

A guidebook to the Green Economy

Issue 1: Green Economy, Green Growth, and Low-Carbon Development
– history, definitions and a guide to recent publications

Division for Sustainable Development, UNDESA



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1. Introduction

Sustainable development has been the overarching goal of the international community since the UN Conference on Environment and Development (UNCED) in 1992. Amongst numerous commitments, the Conference called upon governments to develop national strategies for sustainable development, incorporating policy measures outlined in the Rio Declaration and Agenda 21. Despite the efforts of many governments around the world to implement such strategies as well as international cooperation to support national governments, there are continuing concerns over global economic and environmental developments in many countries. These have been intensified by recent prolonged global energy, food and financial crises, and underscored by continued warnings from global scientists that society is in danger of transgressing a number of planetary boundaries or ecological limits¹.

With governments today seeking effective ways to lead their nations out of these related crises whilst also taking into account these ecological limits, green economy (in its various forms) has been proposed as a means for catalysing renewed national policy development and international cooperation and support for sustainable development. The concept has received significant international attention over the past few years as a tool to address the 2008 financial crisis as well as one of two themes for the 2012 UN Conference on Sustainable Development (Rio+20). This has resulted in a rapidly expanding literature including new publications on green economy from a variety of influential international organisations, national governments, think tanks, experts, non-government organisations and others.

Despite the growing international interest in green economy, negotiations among Member States on the concept in the lead up to Rio+20 were challenging. This was partly due to the lack of an internationally agreed definition or universal principles for green economy, the emergence of interrelated but different terminology and concepts over recent years (such as green growth, low carbon development, sustainable economy, steady-state economy etc.), a lack of clarity around what green economy policy measures encompass and how they integrate with national priorities and objectives relating to economic growth and poverty eradication, as well as a perceived lack of experience in designing, implementing and reviewing the costs and benefits of green economy policies.

Recent publications on green economy or green growth by the United Nations Environment Program (UNEP), the UN Department of Economic and Social Affairs (UNDESA), the United Nations Conference on Trade and Development (UNCTAD), the International Labour Organisation (ILO), the World Bank, the Organisation for Economic Cooperation and Development (OECD), the Global Green Growth Institute (GGGI), the Green Economy Coalition, Stakeholder Forum, the Green Growth Leaders and many others have begun to address these knowledge gaps and demystify these concepts. Importantly, there is also emerging practice in the design and implementation of national green economy strategies by both developed and developing countries across most

¹ Cf. "State of the Planet Declaration", Planet Under Pressure 2012, 26-29 March, London, which refers to humanity's impact on the Earth system and to researchers' first steps "to identify planetary and regional thresholds and boundaries that, if crossed, could generate unacceptable environmental and social change" (para. 7 A1.). See also Rockstrom et al (2009) "A Safe Operating Space for Humanity", *Nature* 461, 24 September 2009, <http://www.nature.com/nature/journal/v461/n7263/full/461472a.html>.

regions, including Africa, Latin America, the Asia-Pacific and Europe. This emerging practice can help to provide some important insights and much-needed clarity regarding the types of green economy policy measures, their scope with regard to various sectors and national priorities, and their institutional barriers, risks and implementation costs as well as environmental, social and economic benefits. This international experience may serve to alleviate concerns regarding the effective integration of green economy policies with national economic and social priorities and objectives, including the achievement of internationally agreed development goals.

This document aims to provide an overview of recent literature on '**Green Economy**' and the related concepts of '**Green Growth**' and '**Low-Carbon Development**' (and other variations such as low-emissions development or low-carbon growth). The overview provides a brief history of these concepts and brings together recent publications from international organisations, think-tanks, experts, political groups, governments, non-government organisations and others, most of which are freely available on the Internet. Recent national green economy, green growth and low-carbon development strategies are also provided. In most cases, a web link and citation have been provided so that the reader can find out more information or reference the document as necessary.

2. Related concepts: Green economy, green growth and low-carbon development

Whilst the concept of green economy has only recently gained significant international attention, green economy policies have been discussed and analysed for some decades by economists and academics, particularly in the fields of environmental and ecological economics. Green economy policy measures have also been discussed at length in international negotiations, including UNCED in Rio in 1992. For example, the Rio Declaration included principles promoting the internalisation of environmental costs and the use of economic instruments (Principle 16) as well as eliminating unsustainable consumption and production (Principle 8). Agenda 21 further elaborated on these principles and called for the development of national strategies for sustainable development incorporating measures for integrating environment and development, providing effective legal and regulatory frameworks, making effective use of economic instruments and market and other incentives, and establishing systems for integrated environmental and economic accounting (Chapter 8).

Ten years later, the Johannesburg Plan of Implementation (JPOI) also identified the need to change the way societies produce and consume, and called for the development of a 10-year framework of programmes for sustainable consumption and production. The First (Marrakech, June 2003) and the Second (San Jose, September 2005) International Expert Meetings emphasised the need to promote social and economic development within the carrying capacity of the environment, de-link economic growth and environmental degradation through improving efficiency and sustainability in the use of resources and production processes, and reduce resource degradation, pollution and waste².

² (see <http://www.greengrowth.org/>)

The Rio Conference in 1992 also produced the UN Framework Convention on Climate Change (UNFCCC), which has involved prolonged debate regarding potential economic, regulatory and market-based measures to address climate change through low-carbon development. In recent negotiations under this Convention, it has been agreed that Low Emission Development Strategies (LEDS) that adopt appropriate policy measures for low carbon development are indispensable for achieving sustainable development.

This section provides a brief overview of the recent history of three interrelated concepts that have gained significant attention in recent years in the context of catalysing efforts to achieve sustainable development: green economy, green growth and low carbon development. It is acknowledged that this is not a finite list of approaches, models or tools proposed for achieving sustainable development, but rather is a subset of approaches that have gained prominence in recent years in the context of international negotiations and amongst influential international organisations. Sections 3, 4 and 5 below provide a brief history of each of the concepts and recent definitions, as well as a summary of recent publications and national strategies that are available online. This list is not exhaustive and, with new publications being released every other day, it is intended that this guidebook be a working document that will be regularly updated. Section 6 provides a brief critique of these concepts.

3. Green Economy

The term green economy was first coined in a pioneering 1989 report for the Government of the United Kingdom by a group of leading environmental economists, entitled *Blueprint for a Green Economy* (Pearce, Markandya and Barbier, 1989). The report was commissioned to advise the UK Government if there was a consensus definition to the term “sustainable development” and the implications of sustainable development for the measurement of economic progress and the appraisal of projects and policies³. Apart from in the title of the report, there is no further reference to green economy and it appears that the term was used as an afterthought by the authors. In 1991 and 1994 the authors released sequels to the first report entitled *Blueprint 2: Greening the world economy* and *Blueprint 3: Measuring Sustainable Development*. Whilst the theme of the first Blueprint report was that economics can and should come to the aid of environmental policy, the sequels extended this message to global problems – climate change, ozone depletion, tropical deforestation, and resource loss in the developing world. All reports built upon research and practice in environmental economics spanning back several decades.

In 2008, the term was revived in the context of discussions on the policy response to multiple global crises. In the context of the financial crisis and concerns of a global recession, UNEP championed the idea of “green stimulus packages” and identified specific areas where large-scale public investment could kick-start a “green economy” (Atkisson, 2012). It inspired several governments to implement significant ‘green stimulus’ packages as part of their economic recovery efforts.

³ The report interprets sustainable development as “non-declining human welfare over time” – that is, a development path that makes people better off today but makes people tomorrow have a lower standard of living is not sustainable.

In October 2008, UNEP launched its Green Economy Initiative to provide analysis and policy support for investment in green sectors and for greening resource- and/or pollution-intensive sectors. As part of this Initiative, UNEP commissioned one of the original authors of *Blueprint for a Green Economy* to prepare a report entitled a *Global Green New Deal* (GGND), which was released in April 2009 and proposed a mix of policy actions that would stimulate economic recovery and at the same time improve the sustainability of the world economy. The GGND called on governments to allocate a significant share of stimulus funding to green sectors and set out three objectives: (i) economic recovery; (ii) poverty eradication; and (iii) reduced carbon emissions and ecosystem degradation; it also proposed a framework for green stimulus programs as well as supportive domestic and international policies (UNEMG, 2011).

In June 2009, in the lead up to the UN Climate Change Conference in Copenhagen, the UN released an interagency statement supporting the green economy as a transformation to address multiple crises⁴. The statement included the hope that the economic recovery would be the turning point for an ambitious and effective international response to the multiple crises facing humanity based on a global green economy.

In February 2010, Ministers and Heads of Delegation of the UNEP Global Ministerial Environment Forum in Nusa Dua acknowledged in their declaration that the green economy concept “*can significantly address current challenges and deliver economic development opportunities and multiple benefits for all nations.*” It also acknowledged UNEP’s leading role in further defining and promoting the concept and encouraged UNEP to contribute to this work through the preparatory process for the UN Conference on Sustainable Development in 2012 (Rio+20).

In March 2010, the General Assembly agreed that green economy in the context of sustainable development and poverty eradication would form one of the two specific themes for Rio+20 (resolution 64/236). This led to a great deal of international attention on green economy and related concepts and the publication of numerous reports and other literature aiming to further define and demystify the concept.

One of the key reports was the flagship *Green Economy Report* released by UNEP in November 2011 under its Green Economy Initiative. UNEP partnered with think tanks and commercial actors (including Deutsche Bank), lending credibility to its economic analyses (Atkisson, 2012). Importantly, the report also provides a working definition of ‘green economy’ which has since been cited in numerous other publications.

A series of other publications by UNEP, UNCTAD, UNDESA and the UNCSD Secretariat have attempted to elaborate on the concept and outline guiding principles, benefits, risks and emerging international experience⁵. In December 2011, the UN Environment Management Group (a system-wide coordination body of over 40 specialized agencies, programmes and organs of the United Nations) also released its system-wide perspective on green economy – *Working Towards a Balanced and Inclusive Green Economy* – which identifies and clarifies the use of green economy

⁴ <http://www.unep.ch/etb/pdf/2009%20statement%20deliver%20as%20one/Interagency%20Joint%20Statement.%20E%20rev1.pdf>

⁵ For example, see UNEP, UNCTAD, UNDESA (2011) *Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective*, UN, July 2011; UNCTAD’s *Road to Rio+20* series of publications; UNEP, UNCTAD, UN-OHRLS (2011) *Why a Green Economy Matters for the Least Developed Countries*; and papers prepared by UNCSD Secretariat for the Rio+20 Conference including A/CONF.216/PC/6 and A/CONF.216/PC/1.

and other related terms. This report adopts the definition provided by UNEP in its 2011 *Green Economy Report*. A number of non-government organizations and partnerships have also developed in recent years which aim to promote green economy as a concept and undertake research, analysis and outreach⁶.

There is no internationally agreed definition of green economy and at least eight separate definitions were identified in recent publications (see [Appendix 1](#)). For example, UNEP has defined the green economy as “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive” (UNEP, 2011). This definition has been cited in a number of more recent reports, including by the UNEMG and the OECD. Another definition for green economy offered by the Green Economy Coalition (a group of NGOs, trade union groups and others doing grassroots work on a green economy) succinctly defines green economy as “a resilient economy that provides a better quality of life for all within the ecological limits of the planet.”

3.A. Publications

Following is a summary of recent green economy publications available online.

Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication – UNEP

This publication aims to set the stage for the transition to a green economy. The report provides evidence that the transition has sound economic and social justification and offers governments and the private sector means to contribute to the shift. Opportunities for government include phasing out antiquated subsidies, reforming policies and providing new incentives, strengthening market infrastructure and market-based mechanisms, redirecting public investment and greening public procurement. Options for the private sector may include understanding the opportunity arising from a green economic transition, and responding to policy reforms and price signals through higher levels of finance and investment.



The report identifies the main failings of our current economic paradigm and highlights the causes and what can be done to reverse negative trends. A substantial section is devoted to defining what a green economy might look like, the relationship between the term ‘green economy’ and the terms ‘sustainable development’ and ‘poverty eradication’, and how far we currently are from a true green economy. In relation to the latter, the report provides options for measuring progress towards a green economy and begins to explore how a green economy might perform over time.

The green economy is defined by UNEP as one that results in *improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities*.

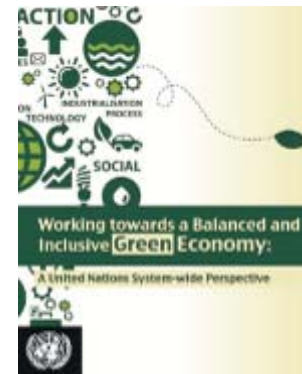
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⁶ For example, see the Green Economy Coalition <http://www.greeneconomycoalition.org/>

Citation: United Nations Environment Programme, 2011. *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*.

***Working Towards a Balanced and Inclusive Green Economy –
Environmental Management Group, United Nations***

This publication documents the United Nations system-wide perspective on the green economy and offers each agency the opportunity to define their contribution to all three pillars of sustainable development. The report provides a common reference for United Nations agencies on the meanings and implications of a green economy, and documents the understanding of the UN on what is required to meet current economic and resource challenges. The overall goal of the report was to assess how the UN system could coherently support countries in transitioning to a green economy. A second aim of the report was to contribute to the preparatory process for the Rio+20 United Nations Conference on Sustainable Development 2012.



As the report is a synthesis of UN agency positions, the green economy is defined in the same way as in the UNEP's 'Towards a Green Economy' report. The report also includes sections on:

- investment in physical infrastructure and target sectors;
- investment in human capital and societal infrastructure (restating that a green economy must contribute to the Millennium Development Goals (MDGs));
- enabling the transition towards a green economy, with the following sub-sections on:
 - mainstreaming environmental and social integration;
 - public and private financing;
 - full-cost pricing;
 - sustainable trade;
 - innovation and technology transfer; and,
 - assessment and indicators.
- the way forward for the United Nations system.

Particular emphasis is placed on the Rio+20 conference and its potential to send a powerful signal to governments, business and civil society around the world of the determination of the United Nations to “Deliver as One” on a green economy transformation for sustainable development and poverty eradication.

[Download here](#)

Citation: United Nations. (2011). *Working towards a Balanced and Inclusive Green Economy*.

Green Economy Briefing Papers - UNEP

Under its Green Economy Initiative, UNEP prepared a series of nine green economy briefing papers on priority issues for the transformation towards a green economy: poverty reduction; advisory services; health; indicators; trade; finance; employment; valuing nature; and innovation. Each brief provides an overview of the issue, the way forward, and outlines what UNEP is doing to address the issue.

[Download here](#)

Citation: UNEP (2012). *Green Economy Policy Briefs – key issues for the transformation towards the Green Economy*, UNEP.



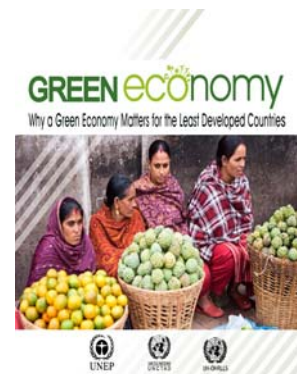
Why a Green Economy Matters for the Least Developed Countries - UNEP, UNCTAD, UN-OHRLS

This is a joint report prepared by the United Nations Environment Program (UNEP), the United Nations Conference on Trade and Development (UNCTAD) and the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLS) for the Fourth UN Conference on Least Developed Countries (LDCs) in 2011. The report explores how a green economy might contribute to poverty eradication objectives in LDCs, and aims to be illustrative rather than comprehensive by showcasing examples of innovative policies and practices, identifying emerging opportunities and challenges for a green economy transition in LDCs, and stimulating further discussion amongst interested stakeholders.

The report highlights that LDCs are well positioned in the transition to a green economy given their low-carbon profile and rich natural capital assets. Key sectors for greening economies include energy access, waste, ecotourism, agriculture, sustainable urbanisation and forestry. Through targeted spending, appropriate national policies and incentives, government help encourage green investment, both public and private. International cooperation will also be essential to complement national actions of LDCs, in particular access to financing.

