

Hitachi Group and SCG-CBM Embark on Collaborative Creation to Promote Energy Saving across Factories and Increase Efficiency in Dispatching Process Utilising IoT



MOU Signing Ceremony

Bangkok, September 18, 2018 --- Hitachi, Ltd. (TSE: 6501, “Hitachi”), Hitachi Asia (Thailand) Co., Ltd. (“Hitachi Asia (Thailand)”) and SCG Cement-Building Materials Co., Ltd. (“SCG-CBM”) today announced the conclusion of a Memorandum of Understanding (“MOU”) concerning collaborative creation to promote energy saving across SCG-CBM factories and increase efficiency in dispatching process.

Moving forward, the three companies will work to develop digital solutions utilising Hitachi’s IoT platform, Lumada, and joint verification. They will also promote initiatives to increase value chain efficiency from production sites to logistics.

Currently, the productive-age population is decreasing across Japan, China and other Asian countries. At production and logistics sites, there are greater needs not only for increased efficiency and improved labour saving, but also for the provision of high value-added production and logistics operations that achieve the total optimisation of the value chain from conventional individual optimisation. Simultaneous projects are progressing around the world to manage the development of the economy and solve social issues through the utilisation of innovative technologies such as artificial intelligence (AI), Internet of Things (IoT) and robots. Specifically, economic visions that support the use of such technologies include Thailand 4.0 from Thailand and Society 5.0 from Japan, led by the respective government bodies.

The Siam Cement Public Company Limited is a Thai manufacturer and Thailand's largest conglomerate involved in cement, construction materials, petrochemicals and packaging manufacturing as its main global business. SCG-CBM manufactures and distributes cement and other construction materials. Because the company covers a wide range of business fields as a Group, it tries to enhance productivity through digital technology.

Meanwhile, Hitachi conducts its Social Innovation Business utilising digital technology, setting Power/Energy, Industry/Distribution/Water, Urban and Financial/Social/Healthcare as its domains of focus. Based on its experience and knowhow cultivated in the manufacturing industry over many years, Hitachi develops and provides a variety of digital solutions through Collaborative Creation with customers utilising Hitachi's IoT platform "Lumada" and to solve customers' challenges. On September 17, 2018, Hitachi launched "Lumada Center Southeast Asia" in Thailand, accelerating global development of its IoT platform.

As SCG-CBM aims to further increase efficiency in management and Hitachi and Hitachi Asia (Thailand) provide digital solutions globally, the three companies concluded an MOU and will embark on collaborative creation to promote energy saving in factories and increase efficiency in dispatching process.

Specifically, at the SCG-CBM's cement factory in Thung Song, in the south of Thailand, Factory Simulator, a Hitachi's Lumada solution core, analyses databases, including production capabilities and production control, and automatically develops an optimal production plan for the entire factory, reducing the energy usage volume. On the dispatching process, Hitachi will analyse the operational data of cement delivery trucks and develop an optimal delivery plan to reduce logistics operation costs and inventory.

The three companies will carry out joint verification, and then verify its effect to deepen collaborative creation utilising Hitachi's digital technologies and consider expanding the scope of application. Hitachi and Hitachi Asia (Thailand) will also create new service through collaborative creation with SCG-CBM and strive to develop it as Lumada solution core.

Comment by Chana Poomee, Vice President, SCG Cement-Building Materials Co., Ltd.
"Actually Hitachi and SCG have a close relationship for a long time, today's our MOU signing ceremony will be another step of the collaboration among these two parties which will create the significant moment for transferring Hitachi's expertise on the digital

technology to SCG by co-creating the best business solution for each other. This collaboration is initiated from the energy management system and will expand to other business areas for enhancing the SCG's future Industry 4.0 platform.”

