

ENERGY & ENVIRONMENT



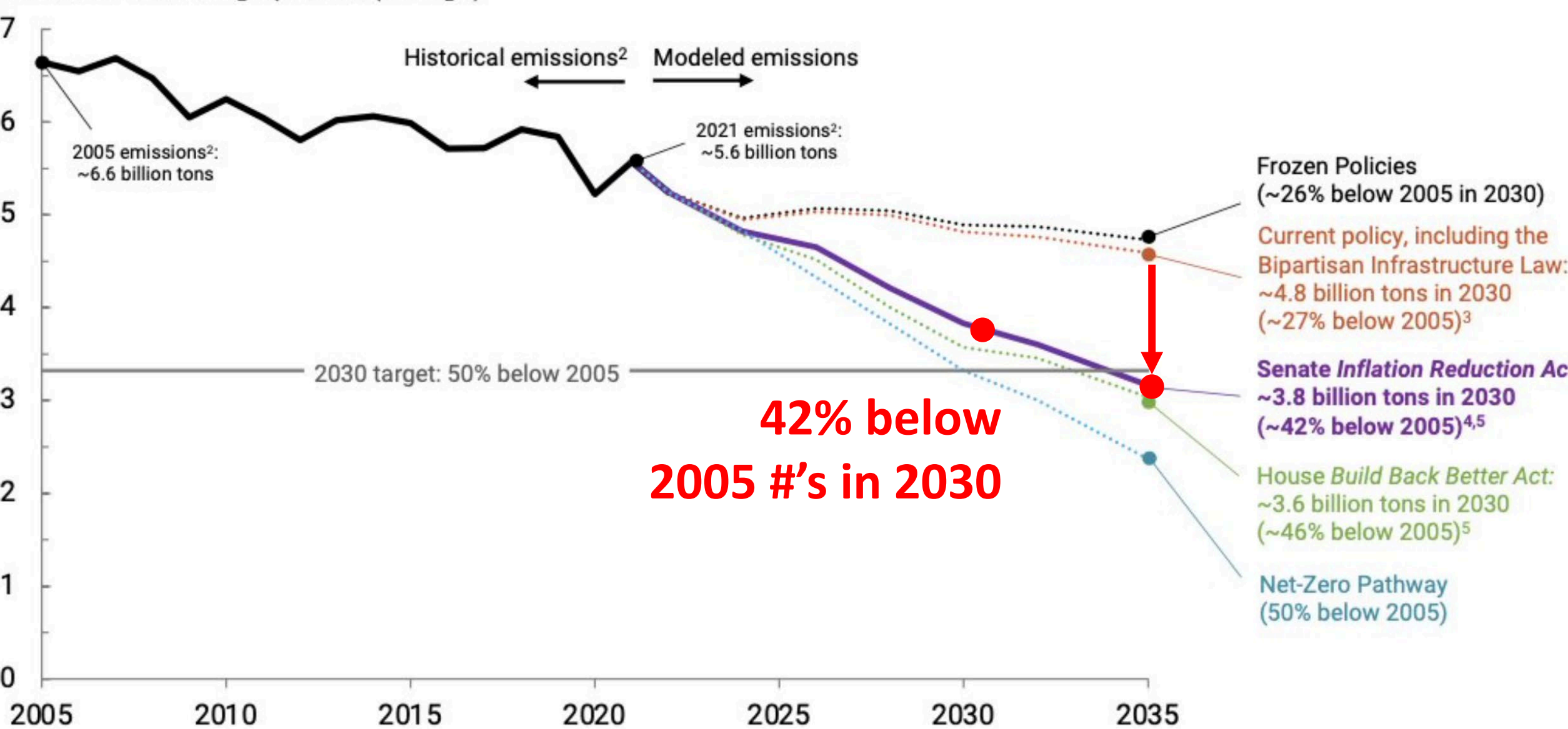
Department of Energy Tribal Clean Energy Summit