[Download here.](#)

Citation: UNEP, UNCTAD, UN-OHRLS (2011). *What a Green Economy Matters for Least Developed Countries*, UNEP.



Measuring Progress Towards a Green Economy - UNEP

This draft working paper prepared by UNEP introduces a framework for the use of indicators in developing and tracking green economy policies. The objective is to provide brief guidance on the use of indicators in major stages of policymaking using environmental issues as an illustrative entry point. Section 2 introduces the indicators for environmental issues and targets. Section 3 discusses indicators for environmental policy interventions. Section 4 focuses on indicators that show the impacts of policy interventions on well-being and social equity beyond the environmental realm. Examples of policies and the indicators that can be utilized to evaluate them are presented in section 5. Data needs and capacity building issues are highlighted in section 6, and the final section points to the next steps that could facilitate the use of this framework.



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Citation: UNEP (2012) *Measuring Progress Towards a Green Economy – draft working paper*, UNEP.

Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World - UNEP, ILO

This report assembles evidence for existing green jobs and presents estimates for future green employment in the key economic sectors of renewable energy, buildings and construction, transportation, basic industry, agriculture and forestry. The report indicates that a global transition to a low-carbon and sustainable economy can create large numbers of green jobs across these sectors and become an engine for development. Current green job creation is occurring in both developed and developing countries.



The report defines 'green jobs' as work in agricultural, manufacturing, research and development, administrative, and service activities that contribute substantially to preserving or restoring environmental quality. Specifically, but not exclusively, this includes jobs that help to protect ecosystems and biodiversity; reduce energy, materials, and water consumption through high-efficiency strategies; de-carbonize the economy; and minimize or altogether avoid generation of all forms of waste and pollution. However, the report also acknowledges that there will be winners and losers and public policy should seek to minimize disparities.

Forward-thinking government policies will be indispensable, including subsidies, carbon markets, tax reform, regulatory tools and targets, feed-in tariffs, eco-labeling, R&D investment, and international aid.

[Download here](#)

Citation: UNEP, ILO (2011). *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World*, UNEP.

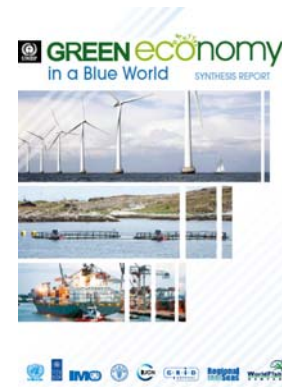
Green Economy in a Blue World: Synthesis Report – UNEP, FAO, IMO, UNDP, UNDESA, IUCN, WorldFish Center, GRID-Arendal

This report analyses how key sectors that are interlinked with the marine and coastal environment – the blue world – can make the transition towards a green economy. It covers the impacts and opportunities linked with shipping and fisheries to tourism, marine-based renewable energies and agriculture.

The report concludes that a shift to sustainability in terms of improved human well-being and social equity can lead to healthier and more economically productive oceans that can simultaneously benefit coastal communities and ocean-linked industries.

[Download here](#)

Citation: UNEP, FAO, IMO, UNDP, UNDESA, IUCN, WorldFish Center, GRID-Arendal (2012). *Green Economy in a Blue World – Synthesis Report*, UNEP.



Forests in a Green Economy – A Synthesis, UNEP

Drawing on UNEP's Green Economy Report, this UNEP brief provides an evidence-based roadmap for policy makers, the private sector, forest sector and forest dwellers alike. The paper includes an overview of the role of forests in the green economy, policy recommendations for forests in a green economy, and a number of success stories.

The paper concludes that to fully realize the benefits of forests in a green economy, governments and the international community will need to take an active role, including through policy reforms to create incentives to maintain and invest in forests and introduce disincentives to modify market signals and associated rent-seeking behavior. Examples of policies include national regulations, smart subsidies and incentives, information management, supportive international markets, legal infrastructure, and conducive trade and aid protocols.

[Download here](#)

Citation: UNEP 2011. *Forests in a Green Economy – Synthesis Report*, UNEP.



Green Economy and Trade Opportunities, UNEP

This study seeks to identify and assess the international trade opportunities associated with the transition to a green economy, and in particular how developing countries can increase exports to respond to international demand for environmentally-friendly goods and services.



The study focuses on six key economic sectors considered to have a high potential to generate trade opportunities while contributing to the transition to a green economy: agriculture, fisheries, forests, manufacturing, renewable energy, and tourism.

The study highlights that significant untapped trade opportunities exist and are expected to continue to expand in the future. In particular, export markets for green and sustainable food, products, services, energy and tourism, are expected to grow rapidly due to changing consumer preferences as the world becomes more environmentally aware. It is crucial to identify these trade opportunities, together with the policy reforms that can promote and strengthen developing countries' capacity to benefit from them.

[Download here](#)

Citation: UNEP, International Trade Centre, ICTSD 2012. *Green Economy and Trade Opportunities – Draft for Discussion (18 June 2012)*, UNEP.

Adapting for a Green Economy: Companies, Communities and Climate Change – WRI, Oxfam, UNEP

This report is very much focused on private sector led initiatives to responding to climate change. The report is based upon the results of a survey of business leaders committed to advancing climate action, especially in ways that build the resilience of vulnerable communities in developing countries. It offers help to companies with national, regional or global reach to develop strategies for dealing with the immediate to long-term consequences of climate change in developing countries where they have operations, supply chains, employees, or customers.



A central message of the report is that community and social risk of climate change challenges are also business risks – businesses fail in failing societies and it is difficult to separate community well-being from companies' viability and, in turn, economic growth. The report mentions that business response to climate change forms part of the transition to a 'green economy', defined as one that is low-carbon, resource-efficient and socially inclusive. It goes on to say that, in a green economy, growth in income and employment can be generated by strategic public and private investments that reduce GHG emissions, improve resource efficiency and reduce loss of biodiversity. Businesses can accelerate this transition by aligning their investments with climate change adaption opportunities, and in doing so green the economy.

The report concludes that the private sector is a critical sector in addressing the needs of vulnerable communities and has much to contribute to the development and implementation of climate adaption strategies, including sector-specific expertise, technology, financing, efficiency and entrepreneurial spirit. The key is to find exactly where business incentives align with communities' adaptation needs.

[Download here](#)

Citation: UN Global Compact, UN Environment Programme, Oxfam, World Resources Institute (2011). *Adapting for a Green Economy: Companies, Communities and Climate Change*.

The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective

This report comprises a series of three perspectives of the ‘Green Economy’ from leading experts Jose Antonio Ocampo, Aaron Cosbey and Martin Khor and an overarching summary by Jose Antonio Ocampo. The core elements of the paper are:



- **The macroeconomics of the green economy**

Here, Ocampo introduces the concept of the green economy from the perspective of the UNEP as one that not only improves human well-being and lessens inequality but also reduces environmental risks and ecological scarcities. He continues by stating that the majority of literature on sustainability and the green economy exist at a microeconomic dimension (externalities, taxes, emissions trading, subsidies and so forth) and that there is a dearth of literature on the green macroeconomy. He asserts that there are four issues that need to be analysed from a macroeconomic perspective: inter-generational welfare; the effects of environmental spending and protection policies on both aggregate supply and demand; structural change of growth; and global financing for green economic initiatives.

- **Trade, sustainable development and a green economy**

This paper by Aaron Cosbey explores the potential opportunities and risks of trade, arising in the transition to the green economy. The paper discusses the reasons why a green economy is desirable and how trade policy can ease the transition, the relative positions of trading partners pursuing a green economy, and the role of the international community in ensuring that trade and investment policy contribute to a widespread pursuit of the green economy.

- **Challenges of the green economy concept and policies in the context of sustainable development, poverty and equity**

In this paper Martin Khor explains that the ‘green economy’ has become a major focal point in discussions around the environmental crisis. He documents the problems associated with defining the concept of a ‘green economy’ as there has not yet been widespread agreement amongst environmentalists or economists on what it should entail. He states that it is an extremely complex concept and as such, it is unlikely there will be international consensus on its meaning and use in the short-term. However, he does say that a ‘green economy’ should be environmentally friendly, sensitive to the need to conserve natural resources, minimize pollution and emissions that damage the environment and produce products and services which do not harm the environment. Importantly, Khor raises several concerns and risks associated with green economy from the perspective of developing countries, including: that green economy must contribute to rather than replace sustainable development; that countries cannot be treated in the same manner through a “one size fits all” approach; the risk of “green protectionism”;

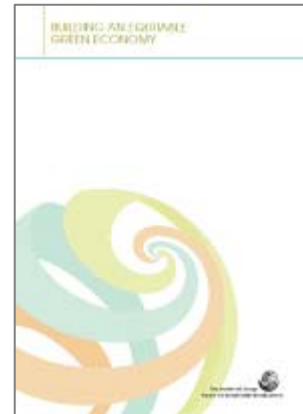
attempting to gain market access through the guise of environment; the treatment of subsidies; environmental standards; and conditionalities on aid and finance.

[Download here](#)

Citation: UNDESA, UNEP, UNCTAD. (2011). *The Transition to a Green Economy: Benefits, Challenges and Risks from a Sustainable Development Perspective*.

Building an Equitable Green Economy – Danish 92 Group

This paper lays out how a ‘green economy’ must be designed to contribute to – rather than distract from – sustainable development. The authors define the *equitable* green economy as one that is ‘not a state but a process of transformation and a constant dynamic progression. The Green Economy does away with the systemic distortions and dis-functionalities of the current mainstream economy and results in human well-being and equitable access to opportunity for all people, while safeguarding environmental and economic integrity in order to remain within the planet’s finite carrying capacity. The economy cannot be Green without being Equitable.’



The paper proposes five key working principles that aim to help inform policy and market decisions in progressing the green economy and providing the link between an equitable green economy and sustainable development. The principles are that the Green Economy:

1. Links to policies specifying clear goals for key cross-cutting pre-requisites (enabling conditions) to address systemic distortions and dis-functionalities in order to establish the foundation for equitable transformation and achieving sustainable development.
2. Establishes clear objectives for the necessary means for action to be mobilised (technology, capacity, finance) and defines the approach, nature and profile of these means, e.g. the role of technology within the context of building an equitable Green Economy.
3. Creates the necessary aligned framework of institutions at all levels with clearly defined roles and mandates to enable them to actively advance an equitable Green Economy.
4. Is transparent and engages all involved and affected actors, with powerful actors having clearly defined responsibilities and forms of accountability, while making sure other stakeholders are empowered to act both as beneficiaries of and contributors to the Green Economy.
5. Includes clear timelines for action to achieve objectives, introduce new systems for measuring progress and success, and integrate the tracking of the well-being of people, places, and the planet.

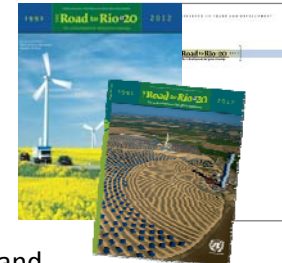
The report puts a heavy emphasis on an **equitable** green economy to the extent to which it appears that they do not believe that a green economy is equitable *per se*. Each **working principle** is described in relation to the **framework** that needs to be in place. Each chapter also contains references and links to the proposal in the Zero Draft document for Rio+20.

[Download here](#)

Citation: The Danish 92 Group Forum for Sustainable Development. (2012). *Building an Equitable Green Economy*.

The Road to Rio+20: For a development-led green economy – UNCTAD

The Road to Rio+20 publications, by the United Nations Conference on Trade and Development provide a series of essay compilations, all based around the 'what', 'why' and 'how' of making the transition to a development-led green economy. Road to Rio+20 comprises three issues released in March 2011, November 2011 and June 2012.



The first issue aims to contextualise the green economy, examine the pros and cons from different perspectives, identify the critical issues and provide a case study to look at a specific green economy initiative. The second issue provides a series of real world references for governments, businesses and civil society; what is referred to in this volume as 'pathways to a development-led green economy'. The third issue moves forward the debate, focusing primarily on commitments and outcomes and the potential of Rio+20 to generate innovative ideas, policies and to consolidate sustainable development strategies of governments.

In the first issue, the UNCTAD Secretary-General Supachai Panitchpakdi describes the green economy as an economy that results in improved human well-being and reduced inequalities, while not exposing future generations to significant environmental risks and ecological scarcities. He stresses that a green economy is a critical enabling component of the overarching goal of sustainable development. Moving towards a green economy implies not only the mainstreaming of green niches in specific sectors of an economy but also a change in an economy's overall social construct.

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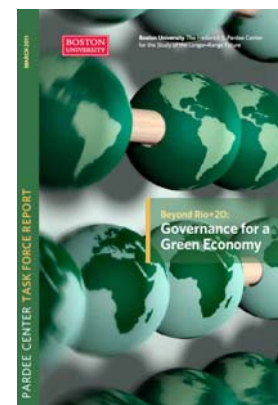
Citation: United Nations Conference on Trade and Development. (2011). *The Road to Rio+20: For a development-led green economy*. Issue 1 March 2011.

UNCTAD. (2011). *The Road to Rio+20: For a development-led green economy*. Issue 2, November 2011.

UNCTAD. (2012). *The Road to Rio+20: For a development-led green economy*. Issue 3, June 2012.

Beyond Rio+20: Governance for a Green Economy – Boston University

As an intellectual contribution to the Rio+20 preparatory process, the Boston University Frederick S. Pardee Center for the Study of the Longer-Range Future convened a small task force of experts to discuss the role of institutions in the actualization of a green economy in the context of sustainable development. The report includes papers by experts from academia, government, and civil



society on what the world has learned about institutions for sustainable development from the past, and what can be proposed about the governance challenges and opportunities for the continuous development of a green economy in the future. Based on these papers, the report synthesizes six recommendations for the Rio+20 process: think boldly and move incrementally; take economic policy seriously; recognize what is working and what is not working; make implementation the focus; the state remains central but non-state actors have to be better accommodated; and put equity at the center.

[Download here](#)

Citation: Pardee Centre (2011). *Beyond Rio+20: Governance for a Green Economy*, Boston University.

Rio+20 Policy Brief: A green economy for a planet under pressure

This policy brief by Planet under Pressure is one of nine policy briefs produced by the scientific community to inform the Rio+20 United Nations Conference on Sustainable Development. The brief suggests that the current concept of the 'green economy' is based on a traditional and *trickle-down* economic growth theory which has rendered it inadequate. In this light, the document sets out a series of guidelines for the social and technological transformation needed for a new economic system:

1. Find common agreement on an agreed set of planetary boundaries that the global society should not cross.
2. Establish a common set of rules for the global economic system that emphasises not short-term monetary benefits, but long-term sustainable well-being.
3. Allow all countries to give their citizens access to the six key instrumental freedoms.
4. Establish a set of rules on technology transfer and development, which would enable technology to be either developed or adapted locally.
5. Measure country progress by establishing a new set of accounts that track well-being and not just economic performance.

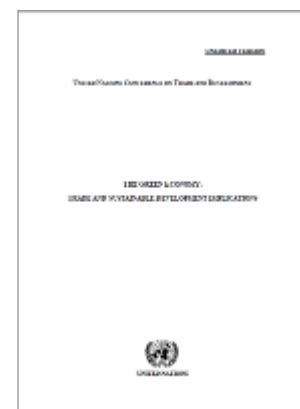


[Download here](#)

Citation: Planet Under Pressure. (2012). *Rio+20 Policy Brief: A green economy for a planet under pressure* (pp. 1-8).

The Green Economy: Trade and Sustainable Development Implications – UNCTAD

This paper focuses primarily on the opportunities that global trade can bring in the transition to the green economy and how the Rio+20 conference can catalyse the transition by generating new investment,



income sources and jobs among countries of varied levels of development. It elaborates by explaining that trade plays an essential role in the diffusion of green goods, services, technologies and production among countries and that this enhances economic growth and contributes to environmental and social developmental objectives.

