

US Sources of Critical Minerals

DATA 608 | Glen Dale Davis

Key Facts

The US is very highly or completely dependent on imports for 70% of critical minerals

70%

China is the US's number one source of 48% of critical minerals

48%

12%

The US has no significant ally sources among suppliers for 12% of critical minerals

50%

50% of the US's critical mineral sources rank poorly or worse on corruption, gov't effectiveness, political stability, or regulatory quality

The US completely depends on imports for 12 critical minerals and **has no ally sources** among its top four suppliers of arsenic

	Complete Dependence			
ARSENIC	China	Morocco	Belgium	
CESIUM	Germany			
FLUORSPAR	Mexico	Vietnam	South Africa	Canada
GALLIUM	China	Germany	Japan	Ukraine
GRAPHITE	China	Mexico	Canada	Madagascar
INDIUM	South Korea	Canada	China	France
MANGANESE	Gabon	South Africa	Australia	Georgia
NIOBIUM	Brazil	Canada		
RUBIDIUM	Germany			
SCANDIUM	Europe	China	Japan	Philippines
TANTALUM	China	Germany	Australia	Indonesia
YTTRIUM	China	Germany	South Korea	Japan
	1	2	3	4

Ally
Competitor
Neutral

Throughout, 'Ally' includes members of the Minerals Security Partnership, while 'Competitor' includes China and the members of its Belt and Road Initiative. (South Korea is the only source that is a member of both, and it is classified here as 'Ally.') All other sources are labeled 'Neutral.'

The US depends very highly (75%+) on imports for 23 critical minerals and **has no ally sources** among its top four suppliers of antimony, barite, chromium, or tin

	Very High Dependence			
ANTIMONY	China	Belgium	India	
BARITE	China	India	Morocco	Mexico
BISMUTH	China	South Korea	Mexico	Belgium
CHROMIUM	South Africa	Kazakhstan	Russia	Mexico
COBALT	Norway	Canada	Finland	Japan
RARE EARTHS*	China	Estonia	Malaysia	Japan
TELLURIUM	Canada	Germany	China	Philippines
TIN	Peru	Indonesia	Bolivia	Malaysia
TITANIUM (SPONGE)	Japan	Kazakhstan	Ukraine	
ZINC	Canada	Mexico	Peru	Spain
	1	2	3	4

	Ally
	Competitor
	Neutral

RARE EARTHS* includes aggregated import data for 14 critical minerals.

The US is highly dependent (50%+) on imports for seven critical minerals, none of which are exclusively available from competitors or neutral parties

