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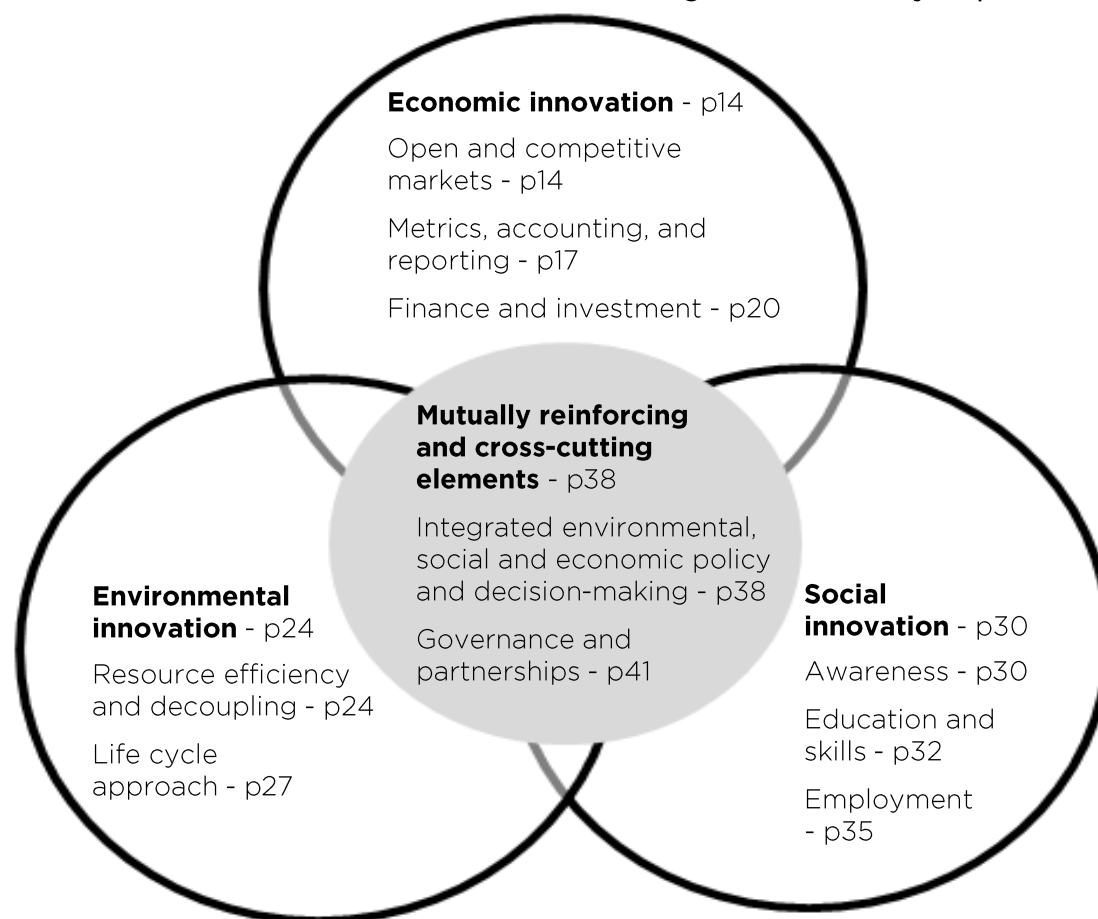
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Preface

The International Chamber of Commerce (ICC) is pleased to present the ICC Green Economy Roadmap - a guide for business, policy makers and society to assist in the development and implementation of policies and actions towards a “green economy”.

A key driver for this effort was the need to develop a global business response to the declared policy priority theme of “green economy in the context of sustainable development and poverty eradication” for the Rio+20 United Nations Conference on Sustainable Development while also taking into account concurrent global policy developments on green growth in the OECD and the G20.

The ICC Green Economy Roadmap represents a comprehensive and multidisciplinary effort to clarify and frame the concept of “green economy” and promote a more common understanding.

The Roadmap highlights the essential role of business in bringing solutions to common global challenges and calls for innovation, collaboration and governance on ten key conditions to be worked on simultaneously, both bottom up and top down, as well as in the short and long term. These conditions recognize the interdependence of the economic, social and environmental dimensions of sustainable development and seek to integrate them in a more holistic manner, both in terms of business strategies and in terms of enabling policy mixes for a transition towards a “green economy”.

The ICC Green Economy Roadmap is a forward-looking document meant to serve as a reference document for current and future actions. We hope that it will be a useful tool for integrating sustainability into business strategies or government policy frameworks.

We welcome continuous feedback on the Roadmap so that we can collectively build it as a platform for future action and collaboration.



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Executive summary

The world is facing a critical challenge: how to create economic opportunities for a growing population while ensuring that economic growth and environmental and social responsibility work together in a mutually reinforcing fashion.

Two global megatrends are on collision course:

- Increasing competition and limitation in the use of earth's finite resources;
- Predicted world population of 9 billion in 2050, growing at the most rapid pace in history.

Some key numbers provide the backdrop:

- 3 billion more middle class consumers expected in the global economy by 2030¹ with increased resource demands;
- 147% increase in real commodity prices since the turn of the century² ;
- \$2.1 to \$6.3 trillion of potential commercial opportunities related to environmental sustainability in natural resource sectors alone³.

Business has an essential role in bringing solutions to global sustainability challenges. Just as the creation of shareholder value requires performance on multiple dimensions, the global challenges and opportunities associated with sustainable development are multifaceted involving economic, social, and environmental concerns⁴. Today's collective sustainability challenge requires all actors, whether business, government or civil society, to accept shared responsibility and shift towards more collaborative and solutions-oriented thinking.

To meet these challenges, the ICC Green Economy Roadmap calls for innovation, collaboration and governance on ten conditions that need to be worked on simultaneously, both bottom up and top down and in the short and long term for a transition towards a "green economy".

- ***Innovation:*** *creating new ways and combinations based on a holistic vision.* Innovation at all three dimensions of sustainable development (social, environmental and economic) is required in order to develop more integrated strategies, policy and decision making.

¹ McKinsey (2011). Resource Revolution.

² McKinsey (2011). Resource Revolution.

³ OECD (2011). Towards green growth.

⁴ Hart & Milstein (2003). Creating sustainable value.

- **Collaboration:** *developing new forms of collaboration through enlightened leadership.* Collaboration leverages the mutually reinforcing and cross-cutting elements of integrated policy making.
- **Governance:** *shaping the context and enabling frameworks to allow all actors to deliver on their shared responsibilities.* Integrated governance structures will foster greater policy coherence between economic, environmental and development objectives.
- **Short/long-term:** *seeking to reconcile short term pressures with longer term strategies for shared value.* Efforts by all actors should reconcile short and long term approaches to deal with the multifaceted economic, social, and environmental challenges and opportunities in an integrated manner.
- **Top down/bottom up:** *simultaneously pursuing both, “bottom up/green growth” and “top down/ macro-economic green economy actions”,* including measures to complement Gross Domestic Product (GDP). A one-size-fits-all approach will not be effective, nor will policies that work in “silos”.
- **Multilateralism:** *delivering sustainability solutions in a globally connected world.* The business community is organized in sectors and value chains⁵, many of which are global. Therefore multilateral and cross-cutting approaches across countries and sectors are indispensable. ICC would like to signal the importance of multilateral approaches to bring solutions to sustainable development and underscores that open trade and investment remain at the heart of greening the global economy.

