# Conference on Intellectual Property and Public Policy Issues, GICG 13.July.2009

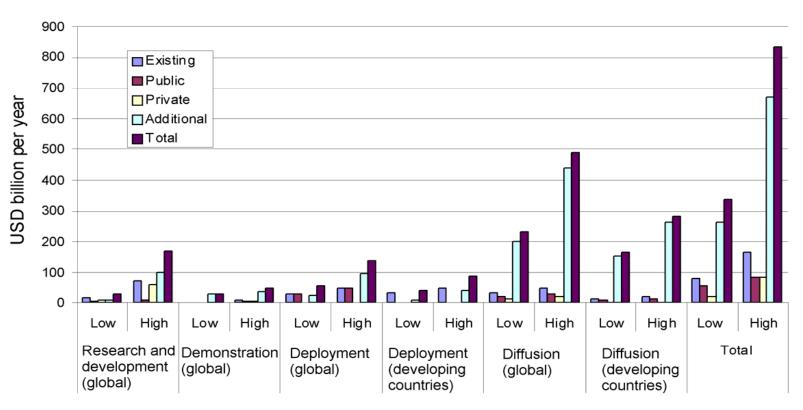
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# EGTT, the expert group on technology transfer under the UNFCCC

- Preparing and testing a set of Performance Indicators for technology transfer
- Recommendations on future financing options for enhancing technology transfer under UNFCCC
- Preparing a strategy paper for long term perspective beyond 2012 to facilitate technology transfer under UNFCCC



# Summary of financing needs and gap



Funding needs to increase 4 to 10 fold

#### Overview of possible activities and mechanisms

#### Possible activities

#### Examples of existing mechanisms

#### Examples of new and enhanced mechanisms

#### Increasing funding for RD&D:

- Public funding for RD&D
- Business funding for RD&D on climate technologies in developed countries
- RD&D in developing countries
- RD&D for globally significant climate technologies

Increased investment in demonstration of technologies globally

National government RD&D programmes

International technology initiatives/organizations (IEA-IA, APP, etc.)

Business RD&D activities

UNIDO/UNEP Cleaner Production Centres

Cool Earth Partnership (Japan)

Targets for the provision of financial support for RD&D in developing countries

Targets for reducing or eliminating support for RD&D for environmentally harmful technologies

RD&D window of a technology fundPooling of national RD&D funding

Mitigation and adaptation policies that create incentives for increased RD&D

Investment risk sharing tools

Intellectual property sharing and purchasing

Public-private partnerships

Scientific and technical exchange programmes

Innovation prizes

Technology agreements and financial support for implementation of global technology roadmaps

National policies to stimulate deployment of climate technologies in developed countries

Financial support for technology deployment in developing countries

Measures to stimulate global deployment of selected technologies

Carbon financing

Investment facilitation

Concessional financing

Technology transfer fund

Export credit agencies reforms

National policies, e.g. technology targets, feed-in tariffs, tax credits, grants, investment facilitation

World Bank, multilateral development bank financing, regional development banks Clean Investment Funds, PFAN, IFC

Private venture capital

GEF, ODA, APP

CDM, Joint implementation

OECD arrangement for ECAs

Public venture capital or equity window of a technology fund

Scaling up the Convention's financial mechanism

Credit line for subordinate debt within a technology fund

Investment risk mitigation incentives for emerging technologies and markets

Coordinated public procurement programmes

Financial support for deployment of selected technologies and NAMAs in developing countries

