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The Green Economy and the BRICS Countries: Bringing Them Together

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ABSTRACT

The 'green economy' has been around as a concept since the 1970s but gained relevance again in the wake of the global economic recession in 2009 as government leaders looked towards new economic opportunities through sustainable, equitable and resilient economic growth. International institutions such as the UN helped to shape the thinking around, and define green growth and its constituents, including economic development and social inclusion. All these concepts are of significance to Brazil, Russia, India, China and South Africa (the emerging-economy geo-political bloc known as 'the BRICS'). This paper aims to contextualise the development of green economies in the BRICS countries, highlighting important steps the individual countries in the BRICS have taken to establish systems to support the development of a green economy. An attempt is made to explain the differing approaches BRICS countries take in developing a green economy by comparing the outcomes of the policies they have implemented, while taking into consideration their respective economic priorities. The impact of their policies on any progress made towards establishing a green economy is also evaluated. The paper summarises the outcomes of BRICS countries' policy approaches to developing a green economy and establishes the stage in which the BRICS countries find themselves as a collective. Generally, individual approaches driven by countries' overarching objectives for economic development resulted in differing outcomes. While some countries have embraced the concept of a green economy, and hence implemented policies as well as taken actions to ensure its development, others are sceptical about the direction of economic transformation that could occur from the allocation of resources for the development of a green economy. The conclusion reached is that for BRICS countries to embrace the development of a green economy fully, objectives for this transformation should be strategically linked to countries' broader economic development agenda. However, individual governments and policymakers have to agree on the nature of desired economic development outcomes that can be realised from embarking on developing a green economy, in order to establish policy to co-ordinate activities cohesively so as to achieve the projected outcomes.

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ABBREVIATIONS AND ACRONYMS

BRICS	Brazil, Russia, India, China and South Africa
CCICED	China Council for International Cooperation on Environment and Development
COP	Conference of the Parties
DBSA	Development Bank of Southern Africa
DEA	Department of Environmental Affairs [South Africa]
DMA	Department of Minerals and Energy [South Africa]
dti	Department of Trade and Industry [South Africa]
G-20	Group of Twenty
GDP	gross domestic product
GEA	Green Economy Accord [South Africa]
GHG	greenhouse gas
IPAP	Industrial Policy Action Plan [South Africa]
NDP	National Development Plan [South Africa]
NFSD	National Framework for Sustainable Development [South Africa]
OECD	Organisation for Economic Co-operation and Development
Rio+20	UN Conference on Sustainable Development, Rio de Janeiro, Brazil, June 2012
SAIIA	South African Institute of International Affairs
SME	small and medium enterprise
UNCED	UN Conference on Environment and Development
UNCSD	UN Conference on Sustainable Development
UNEP	UN Environment Programme
UNFCCC	UN Framework Convention on Climate Change

GREENING ECONOMIC GROWTH: RIO AND LOS CABOS

Ideas related to the concept of 'green economy' have been in circulation at least since the 1970s.[1] The discussion re-emerged in 2009, when the *Charter for Sustainable Economic Activity* was introduced by Germany and the Netherlands at the Group of Twenty (G-20) London Summit.[2] This charter was largely attributed to the global economic crisis and political leaders' desire for a new economic compact. The concept of more resource-efficient and less-polluting economies that could provide new economic opportunities leading to a sustainable, equitable and resilient global economy gained recognition as an alternative pathway for growth. 'Greening growth' was perceived to contain the right combination of 'employment, innovation, technology and investment'.[3] Importantly, as tools for reducing poverty, the strengthening of natural resource management and environmental protection could contribute to sustained economic growth and wellbeing.

In June 2012, 20 years after the first UN Conference on Environment and Development (UNCED) (or Earth Summit), Brazil hosted the UN Conference on Sustainable Development (UNCSD) Summit (or Rio+20 Summit) in Rio de Janeiro. This summit aimed to create a green economy in the context of sustainable development and the eradication of poverty. Debate and disagreements about the meaning of a green economy proliferated, and much emphasis was placed on the differences between 'green economy', 'green growth' and 'sustainable development'. This largely reflected the political competition among different international constituencies who were vying to highlight one term over another.[4] In essence, the argument centred on the definition of these concepts and the extent to which an aspect of economic growth versus that of social inclusivity was attached to each.

