

**A Report of the Issue Management Group on Green Economy
United Nations Environment Management Group
(4th Draft 6 September 2011 – for discussion only)**

Executive Summary

1. Introduction

In September 2009 the United Nations (UN) Environment Management Group decided to establish an Issue Management Group on Green Economy. This group was tasked to prepare a report to assess how the UN system could coherently support countries in transitioning to a green economy, facilitating a common understanding of, and approach to the measures required for the transition. The report also contributes to the preparatory process for the 2012 UN Conference on Sustainable Development (UNCSD or Rio+20) where “the green economy in the context of sustainable development and poverty eradication” is one of the main themes.

Achieving a green economy requires breaking away from resource intensive and inequitable growth models, a transformation of production and consumption into more sustainable patterns, and increased value added created and reinvested in resource-rich supplier communities in the developing world. This comes with the recognition that resource intensity of consumption and production in developing countries may increase in absolute terms in the industrialization process. It requires the inclusion of the marginalized in development and the reduction of gaps between developing and developed countries in labour productivity and access to technology and scientifically-based information. For commodity-dependent countries, it is particularly important that they have access to new green opportunities to diversify their economies.

In a transition to a green economy, investments should be directed to: 1) efficient, clean, and low-carbon technologies and infrastructure, application of the life cycle approach, environmental goods and services, sustainable sourcing of materials, the maintenance and restoration of natural capital – soil, forest, water, biodiversity, etc.; and 2) access to energy, water, biological resources, and sanitation services, public health and health care, new jobs, labour protection, social protection systems, information systems, and training and education including aimed at sustainable consumption. Priorities should be given to investments that meet both environmental and social objectives whilst delivering economies ones, focusing on sustainable livelihoods approaches and access to services for the marginalized.

Proper incentives such as economic instruments, regulations, trade measures, as well as distributional policies and voluntary initiatives can help channel investments - public and private - towards targeted sectors and enhance the effectiveness and fairness of such investments. They can also affect incentives and public awareness, contributing to behavioural changes in production, consumption and lifestyles.

2. Investing in infrastructure and target sectors

The call for a green economy came against the background of global financial and economic crisis, to which many Governments have responded with stimulus packages including particular provision for infrastructure development. As governments seek to scale up the implementation of their provisions, these stimulus packages and their green components are paving the way for longer-term policy reform and infrastructure development. They hold the potential to avoid locking capital into outdated technologies and designing new growth paths.

Ongoing systemic problems such as global climate change give the greening of infrastructure additional importance. In developing countries, the need for investments in greening infrastructure could reach

USD264-563 billion by 2030 with an additional USD30-100 billion for adaptation. These investments will mean new jobs, new incomes, and better health for all who need it most while reducing households' and countries' energy bills, lessening the fiscal burden from unemployment and health payments, and providing new business opportunities. Biodiversity and ecosystems frequently play the role of infrastructure as well. Their maintenance or restoration – also for ecosystem based adaptation and species management - should also be considered as a priority for investment.

Greening infrastructure is urgent as emerging economies and developing countries will build the bulk of their infrastructure in the next two decades. Given the substantial inertia and “committed emissions” of infrastructure investments, which would lead to the lock-in of unsustainable fossil fuel consumption patterns, delaying action in developing countries by 10 years could result in doubling the amount required to mitigate greenhouse gas (GHG) emissions and make adaptation impossible. The Green Climate Fund agreed in Cancun in December 2010 with the objective of mobilizing USD100 billion per year by 2020 can reduce the infrastructure funding gap.

Investing in greening infrastructure, however, must leverage funding for broader investment needs in developing countries estimated at USD1-1.5 trillion per year, only about half of which has been met. In the absence of adequate funding, the deployment and use of individual power generators and batteries, unregulated wells, and open drains carries significant social, environmental, and economic costs. Tackling these issues requires scaled up and accelerated international cooperation, innovative technologies, integrated city-regional spatial planning, and delivery models including decentralized power generation sourced from solar and wind, as well as which could generate multiple benefits at a relatively low cost. By transitioning now, developing countries have the potential to leapfrog costly retrofits.

