

# What would we do without rare earths?

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The **Critical Materials Institute**, an **Energy Innovation Hub** created by the **U.S. Department of Energy**, has a big problem to solve — what would we do without rare earths?

**Rare earths** are a big part of our modern world. They are in clean energy technologies like wind turbines and solar cells, and in many things we use every day — cars, cell phones, computers and televisions.

We need them, and yet commercial demand, mining challenges, and international politics have experts predicting shortages by 2016. That makes these rare earths **critical materials**.

To create the Critical Materials Institute, the DOE named a genius team of national laboratories, universities, and industry partners under leadership of **the Ames Laboratory** to work on a solution.

What's the **solution**? This hub will deliver technologies to help find new sources of and substitutes for rare earths and other critical materials, as well as develop recycling and recovery methods. It will also use its expertise to predict and address future shortages.

The CMI is the DOE's investment in timely, cost-effective, and energy-efficient solutions to this global challenge.