October 5, 2022

Greg Gershuny – Executive Director

Historical and Modeled Net U.S. Greenhouse Gas Emissions (Including Land Carbon Sinks)

billion metric tons CO₂-equivalent (Gt CO₂-e)¹

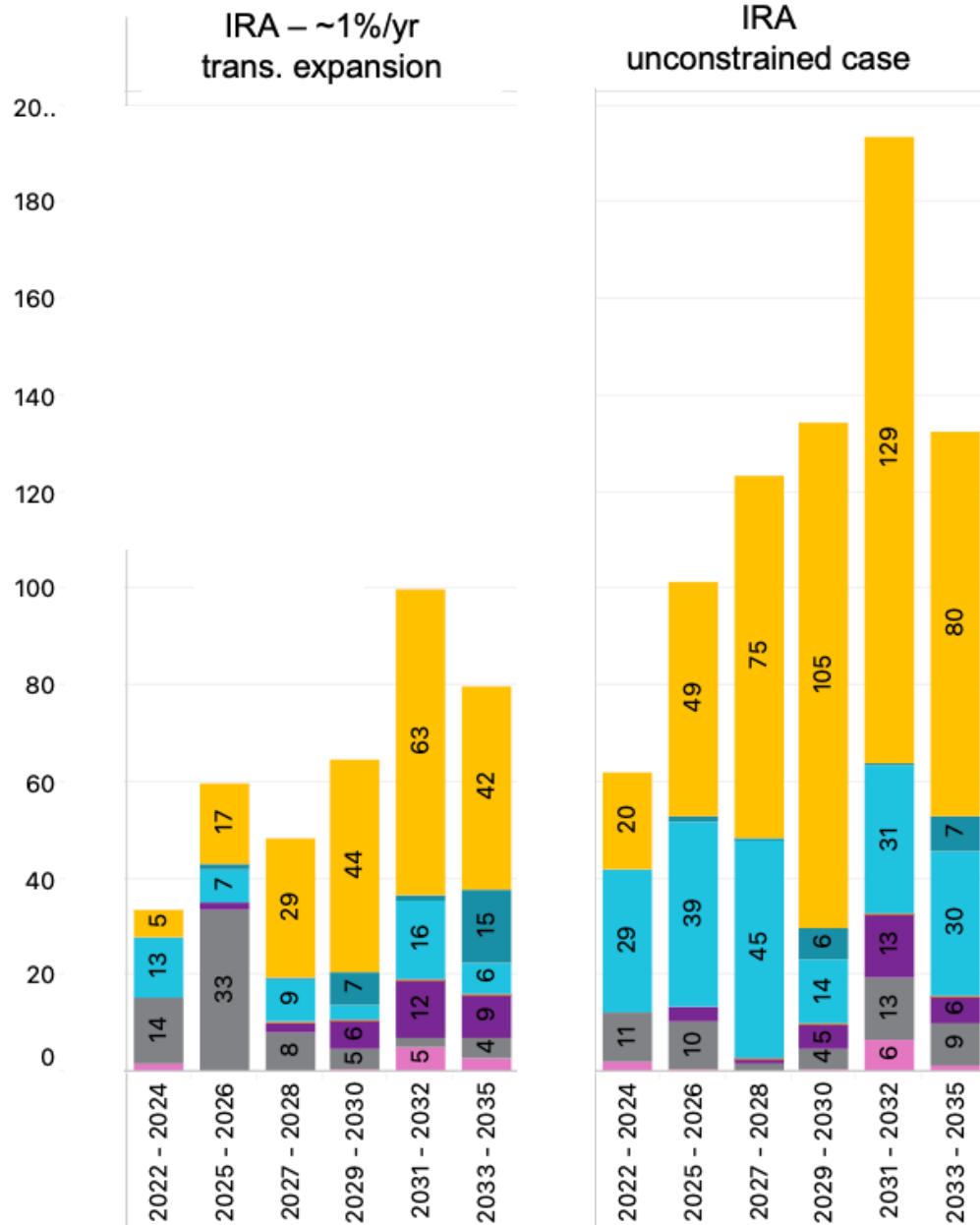


**42% below
2005 #'s in 2030**

Jenkins, J.D., Farbes, J., Jones, R., Patankar, N., Schivley, G., "Electricity Transmission is Key to Unlock the Full Potential of the Inflation Reduction Act," REPEAT Project, Princeton, NJ, September 2022. DOI: [10.5281/zenodo.7106176](https://doi.org/10.5281/zenodo.7106176)



