

Japan deep-sea robots to seek minerals: report

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An illustration photo of sea-bed. Resource-poor Japan plans to use deep-sea mining robots to exploit rare earths and precious metals on the ocean floors around the island nation within a decade, according to a media report.

Resource-poor Japan plans to use deep-sea mining robots to exploit rare earths and precious metals on the ocean floors around the island nation within a decade, according to a media report.

The state-backed Japan Oil, Gas and Metals National Corp (JOGMEC) plans to deploy the remote-controlled robots at depths of up to 2,000 metres (6,600 feet), the Yomiuri Shimbun said without naming sources.

Experts believe that as some minerals become scarcer worldwide, exploiting hard-to-reach underwater deposits and pumping them up to mother ships will become feasible, despite the huge challenges, the daily

said.

Japan and its Asian high-tech rivals are scrambling to secure [rare earths](#) and other minerals needed for products from fuel-efficient [hybrid cars](#) and batteries to cellphones and liquid crystal display televisions.

The JOGMEC project will focus on seabed volcanoes, where so-called hydrothermal vents belch out minerals, near the Izu and Ogasawara island chain, south of Tokyo, and the southwestern Okinawa islands, the report said.

Japanese experts believe the bottom of the ocean could also yield [precious metals](#) such as silver and gold and supplies of what they see as a potential next-generation fuel -- methane hydrate, also dubbed "fire ice".

The project would cost about 30 billion yen (360 million dollars) and is expected to start production in about 10 years, the report said.

Japan, which has long been one of the world's largest importers of industrial materials, is believed to have abundant underwater resources estimated to be worth about 200 trillion yen, the Yomiuri said.

The project is expected to help Japan secure its own mineral and energy resources amid soaring prices of industrial commodities and tighter restrictions on rare earth exports by dominant producer China.

In 2009 the Japan Agency for Marine-Earth Science and Technology announced plans to send robotic submarines to study areas near seabed volcanoes.

Under that strategy, [Japan](#) eyed exploring the seabed within its exclusive economic zone, an area which extends 200 nautical miles (370 kilometres) offshore or to the half-way points to neighbouring countries.

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