executed?**

**A:** While centering on basic education for new employees and OJT, HR development has recently been making practical use of external collaborative innovation, especially through our tie-ups with universities. Concerning IoT/AI, we are keenly focused on programs such as the Daikin Information and Communications Technology College, but there is no specific recognition for KPIs within HR development. Programs encompass various fields including basic research, elemental technology development, and product development. To transcend these barriers and engage in diverse fields ranging from basic research to genuine product development, we have established co-creation projects.

**Q: This question relates to the balance between short-term and medium- to long-term R&D. Eight years have passed since the Goodman acquisition in North America. During that time, energy-saving regulations have not been significantly tightened, and market penetration for ductless and inverters has not proceeded as initially planned. Reflecting on the past eight years, what do you think is the appropriate balance of human resources and investment for short-term and medium- to long-term R&D?**

**A:** While we have been working to promote the adoption of inverters in North America, the industry overall has had a lower appreciation for energy savings than we had expected. As a result, short-term themes have become the main focus. Currently, a digitalization wave is coming even to the air conditioning industry, and it is necessary to shift resources for the future. With an office established in Silicon Valley, we are focusing on the latest technological developments in North America, particularly cutting-edge technologies such as IoT/AI. Because connected air conditioners are expected to become mainstream, we are shifting our resources to the latest technologies and not just focusing on energy-saving technologies.