

10 major Japanese companies collaborate to minimize, recover and utilize CO2 in the carbon neutral Goi and Soga complex.



Joint Study of Activities for the Realization of a Carbon Neutral Industrial Complex in Japan's Chiba Prefecture

Cosmo Oil Co., Ltd., Denka Company Limited, Iwatani Corporation, JFE Steel Corporation, JNC Corporation, KH Neochem Co., Ltd., Maruzen Petrochemical Co., Ltd., UBE Elastomer Co. Ltd., Ube Material Industries, Ltd., and Yokogawa Electric Corporation hereby announce the signing of a memorandum of understanding (MoU) on a joint study into activities for the establishment of a carbon neutral industrial complex in the Goi district of Ichihara City and the Soga District of Chiba City in Japan's Chiba Prefecture (hereafter referred to as the "carbon neutral Goi and Soga complex").

The Goi and Soga districts form part of the Keiyo Rinkai industrial complex in Chiba, a prefecture adjacent to Tokyo that hosts Japan's largest concentration of materials and energy companies. The achievement of carbon neutrality at this industrial complex will enhance the overall competitiveness of the companies that maintain operations there and lead the way forward to a sustainable society.

From February 2021, Yokogawa has been undertaking a project* to examine the feasibility of achieving carbon neutrality through interindustry collaboration at the Goi industrial complex. The nine other companies, who have operations there, have joined Yokogawa in this undertaking, and Yokogawa has also involved its subsidiaries Yokogawa Solution Service Corporation and KBC Advanced Technologies Limited. Through this study, it has been established that inter-industry collaboration would be more effective than companies working on their own in reducing CO2 emissions, and that the recovered CO2 can be effectively utilized by the companies located within this industrial complex.

On the basis of the MoU, Yokogawa and these nine companies that are active in the energy, petrochemical, chemical, steel, materials, and other industries will study the feasibility of the commercialization of activities by the year 2030 that will be required to make the Goi and Soga industrial complex carbon neutral by 2050.

These activities are as follows:

- (i) Introduction of an inter-industry energy management system to minimize CO2 emissions
- (ii) The recovery and effective utilization of CO2 through interindustry collaboration
- (iii) Reduction in CO2 emissions through inter-industry collaboration in the utilization of hydrogen and other gas by-products from existing processes

Through this cooperation between businesses aiming for sustainable operations and a provider of advanced control systems and energy management systems for industrial processes, the participating companies aim to collectively achieve carbon neutrality at the Goi and Soga industrial complex and thereby lessen their environmental impact, while enhancing their own international competitiveness.

*Project details:

- Project commissioned by New Energy and Industrial Technology Development Organization (NEDO)
- Project name: Carbon recycling and nextgeneration thermal power generation technology development / Next-generation thermal power generation technology promotion business / Feasibility study of carbon recycling business utilizing interindustry collaboration in industrial complexes, etc. / Inter-industry collaboration study project in the Goi district of Chiba Prefecture
- Project period: FY2020 FY2022

