



OECD Green Growth Strategy

FAO/OECD Expert Meeting on Greening the Economy with Agriculture

5-7 September 2011



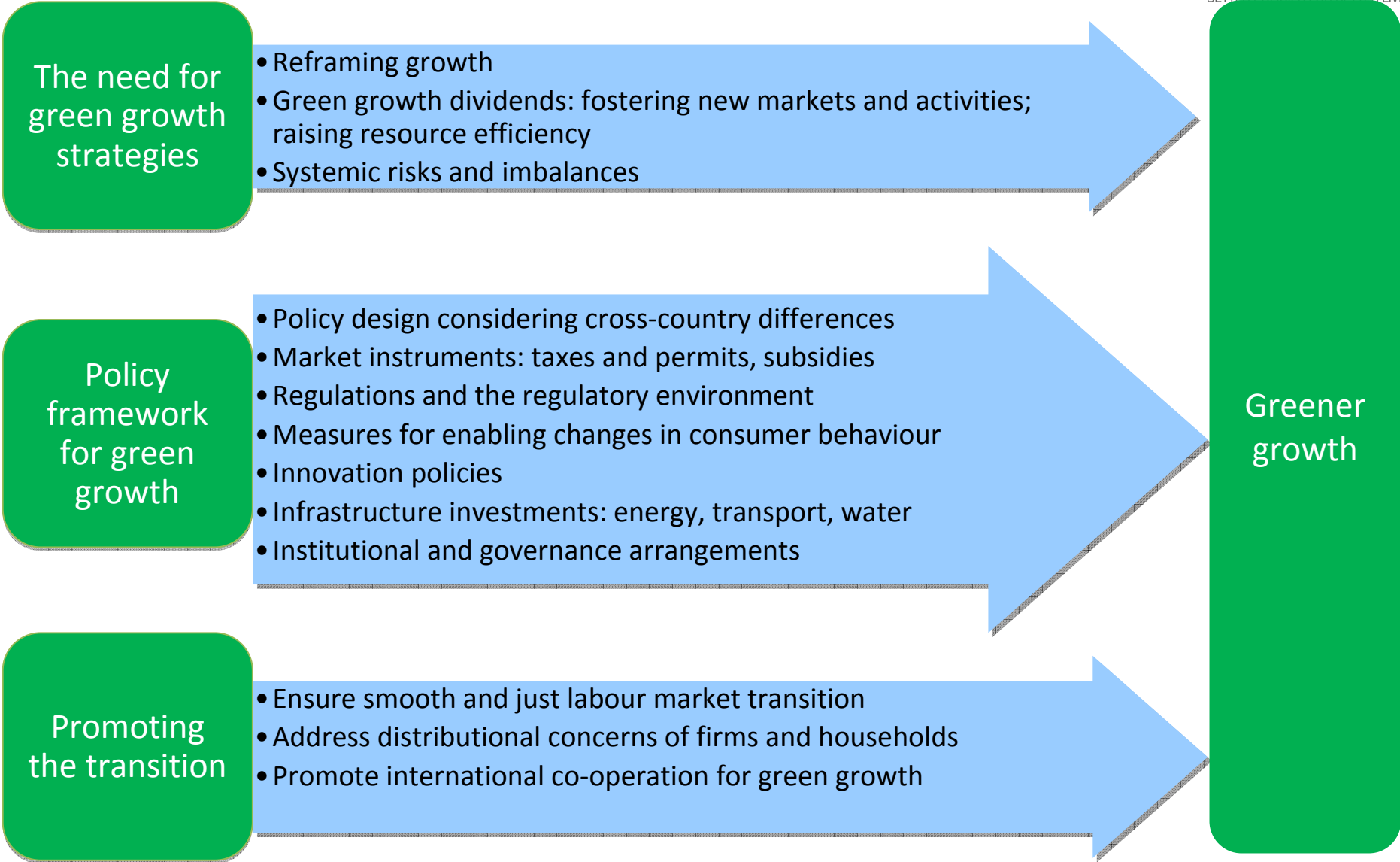
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The Green Growth Strategy



- **Multi-disciplinary inter-governmental process**, involving 25 OECD Committees: delegates from Ministries of Finance, Economy, Environment, Agriculture Development Co-operation, Industry, etc.
- Our work starts with the premise is that there is **no necessary conflict** between pursuing economic growth and doing so in a green way.
 - We need **growth** and it **needs to be green**.
- **Key deliverables** at the 2011 Ministerial meeting:
 - Synthesis Report: *Towards Green Growth*
 - Toolkit: *Tools for delivering on green growth*
 - Indicators Report: *Towards Green Growth: Measuring Progress – OECD Indicators*

'Towards Green Growth': structure (1)



'Towards Green Growth': structure (2)



Measuring progress

- Measurement framework and principles
- Emerging messages: relative but not absolute decoupling
- Other measurement issues, *e.g.* availability of internationally comparable data

Delivering on green growth

- Mainstream green growth policies in government policies, *e.g.* green growth toolkits
- Identify country-specific policy priorities, *e.g.* country reviews, GG reports for emerging and developing economies
- Issue-specific and sector-specific studies, *e.g.* food and agriculture, energy sector, water, etc

Greener growth

What is green growth?

Green growth means fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.