Beyond infrastructure, the greening of agriculture, industry (including mining or extractive industries), and services is also crucial for satisfying demands for higher living standards for an urbanizing global population while adjusting to the increasing environmental constraints. In agriculture, investments should aim at improving food security and livelihoods and reducing emissions and other negative environmental impacts through sound soil and nutrient management, efficient harvesting and use of water, increasing production system resilience, conserving genetic resources, reducing post-harvest losses, and improving processing. Making these investments employment intensive will benefit workers, communities, and local enterprises.

In the industry sector, investments in renewable energy technologies and more resource efficient production processes, for example, could generate multiple benefits, but distributional effects need to be taken into account with an emphasis on improving access to cleaner technology and employment opportunities. Apart from renewable energy, investments in the broader category of environmental goods and services, ranging clean production processes, low impact logistics, and material-saving packaging to natural products and services from ecosystems including the often neglected oceans, also have a potential for generating multiple benefits. In 2009, the global market of environmental goods and services reached USD770 billion. The greening of industry holds the potential for opening up vast new markets such as services in the prevention and management of waste, new markets created through the application of life cycle approaches with supportive regulatory and physical infrastructure.

In the service sector, Information and Communication Technologies (ICTs) as applied, for example, to intelligent transport networks and smart grids can become the future drivers of growth and enablers of resource efficient development. And while intelligent use of ICT can help industries and consumers to dematerialize, sound management of electronic waste poses new risks and opportunities. A growing number of transport sectors are also scaling up their responses to climate and related risks and opportunities. In the aviation sub sector, governments and businesses have undertaken investments to

scale up the production of fuels from sustainable biomass or renewable oils to commercially-viable levels while reducing the emissions of GHGs, particulate matters, and fuel sulphur content.

3. Investing in people and social infrastructure

At the heart of a green economy approach is the desire to improve human well-being and equity, which implies targeted investment in human and social capital. A green economy must also contribute to the Millennium Development Goals (MDGs), which focus on the access of the poor, vulnerable, and marginalized to services, resources, and opportunities, as well as supporting the necessary social transformations. It must contribute to the growth of income, jobs, sustained poverty and hunger reduction, improved health and equity, resource efficiency, and reduced vulnerability. All poverty reduction policies should, however, be formulated with a view to encouraging sustainable consumption and production patterns and establishing a green path for future development.

To break the cycle of poverty and over-exploitation of resources, a firm commitment is needed to make long-term investment in education and training, cultural development as well as communication and media, including the generation of information and access to information. Investing in education for sustainable development including teaching of skills, competencies and research capacities has the potential to offer high returns including accelerated social and economic development apart from encouraging changes in individual behaviours, attitudes lifestyles, and consumption and production patterns. This includes education and training of the youth, as well as life-long learning and training for adults at a time of transition. Additionally, investing in the information sector and cultural development is also essential for transparent, inclusive, context-sensitive, equitable, and locally owned transformation. Exclusion and inequalities linked to wealth, gender, ethnicity, language, location and disability are holding back progress. Girls are disproportionately affected.

Addressing the unemployment challenge through a green economy approach requires increased investments in environmentally and socially significant sectors with high potential for job creation. Active labour market policies focusing on improving the skills of the most vulnerable, women, youth, informal workers, and the unemployed could support targeted investments.

Measures to support the most vulnerable such as access to a social protection floor and social safety nets as an investment in productive and human capital are essential to lift marginalized people out of the poverty trap and include them in a green development path. They are also needed to protect potential “losers” of a transition towards a green economy. Such investments include access to education, training and retraining, improved access to food, unemployment benefits, and health services. It requires an improved and sound social infrastructure. A “just transition” also requires social dialogues and civic participation in identifying the employment impact of green economy policies and charter the way to economic diversification that generates green jobs.