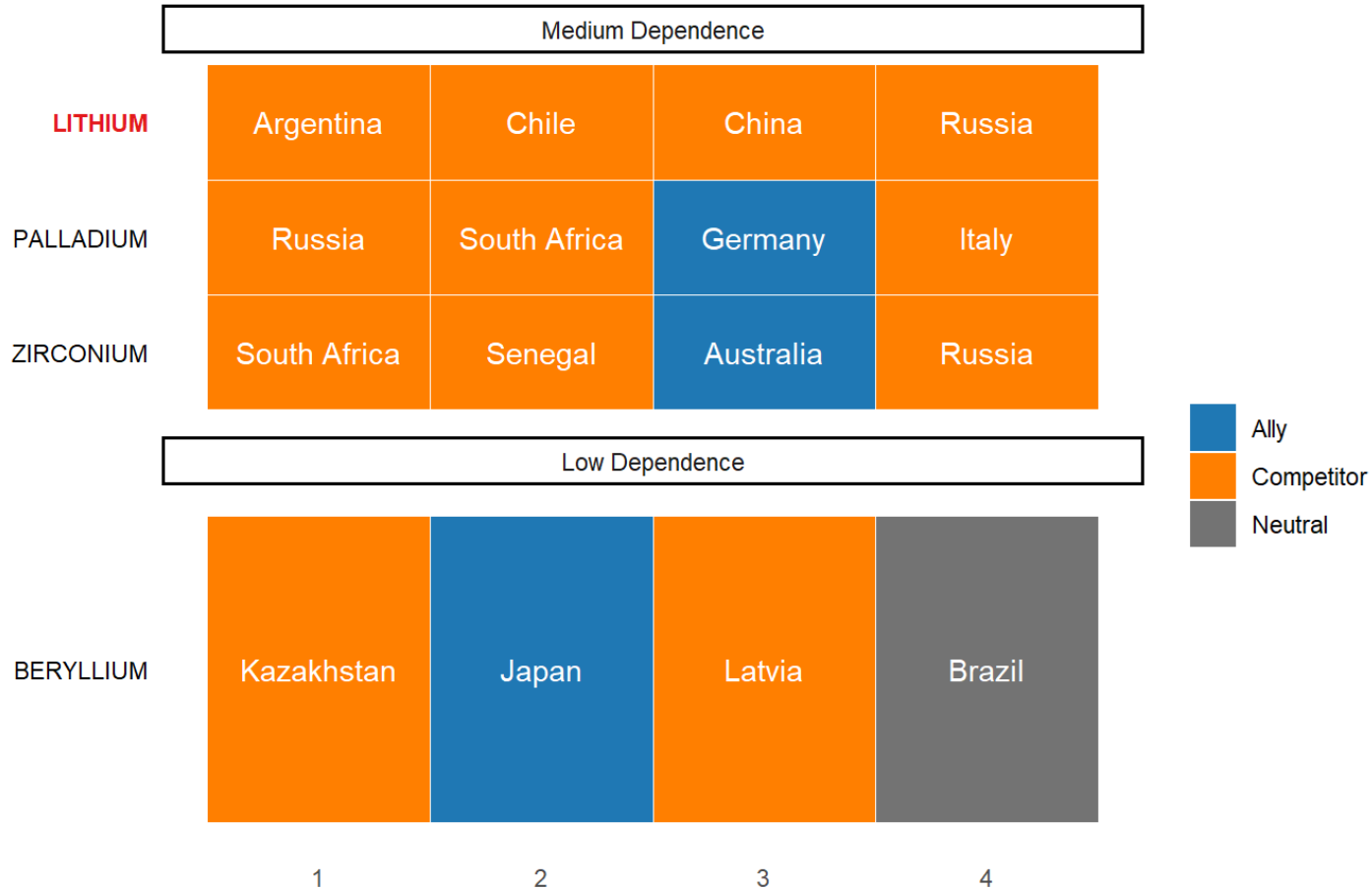
	High Dependence			
ALUMINUM (METAL)	Canada	UAE	Russia	China
GERMANIUM	China	Belgium	Germany	Russia
MAGNESIUM (METAL)	Canada	Israel	Mexico	
NICKEL	Canada	Norway	Australia	Finland
PLATINUM	South Africa	Germany	Switzerland	Italy
TUNGSTEN	China	Bolivia	Germany	Canada
VANADIUM	Canada	China	Brazil	South Africa
	1	2	3	4