Green Growth and Sustainable Development:

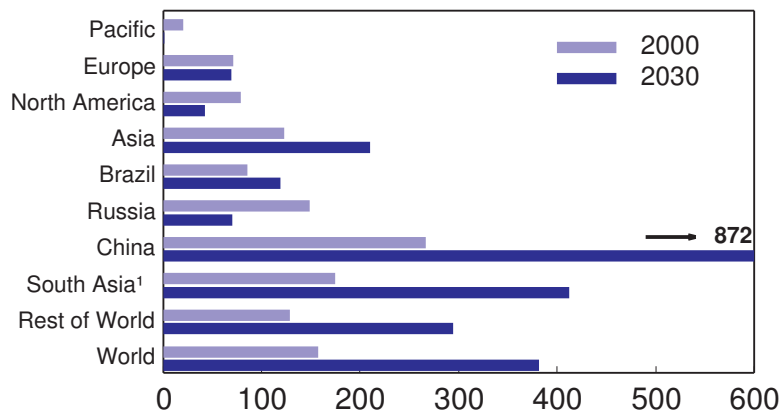
- Sustainable development **provides important context** for green growth
- Green growth as a **subset** of sustainable development: narrower; an **operational** policy framework to help achieve concrete, measurable progress
- Green growth focus on fostering innovation, investment and competition that can give rise to **new sources of economic growth**
- Green growth strategies need to pay attention to **social issues and equity concerns** as a result of greening the economy

The risks of not going green

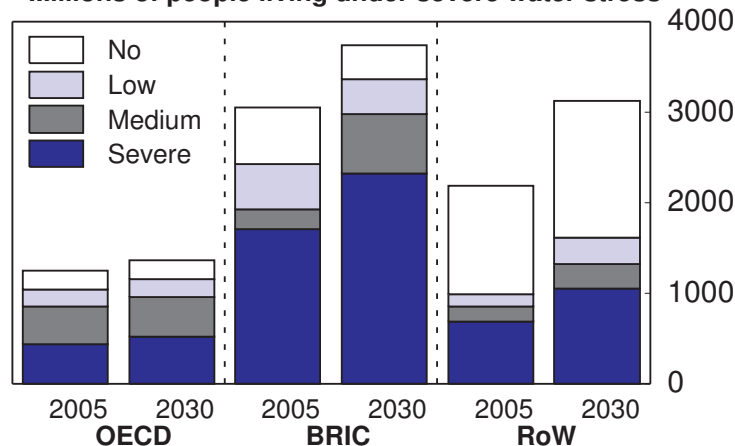
Air pollution, water stress, biodiversity loss, GHG emissions



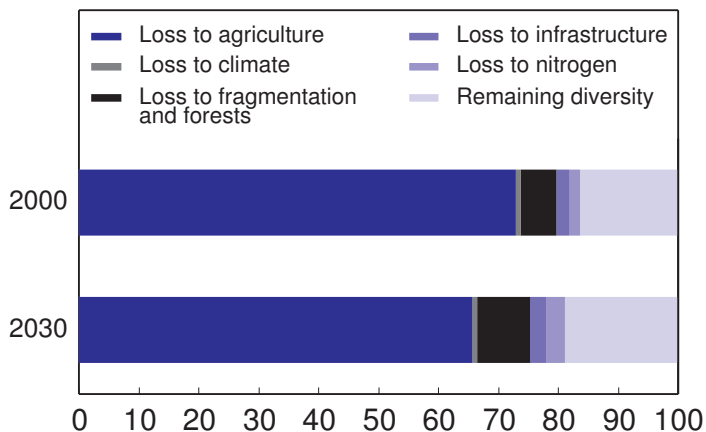
Premature death from PM10 air pollution



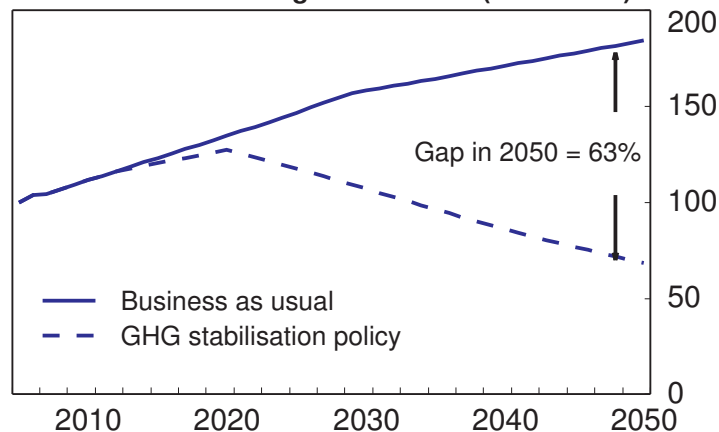
Millions of people living under severe water stress