Investment guarantees

International project development facility

Purchase of licences or patents

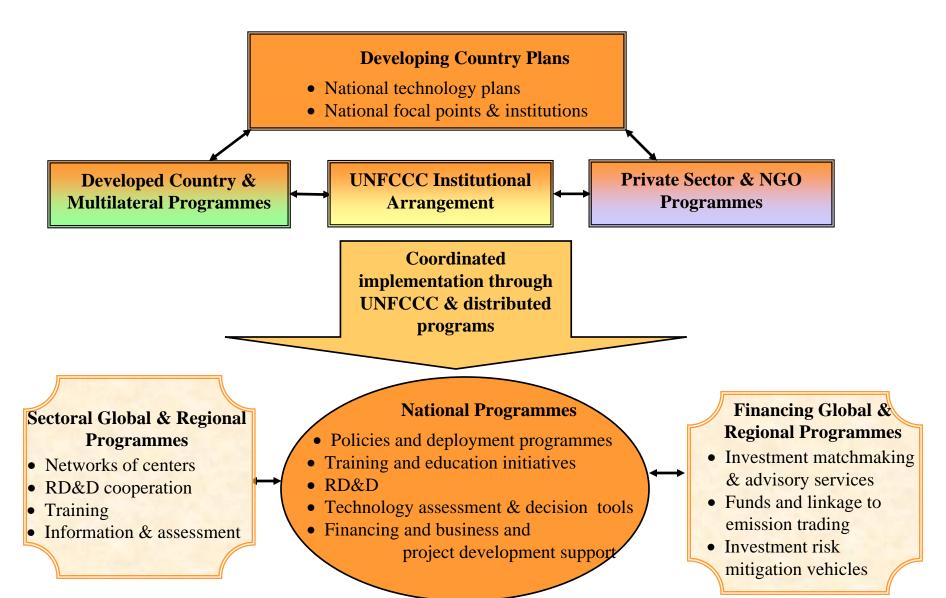
Global energy efficiency standards

Trade policy – elimination of tariff and non-tariff barriers

## RD&D

# Deployment, diffusion and transfer

### National Plan and Program Focused



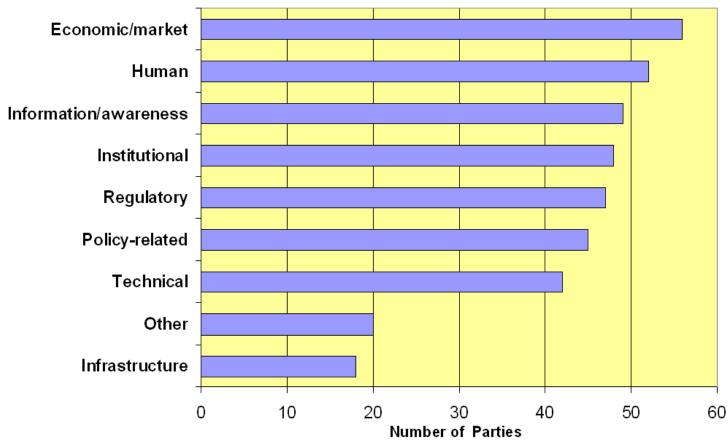
## Example of Contents and Roles of National Technology Plans

- National technology plans can be integral parts of NAMAs or national adaptation strategies or separate, but linked plans
- Examples of plans roles/contents
  - Identify focal points
  - Define priority technologies
  - Describe contribution of technologies toward adaptation and mitigation goals
  - Identify barriers and current and planned national programs to address barriers for each priority technology
  - Describe current international programs and opportunities for further international cooperation for priority technologies
  - Recommend approaches to couple national and international programs





## Barriers to technology transfer most commonly identified by Parties







#### IPRs in the negotiating text

#### Option 1:

Promoting DTT by operating the intellectual property regime in a manner that encourages development of climatefriendly technologies and simultaneously facilitates their diffusion and transfer to developing countries.

#### Option 2:

- ➤ Removing barriers to DTT from developed to developing country Parties arouse from the IPR protection, including:
- (a) **Compulsory licensing** for specific patented technologies;
- (b) **Pooling and sharing** publicly funded technologies and making the technologies available in the public domain at an affordable price;
- (c) Taking into account the example set by decisions in other relevant international forums relating to IPRs, such as the **Doha Declaration on the TRIPs Agreement** and **Public Health**;

#### Option 3:

**LDCs** should be **exempted from patent protection** of climate-related technologies for adaptation and mitigation, as required for capacity-building and development needs.



