

42. Promises and pitfalls of the green economy

by
Ivan Turok and Jacqueline Borel-Saladin

The green economy is an important feature of policy discussions around the world. It is portrayed as part of the solution to the global economic crisis, and as an innovative, efficient means of advancing the climate change agenda. It promises a targeted economic stimulus to launch the transition to a low carbon economy and spur long-term prosperity based on radical new technologies and improvements in resource efficiency. Clearly, this is a seductive idea worthy of careful scrutiny by social scientists.

Introduction

The green economy encompasses the development potential of interlinked natural and human systems. Natural systems are fundamental to regional economies based on agriculture, forestry, fisheries and tourism. Manufacturing and advanced service economies also depend on natural resource inputs in the form of energy, raw materials, clean water and fresh air. The green economy focuses on improving rather than undermining the material conditions upon which human systems depend.

This article explores the arguments of three major intellectual contributions by leading global institutions aimed at setting the agenda for environmental and economic policy in the years ahead: The United Nations Environment Programme's (UNEP) *Towards a Green Economy* (2011), the Organisation for Economic Co-operation and Development's (OECD) *Towards Green Growth* (2011), and the World Bank's *Inclusive Green Growth* (2012).

A bold vision

The green economy offers a positive vision of the future (Hallegatte et al., 2011; Pollin et al., 2008), in contrast to the apocalyptic perspective common in the environmental literature (Jackson, 2009; Meadows, Randers and Meadows, 2004; WCED, 1987). By identifying opportunities for progress, it is likely to have more potential for inspiring change in citizens and decision-makers than the paralysis that often stems from fear and negativity. The basic point is that something can be done to reduce the degradation of natural resources and ecosystems, while simultaneously improving human well-being. The emphasis is on pursuing the combined benefits of interactions between the economy and the environment, rather than accepting trade-offs and compromises.

The notion also includes ideas about how progressive change may be brought about: that is, the policies and instruments that will achieve green growth, including taxes, subsidies, direct investment, regulations and capacity building, which may be aimed at producers or consumers. A fundamental principle is that attaching a more appropriate monetary value to natural capital should help reduce its exploitation and degradation (UNEP, 2011; World Bank, 2012). The use of pricing instruments is apparent in carbon taxes, tradable carbon permits and the removal of fossil-fuel subsidies. Pricing strategies may encourage firms or households to substitute green products for brown. Green products are less harmful to the environment, less resource-intensive to produce, and generate lower levels of waste, pollution and greenhouse gas emissions. Better information, awareness raising and the enforcement of tougher standards and regulations may also be required to influence perceptions and reduce behavioural resistance to greening measures. Where markets are weak or nonexistent, as in impoverished rural communities, investment in building new institutions may be required to launch more sustainable forms of development.

Another feature of the green economy is that its basic principles are applicable to developed and developing economies alike. Both share an interest in harnessing the potential of improved environmental outcomes to enhance human welfare and raise living standards, and so to reap the synergies of economic and environmental action. The green economy is a kind of umbrella concept that could draw together diverse sectoral, economic and territorial interests around a common agenda.

The staunchest supporters suggest that greening the economy could launch the next wave of global growth (Moody and Nogrady, 2010; von Weizsäcker et al., 2009), or even the next industrial revolution (Rifkin, 2011). They argue that the rising prices of energy and mineral resources will lead to dramatic improvements in efficiency and productivity through better designs and new operating systems. A simple example is the Internet-enabled 3-D printing process that allows cost-effective manufacturing in small batches anywhere in the world. Other examples may emerge from new disciplines such as green nanotechnology, industrial ecology, green chemistry and biomimicry. A co-ordinated international green growth strategy involving investment in research and development and support for practical applications could in principle generate a profusion of disruptive new products and processes with transformative economic and environmental effects.

The OECD is more restrained, but endorses the idea that “the core of transforming an economy is innovation” (OECD, 2011: 51). It gives examples of solar power, microhydro power and biofuels that have resulted in important increases in energy supply and self-sufficiency in developing countries. The World Bank (2012) supports green industrial policies to develop new technologies that help to decarbonise the economy. Both organisations recognise the need for complementary financial instruments, such as long-term loans and equity funds, which can take a patient and broad view of the returns from such investments.

Because of the need for early and far-reaching action to mitigate climate change (OECD, 2011), the speed and scope of technology diffusion and adoption are just as important as the development of new products and systems. In the past, environmental technologies tended to be exchanged between developed countries in the North, which limited their impact. Green technology transfers between countries in the South will become increasingly important, given the greater similarities in their circumstances and

their need for more appropriate and affordable solutions. Various forms of international financial support and collaborative pacts between governments could facilitate such arrangements.

Creative thinking also extends to the protection and restoration of natural ecosystems. New systems of planning and management are needed that respect and value the services they offer, such as clean water and fresh air (OECD, 2011). Ingenuity is also essential in large-scale, long-lasting physical infrastructure, because it may lock in unsustainable patterns of material flows and consumer behaviour for decades (World Bank, 2012). This is vital in the rapidly urbanising countries of Asia and Africa, where the biggest environmental effects can be expected in the next few decades. Innovation is required in constructing energy-efficient buildings, retrofitting existing structures and introducing mass transportation systems. Greening the construction sector, waste recycling, and low-tech renewable energy generation could all generate substantial numbers of jobs because they are labour intensive (UNEP, 2011). The necessary tools for change include setting new norms and standards, creating financial incentives for producers and consumers, and raising awareness through demonstration projects and promotional campaigns.

