

# Wind Power Needs American Metals & Minerals



## A Single 3MW Wind Turbine Needs:

- ☑ 335 tons of steel
- ☑ 4.7 tons of copper
- ☑ 1,200 tons of concrete (cement and aggregates)
- ☑ 3 tons of aluminum
- ☑ 2 tons of rare earth elements
- ☑ Aluminum
- ☑ Zinc
- ☑ Molybdenum

***However, we are increasingly dependent on foreign nations for many strategic minerals ...***

Metals / Minerals Used in Clean Power Systems	% Net Import Reliance
Steel	8%
Concrete	12%
Copper	32%
Lithium	50%
Titanium	54%
Silver	60%
Zinc	73%
Cobalt	81%
Platinum	91%
Aluminum	100%
Rare earth elements	100%
<i>Nickel (new sources)</i>	100%



## Questions For Policymakers:

- Should we get rare earths from California or rely on China?
- Should we get silicon from Washington or rely on China, Russia and Venezuela?
- Should we get cobalt from Idaho or rely on the Congo, Tibet and Siberia.
- Should we get copper from Arizona and Utah or rely on Peru, Chile, and Mexico?
- Should we get zinc from Alaska and Washington or rely on Peru and Mexico?

**Mining: Indispensable to our way of life - Indispensable to our future**