Based on this understanding, the ICC Green Economy Roadmap outlines the interdependences of the economic, social and environmental dimensions of sustainable development and seeks to integrate them in a more holistic manner, both in terms of business strategies and in terms of enabling policy mixes that facilitate a transition towards a “green economy”.

In short, the Roadmap seeks to strengthen the business case for responding to these interdependencies in today’s globalized world, by proposing ten conditions as a guiding framework for green growth on a range of inter-linked policies and actions.

⁵ The value chain depicts all the activities a company engages in while doing business (M. Porter, 1985). It is part of a larger system that includes the value chains of upstream suppliers and downstream channels and customers across sectors.

Lastly, business is a diverse set of actors ranging from large multinational companies to small and medium size enterprises (SMEs). It is paramount to recognize the crucial role of SMEs within the value chain not only as innovators and collaborators for job creation, but also their need for assistance to raise their performance and enhance capacity building for a “green economy”.

A “green economy” calls for immediate attention on:

- **Economic innovation:** For a “green economy” to be made operational, it needs to become embedded in global markets and balance sheets. A “green economy” should actively drive innovation in private and public finance and investment into the direction of sustainable development which is currently still low as compared to the overall size of the economy.
- **Social innovation:** A “green inclusive economy” needs to provide transition policies, allow all actors to participate through meaningful employment, provide access to education and life-long learning, as well as promote employment as a means to overcome poverty.
- **Environmental innovation:** Life cycle thinking⁶ and resource efficiency go hand in hand. Further integration of both is required at all levels to deliver sustainability solutions that are at the heart of greening economies. Ultimately, a “green economy” decouples economic activities and social developments from negative environmental impacts.
- **Cross-cutting, mutually reinforcing elements:** A “green economy” needs to provide the governing structures and platforms which allow new and innovative collaborations to be shaped and implemented – intra-policy and intra-industry coordination and governance at all levels is crucial and will promote investments for a “green economy”.

⁶ Life cycle thinking (UNEP) is a way of thinking that includes the economic, environmental and social consequences of a produce or process over its entire life cycle

Introduction

Global political context

The world is facing a turning point with multiple economic and financial crises that have social and environmental repercussions.

These crises have seen a resurgence of nationalism and protectionism, and have led governments to withdraw from multilateral approaches such as the Doha Round or on climate change, despite the recognition that countries cannot solve global challenges individually and that standing alone is no longer a viable development option for an economically interdependent global economy.

Placing “economy” at its core, the concept of “green economy” has emerged prominently in various intergovernmental forums within the United Nations System, the Organisation for Economic Co-operation and Development (OECD) through its Green Growth Strategy and in discussions among G20 leaders. In addition, “green economy in the context of sustainable development and poverty eradication” has been declared a priority theme for the United Nations Conference on Sustainable Development in June 2012 (Rio+20).

Business is a critical engine for growth and plays a crucial role in the achievement of sustainable development. With a large range of global business leaders already engaged to a great extent, it is vital that the global business community and governments continue to explore new forms of innovation and collaboration to realize green and inclusive growth and accelerate the transition toward a “green economy”.

Framing the concept of a “green economy”

Governments in the “The Future We Want” negotiating text of the Rio+20 UN Conference on Sustainable Development⁷ have encouraged all countries in all national circumstances to consider the concept of “green economy” as a guiding principle in choosing their development paths - regardless of their economic structure or level of development. It has also been suggested that, as governments choose their own development path, they should take into account the impact they may have on other countries.

⁷ The Rio+20 UN Conference on Sustainable Development negotiations text called “The Future We Want” is available at: www.uncsd2012.org

Recognizing that a “green economy” requires the need to reconcile long, medium and short term vision and actions, the ICC Green Economy Roadmap outlines ten conditions and related policy recommendations as a framework to discuss a range of inter-linked policies and actions for a transition towards a green economy - by business as a part of society as well as in collaboration with other actors in society. The roadmap also has a clearing house function to share existing best practice and initiate new collaborative activities.

Governments are seeking to advance “green economy” policies that integrate economic, social, and environmental objectives.

Governments around the globe are seeking ways to define and shape “green economy” into meaningful policies that advance inclusive economic growth while enhancing environmental protection and social progress. Policies should aim to be consistent with international trade rules, provide access to finance, promote technology transfer, strengthen capacity and reduce inequality. The business community is intrinsic to this debate, and needs to be closely engaged in these important discussions.

For global business, the focus should be rather on “greener economies” to reflect the diversity of sectors and value chains and specific national circumstances.

Green economy” is a term principally utilized by policy makers. There is no single agreed definition, set of indicators or financial measurements for what exactly a “green economy” would look like. ICC would therefore rather focus on “more sustainable” or “greener economies” to acknowledge and reflect the many challenges and opportunities inherent in this concept. Whilst the concept is global in scope, the priorities and actions needed to transition towards a “green economy” may vary from sector to sector, value chain to value chain, and specific national circumstances – hence the idea of “greener economies”. However, for the purpose of intergovernmental policy discussions, business acknowledges “green economy” as a policy term and unifying theme to achieve sustainable development⁸ as the *direction* in which all economies need to strive towards irrespective of existing tensions and current global economic turmoil.

⁸ ‘Our Common Future’ (1987) or the Brundtland report defines sustainable development as: “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Business definition of a “green economy”:

The ICC Green Economy Task Force has defined the term “green economy” as follows: ***“The business community believes that the term “green economy” is embedded in the broader sustainable development concept. The “green economy” is described as an economy in which economic growth and environmental responsibility work together in a mutually reinforcing fashion while supporting progress on social development. Business and industry have a crucial role in delivering the economically viable products, processes, services, and solutions required for the transition to a green economy.”***

Simultaneous approaches are needed, pursuing both, “bottom up/green growth” and “top down/systemic macro-economic” actions. A one-size-fits-all approach will not be effective, nor will policies that work in “silos”.

The terms “green economy” and “green growth” are often used interchangeably. From a business perspective, companies can green their products, processes, services, technologies, implement solutions, and collaborate with their customers, suppliers and stakeholders to green their sectors and value chains. Companies drive research and development (R&D) for “green” innovations and solutions and thus integrate sustainability into business growth strategies. These are bottom up actions at the *operational and process level* that promote sustainable practices.

“Green economy” in turn involves a top down approach that addresses systemic challenges at the strategic and macro-economic level The term “economy” implies the need to address these systemic challenges at the macro level beyond Gross Domestic Product (GDP), including new approaches to incorporate externalities⁹ in economic terms.

⁹ *Externalities is referred to as following:*

Externalities (OECD Glossary; monetization of benefits and costs): Externalities refers to situations when the effect of production or consumption of goods and services imposes costs or benefits on others which are not reflected in the prices charged for the goods and services being provided.

