

December 20, 2022

Fiscal 2022 NSK Sustainability Conference – Summary of Q&A Session

◆ Regarding "Create" initiatives (Reduction of CO₂ emissions by the Company)

Q1

You have set CO₂ emission reduction targets of -50% by fiscal 2026 and -100% by fiscal 2035. How does this break down into the categories you described of renewable energy, energy savings, and technological innovation?

A1

As of fiscal 2035, the breakdown is expected to be 50% renewable energy, 25% energy savings, and 25% technological innovation.

Q2

In the production of bearings, the reduction of CO₂ emissions in the heat treatment process seems to be a significant issue. If the shift to electric heat treatment progresses, and if the shift to renewable energy is promoted as in Europe, will it be possible to achieve carbon neutrality?

A2

The heat treatment process is an important item for achieving carbon neutrality. Switching the heating systems to electric and adopting renewable energy will contribute to carbon neutrality. There are some bearings that cannot be heat treated using electric systems, so we will proceed with trials of other technologies such as renewable combustible energy sources.

Note that the operation of production equipment and air conditioning each account for about 1/3 of CO₂ emissions, so it is also important to implement measures in these areas.

Q3

How will efforts to reduce CO₂ emissions affect costs and business performance?

A3

Energy savings leads to cost reductions, but we believe it will be difficult to fully offset increasing costs related to renewable energy procurement, technology development, and capital investment. We would like to negotiate with our customers so that our customers and society can see the value of our carbon neutrality initiatives and recognize our achievements as a point of differentiation and added value that contributes to increasing our product price.

◆ **Regarding "Utilize" initiatives (Contributing to reducing customers' CO₂ emissions)**

Q4

We believe that the environmental contribution value of bearings, such as higher efficiency due to low-torque bearings, is positioned as a new kind of added value. What are you doing to reflect this in your branding and marketing activities?

A4

The Carbon Neutrality Department is working on brand strategy in cooperation with our business divisions, and we hope that people will buy the value of environmentally friendly "green bearings" realized through the application of NSK's differentiated technologies.

◆ **Regarding NSK's approach to Scope 3 carbon emissions**

Q5

Some other machinery manufacturers are working on Science Based Targets (SBT) certification, is NSK also pursuing SBT?

A5

To obtain SBT certification, we need to set milestones toward carbon neutrality, including for Scope 3 (upstream) emissions. The Carbon Neutrality Department is studying the issue, but we believe that we can accurately disclose this information only when the activity policies of suppliers, including steelmakers, have been detailed. We will continue to discuss this as part of our mid-term management plan.

Q6

Please tell us about the status of carbon neutrality initiatives in procurement, such as initiatives related to steel manufacturers and part suppliers.

A6

Collaboration with suppliers is an important task. We have shared the importance of carbon neutral initiatives with our suppliers, and have begun exchanging information regarding our mutual efforts. We are also making steady progress in areas that NSK can pursue independently to reduce Scope 3 CO₂ emissions, such as improving the yield of the materials we use. In addition, if there are areas where we can contribute, such as in the development of green steel, we will actively get involved.

Scope 3 initiatives are important. Building partnerships with suppliers of steel and other parts is an important issue that we will continue to address.

◆ **Regarding opportunities for growth**

Q7

You have described societal demand for carbon neutrality as a growth opportunity for NSK. How does this affect the competitive environment? For example, do you think NSK has an advantage over its competitors?

A7

We are aware that NSK's carbon neutrality efforts are being closely evaluated, as evidenced by an increase in the number of surveys and inquiries from customers regarding carbon neutrality. Regarding competition with other companies, we are taking advantage of NSK's unique technologies under the "Utilize" category, such as by offering lower torque and lower product weight. We believe that NSK's technological capabilities can be used to develop a competitive edge as customers are becoming increasingly demanding of products.

◆ **Other questions**

Q8

As the shift to EVs seems to be accelerating, what is the status of orders and commercialization of traction drive speed reducer on page 17?

A8

We are in discussions with various customers about conducting performance evaluations of the traction drive speed reducer. Customers are determining what kind of value they can create by utilizing this type of traction drive. Although the traction drive is not yet in mass production, we are confident that we will reach mass production, as the traction drive is drawing interest from a wide range of industrial machinery makers as well.

As the shift to EVs accelerates, there is a trend toward making motors rotate at higher speeds to be able to reduce motor size and conserve resources. In the future, maximum motor speeds are expected to approach 30,000 rpm, and we believe that the functional advantages of traction drives, such as low noise and compact size, will be highly evaluated.

Q9

What specific issues do you currently face regarding the ultra-stabilization of production?

A9

Our efforts to ultra-stabilize production are also linked to becoming carbon neutral. The absence of defective products, quality problems, and equipment problems means more efficient production, which saves energy. Over the mid-term plan, we will aim for manufacturing that allows workers to produce products safely and securely while preventing errors and mistakes from occurring.