World threats on biodiversity



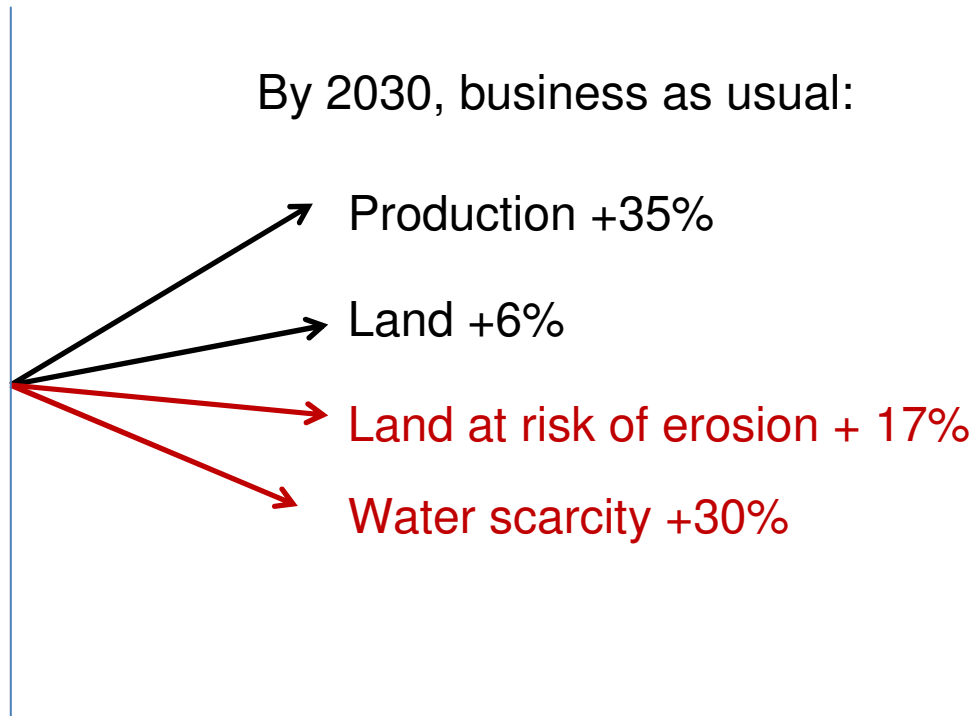
World's Greenhouse gas emissions (2005 = 100)



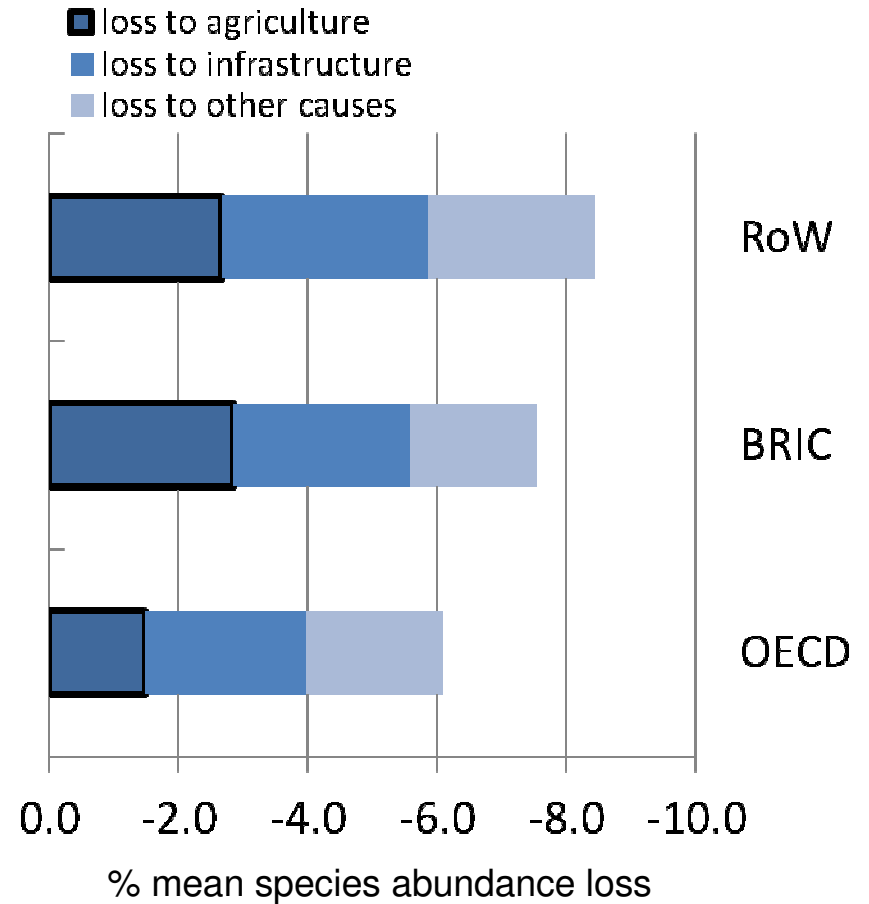
Source: OECD (2008), Environmental Outlook to 2030, and OECD (2009), The Economics of Climate Change Mitigation: Policies and Options for Global Action beyond 2012, OECD, Paris.

Risks in not going green: shocks to food supply

Pressures on natural capital



Biodiversity loss (2000-2030)