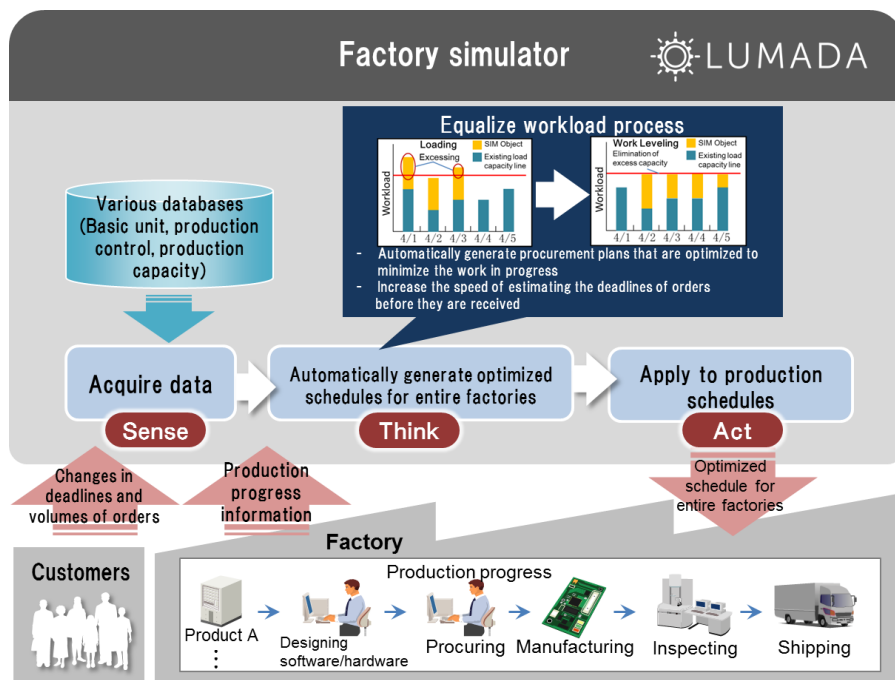
Comment by Jun Abe, CEO of Industry & Distribution Business Unit, Hitachi, Ltd.

“I am very pleased to start collaborative creation with SCG-CBM, a leader of the Thai manufacturing industry. I believe that Hitachi's broad digital technology in the manufacturing and distribution industries as well as its performance in collaborative creation utilising Lumada has been highly evaluated. We would like to work with SCG-CBM to create innovations with the aim of contributing towards Thailand 4.0.”

Comment by Yoshito Kodama, Managing Director of Hitachi Asia (Thailand) Co., Ltd.

“I am glad that the Hitachi Group can help SCG-CBM construct the next phase of the value chain by utilising our digital technology. Additionally, based on “Lumada Center Southeast Asia” which we launched yesterday, Hitachi Group will contribute to the promotion of digitalisation of manufacturing industry in Thailand and other ASEAN countries.”

Conceptual image of the Factory Simulator



Related News Release

Hitachi Launches the Systems to Automatically Generate Optimized Production Schedules and 3D Work Instructions as a Solution Core for the IoT Platform “Lumada” (announced on October 17 2017)

<http://www.hitachi.com/New/cnews/month/2017/10/171017.html>

About SCG CEMENT-BUILDING MATERIALS CO., LTD.

SCG Cement-Building Materials, a business unit of SCG, is a leading integrated manufacturer, supplier, and distributor of cement and related building materials. It provides an extensive range of construction products. The group has pushed for development in this sector to increase operational efficiency, and speed up the process of development of new products and services. SCG Trading takes a role to support SCG Cement-Building Materials to expand the products to ASEAN and the global market.

About Hitachi, Ltd.

Hitachi, Ltd. (TSE: 6501), headquartered in Tokyo, Japan, delivers innovations that answer society's challenges, combining its operational technology, information technology, and products/systems. The company's consolidated revenues for fiscal 2017 (ended March 31, 2018) totaled 9,368.6 billion yen (\$88.4 billion). The Hitachi Group is an innovation partner for the IoT era, and it has approximately 307,000 employees worldwide. Through collaborative creation with customers, Hitachi is deploying Social Innovation Business using digital technologies in a broad range of sectors, including Power/Energy, Industry/Distribution/Water, Urban Development, and Finance/Social Infrastructure/Healthcare. For more information on Hitachi, please visit the company's website at <http://www.hitachi.com>.

About Hitachi Asia Ltd.

Hitachi Asia Ltd., a subsidiary of Hitachi, Ltd., is headquartered in Singapore. With offices across seven ASEAN countries – Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam - the company is focused on its Social Innovation Business to answer society's challenges. Hitachi Asia and its subsidiary companies offer a broad range of information & telecommunication systems, power systems, social infrastructure & industrial systems, electronic systems and equipment, construction machinery, high functional materials and components, automotive systems, home appliances and others. For more information on Hitachi Asia, please visit the company's website at <https://www.hitachi.com.sg>.