4. Enabling the transition towards a green economy

4.1 Mainstreaming: environmental and social integration

A fundamental challenge the green economy debate poses to all public institutions is that of failure to effectively converge, align and integrate work across the three pillars of sustainable development. This is in part a failure of institutional collaboration and coherence of policy approaches between different agencies, at international and national level. The green economy approach points to a new level of mainstreaming that goes beyond business-as-usual. The linkage of “green” and “economy”, with human well-being and equity as core goals, signals a new paradigm in which human and natural assets are more

Comment [ech1]: I add this to avoid the sense that the GE only has the MDGs as a social objective. The MDGs are a key concern for less than half of the world's countries. The entire global community, however, is challenged by the social transformations needed to accomplish the transition to the green economy.

appropriately measured, valued and put at the centre of economic planning. The challenge of integration also signals a paradigm shift in favour of more inclusive and pro-poor growth.

Investing in people is fundamental to achieving resource efficient growth together with social objectives. New knowledge and skills are required, for example, to perform new green jobs. Investments in efficient transport systems, housing energy efficiency improvements, sustainable sourcing of biological resources, and sustainable agricultural practices have the potential to generate significant co-benefits for health. Household energy investments to replace inefficient biomass/coal stoves with improved stoves and cleaner fuels as well as household waste-for-biogas production could improve the sanitation and health of 3 billion people. These linkages point to the need for an integrated approach, which should provide a basis for prioritizing investments in a green economy. Those investments that generate both environmental and social benefits should be the priorities. This points to investments in human and social capital, environmental and other forms of capital to enable and deliver results across the three pillars of sustainable development.

4.2 Public and private financing

A global transformation towards a green economy will require substantial financial resources and coherent criteria for their use. Subsidy reforms and ecological taxes can unlock a substantial amount of funds to support a green economy transition. In addition, carbon finance, payments for ecosystem services, green stimulus funds, micro-finance, social responsibility investment funds, green bonds, and other local financial innovations have emerged in recent years and can open up the space for large-scale green financing. To further scale up the financing for a green economy, public-private innovative financing mechanisms are needed to tap institutional investors' capital.

Although the bulk of investments will have to come from the private sector, the role of the public sector is indispensable for influencing the flow of private financing and triggering a green economy transition. Public spending is important for setting the stage and building the necessary capacity for the transition. It can also play an important role, inter alia, in facilitating access to water, sanitation and energy services, biodiversity and ecosystem conservation and sustainable use, and poverty alleviation. Governments should also use their resources, including through public procurement, to leverage financial flows from the private sector towards green and socially beneficial economic opportunities including at the local level. In addition, governments should involve the private sector in jointly identifying impediments to a green economy and establishing clear, stable and coherent policy and regulatory frameworks to facilitate the integration of environmental, social, and governance issues into investment decision-making.

The UN system and the Multilateral Development Banks (MDBs) have an important role to play in supporting investments in resource efficient development and advancement of SCP. They can provide technical advice and capacity support to governments in areas such as policy and project design and implementation as well as carbon market development and the greening of strategic value chains, help countries catalyze energy efficient and climate change investments by the private sector, and use a range of instruments to support and fund climate change interventions. To truly contribute to a green economy transition, these investments and interventions need to ensure that they do not disadvantage and harm the poor and that the continued flow of funding towards education, health, and social protection activities is guaranteed.

The BWIs and other international finance institutions are introducing new targets to mainstream and scale up their contribution to the interdisciplinary challenge of climate change. This is greater frankness and sense of progress in addressing human and natural resource use questions in investment and lending decision-making. At the same time, inertia and funding gaps that accompany economic downturn and the

current misallocation of capital highlights the need for re-thinking mainstream financing in areas such as infrastructure instead of assuming the availability of additional funding.

4.3 Full-cost pricing

Full-cost pricing is an essential tool for changing consumption and production patterns and motivating innovations. Apart from reflecting social and environmental costs in prices through taxes, full cost pricing also implies the phasing out of harmful subsidies, such as those on fossil fuels, fisheries, forestry, water use, land use and agriculture, which not only encourage excessive carbon emissions, resource depletion, and environmental degradation, but can also cause trade distortions and strain public finance. Full-cost pricing contributes to a more level playing field between established, “brown ” technologies, and newer, greener, ones. However, distributional consequences, especially the impacts on the poor and marginalized should be duly considered when designing and implementing subsidy reforms. International agencies can help governments and others to find the most appropriate ways of phasing out harmful subsidies while combining that with the introduction of new incentive schemes to encourage positive steps forward.

