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ESSAYS ON THE GREEN ECONOMY

Transitioning to a Green Economy: What Does it Mean? Challenges and Opportunities for Guyana

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This essay is reproduced from the SEES Research Series, which was originally published in 2013 through the School of Earth and Environmental Sciences, University of Guyana, and has been updated for digital publication.

ISBN Number: 978-976-624-036-3

Publisher: Journal of Academic Research and Essays

SEES Research Series
Essay 1

Transitioning to a Green Economy: What Does it Mean? Challenges and Opportunities for Guyana

By **Mark Bynoe, PhD**[1]

Two decades after the United Nations Conference on Environment and Development (UNCED)[2] that saw the genesis of the three multilateral environmental agreements in the United Nations Framework Convention on Climate Change (UNFCCC), United Nations Convention to Combat Desertification (UNCCD) and United Nations Convention on Biodiversity (UNCBD), the concept of the Green Economy is once again entering the lexicon of policymakers, technocrats, and academics as the world seeks to combat arguably the most serious existential threat to humankind, i.e., tackling climate change, reducing greenhouse gas (GHG) emissions, reducing foreign exchange leakage, and enhancing energy security.

But what is a Green Economy and what is its relevance for Guyana? According to the World Resources Institute (2011), a Green Economy can be viewed as an alternative vision for economic growth and development. It emphasises the generation of growth and is predicated on the improvement in people's lives in ways consistent with sustainable development. Additionally, it promotes the pursuance of a triple dividend: advancing and sustaining economic, environmental, and social well-being (Lefevre, 2014), and reinforces the broader sustainable development principles, i.e., allowing current generations to meet their needs without compromising the ability of future generations to meet their own needs.

Unfortunately, the development imperatives for small, open economies like Guyana are still largely based on economic indicators, such as the expansion in gross domestic product (GDP), foreign currency reserves held, and improvements in the purchasing power parity (PPP). While these are necessary ingredients for advancing a country's well-being, they are insufficient for the sustained growth that will help in promoting inter- and intra-generational equity. Furthermore, these economic indicators often come at high, significant and irreversible social, environmental and economic costs, such as extreme poverty levels that are still reportedly above 30% in Guyana (World Bank, 2010) and increasing social inequities. There is clearly, therefore, the need for a new economic paradigm for small island developing states and low-lying coastal states (SIDS)[3] like Guyana, with substantial natural resources, limited human capital, and high fossil fuel costs estimated at 0.31 US$/kwh (Williams, 2013). This is where the concept of a Green Economy becomes attractive and one which the political

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[2] Popularly known as the Earth Summit.

[3] Small Island Developing States (SIDS) are a distinct group of developing countries facing specific social, economic and environmental vulnerabilities and includes low-lying coastal countries like Guyana. SIDS were recognized as a special case both for their environment and development at the United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit, held in Rio de Janeiro, Brazil (3–14 June 1992). This recognition was made specifically in the context of Agenda 21 (Chapter 17 G) (UN-OHRLLS, 2011).

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administration in Guyana seems to be focused[4] after years of an almost 100% fossil fuel driven economy.

But while transitioning to a Green Economy can benefit Guyana through increasing the country's sustainable development, reducing poverty, enhancing job creation, expanding environmental conservation and reducing harmful gas emissions, there are still some concerns for Guyana regarding the benefits and risks of doing so. Much of the interest in greening Guyana's economy, as elsewhere, revolves around its implications for the energy sector. Guyana would, for example, want to reduce its dependence on fossil fuels through the development of, and unleashing the potential associated with, a plethora of indigenous alternative energy sources that are more sustainable with significant emphasis on renewable energy and energy efficiency within broader strategies to green key sectors and communities.[5] For example, policymakers in Guyana are looking for concrete advice and direction with respect to renewable energy for electricity generation. But they need economic data on the costs and benefits of switching to renewable energy, including information on the potential for significant foreign exchange savings, revenue impacts, employment generation, and environmental impacts. It is clear that such major shifts demand that proper impact studies be conducted, methodologies be widely advertised, and results be distributed nationally. It cannot, and must not, seem to be a knee-jerk reaction or the flavour of the month decision.

Figure 1: Using Solar Panels to derive energy in Capoey, Pomeroon-Supenaam (Region 2)

At the same time, the persistence of poverty and environmental degradation associated largely with, but not exclusively, mining and inadequate coastal zone management, can be traced to a series of market and institutional failures that make the economic model pursued for the

[4] In his address to Parliament before the 2015 Budget, His Excellency David Granger indicated that "we *shall exploit Guyana's favourable geographical location and abundant assets in order to develop a 'green economy' (that is) one that generates human happiness in ways that are consistent with economic exploitation of its natural resources. We see a 'green economy' as one that sustains economic prosperity, environmental security and social well-being*."

[5] The recent move to increase the taxes on reconditioned vehicles over 5 years old and reduce same on vehicles below 5 years old is one such policy measure in this direction (Budget, 2016)

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past 50 years far less effective than it otherwise would be in advancing sustainable development goals.

These market and institutional failures are well known to economists, but in the opinion of this author, little progress has been made to address them. For example, there are insufficient mechanisms to ensure that polluters pay the full cost for their polluting actions. One only has to look to the current gold mining industry to appreciate the chaotic state and scant regard to environmental and social safeguards to appreciate this statement (Trotman, 2016). There are "missing markets" – meaning that markets do not systematically account for the inherent value of services provided by nature, like water filtration or coastal protection. A "market economy" alone, therefore, cannot provide public goods, like efficient electricity grids, sanitation, or public transportation. And economic policy is often shaped by those who wield power, with strong vested interests, and rarely capture the voices and perspectives of those most at risk.

