Cooperation on Technology Development and Transfer

Roundtable Consultation on Development, Transfer and Deployment of Environmentally Sound Technologies

Beijing

November 6, 2008

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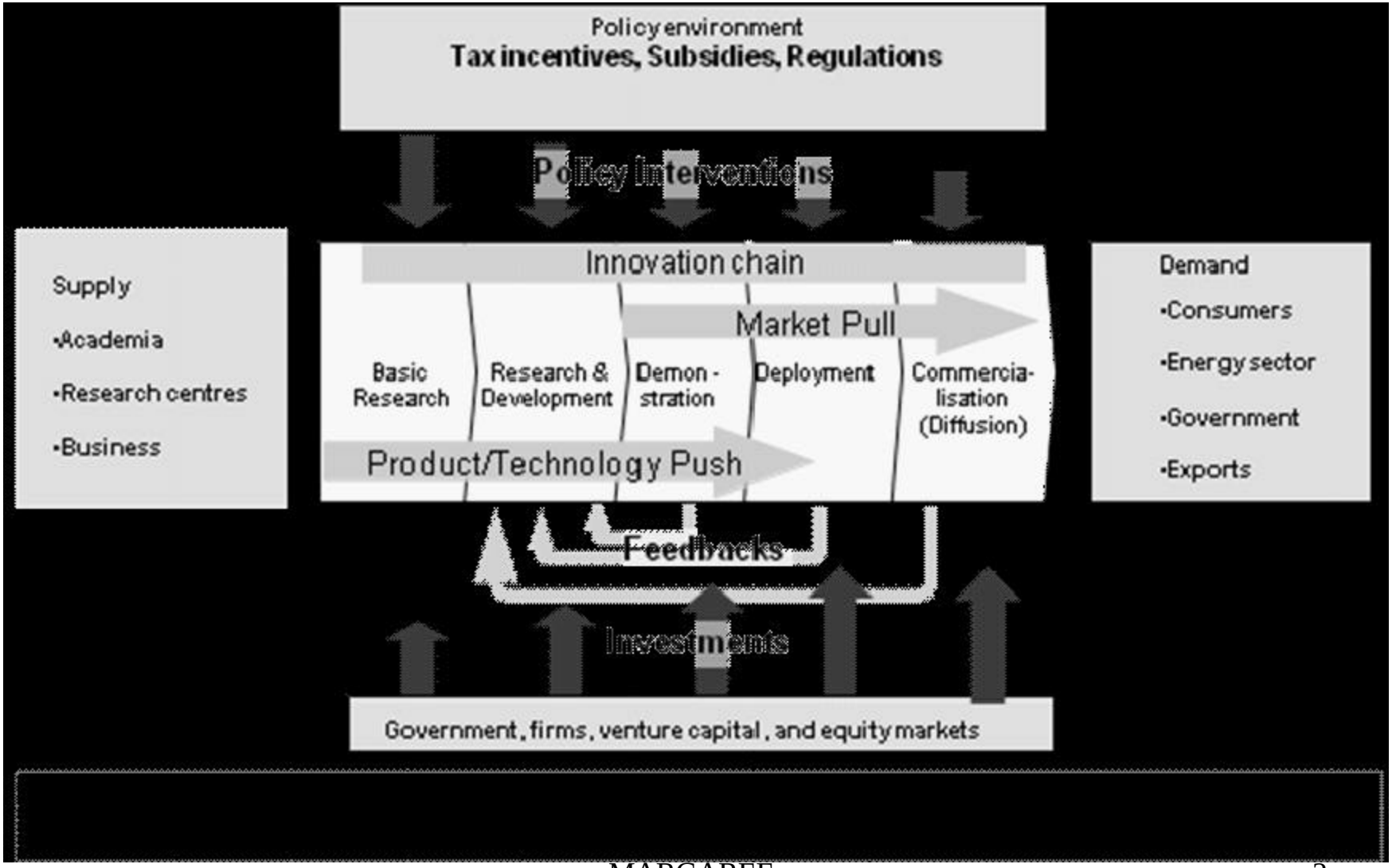
Technology Cycle



The Challenge

Accelerate development of evolving set of 150 mitigation and 100+ adaptation technologies that are at different stages and have different needs

Transfer these technologies to 150 developing countries where the barriers facing each technology differ

Do this with only a small fraction of total funding -- most funding is from the private sector and most public funding is domestic in a small number of developed countries

Technology RD&D

Vast majority of RD&D done in a few developed countries – Japan, USA, EU

RD&D in developed countries needs to be scaled up and shifted away from fossil fuels

Cooperation with developing countries could include contribution to the cost of:

- Participating in international technology agreements
- Operating RD&D centres that participate in an international network similar to CGIAR

Technology Deployment

Technology available but more costly, incentives for use needed to reduce cost (learning curve)

Deployment in developed countries needs to be scaled up through domestic policies

Cooperation with developing countries could include funding for deployment based on:

- Lowest cost bids by developing countries
- Fixed amount per unit – e.g., $X/MW for wind turbines – which would decline over time

Technology Diffusion

Technology more costly by less than the market price of carbon

Developed countries scale up diffusion using domestic policies and commit to use of CDM

Cooperation with developing countries could include:

- CDM and other, expanded crediting mechanisms
- Direct funding for agreed technologies, such as CCS and REDD

Technology Transfer

Technology transfer involves capacity building, creation of enabling environments, and other actions to support adoption of technologies at deployment, diffusion and commercial stages in developing countries

Cooperation with developing countries could include funding for preparation and implementation of national technology transfer plans:

- Technology transfer plans, similar to Montreal Protocol, build on technology needs assessments
- Technology transfer plans identify measures to build capacity and enabling environment for technologies
- Plans should include changes to domestic policies where appropriate; removal of import duties on the technology, changes to standards, etc.
- Funding would not subsidize the cost of the technology

Technology Transfer in the CDM

Technology transfer is not a requirement for the CDM, but host countries can encourage transfer through approvals

Technology transfer claimed for 39% of projects representing 64% of expected reductions; lower rates of technology transfer for unilateral and small-scale projects

Rate varies by project type, ranging from 7% to 100% of projects

Korea has higher rate and India lower rate of technology transfer than average

Equipment and knowledge for 56% of projects, equipment only for 33%, knowledge only for 11%

Technology Financing

Currently most funding for technology development and technology transfer is private and in developed countries

Technology cooperation with developing countries could require international financing for:

- Participation in international RD&D
- Accelerated deployment, diffusion of selected technologies
- Preparation and implementation of technology transfer plans

Amount needed not known, perhaps a few billion USD/yr

Several sources identified that could provide sufficient funds for adaptation, mitigation and technology cooperation

Thank you!

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Technology Stages