To make it work, governments need to stimulate inter-ministerial collaboration to communicate the societal implications of under-pricing to all concerned and collectively design fiscal and tax policies as well as policies on revenue recycling. Consultations with major groups including workers and employer’s organizations on the various policy options for implementing full cost pricing need to take place before deciding on options that enjoy the broadest societal support. Any adverse effects of changes in relative prices on vulnerable groups must be compensated for and new livelihoods opportunities provided.

At the international, sub-regional and regional levels, there is a need for policy coherence and financial and technological cooperation, as countries may not be willing to adopt full cost pricing unilaterally or in isolation for fear of losing international competitiveness. In spite of this potential “collective action problem”, which should be addressed at global and regional levels, it may still be beneficial for some countries to take full cost pricing measures independently. As commodity prices including fossil fuel prices are generally expected to continue to rise, countries can benefit from the development of resource-efficient technologies and renewable energies even if others continue to object to these transformations.

One contentious issue is possibly the distorting effect on trade of the so called “green subsidies” used by governments to stimulate the development of green technologies. The World Trade Organization (WTO) Agreement on Subsidies and Countervailing Measures (SCM Agreement) seeks to strike a balance between allowing Members to provide subsidies for legitimate policy purposes and preventing Members from providing subsidies that distort international trade. Provided that certain basic disciplines are respected, the SCM Agreement leaves Members with substantial policy space for supporting a transition towards a green economy.

4.4 Sustainable trade

Trade can expand the markets for green goods and services and diffuse clean and resource-efficient technologies and production methods. It can also signal the growing environmental and social preferences of firms and consumers. An open, rule-based and non-discriminatory multilateral trading system that provides predictability, security and stability is essential for enabling green investment, innovation and technological change, and for preventing trade protectionism disguised as green economy measures.

Positive steps are needed to take the Doha Round negotiations forward, which could contribute to a transition towards the green economy. These include negotiations on the removal of trade distortions in particular harmful subsidies such as fisheries and agriculture subsidies, and the elimination or reduction

of tariff and non-tariff barriers to environmental goods and services. Support is needed to assist developing countries, especially their low-income producers and SMEs, to identify green export opportunities, develop capacity in the production and export of related goods and services, facilitate access to information, training and education, finance, technologies and markets, and increase their competitiveness. International and regional organizations have an essential role to play in this regard.

Freer trade should be tied to important human values, welfare goals and inclusive growth, assisting those developing countries that are marginalized in the global trading system. Trade policy needs to be accompanied by policies in both the social and environmental spheres.

4.5 Technological innovation

Technological innovation in product design, production processes, service systems, and organizational management is essential for reducing negative environmental and social impacts, and improving resource efficiency. Technological innovation is also essential for the development of new products, services, and technologies that promote decent work, benefit society and lead them to economic diversification and structural change.

Changing user behaviors in resource demanding sectors such as food, housing and mobility, however, requires innovation not only in hard technologies but also in knowledge, management systems and incentive mechanisms, important attributes of social innovation. The use of ICT can help generalize access to relevant information in decision making, anticipate and manage potential risks from new technologies, and optimize sustainability and cost-efficiency in all economic sectors, including in workplaces through workers-management collaboration and dialogue. International agencies need to scale up support for education and training, small business development, continual improvement in resource efficiency and access to innovative financing. It is critical that local actors have ownership of the innovative process and new technologies, and that local and indigenous knowledge is part of the change.

The UN system and the BWIs have indeed actively supported technological and social innovations in developing countries. Their activities range from policy advice and policymaking tools to technical and managerial engagement with industries on resource efficiency and cleaner production, financing and marketing support, skill and capacity development, and facilitating the development of knowledge networks and platforms. There is, however, a surprising amount of overlap and the tendency to deal with “environmental technologies and standards” in isolation. This points to the need for improving the delivery of joint, interagency initiatives as well as mainstreaming programmes on the introduction and effective implementation of new technologies and standards that a green economic transition requires.

