Green growth and competitiveness

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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.

Wide concept encompassing the whole economy not just the environment.
Green growth policies and competitiveness

- Environmental taxes ➞ to get the price of goods and services right (pricing externalities); costs of energy

- Employment/labour market ➞ creation of “green jobs” and transition of workers to less polluting and resource-intensive firms and sectors; costs of labour

- Innovation ➞ incentives to create and deploy more productive (green) technologies; supply chains, productivity increase
Environmental taxation: issues

- Green taxation:
  - get the price of goods and services right (pricing externalities);
  - shift production from highly to less polluting and resource intensive sectors

- Competitiveness issue: higher taxes and costs (e.g.: energy costs) for firms
Green taxation: environmental tax receipts are higher than elsewhere.

Total environmentally related taxes, % GDP

Source: OECD Green Growth Indicators
Green taxation: ….but focusing on energy mostly

Composition of environmentaly related taxes, 2012

- Other
- Motor vehicles
- Energy
- Total

% GDP

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

United States
Canada
Chile
Japan
OECD
Spain
Slovak Republic
Switzerland
France
Australia
Poland
Germany
Portugal
Norway
Iceland
Belgium
Ireland
United Kingdom
Luxembourg
Sweden
Austria
Korea
Estonia
Czech Republic
Hungary
Italy
Finland
Israel
Netherlands
Turkey
Denmark
Slovenia
Green taxation: ....with high excises on fuel for road transport

Effective tax rates on energy: Gasoline vs. diesel (road use, mid-2012)

Source: OECD (2013) Taxing Energy Use
Green taxation: high taxation has resulted in low energy intensity and CO₂ emissions.
Green taxation:…also thanks to rising share of renewables
Green taxation: Share of electricity, gas and water supply costs is higher than elsewhere.

Share of Electricity, Gas and Water Supply Costs by country (2011 / USA: 2009)

- ITA: 2.2%
- DEU: 1.5%
- FRA: 1.1%
- SWE: 1.0%
- DNK: 0.8%
- USA: 0.6%

Green taxation:...but still small in most sectors

Green taxation: there is room to reduce taxes on labour

Source: OECD Taxing Wages Database
Green taxation: general policy recommendation

• Higher environmental taxes need be accompanied by lowering income/labour taxes ➔ more efficient tax system; higher growth

• Environmentally related taxes could reach 10-11% of GDP, according to some estimates

• Broaden the base of environmental taxes to beyond energy use to motor vehicles and other activities, (e.g.: waste management…)

• Pricing externalities in a more uniform way (e.g. diesel vs petrol)
Employment: issues

• Transition towards green growth ➔ new opportunities and risks as workers will shift from more to less polluting and resource-intensive firms and sectors

• Need to facilitate these transition: two main issues;
  – Labour market flexibility
  – Social and skill policies
Employment: most polluting industries account for a small share of jobs

Source: The World Input-Output Database (WIOD)
Employment: Reallocation of activity accounted for most of the reduction in CO2 per employee between 1995 and 2009

Source: The World Input-Output Database (WIOD)
Employment: general policy recommendation

- Facilitate transition of workers from more to less polluting and resources firms and sectors (e.g. from heavy industries to high-tech, creative high value added sectors)

- Need of social policies to assist displaced workers

- Improve co-ordination among labour market, skill policies and environmental policies:
  - Support the change in job skill requirements (e.g. construction works)

- Reducing barriers to firms creation, competition and job creation (including in services)
Innovation: main issues

- Production and deployment of environmentally related technologies

- Supply chains for environmentally related goods
  (e.g.: renewable industries focused on downstream sector, installation)

- More innovation in environmentally related technologies ➔ High value added activities and jobs
Innovation: public sector has supported environmentally related R&D

Public spending in environmentally related RD, % total public spending

- Denmark
- France
- Italy
- Sweden
- United Kingdom
Innovation:…but patents have remained elusive

**Patents on environment-related technologies (2005-2013)**

- Energy efficiency in buildings and lighting
- Technologies for climate change and emission mitigation
- General Environmental Management (air, water, waste)
- Emissions abatement and fuel efficiency in transportation
- Energy generation from renewable and non-fossil sources
- Total per million of people (right axis)
Innovation: …but not only in environmentally related technologies
• Focus must be on the general framework to stimulate more innovation and more green innovation (if the price is right).

• Develop and implement a comprehensive framework for promoting eco-innovation:
  – Improve co-ordination of industries, innovation and eco-innovation policies across the government
  – Improve links between academic/research institutions and business sectors.

• Bridge the gap between R&D and industrial policies (which are the responsibility of different ministries).

• Supporting eco-innovation and the diffusion of green technologies by strengthening initial education and vocational training.

• If incentives are right green innovation will come.
Summary and conclusion

• Italy has made progress towards green growth

• Competitiveness issues concern mainly the country as a system and not green growth policies per se

• Pursuing green growth policies along with structural reforms ➔ higher growth with “green sectors” contributing to it
For more information and queries
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Resources

OECD Green Growth Strategy
http://www.oecd.org/greengrowth/towardsgreengrowth.htm