Annual Average Capacity Additions gigawatts



GW installed 2023-2035	Solar	On-shore Wind	Off-shore Wind	Natural Gas
1% / year Transmission expansion	201	54	24	65
IRA unconstrained case	158	188	15	48

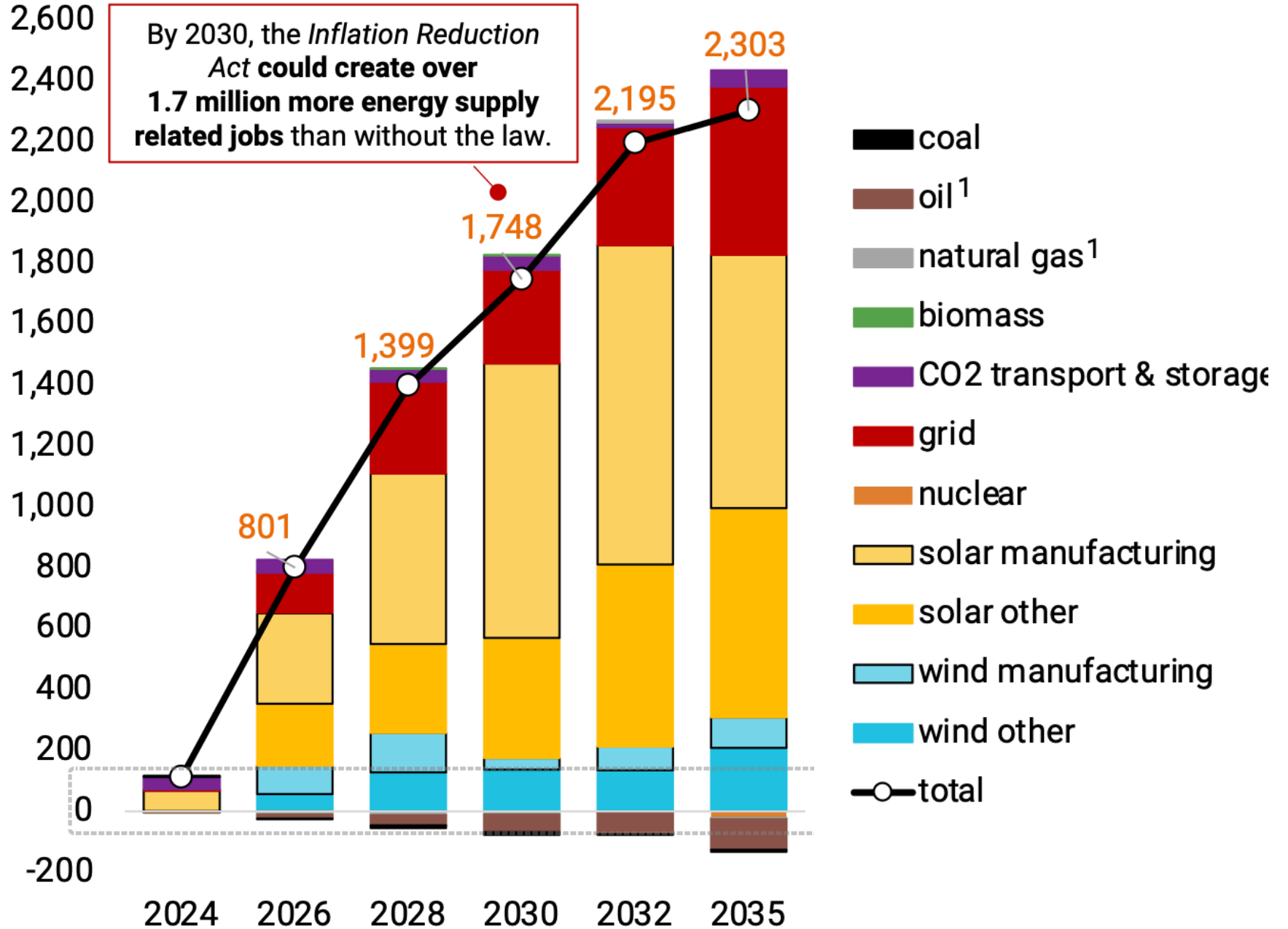
Jenkins, J.D., Farbes, J., Jones, R., Patankar, N., Schivley, G., "Electricity Transmission is Key to Unlock the Full Potential of the Inflation Reduction Act," REPEAT Project, Princeton, NJ, September 2022. DOI: 10.5281/zenodo.7106176

