

Green Growth

Broad support, but what is it?

Rob Maas, 24 April 2013

Green Construction

Building a greener construction sector for Europe

Environmental improvements to the construction sector would increase its competitiveness and make significant contributions to a more resource efficient society. The EU's Roadmap to a Resource Efficient Europe indicates that better construction and use of buildings in the EU could influence 42% of our final energy consumption, about 35% of our greenhouse gas emissions and more than 50% of all extracted materials, for example. It could also help us save up to 30% of water.

Science for Environmental Policy, 23 April 2012

Richer nature, new environmental regulation and new growth opportunities for agriculture

Global demand for food is increasing significantly and will continue to increase in the decades to come. At the same time, nature is under pressure in many parts of the world from unsustainable growth and increasing population, and there is a shortage of clean water and other vital resources. Climate change also calls for changes in the way food is being produced and consumed; in Denmark as well as globally.

Denmark must be a frontrunner in developing the biobased society and sustainable, efficient agricultural production which minimise the consumption of resources, and is better balanced with nature, environment and climate. Denmark itself needs this development, but we can also develop new solutions and technologies for the rest of the world. In this way, Denmark can create development and employment whilst reducing impacts on environment, nature and climate.



Everyone agrees ...

definitions vary ... desired actions vary

1. Green growth = *decoupling* GDP growth from GHG, AP, water use, land use,
2. Green growth = *greening taxation*
3. Green growth = growth based on *ecosystem services* (tourism, forestry) ...
4. Green growth = substituting petrochemical products by biobased (agricultural) products
5. Green growth = *greening agriculture*

1. Decoupling

- Green production: Innovation is key!
 - Is innovation unlimited?
 - Is green growth an oxymoron?
 - Green consumption?
- Tools?
 - Financial instruments, regulation, R&D policy
 - Endless policy?



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“Green growth”: From a growing eco-industry to economic sustainability

Martin Jänicke*

Freie Universität Berlin, Environmental Policy Research Centre, 14195 Berlin, Germany

H I G H L I G H T S

- ▶ “Green growth”—from a sectoral to an integrated view of the economy.
- ▶ Green investment can increase the GDP.
- ▶ “Green growth” is both, rapid growth of green sectors and “de-growth” of others.
- ▶ “Zero growth” is no solution of the environmental problem.
- ▶ Rich countries can achieve high speed of eco-innovation even with low growth rates.

2. Greening taxation

- Include external effects in the price of products + reduce income tax
- What to tax?
 - Kilometres, fuels, carbon, water, land use, nitrogen, pesticides, meat
 - Don't forget perverse subsidies (kerosine, large industry, agriculture)

Towards Green Growth



3. Ecosystem services

- Limits to growth of ecotourism, forestry, ..?
- Substitute for polluting sectors or growth on top of other activities?
- Dematerialisation of consumption?

4. Biobased economy

- Replace petrochemicals by biobased chemicals
- LCA? → footprint for land, carbon, water, nitrogen ?
- Efficiency/innovation is key for success
 - Intensification: are GMOs required?
pesticides?
 - Position of bio – organic agriculture?
 - Price of agricultural products?

5. Greening agriculture

- Decouple food and biomass production from the use of nutrients, land, water, and emissions of GHG and air pollutants?
- Efficiency in production and consumption
- Less waste, more recycling
- More jobs, higher incomes
- Price of agricultural products?

Towards a common approach

- Different visions do not have to be contradictory
- Sustainable development requires to take different views into account