The report stresses that growth resulting from international trade of green goods and services should be inclusive, building the human and productive capacities of developing countries and stimulating economic diversification, employment for the poor and increased access to basic services such as energy, water, housing, education, communications and transport.

The paper concludes by presenting key issues and considerations that need to be taken into account in the Rio+20 conference deliberations and how UNCTAD can support countries in their transition to a green economy.

[Download here](#)

Citation: United Nations Conference on Trade and Development. (2011). *The Green Economy: Trade and Sustainable Development Implications*.

Challenge Paper: The Green Economy - Stakeholder Forum

The Global Transition 2012 papers were borne out of a collaborative initiative between two UK-based organisations, Stakeholder Forum and nef (new economics foundation), and aim to help catalyse a 'Global Transition' to an economy that maximises well-being, operates within environmental limits and is capable of coping and adapting to global environmental change.

This particular paper focuses on the 'Green Economy' and puts forward 6 challenges that would form the basis for systemic change. These are:

- Develop a national transition plan that puts countries on paths to operate within planetary boundaries, and on timescales sufficiently quick to preserve key, ecological life support functions;
- Don't start from a growth perspective;
- Agree to develop and implement new measures of economic success;
- Commit to reduce income and wealth inequalities between and within nations;
- Put fiscal policy and public expenditure centre stage in managing economic transition; and
- Recapture the financial sector for the public good.

The paper recognises the systemic problems facing the world and proposes that they can only be rectified with the above systemic changes.

[Download here](#)

Citation: Jenkins, T., & Simms, A. (2012). *Challenge Paper: The Green Economy*, Stakeholder Forum (pp. 1-9).



A fresh look at the green economy – Oxfam America

This report, by Oxfam America, re-examines the green economy in America with a particular focus on green jobs that build resilience to climate change. The report reveals that two million people already work in fields that contribute to building resilience to climate change across the USA. However, it goes on to state that substantial investment will be required not just in the mitigation of carbon emissions that emphasise climate change, but in adapting to the effects brought about by the changing climate.



Investment in development and deployment of new technologies and strategies can build resilience to the negative consequences of climate change, create jobs and save lives at the same time. This report focuses more on jobs that relate to adaptation rather than mitigation of climate change effects.

[Download here](#)

Citation: Oxfam America. (2010). *A fresh look at the green economy*. Washington DC.

From Green Economies to Green Societies – UNESCO

This report from UNESCO recognises that there are increasing social disparities and inequity in the world, alongside population growth, climate change, the deterioration and pollution of the environment, the unsustainable use of freshwater and depletion of ocean resources, as well as increasing cases of natural and human-made disasters. The report reveals UNESCO's vision that aims to counter the above challenges by providing a 'new way forward' through the development of an inclusive green society and economy. The report identifies five priority areas for UNESCO in the transition to a green economy. These are:



- Education: the report states that education is one of the best weapons to fight poverty and inequality and can foster the attitudes and behaviours necessary for a new culture of sustainability.
- Science: UNESCO identifies that science, technology and innovation can and must drive the pursuit of more equitable and sustainable development.
- Culture: the report recognises that new approaches will only work if they match the context and so culture must be built into development from the start.
- Information: the green transition will rely on the media to enable governments to create policy for sustainable development and act on it. Media can raise public awareness of these issues and build solidarity.
- Oceans: the report identifies that oceans make the world habitable for people and so there must be renewed effort to manage the world's water systems in a new green economy.

UNESCO also detail their roadmap to a sustainable world which incorporates the above elements as well as disaster-preparedness, conservation of biodiversity, and improving governance for sustainable development.

[Download here](#)

Citation: UNESCO. (2011). From Green Economies to Green Societies.

The future we want, Outcome of the UNCSD 2012 (Rio+20)

The outcome document for the United Nations Conference on Sustainable Development 2012 includes a chapter on green economy in the context of sustainable development and poverty eradication. Whilst not a strong chapter, it is significant as it is the first reference to green economy in the outcome document of a major UN summit. The chapter helps to frame the green economy concepts, identifying a range of principles for applying the concept in a way that achieves sustainable development and contributes to poverty eradication.

Importantly, the document invites the UN system, in cooperation with relevant donors and international organisations, to coordinate a number of green economy deliverables relating to tools, best practices, methodologies and platforms that can assist with green economy capacity building.

[Download here](#)

Citation: UNCSD 2012. *The Future we want*, outcome of the United Nations Conference on Sustainable Development (Rio+20).



Progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development, as well as an analysis of the themes of the Conference, UNDESA

This paper prepared by UNDESA for the First Session of the Preparatory Committee for the United Nations Conference on Sustainable Development (UNCSD) provides a concise overview of the concept of green economy in the context of sustainable development and poverty eradication which was one of the two themes for the UNCSD 2012, or Rio+20. The concept is described as one of several mutually complementary constructions that have emerged in recent years to enhance convergence between the different dimensions of sustainable development.

The paper outlines four different approaches or 'strands' to green economy with slightly different modes of economic analysis: the first approaches the question through the analysis of market failure and internalisation of externalities; the second takes a systemic view of the economic structure and its impact on relevant aspects of sustainable development; the third focuses on social goals (e.g. jobs) and examines ancillary policies needed to reconcile social goals with other



objectives; and the fourth focuses on the macroeconomic framework and development strategy with the goal of identifying dynamic pathways towards sustainable development. Examples of existing programs and actors supporting each approach are also provided.

The paper also highlights a set of policy instruments that are common across the approaches, which are grouped into several categories: (a) getting prices right (including subsidies, valuing natural resources and imposing taxes on environmental “bads” in order to internalise externalities); (b) public procurement policies to promote greening of business and markets; (c) ecological tax reforms; (d) public investment in sustainable infrastructure; (e) targeted public support for research and development; (f) strategic investment through public sector development outlays, incentive programmes and partnerships; and (g) social policies to reconcile social goals with economic policies.

The paper concludes that green economy is an omnibus term, like sustainable development itself, which comprises a suite of economic instruments that could harness economic activity in support of one or more sustainable development goals. The application of these instruments will require careful consideration of the social, institutional and political context of the country.

[Download here](#)

Citation: UNDESA 2010. *Progress to date and remaining gaps in the implementation of the outcomes of the major summits in the area of sustainable development, as well as an analysis of the themes of the Conference*. Preparatory Committee for the UNCSD, 17-20 May 2010.

Secretary-General's Report on Objectives and Themes of the UN Conference on Sustainable Development, UNDESA

This report examines the two themes of the United Nations Conference on Sustainable Development, including green economy in the context of sustainable development and poverty eradication, in relation to the objective of renewed political commitment to sustainable development, reviewing progress and implementation gaps and addressing new and emerging challenges.

The report draws a number of conclusions relating to green economy:

- countries at all levels of development have been implementing nationally-tailored policies and programs for green economy;
- a growing number of countries are experimenting with a more comprehensive framing of their national sustainable development strategies and policies along green economy lines, including as low-carbon green growth strategies;
- their combined impact does not yet add up to changes in production and consumption patterns on a scale equal to the challenges;
- an early focus on “win-win” opportunities with short-term co-benefits can build support for a green economy;
- improved institutions are crucial to the favourable social outcomes of green economy policies; and



- moving towards a green economy is as much about structural change in the institutions governing economies at different levels as about technological change.

[Download here](#)

Citation: UNDESA 2011. *Objective and themes of the United Nations Conference on Sustainable Development: Report of the Secretary-General, Preparatory Committee for the UNCSD, 7-8 March 2011.*

A Green Economy Knowledge-Sharing Platform: Exploring Options

This paper explores a potential deliverable that emerged from submissions to the Rio+20 compilation document – the development of a green economy knowledge-sharing platform. The paper provides an overview of existing platforms and initiatives, and proposes potential aims/objectives, governance arrangements, and structural components for a green economy platform based on existing initiatives and best-practice literature. The executive summary of this paper is available online, with the full version available on request.



The paper concludes that a comprehensive green economy knowledge-sharing platform would need clear aims/objectives, an effective governance structure, and a number of key structural components:

- A mechanism for promoting connections, networks and partnerships;
- A brokering mechanism to match 'knowledge seekers' with 'knowledge providers';
- An online data platform and green economy toolbox;
- Expert focal points or hubs for sectoral or cross-sectoral issues; and
- A financing facility for developing countries.

[Download here](#)

Citation: Allen, Cameron 2012. *A Green Economy Knowledge-Sharing Platform: Exploring Options*, UNCSD Secretariat.

A Global Green New Deal, Edward Barbier

This report was commissioned by UNEP in response to the multiple global crises of 2008 – fuel, food and financial. The report proposes a mix of policy actions that would stimulate economic recovery and at the same time improve the sustainability of the world economy. The Global Green New Deal (GGND) calls on governments to allocate a significant share of stimulus funding to green sectors and sets out three objectives: (i) economic recovery; (ii) poverty eradication; and (iii) reduced carbon emissions and ecosystem degradation; and proposed a framework for green stimulus programs as well as supportive domestic and international policies.



National actions proposed for the GGND include:

- US, the EU and other high income OECD economies, as well as middle and high income economies of the G20, should spend over 2 years at least 1% of their GDP on reducing carbon dependency;
- Developing economies should also implement national actions proposed for reducing carbon dependencies, should spend at least 1% of GDP on improving clean water and sanitation for the poor, should develop safety net programs and health and educational services, and should adopt other national actions for improving sustainability of their primary production activities.
- All economies should consider removing water subsidies and other distortions, adopting market-based instruments or similar measures to enhance water management.

[Download here](#)

Citation: Barbier, Edward B (2009). *A Global Green New Deal*, Report prepared for the Green Economy Initiative of UNEP.

A Guidebook for IUCN's Thematic Programme Area on Greening the World Economy

This guide is intended to offer an overview of available literature relating to the main topics covered by IUCN's Thematic Programme Area on Greening the World Economy (TPA5). Similar to the current guide, it is a compilation of papers, reports, and articles that can be freely accessed on the internet. It is not intended to serve as a complete bibliography of available literature, but more as an overview of the different concepts and discourses that animate ongoing discussions on the topic of the 'Green Economy'.



The guide begins with a brief summary of the theoretical framework for green economy, with links to some relevant publications. It then provides a summary of publications relating to macroeconomic policies, financing conservation, engaging the private sector and other areas of interest to biodiversity management. Overall, it has limited duplication with the current guide and provides a useful complement for those seeking information on the framing of green economy in economic theory, macroeconomic policies and earlier green economy reports and initiatives with a focus on biodiversity conservation.

[Download here](#)

Citation: Huberman, David (2010). *A Guidebook for IUCN's Thematic Programme Area on Greening the World Economy (TPA5)*.

Principles for the Green Economy – Stakeholder Forum

This publication aims to develop a set of green economy principles based on some of the most prominent existing principles relating to sustainable development and the green economy from the existing literature. Fifteen principles are



identified that represent a consolidation of existing international agreements and more radical and forward-thinking proposals, cutting across The Stockholm Declaration, the Rio Declaration, The Johannesburg Declaration, The Earth Charter, The One Planet Living Principles, The Green Economy Coalition, the TUC 'Just Transition' principles, and The New Economics Foundation.

[Download here](#)

Citation: Stakeholder Forum, Bioregional, the Earth Charter Initiative (2012). *Principles for the Green Economy: a collection of principles for the green economy in the context of sustainable development and poverty eradication*.

The Principles of a Green, Fair and Inclusive Economy – Green Economy Coalition

This brief publication was prepared as an input into the UN Conference on Sustainable Development 2012 by the Green Economy Coalition, a global network of organisations committed to accelerating the transition to a new green, inclusive economy.

It sets out nine principles for a green, fair and inclusive economy that provides a better quality of life for all within the ecological limits of the planet. The principles are the result of five months of consultations with people and organisations around the world. The principles are: the Sustainable Principle; the Justice Principle; the Dignity Principle; the Healthy Planet Principle; the Inclusion Principle; the Good Governance and Accountability Principle; the Resilience Principle; the Efficiency and Sufficiency Principle; and the Generations Principle.

[Download here](#)

Citation: Green Economy Coalition (2012). *Principles for a green, fair and inclusive economy, 3 May 2012*.



The Green Economy Pocketbook – Green Economy Coalition

This publication was prepared as an input into the UN Conference on Sustainable Development 2012 by the Green Economy Coalition. It sets out the Coalition's vision for change, drawing lessons from their series of national dialogues in developing and developed countries and from across the Coalition's diverse membership. The pocketbook describes examples, stories and glimpses of a transition that is already underway.

Quoting the Coalition the publication is "the most succinct but comprehensive understanding of a green economy drawn from a global and multi-stakeholder perspective. It connects the dots between the many different actions going on at all levels – civil society, government, finance business – to show how it is possible to transform our economies so that they work for people and planet".

[Download here](#)

Citation: Green Economy Coalition (2012). *The Green Economy Pocketbook – The case for action*.



International Chamber of Commerce - Green Economy Roadmap and Ten Conditions for a Transition toward a Green Economy

These publications by the International Chamber of Commerce (ICC) set out the ICC's proposed roadmap for the green economy based on 10 conditions that are needed to drive growth in a resource-constrained world with strong demographic growth. The ICC represents hundreds of thousands of companies in over 120 countries. Some of the key conditions are:

- Social, environmental and economic innovation: A green economy is one that is embedded in global markets and balance sheets, and which drives innovation in private and public finance.
- Collaboration between all sectors of society, business and government.
- Integrated governance: intra-policy and intra-industry coordination and governance at all levels. Policies that advance economic growth while enhancing environmental protection and social progress, and that are consistent with international trade rules, provide access to finance, promote technology transfer, strengthen capacity and reduces inequality.
- Balancing short- and long-term strategies: a green economy needs to reconcile the need for short and medium-term pressures/profits with longer-term shared value.
- Multilateralism. Multilateral approaches across countries and sectors are indispensable in today's globally connected world.



The ICC defines the green economy as “an economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development.”

[Download here](#)

Citation: International Chamber of Commerce (2012). *Green Economy Roadmap*, ICC.

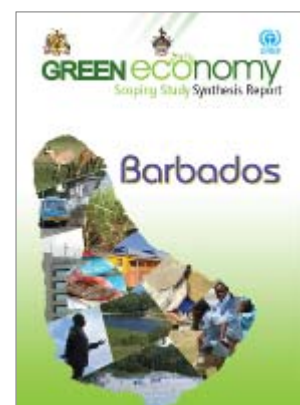
International Chamber of Commerce (2011) *Ten conditions for a transition toward a “Green Economy”*, ICC

3.B. National Strategies

Following is a summary of recent green economy national strategies and similar documents available online.

Green Economy: Scoping Study Synthesis Report Barbados – UNEP, UWI, Government of Barbados

This synthesis report focused on five key sectors (agriculture, fisheries, building, transportation and tourism) in Barbados to scope the transition to a green economy on the island. In particular, the study



focuses on the applicability of the accepted UNEP definition of green economy to Small Islands Developing States, of which Barbados is one.

Barbados is vulnerable to both fluctuations in the price of its imported fossil fuels and at risk from the destruction of its marine and coastal ecosystems from climate change therefore the report states that the pursuit of a greener path to economic development is highly attractive to the country.

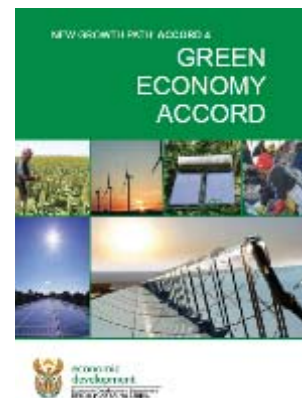
The document continues to explore options for greening the five areas of focus by looking at strengths, challenges and investment gaps, measures and potential returns on investment. The report concludes by analysing the enabling conditions of a transition to the green economy, which include: Finance, Development, access and technology; Trade, tariffs and investment; Taxation, incentives and fiscal reform; Education, training and capacity enhancement; Standards and regulation; Government procurement; Governance and institutions; Information, data analysis and communication.

[Download here](#)

Citation: UNEP, UWI, Government of Barbados. (2012). *Green Economy: Scoping Study Synthesis Report Barbados*. Christchurch, Barbados.