Change in Energy Supply-Related Employment vs No IRA Case (Bipartisan Infrastructure Law only)

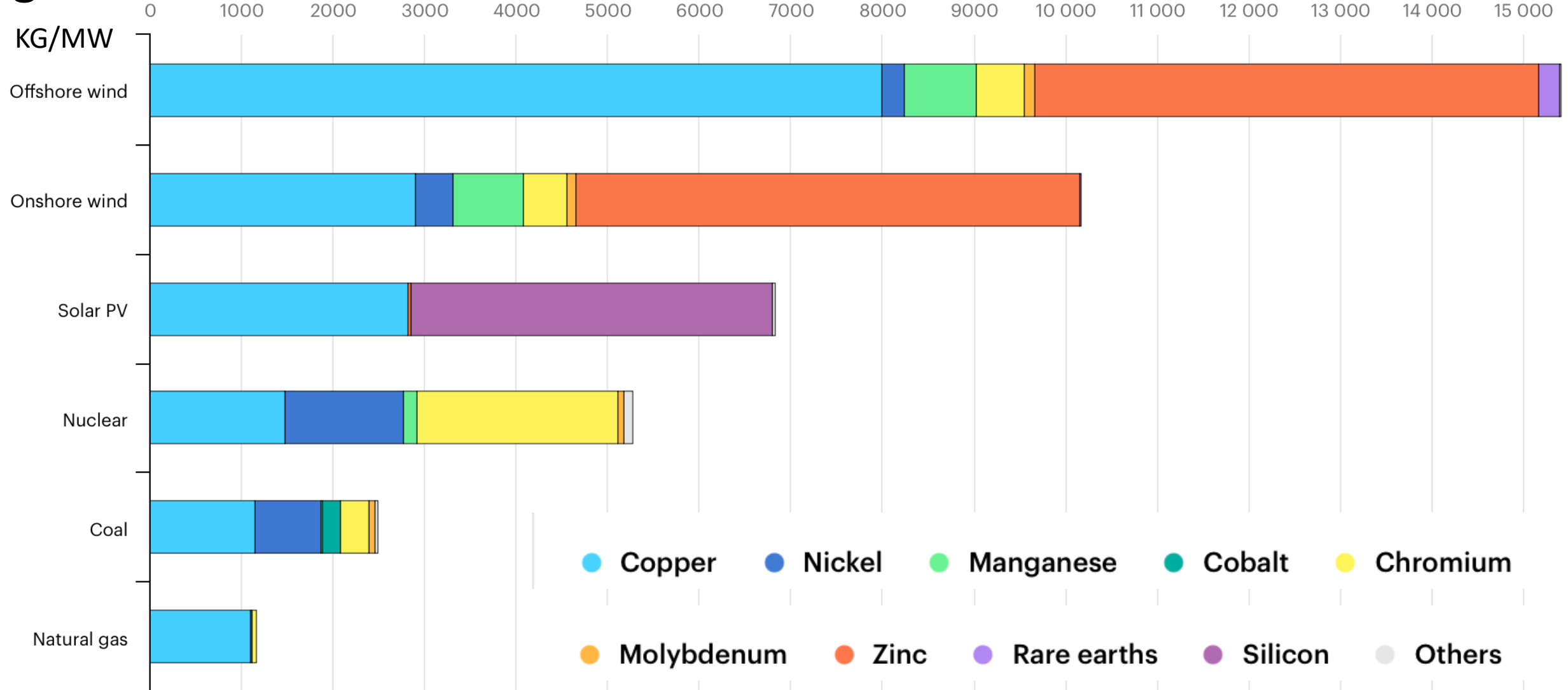
thousand jobs

**More than 2m
ADDITIONAL
jobs by 2035**

Mostly in Grid,
Solar, and Wind



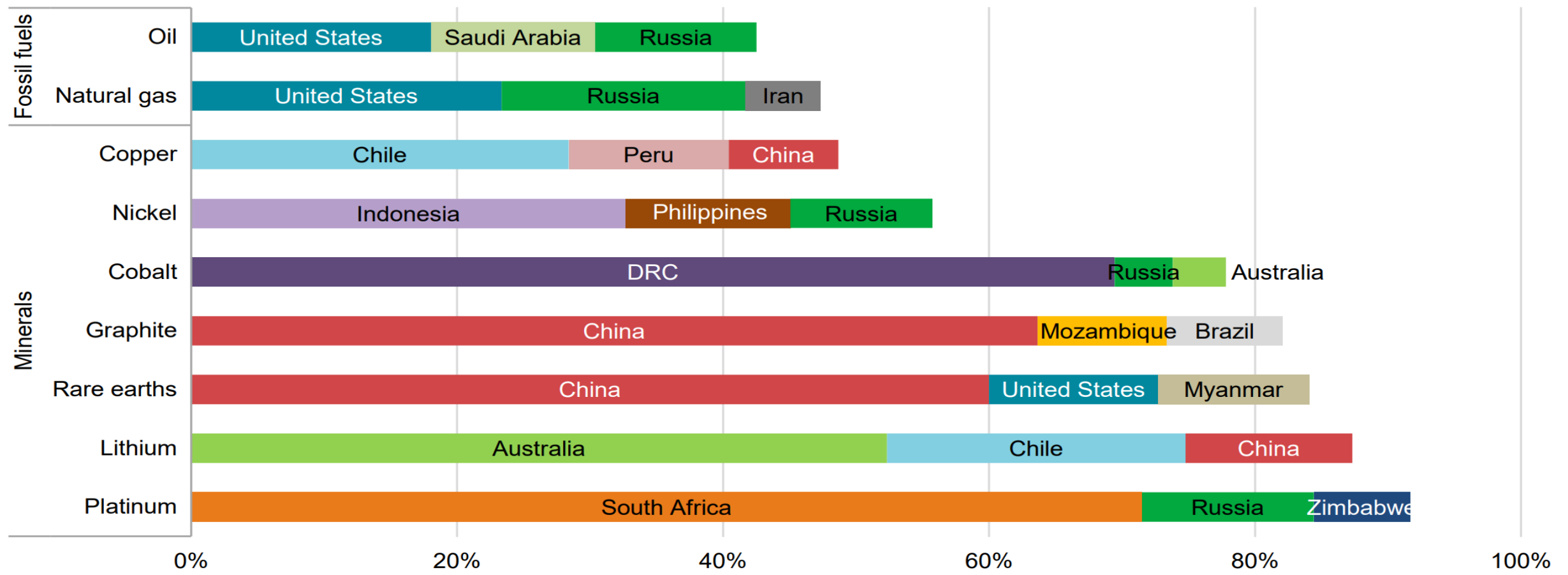
Minerals used in clean energy technologies compared to other power generation sources



Where are the key critical minerals found?

Current production of many energy transition minerals is more geographically concentrated than that of oil or natural gas

Share of top three producing countries in total production for selected minerals and fossil fuels, 2019



Sources: IEA (2020b); USGS (2021).

ENERGY & ENVIRONMENT



Department of Energy Tribal Clean Energy Summit

October 5, 2022

Greg Gershuny – Executive Director