## LCA Negotiation text, example

#### Alternative to subparagraph 188 (b):

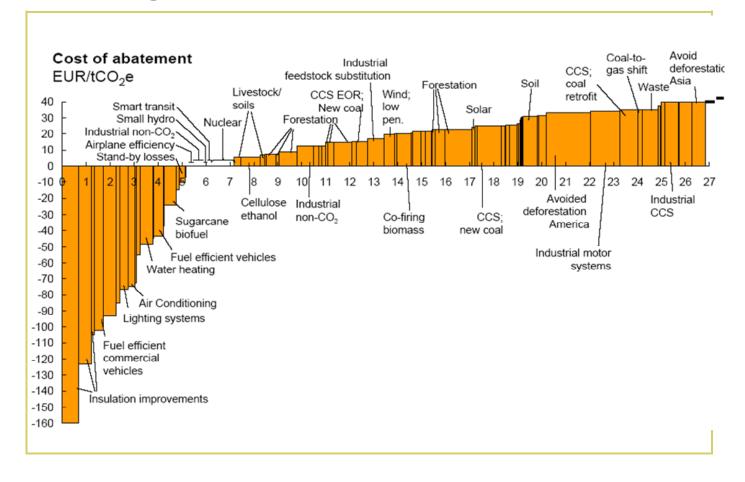
- [Creation of a "Global Technology Pool for Climate Change" that ...ensures access to ...trade secrets to developing countries including on non-exclusive royalty-free terms...]
- (c) Taking into account ... forums relating to IPRs, such as the Doha Declaration on the TRIPs Agreement and Public Health;]
- (c).1 Preferential pricing.
- (c).2 Reviewing all existing relevant IPR regulations in order to provide certain information to remove the barriers and constraints that GHG mitigation technologies are subject to.
- (c).3 Promoting innovative IPR sharing arrangements for joint development of Environmentally Sound Technologies.
- (c).4 Differential pricing between the developed and developing countries.
- (c).5 Promoting Joint technological or patent pools for the development and transfer of technologies to the developing countries at low cost.
- (c).6 Limited/reduced time patents on climate friendly technologies.
- (c).7 Exclusion from patenting of climate friendly technologies.]

The Gap Number of patent applications in relevant technologies

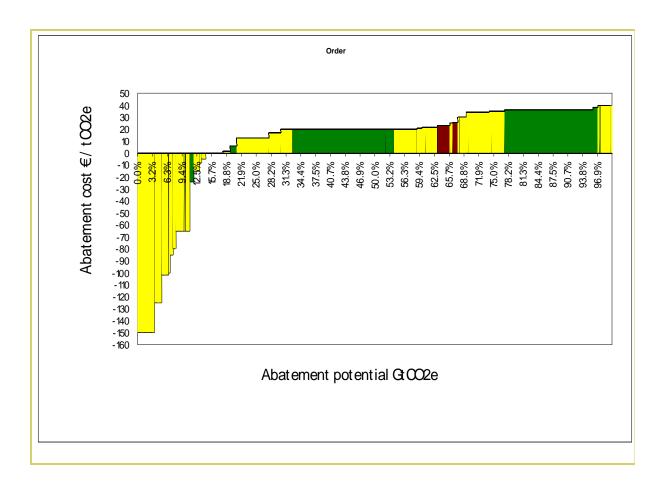
Year	Total worldwide	Emerging economies	Low-Income countries
1998	9.118	342	3
2002	19.982	992	10
2007	27.505	3.439	10
2008	19.701	4.037	6

# There are many substitute technologies

Svend Torp Jespersen | Brussels | 27 April 2009



# Relatively large potential and developing economies



### Implications of the Gap \_\_\_\_\_\_\_

### Hardly any patents registered in low-income countries

Patents not obstacle: no applications

- Relaxing the patent regime would not have any impact
- There are other reasons:
  - Insufficient technical knowledge and absorption capacity to produce these technologies locally
  - Insufficient market size to justify local production
  - Limited purchasing power

#### Closing the Gap

#### Fast growth of patents in emerging economies

- In 2008: 1 patent of 5 in emerging economies
- 1/3 emerging economies patents owned by those country residents
- Spectacular growth in patenting in China
- Not weaker but stronger IPR enforcement would benefit emerging economies

#### Conclusions

- Patents are hardly used in low-income countries
- Economic factors explain low technology transfer
- Use economic instruments to address this
- Patents growing fast in emerging economies, esp. in China
- Local ownership growing fast too
- Strengthening patent enforcement would benefit them

### THANK YOU