Questions about the green economy

A fundamental question is whether greening the economy will achieve enough to alter the current unsustainable trajectory of the global economy and enable it to stay within the “safe operating boundaries” of the planet (Rockström et al., 2009; Bina and Camera, 2011; Victor and Jackson, 2012). In other words, will the scale of change from “business as usual” be sufficient to prevent excessive global warming and other environmental catastrophes, bearing in mind continuing population growth and pressures to increase consumption? Can a new sustainable development path be engineered by manipulating resource prices and stimulating new technologies? Or does the underlying market-based, short-term, growth-oriented paradigm of the global economy need to be replaced?

This is a hugely important but complicated set of questions. One answer is that there are different versions of the green economy, each implying different levels of intervention and different outcomes. They range from minor incremental reforms to major restructuring and transformation of the system. The three reports discussed here do not address the questions explicitly. They provide a range of policy approaches and tools from which governments can choose, depending on their economic conditions and political ambitions. The simple answer to the questions, therefore, depends on what aspect of the green economy is pursued, and how vigorously. The concept is not inherently conservative or radical, but is open to different forms and degrees of action, depending on local, national and international support and commitment.

A second question concerns the social pillar of sustainability. Can greening the economy have a substantial impact on poverty and inequality? The three reports maintain that the green economy can address all three dimensions of sustainable development, although the social aspects are least developed conceptually. All three advocate pro-poor policies in particular situations. One response involves the better management of natural ecosystems, such as soils, forestry and fisheries, on which the welfare of many subsistence communities depends. Another is to improve access to basic services, such as drinking

water and sanitation, in order to improve the quality of life. These actions are discussed mainly in terms of poverty relief rather than sustainable routes out of poverty through decent jobs and livelihoods.

The issue of equity between social groups and territories is a related concern. The continuing importance of competition and market forces in most versions of the green economy means that inherited strengths and assets offer sizeable advantages to individual firms, households, communities and nations; some economic agents and interests are bound to benefit, while others will lose out in the transition to a green economy.

These reports tend to minimise the impact of job losses in industries and localities dependent on fossil fuels, arguing that they would be balanced out by growth and the creation of new jobs in new green industries. This assumption ignores the likelihood that the new industries would emerge in places better suited to their specific needs, and may call for different occupations and skill-sets. There are few reasons why industries based on renewable energy (solar, wind and hydropower) would be sited alongside those based on coal, oil and other minerals. There would also be sizeable adjustment costs for those affected by the restructuring and for future generations within their local communities.

Without a substantial transfer of resources to developing nations, most will struggle to raise the funds required to invest in the transition to a green economy. Many of the new technologies have high upfront capital costs. Mature brown production techniques (those with more damaging consequences for ecosystems) tend to be more cost effective in the short term because they externalise their environmental costs. Considerable effort will be required to develop new collaborative solutions, such as voluntary patent pools to leverage intellectual property (OECD, 2011). Multilateral action may also be necessary to give poorer countries access to other green technologies, such as new medicines to fight infectious diseases. Experience suggests that measures that threaten powerful commercial interests encounter fierce resistance.

There is a technocratic slant to these reports which verges on assuming that if natural resources are priced correctly, the economy will green itself. There should be operating-cost savings from some green technologies and more efficient systems of production and distribution, but these do not mean that the green economy will emerge automatically. In the face of considerable inertia, vested interests and investments already made, it is likely that co-ordinated political action will be required to achieve the systemic changes envisaged. Dedicated efforts will also be needed to restore and regenerate natural environments that are already degraded. The green economy discourse is rather disconnected from the realities of climate change, the disruption caused to communities, and the considerable costs involved in preventing disasters, recovering from extreme events and adapting to shifting weather conditions.

The reports recognise that governments have important roles to play in establishing the conditions for the green economy to emerge. However, there is little discussion of the need for leadership across all sectors of society. Leadership will be necessary to avoid self-interest, advocate higher business costs in some instances, and encourage consumer sacrifices and lifestyle changes for those with large ecological footprints if society is to achieve the collective good of a low-carbon economy. There is also little consideration of the strategic capabilities needed to negotiate the transition, by means of social contracts

and other binding agreements between key economic stakeholders within and between nations.

Conclusion

The green economy offers an intriguing vision of change, with potential practical solutions to some of the major challenges of our time. The concept has probably raised the profile of environmental concerns in mainstream economic and development policy more than the idea of sustainability ever did. In other words, it appears to be an idea whose time has come. Yet it also needs further development, including conceptual clarification and a stronger evidence base grounded in our already degraded environment (MEA, 2005; IPCC, 2007). The extent to which there are genuine synergies rather than trade-offs between economic and environmental objectives is a particular gap in knowledge. Greening the economy in ways that are inclusive and equitable are further challenges. Understanding the diverse possibilities of the green economy in different local and national circumstances is also crucial. Integrating different elements of the green economy to create a new vision of sustainable cities would be particularly worthwhile. Finding the means to scale up effective action to achieve systemic global change is, of course, the biggest challenge of all.

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Ivan Turok is deputy executive director of the Economic Performance and Development Unit at the Human Sciences Research Council in South Africa and honorary professor at the Universities of Cape Town and Glasgow. He is editor-in-chief of the journal *Regional Studies*.

Jacqueline Borel-Saladin is a researcher at the Economic Performance and Development unit at the Human Sciences Research Council in South Africa, with expertise in local labour markets, spatial data analysis and urban geography.



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