



Research Agenda for Eco-innovation & Green Growth

The OECD Project on
Sustainable Manufacturing &
Eco-innovation

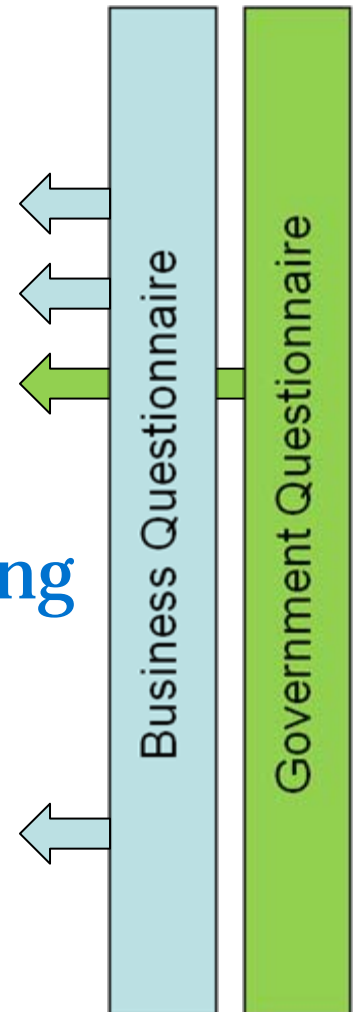
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Phase 1: Structure of the project

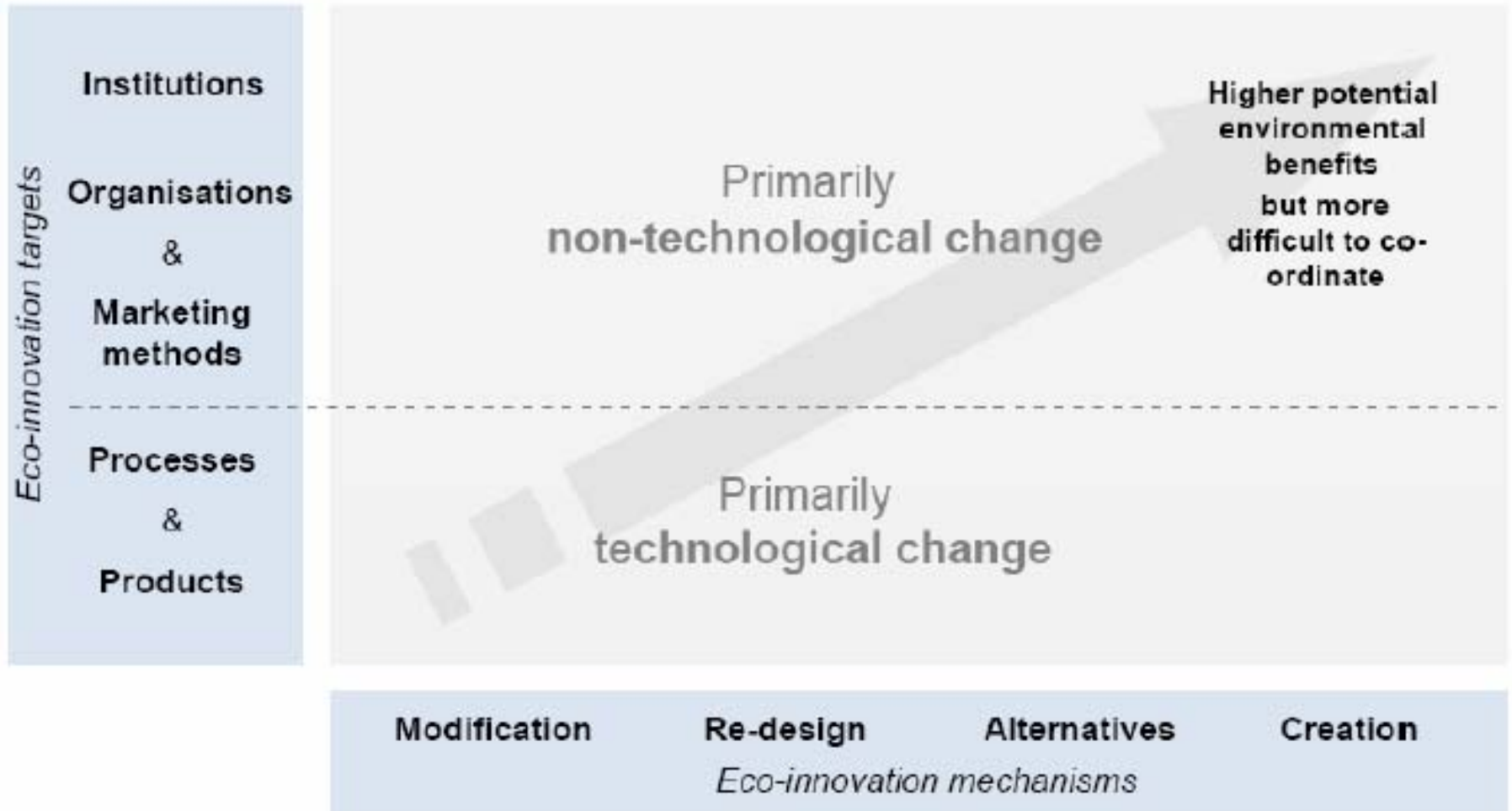
- Review & framework paper (5 parts)
 1. A common analytical framework
 2. Examples of eco-innovation
 3. Review of indicator sets
 4. Measuring eco-innovation
 5. Review of governmental policies
- Conference on Sustainable Manufacturing
 - 23-24 September, Rochester, NY
- Focus group meetings
 - US (Rochester) & Europe (Brussels)
- Advisory Expert Group



