

Q&A for Briefing on Sustainability (Summary)

Yaskawa Electric Corporation

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[Speakers]

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Q Which products account for the majority of Scope 3 category 11? How are the CO₂ emissions calculated?

A Category 11 accounts for a large proportion (96%) because FA devices are used for a long time. Among them, motors with high energy consumption account for 70~80% of category 11. CO₂ emissions for category 11 are calculated using power consumption associated with the use of Yaskawa products, product shipment data, and coefficients defined by Yaskawa.

Q Regarding Scope 3 emission reduction targets, is it possible to reduce them by promoting i³-Mechatronics, YDX, etc.?

A Through the penetration of i³-Mechatronics as well as product alone, we believe that we can contribute to a comprehensive reduction in emissions by realizing production that does not stop at the customers' entire production lines and improving efficiency. At the moment, however, this part is not included in the calculation formula for the target, so we believe that -15% is the minimum target to be met.

Q Has product development time been shortened by open innovation initiatives and the use of YASKAWA Technology Center (YTC)?

A Although progress in development speed has yet to be seen, individual results have been achieved, for example, a prototype that had to be produced several times can now be produced only once. In addition, through the promotion of digitization by YDX, information sharing has been promoted so that other engineers can use past outputs, and work efficiency has been improved by unifying routine work procedures.

Q YTC has been in full operation for less than a year, but have you already recognized any benefits of YTC?

A In the past, when purchasing from a different supplier due to a shortage of parts or other reasons, each business division would verify new parts and report the results to the head office's procurement department for procurement. At YTC, however, when the need to change parts is conveyed in a top down manner, members from development, procurement, and production can immediately gather to share problems in real time, including creating a sense of crisis. YTC also contributes significantly to production. In the past, mass-production prototypes, design of production facilities, and adjustment of suppliers were carried out after development was completed to a certain extent. However, because procurement, production technology, and prototyping divisions are involved from the initial stage of development, problems such as "when development is completed, necessary parts have been discontinued" do not occur. In addition, the start-up time of production facilities has been greatly reduced because they are involved

from the development stage. In this way, it is possible to shorten not only the lead time for development but also the lead time for mass production through YTC.

Q Why did you introduce "local 5G" at YTC?

A Public 5G, which we generally use in the market, has a strong feature in one direction such as video transmission rather than bidirectional communication. Yaskawa's "Local 5G" carries out advanced communication control by setting the communication direction to 50% each in both directions. Since the Kyushu region has not had such an environment until now, "local 5G" was introduced to YTC in order to accelerate development and verification of future communication control technology.

Q Is there any priority given to the sales of each business in FY2025 in order to achieve the environmental targets?

A Electric products for wind turbines and PV inverter for solar power generation contribute greatly to environmental targets because they directly reduce CO₂. However, we do not intentionally expand sales of businesses that contribute greatly to environmental targets. Yaskawa's core businesses are AC servo, AC drive and robots.

Q How do you explain to customers the cost-effectiveness of AC drives resulting from reduced electricity consumption? With electricity prices rising, are energy-saving products becoming easier to sell?

A Up to now, the cost of AC drive introduction has been higher than the cost savings from its energy conservation alone. However, as the momentum for energy reduction increases in society as a whole, the economic benefits from the introduction of AC drive will increase for customers in a situation where a carbon tax is introduced, and electricity costs rise.

Q How does YTC approach cybersecurity when considering open innovation?

A YTC handles human traffic and information separately and has eight security levels for each area. The server is also managed by the ICT department with access rights set at different levels.

Q Against the backdrop of soaring energy prices and other factors, are efforts to decarbonize the market increasing?

A With the spread of solar panels and the increasing demand for batteries used in EVs, a large number of robots, AC servo motors and AC drives, are required to produce them. In addition, China has strict regulations on the environmental impact of electricity under the initiative of the government, and the demand for AC drive is increasing in order to improve energy efficiency. In recent years, we realize that the influence of the increase in demand from this field is large.

Q In product design, the profitability of the business depends largely on the quality of the upstream part. How do you think the consolidation of divisions will lead to future profit margins?

A There are direct and indirect processes in manufacturing, and it is important to reduce and automate these processes. We've been working on automation for a while now, but by consolidating production engineering at YTC, we're developing more automated, cutting-edge, non-stop production facilities that will be installed at each plant. The

integrated production system also improves operational efficiency. As a result of these factors, we believe that YTC has made a significant contribution to improving profit margins from the viewpoint of lowering manufacturing costs and increasing production profits.