Earlier that same month, in Los Cabos, Mexico, the leaders of the G-20 endorsed their commitment to the green economy, anticipating discussions at the Rio+20 Summit. The Los Cabos Summit was critical in giving substance to the green growth agenda, encouraging the adoption of green growth on the national agendas' of G-20 members. The Los Cabos Declaration confirmed the G-20's support for, and commitment to, issues related to climate finance, and to advanced exploration of effective mechanisms for public and private funding for inclusive green growth investment in developing countries. It was also recognised that green growth and sustainable development had significant potential to stimulate enduring prosperity and wellbeing.[5] This was an extension of the discussions held at the Pittsburgh G-20 Summit held in 2011, where a global 'Green New Deal' was first discussed.

In December 2012 the UN Framework Convention on Climate Change (UNFCCC) Conferences of the Parties (COP) set out a timetable for a universal climate agreement by 2015, which is expected to come into effect in 2020. The signatories to the UNFCCC supported the attempts made to adopt a legal instrument that was applicable to all parties by 2015. In September 2013 G-20 members issued a declaration[6] after the summit held in St Petersburg noting, among other things, the cost of climate change and the likely impact on the world economy of delaying climate action. The signatories committed themselves to the full implementation of the outcomes[7] of the recent UNFCCC COP.

G-20 members jointly expressed a common interest in cleaner, more efficient and reliable energy supplies, and undertook to endeavour to develop such technologies. The potential for efforts to promote sustainable development, energy efficiency, inclusive green growth, clean energy technologies and energy security were recognised for their potential for long-term prosperity and wellbeing in implementing countries. Support was given to a voluntary G-20 peer review process to phase out inefficient fossil fuel subsidies. Finance ministers were expected to produce reports by the next G-20 Summit.

The distinctions between the three terms (1) 'green economy', (2) 'green growth' and (3) 'sustainable development' are not clear. However, the new framework for discussions on the green economy has begun to diminish the differences between them. There is agreement that the strong social component is significant, hence the use of the phrase 'green economy in the context of sustainable development and poverty eradication' in formal documentation such as the *Future We Want*, outcome document of the United Nations Conference on Sustainable Development (2012). What underlies an understanding of the new framework is the objective of preserving natural resources for future generations.

THE ROLE OF INTERNATIONAL INSTITUTIONS

Still, there is little consensus on how or through which instruments, this vital objective can be achieved. It remains significant that green growth and the green economy are included in the path towards sustainable development, which includes economic prosperity, reduced poverty and social inequality, and environmental advancement. Furthermore, influential international institutions[8] view green growth and the green economy as the nexus between economic and environmental perspectives on policymaking.

According to the UN Environment Programme (UNEP),[9] when a country implements actions towards a *green economy*, the intent is improved wellbeing and social equity of its population, and a reduction in environmental risks and ecological scarcities. Unmistakeably, the objective of a green economy is low carbon usage, resource efficiency (including energy efficiency) and socially inclusive growth, driven by responsible investments by the public and private sectors that would reduce carbon emissions and pollution.

The Organisation for Economic Co-operation and Development (OECD) describes *green growth* as promoting economic growth, while reducing pollution and greenhouse gas (GHG) emissions, and minimising waste, inefficient use of resources and over-reliance on fossil fuels. Green growth emphasises investment in the environment as a driver of economic growth. With rapid economic growth – especially in advanced and emerging economies – increased pollution, global warming and the depletion of natural resources make natural resource management vital to preserving future growth.

Where public goods, such as air, rivers or oceans, are shared among countries, the management of resources or actions (e.g., pollution control) may not be viewed with the same gravity in different countries or jurisdictions. Countries that bear more than their share of responsibility for action may be disadvantaged; for instance, least developed countries – and especially small island states – carry the burden of high costs of GHG emissions in the form of rising sea levels, yet they are responsible for relatively small emissions themselves.

