The University of Texas at Austin
Energy Institute

Supplying the minerals for a low-carbon energy future

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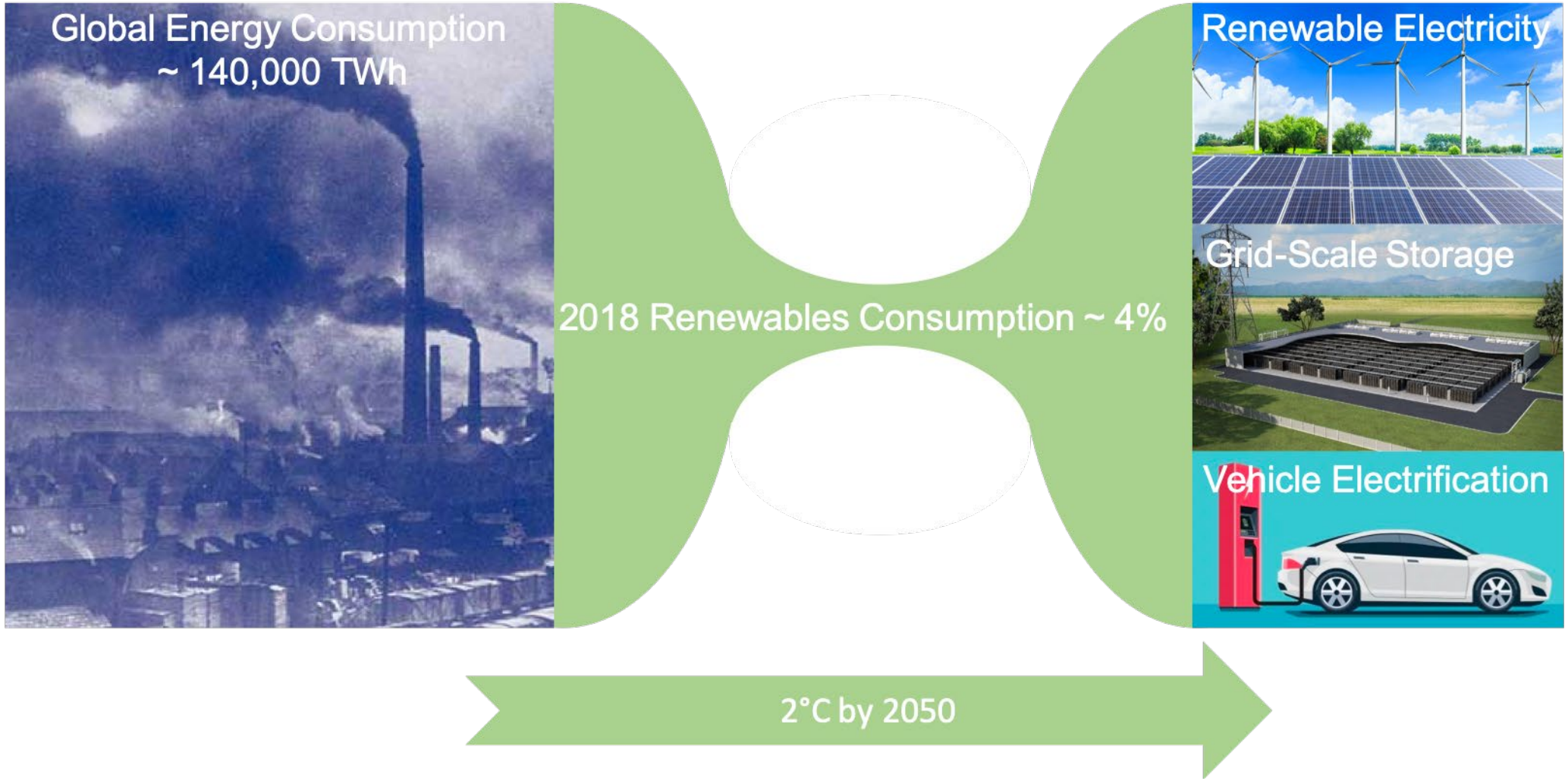
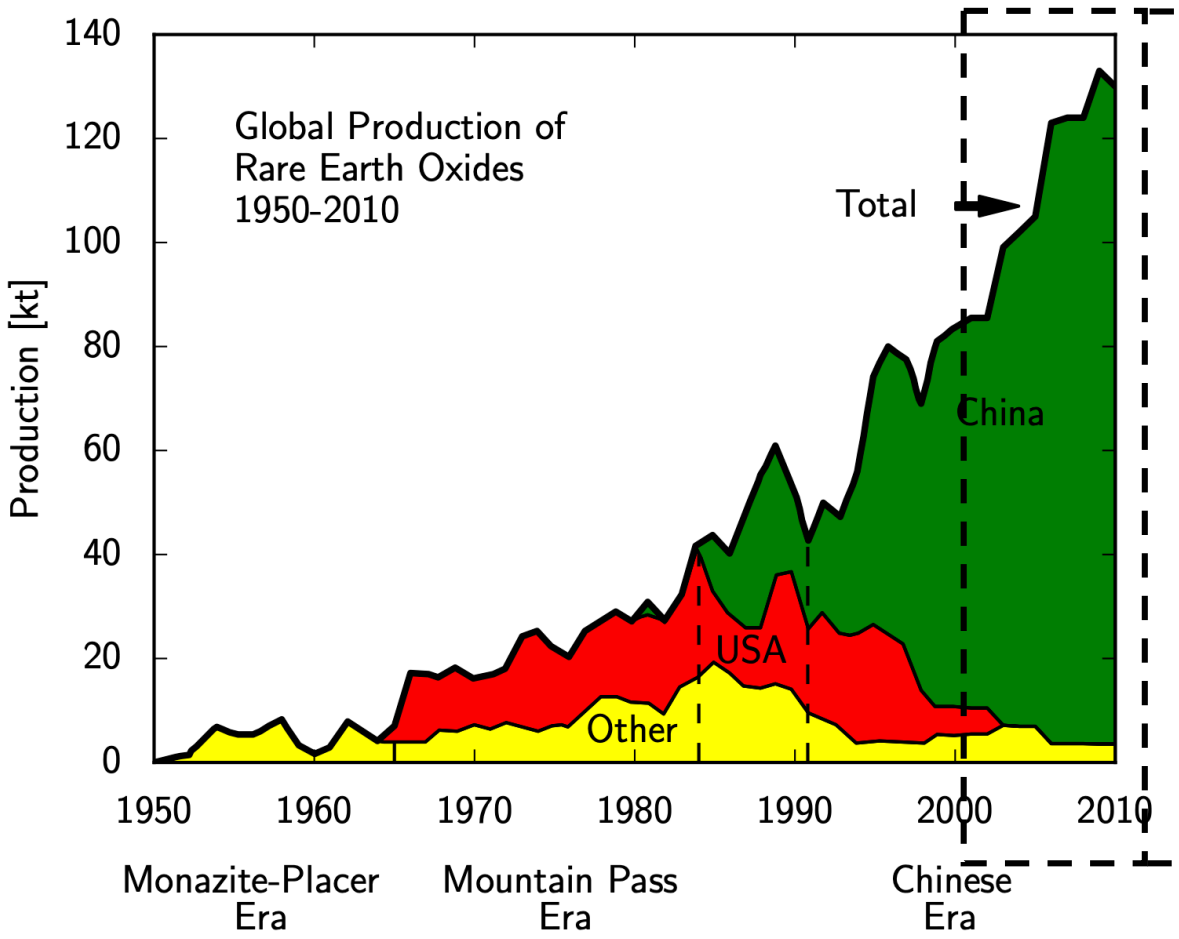
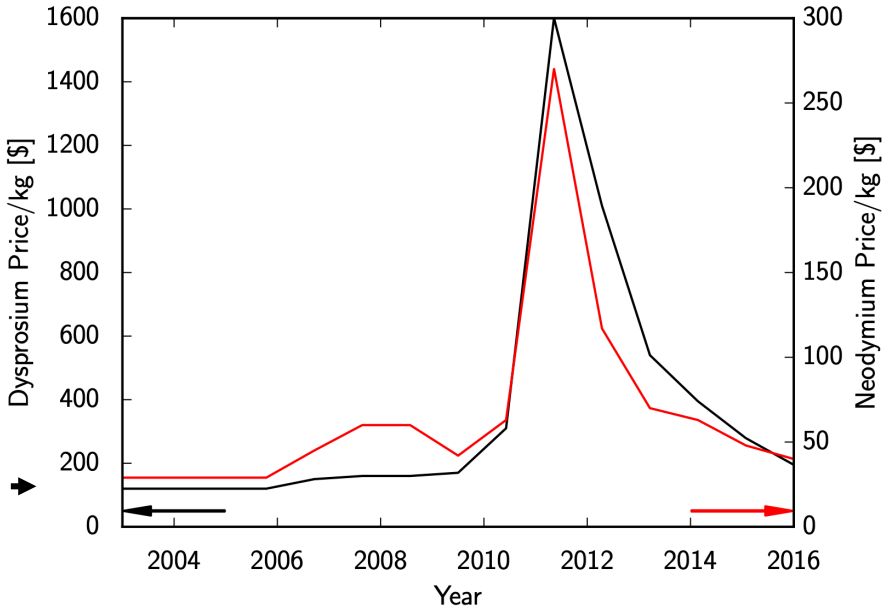
Fueling a sustainable energy transition

