Supporting Reconstruction and Supplying Utilities with Electricity

Fujisawa: I am sorry to hear that the March 11 quake had significant consequences for the JFE Group.

Bada: Our Group subsidiaries in the Tohoku region suffered significant damage from the quake, but we have united as a group to make a concerted effort to overcome this challenge.

We truly appreciate the kind words of condolence and encouragement expressed by so many people. There was one particularly memorable example of cooperation that sticks out for me. When we told a certain South Korean manufacturer that our steel products had been covered with saltwater by the tsunami, they told us to make the shipment anyway and they would wash the products by themselves.

Fujisawa: That's a wonderful story. It shows the close ties that JFE has with its customers.

Interview

Supporting Core Industries and Leveraging Technology for Society

Japan faces many challenges as it seeks to rebuild from the Great East Japan Earthquake, as well as overcome a power shortage and various environmental issues. JFE Holdings President and CEO Hajime Bada met with Kumi Fujisawa, vice president of the private think tank SophiaBank, to discuss the JFE Group's role in addressing these challenges.

As a core industry, steelmakers will play a major role in Japan's efforts to rebuild from the quake. How is the JFE Group involved in the reconstruction?

Bada: Many kinds of steel materials are urgently required for rebuilding in the disaster area, from the construction of temporary housing to the resumption of essential services such as water, sewerage and gas. JFE Steel is giving priority to allocating its steel materials for the reconstruction. By the way, we have learned that steel-framed buildings and other steel structures built with seismic construction were relatively unscathed by the quake.

Fujisawa: Steel materials are a vital part of the backbone supporting our social infrastructure. Engineering firms must play a major role in rebuilding the damaged communities.

Bada: Exactly. JFE Engineering has been asked by local governments and utilities to inspect and/or help restore infrastructure for everything from gas and water services to bridges and waste incineration and water treatment facilities. We sent many engineers into the field right after the quake.

Fujisawa: Power, as well as water and other services, is a critical part of social infrastructure. The media in Japan has widely reported that steel manufacturing plants have been generating electricity to supply to utilities following the quake. I think this is the first time to hear of such a thing.

Bada: Steel plants are massive power-generating facilities that can generate nearly enough power to be self-sufficient.

Right after the quake hit, we began running the powerplants at our steel mills at full capacity to supply electricity to power utilities. In addition to doing our part to conserve energy, we will keep running our powerplants at full capacity to supply power in light of expected power shortages this summer.

Hajime Bada

Profile

President and CEO, JFE Holdings, Inc.

Joined Kawasaki Steel Corporation in 1973. Was appointed a director after a long career on the company's engineering side. Appointed Senior Vice President of JFE Steel in 2002 and representative director and president in 2005. Became president and CEO of JFE Holdings in April 2010. Bada became president of the Japan Iron and Steel Federation in 2006 and became chairman of the Word Steel Association in 2010.

Kumi Fujisawa

Profile

Vice President, SophiaBank

After working for various investment fund management companies, Fujisawa founded Japan's first investment trust evaluation company in 1996. She helped to establish the private think tank SophiaBank in 2000 and was named a Young Global Leader in 2007 by the World Economic Forum, vaulting her onto the global stage. Fujisawa has been a visiting professor of the Hosei Business School of Innovation Management since 2005.

Homegrown Technology for Global Business Focusing on Asia

Fujisawa: The disaster served as a reminder of how we are connected to the world, as in the case of the South Korean manufacturer you mentioned. China and other Asian countries are experiencing rapid economic growth, so their demands for steel, as well as social and industrial infrastructure, will continue to grow. What kind of global strategy has the JFE Group formulated?

Bada: I believe that Japanese industry should rely on technology to compete in the global arena. The JFE Group has leading technologies backed by many decades of experience. We operate the world's largest blast furnace. Quality is another one of our specialties. By using these strengths, we believe we can expand into emerging countries, centering on Asia.

Fujisawa: Are there any areas in which the steel industry would have difficulty expanding globally?

Bada: In some cases, the cost of building a steel plant from the ground up can be as much as half the national budget of the host country. When you consider the costs and time involved, it is often more efficient to handle upstream manufacturing in Japan and manufacture the end products abroad. In Asia, we are actively pursuing local production through vertical division of manufacturing with alliance partners. In FY2010, we invested in local companies and pursued mergers and acquisitions in countries such as China and Vietnam. We also signed a comprehensive cooperation agreement with a major Indian steelmaker, JSW Steel Ltd., which included our taking an equity stake in the company as part of our commitment to the Indian market. In this way, we intend to develop our global business by employing strategies that are best suited to local circumstances.