Figure 2: Pursuing Mangrove Reforestation to Protect Guyana's Shoreline

Some practitioners within Guyana worry that shifting to a green economy will hamper economic development and, thus its capability to reduce poverty. Many people also question if the transition is even affordable, as many of its solutions are seen as being costly. Others argue that the country lacks the know-how regarding green technology and that this will be a disadvantage when it comes to guaranteeing future markets.

Another concern is that changing the market focus of the country's main industries will also lead to job losses in industries seen as being unsustainable or not environmentally friendly such as gold and bauxite mining. These companies and their employees will suffer the full impact of a green economy transition, and supporting them will be essential in building a comprehensive and successful green economy.

According to Khor, one of the main concerns expressed by developing countries like Guyana is of the green economy concept jeopardising them due to its inappropriate use: *"there are risks that the promotion of the "green economy" concept may give rise to unhelpful or negative developments, and these must be avoided"* (Khor, 2011).

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Khor concludes that inappropriate use of the concept can happen in two main ways:

- The first is if it is deployed in a so-called "one-dimensional" way; i.e. sold as an environmentally friendly concept but removed from the overall concept of sustainable development, separated from its equity and development aspects and ignorant of its potential negative impact on emerging economies. This misinterpretation – or misuse – of the green economy concept, could happen by emerging countries using a transition as a pre-condition to receive loans, or the possibility of debt renegotiation. Subsequently this could influence others to adopt a focus on achieving a green economy purely through environmental measures without considering sustainable development and social equity.

- The second is if it is applied to countries in a so-called "one size fits all" way. Such an implementation would be disastrous and inevitably result in no developmental or environmental gains. Khor goes on to state that for a green economy to succeed, it must be tailored to each country's level of development and should particularly take developing countries' conditions and prime concerns into consideration. In addition, developing countries should also be given more assistance in areas such as finance and technology, and have less stringent regulation imposed upon them.

Despite these concerns, the Green Economy concept remains attractive for a country like Guyana, with vast renewable energy resources potential (inclusive of solar, wind, wave, biodiesel and hydropower). The attractiveness of this proposition is that it: (i) offers Guyana an opportunity for energy security, (ii) reduces the cost of doing business in Guyana, thus encouraging more foreign investment in a country ranked 114 out of 182 in the Doing Business Survey of 2011 (World Bank, 2012) and making exports more competitive[6] on the world market, (iii) allowing for more foreign exchange to be earned, (iv) reduces foreign exchange leakage, where it was estimated that the cost for importing fossil fuel in 2008 was 43% of Guyana's GDP (GEA, 2012), (v) has more downstream processing of its raw materials, thus creating more employment, and (vi) improves the country's fiscal position. It should be obvious to all that the funds "lost" through importation of fossil or due to substantial line losses can be directed towards pursuing Guyana's push to achieve and surpass the Sustainable Development Goals (SDGs), as well as improve the social and physical infrastructure, all aimed at enhancing the country's sustainable development thrust.

Critical for transforming Guyana's economy towards a more sustainable low-carbon pathway therefore, even though the country emits less than 0.001% of the global greenhouse gas (GHG), would be to ensure that its income and employment expansions are driven by both public and private investments through an enhancement in the business environment (World Bank, 2012), reform the policy environment, and incentivise areas for fuel efficiency and investment in renewable energy resources.

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[6] This is particularly important for a country which ranks 109 out of 142 countries in the 2011 – 2012 Global Competitiveness Index.

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Figure 3: Using Guyana's Forests to promote actions that will derive social, economic, and environmental benefits through the prudent management of standing forests

While not seeking to be prescriptive, some of the important questions to be asked in the context of Guyana are:

- How to broaden and execute its bold low-carbon development strategy (LCDS) that must include, potentially, making 'every building a power station' by maximising their energy efficiency and potential to generate renewable electricity. With the major energy provider estimating non-revenue losses in excess of 40%, this amounts to US$48.40 (priced at US$121 of Brent Crude in April 2012) on every barrel of fuel! With energy being one of the three main inputs into the manufacturing process, this reduces the attractiveness of Guyana as a place to do business, increases the country's emissions level, and reduces the price competitiveness of its exported products.

- How to create, train, and retain a 'carbon army' of workers to provide the human resources for an environmental reconstruction programme, when the country still suffers from high levels of emigration estimated at above 70% of University graduates (World Bank, 2010).

- How to create the right policy environment and economic incentives to drive efficiency and bring alternative fuels to market. This can make available more funding for the Green Economy development pathway and safety nets to those vulnerable to higher fuel prices via raising carbon taxes and revenue from carbon trading.

- How to regulate the domestic financial system to ensure that the creation of money at low rates of interest is consistent with democratic aims, financial stability, social justice and environmental sustainability. In parallel, the challenges remain on how to prevent inflation, and tighten controls on lending and on the generation of credit.

978-976-624-036-3

The challenges and opportunities for Guyana in pursuit of a green economy objective are many. Clearly, there are roles for both the public and private sectors, with a major tenet being enhanced energy and resource efficiency, while simultaneously preventing the loss of biodiversity and ecosystem services. These investments need to be catalysed and supported by targeted public expenditure, policy reforms, and regulation changes. This development path should maintain, enhance and, where necessary, rebuild natural capital as a critical economic asset and source of public benefit, especially for poor people whose livelihoods and security depend strongly on nature.

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