

**Bali Action Plan:
the role of technology.
About innovation and cooperation.**

Bernard MAZIEN

Stakeholders Meeting
Brussels, 24 Januari 2008

Content

- A flash back
- Development and transfer of technology
- A common understanding ?
- Bali Action Plan: the building block ‘technology’
 - Top-down approach
 - Bottom-up approach
 - A shared vision?
- A concrete investment proposal

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A21- Chapter 34:

Transfer of environmental sound technology, cooperation and capacity-building

BASIS FOR ACTION

- 34.6. This chapter of Agenda 21 is without prejudice to specific commitments and arrangements on transfer of technology to be adopted in specific international instruments.
- 34.7. The availability of scientific and technological information and access to and transfer of environmentally sound technology are essential requirements for sustainable development. ...

A21- Chapter 34: Transfer of environmental sound technology, cooperation and capacity-building

OBJECTIVES

- 34.14. The following objectives are proposed:
 - a) To help to ensure the access, in particular of developing countries, to scientific and technological information, including information on state-of-the-art technologies;
 - b) To promote, facilitate, and finance ...
 - c) To facilitate the maintenance and promotion...
 - d) To support endogenous capacity-building
 - e) To promote long-term technological partnerships between holders of environmentally sound technologies and potential users.

A21- Chapter 34: Transfer of environmental sound technology, cooperation and capacity-building

ACTIVITIES

- A. Development of international information networks which link national, subregional, regional and international systems
- B. Support of and promotion of access to transfer of technology
- C. Improvement of the capacity to develop and manage environmentally sound technologies
- D. Establishment of a collaborative network of research centres
- E. Support for programmes of cooperation and assistance
- F. Technology assessment in support of the management of environmentally sound technology
- G. Collaborative arrangements and partnerships

Belgium – WSSD National Report

Transfer of Environmentally-Sound Technology

- **Coordinating Bodies:** The Regional Governments are the competent authorities on technology policy, with the Federal Government only involved in some specific cases.
- **Legislation and Regulations:** There is no specific legislation addressing clean technologies, but environmental legislation prescribes the use of BAT.
- **Strategies, Policies and Plans / Major Groups Involvement / Programmes and Projects / Status / Challenges / Capacity-building, Education, Training and Awareness-raising / Financing:** No information is available

Information: Two initiatives deserve special attention. The first consists of the use of the INTERNET. ... The second initiative consists of the links with European initiatives.

- **Research and Technologies:** In Belgium, there is some evolution from "end of pipe" technologies to those which emphasize pollution prevention.
- **Cooperation:** Belgium is a member of the ESTO network ...

UNFCCC – Art.4. Commitments

...

§ 5. The developed country Parties and other developed Parties included in Annex II shall take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly developing country Parties, to enable them to implement the provisions of the Convention. In this process, the developed country Parties shall support the development and enhancement of endogenous capacities and technologies of developing country Parties. Other Parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies.

...

