ECOS
SCIENCE FOR SUSTAINABILITY
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Published: 19 September 2011

The OECD cuts a green path ahead

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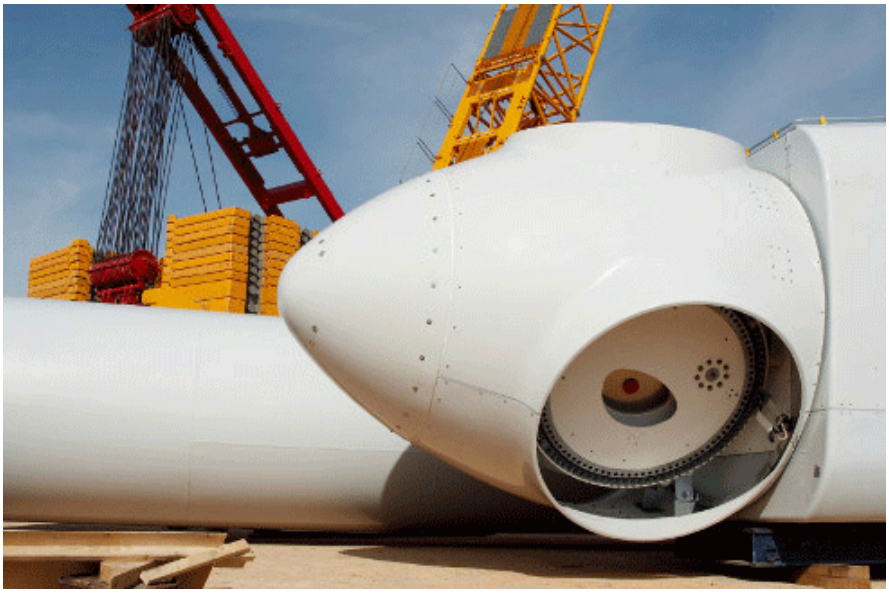
With the world currently in the grip of an economic slowdown, the OECD's *Green Growth Strategy* describes how innovation driven by 'green' economic policy can provide vibrant new sources of growth and employment worth trillions of dollars by 2050.



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'Green growth' is about striking a balance between fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which we depend. Seen as a timely opportunity to fundamentally reappraise business-as-usual economic models and create long-term sustainable outcomes, the concept of green growth has gained increasing traction over the past few years, with initiatives by the United Nations Environment Programme's Green Economy Programme, the Asia-Pacific Economic Cooperation, the Korean-based Global Green Growth Institute and the G20.

Mutual reinforcement

Progress has already been made in greening the world's economy to some extent. The 24-per-cent rise between 1999 and 2008 in patents for renewable energy technologies registered is just one indictor. But, the Organisation for Economic Co-operation and Development (OECD) is calling for rapid progress to prevent serious climate change and the deterioration of natural capital – i.e. Earth's natural asset base, including water supplies, resources and biodiversity – which could undermine future growth.

The **OECD Green Growth Strategy** (GGS), released at the OECD Ministerial Council Meeting on 25–26 May, provides a framework that countries can adapt to suit their differing political, economic and environmental circumstances. The strategy centres on mutually reinforcing aspects of economic and environmental policy, recognising natural capital as a factor in production, and focusing on cost-effective ways of reducing environmental pressures to move towards patterns of growth that avoid crossing critical environmental thresholds.

The GGS identifies three key areas of focus:

improving resource management and boosting productivity

encouraging economic activity to take place where it is of the best advantage to society over the long term

enabling new ways for business and the community to achieve these goals.

Notably, the report also recognises that positive outcomes can only be reduced to a certain point with existing technology and consumer behaviour. This makes innovation a critical part of green growth. Finding new ways to fund this innovation and establishing the right policy environment to support it is just as important; the report says that 'Green growth will require a mix of measures that can collectively bolster growth, while guiding economic activity into modes of production and consumption with lower environmental impact'.

To reduce the lengthy lag times associated with bringing products to market, the report argues that innovation must be supported financially by new products such as green bonds and green funds – a market that is potentially worth hundreds of billions of dollars a year. Currently, the green bonds amount to about US$11billion, or 0.012 per cent of the US$91 trillion of capital held in global bond markets. Pension funds, which hold US$28 trillion in assets, are also potentially valuable sources of funding, along with other institutional investors.

To encourage growth of renewables, the OECD calls for the removal of fossil fuel subsidies that encourage wasteful consumption, while higher carbon prices will provide incentives for low-carbon development. US$112 trillion could be saved between 2020 and 2050 by investing in low-carbon energy systems, the OECD says.

Focusing on gross domestic product (GDP) as a measure of economic progress overlooks the contribution of natural assets to wealth, health and wellbeing, the GGS says. It argues that instead, green growth needs to target measures of progress that encompass the quality and composition of growth, and take into account the effects on people's wealth and welfare.

