

Conditions for green growth^a

Green growth should not be seen as a short-term solution to the present economic crisis, but as a way of contributing to the strengthening of the economic structure. Green growth will not be achieved with the flick of a switch; rather the government needs to set a point on the green horizon and take measures to reach it. This will allow the real costs of environmental use to be reflected in pricing, and the tax system to be made greener.

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There has been much discussion in recent months about the need for cutbacks. However, sustainable recovery necessitates a recovery in trust, and this requires more than just cutbacks. In fact, it requires reform of the social system, of which the stagnation on the housing market, the rapidly increasing costs of care and the financing of our pensions are well-known examples. An equally large challenge is the greening of the economy. Growth is unavoidable, given the projected increase in the world population to nine billion and the objective to improve living standards for all. However, this growth will need to be green – if not, we will damage the natural foundation of society. Climate change, biodiversity loss and increasing resource scarcity, in particular, require that changes are made to the system. This challenge has been acknowledged at the global level, as shown by recent publications by the Organisation for Economic Co-operation and Development (OECD) and the United Nations Environment Programme (UNEP). This challenge will also take a pivotal role in June 2012, on the agenda for Rio+20, the global sustainable development summit.

In some countries, green growth is now more than just an idea, with South Korea, Denmark, Germany and, strangely enough, China all working hard on the greening of the economy. Such an approach could also be valuable in an innovation-focused country such as the Netherlands. Here, we discuss important economic conditions for green growth, such as environmentally friendly technology development, environmental pricing and dynamic regulation. Green growth is a realistic development pathway for the Netherlands; however, it requires new value commitments, new ways of measuring success and new networks. It is conceivable that people will begin to consider clean technology and reduced meat consumption to be associated less with terms as ‘soft’ and more with ‘modern, efficient and healthy’. Green growth can provide a new sense of meaning and purpose; working towards a sustainable, innovative and cooperative society. This requires a new form of interaction between the government, business community and general public, as well as a better use of the dynamics in society.

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THE IMPORTANCE OF GREEN GROWTH

There comes a moment when more knowledge no longer helps. We know that our use of the environment is currently only partly reflected in the prices, or in some cases not at all. However, the future cost of climate change will be high. The increasing global demand for energy, food, water and raw materials is resulting in fuel extraction from unconventional fossil-fuel sources, such as tar sand oils, shale gas and deep-sea drilling, and involves high environmental costs or risks. Research shows that such trends are unsustainable¹ and that continuing along this path will mean that the availability of natural resources will limit future economic growth. Of course, we do not know exactly when

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which resources will become so scarce that it will present a problem. What we do know is that resource scarcity, in the short term, can result in price increases, protectionism and geopolitical tension. The business community is the first to experience the effects of price increases for raw materials and energy, and it is therefore not surprising that companies that need to make long-term investments and that are not tied to fossil fuels are leading the way in the call for the greening of the economy.

Changes are starting to take place: the OECD launched a green growth strategy in 2011², UNEP has taken the initiative for the greening of the economy³, and the European Commission is producing roadmaps for a European economy that makes efficient use of natural resources.⁴ The World Bank has also produced a framework for green growth.⁵ All these approaches are based on the protection of natural capital as the foundation for future economic growth; in other words achieving economic growth within the limits of the Earth's carrying capacity.

These studies show that it is possible to combine economic growth with a better environment. This requires a complete decoupling of economic growth and environmental pressure; in other words, combining increasing production and consumption with decreasing environmental impact. The ecological challenge is huge; it has been calculated that greenhouse gas emissions need to be reduced by a factor of 4 to 5 in the Netherlands (by 80% to 90%) and, according to the UNEP Resource Panel, a similar reduction is required in global resource use. This requires radical improvements in efficiency related to the use of energy, raw materials, water and land. This is not only necessary, it is also achievable⁶. Although it will not be easy, as for example that part of the efficiency gains achieved are often lost again through the volume effect, as energy-efficient technologies 'create' a higher demand for energy-consuming products. An example is LED lighting, which is more efficient than incandescent light bulbs and energy-saving light bulbs, but which people now also use to light their gardens and the outside of their homes.