EMERGING ECONOMIES AND LOW-CARBON GROWTH

The uptake of environmentally sound processes and preservation of environmental resources could raise costs for the economy in the short term. Policy certainty from developed – and developing – country governments is likely to lead the private sector, consumers and regulators towards prioritising 'greener' growth and consumption. Information-sharing and clear incentives for the adoption of green technologies are signals that governments are seriously considering transformation towards sustainable forms of consumption, including the resources consumed in production.

Developing countries have generally been junior contributors to GHG emissions. Yet, as some developing states become global players in manufacturing and industry, there is always the risk that they will adopt the same environmentally harmful industrial practices on which many advanced countries have grown their economies. This is of particular relevance to fast-advancing economies, such as BRICS. The pace of economic growth is fundamental, and an understanding of the interplay between economic growth and its impact on the national and global environment is crucial.

The slow-down of economic growth in the developed economies of the US and the EU during the 2008 global financial crisis and attendant economic recession was profound. At the height of the crisis in 2009, the US economy contracted by 5.1%.[10] In contrast, the cumulative growth of the BRICS countries was around 5% at the time and they owned more than half the global share of gross domestic product (GDP). Certainly, emerging economies were not impervious to the crisis. Even now, the recessionary effects are being experienced in a slowing of the economies of all five BRICS countries, and with the start of recovery in the US and Japan, the pre-crisis liquidity in emerging markets has dried up to a large extent.

The aftermath of the frenetic growth period for emerging markets is an important time for BRICS to reassess their respective strategic economic outlooks. The exhilaration over the efforts made by BRICS to challenge the old and established economic order should now convert into focused action. Discussions about the BRICS Development Bank have advanced, and a BRICS business council, academic forum and think-tank forum have been established. Yet there has been no true level of consultation and shared learning on the imperative to transition towards green economy principles and policies.[11]

Brazil

Brazil has been on the cutting edge of research and development in alternative fuels, demonstrating innovations in sugarcane for ethanol and vegetable oil for biodiesel since the 1930s.

In the ongoing global debate about the consequences and benefits of developing a green economy, Brazil – using its domestic policies and desired economic outcomes as the point of reference – adopted a position that trade-offs between objectives for economic development as established by the government and environmental goals mostly championed by environmental economists do exist. These trade-offs have broader implications for the overall development of the Brazilian economy, which are not entirely favourable.

Contrary to views shared by some developed and developing countries that developing a green economy can lead to economic growth and the eradication of poverty, policymakers in Brazil mostly adopt the standpoint that developing a green economy would mainly benefit developed nations.[12] From their perspective, developing countries do not have the necessary competence to develop new technologies that would support the development of a low-carbon economy. In addition, the investment needed to establish a green economy is outside the reach of most developing countries. Embarking on this process would mean restructuring their economy to accommodate new costs and, consequently, depleting the budgets in other economic sectors.

For this reason, Brazil seeks dialogue with other countries in the BRICS economic bloc to co-ordinate harmonised responses to mandates and commitments regarding the development of a green economy as elaborated on in the G-20. Brazil's main objective in promoting talks on green economy issues in BRICS is to develop alliances and establish a platform from which unified answers to policy proposals from developed countries can be provided, mainly to protect its interests, as well as those of other emerging markets and developing countries.

For the past few decades, public policy in Brazil has been dominated by the industrialist paradigm which focuses almost entirely on the economic dimension of development. More recently, successive governments have made efforts to incorporate social development into Brazil's growth agenda. In this regard preference is given to policy established to reduce social inequalities and poverty. In order to achieve this, policymakers in Brazil linked objectives for social progress to established public policy for overall development. This resulted in a complex matrix of interconnected policy objectives.[13] However, clear-cut policies to promote environmental development and combat climate change are still missing due to the country's focus on economic development. Policymakers in Brazil argue that investing in a green economy that takes the environment and climate into consideration would slow down Brazil's economic growth rate and undermine objectives for social inclusion.[14] This clearly illustrates the 'prioritisation tension' created by the emergence of environmental policy issues in the context of poverty reduction.