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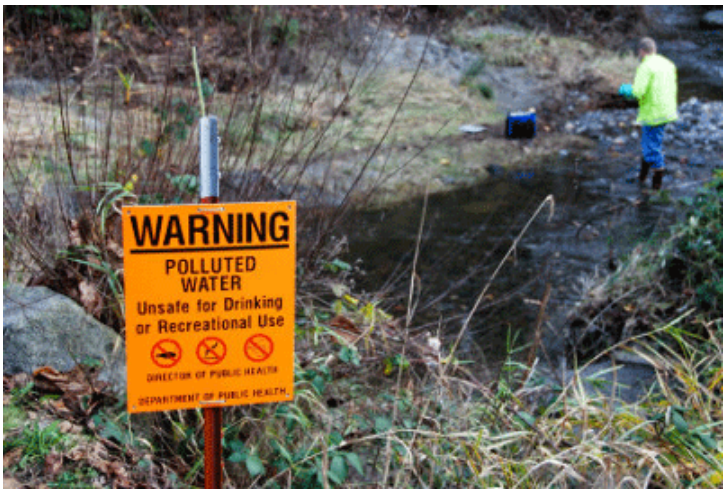
'The report provides an extremely good diagnosis of the problem that the world is facing,' says Mr Barney Foran, an Adjunct Research Fellow at Charles Sturt University and former Futures Analyst at CSIRO. 'It also makes a huge policy leap by linking together issues such as human health, water scarcity, climate change and biodiversity loss in the one document, and makes a clear and compelling case that the 'business as usual' is unviable.'

'It explains how and why policy must change and become more integrated to deal with a nested set of problems, and provides two very positive tools for policy makers: a set of enabling conditions for green growth, and advice on making a financial transition by recommending that every year two per cent of global GDP is invested in making the transition,' Mr Foran continues. 'This is equivalent to $22 billion in Australia, and within range of modelling that has shown it will cost $25 billion per year to make the transition to a low-carbon economy.'

Mr Foran adds that the report provides a very thoughtful set of headline indicators selected to measure the progress of green growth. These include resource productivity, labour markets, education and income, renewable and non-renewable stocks (freshwater, forest, fish, mineral, land, soil and wildlife resources), environmental health and risks, technology and innovation, and international financial flows.

'If Australia wanted to get on the right track in terms of environmental reporting, this would be a good set of indicators to use,' he says.



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The Australian response

Australia has been a strong supporter of the GGS, and provided comments to the draft report through the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC), which welcomed the strategy as a useful framework for making informed policy choices. The department's feedback supported recommendations for mechanisms that target market failures and achieve policy objectives at least-cost to society (especially market-based mechanisms such as emissions trading schemes), while allowing flexibility for countries to implement policies appropriate to domestic priorities. Avoiding environmentally harmful subsidies was also supported.

Deputy Secretary of DSEWPaC, Mr Malcolm Thompson, highlighted that Australia has long understood that recognising the social and economic contribution of environmental assets and ecosystem services is vital to our understanding of trade-offs, and can underpin rigorous analysis of policy options.

'There are complex interactions, both positive and negative, between various sectoral growth areas and environmental performance. This includes what have traditionally been perceived as conflicting policy agendas – for example, environmental concerns versus growth.

'One of the key points of the OECD's *Green Growth Strategy* is that such agendas are not necessarily conflicting, and that sustainable management of our environment and natural resources is actually a positive contributor to economic growth. A healthy environment is an essential prerequisite for a sustainable economy,' Mr Thompson said.

Mr Peter King, Manager of Green Growth Partnerships at CSIRO's Future Manufacturing Flagship, says that when it comes to green growth, each country is driven by its own economic, social and environmental imperatives. Their response will vary according to their own circumstances.

'Australia's motivations derive from concerns over climate change, environmental pressures, how we access global supply chains and how we improve productivity in an ageing population,' says Mr King. 'We recognise limits to our current trajectory of economic growth. Research and development, and innovation more broadly, will be important components in forming Australia's response.'

'CSIRO is actively working with other government departments and agencies to better articulate Australia's green growth response,' he adds.

'As well as the carbon tax, Carbon Farming Initiative and water reform, Australia is currently undertaking a range of activities that fall under the umbrella of green growth, and is building capabilities and expertise in the field. They include programs supported by the Green Car Innovation Fund, Research and Development Tax Incentive, Education and Investment Fund, Clean Energy Initiative and the Clean 21 Manufacturing Strategy. The recently released **Australian Innovation System Report 2011** also identified green growth as a new driver of innovation in Australia.'

Dr Swee Mak, Director of the CSIRO's Future Manufacturing Flagship, says that through its National Research Flagships, CSIRO is delivering research impact that can potentially contribute towards meeting Australia's green growth objectives in various industry domains.

'This includes research in renewable energy, sustainable materials, water, bioeconomy and so on,' says Dr Mak. 'For example, through its Future Manufacturing Flagship, CSIRO is focusing on activities that contribute to resource efficiency, partnering with industry to implement sustainable, low-energy and low-emission technologies, and equipping businesses with technologies that help

them access global supply chains. [This includes] supplying diecasting expertise that helped Nissan Casting win the contract to supply lightweight components for the LEAF [Leading, Environmentally friendly, Affordable, Family] electric car.'