Synthesis of findings

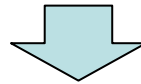
- A. The evolution of sustainable manufacturing has been realised through both technological and non-technological eco-innovations.
- B. Improvement in indicators can accelerate corporate efforts and help a deeper understanding of eco-innovation.
- C. Policy integration and understanding the right levers (supply & demand) are necessary for effective eco-innovation policies.

Typology of eco-innovation



Measuring eco-innovation

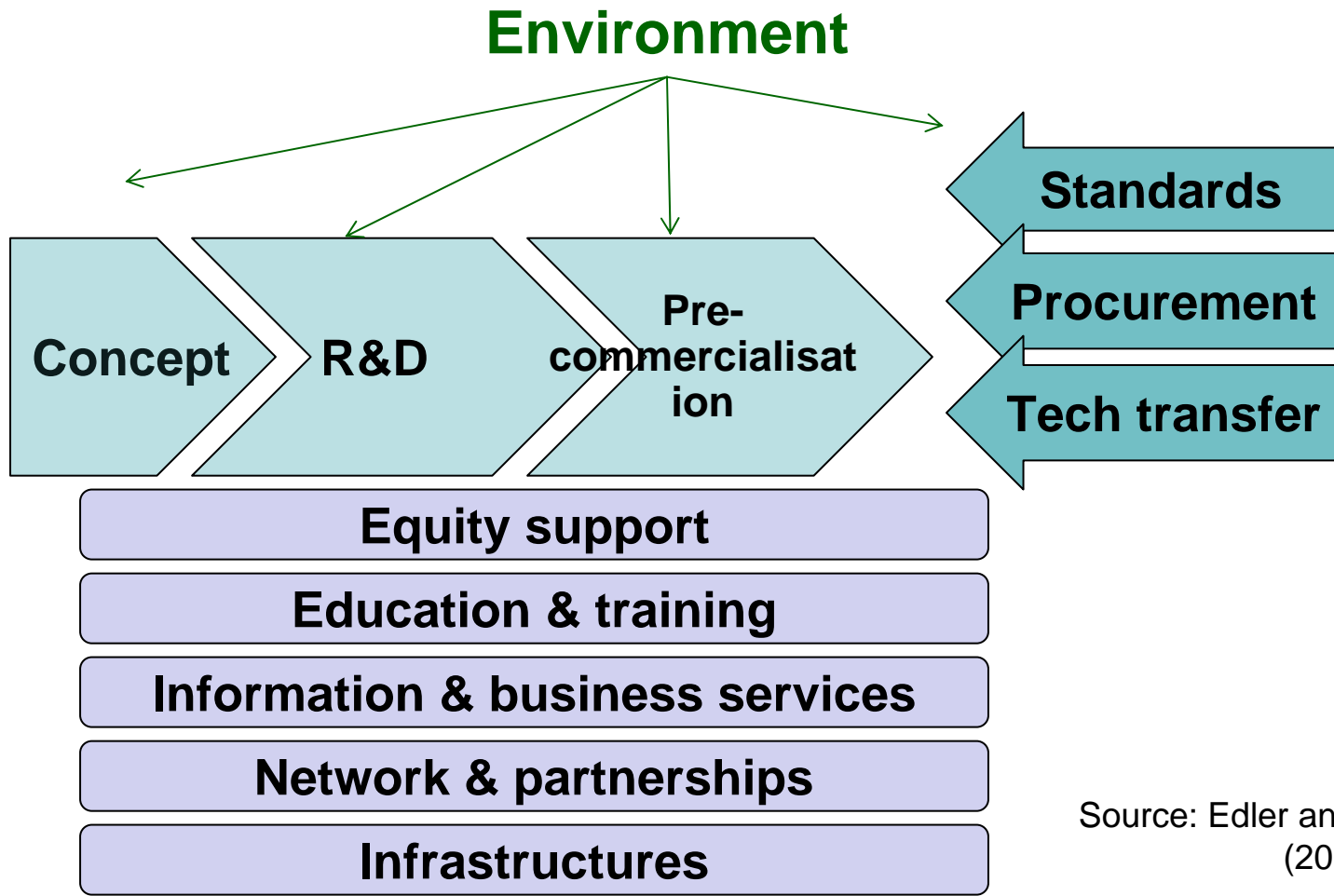
- **Input:** R&D expenditure/personnel
- **Intermediate output:** No. of patents; no. & types of scientific publications
- **Direct output:** No. of innovations; sales of new products
- **Indirect impact:** changes in environmental impact & resource efficiency



