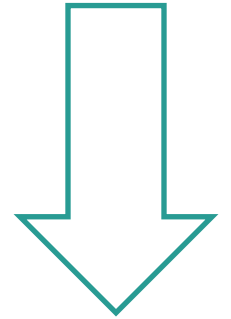


CA Leadership on Building a New Carbon Economy



May 14th, 2018

Noah Deich

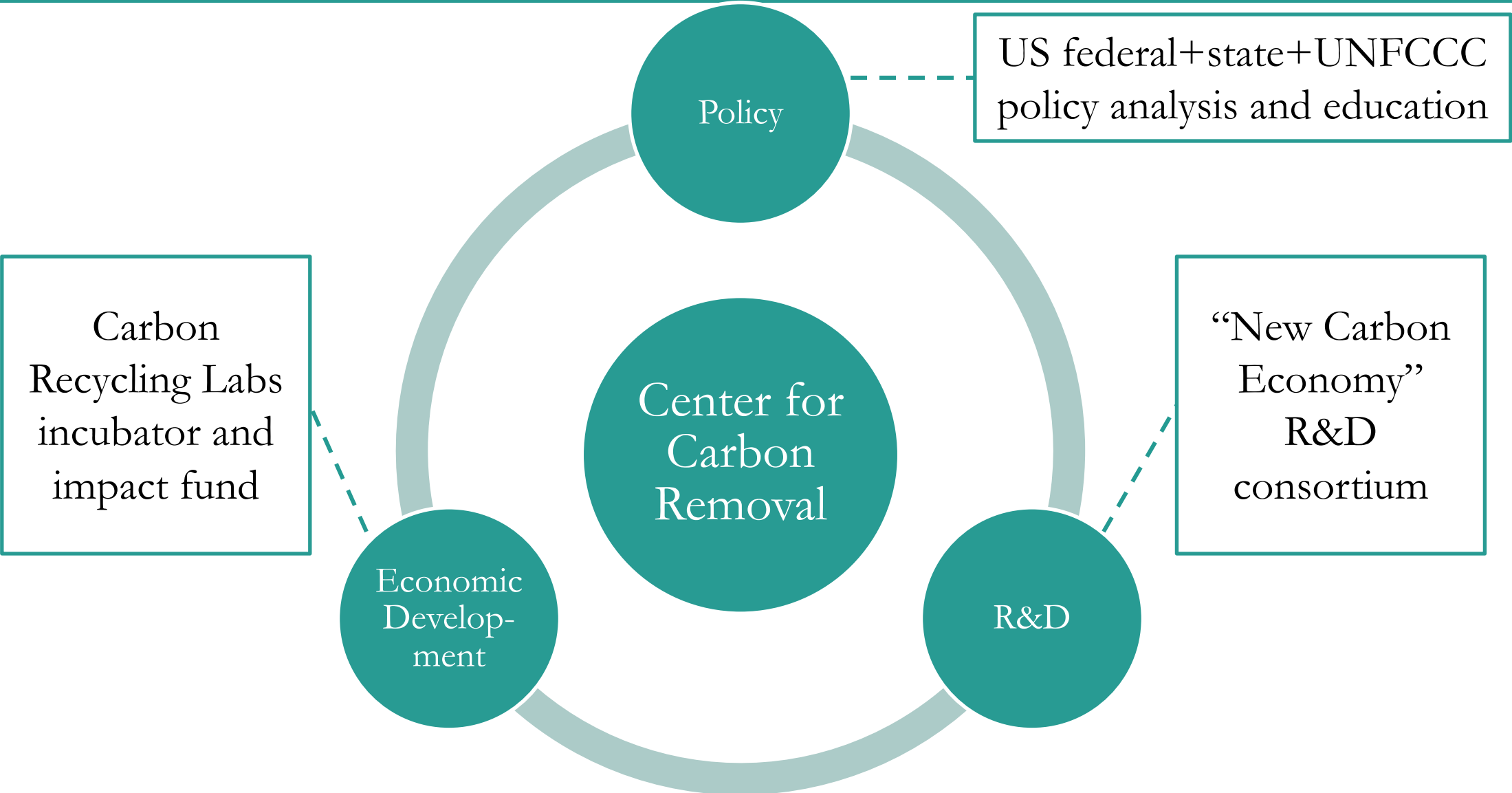
Executive Director

www.centerforcarbonremoval.org

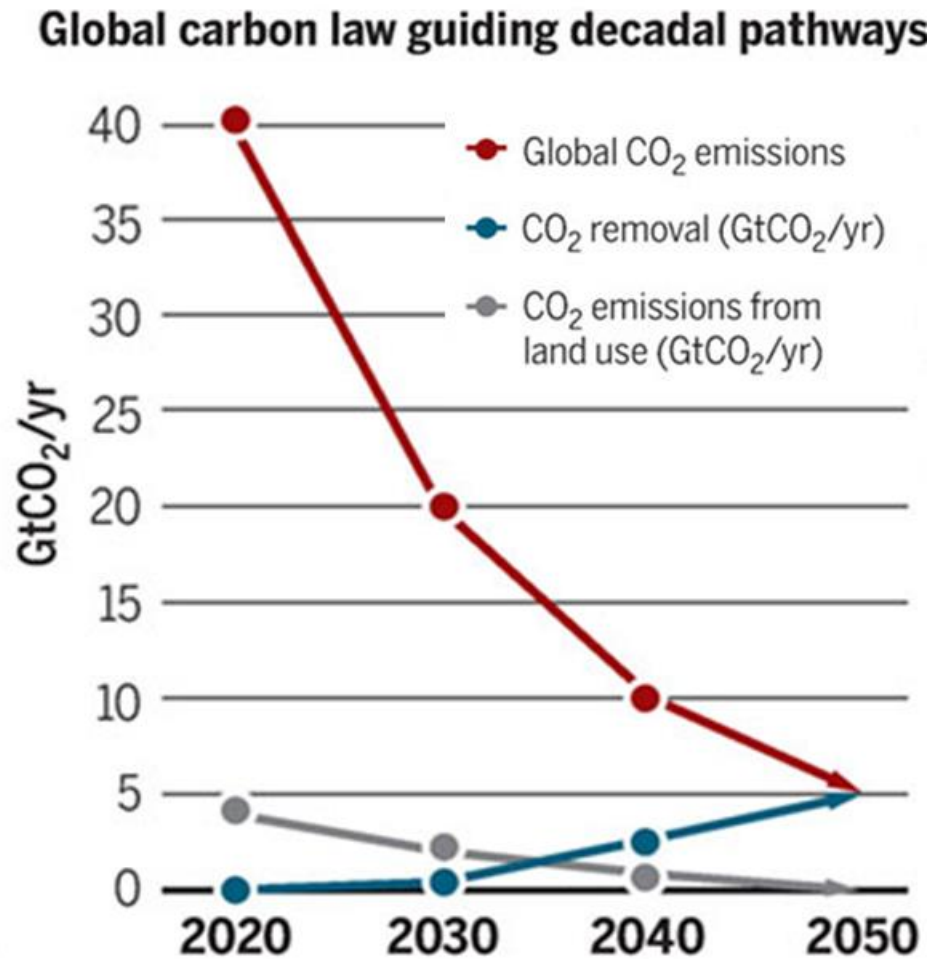
[@CarbonRemoval](https://twitter.com/CarbonRemoval)

Leading on climate means setting a plan and policies to achieve a growing economy that **sequesters more carbon than it emits** by midcentury.

Center for Carbon Removal: NGO on a mission to build a growing, prosperous economy that sequesters more carbon than it emits.