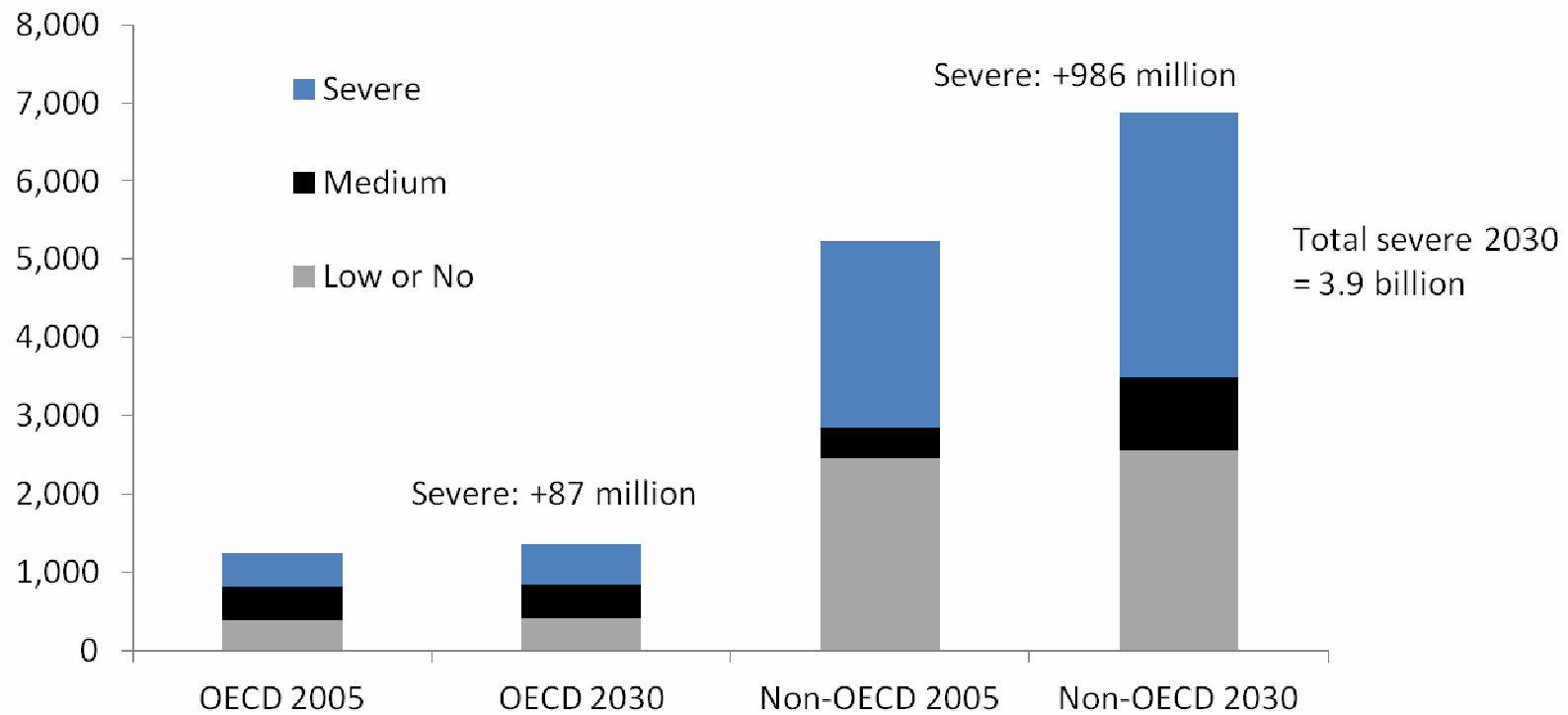


Source: OECD



Risks in not going green: water scarcity

Living with risk of water scarcity
(millions of people under water stress)



Source: OECD

Green growth can address economic and environmental challenges and open up new sources of growth



Expanding economic opportunities for a growing global population

- ✓ **Enhanced productivity**
- ✓ **Innovation**
- ✓ **New markets**
- ✓ **Boosting confidence**
- ✓ **Macroeconomic stability**

Reducing risks of negative shocks to growth

- ✓ **Resource bottlenecks**
- ✓ **Imbalances in natural systems**

Green growth and poverty reduction

- Greening growth can contribute to poverty reduction by *e.g.*:
 - bringing more efficient technologies and infrastructure to people (energy and transport)
 - underpinning sustained long-term growth
 - alleviating poor health associated with environmental pollution
 - minimizing the risks of a legacy of costly environmental degradation as development proceeds
- **Need for a tailored approach**

Policy challenges vary...

Category	Challenges
Developed countries	<ul style="list-style-type: none">▪ High greenhouse gas emission per capita▪ Lock-in into carbon intensive infrastructure
Developing countries	<ul style="list-style-type: none">▪ Industrialisation and increased energy and material consumption▪ Low energy efficiency▪ Weak legal enforcement
Least developed countries	<ul style="list-style-type: none">▪ High dependence on natural resources (both renewable and non-renewable)▪ Climate vulnerability▪ Lack of basic infrastructure (e.g. transport, energy and water)▪ Insufficient financial and technical capacity in government



Green growth in agri-food is desirable ... and achievable



- **Green growth in agriculture sector means :**
 - providing enough food, feed, fibre and fuel for 9 billion people in 2050...
 - ...in the context of greater pressure on land, water, fish stocks and biodiversity resources - and the impact of climate change...
 - ...and the need to limit the harmful and enhance the beneficial environmental impacts and reduce waste in the food supply chain

The Green Growth policy toolkit : Key points

- Governments need to draw from a **wide menu of policies**
- Involve a **mix of policy instruments** which differ across countries
- **put a price** on pollution and over-exploitation of scarce natural resources

Policies will include:

1. Policies that mutually reinforce green and growth:

- Policies to encourage innovation including adequate IPRs
- Labour and product market policies facilitating entry/exit/reallocation
- Growth conducive tax structures
- Openness to trade and investment

2. Policies specifically aimed at greening growth:

Price-based instruments : Environmental taxation, emission trading systems, emission credit systems, subsidies

Non-market instruments: Regulation, standards, active technology support, information-based measures, voluntary agreements

