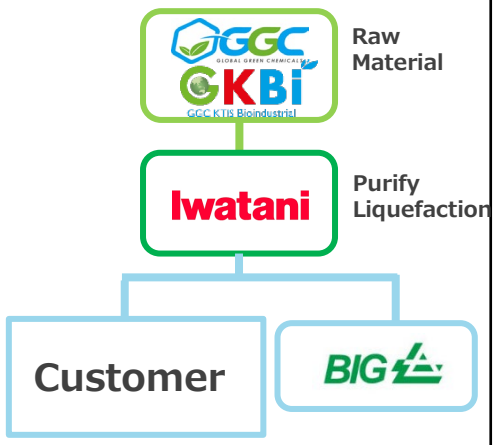
The Global South Future-Oriented Co-Creation Project: Selected Companies (2nd Application)

Project name	Green CO_2 Plant Production Plan Derived from Bioethanol
Company	Iwatani Corporation
Country	Nakhon Sawan Province, Thailand
Category	Category 1 ・Category 2 ・Category 3

【Project Scheme】



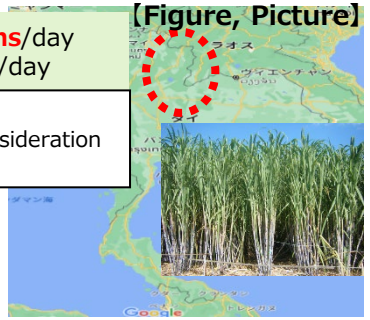
◆Project Overview

In collaboration with Bangkok Industrial Gas (BIG), a leading industrial gas company in Thailand, and GKBI Co., Ltd. (operated by Global Green Chemicals, a leading chemical company under the PTTGC Group), Iwatani Corporation will construct Thailand's first high-purity CO_2 plant derived from sugar cane. As a green CO_2 that contributes to GHG emission reduction, the project aims to ensure stable CO_2 supply not only in Thailand but also across Southeast Asia and Japan. In Japan as well, there are no commercially operating CO_2 plants utilizing biomass, making this a pioneering next-generation supply chain model.

CO_2 production capacity in Thailand : Approx **2,000 tons**/day
Iwatani Production capacity : Approx **100 tons**/day

- ◆ **Domestic Market Size** : Approx. 700,000 t/year
- ◆ **Production Capacity** : 100 t/day
- ◆ **Applications** : Automotive welding, Semiconductors ,Carbonated beverages, HDD cleaning, Food cooling, Cold chain transportation
- ◆ **Project Scale** : 22billion yen
- ◆ **Timeline** : After public grant selection → Equipment procurement January 2027 → Plant operation begins

【Figure, Picture】



Changes in the dependency on specific countries

Most CO_2 plants currently produce carbon dioxide as a **by-product of petroleum refining.** However, due to the **global trend toward decarbonization**, petroleum refining is expected to **decline,** which will likely lead to a **reduction in CO_2 production volumes** in the future.

Resulting benefits to Japan

In Thailand, where many Japanese companies are located, this initiative not only contributes **to BCP (Business Continuity Planning),** but also enables the **supply of CO_2 that is not reliant on petroleum-derived sources,** thereby providing **new added value** to the market.

●Other Government Support Schemes Worth Noting (if any)

The Thai government offers support schemes such as tax incentives and subsidy programs through the BOI (Board of Investment), which are especially applicable to projects that promote environmental technologies and 0industrial expansion. In addition, under the BCG (Bio-Circular-Green) Economy Policy, additional incentives are provided for projects in sustainable industrial sectors.

●Other Considerations (if any)

The production of CO_2 from biomass sources is theoretically expected to contribute to the reduction of approximately one-third of atmospheric CO_2. As there are no Japanese CO_2 manufacturers currently operating in Thailand, becoming the first Japanese CO_2 producer in the country will help strengthen the supply chain for Japanese companies.