Green Economy Accord – South Africa

The South African Government signed a Green Economy Accord in November 2011 and this document sets out the text of the Accord. It focuses primarily on job creation and the key messages are: **opportunity** to benefit from new prospects for economic activity from climate change, **innovation** drawn from technology, research and manufacturing, **responsibility** of government to create an enabling environment, and **partnership** of all constituencies and citizens to achieve the goals of the green economy.



The Accord falls short of attempting to define the Green Economy but it does go some way to exploring what will be needed to make the transition. Inclusivity is another focal point: the Accord talks about the green economy providing an entry-point for broad-based black economic empowerment, addressing the needs of women and youth entrepreneurs and offering opportunities for enterprises in the social economy.

[Download here](#)

Citation: Economic Development Department, Republic of South Africa. (2011). *Green Economy Accord (Vol. 1)*. Pretoria, SA.

Ethiopia's Climate-Resilient Green Economy – Federal Democratic Republic of Ethiopia

The Federal Democratic Republic of Ethiopia have put forth their strategy for developing a climate-resilient green economy by 2025. The government states that Ethiopia aims to be a middle-income country by 2025. However, the strategy recognises that achieving this through the conventional development path would result in dramatically increased carbon emissions and unsustainable use of natural resources.



The climate-resilient green economic strategy for Ethiopia demonstrates the commitment of Ethiopia to bypass the conventional approach to economic development and create a green economy where economic development goals are met in a sustainable way. The strategy identifies the following four pillars of development in the green economic action plan:

1. Improve crop and livestock production practices for higher food security and farmer income while reducing emissions;
2. Protect and re-establish forests for their economic and ecosystem services, including as carbon stocks;
3. Expand electricity generation from renewable sources of energy for domestic and regional markets; and
4. Leapfrog to modern and energy-efficient technologies in transport, industrial sectors, and buildings.

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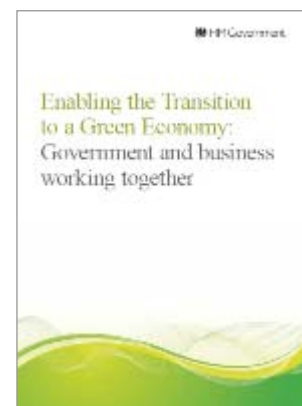
Citation: Federal Democratic Republic of Ethiopia. (2011). *Ethiopia's Climate-Resilient Green Economy*.

Enabling the Transition to a Green Economy: Government and business working together – HM Government, UK

This strategy document proposes means by which the Government and business in the UK can work together to catalyse the transition to the green economy. It explains the potential benefits that the green economy will bring to the UK including: mitigating risks from increasing and fluctuating fossil fuel prices and climate change impacts and seizing the opportunities from new and emerging markets both nationally and internationally.

The UK Government propose a four point vision for what a green economy looks like in the UK. The green economy will:

- **Grow sustainably and for the long term.**



Growth and wealth will be generated whilst emissions and other environmental impacts are reduced.

- **Use natural resources efficiently.**

Demand management will be operational and energy efficiency measures will be implemented in homes, offices and businesses across the country.

- **Be more resilient.**

The UK will be less reliant on fossil fuels whilst maintaining secure supplies of energy and other natural resources.

- **Exploit comparative advantages.**

The UK will be well placed to take advantage of the expanding market for green goods and services.

The strategy documents what the UK Government is doing to ease the transition, which include: promotion of international action; regulation; financial incentives; voluntary agreements; fiscal measures; public sector procurement; provision of information; and targeted work to unblock non-financial barriers to the deployment of clean energy technologies. The report concludes with a section on how UK businesses can work with the Government to benefit from the transition to the new global green economy.

[Download here](#)

Citation: HM Government. (2011). *Enabling the Transition to a Green Economy: Government and business working together*. London, UK.

Towards a Green Economy in Jordan – UNEP

This report investigates the current levels of investment in green economic initiatives and infrastructure in Jordan. The report also defines the economic, social and environmental challenges faced by Jordan and identifies the sectors that present the greatest opportunities for further investment to drive the transition to a green economy. The report identifies sectors that include energy, water, transport, waste management, agriculture and tourism.

[Download here](#)

Citation: UNEP. (2011). *Towards a Green Economy in Jordan*.



Environments of the Poor in the context of Climate Change and the Green Economy – Government of Nepal

This report explores the environmental issues experienced by the poor in Nepal, and identifies links to resource constraints faced in their everyday lives. With this consideration, the government held a national workshop with experts and academics to discuss specific research and policy in the context of climate change and the green economy. In



particular, they aimed to identify what is needed to protect natural resources whilst improving the livelihood of the rural poor.

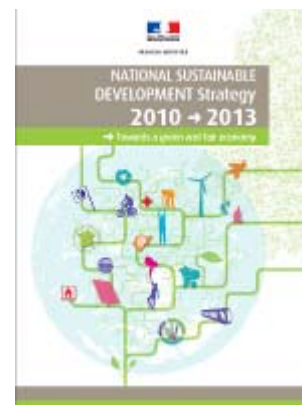
Following the workshop, a series of papers exploring different areas of the green economy were presented on the following topics: “Integrating Environment, Poverty and Green Economy into National Planning Process”, “Climate Screening, Adaption Actions, Financing and Policies: Essentials for Improving the Livelihoods of the Poor”, “Upland Poverty: Examining Causes, Identifying Solutions”, “Economic Analysis of Local Government Investments in Rural Roads: Reducing Poverty through Managing Climate and Environment Risks”, “Local Government Revenue Raising from Natural Resources”, “Alternative Energy Linking Climate and Environment Consideration”, “Community Based Forestry and Climate Change: Implications for Environment and People Living in Poverty in Nepal”. The document reports on each of the papers.

[Download here](#)

Citation: Government of Nepal, UNEP. (2011). *Environments of the Poor in the Context of Climate Change and The Green Economy*.

National Sustainable Development Strategy: Towards a Green & Fair Economy – Republic Francaise

The National Sustainable Development Strategy puts forward France’s approach to developing a green economy. The strategy proposes a framework for organisations in both the public and private sectors to help develop sustainable projects and initiatives around a series of strategic indicators that were agreed upon by wide consensus. In alignment with European commitments, the strategy identifies nine strategic challenges which must be tackled in the move towards a green and equitable economy. These are:



1. Sustainable consumption and production
2. The knowledge economy
3. Governance
4. Climate change and energy
5. Sustainable transport and mobility
6. Conservation and sustainable management of biodiversity and natural resources
7. Public health, risk prevention and management
8. Demography, immigration and social inclusion, and
9. International challenges of sustainable development and the fight against global poverty

The strategy deals with each of these independently and offers a series of strategic choices organisations can take in assuming leadership for sustainable development.

[Download here](#)

Citation: Republic Francaise. (2010). *National Sustainable Development Strategy: Towards a Green & Fair Economy*.

Road Map on Building a Green Economy for Sustainable Development in Carriacou and Petite Martinique, Grenada – Division for Sustainable Development, United Nations

This publication, by the Division for Sustainable Development at the United Nations in collaboration with the Ministry of Carriacou and Petite Martinique Affairs and the Ministry of Environment, Foreign Trade and Export Development of Grenada, aims to provide a framework and systematic approach to developing a practical implementation plan for greening the economies of Carriacou and Petite Martinique.



The publication recognises that small islands are microcosms that exhibit characteristics of the Earth but on a much smaller scale and can be used as examples for leaders in larger cities, nations or regions. Several areas which present challenges for small island developing states are explored in the context of sustainable development which are: 'energy resources and technologies', 'water resources', 'education and jobs', 'transport', 'agriculture, fisheries and food security', 'ecotourism', and 'environmental sustainability'. In conclusion, the study provides the first steps that the two island economies need to take in order to achieve the green economy and enhance the wellbeing of the inhabitants.

[Download here](#)

Citation: Division for Sustainable Development, United Nations Department of Economic and Social Affairs. (2012). *Road Map on Building a Green Economy for Sustainable Development in Carriacou and Petite Martinique, Grenada*.

A Green Economy for Canada – Canadian Institute for Environmental Law and Policy

The 'Green Economy for Canada' publication presents the results of a national research study that aimed to seek the perspectives of Canadian stakeholders on their perspectives on how the green economy should be structured and what it would mean for Canadians. The report explores how Canadians, and the institutions they work for, define the green economy and its associated concepts, what potential gains exist for regular Canadians, successes, best practice and lessons learned, challenges and opportunities presented by the transition, and the role of government and stakeholders.



In general, the Canadians involved in the study believe that Canada has much to gain from the transition to a green economy, and would have much to lose if the country was to ignore what is 'already a global transition in progress'. The next steps identified by stakeholders include:

1. A call for Federal Leadership;
2. Advance a strong national dialogue and development of a shared vision;
3. Establish clear price signals and invest in technology, R&D and green business;
4. Federal leadership on the international stage.

[Download here](#)

Citation: Canadian Institute for Environmental Law and Policy. (2011). *A Green Economy for Canada*.

Roadmap for a green economy in the Heart of Borneo: A scoping study
– WWF, PwC

This report, authored by WWF and PwC, provides a roadmap for a green economy in Borneo, South East Asia that will help to achieve the commitments made in the Heart of Borneo (HoB) Declaration, signed by the Indonesian, Malaysian and Brunei governments in 2007 to conserve and sustainably manage the biodiversity, ecosystems and natural resources of Borneo.

The roadmap identifies the policies already in place in the region that contribute to a green economy such as payments for ecosystem services, renewable energy incentives (i.e. Feed-In Tariffs etc.) and public-private conservation programmes in Brunei. The roadmap then provides recommendations for further development of the green economy. These are:



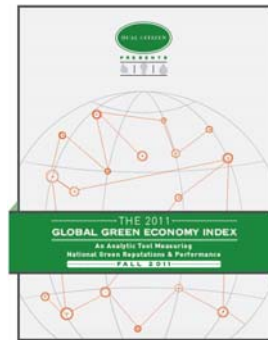
- **Development of a Green Growth Generator** - an evidence-based decision-making framework for green growth
- **Creation of a virtual Green Economy Centre of Excellence** - a capacity building programme for skills and knowledge to advance trilateral commitments
- **Creation of a HoB Partnership forum** - a platform for coordinated stakeholder engagement to incubate ideas and stimulate and facilitate public private collaboration
- **Creation of a Sustainable Finance Facility for Green Growth** - to leverage private investment
- **Identification of a set of demonstration projects** - to create real change on the ground to improve people's lives and the environment

[Download here](#)

Citation: WWF, P. (2011). *Roadmap for a green economy in the Heart of Borneo*.

The 2011 Global Green Economy Index: An Analytic Tool Measuring National Green Reputations and Performance, Dual Citizen

This report provides an overview of the 2011 analysis of the Global Green Economy Index (GGEI) which is a comprehensive analytic tool offering stakeholders in the green economy a robust system to track, analyse, and improve upon both the perceptions and performance of national green economies. The GGEI measures perceptions of green reputations of 27 countries as judged by hundreds of expert practitioners and benchmarks these against a green economy performance index. The 27 countries selected represent over 90% of the international green economy.



The top ten national performers for 2011 were: New Zealand, Denmark, Germany, Norway, Iceland, Sweden, Brazil, Canada, Finland and the United Kingdom.

[Download here](#)

Citation: Dual Citizen (2011). *The 2011 Global Green Economy Index: An Analytic Tool Measuring National Green Reputations and Performance*.

4. Green Growth

The concept of green growth has its origins in the Asia and Pacific Region. At the Fifth Ministerial Conference on Environment and Development (MCED) held in March 2005 in Seoul, 52 Governments and other stakeholders from Asia and the Pacific agreed to move beyond the sustainable development rhetoric and pursue a path of “green growth”. To do so, they adopted a Ministerial declaration (the Seoul Initiative Network on Green Growth) and a regional implementation plan for sustainable development (UNESCAP, 2008). This commenced a broader vision of green growth as a regional initiative of UNESCAP, where it is viewed as a key strategy for achieving sustainable development as well as the Millennium Development Goals (in particular 2 and 7 relating to poverty reduction and environmental sustainability) (UNESCAP, 2012).

The green growth approach adopted by the MCED sought to harmonize economic growth with environmental sustainability, while improving the eco-efficiency of economic growth and enhancing the synergies between environment and economy. As with green economy, green growth attracted significant attention as a way out of today’s economic doldrums in the aftermath of the 2008 financial crisis (Green Growth Leaders, 2011).

In 2008, partly in response to the global financial crisis, the Republic of Korea (RoK) adopted ‘low carbon green growth’ as the country’s new development vision, which was followed shortly after by the release in 2009 of their *National Strategy for Green Growth* and *Five-Year Plan for Green Growth* (which were accompanied by the enactment of a *Framework Act on Low Carbon Green Growth*). The RoK has since been instrumental in promoting the concept more broadly, including through the OECD. At the OECD Ministerial Council Meeting in June 2009, 30 members and five prospective members (comprising approximately 80% of the global economy) approved a declaration acknowledging that green and growth can go hand-in-hand, and asked the OECD to develop a green growth strategy bringing together economic, environmental, technological,

financial and development aspects into a comprehensive framework (UNESCAP, 2012).⁷ Since then, the OECD has become a major proponent of green growth and supports efforts of countries to implement green growth.

In April 2010, the Association of Southeast Asian Nations (ASEAN) summit in Hanoi adopted the ASEAN Leaders' Statement on Sustained Recovery and Development, which highlighted the leaders' determination to promote green growth, including investments in long-term environmental sustainability and sustainable use of natural resources in order to diversify and ensure economic resilience.

In May 2010, at its sixty-sixth session, UNESCAP countries adopted the Incheon Declaration on Green Growth, in which members expressed their intent to "*strengthen efforts to pursue green growth strategies as part of [their] response to the current crisis and beyond.*" Later that year, support to pursue green growth was also stated in the 6th MCED Declaration in Astana in October 2010 (UNESCAP, 2012). The main focus of green growth in this context was for developing countries in Asia and the Pacific region to harmonise economic growth with environmental sustainability, while improving the eco-efficiency of economic growth and enhancing the synergy between environment and economy.

In June 2010, the RoK was instrumental in the establishment of the Global Green Growth Institute (GGGI) as a non-profit foundation (which was elevated to a new international organization at the Rio+20 Conference in June 2012). The GGGI is dedicated to diffusing green growth as a new model of economic growth, targeting poverty reduction, job creation, social inclusion, and environmental sustainability, climate change mitigation, biodiversity loss, and security of access to clean energy and water. The board of the GGGI reflects a "who's who" of economic thinkers (including Nicholas Stern and Jeffrey Sachs) and its placement in RoK reflects a broader regional interest – led by UNESCAP – in helping the Asia and Pacific region to "leapfrog" over the industrialization patterns of the developed world, and avoid the trap of "growing first, cleaning up later" (Atkisson, 2012).

In November 2010, at the G20 Seoul Summit, leaders also recognized green growth as an inherent part of sustainable development which could enable countries to leapfrog old technologies in many sectors. They agreed to take steps to create enabling environments for the development of energy efficiency and clean energy technologies. This was also clearly evident in the response of G20 countries to the global financial crisis and recession of 2008-09, where some governments adopted expansionary policies that incorporated a "green fiscal" component (Barbier, 2011). In fact, almost the entire global green stimulus was made by G20 countries, with measures including support for: renewable energy; carbon capture and sequestration; energy efficiency; public transport and rail; improving electrical grid transmission; as well as other public investments and incentives aimed at environmental protection. Of the US\$ 3.3 trillion allocated worldwide to fiscal stimulus over 2008-09, US\$ 522 billion (around 16%) was devoted to green expenditures or tax breaks (Robins, Clover and Saravanan, 2010). In 2012, the Mexican Presidency of the G20 introduced 'inclusive green growth' as a cross-cutting priority on the G20 development agenda.