Negative externalities (external costs; M. Bianchini): A negative externality imposes a negative side effect on a third party; negative “social cost”. Negative externalities are for example air or water pollutions, unsustainable consumption, decrease in wealth.

Positive externalities (external benefits, M. Bianchini): Positive externalities refer to beneficial impacts/external benefits that may lead to positive impacts on society, such as increase of education and skills resulting in resource efficiency, knowledge transfers leading to inventions and innovations, etc.

Environmental externalities (OECD Glossary): Environmental externalities refer to the economic concept of uncompensated environmental effects of production and consumption that affect consumer utility and enterprise cost outside the market mechanism.

As a consequence of negative externalities, private costs of production tend to be lower than its “social” cost. It is the aim of the “polluter/user-pays” principle to prompt households and enterprises to internalize externalities in their plans and budgets.

Ten conditions for a transition towards a “green economy”

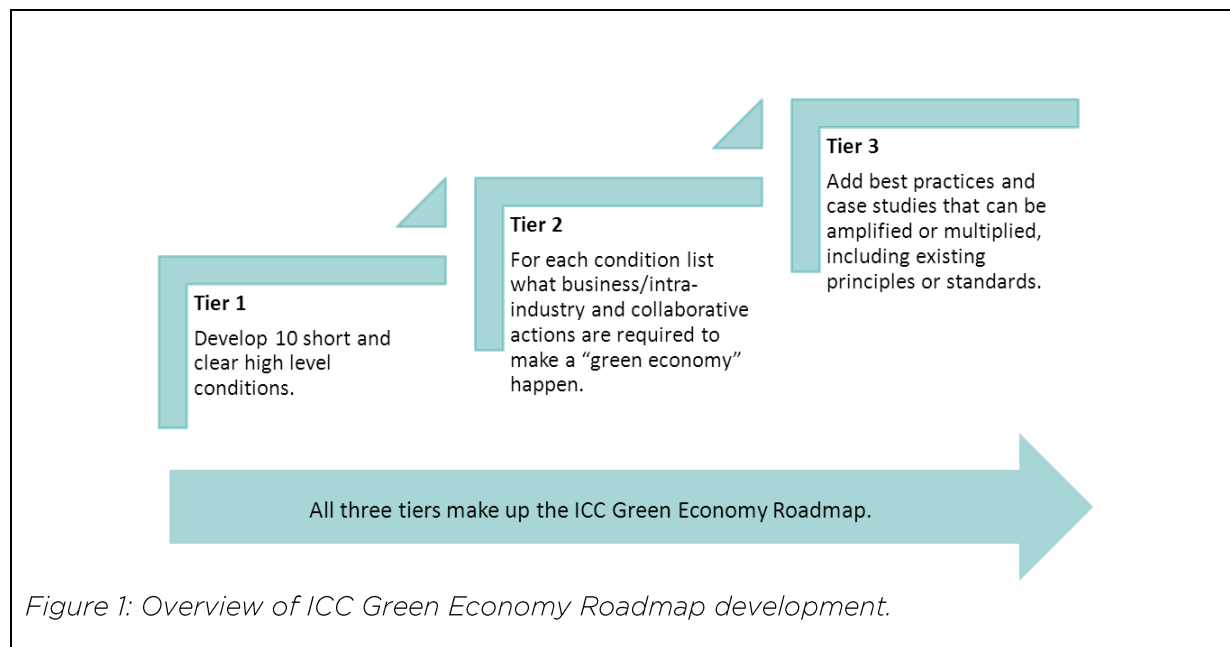
A “green economy” recognizes the interdependences of the economic, social and environmental dimensions of sustainable development and integrates them in a more holistic manner, both in terms of business strategies and in terms of enabling policy mixes.

A “green economy” requires the three dimensions (economic, social, and environmental) of sustainable development to work in a mutually reinforcing fashion. Economic growth is and will continue to be essential to provide the livelihoods, resources and development necessary to build capacity and finance actions in a transition towards a “green economy”.

Efforts by all actors should reconcile the need for short and medium-term pressures with longer-term shared value. It is paramount to recognize the crucial role of SMEs within the value chain as innovators and job creators, but also the need for capacity building and other assistance to raise their performance for a “green economy”.

The private sector has already taken many concrete actions towards building a “green economy”, including reducing environmental impacts across value chains, increasing resource efficiency, investing in a full range of clean energy options.

Following extensive consultations with the global business community and stakeholders, ICC articulated ten conditions for a “green economy” in a three tiered approach that provide a framework to determine what is required to advance the transition towards a “green economy”. Each of the three tiers requires *innovation*, *collaboration* and *governance* to be considered as an integrated set.



Innovation, collaboration and governance for the integration of the economic, social, and environmental dimensions of sustainable development are at the heart of a transition towards a “green economy”. Innovation, however, do not necessarily come naturally. It needs to be actively fostered through dialogue and collaboration to become a key driver of economic progress and well-being with links to competitiveness, and meeting global sustainability challenges. Much of the current rise in living standards is due to innovation - this has been the case since the industrial revolution. Thus, the capability of governments, business, and civil society to work together to bring innovate solutions to market will be crucial to drive society’s longer term shared value¹⁰. Mutually, reinforcing cross-cutting elements link the three innovation dimensions of sustainable development (economic, social, environmental) to achieve an efficient and accelerated transition towards a “green economy” as outlined in figure 2.

¹⁰ Paragraph based on: Innovation and Growth (OECD, 2007)

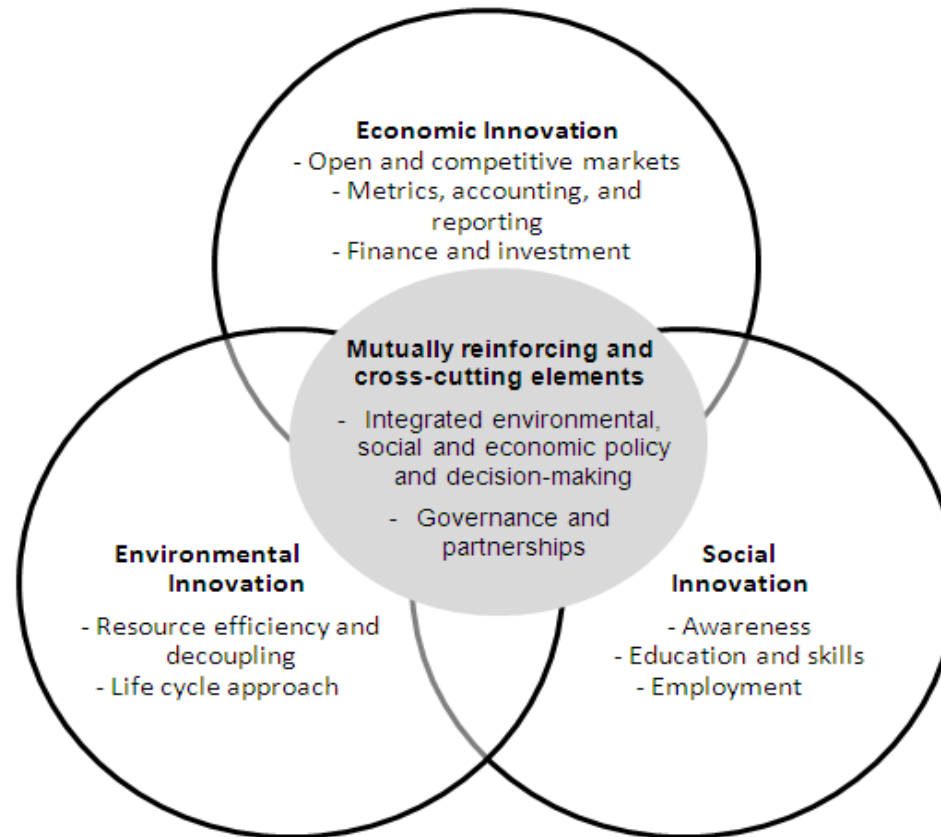


Figure 2: Interdependence of ten conditions for a transition towards a “green economy”.

