

**A Report of the Issue Management Group on Green Economy
United Nations Environment Management Group
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Section 14 – Conclusion

The vision of a green economy is finding its way into the core work programmes of a range of UN agencies and the Bretton Woods institutions. This reflects growing recognition of the shortcomings of business-as-usual as practiced by both public and private sector institutions over the last three decades. It also reflects a sense of urgency in finding lasting solutions in response to global financial and economic crises. It is a trend not only driven by renewed awareness of *risk*, for example those associated with persistent poverty and resource scarcity, but also a growing sense of *opportunity* that lies in fundamental or paradigm change in the way we govern, operate markets and develop communities.

The interagency dialogue on the concept of the green economy shows common concern with linking the concept closely and explicitly with fundamental goals related to human well-being and needs, social inclusiveness, intragenerational and intergenerational equity, as well as emerging risks and scarcities. Looking at means to address these, agencies focus on investment in economic development (growth, jobs), resources (food, energy, water), human development (health, education), social and physical infrastructure, technology and behavioral patterns (organizational, group and individual life styles). There is recognition of the relevance of a rights-based approach, and that progress need to be measured in both quantitative and qualitative terms (eg quality of life, education, health, working conditions).

The overview of activities by international agencies in this report highlights some accomplishments but is also frank in admitting shortcomings. The most fundamental, a challenge the green economy debate poses to all governmental 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 within and between different agencies, at international and national level. Policy coherence becomes all the more important in view the growing complexity of the global economic, finance and trading system. The latter presents an agenda that shows new awareness of value adding opportunities along global chains of supply and demand.

The three-pillar failure is also a failure of substantive integration, recognizing that the green economy approach points to a new level of mainstreaming sustainable development 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 – including ecosystem services – are more appropriately measured, valued and put at the centre of economic planning and decision-making. At the international agency level, efforts to address this challenge can be seen in the “Delivering as One” approach of the UN, global sustainable energy goals advanced by UN-Energy and other institutional innovations such as a multidisciplinary ministerial mechanism under consideration by ECLAC.

Assessment of programmatic action of the UN and its partners in pursuit of goals related to socio-economic inequity, environmental degradation, climate change and related challenges requires recognition of the difference in costs of action and *inaction*. Economic, social and environmental costs must be addressed in a coordinated manner through integrated policies and measures to foster decisions based on a green economy model.

The **multilateral financial institutions, including regional banks, are introducing new targets to mainstream and scale up their contribution to the interdisciplinary challenge of climate change.** This is reflected in the use of performance indicators that show greater frankness and sense of progress in addressing human and natural resource use questions in its investment and lending decision-making. At the World Bank there was a 62% increase in low carbon commitments from 2009 to 2010 and low carbon energy financing accounted for 42% of all 2010 energy commitments. The European Investment Bank is paying close attention to social and environmental footprints in its lending criteria. Up to 35 per cent of its overall lending is devoted to loans for environmental protection and sustainable communities. The Inter American Bank aims to have 25 per cent of all its lending targeting climate change, renewable energy and environmental sustainability by 2015. The Asian Development Bank is setting itself a target of at least USD 2 billion annual investment in clean energy by 2013. Project experience is also building the body of evidence of the economic case and related opportunities. At the same time, inertia, the funding gaps that accompany the economic downturn, and the current misallocation of capital highlights the need for mainstreaming the greening of investment. *This implies not assuming the availability of additional funding but rather re-thinking existing financing in core development areas such as infrastructure. In addition, Bretton Woods System and multilateral finance institutions are challenged to improve coordination and alignment of their priorities with those of other UN agencies at the programmatic level.*

At the level of national government, green stimulus packages are paving the way for longer-term policy reform and infrastructure development. As could be seen from the social protests in a number of countries against recovery measures, the process of transition will entail difficult social adjustments that must be addressed both through short-term measures and longer-term policy reforms. The longer-term policy reforms introduce and accompany processes of transformation that require investment in, among others, education and training to cope with the necessary restructuring. China and the Republic of Korea are working on the basis of five-year plans. In France, the multistakeholder “Grenelle de l’Environnement” covers commitments up to 2020. The immediate urgency is to grasp a window of opportunity that is offered by the global crisis to kick start a process of transformation that could place national economies on more sustainable development paths.