Ally

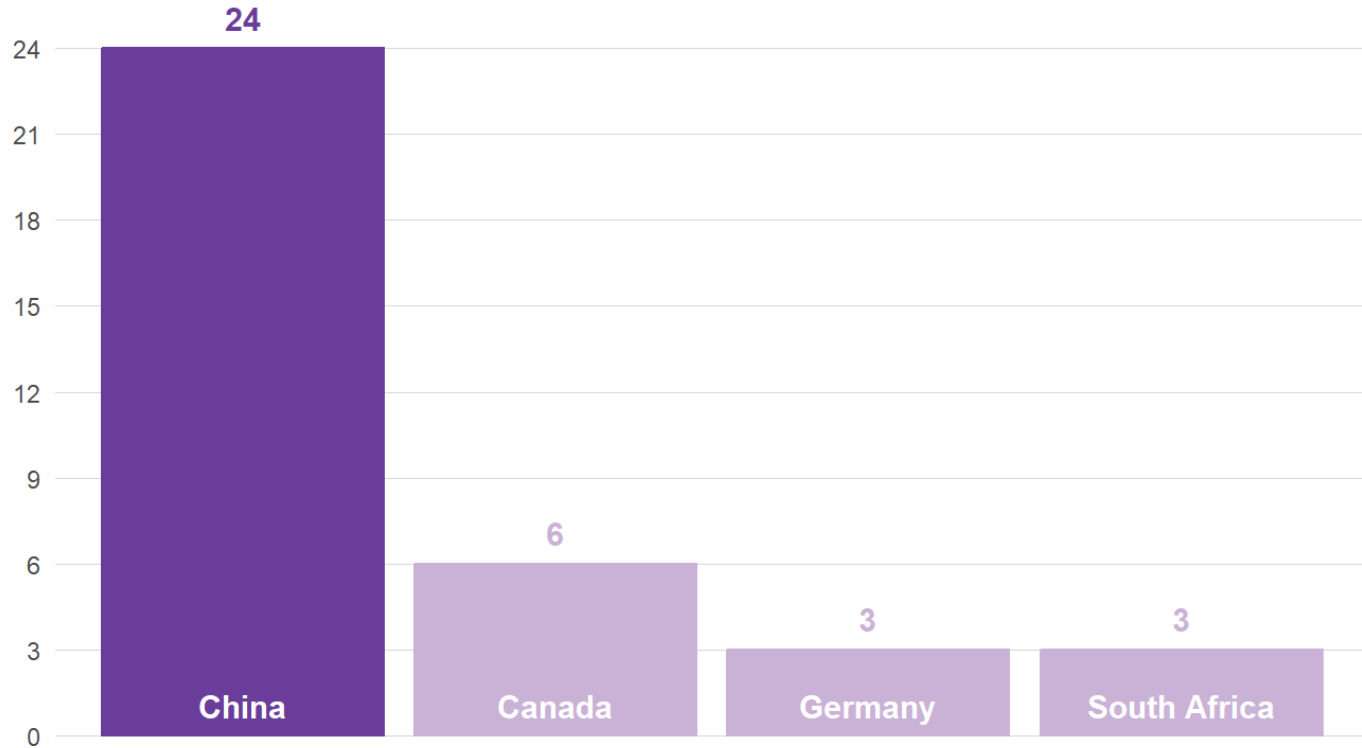
Competitor

Neutral

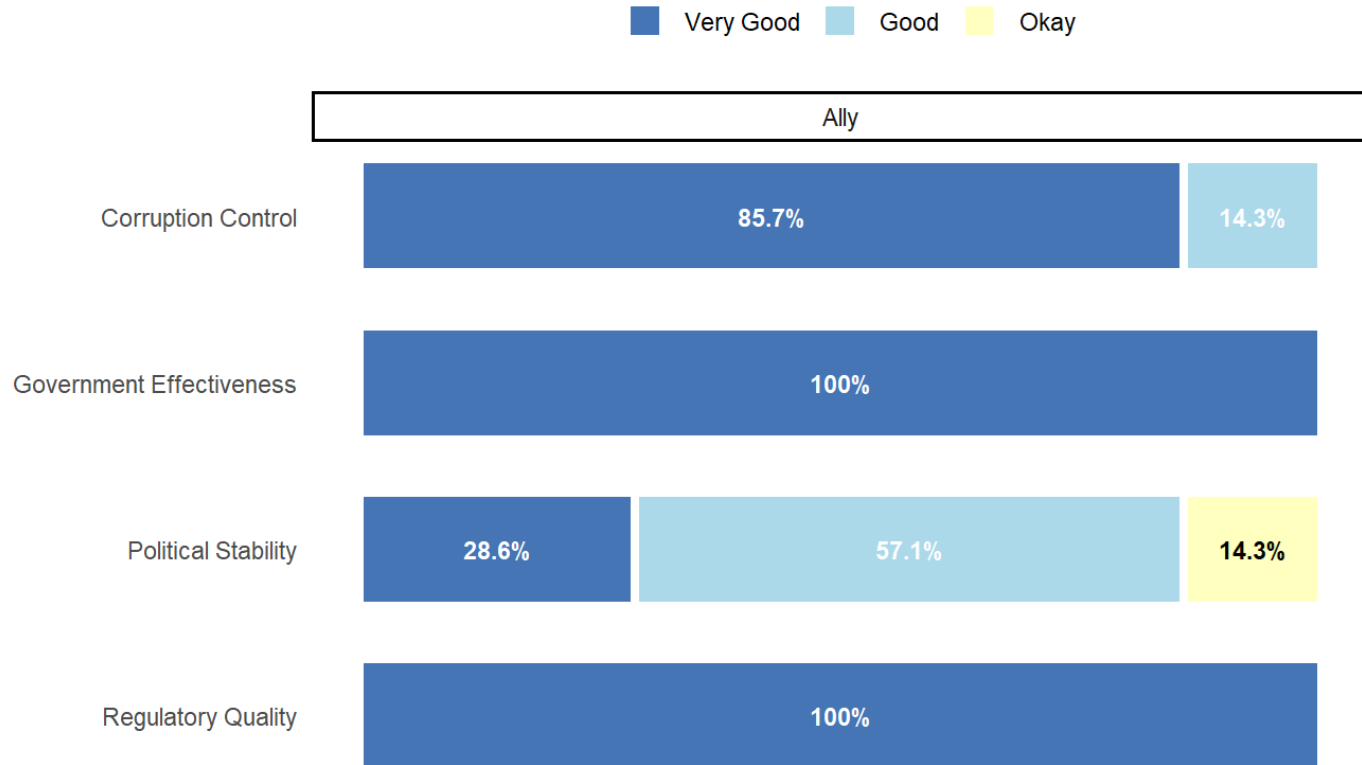
The US is low (<25%) to medium (<50%) dependent on imports for four critical minerals and **has no ally sources** among its top four suppliers of lithium