Economic innovation

Open and competitive markets

High-level condition

A “green economy” emphasizes the importance of sustainable growth and access to open, well-functioning, and efficient markets. It recognizes that relying on markets is indispensable to the evolution of both societies and companies towards “greener” economic activity and prosperity. In order to become a functional economic system, a “green economy” needs to become embedded in international and global markets and made operational in business models and balance sheets. Economy-wide approaches should be adopted that include receptive markets for delivering business value and commercially viable products and services along the value chain.

State of Play

Companies have developed knowledge and skills which integrate sustainable development management and business practices into a strategic advantage for both the specific businesses and the countries they operate in.

Open trade and investment have raised millions of people out of poverty and their enhancement is indispensable to achieving sustainability challenges. For example, many efficient and environmental effective technologies and products are on the market and their market uptake could be enhanced by alleviating both market access and policy barriers.

Business and intra-industry action¹¹

- **Foster development of products and services that contribute to sustainable development**, by, for example, making more efficient use of natural resources, reducing or limiting environmental impacts and enhancing job creation and capacity building.
- **Initiate more intra-industry dialogues** between producers, customers, suppliers and users to foster innovation and capitalize on hidden opportunities in “green economies”.
- **Develop new and innovative business models.**
- **Enhance “idea platforms” for new innovations.**

Collaborative action¹²

- **Pursue a global level playing field and strengthen multilateral rules-based trade and investment for sustainable development by:**
 - *Preventing potential competitive distortions* in international trade in the transition to “greener” economies by avoiding, for example, unilaterally imposed environmental measures to address trans-boundary concerns.
 - *Eliminating or reducing tariff and non-tariff trade barriers* on all goods and services, including on environmental goods and services.
 - *Providing long-term, stable and transparent policy frameworks and incentives* governed by the rule of law, including effective intellectual property rights protection (IPR) – with a view to enhance both innovation and technology dissemination (please see also [ICC Intellectual Property Roadmap](#) and [ICC Guidelines for International Investment](#)).
- **Consider that the design parameters for environmental taxation should be to provide a framework which underpins environmental policy and affects behaviours** for specific sustainability goals in the most economically efficient manner.
- **Initiate collaboration between government, academia, companies, and others to develop quantitative analyses and macroeconomic models** that i) assess the impact of “green” investment and finance and ii) outline

¹¹ Intra-industry actions include business to business collaborations; items under this point are “under control” of each company or business organization. Thus, a quicker implementation is possible.

¹² Collaborative action may include collaborations with local, national, regional, governments and inter-governmental system as well as civil society stakeholders with business.

enabling conditions and policy options necessary for a shift towards a “green economy”.

- **Collectively promote “smart” procurement/purchasing** by both individuals and organisations vis-a-vis products and services that are scientifically proven to have sustainability advantages, while allowing access for companies of all sizes (e.g. cost neutral access possibility).

The road ahead

The economic crisis has made it difficult for hard pressed national treasuries to invest in a “green economy”. In addition, business is suffering from crisis of confidence created by volatile economic conditions. A particular negative consequence has been to delay business investment at a time when such investment and jobs would be badly needed. This difficult environment creates challenges for innovation and its dissemination, especially for new technologies that are poised to make substantial contributions to advancing “greener” economic activity.

In order to overcome this situation, market and policy frameworks should work hand in hand. This is best achieved through a combination of regulatory and voluntary initiatives which combine supply and demand. However, governments intervening in a precautionary manner rather than engaging in dialogue may hamper innovation and place unnecessary hurdles to solutions that can contribute to a “green economy”.

Role of SMEs

The role of SME’s should be considered, in particular:

- when products and services that contribute to sustainable development are developed to support SMEs along the value chain, especially in new and emerging markets.
- when SMEs can uniquely contribute to often niche “green” technologies along a value chain. SMEs can develop new business models very quickly and serve as “innovation labs” that can be scaled up.

Metrics, accounting, and reporting

High-level condition

For a “green economy” to become operational, there is a need for indicators, metrics, accounting measures, and better disclosure and reporting that make sense in economic terms while ultimately including externalities¹³. This entails the simultaneous pursuit of developing operational green growth measures at company level (bottom up) and strategic macro-economic indicators and accounting systems beyond Gross Domestic Product (GDP; top down). This will require a flexible approach that balances costs and benefits and is able to incorporate new knowledge and scientific understanding in the coming decades.

State of play

Substantive progress has been made on sustainability reporting and many companies are already applying sustainability reporting schemes in their operations. Yet, data for sustainability measures and indicators that are rigorous and meaningful in economic terms have not yet been fully developed. Hence a constructive and adaptable approach to reporting is needed to sustain engagement in sustainability reporting by ensuring that all actors in society have the necessary flexibility to reflect their particular circumstances.

Costs and benefits will always have to be considered in a balanced manner in assessing policies and informing decision making, recognizing that prioritization and trade-offs are both important considerations when assessing available options by all actors. Better approaches to account for environmental and social attributes are needed in the long term. Several global initiatives such as “The Economics of Ecosystems and Biodiversity (TEEB)” study on natural capital and corporate efforts have already identified best practices and can inform the development of accounting methods that consider not only the direct costs and benefits but also indirect costs and benefits by attributing some form of monetary value to common goods like air, water, ecosystem services or social issues such as cost of employee absenteeism due to social unrest. More research needs to be done to utilize the knowledge of these “pockets of excellence” and derive appropriate metrics and accounting systems over time.

¹³ Please see footnote 9.