As part of implementing national fiscal stimulus packages, major public investment in infrastructure creates the opportunity to put in place low carbon assets, while avoiding locking in outdated technology stock and creating more sustainable employment opportunities as a result. Countries will need to develop spatial strategies at the regional and urban scales so that the infrastructural configuration maximises sharing and minimises excessive mobility and resource use. Consider the fact that developing countries will still build the bulk of their infrastructure over the coming two decades. Of special significance is investment in sustainable mobility and housing, including rail, water infrastructure, electricity grid (on and off) development and improved building efficiency. Investment in public railways include the need for expanded networks as well as the upgrading of existing grid, investment that is both greener and more job

creating than investment in highways. The potential for green employment creation is of special importance as national economies struggle with problems of unemployment especially amongst the youth.

While increasing the sophistication of their increasingly service-oriented economies, developed countries continue to be drivers for demand in as yet unsustainable consumption patterns. Their citizens consume an average of 16 tons of four key resources - minerals, ores, fossil fuels and biomass - per capita, while for example the average person in India today consumes only four tons per year. And whilst demand from developed economies create export opportunities for developing economies, the industrializing countries of Asia and elsewhere still face the challenge of introducing cleaner and more resource efficient technologies in their production processes. New growth strategies need to ensure that globally economic growth is far less closely linked to carbon emissions than during the 20th century.

Whilst noting progress in decoupling economic growth from environmental impact in countries such as Japan and Germany, the International Resource Panel (2011) has highlighted that, in absolute terms, global resource use grew eight-fold from 6 billion tons in 1900 to 49 billion tons in 2000, and is estimated at up to 59 billion tons by 2010. This is driven by population growth, continuing high levels of consumption in industrialized countries, and increased demand for material goods, particularly in China, India, Brazil and other emerging economies. It is often accompanied by the delocalization of production and associated relocation of resource extraction. Faced with growing scarcity of living and non-living resources such as water and metals, governments will need to pay close attention to the introduction of more resource efficient technologies and efficient resource use patterns in any strategy for dynamic growth. *For international agencies, this requires supporting services in integrated resource management and integrated spatial planning (as opposed to dealing with individual resources such as energy and individual technologies in isolation).*

Successful policy integration also requires a paradigm shift in favour of more inclusive and pro-poor growth. Growing inequality in the world will lead increasingly to social disruption. If the share of global household income by the bottom quarter of the world population continues to decline at the pace it has since the 1980s, public and private institutions alike will face growing pressure to deliver on bottom of the pyramid risks and opportunities. Building on progress made towards the MDGs, and mindful of remaining shortcomings in meeting these, international agencies are pursuing a multidimensional approach to poverty. They are calling for the urgent intensification of interventions that are pro-poor, integrated and multidimensional, and that help protect, support and enhance livelihoods systems and opportunities among the most vulnerable. This includes improved usage of targets and integrated indicators related to social protection, education, health services, infrastructure and environmental degradation. It also includes recognition of the direct dependence of the poor on services provided by ecosystems.

Agencies active in the field of agrifood and environmental services recognize that by increasing investment in natural assets - such as ecosystems and underlying biodiversity - that are used by the poor to earn their livelihoods, the shift towards a green economy enhances livelihoods in many low-income areas. This is particularly evident in areas such as agriculture, forests and the provision of water and sanitation, areas that lend themselves to social entrepreneurship and the creation of green jobs. *But entrepreneurs and informal businesses in poor communities desperately need the necessary social infrastructure and regulatory environment that facilitates*

their access to markets and green business opportunities. Poor rural communities also need to be empowered to make investments in the sustainable management of natural resources. Asset transfers through social protection schemes allow poor farmers to accumulate productive assets, to access investment opportunities that they would otherwise miss, and benefit from technological advances from which they would otherwise be excluded. If linked with ecosystem-based approaches, social safety nets can help to transform degraded lands into resilient landscapes at the scale required to support thriving communities. Such an investment in natural capital is therefore also an investment in human capital – people’s food and nutrition security – and in reducing the socio-economic costs of hunger.

