

Green Growth Indicators: OECD Approach

CNIS

Paris 12 April 2012

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1. OECD Green Growth Strategy

Background

- Mandate to OECD in 2009
- Report to Ministerial meeting in 2011
 - Green Growth Strategy
 - **Green Growth Indicators**
 - Tools for Delivering on Green Growth
 - Special reports on
 - Agriculture
 - Energy

...to start with, a definition of Green Growth

*Green growth is about fostering **economic growth and development** while ensuring that the **natural assets** continue to provide the resources and environmental services on which our well-being relies. To do this it must catalyse investment and innovation which will underpin sustained growth and give rise to new **economic opportunities**.*

...what's different from Sustainable Development?

- SD provides important context for GG
- GG: more narrowly focused and with a strong policy component
- Green growth:
 - Emphasises *flows* and greening of growth
 - Emphasises economic opportunities: fostering innovation, investment and competition that can give rise to new sources of economic growth
 - Takes an 'optimistic' stance about of growth and resilient ecosystems

Sources of green growth

Green growth can **open up new sources of growth**
through:

- Enhanced productivity
- Innovation
- New markets
- Confidence
- Stability

and also **reduce risks of negative shocks to growth**
from:

- Bottlenecks from resource scarcity
- Imbalances in natural systems



2. OECD Green Growth Indicators

... indicators report



Four dimensions

- Low-carbon, resource-efficient economy:
Indicators of environmental and resource productivity
->*IS GROWTH BECOMING GREENER?*
- Rising productivity is not enough: often, an *absolute* decline in environmental pressures is needed to ***keep the natural asset base intact***
->*IS THERE A RISK OF FUTURE SHOCK TO GROWTH?*

Four dimensions

- Capturing the direct interaction between people and the environment : ***indicators of environmental quality of life***

→ *HOW THE ENVIRONMENT AFFECTS PEOPLE*

- ***Economic opportunities*** from environmental considerations and ***policy responses***

-> *HOW GREEN HELPS GROWTH & EMPLOYMENT*

Indicator groups and topics

1 The environmental and resource productivity of the economy

- Carbon and energy productivity
- Resource productivity: materials, nutrients, water
- Multi-factor productivity

2 The natural asset base

- Renewable stocks: water, forest, fish resources
- Non-renewable stocks: mineral resources
- Biodiversity and ecosystems

3 The environmental dimension of quality of life

- Environmental health and risks
- Environmental services and amenities

4 Economic opportunities and policy responses

- Technology and innovation
- Environmental goods & services
- International financial flows
- Prices and transfers
- Skills and training
- Regulations and management approaches

Socio-economic context and characteristics of growth

- Economic growth and structure
- Productivity and trade
- Labour markets, education and income
- Socio-demographic patterns

...full list of about 25 indicators (extract)... with considerable gaps

Group/theme	Proposed indicators	Type	R	S	M
Environmental and resource productivity					
Carbon & energy productivity	1. CO₂ productivity				
	1.1. Production-based CO ₂ productivity GDP per unit of energy-related CO ₂ emitted	M	1	1	S
	1.2. Demand-based CO ₂ productivity Real income per unit of energy-related CO ₂ emitted	M	1	2	S/M
	2. Energy productivity				
	2.1. Energy productivity (GDP per unit of TPES)	M	2	1	S
	2.2. Energy intensity by sector (manufacturing, transport, households, services)	M	2	1	S/M
	2.3. Share of renewable energy in TPES, in electricity production	M	1	1	S
Resource productivity	3. Material productivity (non-energy)				
	3.1. Demand based material productivity (comprehensive measure; original units in physical terms) related to real disposable income	M	1	3	M/L
	• Domestic material productivity (GDP/DMC) - Biotic materials (food, other biomass) - Abiotic materials (metallic minerals, industrial minerals)	P	1	2	S/M
	3.2. Waste generation intensities and recovery ratios By sector, per unit of GDP or VA, per capita	M	1	1	M/L
	3.3. Nutrient flows and balances (N,P) • Nutrient balances in agriculture (N, P) per agricultural land area and change in agricultural output	M P	1 2	3 1	L S/M
	4. Water productivity	M	1	1	M
	VA per unit of water consumed, by sector (for agriculture: irrigation water per hectare irrigated)				
Multi-factor productivity	5. Multi-factor productivity reflecting environmental services (comprehensive measure; original units in monetary terms)	M	1	2	M/L

...qualifier for each indicator

Criteria	Classification
Relevance (R)	1= high 2= medium 3= be further reviewed
Analytical soundness (S)	1= good 2= average 3= to be further reviewed
Measurability (M)	S = short term basic data currently available for a majority of OECD countries; M = medium term basic data partially available, but calling for further efforts to improve their quality (consistency, comparability, timeliness) and their geographical coverage (number of countries covered) L = long term basic data not available for a majority OECD of countries, calling for a sustained data collection and conceptual efforts.



3. Measurement Agenda

Measurement agenda (1)

1. Updating indicator publication

2. Implementing environment-economy accounting framework

- Key for consistent information
- Key for the construction of indicators
- SEEA adopted by the United Nations
- Next: implementation OECD

Measurement agenda (2)

3. Focus: measuring natural resources

- Accounts on **land**, in particular monetary valuation and volume measures
- Valuation of **other natural resources**, such as non-energy and energy mineral resources, and timber resources

Measurement agenda (3)

4. Extended growth accounting

- Better capture growth contribution of natural assets
- Are we measuring productivity correctly?

Join the discussion!



- **International Green Growth Dialogue online community**
- A secure site for sharing your perspectives and initiatives, and discussing the development of the Green Growth Strategy.
- To register, email your contact details to:
green.growth@oecd.org



Green Growth Strategy



Thank you!

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