Supporting green growth for food and agriculture:

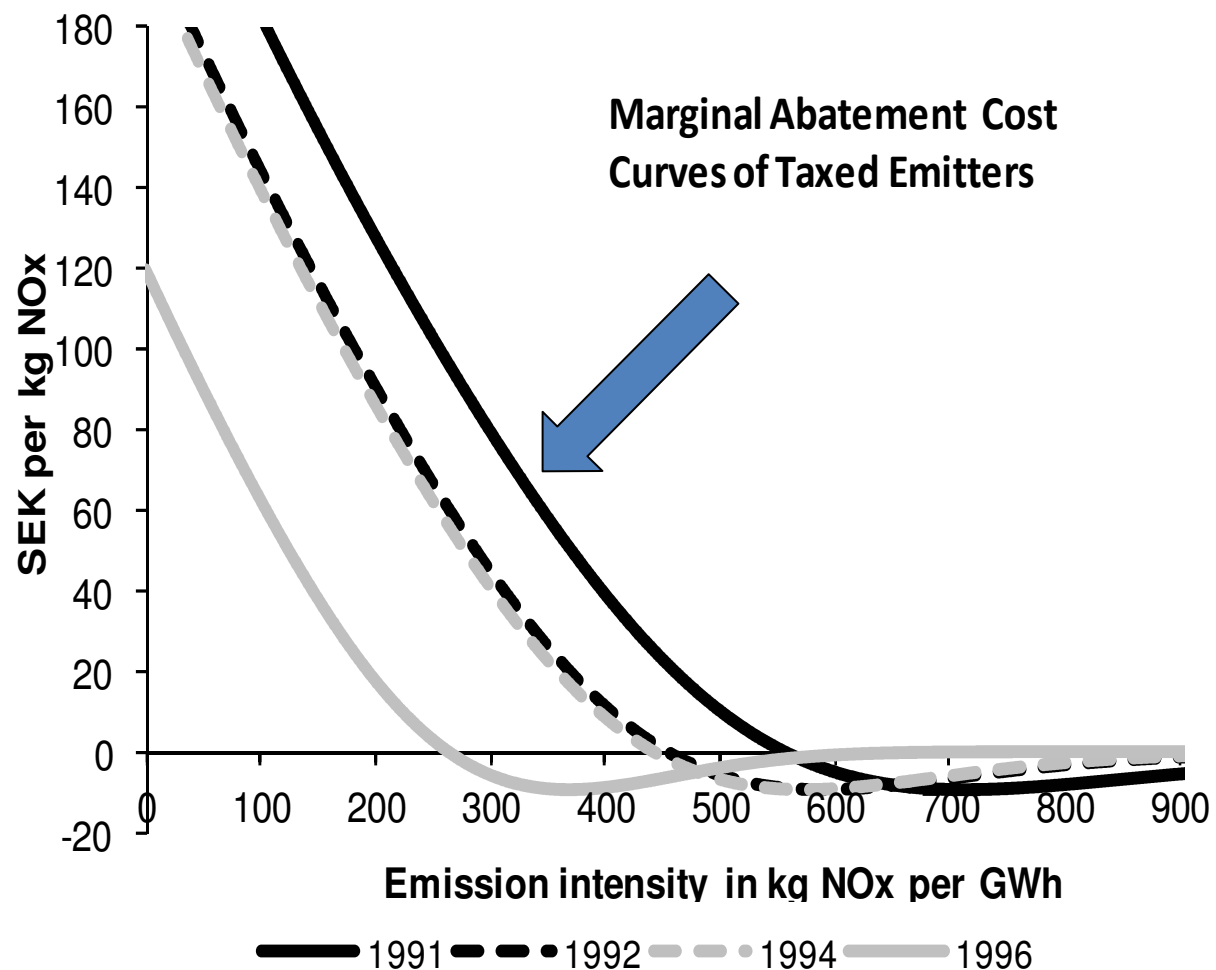
- Increasing **productivity** in a sustainable manner – from research and development, innovation, to uptake all along the food supply chain
- Ensuring **well-functioning markets** provide the right price signals – taking account of non-market values
- Establishing and enforcing **well defined property rights** to ensure optimal resource use, especially as many of them are global and not domestic

These priorities aren't new : governments have a role in "**pricing the environment**" so that farmers and business have incentives to respond to signals

- The challenge is to provide **concrete implementable policy advice, measure progress, and learn from experiences across countries and businesses**