The transition to the green economy requires an enabling environment in which appropriate pricing and incentives, coupled with effective legislation and regulation, encourage a departure from business-as-usual. **Of particular relevance in the debate on pricing and societal costs is the perverse use of subsidies, the harmful effects of which are beyond doubt.** In reforming these, Governments must consider the implications of alternative pricing on households, as well as the scope for the alternative use of subsidies to encourage sustainable patterns of consumption and production, provide longer-term certainty for private sector investors, and address concerns related to international competition and leakage. *International agencies can help governments and other stakeholders to find the most appropriate ways of phasing out harmful subsidies, combining this with a recasting of price and other incentives to internalize the external costs.*

Subsidy reform needs to be accompanied by realization of how the *absence* of appropriate regulation is causing a *failure to create new markets*, for example markets in carbon trading, ecosystem services and environmental goods and services such as water and waste management. As stated in the report, the removal of harmful, trade distorting subsidies can constitute a triple win for trade, environment and development. In addition, the introduction and consistent enforcement of appropriate regulations aligned with international requirements can constitute a triple win for producers, consumers and governments as they benefit from new, green markets and trade. Likely beneficiaries include SME suppliers and rural communities.

Governments have at their disposal a policy toolbox of instruments, including regulatory and control mechanisms, economic or market-based instruments, fiscal instruments and incentives, as well as the use of voluntary action, information and capacity building. Analysis of environmental policy over the last three decades provide wide-ranging evidence of lessons learned in different countries with the use of policy tools such as technology standards, labeling, reporting requirements and registers to facilitate access to information. Experience today provides indication of what is more or less effective at industry sector level, considering impacts channeled through increasingly global chains of supply and demand. The case of vehicle manufacturing provides an example of the facilitative role that international agencies can play in helping define minimum standards and good practice. The car is one of the most resource intensive and costly consumer products in the market, driving consumption of energy and other resources from metals extraction to polluting emissions, traffic congestion and end-of-life waste. Addressing efficiency standards in the design and manufacturing of vehicles, the UNECE World Forum for Harmonization of Vehicle Regulations has adapted its approach decade to decade. Today it is expected to scale up requirements for cleaner fuels and resource pressures resulting from the production of an increasingly wide range of vehicles, including hybrid and electric vehicles, and measures to pro-actively deal with risks associated with their end-of-life

management. Increasingly relevant is the goal of greening industry, building industries that minimize waste and material consumption by optimized resource efficiency.

Policy dialogue and regulatory harmonization at regional level, as can be found in Europe, provides good illustration to governments at national level and at global multilateral level of what is possible. *Regional policy dialogue and harmonization can also be effective in dealing with possible trade distortions resulting from the introduction of new standards.* And while the impact of producing certain goods and services has more local impact, the production of others has direct impact that stretches along global chains of supply and demand. On the regulatory front, this requires pro-active consideration at the level of bodies such as global, multilateral conventions and the WTO. On the self-regulatory front, it requires social responsibility from business and support by international agencies in building capacity in the improved application of voluntary standards such as those of the International Organization for Standardization (ISO).

The transition to a green economy will also rely heavily on innovation and entrepreneurship, dynamic areas which government regulatory and control mechanisms must take care in enabling rather than limiting. Considering the scale of action required to take societies beyond the limits to and of growth as currently defined, it will require both technological and social innovation that is of the fundamental rather than incremental kind. In considering ways of making this transition happen, *international agencies and Governments alike need to consider how their interventions can help citizens and organizations to overcome the problem of social inertia.* This highlights the apparent convenience of business as usual and unsustainable patterns of consumption that continue to be engrained by inappropriate marketing and incentives.