Only three countries other than China are number one US sources of more than one critical mineral, and their numbers are dwarfed in comparison

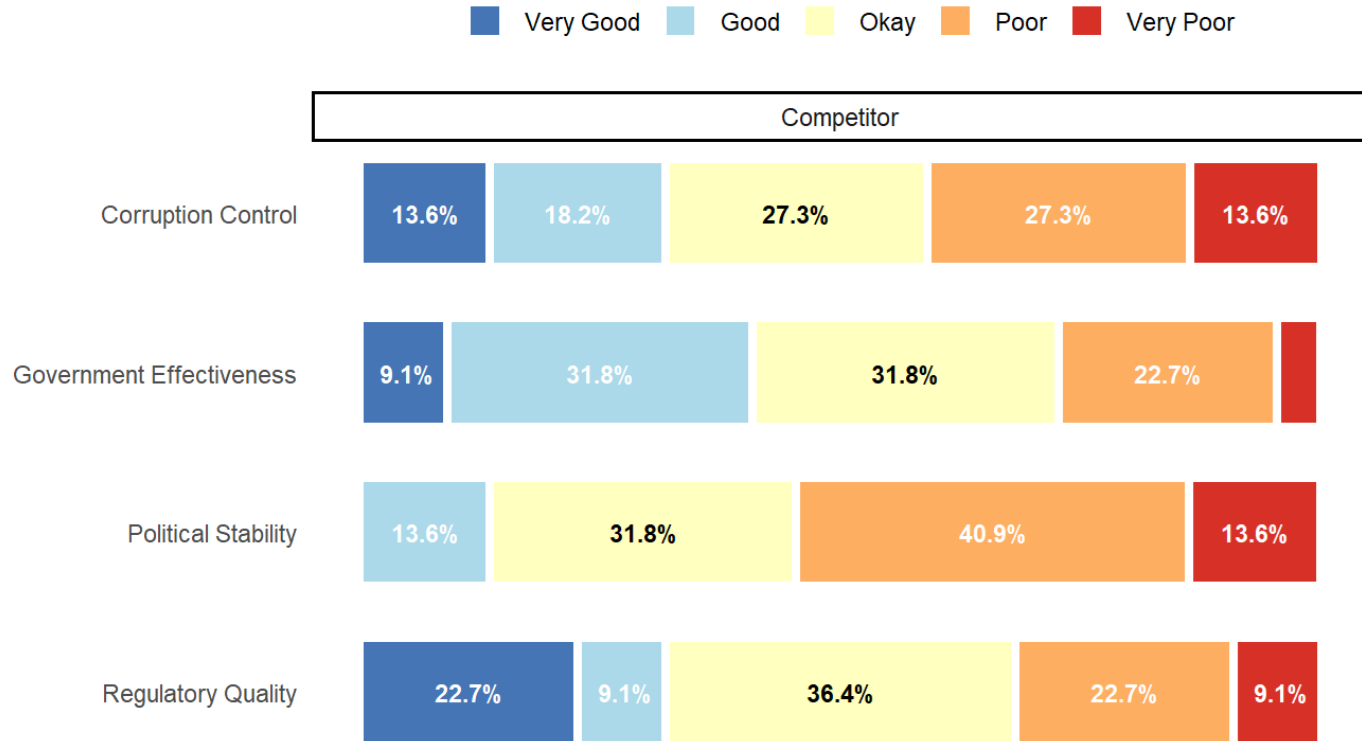


Ally sources of critical minerals score relatively well on the World Bank's governance indicators