The Netherlands has an energy-intensive economy and is a main importer and exporter of raw materials. Therefore, it is susceptible to price increases and the availability of natural resources. The Netherlands thus would benefit from a structural change that focuses on the greening of the economy. For example, the use of clean energy also improves air quality, which has positive effects on public health and nature. Past experiences with waste prevention and energy savings show that win-win situations are possible, although not unlimited. The global greening trend provides opportunities for Dutch companies in various sectors. It is also important that current top sector policy indicates how such green growth opportunities could be used in the Netherlands.

A focus on green growth may divert from the collision course with the Earth's natural limitations. According to the World Bank, sensible policy measures would not need to be at the expense of short-term growth.⁷ The question is whether green growth also may help us out of the current recession more quickly. The CPB Netherlands Bureau for Economic Policy Analysis notes that, although green growth will lead to new knowledge, jobs and sectors, other sectors will experience decline in this process of creative destruction.⁸ This is a clear argument, however, 'business is usual' is going to run aground sooner or later. To prevent this from happening, it is crucially important that we deal with vested interests and assist existing sectors in this transition process, as these parties currently often resist such change.

It is clear that green growth will result in a shift from brown to green jobs and a more robust economic structure. After all, businesses will become less susceptible to future shortages and price increases if they use energy and raw materials more efficiently. Everything that we do now in terms of renewable energy (wind, sun and biogas) makes us less dependent on fossil-fuel price fluctuations. Whether green growth will also result in more growth and jobs than brown growth depends partly on the existing economic structure. For example, the Netherlands has relatively low unemployment and there is expected to be a shortage rather than an excess of workers in the future. In the Netherlands, therefore, green growth should be seen, rather than a short-term solution to the present economic crisis, as a way of contributing to the strengthening of the economic structure.

CONDITIONS FOR GREEN GROWTH

Green growth will not be achieved with the flick of a switch; neither is there a blueprint for its implementation. New planning philosophies focus much more on concentrating on a public objective ('green growth' = less CO₂, efficient resource use and no major environmental impacts), subsequently stimulating innovation and consistently prioritising those activities that bring the ideal closer within reach. What are the principal elements of such a green growth strategy?

Environmental pricing

The true costs of environmental use are currently insufficiently expressed in prices, and in some cases not at all. If the hidden environmental costs are better reflected in prices, investment in clean and efficient technology will become more attractive and wastefulness more expensive. This can be done, for example, by allocating fewer CO₂ emissions rights to companies that fall under the EU Emissions Trading System, or by implementing a European energy tax. A further greening of the tax system is also possible in the Netherlands. In 2010, green taxes generated about 20 billion euros in the Netherlands, one of the highest rates in Europe, and made it possible to reduce income taxes. However, green taxes are expected to generate less income in the coming years due to the abolishment of taxes on packaging, waste and water, which together would generate about 750 million euros.

Abolish adverse incentives

There are still some pricing incentives available in the Netherlands that have a reverse effect as far as the environment is concerned. These often relate to exemptions and reduced tariffs for specific taxes. For example, bulk consumers of electricity and gas pay just a fraction of what private consumers pay. Given the huge differences in rates, it is no wonder that the least savings are achieved in the sectors that pay the lowest energy taxes.⁹ Another example of an adverse incentive is

the tax exemption for businesses and commuter traffic. Reducing this from 19 to 12 cents per kilometre would provide the treasury with roughly 1 billion euros, annually. Another argument for reducing this exemption is that cars are becoming increasingly economical. Abolishing all these so-called environmentally harmful subsidies would provide the Dutch treasury with an additional sum of up to 10 billion euros.¹⁰ Improving environmental quality, therefore, can make a substantial contribution to reducing government spending.

Dynamic regulation

However, pricing is no panacea. The last wild tuna may sell for a million dollars, but, to protect species, regulation would be more advisable. For example, it is possible to set regulations concerning the energy consumption of products such as electrical equipment and cars. Regulation has played an important role in those cases in the Netherlands in which emission reductions of more than 80% have already been achieved, such as for air pollution and waste. Clear agreements regarding emission standards also contribute to innovation and its dissemination. For example, there was a peak in patents filed at the time of the signing of the Kyoto Protocol. 'Dynamic standards' can be used to ease requirements over time and to reward innovative companies with a financial advantage. An example is the Japanese Top Runner programme, in which the government regularly takes the best-performing companies as a benchmark for setting standards.