Belgium's Third National Communication under the UNFCCC

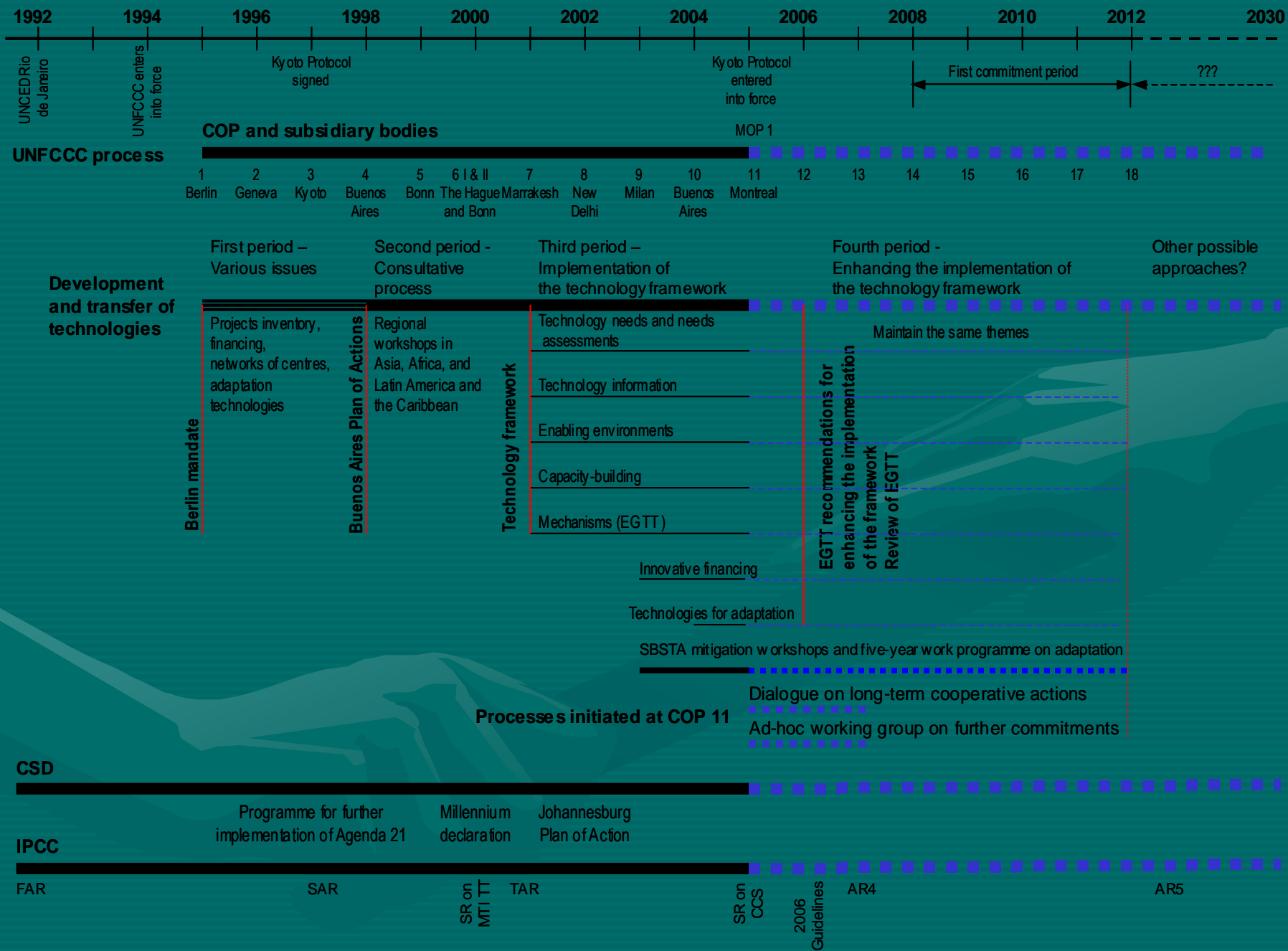
“... Furthermore, most bilateral aid programmes of both the Federal Government and the Regional Governments, always include aspects of technology transfer and capacity building, through training segments, either in the developing country itself, in Belgium or both.”

Kyoto Protocol

- Flexible mechanism (JI, CDM) can contribute to the development and transfer of technology (DTT), but ...
- A comparison between CDM projects and the Technology Needs Assessments of developing countries has shown that only 1/3 of the CDM projects has elements of DTT.
- This is not surprising knowing the portfolio of the CDM-projects (+/- 50 % HFC and no equitable regional distribution).

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A history of 5 phases under the UNFCCC

- Phase 1 (1992-1998): turbulent period
- Phase 2 (1998-2002): consultative round
- Phase 3 (2002-2008): common understanding
- Phase 4 (2008-2012): acceleration on implementation
- Phase 5 (Post-2012): massive investments

Framework with 5 key elements (cf. 4/CP.7)

- Technology Needs Assessments
- Technology Information (System)
- Capacity Building
- Enabling Environments
- Financial and Institutional Mechanisms

plus ... later on ...

- Innovative options for financing
- Technologies for adaptation

For deliverables of the EGGT during Phase 3:
see <http://ttclear.unfccc.int/ttclear/jsp/>