Business and intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Consider developing indicators and measurement tools for sustainability reporting. This includes, for example proactively engaging internal teams to support sustainable development indicators and measurement development. • Initiate and engage in intra-industry collaboration to start developing common methodologies to integrate externalities, both environmental and equity considerations into wider value chain strategies. • Integrate externalities (costs and benefits) into corporate strategies and balance sheets while assuring competitiveness and taking into account national and sectoral circumstances. • Reduce future business risk through greater risk analysis. • Encourage the financial market to enable investors to make fully informed investment decisions by using available information on sustainability performance. • Drive new business development through investments in joint-research with academia. 	<ul style="list-style-type: none"> • Encourage greater transparency and reporting of sustainability policies and practices by all actors, whether, government, business or civil society organizations. • Avoid one-size-fits-all approaches to sustainability reporting that may hamper the transition to “green economies” and not take into account national, sectoral and regional differences. • Further stimulate transparency in relation to project criteria and public funding • Promote scientific partnerships, research, and dialogues to discuss and support the development of metrics and indicators that make sense for individual companies, non-profit organizations, governments, and other stakeholders, • Utilize research outcomes to inform long term accounting of natural capital at national, regional, and global levels. • Assess, develop and adopt meaningful and appropriate indicators in ministries and national statistics for national green growth plans (including for local authorities). • Establish global collaborative initiatives to share best practices and experiences as well as develop pilot projects on metrics and measures for business and government. • Support collaboration between companies and government to further calculate and reduce environmental footprints.

The road ahead

As there is no fully developed rigorous and agreed upon method for measuring environmental and social externalities, it is difficult to fully quantify environmental and equity considerations or make sound comparisons.

For the private sector, activities should be measured and accounted for according to sound methodologies and in conformity with legal requirements, as well as to track costs, revenues, and return on investment. Numerous efforts that seek to develop more holistic and full accounting standards should be joined up through more study, dialogue, and experience sharing to better understand the total costs and benefits of producing and using products and services over their life cycle. More dialogue should also be initiated on how and by whom such information should be reflected internally and communicated externally. One early work in this direction is the above already cited example of “The Economics of Ecosystems and Biodiversity (TEEB)” study. Further work to mature these concepts will continue to unfold through collaboration of global experts and thought leaders, building on successful voluntary examples such as the Carbon Disclosure Project (CDP) and the work laid out in the Stiglitz report¹⁴.

Role of SMEs

The impact on SMEs of reporting systems needs to be better understood. A disproportionate administrative and compliance burden on SMEs should be avoided.

¹⁴ The Stiglitz Report - Reforming the International Monetary and Financial Systems in the Wake of the Global Crisis (2010).

Finance and investment

High-level condition

A “green economy” actively drives innovation in both private and public finance and investment in the direction of sustainable development. To succeed, supporting policy and regulatory frameworks that promote informed investment decisions for both public and private investors are required. A “green economy” stimulates new demand for innovative and responsible businesses and government services through transparency. It also provides appropriate public-private engagement mechanisms that look beyond short-term pressures and focus on the development of long term shared value.

State of play

Business has already developed many approaches, including innovation and operational management systems to develop and deploy advanced technologies and services through investments that will underwrite the transition to a “greener economy”. At the same time, there are examples of where targeted research and investment have not succeeded in delivering commercially viable products or services because markets did not materialize as projected.

In order to make longer term investment decisions in the direction of a “green economy”, business requires predictability and regulatory clarity. Investors and other providers of capital should have the opportunity to earn returns commensurate with the risks they are taking. As long as enabling conditions lack regulatory and market clarity, investments in “green economy” initiatives will be slow and compete with investments for conventional activities. It should be noted that business allocates its investments globally and only when there is sufficient level of regulatory certainty, consistency and clarity will such investments be viable and provide the expected return. Often, policy can help eliminate non-economic barriers facing a “green economy”, for example administrative barriers, lack of information and social acceptance.

For further information, please see also [2012 ICC Guidelines for International Investment](#), including chapters on labour and fiscal policy, competitive neutrality, and corporate responsibility.

Business and intra-industry action ¹⁵	Collaborative action
<ul style="list-style-type: none"> • Accelerate the development of products and services for green growth by combining private finance and access to public funds. A particularly important area for innovation and sharing of best practice involves the targeted use of public funds to leverage private capital in the most efficient (and preferably technology-neutral) manner. • Develop innovative approaches to financing, such as partial risk sharing mechanisms (including also developing common methodologies or standards), credit guarantees and co-financing in order to reduce investment risks. The reduction of risks should apply through the entire development spectrum, from the initial design through construction, and is especially important for institutional investors with large asset volumes. • Develop non-financial support mechanisms such as advisory services to educate local lenders (banks, institutional lenders, and microfinance intermediaries in emerging markets) to establish dedicated financial products, incentives, credit lines, and pools of capital that target specific opportunities for “greening economies”, such as, partial credit guarantees, or refinancing guarantees for projects. • Develop and promote inclusive business models (e.g. microfinance) that meet the needs of a “green economy” in the context of poverty eradication. 	<ul style="list-style-type: none"> • Include “financing and investment” in national green growth strategies. • Actively drive investments in the direction of sustainable development by <ul style="list-style-type: none"> - <i>Making business aware of countries or other investors that seek to increase private investment in key areas such as clean energy solutions or resource efficiency.</i> - <i>Supporting research and development by injecting start up finance into prototype projects and technologies where risk capital is lacking.</i> - <i>Using publicly financed institutions that are run as private entities and can leverage private capital to deliver social goods, e.g. UK Green Investment Bank, Australia Clean Energy Finance Corporation, UN Green Climate Fund; the private sector should be involved in the design and evaluation of these new institutions.</i> - <i>Encourage, over the longer term, institutional investors to allocate parts of their assets under management to “green” investments.</i> • Increase efforts to pool public funding to leverage private investments by <ul style="list-style-type: none"> - <i>Scaling up risk mitigation and co-investment funding structures and shifting away from a project-by-project towards a portfolio approach, while ensuring there is a support for initial project and programme development.</i>

¹⁵ This section refers more largely to investors / banking sector actions

- *Incorporating “leveraging private finance” as a key performance strategy for national and multilateral banks and direct government climate and development cooperation.*
- *Facilitating greater sustainable infrastructure financing by institutional investors through developing insurance and risk mitigation products, robust and transparent rules for debt aggregation.*
- *Using standards to verify environmental benefits of bond investments.*
- **Develop innovative bond schemes backed by guarantees** (e.g. sovereign guarantees) to allow creating economies of scale for “greener” investments. Bonds allow for large investment volumes facilitating scaling up and accelerating green growth activities.
- **Consider the appropriate application of policy tools to reflect values and prices in the most economically efficient manner ensuring they are consistent with the overall policy framework in place.**

The road ahead

The desired level of financing and investment for “green economy” is still low in comparison with the overall size of the global economy. As countries develop their green growth strategies, they should provide regulatory clarity and consistency for all innovations and be technology neutral to stimulate markets towards a transition to a “green economy”.

For a “green economy” to happen at an accelerated pace, economies of scale need to be created through supporting mechanisms that balance risks while leveraging private sector finance and investment. Stronger public-private cooperation mechanisms such as with International Financial Institutions (IFIs) could be one example to share risk and increase leveraging of private sector capital.

Furthermore, methods and processes for “green” investments should create global synergies for joint investments, e.g. in urban planning and between different infrastructure supply systems.

More work needs to be done to demonstrate the business case through pilot projects and stimulate replication by sharing best practices.

Role of SMEs

The requirements and needs of SMEs for investment and finance and specific schemes such as micro-financing and e-finance should be considered. The cash flow requirements of SMEs and financing time frames (very short term help and long term accompanying one) need to be understood and integrated into financing and investment schemes.