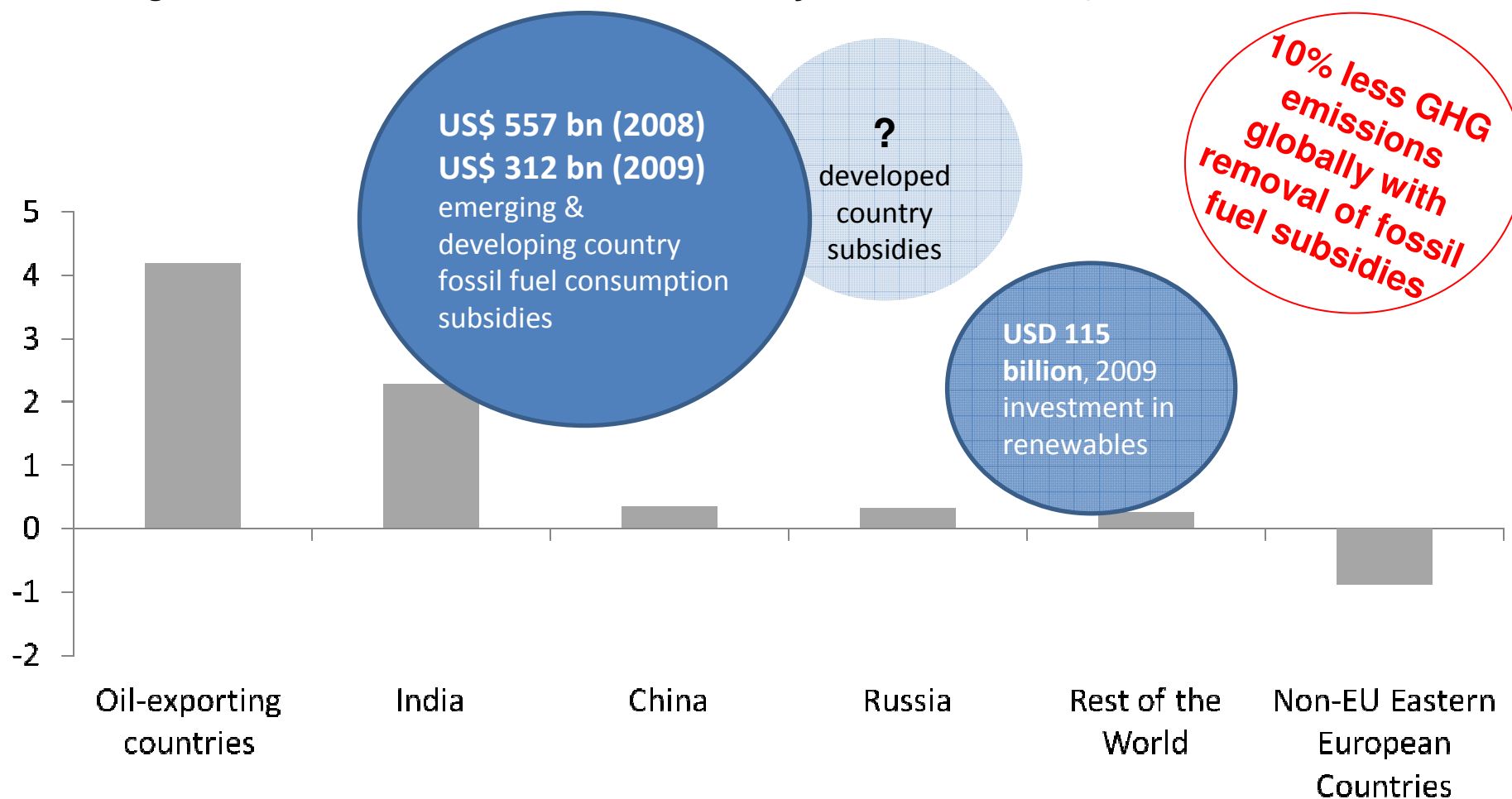
Prices matter – and spur innovation

- **Swedish NO_x tax**
 - Patents increased;
 - Emission intensities declined;
 - Marginal Abatement Costs fell.



Fossil fuel subsidies: subsidising CO₂ emissions

Income gains from unilateral fossil fuel subsidy removal (% change in household income vs BAU)