⁷ The strategy – *Towards Green Growth* – was launched at the OECD Ministerial Council Meeting in May 2011. It includes a suite of publications including a policy toolkit and indicators (see http://www.oecd.org/document/10/0,3746,en_2649_37465_47983690_1_1_1_37465,00.html)

A number of other international organisations, think tanks and academics have also turned their attention to green growth, including the World Bank⁸ and the Green Growth Leaders. In February 2012, the World Bank along with UNEP, OECD and the GGGI launched a new international knowledge-sharing platform in Mexico – the Green Growth Knowledge Platform (GGKP) – bringing together under the same roof the major international organizations supporting and promoting both green growth and green economy. The GGKP aims to enhance and expand efforts to identify and address major knowledge gaps in green growth theory and practice, and to help countries design and implement policies to move towards a green economy.

At least 13 separate definitions for green growth were identified in recent publications (see [Appendix 1](#)). This includes definitions by key international actors involved in green growth work:

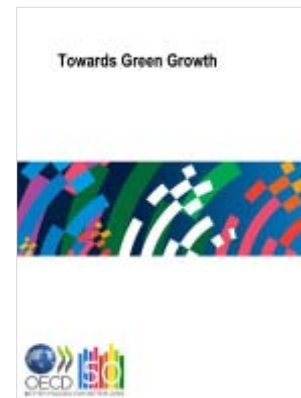
- **UNESCAP:** growth that emphasizes environmentally sustainable economic progress to foster low-carbon, socially inclusive development.
- **OECD:** fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies.
- **World Bank:** growth that is efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters.
- **GGGI:** green growth is the new revolutionary development paradigm that sustains economic growth while at the same time ensuring climatic and environmental sustainability. It focuses on addressing the root causes of these challenges while ensuring the creation of the necessary channels for resource distribution and access to basic commodities for the impoverished.

4.A. Publications

Following is a summary of recent green growth publications available online.

Towards Green Growth – OECD

The 'Towards Green Growth' report by the OECD introduces the organisation's Green Growth Strategy that provides a framework for how countries can achieve economic growth and development while at the same time combating climate change and preventing costly environmental degradation and the inefficient use of resources. The strategy comprises a number of reports, including *Towards Green Growth*; *Towards Green Growth – Monitoring Progress: OECD Indicators*; and *Tools for Delivering Green Growth*.



The strategy provides a 'lens' for re-examining the current economic growth paradigm whilst at the same time offering an actionable policy framework for policy makers in advanced, emerging and developing economies. The OECD states that a return to the 'business-as-usual' approach as the world economy emerges from the financial crisis would be unwise and indeed unsustainable and would impose human costs and eventually constraints on economic growth and development.

⁸ In May 2012, the World Bank released its flagship report in advance of the Rio+20 Conference entitled *Inclusive Green Growth – The Pathway to Sustainable Development*.

In summary, the strategy states the reasons why a green growth strategy is critical, then provides a framework for green growth and continues with options for promotion of the transition. Similarly to the UNEP Green Economy report, the OECD strategy presents options for measuring progress against green growth and begins to explore delivery mechanisms.

According to the OECD, Green Growth means *fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies*.

[Download here](#)

Citation: OECD, 2011. *Towards Green Growth*. OECD Publishing.

Fostering Innovation for Green Growth – OECD

This publication on ‘Fostering Innovation for Green Growth’ forms part of the OECD’s Green Growth Studies and addresses the role of innovation in green growth strategies. The report begins by stating that innovation will be an important part of the transition to green growth economies and without it, it will be very difficult and costly to achieve greener economies. The concept of decoupling economic growth from natural resource depletion is discussed and how innovation in developing new business models as well as in technological processes will be crucial.



The publication identifies a series of policy actions governments can take that will help to drive innovation and overcome market failures. These are:

- Support for private investment in innovation, notably R&D and the commercialisation of green economies.
- Support for general-purpose technologies
- Fostering the growth of new entrepreneurial firms
- Facilitating the transition to green growth in small and medium-sized enterprises

The report also details market-based policy innovations to help the take-up of green innovations in the market place. These include: fostering diffusion of green innovation within and across countries by exploring new knowledge avenues and technologies, strengthening markets for green innovation and changing consumer behaviour.

[Download here](#)

Citation: OECD. (2011). *Fostering Innovation for Green Growth*. OECD Publishing

Green Growth and Developing Countries – Consultation Draft – OECD

This report and the accompanying summary for policy makers provide a conceptual outline for green growth in the developing country context, providing a rationale for green growth and examining the concerns held by some developing countries about the green growth agenda informed by a series of consultations. The report discusses the economic, environmental and social objectives that green growth can help developing countries to achieve, and review economic growth and environmental trends over recent years and speculates on how economic and social trends will evolve in the years to come. Based on this evidence, country clusters are established for analysis of countries which may apply similar approaches to foster green growth.



Relevant national frameworks and a range of policy instruments, national and local, public and private, are articulated and detail of how they can be supported by the international community through existing mechanisms and policy coherence for development will be set out.

Importantly, the report articulates six national enabling conditions for green growth, four green growth mainstreaming mechanisms, and eight green growth policy instruments.

[Download here](#)

Citation: OECD. (2012). *Green Growth and Developing Countries – Consultation Draft*, OECD Publishing.

OECD. (2012). *Green Growth and Developing Countries – A Summary for Policy Makers*, OECD Publishing.

Inclusive Green Growth: For the Future We Want – OECD

This report provides a concise summary of green growth and the work of the OECD in this area that was prepared as a contribution to Rio+20. The report briefly defines green growth and how it can deliver sustainable development, as well as some key principles for guiding green growth policies. The report also details how the work programs of the OECD are contributing to international green growth work, including its efforts to support countries in the design and implementation of strategies for greener and more inclusive growth.

The report indicates that the elements of successful green growth strategies are: making pollution more costly; reforming environmentally harmful subsidies; innovation and green technology development and diffusion; skills development and labour market policies; leveraging private investment for green infrastructure technologies; and greening consumer behaviour.



[Download here](#)

Citation: OECD. (2012). *Inclusive Green Growth for the Future We Want – OECD Work of Relevance to Rio+20*, OECD Publishing.

Greening Development: Enhancing Capacity for Environmental Management and Governance – OECD

This report outlines a number of steps to be considered when building capacity for greening national development planning, national budgetary processes and key economic sector strategies. It identifies the key actors to be engaged in the decision making processes, outlines possible capacity needs and suggests how these can be addressed. It is intended to support developing countries in their efforts to move to a greener development path. It is also intended to assist development co-operation and environment agencies in their efforts to support that process.



Effective environmental management requires a broad range of skills and knowledge among individuals and organisations and an enabling environment that supports this process (e.g. international regimes, national policies, rule of law, accountability and transparency). Within this framework, some specific interventions for greening development include:

- Use multi-year development planning processes;
- Develop key actors' technical skills;
- Encourage the participation of non-government actors;
- Build functional and technical skills; and
- Plan and target efforts carefully.

[Download here](#)

Citation: OECD. (2012). *Greening Development: Enhancing Capacity for Environmental Management and Governance*, OECD Publishing.

Incorporating Green Growth and Sustainable Development Policies into Structural Reform Agendas – OECD, World Bank, UN

This report was prepared by the OECD, World Bank and a number of United Nations agencies as an input to the G20 Summit in Los Cabos in June 2012. The report, was prepared in response to the request from G20 Finance Ministers and Central Bank Governors in February 2012 that asked the OECD, with the World Bank and the UN, to prepare a report that provides options for G20 countries on inserting green growth and sustainable development policies into structural reform agendas, tailored to specific country conditions and level of development.



The report highlights that green growth is a tool for achieving the broader goal of sustainable development, and implies a medium- to long-term policy strategy that understands and addresses potential poverty and resource scarcity gaps; provides opportunities for fostering alternate economic, production and livelihood models; and intends to shield development and growth prospects from future resource price volatility, as well as the impacts of environmental

degradation. Green growth that is inclusive can help to implement social and sustainable development goals.

The report provides a toolkit of policy options that are available for countries to draw upon when designing a green growth strategy:

- Reforms of the structure of taxes and charges with a view to pricing negative environmental externalities.
- Reforms that improve the working of product markets.
- Other policies such as regulations and standards and other approaches to address information failures, measurement issues and behavioural biases.
- Conditions for assuring the right policy framework for greening infrastructure provision.
- Innovation policies, and trade and international investment policies.
- Broader social policies to better harness synergies and minimise tradeoffs.

[Download here](#)

Citation: OECD, World Bank, United Nations (2012). *Incorporating Green Growth and Sustainable Development Policies into Structural Reform Agendas*, A report by the OECD, the World Bank and the United Nations prepared for the G20 Summit (Los Cabos, 18-19 June 2012), OECD Publishing.

Resilient People Resilient Planet – SG’s High-Level Panel on Global Sustainability

This report was prepared by the UN Secretary-General’s High-Level Panel on Global Sustainability as an input to the UN Conference on Sustainable Development 2012 (Rio+20). The 22-member Panel, established by the Secretary-General in August 2010 to formulate a new blueprint for sustainable development and low-carbon prosperity, was co-chaired by Finnish President Tarja Halonen and South African President Jacob Zuma. The Panel's final report contains 56 recommendations to put sustainable development into practice and to mainstream it into economic policy as quickly as possible.



Whilst not specifically targeting green growth, the report does include a section on ‘moving towards a sustainable economy’ in which it outlines policy actions to shift towards green growth, including:

- Incorporating social and environmental costs in regulating and pricing of goods and services, as well as addressing market failures.
- Creating an incentive road map that increasingly values long-term sustainable development in investment and financial transactions.
- Increasing finance for sustainable development, including public and private funding and partnerships to mobilize large volumes of new financing.
- Expanding how we measure progress in sustainable development by creating a sustainable development index or set of indicators.

[Download here](#)

Citation: United Nations Secretary-General’s High-Level Panel on Global Sustainability (2012). *Resilient people, resilient planet: A future worth choosing*. New York: United Nations.

From Growth to Green Growth: A Framework – World Bank

This publication, produced by the World Bank as part of their 'Policy Research Working Papers', aims to provide a contribution to discussions on green growth around the world. The paper defines green growth as about: 'making growth processes resource efficient, cleaner and more resilient without necessarily slowing them.'

The paper aims to clarify the concept of green growth by (a) proposing that we need to focus on what needs to happen over the next 5-10 years to remove the world from patterns that would be complex and expensive to modify and (b) reconciling the short and long term by offsetting short-term costs and maximising synergies and economic co-benefits.

The paper then puts forward an analytical framework through which green policies can contribute to economic growth. It concludes with proposing policies that can be implemented to capture these co-benefits and environmental benefits. These include: price-based policies, norms and regulations, public production and direct investment, information creation and dissemination, education and moral suasion, or industrial and innovation policies.

[Download here](#)

Citation: World Bank. (2011). *From Growth to Green Growth: A Framework*.



Inclusive Green Growth: The Pathway to Sustainable Development – World Bank

In this publication, the World Bank indicates that inclusive green growth is *the* pathway to sustainable development. The report begins by stating that although economic growth has lifted more than 660 million people out of poverty over the past 20 years, it has often come at the expense of the environment. Long-term sustainability of growth and progress on social welfare are threatened by inefficient and wasteful use of the earth's natural capital resources without adequate reinvestment of other forms of wealth or sufficient reckoning of the true social costs.

The report maintains that this can be blamed on market, policy and institutional failures.

Inclusivity is at the heart of the concept: the report states that there are still many people who have been excluded from the benefits of economic growth. 1.3 billion still do not have access to electricity, 2.6 billion do not have access to sanitation and 900 million lack access to clean drinking water.

Similarly to the Danish 92 Group's report on the 'Equitable Green Economy' the World Bank states that we cannot assume that green growth will be inclusive and equitable. Green growth policies must be developed to ensure maximised benefits and minimised costs to the poor and most vulnerable, and policies and actions with irreversible negative impacts must be avoided. The report also calls for better measures to monitor economic performance and mentions 'comprehensive wealth', which includes natural capital, as an example. The five key messages



from the report are: 1) Greening growth is necessary, efficient, and affordable 2) Obstacles to greening growth are political and behavioural inertia, and a lack of financing instruments 3) Green growth should look at what needs to be done in the next 5-10 years 4) The way forward requires a blend of economics, political science, and social psychology and 5) There is no single green growth model.

[Download here](#)

Citation: World Bank. (2012). *Inclusive Green Growth: The Pathway to Sustainable Development*. Washington.

Shaping the Green Growth Economy – Green Growth Leaders

This publication, by Green Growth Leaders, commences by saying that the concept of green growth has enormous potential in changing the mindsets of governments and businesses around the world from fearing that acting on climate change would bring about rising costs and reducing growth to realising that green growth can create foundations for economic prosperity. The authors reason that this is why green growth has become especially attractive to policy makers in the wake of the financial crisis.



The report asserts that sustained green growth will require both a fundamental change in the energy system itself, and a policy framework that allows the private sector to discover and capture the gains that transformation can provide to the entire economy. The transformation is likened to the systemic transformations of the past including the rail transport and information technology revolutions that both fundamentally altered the way things are produced, distributed and consumed, and generated substantial economic growth (by creating a platform for new innovations, business models and value creation) in the process.

The authors define what they understand by green growth as ‘job creation or GDP growth compatible with or driven by actions to reduce greenhouse gases.’

[Download here](#)

Citation: Green Growth Leaders. (2011). *Shaping the Green Growth Economy*.

Life Beyond Growth – AtKisson

The Life Beyond Growth publication by AtKisson for the Institute for Studies in Happiness, Economy and Society, explores, as a basis, alternatives and complements to GDP- Measured growth as a framing concept for social progress. The report begins by analysing the history of the economic growth paradigm, summarising the key factors that have supported the dominance of “growth” in global history, and then continues to provide insight on some of the contemporary political factors and technical initiatives that have led to new thinking on green



growth and human well-being as indicators for social progress.

The document aims to provide a summation of the current *state of the art* in relation to rethinking economic growth in favour of alternative models such as green growth. It concludes with a section on the ethics of growth and happiness and a vision for the future.

[Download here](#)

Citation: Institute for Studies in Happiness, Economy, and Society, AtKisson. (2012). *Life Beyond Growth*.

Green Growth, Resources and Resilience – UNESCAP, ADB, UNEP

The 'Green Growth, Resources and Resilience' report by ESCAP, ADB and UNEP focuses on environmental sustainability in Asia and the Pacific region. It is the sixth report of a series published every 5 years on the state of the environment in Asia and the Pacific, this time highlighting the issues of green growth, resource efficiencies and limitations, and resilience to global turbulence in markets and ecosystems.

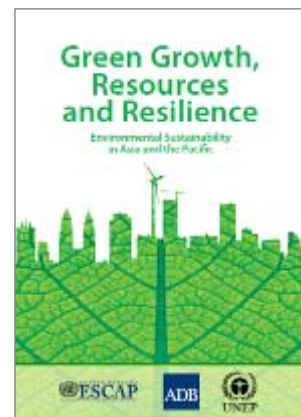
The report begins by stating that economic growth has been the main reason behind lifting more than 500 million people out of poverty in the region over the last 20 years but this socio-economic progress has come at the expense of the environment due to unsustainable and inequitable growth patterns.

The concept of green growth is explored in detail and strategies to respond to the mounting challenges to sustainable development in the region are analysed. Green Growth is defined in the report as “economic progress that fosters environmentally sustainable, low-carbon and socially inclusive development”. This definition differs from that of the World Bank by assuming the green growth inherently involves social inclusiveness.

The publication identifies several strategies for green growth including: 1) A supportive economic incentives framework at the heart of successful green growth initiatives, 2) Infrastructure investments guided by the principles of sustainability, accessibility, and social inclusiveness, 3) “Natural infrastructure” providing valuable but undervalued economic inputs, and 4) Sustainable agriculture as a critical aspect of maintaining and building natural capital.

[Download here](#)

Citation: UNESCAP, ADB, UNEP. (2012). *Green Growth, Resources and Resilience*.