Banks should also consider SMEs as key sources to detect successful approaches before scaling them up.

Environmental innovation

Resource efficiency and decoupling¹⁶

High-level condition

A “green economy” recognizes that the world’s resources are finite and must be managed with scarcity in mind. It enhances the resource efficiency of materials flows through the principle of “more from less”. It also seeks to take into account the economic value of natural capital and ecosystem services. Over the long term, a “green economy” strives to increase economic, social, and environmental benefits to achieve sustainability while decoupling economic activities and social developments from negative environmental impacts.

State of play

Greening the world economies is a long term effort that calls for a holistic life cycle view across all countries and elements of the economy. This involves further minimizing the environmental footprint of all economic activity by enhancing the efficient use of natural resources.

Resource efficiency is one facet of the broader effort to de-couple economic development from environmental degradation taking into account the interdependence of all economic activity on environmental systems. Significant progress has been achieved to enhance the efficient use of all natural resources, be it carbon, water, rare metals or other materials, yet more needs to be done to understand the nexus between them and enhance collaboration among sectors and countries to further decouple economic activities from resource use.

The concept of decoupling seeks to separate the dependence of economic activity from the use of natural resources in such a way that economic activity is relatively decoupled from the growth rates of natural resource consumption. More work needs to be done to make this concept operational in both policy and specific value chains.

¹⁶ The Wuppertal Institute distinguishes “decoupling” as following:

- absolute decoupling: reduction of per capita resource consumption;
- relative decoupling: reduction of growth rates of resource consumption; this document refers to relative decoupling.

An emerging element in the resource debate is the valuation of eco-system services which seeks to reflect the value of natural and renewable resources, also known as natural capital. The concept of natural capital valuation includes taking into account environmentally provided assets from both renewable (e.g. grassland, forest, fisheries) and non-renewable resources. Included in this concept are examples such as oxygen production, purification of water and air, prevention of soil erosion and production of food.

Business and intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Adopt a value chain approach based on life cycle thinking¹⁷ and a focus on resource efficiency. Manufacturing companies should further adopt a value chain approach based on life cycle thinking and focus on resource efficiency. Information and communication technology (ICT) and service oriented companies can enable the value chain and lifecycle thinking to deliver innovative solutions. • Initiate value chain projects that capitalize on the nexus of resource use. • Work within corporate value chains to measure, manage and reduce environmental impacts of manufacturing activities, transport and distribution, and end of life options. • Partner with innovation agencies and innovation incubators to drive successful implementation of solutions. 	<ul style="list-style-type: none"> • Provide incentives and policy guidance to drive efficiency in the use and re-use of all natural resources (beyond carbon and energy) and ensure access to and sustainable use of all, especially scarce resources. • Incentivise companies through new policy instruments so they can scale up and accelerate the production of “green” technologies and efficiency improvements to achieve economies of scale. • Create and deliver new platforms for public-private collaboration at the international and national levels including on research and development. • Collaborate to educate consumers about the importance of resource efficiency and seek to design and offer products that help consumers make more sustainable consumption choices and achieve more sustainable lifestyles. • Promote synergistic approaches that reaffirm the intrinsic value of biodiversity both for society and for business. • Develop resource efficiency plans for e.g. water or infrastructure. • Adopt the 10 Year Framework of Programmes on Sustainable Consumption and Production (SCP).

¹⁷ Life cycle thinking (UNEP) is a way of thinking that includes the economic, environmental and social consequences of a product or process over its entire life cycle

The road ahead

The growth of available scientific data and knowledge through technological advances and global data and information systems on the state of the natural world should be known, understood, shared and utilized by both business and governments in their planning strategies and policies.

Best practices decoupling economic growth from natural resource use exist but have yet to be mainstreamed. Efforts need to be scaled up to identify key implementation challenges and bring solutions and opportunities, e.g. for technological and non-technological innovation barriers.

However, in order to do so, more mechanisms and platforms will need to be created for all actors to realise opportunities and overcome existing governance gaps.

Role of SMEs

The role that SMEs may play for resource efficiency in the value chain cannot be underestimated. Dialogue and collaborations need to include SMEs and consider how they can leverage growing market share by introducing their innovations in the value chain. Supporting structures, for example chambers of commerce, can be one way to allow SMEs to gain access and more actively participate in the debate on resource efficiency and innovation building.

Life cycle¹⁸ approach

High-level condition

A “green economy” adopts a life cycle approach which involves further minimizing the environmental footprint of all economic activity through applying science and acknowledging emerging knowledge. The life cycle of a product starts at raw material extraction, research on conceptual design and development of products and services, manufacturing, distribution, use and end of life treatment options such as recycling, recovery and re-use or re-manufacturing. At every stage of the life cycle of a product, process, technology or service, critical questions about costs, benefits, environmental responsibility and social impact are being addressed. A life cycle approach also helps identify hidden opportunities and accounts for unintended consequences, spill-over implications and competition for resources.

State of play

A life cycle involves the sequence of stages of existence, transformation and use experienced by a product starting from the extraction of its raw materials and finishing with its end of life. The expression “cradle to grave¹⁹” has often been used to describe this concept. More recently, the expression “cradle to cradle²⁰” is used to illustrate a true cycle and strive towards a circular economy²¹ that would decouple economic activity from environmental impact.

¹⁸ Life cycle: Consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal (ISO 2006).

¹⁹ Cradle to grave: life cycle, from the time natural resources are extracted from the ground and processed through each subsequent stage of manufacturing, transportation, product use, recycling, and ultimately, disposal. (Athena Institute & National Renewable Energy Laboratory draft 2010 from UNEP, 2011)

²⁰ Cradle to cradle, concept to promote a closed loop circular process. William McDonough and Michael Braungart make the case for an economic model that can be a ‘creator of goods and services that generate ecological, social and economic value’ (Chatham House, 2012 from McDonough, W. and Braungart, M. (2002), Cradle To Cradle: Remaking The Way We Make Things (San Francisco, CA: North Point Press).

²¹ Circular economy: approach that would transform the function of resources in the economy. Waste from factories would become a valuable input to another process – and products could be repaired, reused or upgraded instead of thrown away (Chatham House, 2012).

The various stages of life cycle assessment need to comply with sustainable development principles. The life cycle concept applies to the material life cycle of products and technologies, which must be managed in the most resource efficient manner. It may also refer to the life cycle of a business activity, which must actively manage its value chains with a new holistic mind-set. Applied properly, a life cycle approach leads to a resource efficient, decoupled or circular economy, in other words what could also be described as a “green economy”.

