The OECD Green Growth Strategy and its measurement framework

UNECE/FAO workshop
Measuring the value of forests in a green economy
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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 to give rise to new economic opportunities.

→ Compatible & mutually-reinforcing economic and environmental policies
Monitoring progress:
OECD measurement framework and indicators
Monitoring progress towards Green Growth

- At the core of the OECD GG Strategy
- Draws from experience with indicators, statistics, accounts
- Concrete outputs
  - Conceptual measurement framework
  - Set of indicators
  - Database
- Use in OECD work
  - Policy analysis
  - Country reviews
- Applications in countries
Green Growth indicators

Conceptual measurement framework

Combines the main features of green growth with basic accounting principles and the PSR model

Economic activities (production, consumption, trade)

Consumption
- Households
- Governments

Investments

Outputs
- Income
- Goods & services
- Residuals

Inputs
- Labour
- Capital
- Resources

Production
- Multi-factor productivity
- Recycling, re-use, remanufacturing, substitution

Natural asset base (capital stocks, environmental quality)
- Amenities, health & safety aspects
- Pollutants waste
- Energy & raw materials
  - water, land, biomass, air

Service functions
- Sink functions

Resource functions

Policies
- Measures

Opportunities
- Policy instruments, innovation, financing, education, employment

Policy
- Instruments
- Innovation
- Financing
- Education
- Employment
## Five inter-related indicator groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>The environmental and resource productivity of the economy</td>
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<tr>
<td>2</td>
<td>The natural asset base of the economy</td>
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<tr>
<td>3</td>
<td>The environmental dimension of quality of life</td>
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<td>4</td>
<td>Economic opportunities and policy responses</td>
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<tr>
<td>5</td>
<td>Socio-economic context and characteristics of growth</td>
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</tbody>
</table>

**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 of the economy**
- 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

**5. Socio-economic context and characteristics of growth**
- Economic growth and structure
- Productivity and trade
- Labour markets, education and income
- Socio-demographic patterns
OECD approach

• Pragmatic
  – No composite indicator, rather a set of internationally comparable indicators of manageable size
    • A set of about 25 to 30 indicators
    • A small sub-set of 6 headline indicators for communication purposes
  – Selected from existing OECD work

• Balanced
  – Coverage of “green” and “growth”
  – Relevance for OECD countries and for key partners
  – Relevance for international work and for countries

• Flexible
  – Easy to adapt to countries’ circumstances
  – Easy to adapt to sectors
  – Easy to apply at macro-, meso-, micro-levels
  – Easy to improve and develop further
# Green Growth indicators

## Headline indicators

Selected from full set to ease communication with policy makers, media, citizens

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<td>Carbon productivity</td>
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<td>Resource productivity</td>
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<td>Multifactor productivity</td>
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<th>The natural asset base</th>
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<td>Renewable and non-renewable stocks</td>
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<td>Biodiversity and ecosystems</td>
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<th>Environmental quality of life</th>
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<td>Technology and innovation, environmental goods and services, prices and transfers, etc.</td>
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</table>

“Green” difficult to isolate
Diversity of country circumstances, of instruments
→ countries to choose
Monitoring progress towards green growth
Foundations and overall indicator architecture

Measuring well-being and the progress of societies – GDP and beyond

Better Life initiative
- Better life index
- How’s life
- Income inequality

Monitoring progress towards Green Growth
- Socio-economic & growth characteristics
- Environmental and resource productivity
- Natural asset base
- Environmental quality of life
- Economic opportunities and policies

OECD indicators and statistical databases
- Economic performance
  - National accounts
  - Productivity
- Environmental performance
  - Resource productivity
- Science & Technology
  - Innovation
  - Entrepreneurship
- Energy
  - Agriculture
  - Transport
- Employment
  - Education
- Development aid
  - Investment
  - Trade

Review & selection:
- Policy relevance
- Analytical soundness
- Measurability

SEEA

UN SDGs
- FAO
- UNEP, WB
- UNECE
- EU
- National indicators

Member countries
- IGOs

Green Growth indicators
Green Growth Indicators & Sustainable Development Goals

1. No Poverty
2. Zero Hunger
3. Good Health and Well-Being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
7. Affordable and Clean Energy
8. Decent Work and Economic Growth
9. Industry Innovation and Infrastructure
10. Reduced Inequalities
11. Sustainable Cities and Communities
12. Responsible Consumption and Production
13. Climate Action
14. Life Below Water
15. Life on Land
16. Peace and Justice Strong Institutions
17. Partnerships for the Goals

Environmental and resource productivity
Natural asset base
Environmental quality of life
Eco opportunities and policy responses
### Forest in the OECD Green Growth Measurement Framework

<table>
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<tr>
<th><strong>1</strong></th>
<th>The environmental and resource productivity of the economy</th>
<th>• Material productivity (biotic materials, wood)</th>
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<tbody>
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<td><strong>2</strong></td>
<td>The natural asset base of the economy</td>
<td>• Forest resources</td>
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<td></td>
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<td>• Land resources: forest, arable, pasture land</td>
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<td></td>
<td></td>
<td>• Biodiversity and ecosystems (wildlife resources)</td>
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<td></td>
<td>• Natural resource index</td>
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+ Forest in OECD Core set of Environmental Indicators
OECD GGI in practice
Intensity of use of forest resource in OECD countries
2011 or latest

OECD (2013), OECD Environment Statistics (database)
OECD (2014) Green growth indicators

Export of forest products
Selected OECD countries, 2011, as a share of national exports of goods

OECD (2013), OECD Environment Statistics (database)
Increasing volume of forest area of standing timber
Forests covered 30% of the area of Germany, an increase of 3% compared with 1992.
Due to expansion of forest areas, standing timber increased since 2000 by an average annual growth of 1.9 percent.

Dutch timber production is stable at about 1.0 million m³ annually (under bark).
Measurement agenda
Measurement agenda

→ Capture better
  - Contribution of natural assets to growth
  - “Greening” of economic sectors
  - Economic opportunities and effectiveness of policies

→ Fill data gaps
  - Consistent environmental-economic data at industry level
  - Natural assets and material flows
  - Biodiversity and ecosystem services

→ Enhance role of System of Environmental-Economic Accounts
  - Consistent information on env-eco interface, with breakdown by industry
  - Better capturing growth contribution of natural assets
  - OECD headline indicators

→ Strengthen the use of indicators in OECD work and in countries
  - OECD environmental performance reviews and economic surveys
  - In OECD member countries and others (e.g. in EECCA)

→ Gain additional feedback on relevance and interpretation
Thank you!

For more information, see www.oecd.org/greengrowth and www.oecd.org/greengrowth/indicators

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