3 steps for building a new carbon economy



1. Deeply decarbonize

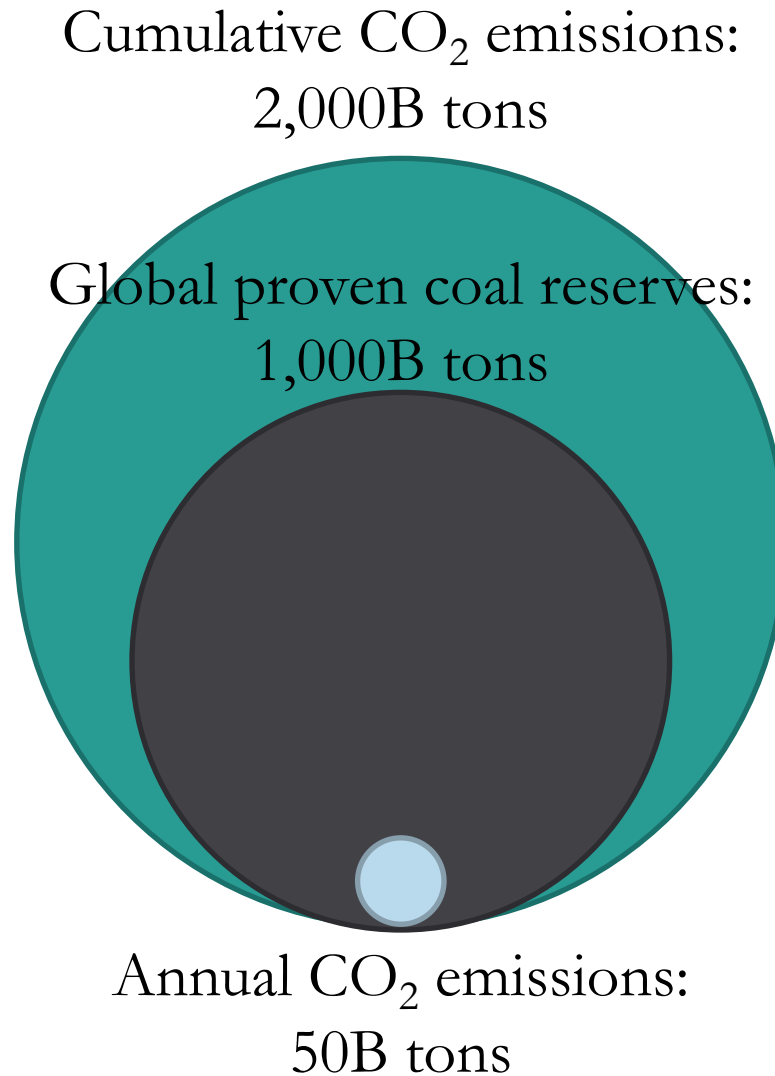
2. Eliminate land use emissions

3. Scale carbon removal

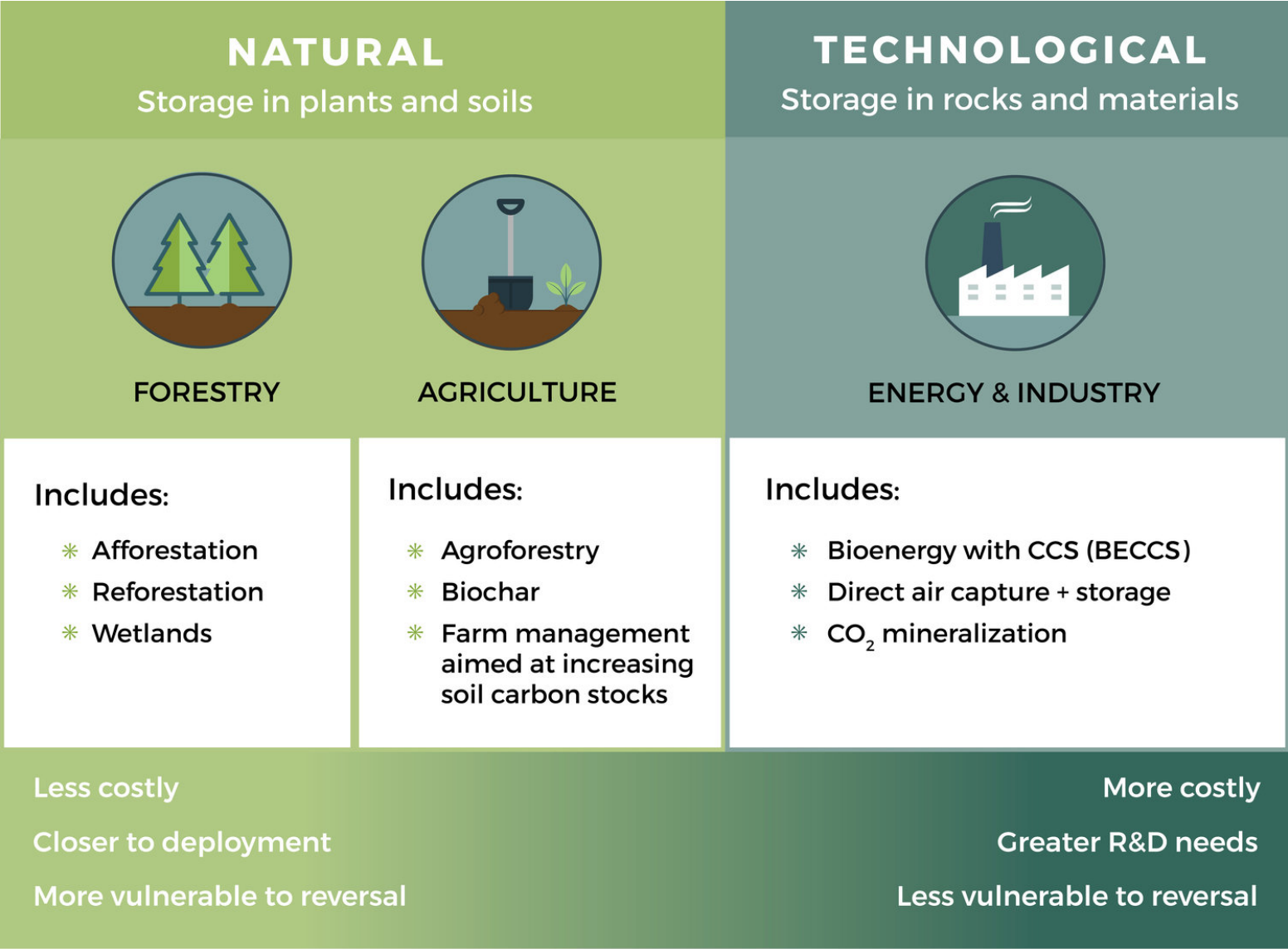
...ASAP

Source: Rockstrom et. al in Science

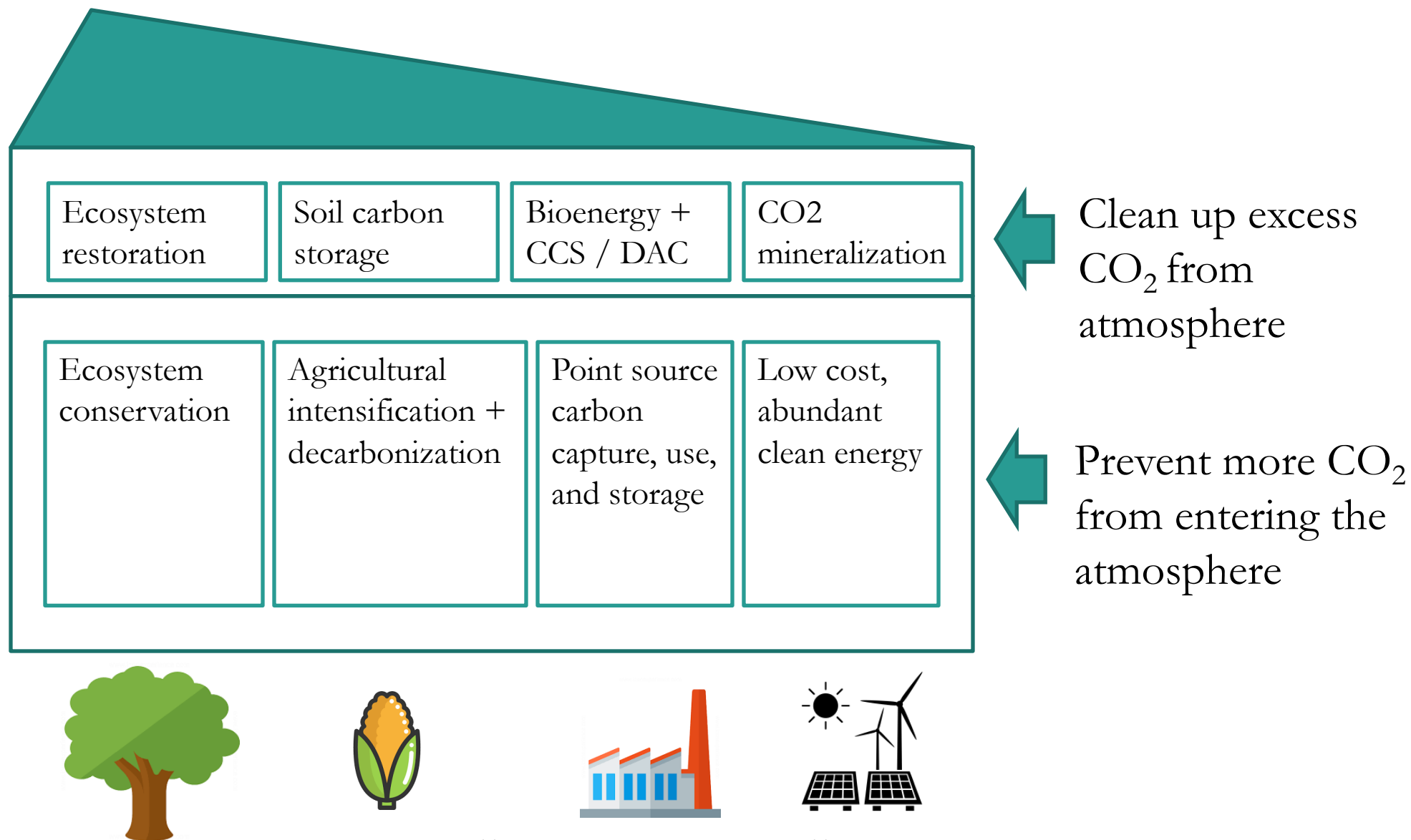
Cumulative CO₂ emissions in context



Carbon removal solution overview



Carbon removal solutions in context



Technological approaches – Direct Air Capture



Bioenergy + CCS



Source: NETL

Center for Carbon Removal // www.centerforcarbonremoval.org // @CarbonRemoval

Technological approaches – CO₂ Mineralization



Source:
NYTimes

Policy overview: patchwork of policies exists today, but needs major expansion to achieve goals

International	US Federal	US state