Business and intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Adopt a holistic life cycle approach in designing and developing products and services across the value chain. In doing so, raise awareness and focus attention on the need for all actors to deliver on their shared responsibility to manage products safely and responsibly at each stage of their life cycle. • Further evolve metrics of a life cycle approach to track and use data to manage the use of resources and externalities within industrial production processes (sustainable production) and to enhance product stewardship across value chains. • Improve existing products and develop new ones by actively fostering dialogue and collaboration between suppliers, customers, and other stakeholders in the value chain, from research, manufacturing, downstream users to logistics, distribution and waste management. In doing so, connect the value chain in a holistic manner and identify the hidden opportunities for “green economy”. • Enhance the flow of information, communication, and uptake of product information across their life cycle to promote informed decision making by all actors. 	<ul style="list-style-type: none"> • Recognize the changes in the way business operates and ensure adequate protection of intellectual property to enable these linkages, connections and exchanges. • Provide long-term, stable and transparent policy frameworks that foster and enable product stewardship across product life cycles. • Create mechanisms and platforms for companies and countries to adopt a holistic life-cycle approach that recognizes that products and services are disbursed across many countries. • Encourage innovative industrial product designs to support the “green economy” concept. • Foster collaboration (especially among countries) to provide overarching industrial policy frameworks that bring coherence in product management between the various product stages throughout the life cycle. • Ensure policy mixes at one stage of the life cycle of a product do not cause unintended consequences at another stage of the life cycle. • Integrate and foster life cycle thinking at all levels of governmental operations. • Enhance the science-policy interface and ensure science based classification of products and risk assessment.

- **Innovate and close knowledge gaps to achieve more demand driven product designs.**
- **Further develop guiding principles and tools for life cycle management and foster adoption, replication and scaling up of existing best practices** across all sectors and across geographically dispersed value chains.
- **Ensure that global best practices are implemented across the product life cycle.**

The road ahead

Life cycle thinking and resource efficiency go hand in hand. All business sectors should further advance these concepts through greening all stages along the life cycle of their products. Existing intra-industry best practices should be leveraged to promote a life cycle mindset. Governments should actively engage to create this life cycle mindset as it will foster sustainability.

The biggest challenge in this area is fragmented value chains and lack of governance mechanisms, both within the chain of commerce and with governments, to promote dialogue and collaboration. Joint efforts between governments and business therefore need to be stimulated to raise awareness, understanding and allow integration of life cycle thinking into existing policy frameworks.

Role of SMEs

SMEs often bring innovative niche products. In some value chains, SMEs do have a unique role in bringing the essential niche products or technologies to improve process efficiency and close the gaps thus permitting full life cycle approaches. Policy formulation needs to consider the SME sector, the best practices they may be able to contribute as well as other considerations depending on local or geographical needs and circumstances.

Social innovation

Awareness

High-level condition

The shift towards a “green economy” requires awareness regarding global economic, environmental and social challenges as well as opportunities available. Greater awareness and understanding are pre-requisites for setting priorities and action that require a shift in the global debate. It is a shared priority and challenge for all actors, whether government²², inter-governmental bodies, business or civil society and consumers.

State of Play

As countries are at different stages of development through a diversity of national circumstances and societal priorities, we can expect there will be numerous “green economies”. Each actor in society needs to determine what is meaningful and relevant for sustainable development within the context of their own circumstances and priorities.

There is already significant awareness in the global business community on “green economy” and “sustainable development”. Leading companies have incorporated sustainability into their business strategy. However, more needs to be done to raise global awareness to address the integration of the three dimensions (economic, social, environment) of sustainable development.

Business and Intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Raise global awareness about sustainability challenges within companies and business organisations targeting employees and business partners so they can innovate collectively to develop new business solutions. 	<ul style="list-style-type: none"> • Reinvigorate political will in governments for sustainable development and recall Agenda 21 as the basic framework for policy development and recognize that global problems in economy, finance, environment and society are inter-linked, and thus seek an integrated approach on strategies

²² “Government” is used as an umbrella term for governments at national, regional, and local levels.

- **Promote knowledge sharing and build understanding about sustainability to connect** corporate value chains, for example by sharing best practices.
 - **Support businesses in providing reliable information to encourage innovation and competition, based on responsible presentation of product choices.** This includes to encourage adoption of a globally harmonized metrics that could offer a common credible environmental claims system to level the communication playing field, e.g. [ICC Framework for Responsible Environmental Marketing Communications](#).
 - **Utilize available instruments and tools** such as labels and certification schemes, green audits, and other information sharing vehicles to provide stakeholders and consumers with a credible basis for decision making towards sustainable choices.
- and solutions (see also points under “mutually reinforcing and cross-cutting elements”).
- **Raise global understanding on sustainable development and interlocked challenges through simple messages,** and diverse communications means to reach a wider audience.
 - **Achieve a shared tangible vision and common understanding** on “green economy”, identifying key elements of a “green and inclusive economy” taking into account national, regional, and local circumstances.
 - **Promote education campaigns** to raise consumer consciousness regarding current consumption patterns and encourage more sustainable consumption patterns
 - **Put mechanisms in place to integrate knowledge and understanding** derived from awareness into decision-making processes.
 - **Develop action- and result-based dialogues** addressing specific cross-cutting questions in a holistic manner and identify key action items and implementation steps for particular countries and value chains.

The road ahead

While awareness and understanding has considerably increased at different scales and levels for countries and businesses, much work is left to be done to move from awareness to understanding with the eventual aim of implementation on the individual level. Joint public-private awareness and education campaigns may be one opportunity to reach a wider audience required for a transition towards a “green economy”.

The biggest challenge in this area is the lack of governance mechanisms, both within global value chains as well as governments, to promote dialogue and collaboration that address the three dimensions of sustainability in an integrated manner. Joint efforts between governments and business need to be stimulated to raise awareness, understanding, and replicate best practices.

Role of SMEs

Given their local involvement and ties, SMEs are essential in implementing concrete solutions to local social innovations. Awareness programmes specifically tailored for SMEs need to be integrated into any public or private programmes and best practice examples from SMEs recorded and shared across a wide spectrum of sectors.

Education and skills

High-level condition

Education is paramount for the “operationalization” of the “green economy”. Education must be enhanced by policy makers, academia and business to build the skills and entrepreneurship needed for implementation. All skill requirements will be affected from continuously evolving environmental and scientific understandings. A “green economy” should seek to develop the necessary skills in STEM²³ and inter-disciplinary subjects.

State of play

General education is critical to understand challenges and face them with entrepreneurship, sciences and technological skills needed to develop solutions. Technical skills are needed for effective implementation. However, access to education for all has not yet been achieved and education levels differ widely across countries.

With an increasing global population, the needs and demands of developing and emerging economies for education will increase substantially, while the transformation in developed countries will require new talents and skills.

²³ STEM: science, technology, engineering, and mathematics

Education for a “green economy” should allow the understanding of the ten conditions outlined in this Roadmap, its underlying principles and need for an integrated approach.

Business and intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Use the education system, including new and innovative ICT²⁴, training and outreach programmes, to educate and develop skills of future employees on sustainability. This includes incorporating knowledge and expertise from academia, government, science and civil society in order to better inform and shape business strategies around sustainability. • Work with and support educational institutions to incorporate sustainability knowledge into all levels of curricula thereby developing the required capacity and entrepreneurship to support a “green economy”. 	<ul style="list-style-type: none"> • Stimulate young people’s interest in STEM (science, technology, engineering, mathematics) disciplines and careers through the identification, scale up and replication of successful public-private initiatives and partnerships. • Strengthen university curricula and further education and training offers for sustainability by <ul style="list-style-type: none"> - <i>Reaching out to business</i> for input on needs to address societal challenges and develop business case studies for sustainable development. - <i>Leveraging educational materials</i> developed by and with the private sector. - <i>Promoting distant learning</i> and the Open University concept, virtual universities, and further cooperation among universities to give wider access to knowledge and skills needed. • Foster entrepreneurship by educating young people to advance innovative solutions for a “green economy” taking into account the interdependences of economic, environmental, and social dimensions. • Develop education policies that allow all groups in society to participate actively and inclusively in economic, social and political life for the implementation of a “green economy”.

