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China ends flammable ice drilling trials – mission ‘a success’

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Chinese engineers have broken several records in extracting the potentially huge new energy source during drilling under the South China Sea, state media reports

China has completed its first full trials to extract “flammable ice” from the ocean floor under the South China Sea, declaring the mission a success.

More than 300,000 cubic metres of natural gas was extracted in the trial phase of 60 days before the drilling rig was closed on Sunday, the state-run news agency Xinhua reported.

The reserves of frozen gas around the world could offer a potentially huge new source of energy, but there are massive technical difficulties in extracting the fuel and bringing it to the surface.

China has pledged to step up exploration and research efforts in the hope that flammable ice will aid the nation’s energy security, state media reported.

China reports smooth production of gas from ‘flammable ice’ under the sea [1]

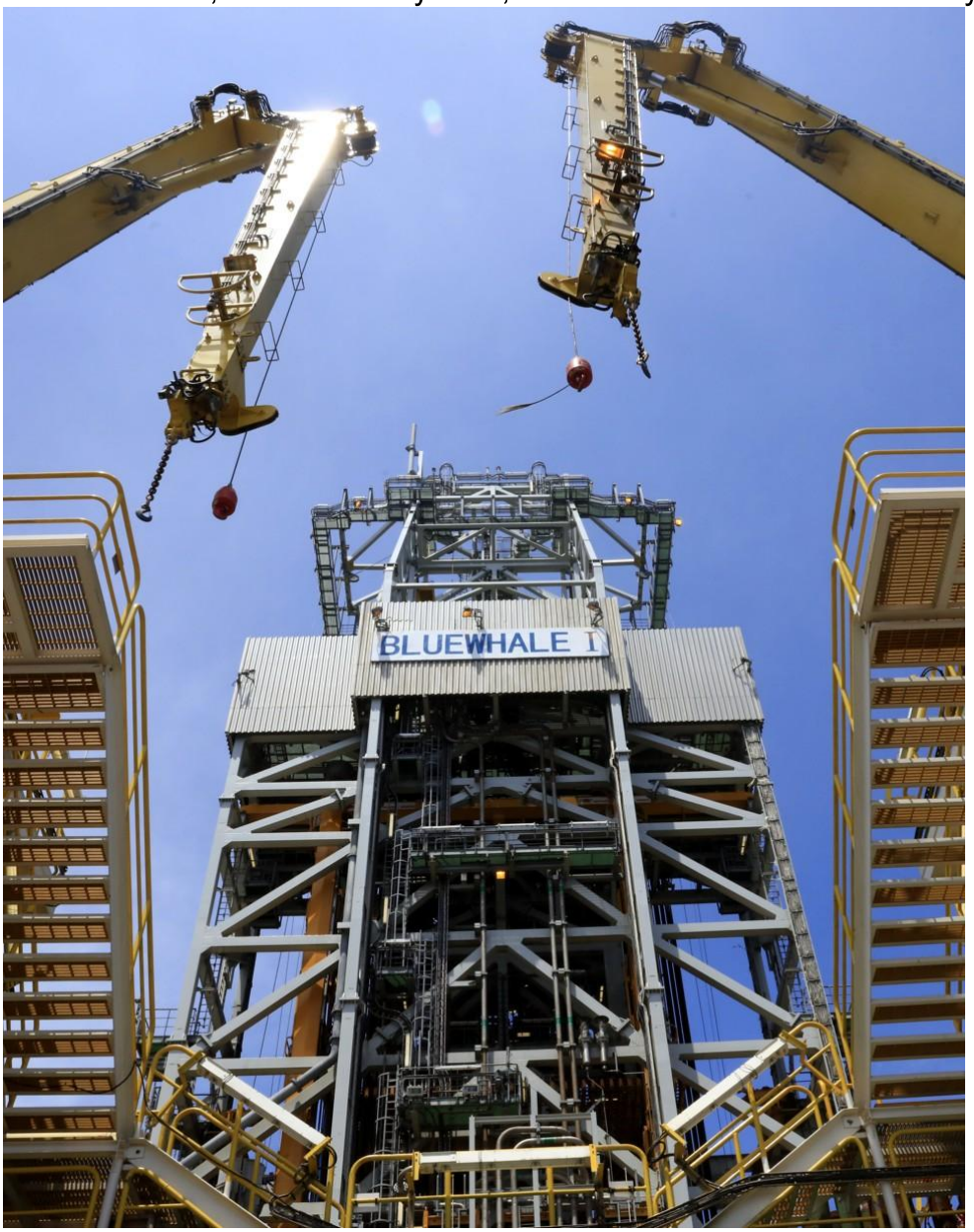
China began extracting gas under the ocean floor near the Pearl River estuary – about 300km southeast from Hong Kong – in May.

An average of 5,000 cubic metres of gas was collected every day from 203 metres to 277 metres below the seafloor since production started on May 10, according to Xinhua.

Chinese officials said the team had achieved “breakthroughs” in the length of extraction, production volumes as well as environmental protection. One of the concerns is that the methane gas released will filter to the surface and enter the atmosphere, contributing to greenhouse gas emissions.

Li Jinfa, the deputy director of the China Geological Survey Bureau, was quoted as saying: “We will step up efforts in looking for natural gas hydrate deposits. We will meantime reinforce theoretical, technical, engineering and equipment developments to prepare for commercial production.”

Flammable ice, or methane hydrate, is a white solid that can be easily set alight.



It forms at very low temperatures from water and methane produced by microorganisms.

Global reserves of “flammable ice” could possibly produce more energy than all other known fossil fuels combined, according to the US Department of Energy.

The energy source trapped beneath seafloors is largely untapped because of the high costs and technical difficulties involved in extracting it.

China taps into cool future for global energy [2]

Research has been dominated by the US, Canada and Japan, but China has been increasing its efforts since promising reserves were discovered in the South China Sea in 2007.

Chinese officials said strict measures were taken to protect the environment and there had been no pollution produced so far during extraction, according to the Xinhua report.

Topics: China science