Furthermore, Brazilian policymakers are wary of the possibility of developed countries imposing export barriers on other countries based on non-adherence to mandates for action on environmental and climate issues. As regards trade, policymakers also carefully observe the global dialogue on green economies, but are cautious of market distortions in international trade and flows of investment that could arise from developed countries offering subsidies to other developing countries that agree to develop green economies.[15]

Collectively, in view of international developments, the dominant perception of green economy issues among Brazilian policymakers is that new alliances and asymmetries between developed and developing countries could be formed. This could have an impact on global trade dynamics, which would affect Brazil's industrialist economic growth strategy.[16]

Russia

Russia is a resource-rich country that holds a leading position in the production of major commodities such as steel, iron, agricultural products, oil and gas. It largely depends on these commodities for its overall prosperity as a nation and economic survival. Processing these commodities, however, requires energy-intensive activities. In a bid to modernise its economy and move away from resource-based economic development, Russia considers the development of a green economy to be a strategic option that could increase overall economic efficiency.[17]

Over decades, Russia's wealth as a nation has been derived from the abundance of minerals in the country. The extraction and processing of these minerals using fossil fuels has resulted in severe environmental challenges based on a continual focus on national development, narrowly defined as 'economic prosperity', which is entirely dependent on resource extraction and trade.[18] However, on the international platform, Russia has shown its willingness to transform its economy in order to promote inclusive and sustainable development by supporting the agenda for green economy reforms.[19]

Russia, in co-operation with some international organisations such as UNEP, has developed a network of environmental institutions and legislative frameworks to promote its plan for developing a green economy.[20] However, its approach to developing environmental policies to support the growth of a green economy is not as yet balanced or integrated. The country also faces challenges in implementing policies, and the actual execution of plans is seen as slow and inconsistent.[21]

The dominance of energy-intensive industries in Russia's economic strategy has contributed to constant degradation of the environment, creating barriers to the development of a green economy. The lack of clarity in establishing consensus on policy frameworks for a balanced approach to sustainable development further slows down the country's plans for developing a green economy.[22]

India

As a member of the G-20, India's decision to promote the concept of a green economy is linked to its overall aim to foster prosperity and sustainability in development as elaborated in the country's 11th Five-Year Plan (2007–2012). In embracing green growth, India envisages poverty alleviation and the lowering of economic inequalities as a key benefit that could be derived from implementing the green economy concept.[23]

Before embracing green growth, India, in its quest to reduce poverty and spur economic activity, regarded the controls on carbon emissions from fossil fuel-generated energy as unfair.[24] Recently, India's economic development objectives provided a different perspective in which opportunities for growth could be realised from developing a green economy.

In analysing debates on India's approach to developing a green economy, a dominant and a counter-discourse is observed. The main premise of the dominant discourse is that no trade-off exists between economic growth and environmental sustainability.[25] Proponents of the counter discourse agree that developing a green economy will impact the country's economy positively. Hence, India can pursue both discourses, applying both market and scientific strategies in developing its economy without compromising the environment.[26]

Conversely, using historical economic data, proponents of the counter-discourse highlight deficiencies of economic growth in addressing poverty reduction in India; contesting claims that green growth will drastically change India's current economic paradigm, and subsequently lead to prosperity and sustainability for all Indians.[27]

Importantly, they question the dominant ideological position that no trade-off exists between economic growth and environmental sustainability.

The coexistence of the two contradicting narratives reflects the level to which the concept of a green economy may be interpreted by differing political constituencies to support their arguments. In the case of India, differing positions on the actual benefits of developing a green economy form the crux of the overall discourse.

China

While emissions are now growing at a lesser rate than GDP, China's absolute GHG emissions have not reduced in absolute terms. The country has now agreed to carbon reduction targets by 2015, in a move that is expected to encourage other countries to take CO2 reductions seriously.