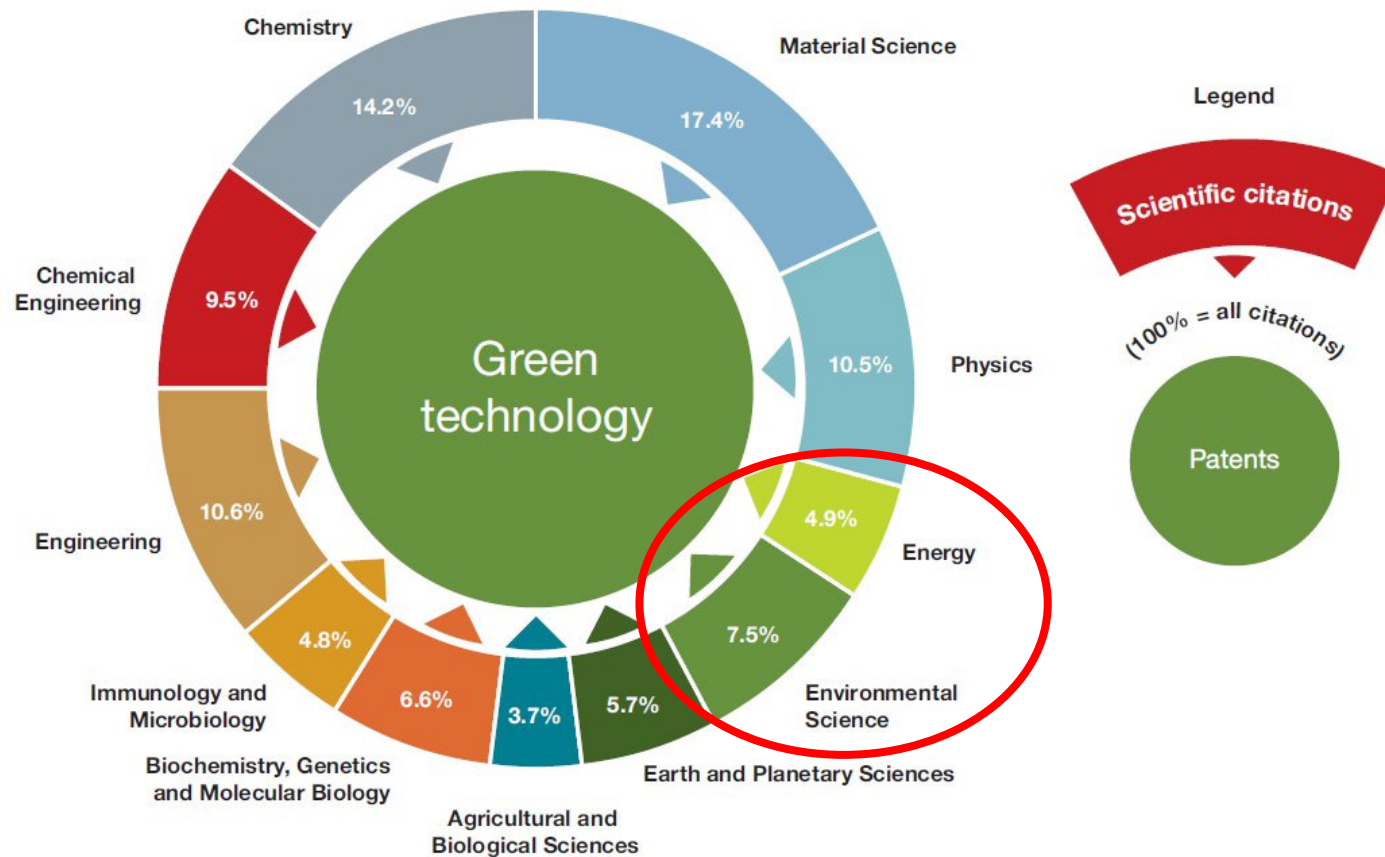


Source: OECD analysis, based on IEA data

Innovation in unexpected places: Target multidisciplinary research

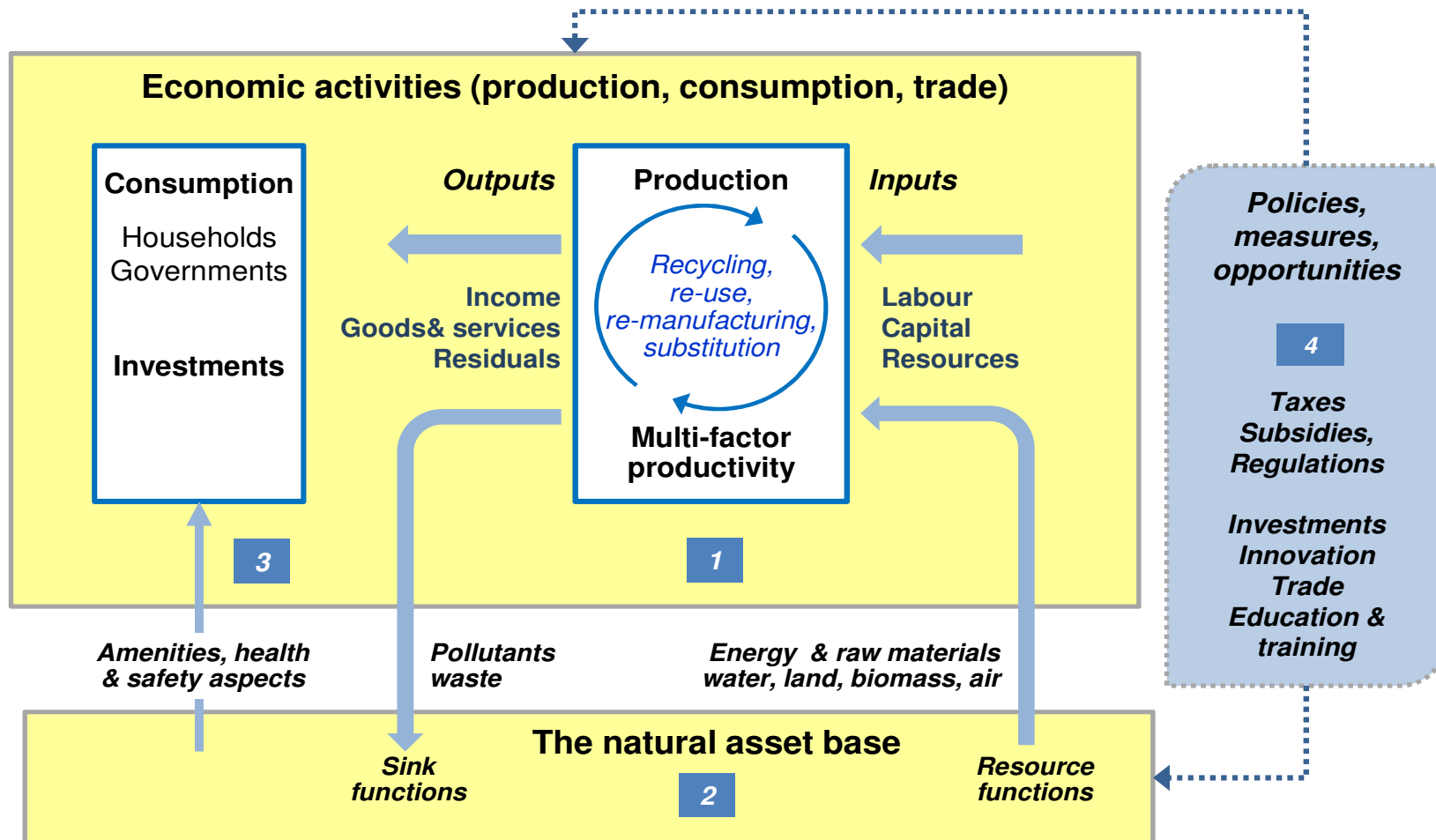
The innovation-science link in selected green technologies

Patent-science link via citations, 2000-07



Source: OECD (2010), *Measuring Innovation – A New Perspective*, based on Scopus Custom Data, Elsevier, July 2009; OECD, Patent Database, January 2010; and EPO, Worldwide Patent Statistical Database, September 2009.