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Building blocks post-2012

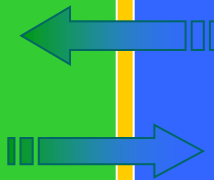
Global action

Sustainable development objectives and national circumstances

Investment and Finance

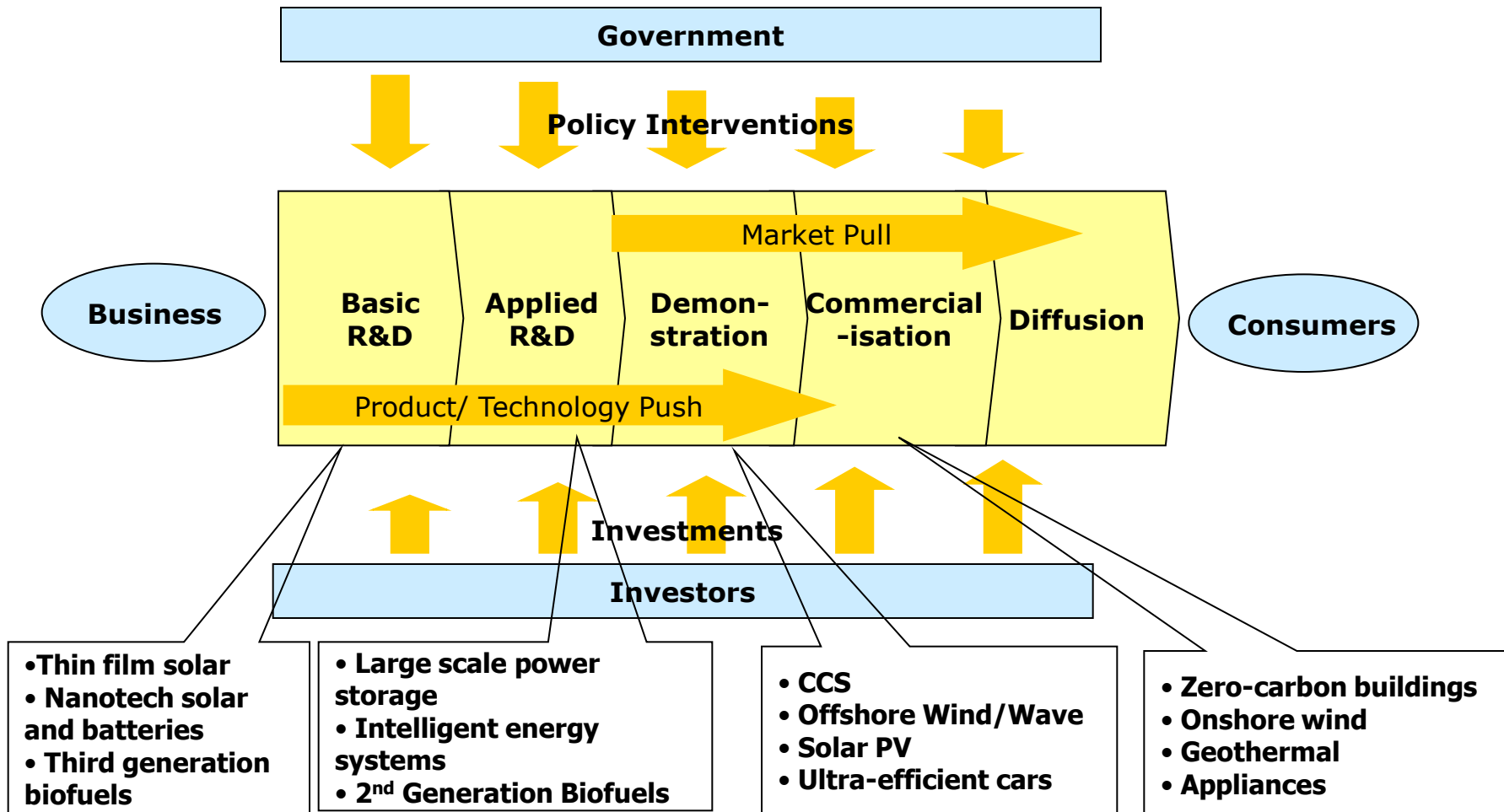
Mitigation

Adaptation

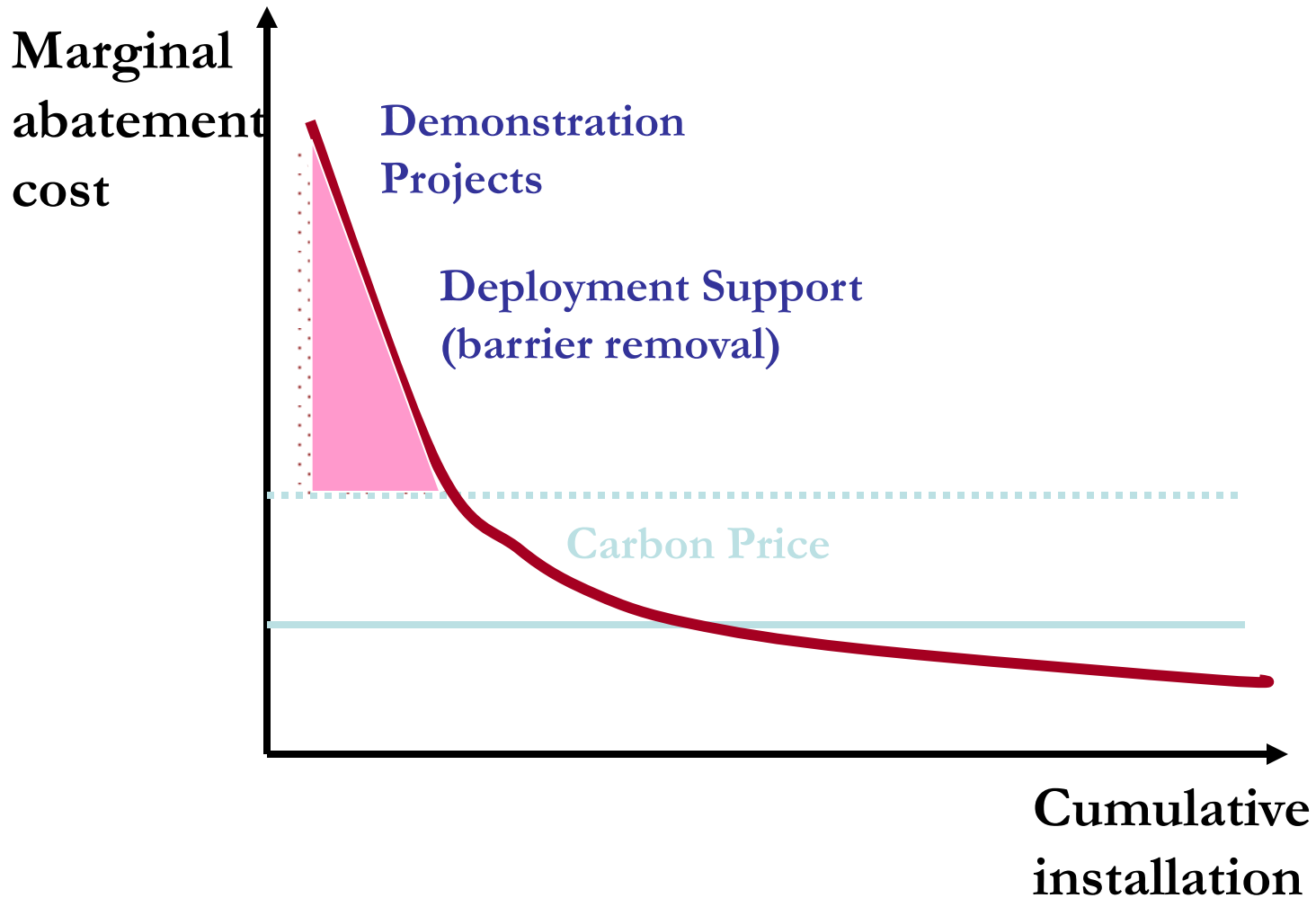


Technology

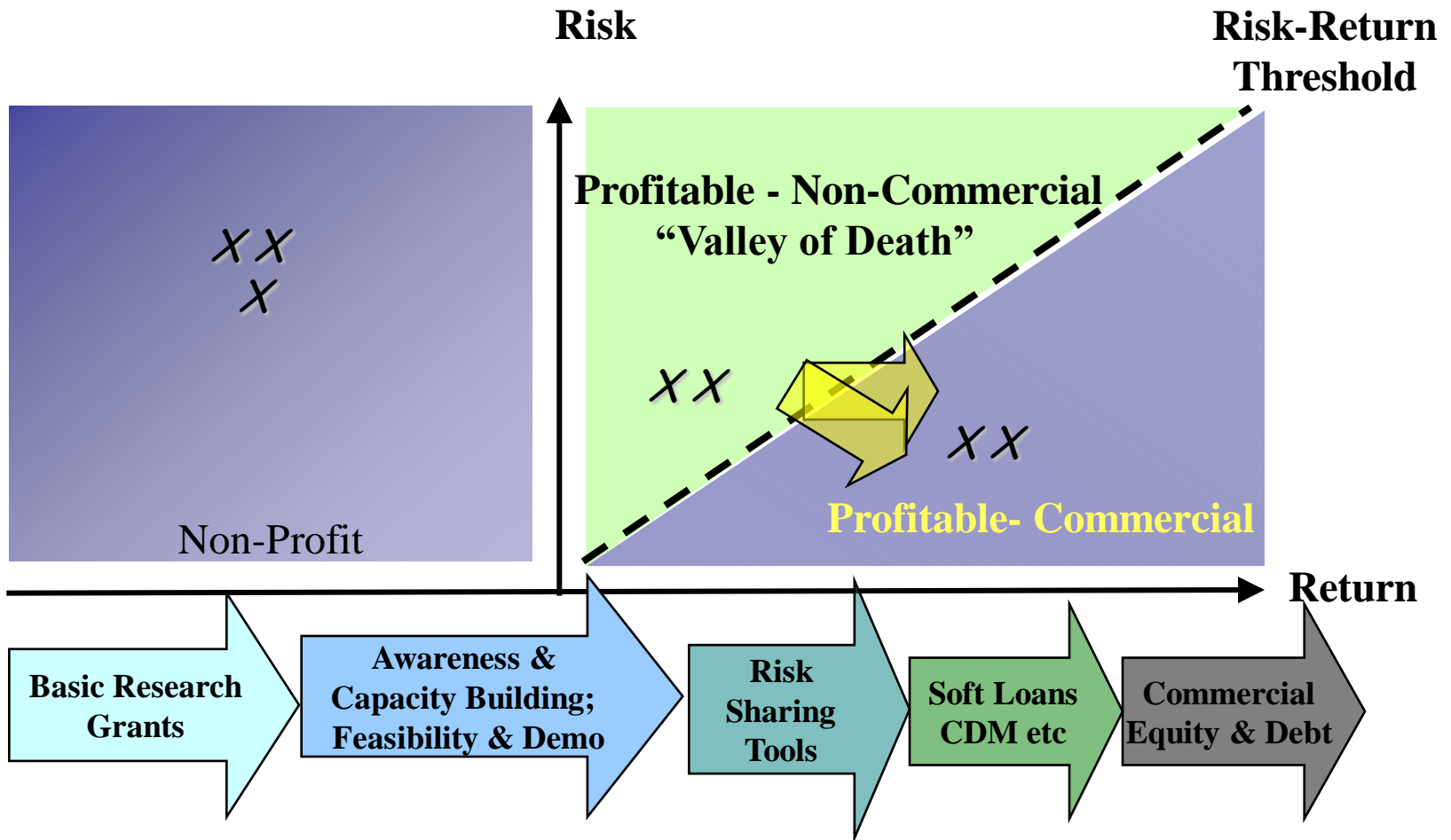
The Innovation Chain is different for every Technology