In global politics China has a reputation for keeping a low profile. This has not affected its engagement at the G-20 summits: the president of the country has attended every meeting. As regards the politics that surround the G-20, China finds comfort in the fact that the group is not strictly comprised of developed countries.[28] Over the past few decades, China has experienced rapid economic growth but this has come at the expense of the environment. China's priority as a country has simply been growth and, consequently, issues relating to the environment have been secondary on its development agenda. As a result of this, China's position on the green economy is complex and unclear.[29]

China faces high levels of resource constraints and environmental challenges. The development of a green economy can help to address the challenges that it faces, but the government – aware of this strategic option – proceeds cautiously, consistently weighing the impact of developing a green economy on the country's development objectives.[30] China's plans and objectives for development focus on internal growth and strengthening its overall competitiveness among other countries. Developing a green economy could conceivably derail its plan. China also seeks to dictate the level at which it will engage on issues concerning the green economy as this similarly could come at the cost of economic development.[31]

Nonetheless, China has reportedly invested about $ 50 billion annually in its renewable energy sector since 2009. China's five-year investment in the environmental protection industry is expected to reach about $ 317 billion by 2015.[32]

Conceptually, the fundamental process of developing a green economy is not new to China. In 2006 its 11th Five-Year Plan contained policies developed to address issues related to energy efficiency, environmental protection and sustainable development.[33] The plan laid out approaches to alleviate these issues. The government backed this policy framework financially. China's 12th Five-Year Plan on national economic and social development released in 2011 set a strategic agenda for achieving green growth and sustainable development.[34]

In its current green development plan, China has now elaborated its strategy for green growth in the medium to long term. The overarching objective of the plan is to help China achieve inclusive, green and competitive development. A number of targets and goals for carbon emission reduction, increasing energy from non-fossil fuels and reducing energy consumption per unit of GDP are given, among other objectives.[35] There is consensus on developing a green economy in China and transitioning to low-carbon technologies. However, transforming this consensus into policy frameworks to establish a clear developmental path for the country is an arduous task. This is especially so in the light of China's established growth plans and existing growth patterns, and the amount of investment already committed to realising them.

Developing a green economy in China would require high levels of co-ordination and negotiation. In the long term this may benefit it in terms of economic output and environmental protection. However, in the short to medium term developing a green economy appears to come into conflict with the country's established growth objectives. This could result in disruptions to China's overall economic agenda and may require a reassessment of projections for growth established previously by the government.[36]

South Africa

South Africa regards the concept of a green economy as a viable path to sustainable development. This stems from the potential of the green economy to foster economic development while preserving the integrity of the natural environment.[37] In order to achieve its objective, South Africa has made significant investments in green energy sectors and has developed policies to promote the development of a green economy.[38]

As Africa's representative in the G-20, South Africa understands the role it has to play in making the concept of developing green economies on the continent a reality. At the Rio+20 Summit in 2012, South Africa emphasised the fact that African countries would be better positioned to benefit from transitioning to green economies if the transitioning process were founded on national objectives, and if these objectives were aimed at addressing social, economic and environmental issues.[39] Transitioning to a green economy has already provided a mix of opportunities and challenges for South Africa. Developing a green economy presents the country with an opportunity to lower its carbon footprint and diversify its energy systems. However, the challenge lies in the fact that most industries in South Africa are heavily reliant on energy derived from coal.[40]

Although the implications of transitioning to a low-carbon economy are not fully understood in terms of the medium- to long-term economic impact on the country, South Africa has taken a leadership position; leading the movement towards developing a green economy among other African countries.[41] Since establishing a National Framework for Sustainable Development (NFSD) in 2008 to promote sustainability in the country, South Africa has consistently developed a number of policy frameworks and action plans to support the development of a localised green economy.[42] The most recent of these frameworks are a National Strategy for Sustainable Development created by the Department of Environmental Affairs (DEA) in 2011 and elements of an Industrial Policy Action Plan (IPAP), developed by the Department of Trade and Industry (dti) in 2012. These policy frameworks elaborate on the need to develop a green economy and highlight South Africa's strategy in this regard.

