Why Governments Should Care About Carbon Dioxide Removal (CDR)

Carbon dioxide removal (CDR)—the durable removal and storage of CO2 from the atmosphere—is now widely recognized as a necessary complement to emissions reductions. For governments, the central question is no longer whether CDR will be needed, but whether public institutions will help shape its development early, or face higher costs and fewer choices later.

1. CDR helps control long-term public costs
Climate change is already driving rising government expenditures on disaster response, infrastructure repair, health systems, water management, and ecosystem protection. As warming continues, these costs escalate rapidly. By slowing and eventually stabilizing global temperatures, CDR can help reduce future adaptation burdens and long-term public liabilities, making it a practical tool for fiscal risk management rather than a speculative climate intervention.

2. Governments are essential to scaling CDR responsibly
CDR depends on long-lived infrastructure, environmental safeguards, monitoring, and long-term stewardship—functions that markets alone cannot provide. As with energy systems, transportation networks, water infrastructure, and public health, governments are uniquely positioned to set standards, coordinate deployment, and ensure public accountability. Early public leadership reduces the risk of fragmented or poorly governed deployment later.

3. CDR represents a major economic opportunity
Most credible global energy and climate analyses project CDR to become a trillion-dollar-plus industry by mid-century, supporting millions of skilled jobs across engineering, construction, operations, environmental management, and monitoring. Government engagement helps ensure this growth occurs under clear rules, delivers public value, and contributes to long-term economic resilience rather than short-term speculation.

4. CDR can help protect livelihoods and natural systems
Unchecked warming threatens ecosystems and the industries that depend on them, including fishing, forestry, agriculture, and mining. Well-governed CDR can help repair environmental damage, restore natural systems, and reduce climate volatility over time, supporting the ecological foundations of traditional livelihoods rather than undermining them.

5. CDR strengthens climate policy integrity
CDR does not replace emissions reductions; it addresses legacy emissions and sectors that are difficult to fully decarbonize. All credible pathways to climate stabilization include both. Government involvement ensures CDR complements existing climate commitments and strengthens the durability and credibility of climate policy overall.

6. What governments can do next
A practical first step is to engage with the Vancouver Declaration on Carbon Dioxide Removal—a non-binding, government-led process designed to support coordination, information sharing, and institutional readiness. Participation in the Declaration process does not create legal or financial obligations, but allows governments to learn from peers, help shape emerging norms, and prepare for future policy and investment decisions. Early engagement ensures governments help lead the development of CDR rather than reacting to it later. For more information, see the box to the left, or the Vancouver Declaration website at https://cdranet.org.

The Vancouver Declaration on Carbon Dioxide Removal is a voluntary, non-binding soft-law instrument designed to:

- Support dialogue among governments on CDR policy and governance structures;
- Encourage information-sharing and capacity-building on issues such as standards, best practices, regulation and investment;
- Promote coordination across governments, jurisdictions, and regions; and
- Complement existing national and international climate frameworks without replacing them.

The Declaration is enabling rather than prescriptive, and is designed to lower barriers to engagement on a complex and emerging policy domain. The Declaration does not create legal obligations; require legislative approval; mandate specific technologies, targets, timelines, or funding commitments; or create a centralized authority with decision-making power over national actions.

The Declaration process is a secretariat-governed forum developed by CDRANet, an international network of several hundred experts spanning climate science, policy, industry, and civil society. The CDRANet initiative has been convened by the Science Communication Institute, a US-based non-profit organization acting as a neutral, non-advocacy convener in support of international policy dialogue.

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