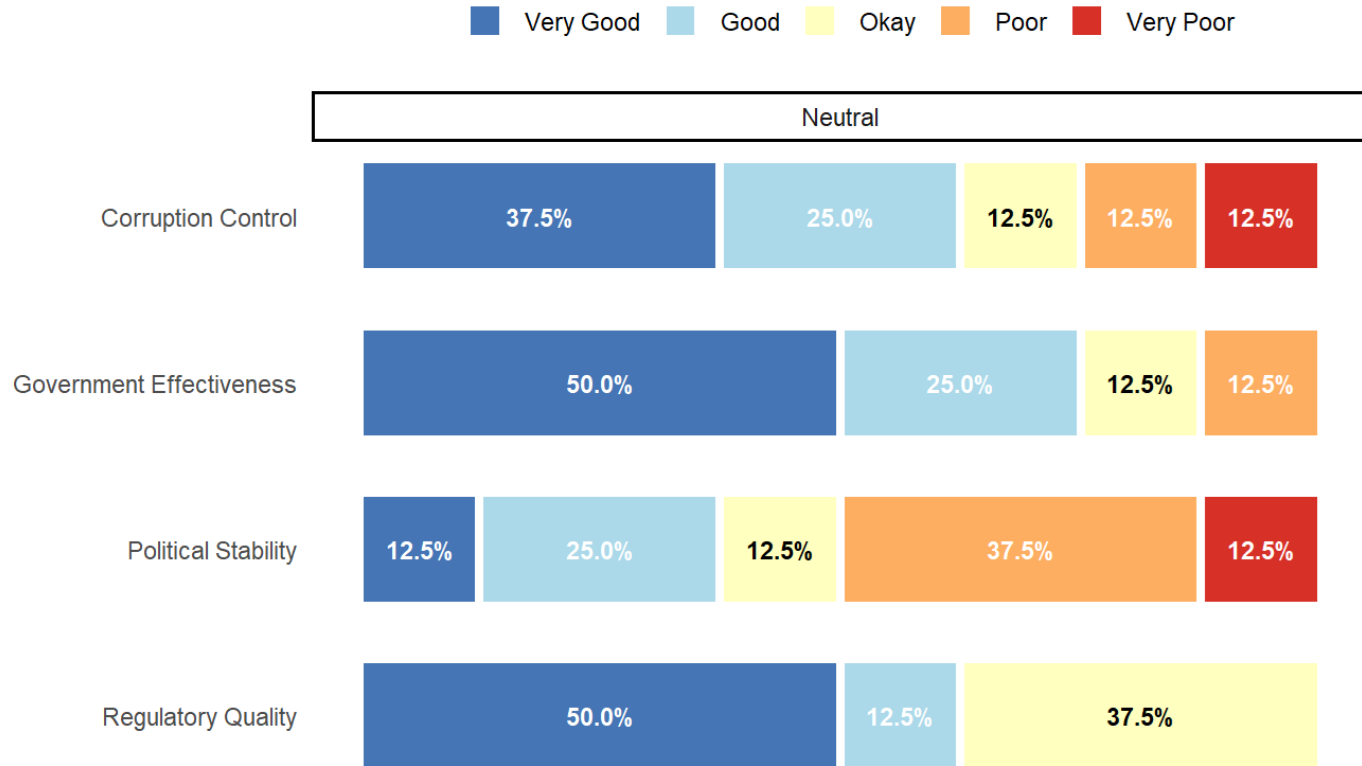
Ally sources include: Australia, Canada, Europe, Finland, France, Germany, Japan, South Korea

In contrast, many competitor sources of critical minerals score relatively poorly on the World Bank's governance indicators



Competitor sources include: Argentina, Bolivia, Chile, China, Estonia, Gabon, Georgia, Indonesia, Italy, Kazakhstan, Latvia, Madagascar, Malaysia, Morocco, Peru, Philippines, Russia, Senegal, South Africa, UAE, Ukraine, Vietnam

While neutral sources have more mixed scores on the World Bank's governance indicators



Neutral sources include: Belgium, Brazil, India, Israel, Mexico, Norway, Spain, Switzerland

Low-Carbon Technologies Rely on Critical Minerals the US Is Very Highly or Completely Dependent on Importing, Endangering a Clean Energy Transition