Fujisawa: What is the overall global strategy of the JFE Group, particularly for engineering?

Bada: We will market engineering services for projects in China, Southeast Asia and Europe, centering on the environment, energy, water and wastewater. To open new offices abroad, we will nurture employees who can help the JFE Group develop global business.

Advanced Technologies for Low-Carbon Societies

Fujisawa: Japanese industry will be asked to do more to conserve energy, partly due to the power shortages following the March 11 quake. Japan has some of the world's most energy-efficient steelmakers, but I feel the JFE Group needs to do even more in terms of developing technologies for energy and resource conservation.

Bada: I can appreciate your perspective, knowing your expertise in environmental issues. The JFE Group takes pride in being an international leader in environmental technologies.

To give you an example, we are collaborating with other Japanese steelmakers to develop an innovative technology that reduces carbon dioxide (CO_2) emissions from steel manufacturing by some 30 percent. It is an impressive undertaking that will last for the next 30 to 40 years. As part of this project, the West Japan Works of JFE Steel began operating a pilot plant for CO_2 separation and recovery in February 2011.

Fujisawa: I understand that the JFE Group also develops technologies that conserve energy for end users. For example, the latest fleet of eco-cars offering better fuel efficiency and fewer carbon emissions would not be possible without lighter steel sheets.

Bada: Aluminum and carbon fiber are superior to steel in terms of reduced weight, but steel actually offers the lowest total energy expenditure in terms of total lifecycle, from manufacturing to disposal.

Non-oriented electrical steel sheets are being widely used around the world for high-efficiency motors that offer significantly better performance. Many of today's hybrid and electric cars use these steel sheets.

Fujisawa: The JFE Group is also putting its weight behind R&D for environmental technologies other than steel.

Bada: Engineering is a cornerstone of our environmental efforts. For instance, we develop waste-processing facilities and export the technology to countries such as Italy. Our engineering unit has helped to build nine of the 18 geothermal power plants in Japan, and is also involved in constructing plants for solar energy and solar thermal power.

Japan is also a global leader in marine environmental performance, including building ships that offer about 10% better fuel economy than South Korean ships. The JFE Group also is developing eco-ships that will consume half the conventional amount of fossil fuels and use solar power and even sails. The technology already has been proven in small pilot vessels and we now are working on applications for large vessels.

Group Synergies and Long-Term Ties with Stakeholders

Fujisawa: Many industries, including steel, are realigning. Considering the rapid pace of globalization, what is the JFE Group's vision of the future?

Bada: Our portfolio is unlike any other corporate group in the world, with business segments ranging from steel and engineering to shipbuilding and large-scale integrated (LSI) circuits. In addition to improving the efficiency and profitability of each of our segments, we are fostering synergies throughout the Group.

Fujisawa: You have segments that use products manufactured on your own, so it seems that you put a lot of emphasis on product development.

Bada: To give an example, we are focusing on technology for ballast water treatment. Vessels typically carry a large amount of seawater to ensure stability, but when seawater loaded in one location is released in a different location at the end of a voyage, it can have a negative impact on the local environment, so we need a way to clean ballast water.

The JFE Group is leveraging its technical expertise in shipbuilding and engineering to develop a solution.

Fujisawa: Since the technology will help to protect biodiversity, it will become increasingly important.

Bada: It is important for Japanese companies to continue producing within Japan as much as possible. Japan has some of the world's best and most sophisticated technologies and highest levels of quality, which give us an edge in the global marketplace. We need to further these strengths to spur our global business.

Fujisawa: What would you like to say to your stakeholders?

Bada: The JFE Group's corporate activities involve diverse stakeholders, including customers, shareholders, host communities and employees. We will continue working to secure sustainable growth while emphasizing our relationships with these stakeholders.

Fujisawa: When people see white smoke coming from the flues of a steel plant, sometimes they assume it is CO_2 when in fact it is just water vapor. It is very important to accurately convey and communicate the facts, such as the JFE Group's contributions to power supply.

Bada: Yes, it's important to be perceived accurately. That is why we continue to engage in initiatives such as inviting shareholders and local elementary and junior high school students to tour our steel plants, so that people understand what we are about.

Fujisawa: I hope that the JFE Group will continue to make such efforts. Thank you for inviting me here today.

Bada: Thank you for joining us.