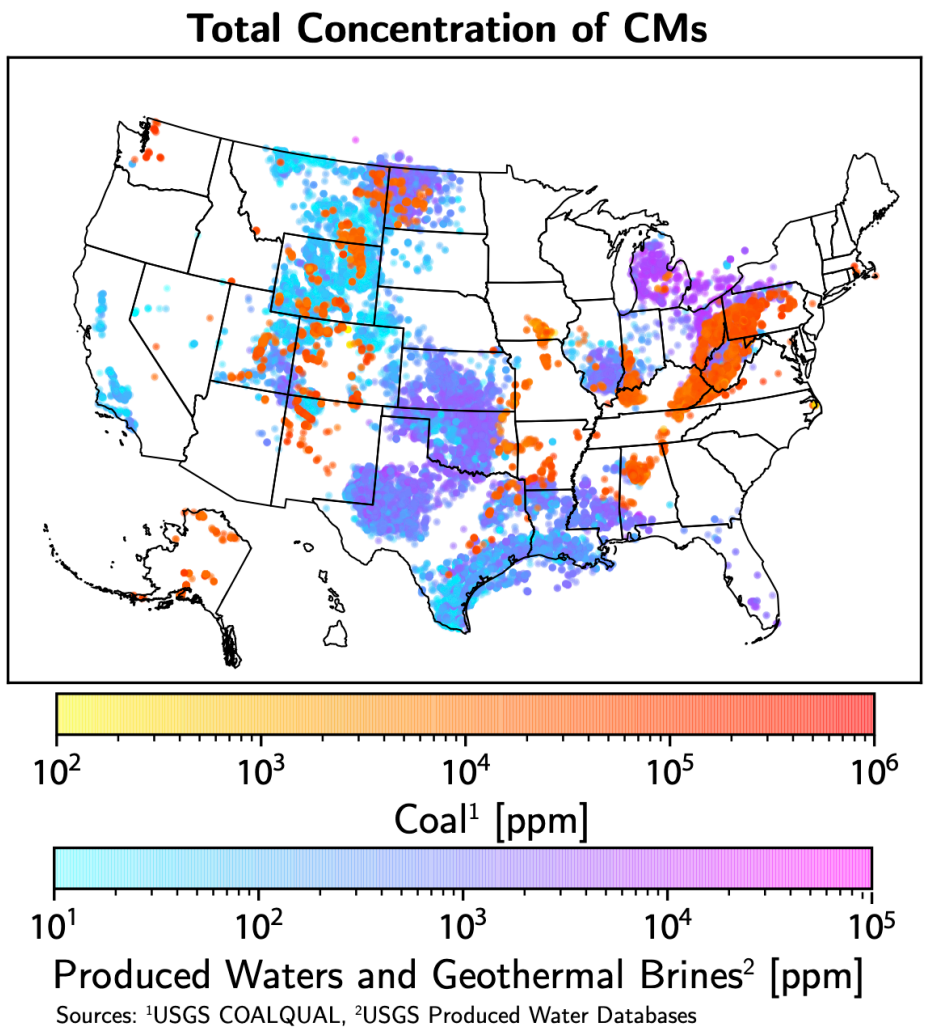


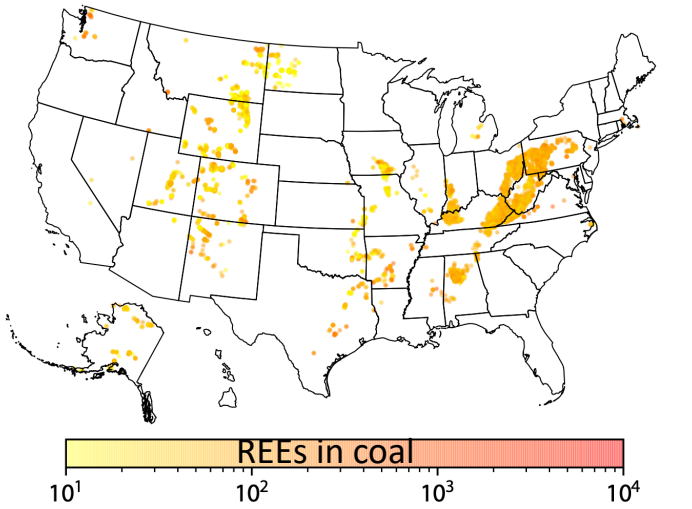
Global production of REEs

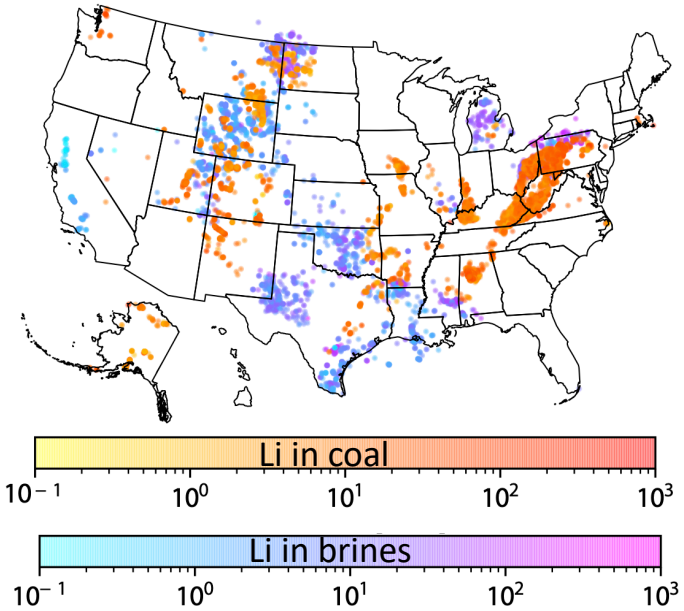




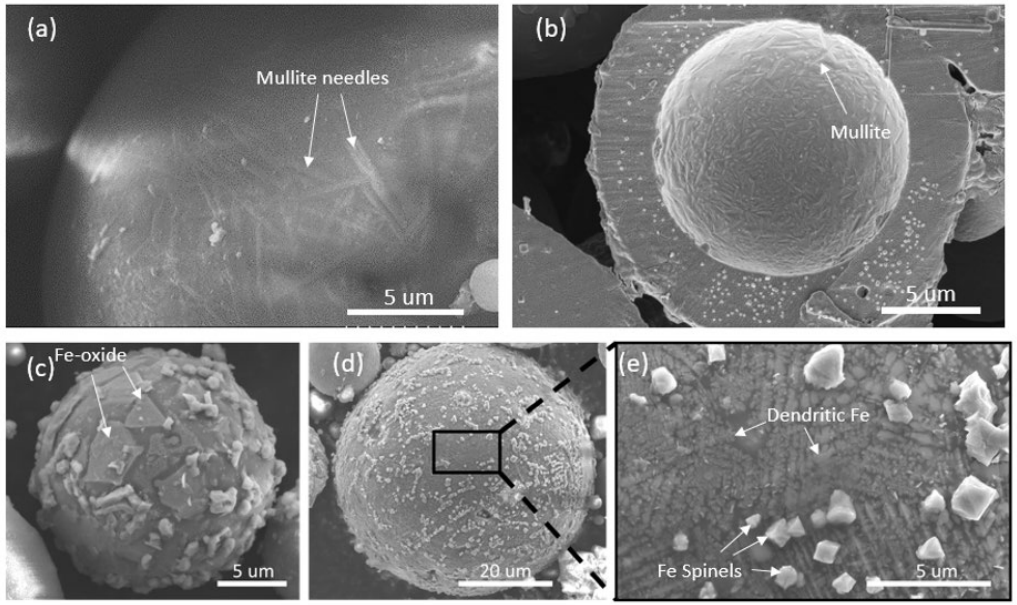
Unconventional resources for critical minerals







Resource characterization



Basin	Al_2O_3	CaO	Fe_2O_3	K_2O	MgO	NaO	SiO_2	TiO_2
Illinois	20.6%	2.9%	22.1%	2.5%	1.0%	0.6%	49.4%	0.9%
Green River	17.1%	28.2%	5.8%	0.4%	6.7%	1.8%	38.0%	1.2%
Powder River	17.5%	6.0%	4.3%	1.2%	2.4%	1.6%	65.6%	0.9%