South Africa considers the growth of a competitive renewable energy sector as a key element for developing a green economy.[43] South Africa's rationale for investing in renewable energy is mainly the creation of "green jobs"[44] through small and medium enterprises (SMEs), while maintaining the environment by reducing carbon emissions and diversifying its energy mix to ensure energy security.[45] South Africa showed its dedication to transitioning to low-carbon technologies and the development of a green economy in its National Development Plan (NDP) which was released in 2011. The plan detailed the country's strategy for national growth until 2030 and called for a tax on carbon by 2015.[46]

Additionally, the South African government established a Green Economy Accord (GEA); an agreement to partner with the private sector and public organisations to create jobs through the development of a green economy.[47] In this accord, the South African government agreed to work towards creating an enabling policy environment to foster the green economy, and to provide financial support and institutional frameworks to promote green industrial development.[48] The main rationale for developing a green economy is the potential it has to create employment.[49] A less popular perspective, however, suggests that aggressively embarking on a transition to low-carbon technologies could affect the country negatively in terms of employment.[50]

On the continent, South Africa – as the country seemingly with the most experience in transitioning to a low-carbon economy and, subsequently, developing a green economy – could play an important role in advising other African countries keen to diversify their energy mix. South Africa could be a valuable source of information on designing policy frameworks, financing low-carbon technology development, and highlighting the role of government and the private sector in realising established objectives for developing a green economy.[51]

FUTURE CHALLENGES

It is clear that governments and governance forums should waste no time in advancing the agenda for a green global economy. Regardless of how countries view the concept of a green economy, transformation into cleaner, more efficient production and development – with a minimum negative effect on the environment – is not only desirable, but imperative.

Many emerging economies, including the BRICS countries, have recognised the need to transform to green growth strategies. Numerous governments have developed policies and plans, and implemented processes that focus on lower carbon emissions. There are obvious trade-offs in transforming old methods of production using newer, more expensive (in the short term) technologies. What is clear is that intelligent transitioning to a green economy will not only maintain natural resources for future generations, but will also provide jobs in this emerging field.

ENDNOTES

1 The provocative book by DH Meadows, DL Meadows, J Randers & WW Behrens III, *The Limits to Growth*. New York: Universe Books, 1972, presents computer-simulated models of economic growth that consider the impact of human interactions on the earth's natural resources.

2 Article 21, 'Global Plan for Recovery and Reform', statement issued by the G-20 Leaders, London, April 2009, http://www.g20.utoronto.ca/2009/2009communique0402.html.

3 Park J, 'The evolution of green growth policy: An unwelcome intrusion on global environmental governance?', *Journal of East Asian Economic Integration*, 17, 2, June 2013, pp. 207–241, http://www.jeai.org/journal/journalDetail.jsp?mgr_no=JE0001_2013_v17n2_207, accessed 7 October 2013.

4 AtKisson K, *Green Economy 2013: A Strategic Briefing on the State of Play in the Global Transition*. Stockholm: AtKisson Group, August 2013.

5 Article 73, G20 Summit Declaration, 18–19 June 2012, Los Cabos, Mexico, 2012, http://g20.org/images/stories/docs/g20/conclu/G20_Leaders_Declaration_2012_1.pdf, accessed 20 November 2013.

6 Russia G20, 'The G20 Leaders' Declaration, G20 Summit 2013'. Saint Petersburg: Russia G20, http://en.g20russia.ru/news/20130906/782776427.html.

7 See http://unfccc.int/meetings/warsaw_nov_2013/session/7767.php for the latest COP 19 documents, reports and decisions.

8 By institutions such as the World Bank, *Inclusive Green Growth: The Pathway to Sustainable Development*. Washington, DC: World Bank, May 2012, http://siteresources.worldbank.org/EXTSDNET/Resources/Inclusive_Green_Growth_May_2012.pdf, accessed 7 October 2013.

9 UNEP (UN Economic Programme), *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*, December 2011, http://www.unep.org/greeneconomy/Portals/88/documents/ger/ger_final_dec_2011/Green%20EconomyReport_Final_Dec2011.pdf, accessed 8 October 2013.

10 Elwell CK, *Economic Recovery: Sustaining US Economic Growth in a Post-Crisis Economy, Congressional Research Service*, Report for Congress, Washington, DC, 18 April, 2013.

11 In an effort to begin such consultation, the South African Institute of International Affairs (SAIIA) assigned researchers in four of the BRICS countries to consider the challenges that their respective countries are contending with in reorientating their economies towards a low-carbon growth trajectory, the kind of trade-offs that have to be made, available capacities to undertake this structural change and the various policy actions open to decision-makers. Among these options are the development and application of better technologies, changing institutional practices and providing economic incentives. Occasional papers on BRICS are available on SAIIA's website and via its publications department.

