

A NEW INTERNATIONAL CLIMATE INNOVATION FACILITY: Why, What and How?

WHY? Most experts agree that, independent of emissions caps, **the challenge of climate recovery demands a complementary process that drives technology innovation** because:ⁱ

- The technology challenge to stabilize climate is unprecedented.
- Existing low-carbon technologies cannot meet this challenge – breakthroughs in cost, performance, and scalability of existing and new technologies are needed.
- There has been a significant under-investment in low-carbon technology research, development, and deployment (RD&D).
- Cap-and-trade policies alone will not create incentives for adequate investment or technology innovation for expensive breakthrough technologies.
- Collaborative international RD&D is essential to overcome the underinvestment challenge and the other barriers to technology scale.
- A global institution dedicated to climate technology RD&D using modern, corporate innovation strategies could radically speed up and reduce the cost of mitigation.

WHAT? Many groups agree that **a new global facility** will be needed to manage, coordinate and accelerate innovation because existing international entities, which focus on sharing research (IEA) or on financing existing technologies (multilateral development banks), do not have a mandate for rapid product development and commercialization of new technologies.ⁱⁱ

HOW? A new International Climate Innovation Facility should work with existing entities to **orchestrate technology innovation**. It should have the following characteristics:ⁱⁱⁱ

- **Be driven by science, not politics.** The governance of such an entity should be linked to the UN but independently run by scientists and technology experts.
- **Complementary to on-going efforts.** Doesn't overlap with existing national and private sector efforts, but helps to coordinate, complement and accelerate these efforts.
- **Aggregator of information.** Procures the best research from established centers with proven track record of performance.
- **A light-touch.** A minimal administrative structure would maximize disbursement of finance with minimal bureaucracy.
- **Product focused.** It would rapidly drive upstream research to downstream product development and deployment within defined timeframes, going beyond existing research networks, information sharing agreements and centers of excellence.
- **Open to many stakeholders.** Engages both public and private research institutions and financial players as well as private industry.
- **International in focus.** Promotes the engagement of researchers and engineers in developed and developing countries.
- **Use newest innovation strategies.** Relies on modern research approaches, including open and distributed innovation, and IT systems that allow for robust networks and rapid information sharing.^{iv}

ⁱ There is a growing body of academic literature to support that position. See "Climate Crash Course for Copenhagen: Six Simple Reasons Why We Need Global Technology Collaboration," by Lewis Milford and Jessica Morey (December 2009). www.cleanenergygroup.org/Reports/CEG_Climate_Course_Copenhagen_Dec2009.pdf

ⁱⁱ Ballesteros, A., S. Nakhooda, J. Werksman, K. Hurlburt and S. Kumar (2009). "Power, Responsibility, and Accountability: Re-Thinking the Legitimacy of Institutions for Climate Finance." World Resources Institute Working Paper. http://pdf.wri.org/working_papers/power_responsibility_accountability.pdf

ⁱⁱⁱ L. Milford, et. al. (2009) "International Climate Technology Innovation Initiative: Structure and Strategy Draft Proposal for the Copenhagen Agreement "Technology Track." by Clean Energy Group, Meridian Institute and CEPS. <http://www.cleanenergygroup.org/publications.html>.

^{iv} For more on distributed innovation see "Accelerated Climate Technology Innovation Initiative (ACT II): A New Distributed Strategy to Reform the U.S. Energy Innovation System," by L. Milford, J. Morey, T. Barker, K. Locklin, S. Boettiger, and J. Panetta (2009). Clean Energy Group. Available at: http://www.cleanenergygroup.org/Reports/ACTII_Report_Final_November2009.pdf