



NEWS RELEASE



September 4th, 2018

Nippon Steel & Sumikin Engineering Co., Ltd.

Osaka Gas Co., Ltd.

Commencement of the On-Site Energy Supply Project for Thai Honda Manufacturing Co., Ltd.

NS-OG Energy Solutions (Thailand) Ltd. (hereinafter “NSET”), a joint venture company between Nippon Steel & Sumikin Engineering Co., Ltd. (Representative Director and President: Shinichi Fujiwara; Head Office: Shinagawa-ku, Tokyo; hereinafter “NSENGI”) and Osaka Gas Co., Ltd. (Representative Director and President: Takehiro Honjo; Head Office: Chuo-ku, Osaka City; hereinafter “OG”) ^{(*)1} has completed the construction of an on-site energy supply project ^{(*)2} for Thai Honda Manufacturing Co., Ltd., a manufacturer of Honda’s motorcycles in Thailand, with energy supply operation having commenced on April 1, 2018. Following the construction of a similar energy supply project for Honda Automobile (Thailand) Co., Ltd., a manufacturer of Honda’s automobile, in November of last year, this marks the company's fourth such project in Thailand.

This project seeks to reduce energy consumption within the plant by introducing a highly efficient cogeneration system, which recovers steam and hot water from the waste heat generated by gas engines while producing electricity and supplies electricity and heat, and a highly efficient cold-water system using a turbo chiller. The project will be capable of supplying electricity and heat (via steam, hot water, and cold water) during the next 15 years. In this business model, NSET handles everything from the construction and operation of the cogeneration system to procurement of gas as a one-stop energy service. The cogeneration system also helps keep the plant running steadily in the event of a power-grid accident. When the system detects a drop in grid voltage, it promptly switches to an autonomous-operation mode and continues to supply energy on its own as a standby power source.

In terms of environmental benefits, this project has been accepted as a FY2015 equipment subsidy project aiming to obtain credit under the Joint Crediting Mechanism (hereinafter “JCM”) and completed the verification inspection by the Ministry of the Environment of Japan on August 23rd, 2018. By working with JCM, this project is expected to result in reductions of CO₂ emissions by about 100,000 tons over the next 15 years, contributing to Japan’s CO₂ emissions reduction target.

Drawing from their extensive experience in construction, operation, and maintenance, NSENGI and OG will continue to expand business operations in Thailand by providing energy-engineering solutions that deliver excellent environmental and economic performance, helping customers advance their efforts toward the creation of a low-carbon society.

*1: Participating through a wholly owned subsidiary, Osaka Gas Singapore Pte. Ltd. (CEO: Tetsuji Yoneda; hereinafter “OGS”).

*2: A project providing cogeneration equipment engineering as well as operational and maintenance services.



[Cogeneration Facility]



[Gas Engine]

[Overview of the Project]

Thai Honda Manufacturing Co., Ltd.

Location: 410 Ladkrabang Industrial Estate, Chalongkrung Rd., Lamplatu, Ladkrabang, Bangkok, 10520
Thailand

- Gas engine cogeneration facility
- Power output: 7,800 kW
- Hot water supply capacity: 2,000 kW
- Steam supply capacity: 4 t/h
- Cold water supply capacity: 4,900 kW
- Expected CO₂ reductions: 7,000 t/year

[Overview of NSET]

Company name: NS-OG Energy Solutions (Thailand) Ltd.

Location: 909, Ample Tower 20th floor, Bangna-Trad road, Khwang Bangna, Khet Bangna, Bangkok, 10260
Thailand

Employees: 67 (As of April 2018)

Shares: 70% held by NSENGI and 30% held by OGS

Founded: June 2012 (Participation of OGS from July 2014)

Business outline: On-site energy supply business in Thailand

Capital: 381 million Thai baht

[Inquiries]

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