Possibility for “**Eco-innovation Scoreboard**”

But how to capture *non-technological innovations*?

Towards “eco-innovation policies”



Source: Edler and Georghiou (2007), adapted

Where are the right levers for successful eco-innovation?

Promising areas for Phase 2

1. Sustainable manufacturing indicators

- Terminology and consistency in use
- Micro-macro linkage for aggregation
- Framework for identifying system-wide impact

2. Promising eco-innovation policies

- Collection of policy best practices
- Better evaluation of policy implementation
- Exploration of “results-oriented” policy-making

Promising areas for Phase 2

3. Common visions for eco-innovation

- In-depth case studies, especially more integrated, systemic eco-innovations
- Visions for future social systems and scenarios/roadmaps/priority-setting for realising visions
- Engagement of stakeholders for sharing

4. Common definition and scoreboard

- Definition based on Oslo Manual
- Country comparison of eco-innovation activities and public policies based on a number of benchmark criteria

Questions

- How can we make more relevant to the “green growth”, “green recovery” agenda?
 - Gaps between macro-economic and innovation approaches
 - Gaps between tech/sector-specific and system innovation approaches
 - Unclear linkages between innovation and competitiveness/growth/jobs
- Any better framework to capture different types of eco-innovation for policy relevance?
- What do you expect from the OECD?

Other work related to eco-innovation

- **Sector-specific work: ICT & bio, nano-tech (DSTI); transport (ITF); energy (IEA)**
- **Sustainable consumption (DSTI)**
- **Measuring eco-innovation based on patent data; Collection of eco-innovation policies; Material flow national accounting (ENV)**
- **“Embedded carbon” measurement based on OECD Input-Output Database (DSTI)**
- **OECD MNE Guidelines & CSR (DAF)**
- **Horizontal co-ordination started in DSTI**

Thank you!

- *OECD Policy Brief* available in the venue
- 30-page *Synthesis Report* will be available later this month
- Full reports will be published as a OECD book in the autumn

Visit

www.oecd.org/sti/innovation/sustainablemanufacturing

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