Driving Down the Costs of Technology



Innovative Options for Financing



Objective for post-2012 ?

Partim 'technology'.

- A multilateral agreement with a multidimensional approach
- Taking into account differences between
 - regions/countries,
 - sectors
 - and stages in the development of technologies.
- For mitigation and adaptation.
- With linkages to 'access to energy' and 'deforestation'.
- Quid 'inside' and 'outside' the UNFCCC?

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Bali Action Plan (1/CP.13)

“Decides to launch a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision at its fifteenth session, by addressing, inter alia: ...

Bali Action Plan (1/CP.13)

- a) **A shared vision for long-term cooperative action, including a long-term global goal for emission reductions, to achieve the ultimate objective of the Convention, in accordance with the provisions and principles of the Convention, in particular the principle of common but differentiated responsibilities and respective capabilities, and taking into account social and economic conditions and other relevant factors;**

Bali Action Plan (1/CP.13)

- b) Enhanced national/international action on **mitigation** of climate change ...
- c) Enhanced action on **adaptation** ...
- d) Enhanced action on **technology development and transfer** to support action on mitigation and adaptation ...
- e) Enhanced action in the **provision of financial resources and investment** to support action on mitigation and adaptation and technology cooperation ...

Bali Action Plan (1/CP.13)

d) Enhanced action on technology development and transfer to **support action on mitigation and adaptation**, including, inter alia, consideration of:

- i. Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the **development and transfer** of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;
- ii. Ways to accelerate **deployment, diffusion and transfer** of affordable environmentally sound technologies;
- iii. Cooperation on **research and development** of current, new and innovative technology, including win-win solutions;
- iv. The effectiveness of mechanisms and tools for technology **cooperation** in specific sectors;

Bali Action Plan

(1/CP.13)

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- i. **Effective mechanisms and enhanced means for the removal of obstacles to, and provision of financial and other incentives for, scaling up of the development and transfer of technology to developing country Parties in order to promote access to affordable environmentally sound technologies;**
- ii. **Ways to accelerate deployment, diffusion and transfer of affordable environmentally sound technologies;**
- iii. **Cooperation on research and development of current, new and innovative technology, including win-win solutions;**
- iv. **The effectiveness of mechanisms and tools for technology cooperation in specific sectors;**