4.6 Regulatory approaches

Governments can employ mandatory technical regulations, voluntary standards, and information-based instruments, to support the transition to a green economy. Often, regulatory frameworks are required to support the greening of sectors that rely on natural resources. At the international level, multilateral environmental agreements (MEAs) can foster global commitments and promote coordinated activities on key aspects of the green economy agenda. In some cases, governments choose to adopt domestic regulatory frameworks to further MEA objectives.

Regulatory approaches are often taken to support price-based measures or when a ban or binding limitation is deemed necessary to stop certain damaging activities or bring about behavioral change. Regulations can also provide enabling conditions and incentives, establish the needed market signals and certainty for businesses to make investment decisions, deploy green technologies, accelerate green innovation, and foster clean technology development and diffusion. Information-based instruments, such

as labelling schemes and voluntary reporting, which show the environmental and social implications of goods and services coupled with appropriate pricing, can alter consumption habits and promote demand for green and socially responsible goods and services while stimulating manufacturers to design and produce such products and improve their environmental and social performance.

The success of regulatory approaches hinges on the certainty of policies as well as the quality and credibility of regulatory institutions and their compliance mechanisms. Regulatory institutions need to be transparent, accountable, efficient and designed with a view to minimizing additional costs for business and consumers. Effective compliance mechanisms should be put in place in order to achieve the desired outcomes. Fostering regulatory approaches to support a green economy requires integrated institutional framework and governance strengthening. To avoid the proliferation of national regulations and standards, the use of relevant international standards is essential. In this regard, a number of UN agencies have been involved in developing international norms, standards or guidelines to be used as a basis for national regulations or standards to support green economy objectives.

Finally, it is important that regulations and standards to promote the green economy do not become a source of green protectionism, in line with *Principle 12 of the Rio Declaration on Environment and Development*. In this respect, the WTO Agreement on Technical Barriers to Trade, while recognizing the important role of standards and regulations for the achievement of legitimate policy objectives, seeks to ensure that they are not discriminatory and do not create unnecessary barriers to trade.

The UN system and the Bretton Woods Institutions have an important role to play in supporting the transition to a green economy in the area of regulatory approaches, for instance, by encouraging the ratification of relevant MEAs, assisting Parties to implement and comply with MEA obligations, developing relevant international standards and guidelines, promoting good regulatory practice, and building national capacity for the preparation of and compliance with regulations and standards to support the transition to a green economy.

4.7 Assessment and indicators

An integrated policy assessment framework including improved accounting systems and indicators to capture relevant information and measure/monitor progress is an essential part of making the green economic transition towards sustainable development. The policy framework—based on a wide range of assessment approaches and tools—should include the participation of all relevant stakeholders. On accounting systems and indicators, their development by public agencies and the professional research community is reaching a new level of sophistication, providing a window of opportunity to mainstream a new economic model. An important starting point is the UN System of Environmental-Economic Accounting (SEEA), which will become an internationally recognized statistical framework in February 2012. It is important that policy makers begin to use this system systematically, taking into account the effects of economic activities on all forms of capital when making policy decisions.

Building on the SEEA, and other relevant initiatives such as the work on resource indicators by the International Resource Panel and the Wealth Accounting and Valuation of Ecosystems by the World Bank, three interrelated groups of indicators may be considered: (i) indicators that measure the green transformation of key sectors including environmental investments, environmental goods and services, and green jobs; (ii) measures of decoupling economic activities from increased use of resources (including energy and materials) or the productivity of resource use including eco-efficiency, re-use and recycling, and material flow indicators; (iii) full wealth accounting, overall measures of well-being or measures “beyond GDP” with a particular focus on natural capital, poverty, equity, and social inclusiveness - indicators of how well a green economy has delivered on human-centered development.

International agencies need to improve their ability to contribute to the further development of the SEEA, including programmatic support to institutions from developing economies to improve their capacity to collect, organize, interpret and communicate the relevant data. Public institutions can also learn from experience gained by responsible businesses in defining and applying “core and additional” indicators in their reporting systems, and how non-financial information is increasingly linked with financial information in emerging models of integrated reporting.

