

# Carbon Management Opportunities for MO

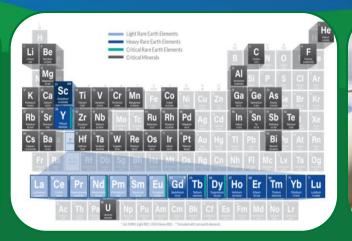
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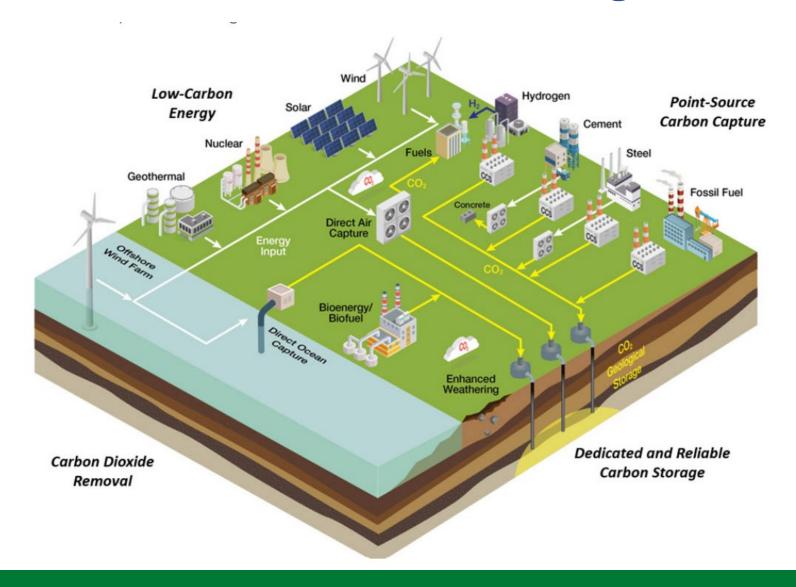
#### Carbon management is a broad set of climate technologies

Carbon management is **both**:

(1) Point source capture (for existing power and industrial emission sources)

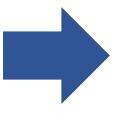
#### and

(2) Carbon removal (directly from the atmosphere)



## Carbon management is critical for Us climate goals

#### **Net-zero:**



- 1. fast,
- 2. cost-efficiently, and
- 3. equitably

#### Legacy emissions:

Minimize temperature overshoot scale + duration

### US now has world-leading policy framework for carbon management

#### **Incentives:**

- 45Q tax credit (\$85/t for pointsource, \$180/t for DAC)
- Bipartisan Infrastructure Law provides >\$12B for pilots and demonstrations

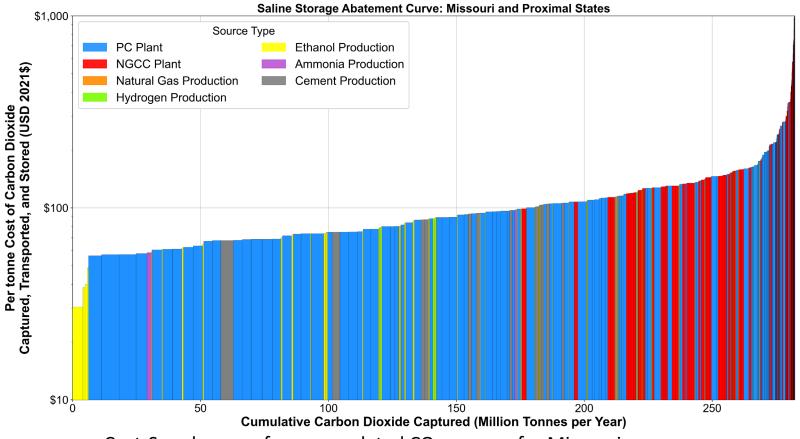
#### Regulation:

- Environmental Protection Agency regulations for CO2 storage on private land (Underground Injection Control "Class VI")
- Department of Interior for CO2 storage on federal land
- Department of Transportation for CO2 pipeline safety

#### Financing:

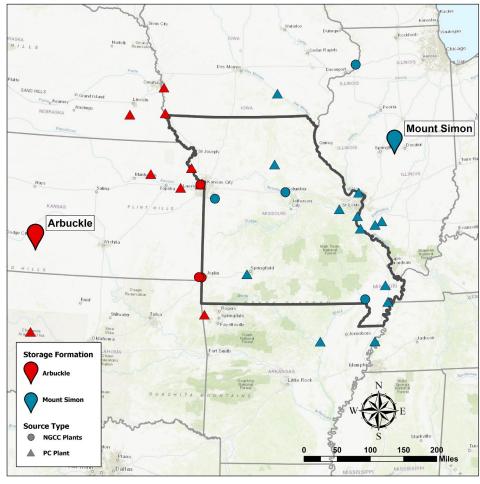
 Loan Program Office authority for >\$100B in loan guarantees (DOE and Department of Agriculture)

## Opportunities for carbon capture in MO



Cost-Supply curve for accumulated CO<sub>2</sub> sources for Missouri and near-by states evaluated

# **Opportunities for carbon capture in MO**



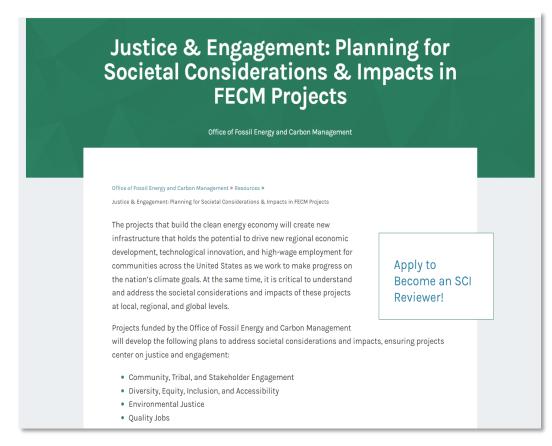
Locations and optimal CO<sub>2</sub> storage formations for power generation CO<sub>2</sub> sources with potential service to Missouri

## Responsible Carbon Management

DOE carbon management projects now require significant societal considerations and impacts. Project applications require new plans for:

- Community and stakeholder engagement
- Diversity, equity, inclusion, and accessibility
- Justice40 Initiative
- Quality jobs

FECM's website provides guidance for applicants to develop these plans



https://www.energy.gov/fecm/justice-engagement-planning-societal-considerations-impacts-fecm-projects