Fuel Switching Business at Food Plants in Vietnam

Switching from Coal to Natural Gas to Reduce CO2 Emissions
 by approx.76,300t over 10 Years –

March 11<sup>th</sup>, 2021

Sojitz Corporation
Osaka Gas Co., Ltd.
Sojitz Osaka Gas Energy Company Ltd.

Sojitz Corporation (President: Masayoshi Fujimoto; "Sojitz") and Osaka Gas Co., Ltd.'s (President: Masataka Fujiwara; "Osaka Gas") joint venture company\*1 Sojitz Osaka Gas Energy Company Ltd. (General Director: Yoshiro Aoyama; "SOGEC") has concluded a supply agreement on March 4th, 2021 with Acecook Co., Ltd.'s ("ACJ") subsidiary, Acecook Vietnam Joint Stock Company ("ACV"), to provide natural gas to ACV's food plants.

SOGEC is concentrating its efforts on fuel switching from coal to natural gas, and this project marks the company's first time supplying natural gas to an individual business. \*2 This natural gas supply business will be a subsidized project\*3 under Japan's Joint Crediting Mechanism (JCM)\*4 scheme. Additionally, this project will be undertaken in cooperation with the governments of Vietnam and Japan.

In partnership with Osaka and Ho Chi Minh City, ACV and SOGEC participated in a feasibility study\*5 for reducing CO2 in food plants prior to replacing the coal-fired steam boilers at two of ACV's plants with highly-efficient gas-fired steam boilers that use natural gas with the objective of improving the plants' work environment and reducing CO2 emissions.

This business expects to reduce CO2 emissions by approximately 76,300t over a 10-year period. Under the JCM scheme, over half of this reduced CO2 amount will be issued as JCM carbon credits and delivered to the Japanese government, which will help Japan to realize its reduction targets for CO2 emissions.

Sojitz, Daigas Group (an Osaka Gas group brand), and SOGEC will continue to respond to the diverse business needs of its customers through the sale of environmentally-friendly natural gas, contributing to Vietnam's sustainable development and to the realization of a low-carbon society.

- \*1: Equity ownership of Sojitz Osaka Gas Energy Company Ltd.: Sojitz Group 51%, Osaka Gas Singapore Pte. Ltd. 49%. (Osaka Gas Singapore Pte. Ltd. is a fully-owned subsidiary of Osaka Gas Co., Ltd.)
- \*2: In April 2020, SOGEC began supplying natural gas to Phu My 3 Specialized Industrial Park in Bà Rịa-Vũng Tàu Province in Southern Vietnam.

#### \*3: Financing Programme for JCM Model Projects in FY2020

JCM Model Projects utilize leading low-carbon and decarbonization technologies to lower GHG emissions in developing countries through measurable, reportable, and verifiable (MRV) actions. In addition to reducing GHG emissions in developing countries, JCM projects aim to help Japan and its partner countries achieve their GHG emission reduction targets. The Financing Progarmme for JCM Model Projects will fund up to half of the initial investment costs for advanced low-carbon and decarbonization technologies.

The Global Environment Centre Foundation (GEC) has been commissioned by the Ministry of the Environment of Japan (MOEJ) to function as a secretariat to manage JCM-related subsidy programs, which are open to private enterprises in Japan.

ACJ, ACV and SOGEC received financing from MOEJ under the Financing Programme for JCM Model Projects in FY2020 on September 28<sup>th</sup>, 2020.

\*4: Joint Crediting Mechanism (JCM): In this bilateral mechanism, Japan provides developing countries with leading low-carbon technologies and products, systems, services, and infrastructures, which contribute to sustainable development in these countries by reducing greenhouse gas emissions. With JCM projects, both countries are able to benefit from reduced emissions. Japan's efforts to reduce greenhouse gas emissions can be evaluated quantitatively through JCMs, which allow Japan to apply JCM credits to meet its emission reduction targets.

\*5: As part of the City-to-city Collaboration Programme, this feasibility study was commissioned by the Ministry of the Environment of Japan (MOEJ) to support effective and efficient initiatives for building low-carbon and decarbonized society models, which are undertaken by Japanese municipalities with expertise on constructing these models and partner cities outside Japan. Osaka and Ho Chi Minh City jointly took part in this City-to-City Cooperation Project in which ACV and SOGEC also participated.

#### (Attachment)

### 1. Project Overview

## ■Equipment to be Installed

Steam Supply 7,000 kg/h per unit (converted evaporation amount)

Capacity

Installed Units 13 units (2 plants)

Supplied Fuel Natural gas and LPG-air

Estimated 7,631t- CO2 /year

Reduction of CO2

Start Date July 2021 (planned)

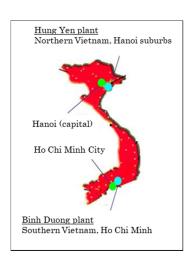
# ■Location and Exterior (Façade) of Installation Sites

ACV Hung Yen plant

Nhu Quynh Town, Van Lam District, Hung Yen Province

•ACV Binh Duong plant

Quarter 1B, An Phu Ward, Thuan An Town, Binh Duong Proveince







[Binh Duong plant]



#### 2. Participating Companies

[Company Overview – Sojitz Osaka Gas Energy Company Ltd.]

Established	October 2019
Location	Ba Ria - Vung Tau Province, Socialist Republic of Vietnam
Representative	Yoshiro Aoyama
Director	
Ownership	Sojitz Group - 51%
	(Sojitz Corporation - 26%, Sojitz Vietnam Co., Ltd 25%)
	Osaka Gas Singapore Pte. Ltd 49%
Main Business	Supply of natural gas to industrial users, energy services, and energy-
	related engineer and consulting services in Vietnam

## [Company Overview - Sojitz Corporation]

Established	April 2003
Location	1-1, Uchisaiwaicho 2-chome, Chiyoda-ku, Tokyo
Representative	Masayoshi Fujimoto
Director	
Main Business	General trading company (trading and business investment in Japan and
	overseas)

## [Company Overview – Osaka Gas Co., Ltd.]

Established	April 1897
Location	4-1-2 Hiranomachi, Chuo-ku, Osaka
Representative	Masataka Fujiwara
Director	
Main Business	Gas production, supply, and sales; power generation, supply, and sales

#### 3. Related News Releases

Sojitz Corporation: "Sojitz and Osaka Gas Establish Natural Gas Supply Company in Vietnam" (Jun. 24<sup>th</sup>, 2019)

https://www.sojitz.com/en/news/2019/06/20190624.php

Osaka Gas Co., Ltd.: "Establishing a Natural Gas Supply Company in Vietnam" (Jun. 24<sup>th</sup>, 2019)

https://www.osakagas.co.jp/en/whatsnew/\_\_icsFiles/afieldfile/2019/06/24/190624\_2\_1.pdf