Low Carbon Green Growth Roadmap for Asia and the Pacific – UNESCAP

This report explores the opportunities that a low carbon green growth path offers to the region. It articulates five tracks to drive the economic change necessary to pursue low carbon green growth as a new economic development path. In particular, the “visible structure” of the economy,



comprising such physical infrastructure as transport, buildings and energy systems, together with the “invisible structure”, which encompasses market prices, governance, regulations and lifestyles, have to be re-oriented towards resource efficiency. The Roadmap provides policymakers in the region with a comprehensive list of policy options and practical implementing strategies as well as examples of successful practices, woven through more than 100 fact sheets and case studies.

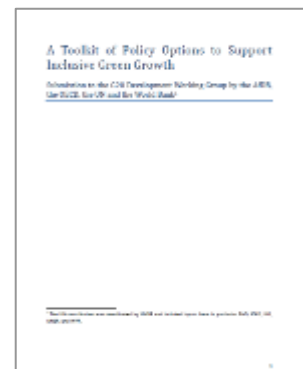
The Roadmap is divided into three parts: Part I provides an overview of the challenges and opportunities confronting the region in terms of low carbon green growth and elaborates on the system change required to pursue the new development path. Part II presents five tracks as core elements of the system change necessary for low carbon green growth and a section that elaborates on the means of implementing the policy options. Part III provides detailed information and analysis of the policy options and successful practices identified in Part II.

[Download here](#)

Citation: UNESCAP (2012). *Low Carbon Green Growth Roadmap for Asia and the Pacific – turning resource constraints and the climate crisis into economic growth opportunities*.

A Toolkit of Policy Options to Support Inclusive Green Growth – AfDB, OECD, UN, World Bank

This document, published by the AfDB, the OECD, the UN and the World Bank, identifies a series of policy initiatives, mechanisms and other options that can be employed to support inclusive green growth. The authors recognise that these kind of policy approaches give the private sector the security to begin investment and innovation for sustainable development and ensure that consumers and businesses internalize the true cost of their behaviours.



The toolkit includes summaries of the following policy options: Environmental Fiscal Reform, Public Environmental Expenditure Reviews, Sustainable Public Procurement, Strategic Environmental Assessments, Social Protection Instruments, Payments for Ecosystem Services, Certification for Sustainable Production, Green innovation and industrial policies, Project-Level Impact Assessment, Integrated Water Resources Management and Green Accounting. The publication also includes a section on knowledge sharing and capacity development and their importance in diffusing this knowledge across and within countries.

[Download here](#)

Citation: AfDB, OECD, UN, World Bank. (2012). *A Toolkit of Policy Options to Support Inclusive Green Growth* (pp. 1-61).

Decoupling Natural Resource Use and Environmental Impacts from Economic Growth – UNEP

This publication, by UNEP, aims to identify the challenges faced in attempting to decouple human well-being from resource consumption and exists as the first report amongst many investigations into decoupling which will be undertaken by the International Resource Panel and UNEP over the next few years. The report offers facts and statistics of natural resource flows and trade globally and notes that consumption of natural resources is still rapidly rising. A series of country wide case-studies are presented that examine the decoupling potential of the countries in question. The report observes that developed countries appear to show stabilization of resource and energy consumption however these economies appear to have exported the more energy and resource intensive elements elsewhere. There appears to be some success of relative decoupling (where resource intensity per unit growth falls) in developing countries but resource consumption in these economies is 'steeply on the rise'.



The report also offers options for absolute decoupling of environmental impact and economic growth, something intrinsic to 'the survival of human civilization', according to UNEP. These are: better and more efficient technologies, policies and appropriate market signals that make the transition attractive and profitable, and the special role of urban areas in forging innovations towards a sustainable economy.

[Download here](#)

Citation: UNEP. (2011). *Decoupling Natural Resource Use and Environmental Impacts from Economic Growth*.

Green Growth in Motion - GGGI

This report, prepared by the Global Green Growth Institute (a new international organisation with head quarters in Seoul), outlines the Republic of Korea's experience with developing its low carbon, green growth strategy. The report outlines the philosophy behind the strategy as well its the institutional foundations and key policies and programs across various sectors - climate policy; green energy; green technology and industry; green cities, transportation and buildings, and green life. The strategy proposes green growth as a new growth paradigm that can address the challenges of climate change and resource depletion.



The intent is that the sharing of Korea's practices for green growth will provide other countries with useful tools and ideas that can be utilized to address their own challenges and the global imperatives.

[Download here](#)

Citation: Global Green Growth Institute (2011). *Green Growth in Motion – Sharing Korea's Experience*.

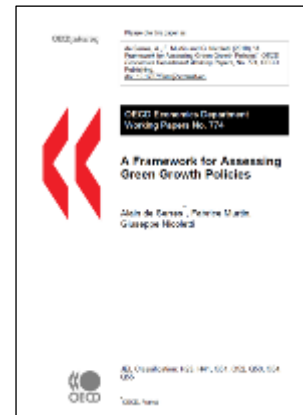
A Framework for Assessing Green Growth Policies – OECD

This academic style paper from the OECD focuses on two key elements: the first identifies principles and criteria for selecting policies that contribute to economic growth whilst reducing environmental impact, and the second examines what structural adjustments are required in the transition to the green economy.

The policies to promote green growth, as stated in the paper, are categorised as market-based or non-market instruments under the broad areas of cost effectiveness, adoption and compliance, uncertainty measures and R&D and technology diffusion incentives. The structural changes as indicated in the second section of the paper include: fostering the transition towards green technologies, easing the transition towards a greener economy, green policies to sustain the economy, sectoral re-allocation, and managing green tax revenues in times of public finance deterioration.

[Download here](#)

Citation: Alain de Serres, Fabrice Murtin, G. N. (2010). *A Framework for Assessing Green Growth Policies* OECD Economics Department Working Papers, (774).



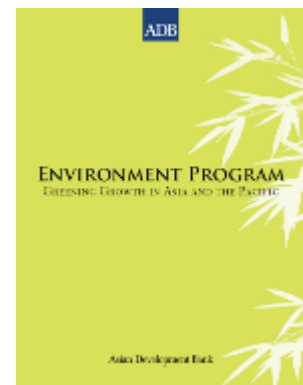
Environment Program: Greening Growth in Asia and the Pacific – Asian Development Bank

The Asian Development Bank has published a report on greening growth in the Asia and the Pacific region. The report identifies the challenges faced by ADB's developing member countries which are experiencing some of the highest economic growth rates in the world. The Bank recognises that although this growth has improved the living conditions of nearly half a billion people, the environmental carrying capacity of the region has been subject to immense pressure.

The document highlights the natural resources available in the region and the environment-related challenges associated with them, with the aim to increase awareness amongst the borrowers, clients, development partners, civil society (incl NGOs), the private sector and other stakeholders of the ADB. The report documents the efforts the ADB is employing to incorporate environmental concerns into country development strategies and investment operations. The ADB's initiatives, programs and partnership related to its environmental operations are discussed alongside options to help achieve environmentally sustainable growth in the region for the future.

[Download here](#)

Citation: Asian Development Bank. (2011). *Environment Program: Greening Growth in Asia and the Pacific*.



4.B. National Strategies

Following are summaries of recent national green growth strategies and similar documents available on line.

Green Growth and Climate Resilience – Republic of Rwanda

The Green Growth and Climate Resilience report, developed as a collaborative project between the Government of Rwanda, the Smith School of Enterprise and Environment and The University of Oxford, sets out the National Strategy for Climate Change and Low-Carbon Development for Rwanda. The strategy begins by stating that Rwanda has experienced significant human and social development in recent years, however the country's future socio-economic development is uncertain: its population will more than double by 2050, the country is vulnerable to climate change as it is strongly reliant on rain-fed agriculture, and it is 100% reliant on oil imports and therefore vulnerable to price increases and fluctuations.



The strategy aims to guide the process of mainstreaming climate resilience and low carbon development into key sectors of the economy. The strategic framework provides a vision for 2050, guiding principles, strategic objectives, programmes of action, enabling pillars and a roadmap for implementation.

The strategy defines green growth as “an emerging concept that recognises that environmental protection is a driver of global and national economic development. It is about focusing society on qualitative growth rather than simply increasing GDP”.

[Download here](#)

Citation: Republic of Rwanda. (2011). *Green Growth and Climate Resilience*. Kigali.

Road to Our Future: Green Growth – Republic of Korea

‘Road to Our Future: Green Growth’ is the Republic of Korea’s national strategy for green growth for the 5-year period 2009-2013. The strategy aims to shift the current development paradigm of quantity-orientated, fossil-fuel dependent growth to quality-orientated growth with more emphasis on new and renewable energy sources. The strategy has three overall objectives, (1) to promote eco-friendly new growth engines for the national economy, (2) to enhance the quality of life for the members of the society, and (3) to contribute to the international efforts to fight climate change.



Korea are putting ‘Green Growth’ at the centre of their vision for the next 60 years and are confident that it will lead to new opportunities for economic growth and environmental protection simultaneously.

[Download here](#)

Citation: Republic of Korea. (2009). *Road to Our Future: Green Growth*. Seoul.

The National Green Growth Roadmap – Kingdom of Cambodia

The National Green Growth Roadmap puts forward an implementation plan of the national and local sustainable development strategy for all policy areas in the Kingdom of Cambodia. It provides a supporting framework for environmentally sustainable and socially inclusive development and growth in Cambodia that aims to strengthen environmental cooperation concerning national and international environmental policy through the sharing of ideas and experiences whilst contributing towards the Millennium Development Goals and National Sustainable Development Objectives.



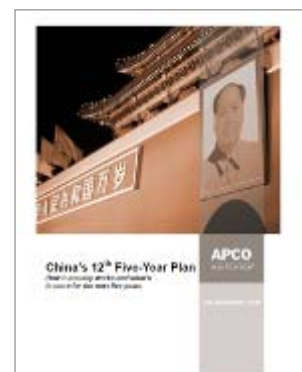
The strategy builds on ESCAP's definition of green growth that emphasises ecologically sustainable economic progress to foster low-carbon, socially inclusive development. To this end, the roadmap proposes potential paths for short, medium and long-term implementation of green growth in Cambodia that will help the country to improve resilience and decrease vulnerability to climate change. The strategy is based largely around ESCAP's holistic Green Growth Approach which states that the economy, the environment and society are not mutually exclusive but rather interdependent, deeply intertwined and integral components of one another.

[Download here](#)

Citation: Kingdom of Cambodia. (2009). *The National Green Growth Road Map*. Phnom Penh.

China's 12th Five-Year Plan – APCO worldwide

This report, by APCO Worldwide, summarises the key guiding principles of China's 12th Five-Year Plan which focus on rebalancing the economy, mitigating social inequity and conserving the environment. The Chinese Government put strong emphasis on 'inclusive growth' where the benefits of economic growth are felt in all regions and social groupings in China. The plan identifies the three SEIs (Strategic Emerging Industries) - healthcare, energy and technology – and recommends the initiatives that will encourage growth in these sectors.



The report also details the changes that may face foreign business in the five-year period in terms of cost implications associated with changes to the minimum wage, value-added tax increases, raw material resource price reforms and environment-related taxes. The plan reports that China is facing severe environmental degradation brought about by rapid industrialization, reliance on coal as an energy source, a large energy-intensive manufacturing sector and little environmental regulation. Three areas of focus are examined in the plan to counter the negative trend: energy conservation (including discussion of mandatory emissions targets), environmental quality which

include water quality and commitments for high-polluting sectors, and new energy regimes (15% of energy from renewable sources by 2020).

[Download here](#)

Citation: APCO Worldwide. (2010). *China's 12th Five-Year Plan*.

Japan's New Growth Strategy to Create Demand and Jobs – OECD

This paper puts forward a strategy for Japan to forge new areas of growth, create demand and jobs through regulatory reform and fiscal measures. A series of key challenges are identified that include climate change, and ageing populations which, according to the strategy, can be turned into sources of green growth.

The strategy states that market-based initiatives such as an effective emissions trading system would promote private investment and green innovation. Other policies that encourage further economic integration with Asia are discussed such as reducing agricultural subsidies and bringing down barriers to trade and foreign workers.

Seven strategic growth areas are presented in the strategy, one of which is green innovation. This area comprises three national strategic projects to promote green growth. These are:

- Introduce a feed-in tariff system to expand the renewable energy market;
- Use the Future City Initiative to promote the use of eco-products and services; and,
- Revitalise forestry and raise the self-sufficiency ratio to over 50%.

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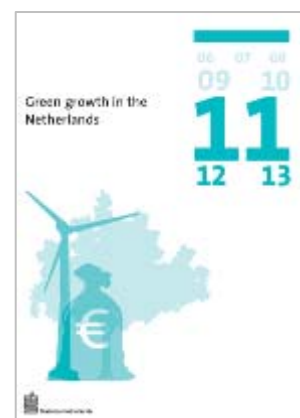
Citation: Jones, R. S., & Yoo, B. (2011). *Japan's New Growth Strategy to Create Demand and Jobs*, (890).



Green Growth in the Netherlands – Statistics Netherlands

This report, by Statistics Netherlands, gives an overview of green growth in the Netherlands and presents data for the majority of the indicators for green growth as specified by the OECD. The report concludes that relative decoupling (where intensity per unit of economic growth is falling) is evident in the following areas: water use, nitrogen and phosphorus surpluses, greenhouse gas emissions and material consumption. However, comprehensive absolute decoupling (where consumption falls as the economy grows) is not evident.

The report represents a first attempt at translating the OECD indicators for green growth to the national level, and providing feedback to the international community. A recommendation is made for a more comprehensive assessment of green growth in the future. Indicators are grouped into the following themes:



- **Environmental efficiency of production** - Production-based greenhouse gas intensity, Consumption-based greenhouse gas emissions, Energy efficiency, Renewable energy, Nutrient surpluses, Material intensity, Water use intensity, Waste treatment.
- **Natural assets base** - Stocks of timber, Fish inputs, Natural gas reserves, Land conversion into built-up land, Threats to biodiversity.
- **Environmental quality of life** - Pollution induced health problems
- **Policy responses and economic opportunities** - Green patents, Share of green taxes, Energy prices, Carbon emission trading, Environmental investment and Green jobs.

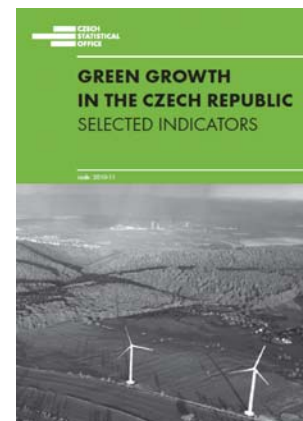
Each of the above indicators is presented on a graph with a time axis, so progress can be measured. Each graph is accompanied by a series of conclusions and a statement of its relevance to green growth.

[Download here](#)

Citation: Statistics Netherlands. (2009). *Green Growth in the Netherlands*.

Green Growth in the Czech Republic – Czech Statistical Office

This report gives an overview of green growth in the Czech Republic and presents data for 27 indicators for green growth based on the OECD indicator framework to assess the development of the Czech economy towards green growth. The report structures the selected indicators into five interrelated groups: sustainability and equity; environmental and resource productivity; natural asset base; environmental quality of life; and policy responses and economic opportunities. Result of the assessment are presented as positive, negative or stable trends against each of the indicators.



[Download here](#)

Citation: Czech Statistical Office. (2011). *Green Growth in the Czech Republic*.

Towards Green Growth in Denmark – OECD

This paper assesses Danish energy and climate policies and discusses how they could be improved to ensure that objectives are met at least cost. It first depicts the evolution of GHG emissions and the energy mix since 1990. It then puts energy and climate policies and targets into perspective and sets out the main challenges. The final section assesses how policies could be shaped to enhance the efficiency of these targets and minimise their costs.



