







February 7th, 2025 Toyota Tsusho Corporation Ferrari Agroindústria S.A. Toho Gas Co., Ltd. Sebigas Cótica Bioenergia LTDA

## Launch of a Pilot Project Study for Bio-methane Production from Sugarcane Waste in Brazil

Toyota Tsusho Corporation ("Toyota Tsusho"), Ferrari Agroindústria S.A.("FAI"), Toho Gas Co., Ltd ("Toho Gas")., and Sebigas Cótica Bioenergia LTDA ("SC") have entered into a joint development agreement to conduct a joint study to develop a pilot project for bio-methane production in Brazil. Under this agreement, the four companies aim at producing bio-methane from sugarcane waste and will initiate detailed discussions on the construction and operation of a pilot plant.

#### 1. Background

Biomethane is produced by refining biogas generated from organic resources. As biomethane has the same composition as methane, the main component of conventional city gas, existing city gas infrastructure can be used, thus contributing to carbon neutrality while minimizing additional social costs.

Brazil is one of the countries with the greatest potential for bioenergy production due to its extensive agricultural activities, notably the largest sugarcane production in the world, and experiences in biofuel production. Its sugar-energy sector has opportunities yet to be explored to boost the production of biomethane. The large-scale mechanized sugarcane cultivation in Brazil allows for the efficient recovery of the raw materials needed for biomethane production.

#### 2. Way forward

In the context of global efforts towards carbon neutrality, the Fuel of the Future law was enacted last year to expand the use of biofuels and develop new technologies in the country. There is growing interest in biomethane as a fuel for power generation and transportation to reduce greenhouse gas emissions.

Under the terms of this agreement, the four companies will conduct a joint study for the construction and operation of an innovative and industrial scale pilot plant with a capacity of 5,500 Nm³ of biomethane per day at FAI site in São Paulo, Brazil, with the aim of starting operations in 2026.

In the future, based on the results of the demonstrations, the companies aim to move forward to increase the volume of production up to a commercial scale in Brazil, with an eye to export to Japan in the future after developing the supply chain infrastructure including land logistics in Brazil and maritime transport.

The four companies are committed to promoting the use of biomethane, raising awareness of its potential roles in the global energy matrix, and working to mitigate greenhouse gases, achieving carbon neutrality.

## $\ll$ Reference Information $1\gg$ Functions of Each Company

Toyota Tsusho	Project lead, Overall project management
FAI	Supply of raw material, utilities, land etc
Toho Gas	Market development in Japan
SC	Engineering for a pilot plant

## $\ll$ Reference Information $2\gg$ Corporate Profiles

## [Toyota Tsusho]

Corporate Name	Toyota Tsusho Corporation
Head Office	Nagoya, Aichi Prefecture, Japan
Establishment	July 1, 1948
Representative	President & CEO Ichiro Kashitani
Business	Domestic and international trade of goods / Export and import of goods / Construction undertaking / Insurance agents, among others
Website	https://www.toyota-tsusho.com

# [FAI]

Corporate Name	Ferrari Agroindústria S.A.
Head Office	City of Pirassununga, State of São Paulo, Brazil
Establishment	October 21, 1953
Representative	Director Jose Sergio Ferrari Junior, Director Fabio Ferrari, Director Antonio Carlos
	Previte
Business	Sugar and ethanol production
Website	https://usinaferrari.com.br/

#### [Toho Gas]

Corporate Name	Toho Gas Co., Ltd.
Head Office	Nagoya, Aichi Prefecture, Japan
Establishment	June 26, 1922
Representative	Representative Director & President Nobuyuki Masuda
Business	Gas business and electricity supply business among others
Website	https://www.tohogas.co.jp/

# [SC]

Corporate Name	Sebigas Cótica Bioenergia LTDA
Head Office	City of Porto Alegre, State of Rio Grande do Sul, Brazil
Establishment	December 14, 2018
Representative	Legal Representative Maurício Silveira Cótica
Business	Biogas and biomethane business specialist
Website	https://www.sebigascotica.com.br/