Efforts should also be made to build any new indicators on the basis of existing macro indicator sets such as the Human Development Index and indicators for sustainable development. The system of green economy indicators should also allow flexibility for countries to develop their own set of indicators that reflect their particular national and industrial circumstances.

5. The way forward for the UN system

5.1 Mobilizing expertise

To organize the expertise of the UN system including BWIs in a targeted and integrated manner when providing green economy related services to countries and to ensure that this expertise is delivered in a coherent manner in accordance with nationally and locally identified challenges and priorities, it is necessary for policy and research staff as well as operational staff, at agencies' headquarters and regional and country offices to achieve a common understanding of the green economy approach. In some cases this may require the creation of special units within agencies with expertise in economic analysis to support other experts in defining the economic case and supporting the mainstreaming of environmental and social goals in economic policy programmes. Expertise outside of the UN system, including regional institutions and the applied research community should also be mobilized. In addition, develop and strengthen understanding, knowledge and the expertise for a green economy at the country level involving a variety of ministries along with ministries of finance and planning.

5.2 Consolidating country assistance frameworks and strategies

Given the inter-sectoral and inter-agency nature of the green economy transition, it is important that any green economy policy development and programme support by a UN agency is demand driven and coordinated with the work of other agencies through the UN Country Team (UNCT) and the **UN Development Assistance Framework**. The Delivering as One approach being piloted in eight countries and applied in another 24 countries (“self-starters”) offers opportunities that are particularly noteworthy for the transition to a green economy by ensuring that support to countries in the transition to a green economy is delivered in an integrated manner, including the involvement of UN Regional Commissions and through a dialogue with all relevant parts of the host government. The ongoing challenge of improving integration across the three pillars of sustainable development is also one of improved interagency collaboration at international and national level. UN Regional Commissions must help governments move to overcome the “collective action problem” discussed earlier.

Comment [AC2]: The UNDAF is developed in response to country planning and follows that cycle, so a new UNDAF may only be rolled out every five years. Agencies' programmes and projects should support delivery of the outcomes of the UNDAF

5.3 Generating green, efficient and effective financial support at scale

Public resources are getting increasingly scarce, calling for an ever more efficient and effective use of funds, including ensuring that public funds can catalyze larger scale private investment in supporting a green economy transition. In many cases private sector investment flows await regulatory reform and the introduction of new measures that facilitate the opening up of new markets in environmental goods and services. Promoting country ownership and the alignment of UN system's programmes and projects with national priorities will be critical. Countries also need support in developing capacities to attract and drive green investments. In addition, there is a need to identify and develop new sources of international funds

at scale for supporting the global transition towards a green economy. Efforts need to be made to explore the potential for an innovative use of Special Drawing Rights and other international reserve assets, as well as deploying pools of concentrated assets to serve the aim of increasing the provision of global public goods.

5.4 Contributing to the global economic recovery and success of Rio+20

The world has not recovered from the financial and economic crisis that broke out in 2008-2009. Recent developments indicate a renewed set-back in the recovery driven by the unsustainable debt levels of some industrial economies. The lingering crisis is causing damage to the world economy at large with serious implications for poverty, equity, and social stability as well as commitments to environmental sustainability in all countries. Opportunities, however, still exist for a shift towards a green economy. By a fundamental restructuring of public spending and leveraging private investments towards environmental and social investments, indebted industrial countries can expect to find new growth paths that will expand the tax base to support fiscal consolidation while contributing to a green economy. BWIs have a particularly important role in influencing these countries to adopt such an approach.

At a global level, Rio+20 provides an important policy opportunity in the near term for the UN system to make commitments to supporting countries, especially Least Developed Countries, in taking the green economy path towards sustainable development. Although various agencies may give emphasis to their particular mandates in the context of Rio+20, common commitments on core elements of the green economy approach will send a powerful signal to governments, businesses, and civil society, demonstrating the determination of the UN system to “Deliver as One” on a green economy transformation for sustainable development and poverty eradication.