

# Japanese project aims to turn CO<sub>2</sub> into natural gas

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An enormous iceberg breaks off the Knox Coast in the Australian Antarctic Territory, 2008. Japanese researchers said Wednesday they hoped to enlist bacteria in the fight against global warming to transform carbon dioxide buried under the seabed into natural gas.

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The researchers at the Japan Agency for Marine-Earth Science and Technology aim to activate [bacteria](#) found naturally in earth to turn CO<sub>2</sub> into methane, a major component of natural gas.

A team led by chief researcher Fumio Inagaki have already confirmed that the bacteria exists in the crust deep under the [seabed](#) off the

northern tip of Japan's main island, a spokesman for the institute told AFP.

But the project faces a big challenge to develop a method of activating the bacteria and accelerating the speed of methane gas generation, a spokesman for the agency acknowledged.

In the natural environment, the bacteria turn CO<sub>2</sub> into methane gas very slowly, over billions of years, he said.

The researchers hope to develop technology within about five years to activate the bacteria and shorten the transformation time to about 100 years, he said.

"The institute still has many hurdles, including the need to secure a budget, before officially kicking off the project," the spokesman said. "But if launched, it would be the first such project as far as we know."

The aim is for the bacteria to produce [methane gas](#) from CO<sub>2</sub> buried in a layer about 2,000 metres (6,600 feet) under the sea bed, the agency said.

Researchers in Japan and elsewhere are seeking to capture and store carbon dioxide underground in an effort to curb [greenhouse gas emissions](#). Such projects are controversial as environmentalists warn that CO<sub>2</sub> could seep out.

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