

March 18, 2022

**Commencement of a Feasibility Study to Synthesize Methane from Cement
Derived CO₂ for Supply through City Gas Pipelines
~ Coupling the Cement and Gas Sectors for Social Implementation of Carbon Recycling ~**

Taiheiyo Cement Corporation
Tokyo Gas Co., Ltd.

Taiheiyo Cement Corporation (Headquartered in Bunkyo-ku, Tokyo; Masafumi Fushihara, President & Representative Director; hereinafter “Taiheiyo Cement”) and Tokyo Gas Co., Ltd. (Headquartered in Minato-ku, Tokyo; Takashi Uchida, Representative Corporate Executive Officer, President and CEO; hereinafter “Tokyo Gas”) have agreed to jointly conduct a comprehensive study toward realizing a decarbonized society. As a first step in the collaboration, the two companies will start a feasibility study on the synthesis of methane from highly concentrated CO₂ recovered from the cement manufacturing process for supply through city gas infrastructure in the future.

In January 2022, Taiheiyo Cement was selected by NEDO (New Energy and Industrial Technology Development Organization) for funding under the Green Innovation Fund for its project to develop a CO₂-capture technology for the cement production process^{*1} that incorporates a methanation system. In addition to the use of synthetic methane as an alternative fuel in the cement manufacturing process, Taiheiyo Cement has been looking for partners to collaborate on its utilization as thermal energy in a wide range of applications.

Meanwhile, Tokyo Gas, as part of its group management vision, “Compass 2030”^{*2} towards establishing a “Value Co-creation Ecosystem” and achieving “Net-zero CO₂ Emissions”, has been seeking to become a carbon recycling company that can effectively utilize synthetic methane produced by methanation of CO₂ emitted from other sectors. Tokyo Gas has therefore been looking for a partner to collaborate with for the full-scale social implementation of carbon recycling.

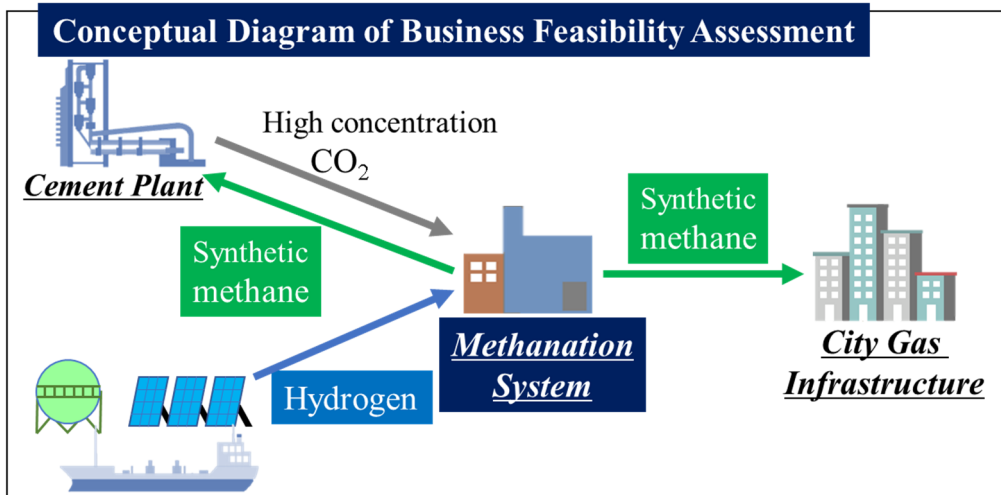
Against this backdrop, the two companies have agreed to jointly investigate the feasibility of a methanation business, with a view to supply synthetic methane using CO₂ from the cement manufacturing process. This would be supplied through the existing city gas infrastructure of Tokyo Gas. This comprehensive study will allow the two companies to work together to realize a decarbonized society through the coupling of the cement and gas sectors.

*1: Taiheiyo Cement press release on January 28, 2022:

<https://www.taiheiyo-cement.co.jp/english/summary/pdf/220128.pdf>

*2: Tokyo Gas announcement on November 27, 2019:

https://www.tokyo-gas.co.jp/Press_e/20191127-01e.pdf



■ Taiheiyo Cement “Carbon Neutral Strategy 2050”^{*3}

Taiheiyo Cement Group considers the establishment of carbon neutral technology to be the most important issue for the future of the cement industry, which emits large amounts of CO₂, and at the same time positions carbon neutrality as a growth strategy. Based on this policy, Taiheiyo Cement is accelerating the development of innovative technologies such as CO₂ separation, recovery, and utilization from cement kiln exhaust gases, in addition to the application and development of existing technologies, in order to achieve carbon neutrality for the entire supply chain by 2050.

^{*3}: May 13, 2021 Taiheiyo Cement press release:

https://www.taiheiyo-cement.co.jp/english/summary/pdf/210513_5.pdf

■ Tokyo Gas “The Challenge to Achieve Net Zero CO₂ Emissions”

Tokyo Gas Group's management vision, “Compass 2030”, calls for “Establishment of a Value Co-creation Ecosystem” and the “Challenge to achieve Net Zero CO₂ emissions”. Through the promotion of digital solutions and expanding collaboration with partner companies, Tokyo Gas will continue to create and provide diverse value together with customers, society, and business partners, and contribute to the realization of a decarbonized society.