FINANCIAL TIMES

There are alternatives to ripping up the ocean floor

With reference to your deep-sea mining article (Report, April 26), the heavy reliance on metals such as cobalt, nickel and manganese which are used in today's 30-year-old lithiumion battery technology is a testimony to a failure of imagination by all those involved in pushing this technology.

The remedy to supply chain "constipation" is new battery chemistries, based on earth-abundant elements that can be regionally sourced without savaging the environment. As for copper, demand can be assuaged by strategic placement of storage to do away with the need for massive upgrades in electric grid infrastructure.

There are tractable alternatives to ripping up the ocean floor.

Donald R Sadoway

John F Elliott Professor of Materials Chemistry Emeritus Massachusetts Institute of Technology Cambridge, MA, US