Changing user and consumer behaviour in resource demanding areas such as food, housing and mobility **requires innovation not only in hard technologies but also soft technologies in the form of knowledge, management systems and incentive mechanisms.** International agencies need to improve their ability in addressing these through scaled-up support programmes in education and training, small business development, continual improvement in resource efficiency and access to innovative financing. The overview of agency programmes on technology and innovation show both a surprising amount of overlap as well as the ongoing tendency to deal with “environmental technologies and standards” in isolation. This points to the need for improvement in the delivery of joint, interagency initiatives that meet country needs and improvement in the mainstreaming of programmes on the new technologies and standards that a green economic transition requires. Such programmes would include networks in support of not only the introduction of new technologies and standards but also continued improvement in their effective application.

Paradigm change in the way we approach the organization and management of our society, economy and environment requires appropriate education for all age and gender groups.

This includes technical and vocational education and training for individuals entering and transitioning within markets. It also includes revisiting the role of communications and the media in shaping culture and lifestyles in an internet-connected world. The scale of the challenge is evident when considering for example that an estimated 2,5 million new engineers and technicians are needed in sub-Saharan Africa to achieve improved access to clean water and sanitation. The groundwork for producing those engineers and technicians need to be done at the level of schools, where education in mathematics and the natural sciences are in need for substantial improvement.

At the same time, the way societies and economies are organized needs improvement, based on a fundamental rethinking of basic concepts such as quality of growth, well-being and life styles. Historical data on human development by country shows that improved well-being is not linked absolutely with improvement in material well-being but also critically linked with quality of education and health services. And as technologies and markets evolve, life-long education and distance learning becomes as important as the personal education of young girls and teenagers at local school level. Online education and responsible social networking provides a world to explore. A socially responsible media can also support life-long education by considering how its function as information provider – not only as entertainer but also awareness raiser and capacity builder – can help to improve access to and understanding of scientific information related to the case for a green economic transition.

Improved awareness and understanding includes a better grasp of the economic case, of which the field of environment and health provides ample evidence. Consider the health, environmental and economic costs and benefits associated with business as usual versus green transport systems and green buildings, a majority of which are in urban areas. Because of their inherent agglomeration and economies of scale, cities can deliver shared infrastructure and infrastructural retrofits more feasibly. Related costs to address include the waste, energy and health costs associated with appliances used in buildings, ranging from electrical and electronic goods to basic cooking equipment used in poor households. The data from WHO on cleaner stoves is illustrative. The introduction of some 131 million low emission biomass and clean fuel stoves in Sub-Saharan Africa and Latin America over the next decade could avert, among others, over 600,000 child pneumonia deaths. It would also save between 0.5-1.1 billion tonnes of CO₂-equivalent emissions. Economic benefits include reduced health-related expenditure as a result of less illness, the value of the associated productivity gains resulting from less illness and fewer deaths, and time savings due to the shorter time spent on transit, fuel collection and cooking. *These costs and benefits, quantified and monetarised with historical data to support its conclusions, need to be shared and communicated more effectively to support the introduction of greener solutions in all regions.*

Activities reported by agencies also signal an evolving understanding of what human rights – including the rights of children, women and employees – mean when applied in the context of a globalizing world economy today. The green economy debate affirms that individuals have rights and duties. A focus on not only the “needs” but also “rights” of poor people serve to define a more pro-active approach in which empowered individuals and groups participate as agents of change. This has also implications at the level of the organization, company and factory, where employees and managers face new opportunities to collaborate in building work places that are greener, safer and decent. At institutional level, agencies have started to collaborate in the area of green jobs, mindful of the critical role that job creation plays in alleviating poverty as well as the need to help currently employed workers transition to greener sectors and functions.

