





Conclusions



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Moving towards a green economy has the potential to achieve sustainable development and eradicate poverty on an unprecedented scale, with speed and effectiveness. This potential derives from two concurrent changes. First, there is a changed playing field in which our world and the risks we face have materially changed. These changes require a fundamental rethinking of our approach to the economy. Second, there is a growing recognition that the natural environment forms the basis of our physical assets and must be managed as a source of growth, prosperity and well-being.

As this report has argued, reallocating public and private investments – spurred through appropriate policy reforms and enabling conditions – is needed to build up or enhance natural capital such as forests, water, soil and fish stocks, which are particularly important for the rural poor. Green investments will enhance new sectors and technologies that will be the main sources of economic development and growth of the future: renewable energy technologies, resource and energy efficient buildings and equipment, low-carbon public transport systems, infrastructure for fuel efficient and clean energy vehicles, and waste management and recycling facilities. Complementary investments are required in human capital, including greening-related knowledge, management and technical skills to ensure a smooth transition to a more sustainable development pathway.

One of the major findings of this report is that a green economy supports growth, income and jobs, and that the so-called trade-off between economic progress and environmental sustainability is a myth, especially if one measures wealth as stocks of useful assets, inclusive of natural assets, and not narrowly as flows of produced output. The results of the report indicate that in the short term, economic growth under a green scenario may be less than under business-as-usual. However, in the longer term – 2020 and beyond – moving towards a green economy would outperform business-as-usual by both traditional measures (GDP growth) as well as more holistic measures (per capita growth).

The report also finds that in a number of important sectors, such as agriculture, buildings, forestry and transport, a green economy delivers more jobs in the short, medium and long-term than business-as-usual. In sectors where capital is severely depleted, such as fisheries, greening will necessitate the loss of income and jobs in the short and medium-term to replenish natural stocks, but this will prevent the permanent

loss of income and jobs. In such cases, transitional arrangements are needed to protect workers from negative impacts on their livelihoods.

Although the bulk of the investments required for the green transformation will come from the private sector, public policy will also play a leading role in overcoming distortions introduced by perverse subsidies and externalised costs. In addition, public investment will be required to jump-start an effective transition to a green economy.

There is much more private capital available than the financial resources of the public sector. However, many developing countries have limited access to private capital. A large amount of the funds needed for green investments at scale in the initial stages of the transition towards a green economy must come from new and innovative financing mechanisms. In this regard, the new Green Climate Fund and nascent REDD+ funding mechanisms offer significant hope for achieving the finance required. Where national budgetary conditions are limited, multilateral development banks are ideally positioned to offer financial assistance to enable these countries to embark on a green development trajectory.

Directions for further research

This report has analysed the enabling conditions required to mobilise investment, and the potential benefits of this investment in greening the world economy. It has provided fresh perspectives on the synergistic relationships between investing in low-carbon, resource efficient technology and socially inclusive economic growth.

Inevitably, as new research is provided new boundaries of knowledge and gaps are found. A number of areas where further research will be needed to provide more specific guidance on a green economy transformation have emerged in the process of writing this report. These areas include research to answer the following questions, among others:

1. How to manage a smooth and fair transition from a brown economy to a green one at global level?

In this report, responses to transitional issues have focused on capacity building, training and educational efforts. Also important, however, is how countries should set an appropriate pace for a transition from the predominantly brown economy to a green one. Many countries are facing rigidities of an infrastructure and industrial base that was developed under the brown economic model.

In many cases, due to this rigidity, the inertia of moving along the brown economy path is likely to continue for some time. How should the move towards a green economy take such inertia into account?

2. How to ensure that green policies are not used as a pretext for trade protectionism? This report has identified the positive role trade can play in facilitating the transfer and deployment of environmental technologies across countries. It has also cautioned against using green economy policies as a pretext for trade protectionism. Practical solutions are needed to manage emerging conflicts. In some countries, “buy local” can arguably be a green economy policy, as reduced need for transport may reduce the ecological footprint. However, this type of policy can have adverse impact on the exports of other countries, including those that need foreign exchange to import goods that are essential for reducing poverty and improving living standards.

Another emerging conflict surfaces because countries that provide state support to green economic sectors such as renewable energy technologies give domestic enterprises a competitive edge in the export of these technologies. The question arises: Is it possible to ensure fair trade, while recognising the need for state interventions in jump-starting the transition to a green economy?

3. How to measure progress in the transition to a green economy? The various chapters of this report have used a wide range of indicators to highlight:

- The extent of the challenges, for example, levels of CO₂ emissions and the number of people lacking access to energy;
- The extent of the opportunities, such as the size of the market for more resource efficient and low-carbon technologies;
- Policies established, such as renewable energy targets; and,
- Policy outcomes, such as the rate of recycling achieved, as well as the material and energy intensity of production and consumption.

Although different sectors will need different matrices to measure progress towards greening, at a national economy level there is a need for aggregates to inform policy making. At the moment, such aggregates are not fully developed or agreed upon by the statistical community. Further research is needed on what are

the limited number of indicators that can measure the progress countries have made in transforming their economic structure from brown to green, including more adequate indicators for measuring economic prosperity and wealth creation beyond GDP.

Towards a green economy

This report marks a first step in outlining key issues for moving towards a green economy at a national and global level. In summary, it has found that a green economy values and invests in natural capital. Ecosystem services are better conserved, leading to improved safety nets and household incomes for poor rural communities. Ecologically friendly farming methods improve yields significantly for subsistence farmers. Improvements in freshwater access and sanitation, and innovations for non-grid energy (solar electricity, biomass stoves, etc.), add to the suite of green economy strategies, which can also help alleviate poverty.

A green economy substitutes clean energy and low-carbon technologies for fossil fuels, which addresses climate change, creates decent jobs and reduces import dependencies. New technologies promoting energy and resource efficiency provide growth opportunities in new directions, offsetting brown economy job losses. Resource efficiency in both energy and materials use becomes a driving proposition, be it in better waste management, more public transportation, green buildings or less waste along the food chain.

Regulations, standards and targets are important to provide direction. However, developing countries must be allowed to move at their own speed, respecting their development objectives, circumstances and constraints. Developed nations have a key role to play in building skills and capacity in developing countries and in creating an international market and legal infrastructure for a green economy.

Enabling conditions have to be managed and adequate finance provided for a successful transition to a green economy. Both are eminently achievable. Environmentally and socially harmful subsidies are a deterrent and should be phased out. However, in select circumstances and over defined periods, rational use of subsidies can facilitate the transition to a green economy. Taxes and other market-based instruments can be used to stimulate the necessary investment and innovation for funding the transition. The scale of financing required for a green economy transition is large, but it can be mobilised by smart public policy and innovative financing mechanisms.

A green economy can generate as much growth and employment as a brown economy, and outperforms

the latter in the medium and long-run, while yielding significantly more environmental and social benefits. Of course, there are many risks and challenges along the way. However, the biggest risk of all is to remain with the status quo and not engage in a transition towards a green economy.

Moving towards a green economy will require world leaders, civil society and leading businesses to collaboratively engage in this transition. It will require a sustained effort on the part of policy makers and their constituents to rethink and redefine traditional measures of wealth, prosperity and well-being.



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Towards a Green Economy is among UNEP's key contributions to the Rio+20 process and the overall goal of addressing poverty and delivering a sustainable 21st century.

The report makes a compelling economic and social case for investing two per cent of global GDP in greening ten central sectors of the economy in order to shift development and unleash public and private capital flows onto a low-carbon, resource-efficient path.