Denmark's green growth strategy focuses on moving the energy system away from fossil fuels and investing in green technologies, while limiting greenhouse gas (GHG) emissions. On the whole, current policies should allow Denmark to reach near-term climate

change targets, but may not be sufficient to achieve its most ambitious targets. The challenge is to achieve objectives in a cost-effective manner and to ensure that these ambitions contribute as much as possible to global GHG emissions mitigation and to stronger and greener growth in Denmark. Better exploiting interactions with EU and international policies, finding the appropriate way to support green technologies and reducing GHG emissions in sectors not covered by the EU emission trading scheme are key issues which need to be addressed to meet this challenge.

[Download here](#)

Citation: Jamet, S. (2012), "Towards Green Growth in Denmark: Improving Energy and Climate Change Policies", *OECD Economics Department Working Papers*, No. 974, OECD Publishing.

A Lively & Liveable Singapore: Strategies for Sustainable Growth - Ministry of the Environment and Water Resources and Ministry of National Development, Singapore

This report documents the findings of the IMCSD (Inter-Ministerial Committee on Sustainable Development) which was set up in 2008 with the aim of developing a national sustainable development strategy for Singapore. The committee consulted extensively with business, community leaders and members of the public to develop the strategy. The resulting vision was to 'Make Singapore a liveable and lively city state, one that Singaporeans love and are proud to call home'.



A series of strategies were developed to work towards in the transition to a sustainable Singapore. These were: Boosting Resource Efficiency, Enhancing the Urban Environment, Building Capabilities, and Fostering Community Action. These strategies are documented in detail in the overarching sustainable development strategy and include targets and time-based actions.

[Download here](#)

Citation: Ministry of the Environment and Water Resources and Ministry of National Development, S. (2009). *A Lively & Liveable Singapore: Strategies for Sustainable Growth*.

Green Growth Planning – GGGI Country Programs

This paper provides an overview of the Green Growth Planning program of the Global Green Growth Institute (GGGI). The GGGI helps developing countries to prepare policy options and develop institutions tailored to their respective economic circumstances and constraints, including the development of national green growth plans (GGPs)

The report outlines the projects current being coordinated through the GGGI, which includes projects in: Brazil, Cambodia, Ethiopia, Indonesia, Kazakhstan, Thailand, and the United Arab Emirates, China, Mongolia, Philippines, Rwanda, and Vietnam. For each project, information is provided on the project background, objectives, main activities and outputs, and policy implications.



[Download here](#)

Citation: Global Green Growth Institute (2012). *Green Growth Planning - GGGI Country Programs*.

5. Low Carbon Development

The concept of low carbon development has its roots in the UNFCCC adopted in Rio in 1992. In the context of this convention, low carbon development is now generally expressed using the term *low-emission development strategies* (LEDS – also known as low-carbon development strategies, or low-carbon growth plans). Though no formally agreed definition exists, LEDS are generally used to describe forward-looking national economic development plans or strategies that encompass low-emission and/or climate-resilient economic growth (OECD, IEA 2010).

LEDS have attracted interest in the climate negotiations as a soft alternative to voluntary or obligatory GHG emission reduction targets in developing countries (ECN, 2011). The initial proposal to introduce LEDS was put forward by the EU in 2008, highlighting how information on planned low-carbon pathways can help to inform the international community about funding needs and priorities and to help gauge the level of global climate change action (OECD, IEA 2010). The concept has been included in the negotiating texts under the UNFCCC since the run up to COP15 in Copenhagen in 2009 and is part of both the Copenhagen Accord (UNFCCC, 2009) and the Cancun Agreements (UNFCCC, 2011), which recognize that a LEDS is indispensable to sustainable development and that incentives are required to support the development of such strategies in developing countries. Though not clearly implied by the terminology, LEDS are understood to also include provisions to reduce vulnerability to climate change impacts.

The discourse of integrating climate change and development builds on a large body of literature, which was assessed by the IPCC in its fourth assessment report (Sathaye *et al.*, 2007), and distinguished between the traditional “climate-first” approach and a “development-first” approach (ODI, 2009). The concept of low carbon development takes a “development-first” approach which rethinks development planning and proposes structural solutions (such as alternative infrastructure and spatial planning) with lower emission trajectories (Morita *et al.* 2001). It focuses on addressing and integrating climate change with development objectives and is therefore a more useful approach for developing countries. In practice, the plans are often combinations of new and existing elements, all combined in a new way to address pre-existing policy objectives along with the need to slow climate change and prepare for its impacts.

Outside of the UNFCCC, the concept has also gained recognition and support by world leaders, including at the Major Economies Forum in Italy in July 2009 where leaders declared that their countries would prepare low-carbon growth plans⁹. A growing number of international organizations and consultancies have also been involved in low-carbon development programs, including the UNDP, UNEP, the World Bank (including through its Energy Sector Management

⁹ The 17 major economies participating in the MEF are: Australia, Brazil, Canada, China, the European Union, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, South Africa, the United Kingdom, and the United States.

Assistance Program (ESMAP)), ClimateWorks, the Climate Development Knowledge Network, WWF, the European Union and a variety of bilateral donors.

5.A. Publications

Following are summaries of recent publications on low-carbon development available online.

Low-Emission Development Strategies (LEDS) – OECD/IEA

The OECD and IEA Secretariat prepared this overview of Low-Emission Development Strategies in response to a request from the Climate Change Expert Group on the United Nations Framework Convention on Climate Change (UNFCCC). The documents do not necessarily represent the views of the OECD or the IEA but merely present national policy makers and other decision makers with best practice example of low-carbon development.

The document also goes some way to defining low-emission development as *‘forward looking national economic development plans or strategies that encompass low-emission and/or climate-resilient growth’*. The publication recognises that the term LEDS is a relatively new concept (first used by UNFCCC in 2008) but that its use has been becoming more and more frequent and currently is mentioned in negotiating texts from COP 15 and beyond, including the Copenhagen Accord, which recognised that a LEDS is indispensable to sustainable development.

The LEDS report provides an overview of technical, institutional and policy lessons learned in the preparation of national climate change strategies and LEDS, in the context of ‘Expertise and resources’, ‘Government co-ordination’ and ‘Stakeholder involvement’. Each lesson contributes to the cycle (defined in the report) of preparing coherent, co-ordinated and strategic Low-Emission Development Strategies. Prominent examples are: the UK’s Low Carbon Transition Plan, Mexico’s GHG inventory, Climate Change Report Co-ordination in Thailand and Guyana’s Measurement Reporting and Verification (MRV) Roadmap.

[Download here](#)

Citation: OECD, IEA, 2010. *Low-Emission Development Strategies*. OECD Publishing.



Low Carbon Growth Plans: Advancing Good Practice – Project Catalyst

The ‘Low Carbon Growth Plans: Advancing Good Practice’ report was authored by Project Catalyst, an initiative of the ClimateWorks Foundation, to provide analytical and policy support for the United Nations Framework Convention on Climate Change (UNFCCC) negotiations on a post-Kyoto international climate agreement. The report states that stabilising carbon emissions at 450ppm to ensure global temperature rises do not increase further than 2 degrees centigrade above the pre-industrial average depends on our will and



ability to make a fast transition to a low-carbon growth economy.

The report refrains from defining low-carbon growth directly, but does offer a series of elements that should be considered in the development of a low carbon plan. These are as follows:

1. **Development priorities:** how they relate with a changing climate and GHG emissions,
2. **Baseline setting:** development plans and obstacles, vulnerability, GHG emissions,
3. **A long-term vision** for an economy with low GHG emissions and low vulnerability to climate change,
4. **Adaptation plan,** specifying what actions are to be undertaken to move towards a climate resilient society and economy,
5. **Mitigation plan,** specifying what actions are to be undertaken to move towards a low emissions economy,
6. **Identification** of what can be achieved without assistance and what could be achieved with international support, and
7. **The incremental cost** of all technology, financing and capacity building support needed to implement the plan.

[Download here](#)

Citation: Climate Works Foundation, European Climate Foundation. (2009). *Low Carbon Growth Plans: Advancing Good Practice*.

Promoting poles of clean growth to foster the transition to a more sustainable economy – UNCTAD

This UNCTAD publication covers policy responses to meeting the challenge of climate change and the changes to the economic system that need to take place in order to do so. The report asserts that the greatest challenge to mitigating climate change is not the macroeconomic costs, but the lack of policy, regulatory and institutional structures to support the shift to a more sustainable economy that combines low-carbon growth with job and income creation in developing countries.



The report presents three overarching ‘growth poles’ that can provide opportunities for low-carbon economic growth and place the global economy on a path to more sustainable development. These growth poles are:

- Energy efficiency
- Sustainable agriculture
- Renewable energy technologies

Each pole is explored in great detail and policy options for the identified initiatives are discussed.

[Download here](#)

Citation: United Nations Conference on Trade and Development. (2010). *Promoting poles of clean growth to foster the transition to a more sustainable economy*.

Preparing Low-Emission Climate-Resilient Development Strategies – UNDP

The ‘Preparing Low-Emission Climate-Resilient Development Strategies’, developed by the United Nations Development Programme, is a guidebook to assist national and sub-national governments in developing countries to prepare low-emission, climate resilient development strategies that aim to simultaneously address the threats, risks, vulnerabilities and uncertainties associated with global climate change and the pressing development needs countries face as they pursue sustainable development.



Similarly to the Project Catalyst report, the UNDP guidebook does not offer a short definition of low-emission development but instead provides a series of detailed steps to the formation of low-emission development plans. These are as follows: identification of key stakeholders and establishment of participatory planning and coordination frameworks; generation of climate change profiles and vulnerability scenarios; identification and prioritisation of mitigation and adaptation options; assessment of financing requirements; and development of low-emission climate-resilient roadmaps for project development, policy instruments, and financial flows.

[Download here](#)

Citation: United Nations Development Programme. (2011). *Preparing Low-Emission Climate-Resilient Development Strategies*.

Climate Change and the World Bank Group: The Challenge of Low-Carbon Development – World Bank

The publication presents the results of an evaluation that aimed to seek lessons and recommendations in relation to the low-carbon development of the World Bank Group’s portfolio in energy, forestry and transport. The evaluation sought to establish how the WBG’s investments in low-carbon growth opportunities can have the greatest impact, both for development and for greenhouse gas mitigation.



The three key findings emerging from the evaluation are that (1) The WBG can achieve great impact by providing advice and support for favourable policies such as removal of energy subsidies and other biases against renewables and energy efficiency, (2) Act more like a venture capitalist, by supporting the transfer and adaptation to local conditions of existing technologies, policies and financial practices, and (3) By focusing on high-impact sectors and instruments, such as energy-efficiency and forestry interventions.

The report is based around financial investments and their importance in the development of low-carbon economies. Again, the publication refrains from defining exactly what low-carbon

development is, but offers a multitude of elements that comprise economic development from a low-carbon perspective.

[Download here](#)

Citation: World Bank. (2010). *Climate Change and the World Bank Group: The Challenge of Low-Carbon Development*. Washington DC.

5.B. National Strategies

Following are summaries of recent national low-carbon development strategies or similar documents available online.

Low-carbon Development for Mexico – ESMAP

The 'Low-carbon Development for Mexico' report by ESMAP, provides an analysis of how Mexico is able to substantially reduce its carbon emissions whilst at the same time growing the economy. The document begins by asserting that low-carbon development is indeed possible in Mexico however there are many entrenched barriers to achieving it which come in the form of information gaps, regulation and trade.

The report evaluates interventions that promote low-carbon development in five key sectors: Electric power, oil and gas, energy end-use, transport, and agriculture and forestry. Each sector is subject to a cost analysis to determine the most viable intervention mechanisms that can be implemented within 5 to 10 years. In addition, low-carbon initiatives are analysed for each sector and forecasts are produced to determine potential carbon savings to 2030.

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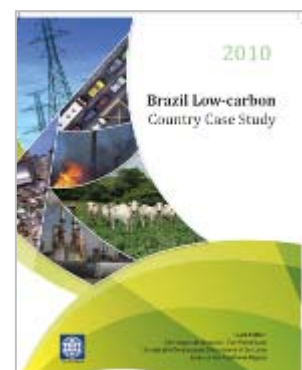
Citation: ESMAP. (2010). *Low-Carbon Development for Mexico*. Washington DC.



Brazil Low-Carbon Development Study –World Bank

The Brazil Low-Carbon Development Study by the World Bank offers a significant exploration into the potential for Brazil to foster economic development whilst reducing greenhouse gas emissions and is the result of a consultative, iterative approach with experts and government representatives in Brazil with an interest in low-carbon development.

This study uses the Brazilian Government's four key development areas (LULUCF - {Land Use, Land Use Change and Forestry}, energy, transport and waste management) to focus on and examine the current systems that generate carbon emission in these sectors. The report then analyses the conditions required for large-scale decarbonisation of the sectors to 2030 by providing technical and analytical elements for emissions reductions.



Following this, the study analyses the options from both a macro and micro-economic perspective, presents a national low-carbon scenario for Brazil and then provides financing options to achieve the scenario. The final section identifies the other structural and institutional changes that will be required in Brazil to meet the low-carbon scenario.

[Download here](#)

Citation: World Bank. (2010). *Brazil Low-carbon Country Case Study*. Washington DC.

Columbian Low Carbon Development Strategy – Ministry of Environment & Sustainable Development

The Columbian Low Carbon Development Strategy recognises that although Columbia's carbon emissions are low relative to developed countries, they will grow significantly if no mitigation occurs, considering the projected economic growth. The strategy states that Columbia should take advantage of international financial incentives to promote low-carbon growth and prepare the economy for a 'future carbon conscious global economy'.



The strategy comprises 3 key components each of which are explored in detail:

1. Identification and assessment of alternatives and opportunities in low-carbon development;
2. Design and implementation of Plans, Policies and Measurements in low-carbon development; and,
3. Design and construction of MRV (monitoring, reporting and verification) System.

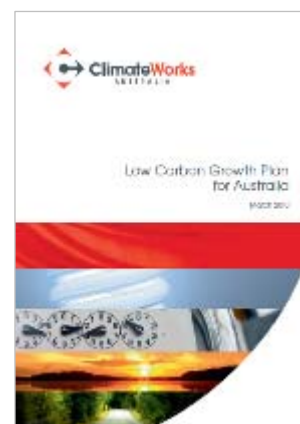
[Download here](#)

Citation: Ministry of Environment and Sustainable Development. (2011). *Colombian Low Carbon Development Strategy*.

Low Carbon Growth Plan for Australia – Climate Works Australia

This plan, produced by Climate Works Australia, sets out emissions reductions opportunities for Australia, the challenges faced in capturing them, and actions required to succeed. The report identifies opportunities available to businesses as well as guiding the actions required for Government and consumers to achieve the emissions reductions for Australia at the lowest possible cost.

The report is not a national strategy of the Australian Government per se, but it was funded through the Australian Carbon Trust and regional and national governmental departments.

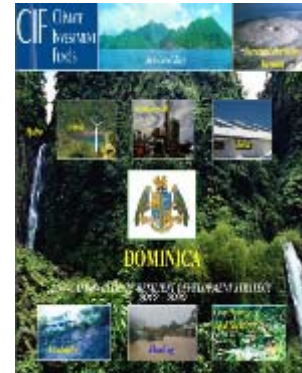


[Download here](#)

Citation: Climate Works Australia. (2010). *Low Carbon Growth Plan for Australia*. Clayton, Australia.

Dominica Low Carbon Climate Resilient Development Strategy 2012-2020 – Climate Investment Funds

The Low-carbon Climate-resilient Development Strategy 2012-2020 for Dominica, by Climate Investment Funds, is aimed at furthering Dominica's efforts in the transformation to a green economy. The strategy recognises the challenges that Small Island Developing States face with regard to the impacts of climate change. In response to this, the low-carbon strategy puts forward a plan to achieve the island's sustainable development goals whilst meeting critical social development and poverty reduction targets.