12 Jacobs M, 'Green Growth: Economic Theory and Political Discourse', Centre for Climate Change Economics and Policy, Working Paper, 108, and Grantham Research Institute on Climate Change and the Environment Working Paper, 92. London: London School of Economics and Political Science, October 2012.

13 Motta VP & S Rios, 'A Política Externa Brasileira sob Lula: o Fim do "Consenso de Brasília"?' *CEBRI Artigos*, 3(V), Julho–Setembro, 2010, http://cebri.org/midia/documentos/cebri_artigo_pmv_ok.pdf, accessed 22 May 2013.

14 *Ibid*., p. 13.

15 Protectionist measures related to the green growth agenda could include, for instance, the imposition of standards and regulations that would increase the costs of goods exported by developing countries or the implementation of border carbon taxes, to compensate for the different climate change mitigation commitments in developed and developing countries.

16 *Ibid*.

17 Piskulova N, *Resource Efficiency Gains and Green Growth Perspectives in Russia*. Berlin: Friedrich–Ebert–Stiftung, September 2012, http://library.fes.de/pdf-files/id-moe/09416.pdf, accessed 27 September 2013.

18 *Ibid*., p. 9.

19 SARCS (Southeast Asia Regional Committee for START), 'G-20 to phase out super greenhouse gas, fossil fuel subsidies', Chung-Li: SARCS Secretariat, 2013, http://www.sarcs.org/en/news/etc/220-201309160, accessed 27 September 2013.

20 UNEP (UN Economic Programme), 'Green Economy Advisory Services: Russian Federation', Paris, Kenya and Geneva: UNEP, 2012, http://www.unep.org/greeneconomy/Portals/88/documents/advisory_services/countries/Russia%20final.pdf, accessed 27 September 2013.

21 Piskulova N, *op. cit.*, p. 1.

22 *Ibid.*, p. 1.

23 Government of India, Planning Commission, *11th Five Year Plan (2007–12): Inclusive Growth*. New Delhi: Oxford University Press, 2008, http://planningcommission.nic.in/plans/planrel/fiveyr/11th/11_v1/11th_vol1.pdf, accessed 22 September 2013.

24 Bowen A & S Fankhauser, 'The green growth narrative: Paradigm shift or just spin', *Global Environmental Change*, 21, 4, 2011, pp. 1157–59.

25 See, for example, UNEP, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication: A Synthesis for Policy Makers*. Paris, Kenya and Geneva: UNEP, February 2011, http://www.unep.org/greeneconomy/greeneconomyreport/tabid/29846/default.aspx; and Hallegattes S, Heal G, Fay M & D Treguer, 'From Growth to Green Growth: A Framework for Policy Research', Policy Research Working Paper, WP5872. Washington, DC: World Bank, 2011.

26 OECD (Organisation for Economic Co-operation and Development), *The Knowledge-based Economy*, OECD/GD(96)12. Paris: OECD, 1996, http://www.oecd.org/science/sci-tech/1913021.pdf.

27 The approach is based on the recommendations of the Government of India, Planning Commission, *Report of the Expert Group to Review the Methodology for Estimation of Poverty*, November 2009, headed by the economist Suresh D Tendulkar. The report is available at http://planningcommission.nic.in/reports/genrep/rep_pov.pdf.

28 In the report to the 18th National Congress of the Communist Party of China (CPC) President Hu Jintao claims that 'taking economic development as the central task is vital to national renewal, and development still holds the key to addressing all the problems we have in China', http://www.hxen.com/interpretation/kouyiziliao/2012-11-20/203384_5.html, accessed 22 May 2013.

29 *Ibid.*

30 CCICED (China Council for International Cooperation on Environment and Development), *Development Mechanism and Policy Innovation of China's Green Economy*. Beijing: CCICED, May 2012, http://www.cciced.net/encciced/policyresearch/report/201205/P020120529371605387628.pdf, accessed 22 May 2013.

31 *Ibid.*, pp. 208–10.

