



Technology in a Global Climate Agreement: Emerging Consensus

Countdown to Copenhagen is a regular bulletin from the World Resources Institute. The authors, WRI experts on climate policy, analysis and science, explore key issues related to the UNFCCC international climate negotiations ahead of the Conference of Parties meeting in December 2009. For further reading on this topic, see www.wri.org/climate/cop-15. For information or feedback please contact Britt Staley (bstaley@wri.org) or Stephanie Hanson (shanson@wri.org).

Q: What are the key technology issues under discussion at the UNFCCC?

Enhanced international action on technology development and deployment, as outlined in the Bali Action Plan, is an important component of the post-2012 climate negotiations. Key elements include:

- How an international agreement can incentivize innovation of next generation low-carbon technologies, and accelerate and scale up diffusion of existing technologies to developing countries.
- Whether the structure of the international regime should include a new technology body or bodies and/or a new technology fund, or should build on existing mechanisms.
- How to solve divisive intellectual property rights (IPR) issues.

Q: Where are the areas of convergence among country positions?

Areas of emerging consensus among key players are illustrated in the graphic on the opposite page. Key among these is the emerging framework for measuring, reporting, and verifying of nationally appropriate mitigation actions (NAMAs) by developing countries and support for such actions by developed countries. Many Parties acknowledge the importance of national policy frameworks to facilitate technology diffusion. In WRI's view, national policies that enhance the enabling environment for private investment should count as NAMAs, as these will facilitate and accelerate technology deployment on a greater scale.

Q: Where do areas of divergence remain?

As the graphic illustrates, key sticking points include the appropriate design of the institutional structure for technology support and how to address intellectual property rights.

The G77 countries have proposed a new executive body and fund under the UNFCCC to oversee technology transfer. Developed countries tend to generally prefer to negotiate improvements to existing mechanisms and funds, including the Global Environment Facility (GEF). Proposals over IPR also break into two camps. In general, G77 countries view the strong enforcement of IPR as a barrier to access to low-carbon technologies. Developed countries emphasize unfavorable national policy frameworks, including lax IPR enforcement, as a barrier to private investment in such technologies.

Q: What would be a successful outcome on technology in Copenhagen?

Technology may be more important to the post-2012 international agreement than the agreement is to technology deployment. In practice, domestic domestic-level policies and flows of private capital will be the primary driver of technology development and deployment in the years ahead.

However, given this issue's central importance in the Bali Action Plan, the technology provisions agreed in Copenhagen will have a major bearing on the negotiations' success. Designed correctly, they may also play an important complementary role in facilitating the adoption of clean technologies around the world.


In particular, agreement on the implementation of, and support for, nationally appropriate mitigation actions by developing countries would provide a significant contribution to facilitating accelerated technology development and deployment. The NAMAs framework will provide incentives for public sector R&D and enhanced domestic policy frameworks, and create a structure for measuring, reporting, and verifying financial and other forms of technology transfer support.

Convergence and Divergence in Party Submissions to the UNFCCC on Technology

STRUCTURE OF INTERNATIONAL REGIME

New Funds
 Multilateral Technology Fund (MCTF/MTAF)
 World Climate Change Fund (Clean Technology Fund)


New Bodies
 Executive Board under COP w/ expert tech panels for implementation
 National coordinating authorities for implementation of actions
 National & regional technology research centers


 Prefer building on and enhancing existing mechanisms

NATIONAL POLICY




 Developed countries support developing country NAMAs


 TNAs should inform development of national climate plan and/or NAMAs

 Register national climate action plans as NAMAs

 Enabling environments facilitate technology deployment


IPR REGIME

 Address IPR barriers
 Joint tech development & IPR Sharing
 Climate technologies should be outside current IPR regime


 National policy/legal frameworks can address IPR barriers

TECH PROMOTION

 Collaborative R&D

 International technology deployment plans

 VC for demo






















 Public-private partnership and public finance to leverage private (Carbon markets, sectors, regulatory framework)

RESEARCH & DEVELOPMENT (Pre-market)

DEMONSTRATION (Market Creation)

COMMERCIAL DEPLOYMENT (Market Penetration)

★ Proposed by significant number of both developing and developed country Parties

-  Argentina
-  Australia
-  Bangladesh
-  Brazil
-  China
-  Costa Rica
-  EU
-  G77
-  Ghana
-  Guyana
-  India
-  Indonesia
-  Japan
-  Least Developed Countries
-  Mexico
-  New Zealand
-  Norway
-  Singapore
-  South Africa
-  South Korea
-  United States

- IPR Intellectual Property Rights
- NAMA Nationally Appropriate Mitigation Actions
- MCTF Multilateral Climate Technology Fund
- MTAF Multilateral Technology Acquisition Fund
- TNA Technology Needs Assessment
- VC Venture capital