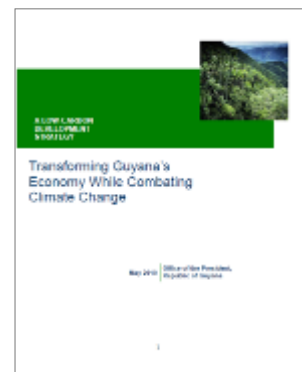
The strategy begins by setting the development context for the island, which documents the existing development plans and programs, before analysing the policy, legal and institutional elements of low-carbon development. Following this, the strategy identifies the rationale for climate change financing and investment and then documents the implementation plan for the Council for Environment, Climate Change and Development, accountable for the delivery of the low-carbon development strategy.

[Download here](#)

Citation: CIF. (2012). *Dominica Low Carbon Climate Resilient Development Strategy 2012-2020*.

Transforming Guyana's Economy While Combating Climate Change – Republic of Guyana

The Low-carbon Development Strategy of Guyana, entitled 'Transforming Guyana's Economy While Combating Climate Change', is the result of over a year of consultation within Guyana and substantiated with input from the United Nations and international climate change initiatives. It sets out Guyana's plan to create a new low-carbon economy to 2020 and does so by identifying seven priority areas that will be focused on in the initial implementation phase and provides a framework for further development of the strategy beyond 2015.



The seven strategic priority areas for investment are:

1. Government equity in the Amaila Falls Hydro Electricity Company;
2. Accelerating Amerindian land titling, demarcation and extension processes;
3. Amerindian Development Fund;
4. Expansion of fibre optic digital infrastructure;
5. Micro-finance for Small and Medium Enterprises and Vulnerable Groups' Low Carbon Development;
6. Initial work to establish an International Centre for Bio-Diversity Research and Low Carbon Development, coupled with enhancement of the national school curriculum;

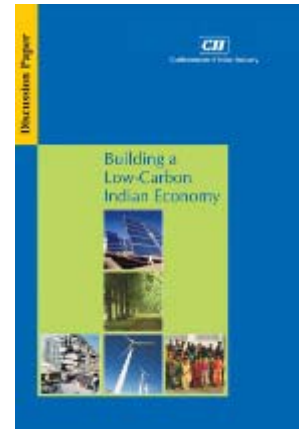
7. Work on Monitoring, Reporting and Verification Systems (MRVS) and other support for the LCDS.

[Download here](#)

Citation: Office of the President, Republic of Guyana. (2010). *Transforming Guyana's Economy While Combating Climate Change* (pp. 1-128).

Building a Low-Carbon Indian Economy – Confederation of Indian Industry

The 'Building a Low-carbon Indian Economy' report, by the Confederation of Indian Industry, recognises that although India is undergoing a phase of rapid industrial development there are clear signs that 'industry in India has adopted an approach that can help India leapfrog to a low-carbon economy'. The report asserts that this can be done by adopting suitable policies to promote non-carbon intensive fuels, renewables and state-of-the-art technologies to promote energy efficiency.



The strategy identifies 12 priority areas with the potential to mitigate India's carbon emissions and put the country on the path to a low-carbon economy. These are:

Renewable Energy, Energy Efficiency, Cleaner Conventional Energy Technologies, Hydrogen Fuel Cells, Free and Open Markets, Green Buildings, The Aviation Sector, Water Efficiency, Agriculture, Afforestation, Research & Development and Financing.

The document concludes by providing specific actions to be undertaken by government, industry and civil society independently, that will put India on a path to a low-carbon economy.

[Download here](#)

Citation: Confederation of Indian Industry. (2008). *Building a Low-Carbon Indian Economy*.

Low Carbon Development Options for Indonesia – World Bank, Ministry of Finance, Indonesia

The report on 'Low carbon Development Options for Indonesia' produced by the World Bank in collaboration with the Ministry of Finance for Indonesia, puts forward a series of economic development options for Indonesia that will help in the transition to a green economy. The phase 1 report recognises that sound environmental management, reduction of greenhouse gas emissions, and economic efficiency and growth are compatible goals. This part of the study investigated the greenhouse gas emissions of the country as well as the economic policy instruments available for addressing climate change mitigation and adaption in Indonesia.



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Citation: World Bank, M. of F. (2008). *Low Carbon Development Options for Indonesia*.

Opportunities for Low Carbon Investment in Tanzania - an Assessment of Future Emissions Growth and Low Carbon Reduction Potential – Global Climate Adaptation Partnership, Stockholm Environment Institute, UKAID

This report focuses on the potential for low carbon opportunities and the financing that could flow from such projects. Tanzania needs additional investment to facilitate growth that is more sustainable than the current pathway. This could be achieved through using financing mechanisms that provide funding for projects and programmes where greenhouse gas (GHG) emissions reductions can be demonstrated. In addition to reducing carbon, many of these options could lead to more sustainable growth through protecting natural resources, improving environmental quality, delivering economic opportunities and reducing reliance on fossil imports.

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Citation: UKAID. (2010). *Opportunities for Low Carbon Investment in Tanzania - An assessment of future emissions growth and low carbon reduction potential*.



The UK Low Carbon Transition Plan – HM Government

This White Paper sets out the UK's transition plan for building a low carbon UK as part of the Government's five point plan to tackle climate change: cutting emissions, maintaining secure energy supplies, maximising economic opportunities and protecting the most vulnerable. The plan will deliver emission cuts of 18% on 2008 levels by 2020 (and over a one third reduction on 1990 levels). This includes sourcing 40% of electricity from low carbon sources by 2020.

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Citation: HM Government. (2009). *The UK Low Carbon Transition Plan – National strategy for climate and energy*.



6. A Critique of Emerging Concepts

Whilst the concepts of green economy, green growth and low-carbon development have emerged from different sources, through the work of different organisations and with different target audiences, the distinctions among them have become blurred and they are now being used almost interchangeably. A main driver behind the development of these concepts has been the move towards a more integrated and holistic approach to incorporating environment and development in economic decision making, policy and planning.

Whilst the terms green economy and green growth might imply a strong focus on the intersection between environment and the economy, many of the definitions of these terms from recent publications clearly also incorporate a social emphasis (see [Appendix 1](#)). A summary of key words from the full list of definitions in [Appendix 1](#) is provided in [Table 1](#) below, categorised according to the three dimensions of sustainable development.

Table 1: Keywords in published definitions of Green Economy and Green Growth

Dimension	Green Economy	Green Growth
Social	Human well-being; social equity; socially inclusive; reduced inequalities; better quality of life; social development; equitable access; addressing needs of women and youth.	Well-being, socially inclusive, access to basic commodities for the impoverished; meeting demands for food production, transport, construction, housing and energy.
Economic	Growth in income and employment; public and private investments; resilient economy; economic growth; new economic activity.	Economic growth and development; technology and innovation; environmentally sustainable economic progress; more resilient; sustained economic growth; driver for economic growth; new growth engines; green technology; new job opportunities; qualitative growth rather than simply increasing GDP; job creation or GDP growth.
Environmental	Reducing environmental risks and ecological scarcities; low carbon; resource efficient; reduce carbon emissions and pollution; enhance energy and resource efficiency; prevent loss of biodiversity and ecosystem services; within ecological limits of the planet; environmental responsibility; finite carrying capacity.	Protection and maintenance of natural assets and environmental services; provision of resources and services; low carbon; using fewer resources and generating fewer emissions; resource efficient; cleaner; climatic and environmental sustainability; energy and resource efficient; minimises pollution and environmental impacts; resilient to hazards; harmony between the economy and the environment; environmental protection; reduce GHG.

Whilst this analysis is illustrative, there is clearly significant overlap between the two concepts, including language around growth and economic development, environmental protection, low-carbon development, resilience, resource efficiency, ecological sustainability, human well-being, inclusiveness and equity. In this regard, low carbon development can be seen as a subset of both green growth and green economy. Importantly, many definitions of green economy include a

reference to ecological limits or planetary boundaries, which are references to the scientific article which identifies nine planetary boundaries that define the safe operating space for humanity with respect to the Earth system and associated with the planet's biophysical subsystems or processes (see Rockstrom et al, 2009). Interestingly, this reference has not been included in definitions of green growth.

The International Chamber of Commerce (2011) propose a key difference between green growth and green economy – i.e. that green growth is a “bottom-up” approach of greening products, processes, services, technologies and supply chains, compared with the “top-down” approach of green economy which involves strategic, macro-economic policies addressing systemic challenges. Others highlight that green growth, more so than the multidimensional concept of green economy, represents a new global compromise position, which may be seen as a weak step forward but one that has the potential to unite many different factions around a goal that many see as transformative (Atkisson, 2012).

Overall, the various definitions of green growth and green economy are generally consistent, both having sustainable development as their ultimate objective and being a means to reconcile the economic and environmental pillars, without ignoring social aspects (World Bank, 2012). As such, the distinction between the terms is probably of little relevance.

However, the approaches to green economy and green growth can be seen to cover a spectrum of different ‘shades of green’, from narrow concerns about climate change on the one hand (in line with initial approaches to low carbon growth), to larger critiques of the environmental sustainability of modern capitalism on the other (Green Growth Leaders, 2011). In other words, and from a scientific perspective, the focus varies between addressing one of the planetary boundaries defined by scientists (i.e. climate change) to more holistically addressing the wider range of resource and ecological limits and the general state of the planet.

Of course, green economy has not been without its critics¹⁰. Criticisms raised include that the concept should not compete with or displace sustainable development and internationally agreed principles, that it implies a focus on environmental and economic dimensions to the detriment of the social dimension, that it will lead to the financialisation of nature as well as further concentration of market power and global inequality (Third World Network, 2011; Lander, 2011). Other risks associated with green economy include that it may attempt to treat countries in the same manner (i.e. be based on a one-size-fits-all approach), that it may result in trade protectionism, that through it some countries may attempt to gain enhanced market access for their products, achieving commercial advantage, and that it may place new conditionalities on developing countries for aid, loans and debt relief (Khor, 2011).

Critics have also highlighted its failure to do justice to the interdependent relationship between environment protection and inclusive economic and social development (Dagupta, 2011; Khor, 2011; Third World Network, 2011). In the context of Rio+20, the relationship of green economy as a means to achieving broader sustainable development and poverty eradication was given a clear emphasis. More recent references to an ‘equitable green economy’ or ‘inclusive green growth’ are clearly attempting more holistically to integrate the three dimensions of sustainable development

¹⁰ For example see the “No to the green economy” campaign: <http://nogreeneconomy.org/en/>

into these concepts to allay these concerns¹¹. However, it has also been pointed out that, whilst this has been an important development, if one follows this track the green economy concept would incorporate so many additional aspects that the concept would become equivalent to sustainable development itself – in that sense, why bother? (Condezey, 2011).

Perhaps a key benefit of the emergence of the green economy concept has been that it has stimulated international attention and renewed global efforts to transform our current unsustainable economic model into one which better aligns with the overarching goals of sustainable development. Importantly, this has included efforts by international organizations, major groups, think tanks and researchers (both supporters and critics alike) to develop operational principles for green economy and green growth, as well as the elaboration of policy toolkits and suites of measures that can be adopted by national governments to shift to a more sustainable economic framework. There is also an emerging international practice as national governments in all regions adopt what could be classified as green economy policies, with some countries taking a leading role in developing overarching national green economy strategies that integrate with long-term development strategies. In this regard, the green economy and related concepts have succeeded in reinvigorating global debate on how to redefine our economic model to achieve the overarching agreed goal of sustainable development.

It is likely that the concepts of green economy and green growth will further converge in coming years and continue to gather momentum as more influential international organizations as well as national governments adopt the concepts into their programs and policy agendas. During this process, it will be critical that proponents of green economy effectively take onboard the concerns raised and address the risks associated with the concept. The development of agreed green economy principles, policy toolkits and databases of good practice will contribute in this regard.

¹¹ For example see recent publications by: the World Bank (2012) *Inclusive Green Growth: The Pathway to Sustainable Development*; the UN EMG (2011) *Working towards a Balanced and Inclusive Green Economy: A United Nations System-wide Perspective*; and The Danish 92 Group (2012) *Building an Equitable Green Economy*.

7. Appendix 1: Definitions of Green Economy and Green Growth

Concept	Definition
Green economy	1. One that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive. In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services (UNEP 2011). 2. A system of economic activities related to the production, distribution and consumption of goods and services that result in improved human well-being over the long term, while not exposing future generations to significant environmental risks or ecological scarcities. (UNEP, 2009). 3. An economy that results in improved human well-being and reduced inequalities, while not exposing future generations to significant environmental risks and ecological scarcities. It seeks to bring long-term societal benefits to short-term activities aimed at mitigating environmental risks. A green economy is an enabling component of the overarching goal of sustain-able development (UNCTAD, 2011). 4. Green economy is “a resilient economy that provides a better quality of life for all within the ecological limits of the planet.” (Green Economy Coalition, 2011) 5. “Green Economy” is described as an economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development. (International Chamber of Commerce, 2011). 6. The Green Economy is not a state but a process of Transformation and a constant dynamic progression. The Green Economy does away with the systemic distortions and disfunctionalities of the current mainstream economy and results in human well-being and equitable access to opportunity for all people, while safeguarding environmental and economic integrity in order to remain within the planet’s finite carrying capacity. The Economy cannot be Green without being Equitable (Danish 92 Group, 2012). 7. The green economy involves largely new economic activities and must provide an important entry-point for broad-based black economic empowerment, addressing the needs of women and youth entrepreneurs and offering opportunities for enterprises in the social economy (Government of South Africa, 2011). 8. Green economy can be seen as a lens for focusing on and seizing opportunities to advance economic and environmental goals simultaneously. (<i>Rio+20 Objectives and Themes of the Conference</i> - UNCSD, 2011)
Green Growth	1. Aims to foster economic growth and development while ensuring that natural assets and environmental services are protected and maintained. The approach places a premium on technology and innovation — from smart grid systems and high-efficiency lighting systems to renewable energies including solar and geothermal power — as well as on improving incentives for technology development and innovation (Global Sustainability Panel, 2011). 2. Fostering economic growth and development, while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies (OECD, 2011). 3. A policy focus for the Asia Pacific region that emphasizes environmentally sustainable economic progress to foster low-carbon, socially inclusive development (UNESCAP website). 4. Is, in general terms, economic progress that fosters environmentally sustainable, low-carbon and socially inclusive development. Pursuing green growth involves outlining a path to achieving economic growth and well-being while using fewer resources and generating fewer emissions in meeting demands for food production, transport, construction and housing, and energy (UNESCAP, 2012). 5. Is about making growth processes resource-efficient, cleaner and more resilient without necessarily slowing them. Development that is green [which here means resources-efficient], clean and resilient (World Bank, 2011) 6. Is the new revolutionary development paradigm that sustains economic growth while at the

	same time ensuring climatic and environmental sustainability. It focuses on addressing the root causes of these challenges while ensuring the creation of the necessary channels for resource distribution and access to basic commodities for the impoverished.” (GGGI website) 7. Green growth is growth that “emphasises environmentally sustainable economic progress to foster low-carbon, socially inclusive development”. The OECD definition is similar but emphasises also green investment as “a driver for economic growth”. (UN DESA – Rio+20 Objectives and Themes of the Conference) 8. It is growth that is efficient in its use of natural resources, clean in that it minimises pollution and environmental impacts and resilient in that it accounts for natural hazards (World Bank, 2012). 9. Is growth that is efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters. And this growth needs to be inclusive. Inclusive green growth aims to operationalise sustainable development by reconciling developing countries’ urgent need for rapid growth and poverty alleviation with the need to avoid irreversible and costly environmental damage (World Bank, 2012) 10. Growth achieved by saving and using energy and resources efficiently to reduce climate change and damage to the environment, securing new growth engines through research and development of green technology, creating new job opportunities, and achieving harmony between the economy and environment (RoK Framework Act on Low Carbon, Green Growth, 2010). 11. Defined as environmentally sustainable progress that fosters low-carbon, socially inclusive development (Government of Cambodia, 2009). 12. An emerging concept that recognises that environmental protection is a driver of global and national economic development. It refocuses society on achieving qualitative growth rather than simply increasing GDP (Government of Rwanda, 2011). 13. Means “job creation or GDP growth compatible with or driven by actions to reduce greenhouse gases.” (Green Growth Leaders, 2011)
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