



### 本集内容

Deep-sea mining 深海采矿

### 学习要点

有关“mining（采矿）”的词汇

### 边看边答

Which metal is needed for batteries that power electric cars?

### 文字稿

In the waters off Malaga, an experiment with a strange looking machine – lowered underwater to test a new and controversial kind of mining – on the ocean floor.

在马拉加附近海域，一项试验用一种外观奇怪的机器潜入水下，目的是测试一种新的、有争议的海底采矿方法。

A camera on the machine monitors its advance over the seabed. A soft coral stands in its path.

机器上的摄像头监控着它在海床上的移动。软珊瑚挡住了它的去路。

Mining would involve **excavating** rocks down here and no one knows the implications.

采矿需要在这里**挖掘**岩石，没有人知道这意味着什么。

The project is run from this Spanish research ship – funded by the EU to find new **sources** of important metals.

该项目由欧盟资助的这艘西班牙研究船负责，目的是寻找重要金属的**新来源**。

David Shukman, BBC Science editor

What this project shows is how the technology is advancing in a way that makes deep-sea mining seem much more plausible which confronts us with a very difficult question - is it the right thing to do given how little we know about the potential impact it could have on life on the ocean floor?

大卫·舒克曼      BBC 科学新闻主编

这个项目显示技术的进步使深海采矿显得更加真实可信，但也让我们面临一个非常困难的问题——我们对深海采矿对海底生命的潜在影响知之甚少，这样做对吗？

Operating underwater, mining the seabed has never been tried before. It would destroy whatever is directly in front of the machines and they'd create clouds of sand and silt which could smother marine plants and creatures even a long way away.

在水下作业，在海床上采矿以前从未有人尝试过。它会破坏任何直接在采矿机器正前方的东西，还会制造出大量的沙子和淤泥，这些沙子和淤泥会让周边甚至很远的地方的海洋植物和生物窒息。

But there's growing pressure for mining to start. Rocks like these – billions of them – are the target. Because, they're amazingly **rich in** important metals, especially cobalt, which is needed for batteries. So the boom in electric cars means there's growing demand for cobalt. And mining companies think the deep ocean could provide it. So if mining goes ahead, can the damage be limited?

但要求开始采矿的压力越来越大。像这样的岩石，目标是要采出数十亿块。因为它们**富含**重要的金属，尤其是电池所需的钴。因此，电动汽车的蓬勃发展意味着对钴的需求在不断增长。矿业公司认为深海可以提供金属钴。那么，如果采矿继续进行，相关破坏会受到限制吗？

Henko de Stigter, Chief Scientist

We're **on the brink** of a new time that we will go down to the deep sea and start changing the landscape of the deep sea and the deep-sea life. And then we have to consider, is it worth it? Do we want to do that in the same way as we did already with the land?

Henko de Stigter      首席科学家

“我们正**处**在一个新时代的**边缘**，我们将进入深海，开始改变深海的景观和深海生物。然后我们需要考虑，这样做值得吗？我们想要像对待我们的土地一样对待海洋吗？”

This is a trial device – the machines that will actually do mining will be about ten times bigger. Dozens of **ventures** are planning to open mines on the seabed. This is a glimpse of how they might look.

这是一个试验装置，实际用于采矿的机器将会大十倍。数十家**企业**正计划在海底开矿。这就是可能出现的海底采矿景象。

## 词汇

excavating 挖出，发掘

sources 来源

rich in 富含……的

on the brink 处于……的边缘

ventures （有风险的）企业

视频链接

<https://bbc.in/3573hno>

问题答案

Cobalt.