# **Responding in the Wake of the Great East Japan Earthquake**

We extend our heartfelt sympathies to everyone affected by the Great East Japan Earthquake that struck on March 11, 2011. Here is an update on the responses taken by the KHI Group as of June 30, 2011, and the role that the Group seeks to fulfill down the road.

#### The Group's Disaster Status

Key operations are concentrated in Western Japan, so except for damage at offices and service points in the Tohoku region in Northeastern Japan, the KHI Group's production facilities, including factories, escaped major damage from the monstrous earthquake and tsunami.

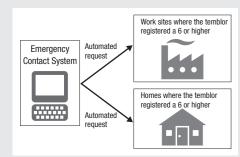
From a performance perspective, the impact on fiscal 2011 profits was limited. Some sales were pushed back to fiscal 2012, and certain production activities were interrupted because of delays in procuring the necessary parts, but that situation was resolved relatively quickly.

### **Business Continuity Plan (BCP) Review**

The production facilities of the KHI Group itself may have escaped major damage, but given the unimaginably extensive scale and severity of destruction, management felt it necessary to review the existing BCP. In its review, management naturally gave thought to inward measures namely, efforts to ensure the safety and livelihood of employees working for Group companies—but also considered outward measures, particularly efforts to address the needs of customers and society as a whole. That is to say, as a company fulfilling its duty to provide products and supporting social infrastructures, KHI-and by extension, all the companies under the KHI Group umbrella-emphasizes efforts that utilize corporate capabilities to contribute to recovery and restoration.

# **Safety Confirmation System**

At 2:53 p.m., just seven minutes after the Great East Japan Earthquake struck, the group-wide emergency contact system automatically activated and sent out requests to employees at work and to residences in prefectures where the temblor registered on the seismic intensity scale 6 or higher to confirm the safety of employees and their families.



# **IT Systems**

Even before the Great East Japan Earthquake, the KHI Group had a contingency plan for IT systems in place. The Group has two data centers, a primary facility and a remote facility, and both are located more than 500km apart from each other to offset the effects of a widespread disaster. Each data

center is equipped with back-up data storage for systems that handle important information related to customers and business activities and also operates communication systems, mainly for e-mail and websites, which ensure contact between members of the Group and their customers and business partners immediately after a disaster strikes. The contingency plan will continue to be fine-tuned with various scenarios in mind.

## **Measures to Deal with Summer Power Shortages**

#### At production points in the Kanto region

EarthTechnica Co., Ltd., implemented several approaches at its facility in Yachiyo, Chiba Prefecture, including adjustments to the operating schedule of its electric furnace and the introduction of summer work hours.

NIPPI Corporation, with facilities in Yokohama and Yamato, Kanagawa Prefecture, responded with flexible working hours, including day and night shifts.





# • Special Power-Saving Days at Tokyo Head Office

At the Tokyo Head Office, we made four weekdays closed in July, and instead we plan to work on four holidays in October, November and December, when power demand is lower. In a show of camaraderie, the Kobe Head Office also participated in this power-saving initiative. All operating facilities take days off in July to reduce consumption of electricity, but 2011 marked the first time that the initiative had the participation of the head offices.

#### . Efforts in the Kansai Region

Asked to conserve electricity in the service area covered by Kansai Electric Power, the Group's key production facilities took suitable measures, such as shifting the operation of equipment that consumes large amounts of power to off-peak times and utilizing in-house power generation systems.

#### • Steps to Reduce the Amount of Available Electricity

Complementing routine power-saving measures, such as placing overhead lights further apart, conscientiously turning off unnecessary lights, and opting for the stairs instead of the elevator, we took the added steps of switching over to energy-saving light bulbs, upgrading old office equipment earlier than planned, and reducing the number of vending machines by half.

## **Support for the Disaster Area**

Seventeen years ago, the KHI Group experienced first hand the destruction caused by the Great Hanshin Earthquake, and based on this corporate lesson, the Group was guick to extend financial support through charitable donations and also provided products that would help in the relief efforts and in the restoration process in the area so ruinously destroyed by the Great East Japan

Earthquake. (Refer to page 35 for concrete examples of assistance.) In addition, each business segment directed concerted efforts toward on-site repair and restoration of Kawasaki-brand installations that had been damaged by the earthquake and/or tsunami. Various activities were also undertaken to support customers and business partners in their restoration work and to deliver vital relief supplies.

# The Role that the KHI Group Aims to Fulfill

#### **Restoration Support in the Devastated Area**

Currently, rubble removal and processing work mainly by local governments in the affected areas is moving along. But initially, cleanup as well as rescue efforts were blocked, quite literally, by mountains of debris. KHI jumped into action immediately after the monstrous earthquake and tsunami and provided motorcycles to help support teams reach places inaccessible by other means of transportation and also provided wheel loaders to expedite cleanup operations—all at no cost. In addition, the Company addressed a request by a local government that had lost its incineration plant and set up temporary incineration facilities under lease.



# **Boost Production of Gas Turbine and Gas Engine Power Generation Systems**

We reinforced our production structure for such products as gas turbine and gas engine power generation systems because power shortages sparked a rapid increase in demand for in-house power generation systems and stand-by power generation systems for use when unexpected power outages occur.





# **Distributed Power Generation and Renewable Energy**

The KHI Group has pursued R&D on distributed power generation as well as renewable energy and high-efficiency energy for a long time already. The disaster's impact on power supply put alternative sources of energy in a much brighter spotlight. Responding to society's keen interest in such energy sources, we will accelerate our efforts to cultivate and further enhance our energy-related products.



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Solar cooling system—an integrated system using solar heat and an absorption-style chiller to provide highly efficient heating and

cooling for factories and large commercial buildings