<ul style="list-style-type: none">• Paris Agreement: pledges fall short of “well below” 2C• UK: ~\$10M R&D program for “GGR”• EU: Considering ~\$10M R&D program in 2020 timeframe	<ul style="list-style-type: none">• 45Q tax credits for carbon capture, use, and storage (\$35-50/t CO₂ sequestered)• Introduced Senate “USE IT” Act + House FE Authorization bills• USDA soil health and forest restoration programs	<ul style="list-style-type: none">• CA Low Carbon Fuel Standard (~\$150/t CO₂) conducting CCS rulemaking• “Healthy Soils” programs and natural and working lands baselines

Business overview: corporates just beginning to incorporate a new carbon economy into their future

“Carbon tech”	Regenerative Ag	Sustainable wood products
<ul style="list-style-type: none">Transforming waste carbon into value in building materials, fuels, consumer goods	<ul style="list-style-type: none">Annie’s, Patagonia, Ben and Jerry’s among leaders making supply chain commitments	<ul style="list-style-type: none">Increase in cross-laminated timber for built environment

Watch this space:

- **IPCC – 1.5C Special Report:** (Q3 2018) highlights essential role for deep decarbonization + carbon removal for meeting aggressive climate targets
- **National Academies – Carbon Removal R&D Roadmap:** (Q3 2018) informs funding needs and priorities for Congress
- **New Carbon Economy Consortium – R&D Roadmap:** (Q2 2018) informs university research agenda

Key Conclusions:

1. California can be early mover in showing the world that:
 - We need to set net-negative economy-wide carbon targets
 - We can have valuable policies and technologies can help us make this goal a reality
2. Achieving a net-negative emissions economy in the future means new policies, investments, infrastructure today

Thank you!

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