

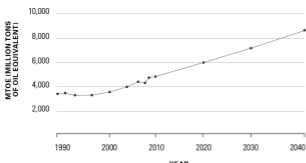
# MINERALS MAKE OUR ENERGY FUTURE

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

## GLOBAL ENERGY DEMAND

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

Projected increase in global energy demand by 2040



## 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

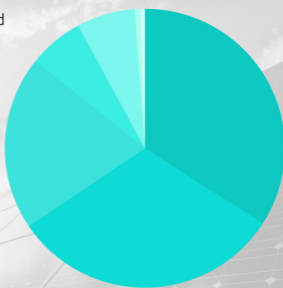
## A PROSPEROUS FUTURE REQUIRES ALL FORMS OF ENERGY

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 2015, THE U.S. WAS RELIANT ON THE FOLLOWING ENERGY SOURCES FOR ELECTRICITY**

- Coal – 34%
- Natural gas – 31%
- Nuclear – 20%
- Hydro – 6%
- Renewables – 6%
- Petroleum – 1%
- Other – 1%

*Energy Information Administration 2015 data are preliminary.*



## 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.

Copper

**Cu**

Molybdenum

**Mo**

Nickel

**Ni**

## CONVENTIONAL ENERGY

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

## RENEWABLES

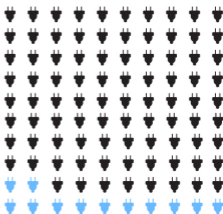
Renewable energy technologies, from wind turbines to solar panels, depend on an array of minerals. For example, a single wind turbine can contain 335 tons of steel, 4.7 tons of copper and three tons of aluminum, as well as zinc, molybdenum and silver.



## 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.

**Take action to unlock our mineral reserves and create an energy plan that will meet the demands of tomorrow!**

## SOURCES

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

<http://www.eia.gov/beta/aero/#/?id=1-AEO2015>

[http://www.eia.gov/forecasts/aero/pdf/0383\(2015\).pdf](http://www.eia.gov/forecasts/aero/pdf/0383(2015).pdf)

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

MINERALS  
MAKE  
LIFE