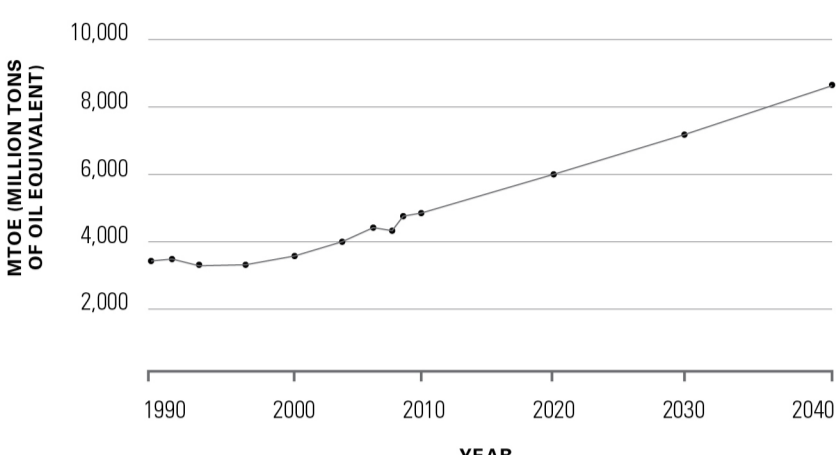


# MINERALS MAKE OUR ENERGY FUTURE

AN "ALL OF THE ABOVE" ENERGY PLAN MADE POSSIBLE BY U.S. MINING

## GLOBAL ENERGY DEMAND

Projected increase in global energy demand by 2040



A growing economy—in the U.S. and around the world—requires a diverse and stable energy supply to power it.

### WHY DO WE NEED ENERGY



Transportation—from personal vehicles and public transportation to aircrafts and ships



Electricity in homes, hospitals and commercial buildings



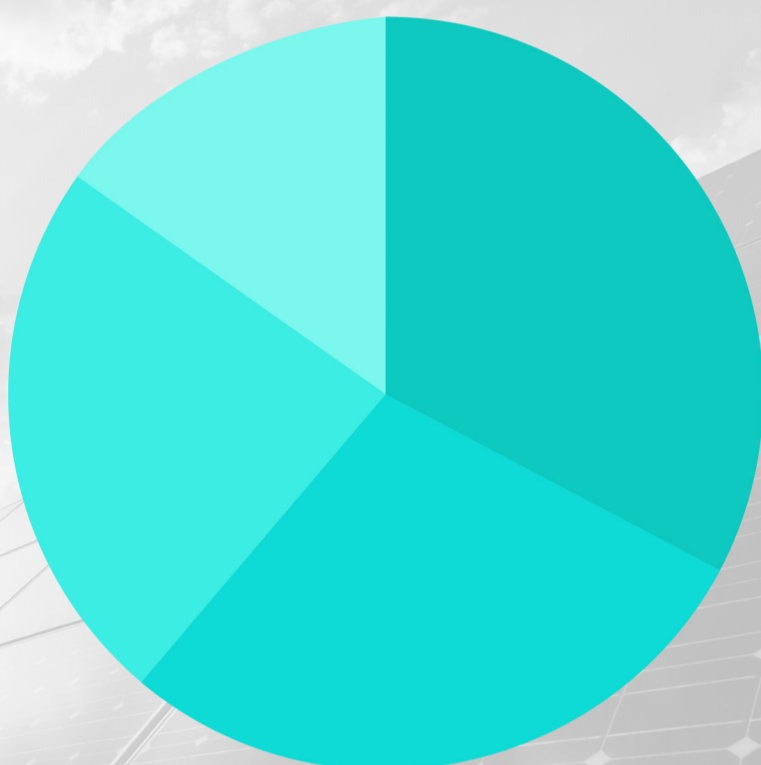
Manufacturing and industrial processes

## A PROSPEROUS FUTURE REQUIRES ALL FORMS OF ENERGY

Meeting tomorrow's energy demand will require more energy than ever before and a true "all of the above" energy strategy. That means more investments in conventional and emerging energy technologies.

**IN 2013, THE U.S. WAS RELIANT ON THE FOLLOWING ENERGY SOURCES FOR ELECTRICITY**

- Coal & other conventional sources – 40%
- Natural gas – 27%
- Nuclear – 19%
- Renewables – 13%



*This information is based on data gathered by the U.S. Energy Information Administration.*

## MINERALS MAKE ENERGY

Minerals are essential to the development and production of all energy sources. In fact, the U.S. Department of Energy (DoE) has made critical minerals a national priority given the increase in global energy consumption and minerals' contributions to several energy sources.



### CONVENTIONAL ENERGY

No power plant can be built or operated without metals such as copper, molybdenum and nickel.

## RENEWABLES

Renewable energy technologies, from wind turbines to solar panels, depend on an array of minerals. For example, a single wind turbine can contain 335 tons of steel, 4.7 tons of copper and three tons of aluminum, as well as zinc, molybdenum and silver.



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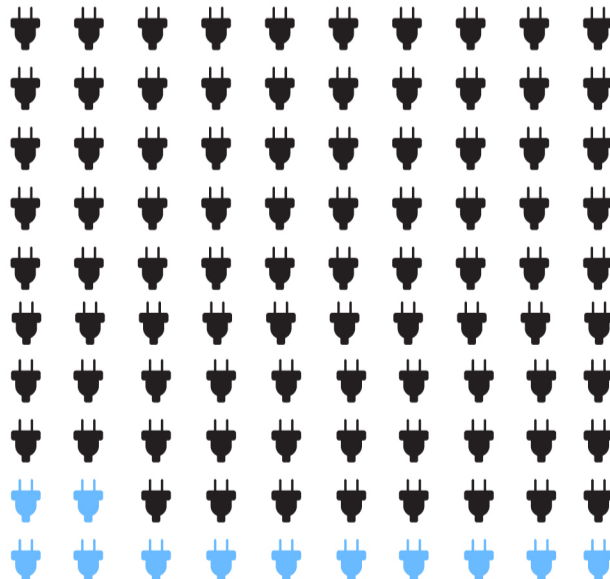


## NUCLEAR

Uranium plays an important role in the development of nuclear energy, as its properties make it naturally radioactive and a source of concentrated energy.

**12%**

of the world's electricity is generated from uranium.



## SECURE OUR ENERGY FUTURE

The U.S. is home to \$6.2 trillion worth of mineral resources, but mine permitting delays prevent the U.S. from leveraging the full potential of our mineral resources. If the U.S. wants to be a global innovator and meet government-projected energy demand by 2040, we must work to secure a reliable supply of domestic minerals, which are essential to a strong energy portfolio.

### SOURCES

<http://instituteeforenergyresearch.org/analysis/ieas-world-energy-outlook-2014/>

<http://www.eia.gov/beta/aeo/#/?id=1-AE02015>

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<http://www.world-nuclear.org/info/nuclear-fuel-cycle/introduction/what-is-uranium--how-does-it-work/>

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