

Press Room

September 23, 2020
Mitsubishi Corporation

Use of CO₂ in Concrete / Partnership with Blue Planet Systems Corporation

Mitsubishi Corporation (MC) is pleased to announce that it will be providing financing to Blue Planet Systems Corporation (Blue Planet), a company based in California that has developed technologies to produce CO₂-sequestered aggregates¹. MC has also entered into a partnership with Blue Planet to help commercialize the technologies.

[Blue Planet's Technologies]

Since its founding in 2012, Blue Planet has worked to develop and commercialize a scalable solution for climate change mitigation that is both economically and technically sustainable. One of Blue Planet's cutting-edge technologies captures CO₂ emissions from power plants and other facilities to create CO₂-sequestered aggregates. Another makes effective use of industrial waste, including demolished and unused returned concrete to produce upcycled aggregates. These technologies have already been used in the construction of an interim boarding area at San Francisco International Airport. MC and Blue Planet will be conducting a feasibility project on possible applications in Silicon Valley until fiscal year 2021, after which the partners plan on making the technologies commercially available.

[MC's Vision]

Global CO₂ emissions continue to rise each year, and in 2018 they reached over 33 billion metric tons, nearly 20% of which were produced by industry². The largest emitters were the energy and shipping sectors, followed by the industry sector including the cement industry. In order to meet the targets set forth by the Paris Agreement, businesses worldwide must promote greater use of not only renewables and low-carbon fossil fuels, but also carbon capture, utilization and storage (CCUS) technologies. The sheer size of the global concrete market means that widespread use of technologies capable of sequestering CO₂ in concrete could reduce the amount of CO₂ in our atmosphere by billions of tons.

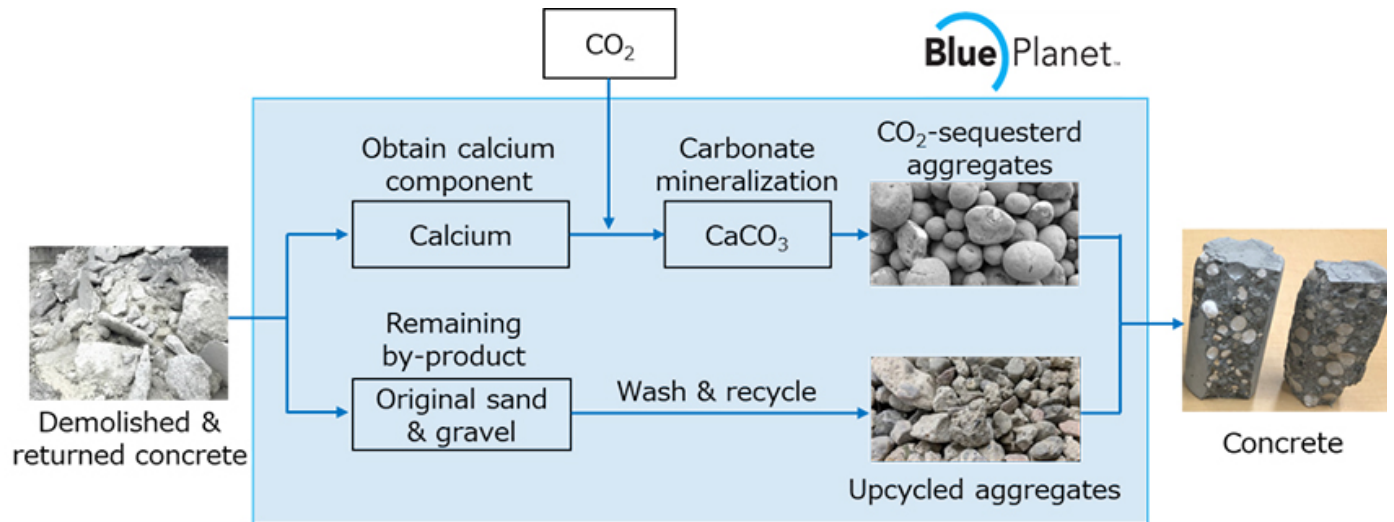
CCUS technologies are an opportunity for MC to leverage the breadth of its business portfolio. This commercialization initiative with Blue Planet joins other efforts by MC to help realize both low-carbon societies and its three-value mission³. Similar ventures in recent months include the ["Technology Development for Paraxylene Production from CO₂"](#) project announced on July 14, and the ["R&D on Use of CO₂ in Concrete"](#) project announced on August 5.

1. Aggregates are inert granular materials such as sand, gravel, or crushed stone. They comprise as much as 80% of a typical concrete mix.

2. Source: IEA

3. Simultaneous creation of economic, societal and environmental value

[Blue Planet's Technology Process Flow]



Blue Planet Systems Corporation

(Established) 2012

(Headquarters) 100 Cooper Ct. Suite A, Los Gatos, CA 95032, United States

(Representative) Dr. Brent Constantz, Founder and Chief Executive Officer

(Main Operations) Production of coarse and fine aggregates made from sequestered CO₂, and development of related technologies

Mitsubishi Corporation

(Established) 1954

(Headquarters) 2-3-1, Marunouchi, Chiyoda-ku, Tokyo

(Representative) Takehiko Kakiuchi, President and Chief Executive Officer

(Main Operations) Natural gas, industrial materials, petroleum & chemicals, mineral resources, industrial infrastructure, automotive & mobility, food industry, consumer industry, power solution and urban development.

Inquiry Recipient

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