

Japan finds rich rare earth deposits on seabed

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Rare earths undergoing processing in large steel pipes are cooled off with dripping water at a privately-owned factory on the outskirts of Baotou city in Inner Mongolia, northwest China on April 21, 2011.

Japanese researchers said Thursday they have found a rich deposit of rare earths on the Pacific seabed, with reports suggesting it could be up to 30 times more concentrated than Chinese reserves.

Mud samples taken from 5,800 metres (19,000 feet) below the waves contained highly concentrated amounts of the [precious minerals](#), which

are vital for high-tech manufacturing and used in products including [wind turbines](#) and iPods.

The proving of resources is significant for Japan, which currently relies largely on China, the source of around 90 percent of the world's supply of rare earths.

Manufacturers have complained in the past that Beijing restricts exports of the materials at times of tension.

"Rare earths are necessary for cutting-edge technologies. Japan faces an urgent task to secure stable supplies," said a statement by researchers from the Japan Agency for Marine-Earth Science and Technology and the University of Tokyo.

The samples, taken from the seabed near Minamitori island some 2,000 kilometres (1,250 miles) southeast of Tokyo, were 10 times more concentrated than that of mud collected from the seabed near Hawaii, the researchers said.

The concentration was 20 to 30 times higher than that from Chinese mines, Japanese media said.

Scientists believe the [seabed](#) contains about 6.8 million tonnes of the materials, the equivalent of 220 to 230 years worth of [rare earths](#) used in Japan.

But despite the desire to move away from dependence on China, the cost of extracting supplies from such a depth and in such hostile conditions may prove problematic, commentators said.

In its afternoon edition, the mass-selling Yomiuri Shimbun said there had been no successful commercial mining below 5,000 metres.

The researchers said they plan to continue their survey, which began in January, to further study rare earth resources and find out how extensive the deposits are.

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