32 Yuanyuan L, 'China set to vigorously develop green economy', Renewable Energy.World.Com, 1 February 2012, http://www.renewableenergyworld.com/rea/news/article/2012/02/china-set-to-vigorously-develop-green-economy.

33 Xiaoyue S, 'China's green economy: Practices and development', paper presented at OECD Green Growth and Development Workshop, 28 June 2012, http://www.oecd.org/dac/environment-development/48329183.pdf.

34 Akinyi KA, Yang C & B Yu, 'Green growth as a national project in China, Kenya and Korea', in *OECD Development Co-operation Report 2012: Lessons in Linking Sustainability and Development*. Paris: OECD Publishing, 2012, http://www.oecd-ilibrary.org/docserver/download/4312011e.pdf?expires=1383736863&id=id&accname=guest&checksum=12760FFCF9DED640848A12B15745EAE2, accessed 22 May 2013.

35 *Ibid.*, pp. 204–6.

36 *Ibid.*, pp. 208–9.

37 South Africa, (DEA) Department of Environmental Affairs, 'About the green economy'. Pretoria: DEA, 2012, https://www.environment.gov.za/projectsprogrammes/greeneconomy/about, accessed 13 May 2013.

38 Zuma J, 'State of the Nation Address by His Excellency Jacob Zuma, President of the Republic of South Africa at the Joint Sitting of Parliament, Cape Town, 14 February 2013'. Cape Town: The Presidency of the Republic of South Africa, 2013, http://www.thepresidency.gov.za/pebble.asp?relid=14960.

39 DBSA (Development Bank of Southern Africa), Development Planning Division, 'Programmes in Support of Transitioning South Africa to a Green Economy'. Working Paper Series, 24, 2011. Halfway House: DBSA.

40 South Africa, National Planning Commission, *National Development Plan 2030, Our Vision: Make It Work*. Pretoria: National Planning Commission, 2011, pp. 180–6.

41 Blaine S, 'South Africa "with Africa" on climate change talks', *Business Day BDLive*, 7 December 2012, 05:24, http://www.bdlive.co.za/national/2012/12/07/south-africa-with-africa-on-climate-change-talks.

42 Gordhan P, 'Medium Term Budget Policy Statement 2011', Pretoria: National Treasury: South Africa, 2011, http://www.treasury.gov.za/documents/mtbps/2011/.

43 South Africa, DME (Department of Minerals and Energy), 'Draft Energy Efficiency Strategy of the Republic of South Africa', 2004, http://unfccc.int/files/meetings/seminar/application/pdf/sem_sup2_south_africa.pdf.

44 Montmasson-Clair G, 'Green Economy Policy Framework and Employment Opportunity: A South African Case Study', TIPS (Trade and Industrial Policy Strategies) Working Paper Series 2012-02. Pretoria: TIPS, http://www.tips.org.za/files/working_paper-green_economy_policy_framework_and_employment_opportunity_in_sa.pdf, accessed 6 November 2013.

45 DBSA, Development Planning Division, *op. cit.*, p. 16.

46 Gordhan P, 'Budget Speech, Minister of Finance Pravin Gordhan, 22 February 2012', Pretoria: National Treasury, 2012, http://www.treasury.gov.za/documents/national%20budget/2012/speech/speech.pdf, accessed 22 May 2013.

47 South Africa, EDD (Economic Development Department), '2011 New Growth Path: Accord 4 – Green Economy Accord', Pretoria: EDD, http://www.economic.gov.za/communications/publications/green-economy-accord, accessed 6 November 2013.

48 *Ibid.*, pp. 6–9.

49 DEA, National Strategy for Sustainable Development and Action Plan (NSSD1), 2011–2014, 2011, http://www.environment.gov.za/, accessed 30 March 2012, p. 7.

50 Scholtz A, A Discussion of Systemic Challenges for a Just Transition Towards a Low Carbon Economy, Green Growth South Africa Briefing Series: Paper Three, World Wildlife Fund, 2011, http://awsassets.wwf.org.za/downloads/just_transitions_paper_with_refs.pdf, accessed 6 November 2013.

51 Blaine S, *op. cit*.

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