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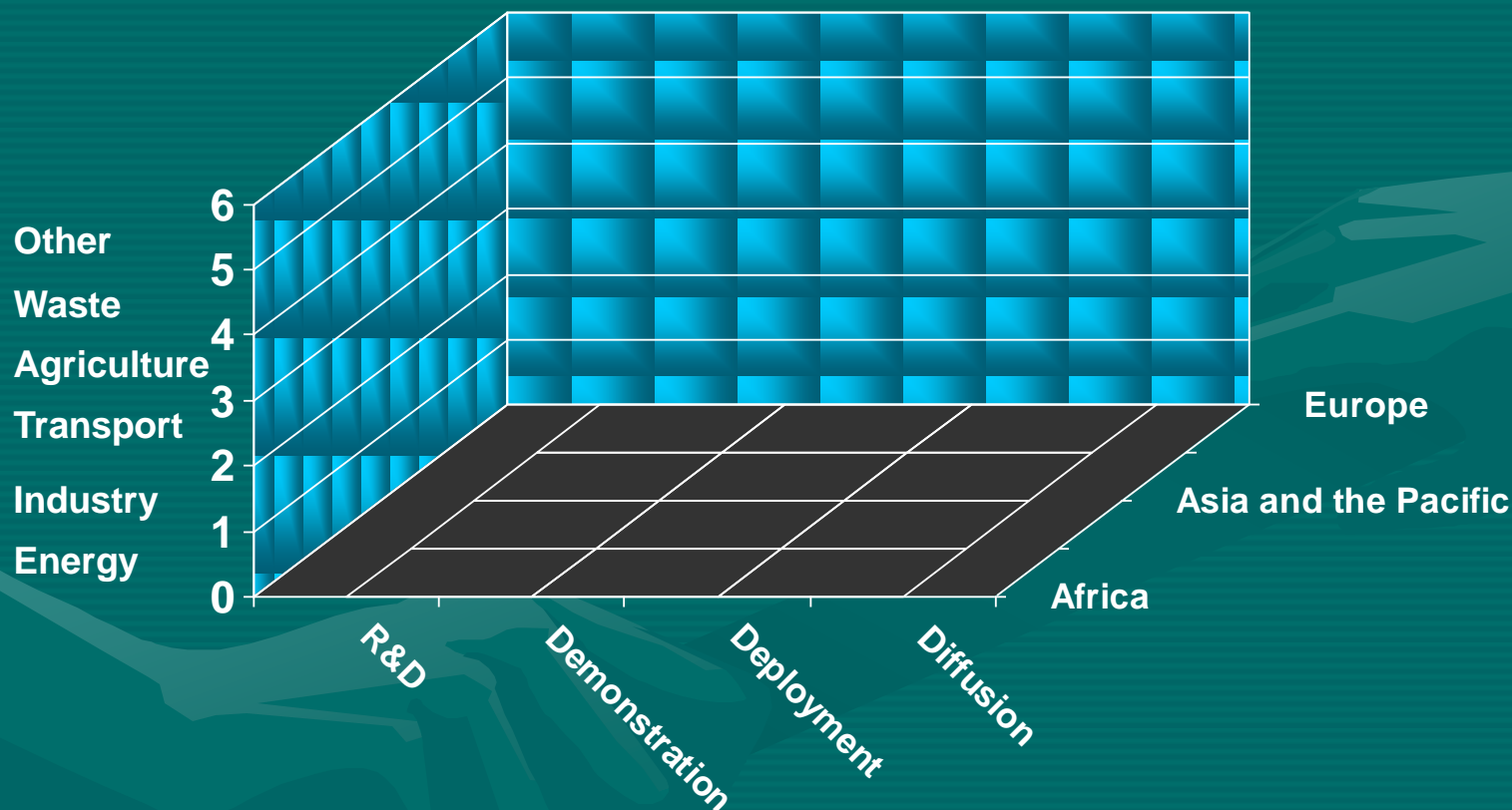
Development and Transfer of Technologies

- **Reconstitution of the EGTT**
- **An ambitious work programme for the EGTT**
- Development of performance indicators to **monitor and evaluate** implementation (and commitments by all Parties) by COP.
- Identification and analysis of existing and potential new financing sources, relevant vehicles and **assessment of gaps and barriers** to use or access of these, to provide information to Parties for considering their adequacy and predictability;
- **Elaborating a strategy on long-term post 2012** approach
- Agreement to **enhance the existing technology transfer framework**, through focus on:
 - Request to the GEF to **elaborate a strategic programme** to scale up level of investment for technology transfer.
 - **Identify and designate a national entity for the development and transfer of technologies**