Sustainable innovation

Innovation will be an important element of green growth. The challenge is to keep searching for new opportunities for the more efficient implementation of energy and materials in the production process, and to achieve the large-scale application of existing efficient technology. Above all, innovation must come from the business community. Many companies have already recognised opportunities in the fast-growing green technology market and are responding to this. To be able to achieve or maintain a competitive advantage, companies are focusing on research and development to either improve efficiency or substitute inputs. Companies that have developed green technology will have a financial advantage in the face of increasing prices of energy and raw materials. From the green growth perspective, we are now at the start of a 'green race', and companies such as Unilever and DSM are already preparing for this. The government stimulates environmentally friendly innovation in various ways; for example, by providing subsidies and tax benefits and by acting as a 'launching' customer. The importance of purchasing power should not be underestimated.

Vision

It is also important that the government sets a green dot on the horizon. This will mean the government commits itself to green growth, supports it through stable policy, and is prepared to learn from experience.¹¹ This also involves curtailing regulation that hinders green growth.

THE VALUE OF VALUES AND INVOLVEMENT

A better balance will be reached between the choices made now and future consequences through greater public involvement and by discussing what really matters. This means a debate about the most important collective values, also in the long term. This can only be achieved if we measure progress differently, looking not only at the flows but also at the inputs. This means looking not only at GDP, but also at the amount of fish in the seas, the amount of fossil fuels in the ground and the concentration of greenhouse gases in the air. This is not just a huge challenge for the statisticians,

but it also needs to be supported by the general public and politicians; after all, it is our welfare that is at stake.

In the current economic situation, the market and the government do not oppose each other but rely on one other. The government is also responsible for translating public values into what we require of the economy. From the point of view of ecological issues, this mainly involves preventing the social system from undermining itself. The moral dimension of capitalism obviously also plays a role, and principles such as stewardship and the duty of care towards future generations need to be addressed.

It is important that the government places a green dot on the horizon

Governance will also need to be adapted. In a modern, well-informed society, top-down decisions are rarely seen as optimum and are resisted by society; in particular, if companies and the general public consider many rules to be without benefit. This therefore requires a different interaction between the government, business community and general public. As far as the government is concerned, it needs to draw up a clear, compelling vision and create a 'new predictability' regarding its expectations of the general public and the business community. For the business community, this means making changes to operations and earnings models. Finally, the general public needs to see greening not just as the solution to an abstract environmental and climate issue; as, ultimately, it is about maintaining quality of life.

Notes

¹ J. Rockström e.a., 'A safe operating space for humanity', in: *Nature* 461 (2009), pp. 472–475.

² OECD, *Towards green growth*. Paris: OECD Publishing, 2011. <http://dx.doi.org/10.1787/9789264111318-en>.

³ UNEP, *Towards a green economy. Pathways to sustainable development and poverty eradication*. 2011. http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER_synthesis_en.pdf.

⁴ EC, *Roadmap to a resource efficient Europe*. Communication from the European Commission, COM 2011/571, Brussels: EC, 2011.

⁵ S. Hallegatte, G. Heal, M. Fay and D. Treguer, *From growth to green growth. A framework* (World Bank Policy Research Working Paper 5872). 2011.

⁶ The Netherlands Environmental Assessment Agency (PBL), *Pathways to sustainability. Achieving major environmental and development goals in 2050* (working title of an analysis by PBL for Rio+20). The Hague/Bilthoven: PBL, 2012 (to be published).

⁷ S. Hallegatte e.a. 2011.

⁸ H. Stolwijk, *Groene groei. Een wenkend perspectief?* (CPB Policy Brief 2011/12). The Hague: Netherlands Bureau for Economic Policy Analysis, 2011.

⁹ A. de Buck, M.J. Blom, M. Smit and L.M.L. Wielders, *Convenant Benchmarking Energie-efficiency. Resultaten en vrijstellingen energiebelasting*. Delft: CE, 2010.

¹⁰ E. Drissen, A. Hanemaaijer and F. Dietz, *Milieuschadelijke subsidies*, PBL memorandum (publication number 500209001). The Hague/Bilthoven: PBL, 2011.

¹¹ M. Hajer, *De energieke samenleving. Op zoek naar een sturingsfilosofie voor een schone economie*. The Hague: PBL, 2011.