A framework for green growth indicators



The socio-economic context and characteristics of growth

1: Indicators monitoring environmental and resource productivity

2: Indicators monitoring the natural asset base

3: Indicators monitoring the environmental quality of life

4: indicators monitoring economic opportunities and policy responses

and monitoring progress in greening the agri-food sector



- No single indicator to track environmental or social impact of agriculture
- Economic, agri-environmental, natural resource stocks and social indicators exist - at various stages of development. They illustrate issues such as:
 - relationship between agriculture production and land area
 - use of irrigated water in agriculture; nutrient balances (N and P)
 - GHG emissions in relation to agriculture production
 - What are needed are *resource intensity indicators* at different production stages and *Valuation of environmental externalities*
 - *supplemented by case studies* to capture food system governance, institutions, changes in policy directions and management approaches

Directions for future work at OECD on green growth



Timeline

Deliverables

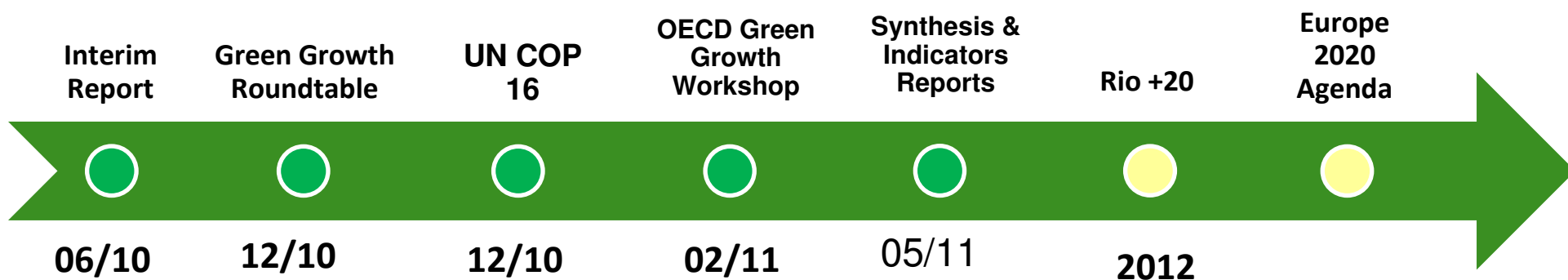
2011 MCM

- ❖ Green Growth Strategy Synthesis Report
- ❖ Green Growth Indicators Report

2011/2012

- ❖ Green growth monitoring work: indicators, country surveys
- ❖ Green Growth Reports for Emerging Economies
- ❖ Report on Green Growth and Developing Countries
- ❖ *A Green Growth Strategy for Food and Agriculture*
- ❖ Joint IEA/OECD Green Growth Study for Energy
- ❖ Monitoring green investment protectionism concerns
- ❖ Report on Green Innovation
- ❖ Green Growth and Biodiversity
- ❖ Green Cities Programme
- ❖ Project on Green Financing
- ❖ Green Growth and Water
- ❖ Environmental regulations and growth
- ❖ Green fiscal revenue
- ❖ Job potential of a shift towards a low-carbon economy

The Timeline



Green Growth Reports on Partner Countries (Brazil, China, India, Indonesia, South Africa)

- Country Economic Surveys, Environmental Performance Reviews, Innovation Reviews
- Environmental Outlook to 2050*

Mainstreaming green growth in OECD work program

International Green Growth Dialogue



- Share your perspectives and initiatives, and discuss the development of the Green Growth Strategy.

- www.oecd.org/greengrowth

- www.oecd.org/agriculture/greengrowth

The screenshot shows the 'Green Growth Strategy' website interface. At the top, there's a green header with the title 'Green Growth Strategy' and a navigation bar. Below the header, the main content area is titled 'International Green Growth Dialogue'. It includes a navigation menu with 'Overview (customize)', 'All Content (33)', 'Discussions (2)', and 'Documents (31)'. A prominent yellow announcement banner states: 'ANNOUNCEMENT: The final version of the Interim Report is now available'. The page is divided into several columns: 'Latest Documents for Comment or Discussion' with a discussion about green growth initiatives; 'Latest Documents for Information' listing recent events and reports; 'Welcome to the International Green Growth Dialogue' providing an overview of the forum's purpose; 'What's New' with a list of recent news items dated from June 2010; 'Actions' with options like 'Start a discussion' and 'Create a document'; 'Notifications' with 'Receive email notifications' and 'View feeds'; and 'OECD Links' with links to the 'OECD Green Growth webpage', 'OECD Forum 2010', 'Meeting of the OECD Council at Ministerial Level 2009', and 'Interim Report'.