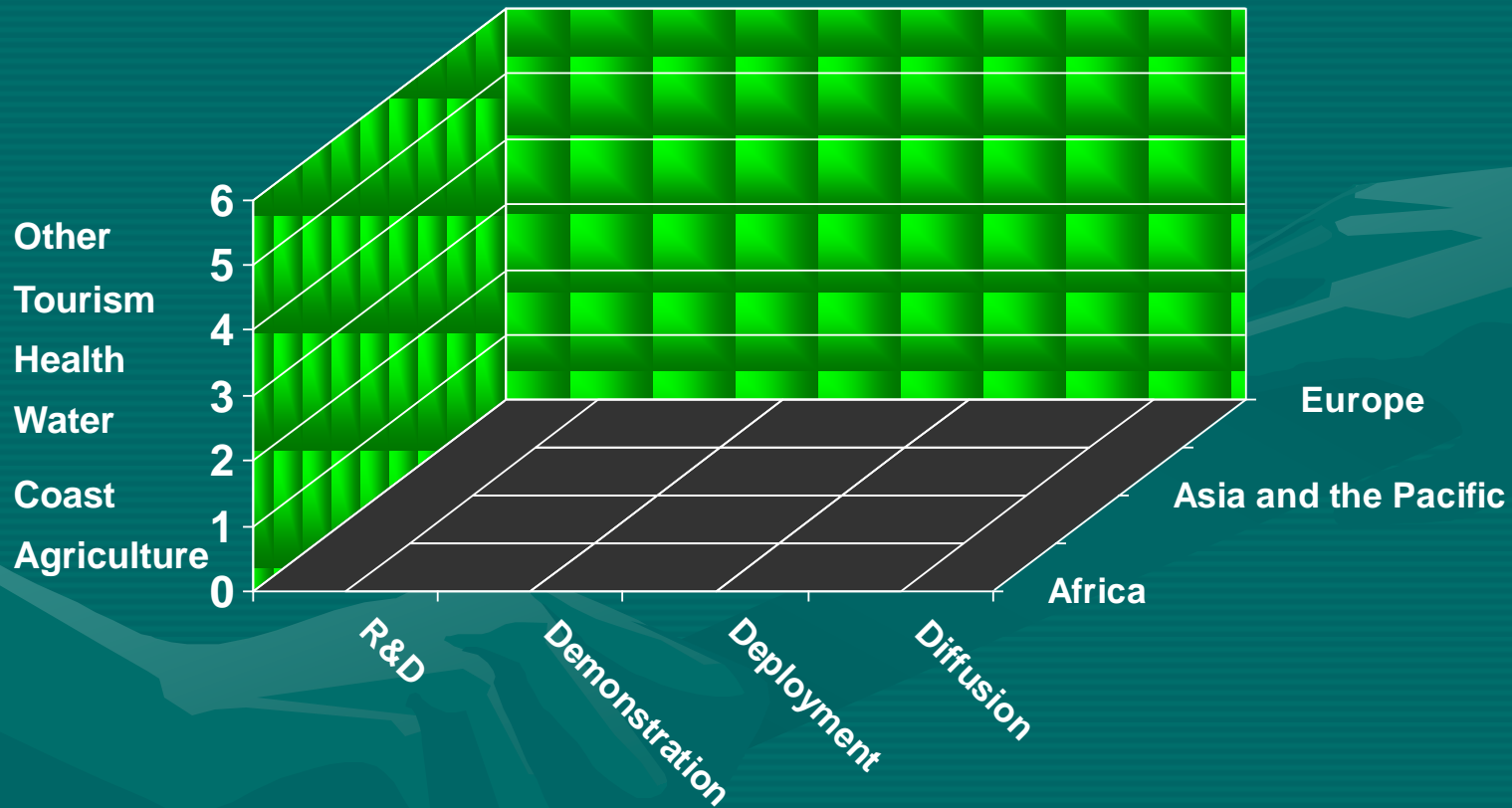
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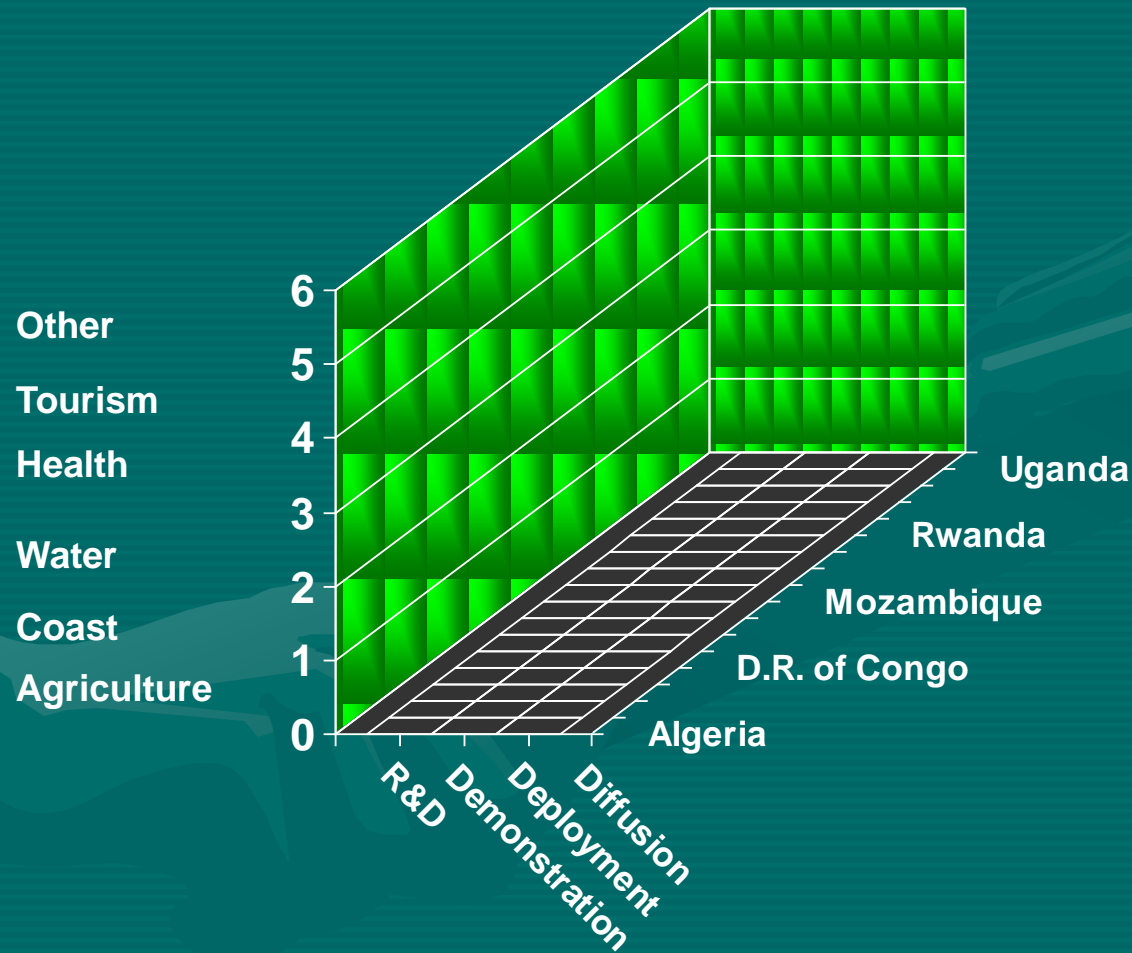
Technology cooperation and transfer of technologies: multilateral long-term cooperative action, now, up to and beyond 2012 on mitigation