Similar to environment and health, the area of green employment is one that lends itself to practical illustration and costs-benefit analysis of the impact of greening actions on the creation and securing of jobs, income and quality of work. This includes opportunities in promising employment boosting areas such as renewable energy technologies, green building, sustainable agriculture, waste management and other environmental service industries. It also includes

ongoing risks that established industries such as the manufacturing of metals and their product chains face. *All UN agencies and Bretton Woods institutions would benefit from incorporating green job analysis in its programmatic work, linking this with analysis of the provision of new goods and services as well as the assessment of associated opportunity costs. The same applies to national agencies*, where Ministries of labour, environment, industry and others need to improve collaboration and consider the interrelation between labour policy and environmental policy in economic development. In addition, the refinement of a human rights approach is critical in designing improved service delivery and governance modes to manage fundamental transition in all regions. Social unrest in different parts of the world has shown the related dilemmas institutions face in poor communities in developing and developed economies alike.

Measuring and monitoring progress, using improved indicators to capture relevant information, is an essential part of making the green economic transition towards sustainable development. The development of accounting systems and indicators 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. This includes the development of multi-purpose systems and integrated indicator sets to meet the needs of decision-makers in targeting specific economic sectors (goods and services), efficiency goals and objectives related to what is newly defined as “progress” and “well-being”. The UN System of Environmental-Economic Accounting (SEEA) is a leading example, providing an international reference framework for public agencies and research bodies on ways of organizing and communicating relevant data. Along with the System of National Accounts (System of National Accounts), the SEEA provides a framework for enhancing the scope of conventional measures of growth, productivity and employment so as to compile extended measures of income and its distribution to study the vulnerability and well-being of people.

Frameworks such as SEEA build on work to improve tools such as sustainability impact assessments and wealth accounting by organizations such as the World Bank. It challenges governmental agencies and other organizations to improve their ability to measure and manage more efficiently the *five capitals* - natural, human, social, manufactured and financial capital – and capture in comparable terms their function in enabling the environmental, social and economic pillars of sustainable 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 business 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.

This report serves, among others, to support EMG members in tracking progress against objectives defined in recent years of multiple crises. Amidst ongoing stress in the world economy, the broad objectives for a global green new deal (GGND) identified two years ago (Barbier 2009) remain relevant, namely to:

1. Make a major contribution to reviving the world economy, saving and creating jobs, and protecting vulnerable groups;

2. Reduce carbon dependency and ecosystem degradation, putting economies on a path to clean and stable development; and
3. Further sustainable and inclusive growth, achievement of the MDGs, and end extreme poverty by 2015.

As a key agenda item at the Rio+20 Conference in 2012, “A Green Economy in the context of sustainable development and poverty eradication” presents the opportunity to take stock of progress made in mobilizing these objectives and improving the understanding of what a green economy transition means at the level of national and local economies. Emerging analysis on the green economy is also improving the definition and understanding of the economic case for action at regional and industry sector level, not least because of the unacceptable costs of continuing with business-as-usual.

Furthermore, **international agencies of the UN and Bretton Woods Institutions have the opportunity to redefine approach in delivering their mandates and advance the mainstreaming of green economic criteria in their portfolio of services.** Agency mandates address key enablers for delivering the three pillars of sustainable development in a more coherent manner, enablers in the form of natural capital (natural resource base, ecosystem services), human capital (labour, education, health), social capital (social infrastructure, services, culture), manufactured capital (physical infrastructure, industries) and financial capital (investment, lending, insurance). In promoting these, international agencies like their national counterparts need to consider improved and effective ways of mainstreaming the new paradigm. This includes institutional and programmatic reform, addressing green economic challenges not simply through stand-alone “environmental” or “social” divisions and mechanisms, but rather incorporating in their programmatic priorities the use of environmental and social data alongside improved economic and cost-benefit analysis into mainstream service provision and decision-making. Externally, this also expands the boundaries of interagency collaboration and coordination – both at international (global, regional) and national, inter-ministerial level. *The interagency Environmental Management Group will further explore this task in the coming biennium.*