At a more strategic level, CSIRO's Future Manufacturing Flagship coordinated a series of workshops starting in 2010 that brought together various government departments to review activity in different portfolios in green growth space. More workshops are scheduled for later this year. CSIRO has also started discussions with the Australian Bureau of Statistics to look at how green growth indicators are currently measured, and how the indicators might change in response to initiatives such as the GGS.

Criticisms of growth

While the GGS has been broadly welcomed, some commentators have expressed concern about the report's focus on growth, consumption and efficiency – with a lack of attention paid to limits and finite resources.

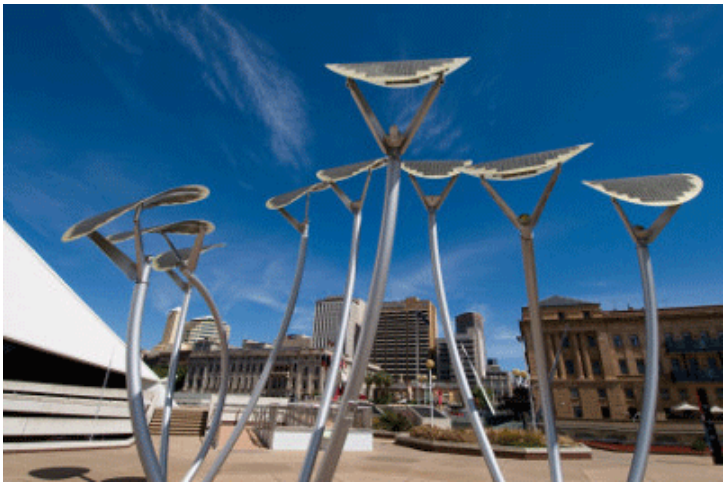
'There is no suggestion that growth should be limited, especially in OECD countries,' says Mr Foran. He is concerned about recommendations for reducing barriers to foreign ownership, investment or trade as a means of encouraging green growth: 'when globalisation has been a major contributor to the problems we now face'.

Mr Foran says there are also issues about the relative decoupling of economic growth from environmental productivity.

'For example, Australia is improving energy efficiency when measured as a percentage of GDP output, but it is still increasing overall,' he says.

'Green growth on its own won't save the world on its current track. Greening the economy can help, but we can't keep extracting more and more. Green shrinkage, not green growth, is the fundamental philosophical change required.

'This report is still light years away from this realisation,' he concludes.



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Business-led green growth

Many large multinational companies aren't waiting for governments to drive green growth. Instead, companies such as Walmart and Siemens have recognised the competitive advantage that employing green growth initiatives will bring. Mr Gavan Ord, a policy adviser at CPA Australia, has been focusing on the impact of sustainability initiatives on business since 2008. He agrees that the main push towards green growth in Australia will come from business.

'The government's role is to provide a framework and to create a better understanding of environmental, social and financial impacts of continuing business as usual, as well as the potential benefits for recognising opportunities that arise,' says Mr Ord.

'Green growth should not just be about being "green"; instead it should be a normal part of the long-term economic sustainability of business.

'The drive towards green growth may identify opportunities for new products or services; however, at board level, people are cynical and will only make business decisions based on hard data. Identifying and recognising the opportunities for change and growth under a green growth framework may help drive those decisions.'

Background on the Green Growth Strategy

The OECD's *Green Growth Strategy* grew out of the *Declaration on Green Growth*, signed in June 2009 by all 34 OECD member countries, in recognition of their ability to drive economic development while 'addressing urgent challenges' including climate change, environmental degradation and energy security.

The strategy comprises the synthesis report, *Towards Green Growth*, which provides a practical framework for governments in developed and developing countries to transition to a green growth strategy, as well as two additional documents.*Towards Green Growth – Monitoring Progress: OECD Indicators* outlines a framework and monitoring tools that can help governments measure progress towards green growth, and*Tools for Delivering Green Growth* outlines some of the options available to policy makers for developing green growth strategies.

Further OECD work is looking at how implementing the strategy, both globally and specifically in developing countries, can maximise broader development outcomes. The strategy will form a key part of the OECD's contribution to the Rio+20 United National Conference on Sustainable Development, scheduled for June 2012.

Other ongoing work by the OECD aims to integrate green growth considerations into the organisation's Economic Surveys, Environmental Performance Reviews and Innovation Reviews of different countries.

More information

Business Leaders Review Asia's Green Growth Milestones, *Ecos*, 5 September 2001

Achieving both economic growth and reduced environmental pressures in the current financial climate, *Ecos* 148 (2009), pg 30

1 **See Table 5.1**

2 **Foran B (2011). Low-carbon transition options for Australia. *Science Direct – Ecological Modelling.* doi:10.1016/j.ecolmodel.2011.05.008.**