

From the Editor

While the market for construction machinery is subject to fluctuating demand, being highly responsive to trends in the global economy, demand is expected to continue growing in the medium to long term based on a background of development in emerging economies, including rising populations and urbanization. Meanwhile, with demand for resources forecast to continue growing steadily, an increasing requirement for more productive mining machinery is also anticipated.

The Hitachi Construction Machinery Group sees its mission as the timely supply of products that accurately reflect the increasingly diverse needs of customers in the global market by keeping pace with rapidly changing social and business conditions. Along with supplying machinery that has excellent performance and reliability, Hitachi also seeks to supply products and services that are a close fit with the challenges faced by customers in areas such as safety, the environment, and economics.

To fulfill this mission, we are taking steps to differentiate our products and services in our role as part of the Hitachi Group and its core Social Innovation Business by drawing on synergies with research and development laboratories of Hitachi, Ltd. and its wide range of businesses, which encompass the energy, railway, automotive, and information technology (IT), and other sectors.

This issue of *Hitachi Review* describes some of these initiatives. Because improving the productivity of large mining machinery at mine sites that operate day and night is a key challenge, we are working to enhance the functions of fleet management systems that equip vehicles with sensors and utilize information. We are also boosting our initiatives for adopting IT with a view toward using construction machinery in "information-oriented construction." Having led the world by launching our Global e-Service remote monitoring system for machinery, we are now proceeding with new developments. A new service called ConSite provides a framework for supplying a bundle of services together with detailed information to customers all over the world.

We are developing construction machines that comply with stringent environmental standards to be more conscious of the environment. Articles in this issue describe the ZAXIS-6 Series of hydraulic excavators that comply with the Tier 4 emissions regulations, and a hybrid wheel loader that is the first in the world (based on Hitachi Construction Machinery research) to feature regenerative braking. Another example is Hitachi Construction Machinery's very large mining dump trucks, which incorporate new functions designed to improve both productivity and safety. Other articles describe the use of simulation to help with development efficiency and reliability and profile our global production activities.

I hope that this issue of *Hitachi Review* will help you learn more about our construction machinery business in its role as part of Hitachi's Social Innovation Business.

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