Technology cooperation and transfer of technologies: multilateral long-term cooperative action, now, up to and beyond 2012 on adaptation



Technology cooperation and transfer of technologies: bilateral long-term cooperative action, now, up to and beyond 2012 on adaptation



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Concrete proposal for technology cooperation and transfer of technologies through bilateral long-term cooperative action, now, up to and beyond 2012.

A partnership for massive investments
in solar air heating systems
to dry crops in our partner countries

Some observations

- “Throughout **Central America**, an estimated **16,086 acres of forest are cut to supply the firewood used to dry the coffee production each harvest** -- equivalent to over 828,000 barrels of diesel fuel per harvest.”
- “Conventional mechanical dryers consume **10.5-kilowatt hours of electricity for every 100 pounds of coffee dried**. In addition, **0.12 cubic meters of firewood**, or firewood equivalent, is consumed for every 100 pounds of coffee that is dried.”
- “The solar heating system was able to meet the full heating load for tea drying at a **payback of 1,5 years**, not including design and development costs. New projects would have to include these, but they would offset by credits for eliminating the fossil heating system.”
- “**Using solar energy to dry crops is ideal** for tea, coffee, fruits, beans, rice, spices, rubber, cocoa, and wood.”







Important export crops in our partner countries (with a focus on coffee, tea, rice, nuts)

- **Bolivia:** different types of nuts
- **Ecuador:** coffee
- **Peru:** coffee
- **Mozambique:** cashew nuts
- **Tanzania:** coffee, tea, ...
- **Uganda:** coffee, tea, ...
- **Benin:** cashew nuts,
- **Mali:** groundnuts, rice
- **Senegal:** groundnuts, rice
- **Niger:** beans
- **Vietnam:** cashew nuts, rice, coffee, tea, cassava dried
- **Palestinian territories**
- **Algeria, Morocco**
- **South Africa**
- **Burundi:** coffee, tea,
- **D.R. of Congo:** coffee
- **Rwanda:** coffee, tea,

Partnership: a proposal for membership

- ***In Belgium***

- Public authorities

- DG Development Cooperation / BTC
 - DG Environment
 - Regions (if interested)

- Investors (industry, bank and insurance companies, etc.)

- Fevia and/or Belgian Coffee/Tea/Nuts/Rice Federations and its members (or particular enterprises)
 - Fedis and its members (or particular distribution chains)
 - Belsolar and its members (or particular enterprises)

- Research community

- Universities en Institutes for Technological Research

- ***In the partner country***

- Depending on the national circumstances: public authority, industry/agriculture, other stakeholders ...

- ***Steering committee*** in Belgium with partners and other stakeholders (consumer organisation, development cooperation ngo's, environmental ngo's, ...)

Win-win solution

- ... taking into account environment considerations:
 - mitigation of climate change
 - combating deforestation
 - ...
- ... taking into account social considerations:
 - new employment opportunities in Belgium and in the partner countries
 - contribution to health care
 - ...
- ... taking into account economic considerations:
 - securing access to 'natural resources'
 - participating in offset credit systems
 - ...
- Development and Transfer of Environmental Sound Technologies within a partnership of cooperation

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