²⁴ ICT: information and communication technologies

The road ahead

A fully functioning, educated workforce is paramount to innovative business development and social progress and it must be actively fostered by policy makers, academia, and business.

Increasing efforts by government, employers, education and training providers and individuals is essential to enhance global education for sustainable development and promote capacity and entrepreneurship for solutions oriented thinking towards a “green economy”. Education in STEM disciplines is of particular importance for science and technology companies and sectors. Joint partnerships on STEM education such as the “Train the Teachers” concept serve as best practices and should be further scaled up.

Collaboration will drive innovation and benefit from a continuum of education, training and lifelong learning for sustainable development. It will also create higher education and skills that foster entrepreneurial and solution-oriented thinking, as well as help building resilience into the economy, society and nature to deal with change.

Role of SMEs

When awareness has reached SMEs, they have an important role in education and skill building. SMEs have often close relationships with local education structures and thus can help build “sustainability” into education schemes.

Employment

High-level condition

Employment is critical for the economy, the environment and social development. A “green economy” provides decent and meaningful employment and promotes employment throughout the world, especially as a means to overcome poverty and enhance development. Policies aimed to create so called “green jobs” should not come at the cost of a net reduction of jobs across the overall economy. A distinction between “green” and “brown” jobs must be avoided as all jobs must contribute to green all aspects of the economy.

State of play

Business plays a crucial role in social and economic development by providing jobs, livelihoods and creating value and prosperity. An alleged “brown” sector may produce and deliver the indispensable building blocks for a so called “green” sector. Thus, it is crucial for a “green economy” that all jobs participate in greening value chains.

The link between “green economy” and job creation may not necessarily be linear. Increasingly, policy makers are using the term “green and inclusive economy” to signal the need for gender and social equity. In addition, levels of unemployment, especially in youth, are soaring around the world. Some economies also face an intergenerational shift. Whilst employment is local, the skill sets that people need to keep employable are transferable across sectors, regions or countries.

Business and intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Tap the talent pool of all groups in society by ensuring fair career options. • Activate skills that promote more holistic and interdisciplinary thinking for business solutions. • Support efforts to equip the workforce with skills relevant to a “green economy”, such as trainings, internships, secondments, and short term assignments in new sectors. • Inform and exchange with policy-makers to address the skill gap to ensure continued “supply” of high quality workforce. 	<ul style="list-style-type: none"> • Put policies in place that support and encourage the greening of all jobs in all sectors. Abandon the distinction between “green” and “brown” since these terms are not definable by sectors or jobs and do not reflect a life cycle approach across the value chain. • Carefully assess transition policies so that the creation of jobs in one sector does not come at the cost of job losses in another sector or causes a net reduction of jobs across the overall economy.

- **Incorporate sustainability thinking and principles** into corporate employee engagement, learning and development programmes.
- **Put in place training programmes for employees** in declining sectors as well as in sectors adapting to a “green economy”.
- **Establish a strategic policy approach to align skills with labour market needs.** that
 - suit national circumstances and adjust the labour market accordingly.
 - ensure employment policies create fair career opportunities for all which is fundamental to securing a sustainable future. A special emphasis should be given to create labour market conditions that work for the youth.
- **Develop more clearinghouse platforms that offer employment opportunities.** Several examples on national or bilateral level exist already and could be leveraged on the global level.
- **Promote small business entrepreneurship and self-employment** through innovative financing mechanisms including microcredits.
- **Stimulate collaboration for sustainable business growth and job creation** through public-private partnerships and new forms of innovative alliances.

The road ahead

The “sustainability innovation wave” will shift employment just as previous innovation waves (e.g. ICT) have impacted employment. Thus, any transition policies on employment for “green” economic growth and new jobs must be formulated with life cycle and value chain concepts in mind. Global job creation could be boosted if governments establish jointly with business and stakeholders new and efficient mechanisms to create opportunities for “sustainability entrepreneurs” and channel and scale up financing for such entrepreneurship.

Role of SMEs

Many new jobs are created by SMEs. They are crucial actors in the global economy and in overcoming poverty by offering employment and integration in their respective economies.

Furthermore, SMEs can adapt to local demand and offer solutions quickly because of a better knowledge of employment conditions in their areas.

Mutually reinforcing and cross-cutting elements

Integrated environmental, social and economic policy and decision-making

High-level condition

A “green economy” requires a holistic approach to decision-making. It integrates and balances policies with respect to environmental, social and economic priorities by considering the intended and unintended consequences of interlinked policies that may result in synergies or barriers, and promote or hinder economy-wide, “greener” growth. Consequently, it will be essential to enhance scientific input and consider perspectives from a variety of stakeholders to assess policy pathways and to improve processes moving forward.

State of play

A deeper understanding of links between economic, social, and environmental policy should inform effective policy mixes to address sustainability challenges. Financial, social and environmental ministries must work together in an integrated manner to create and implement mechanisms for alignment when considering decision making such as for inter-service and inter-ministerial consultations.

There are a number of different policy instruments which aim at promoting sustainable development, including the production and use of environmentally sound products and processes within a market framework, job creation, or capacity building. Whether taxes, subsidies or other policy instruments are employed, they need to be based on cost-benefit analysis, be transparent, and undergo comprehensive competitiveness checks and sustainability impact assessments.

In order to succeed in the long term, enabling policies and incentives should be clear, predictable, practical, targeted, time-limited, and consistent within the overall context of the total policy framework for society.

For example, environmental policy on resource efficiency should anticipate its effects on economic and financing policy and the impact on jobs. Likewise, economic policy on resource efficiency (e.g. access and cost of raw materials and volatility in the market) should anticipate its effects on environmental, social and development policy. As resource efficiency may be more value chain driven and a life cycle approach may be more product driven, future policy mixes need to bridge the gaps between supply and demand and should anticipate the links between resource efficiency and product life cycle. This is complex and requires a systemic approach. If done properly, it will balance policy mixes against each other and leverage synergies. Any policy proposals on how to deal with “natural capital” should support and reinforce the goals to achieve decoupling.

Business and intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Forge innovative alliances and coalitions between sectors and across value chains to identify new business opportunities through value chain engagement. • Leverage existing best practices and encourage other companies to join such practices to raise the bar and enhance performance in the value chain, including SMEs. • Create company sustainability goals and adopt sustainability targets (for example to reduce water, energy and material use) in order to drive innovation. • Enroll interdisciplinary competence and diversity to shape corporate sustainability strategies. Anticipate consequences both in terms of opportunities and potential risks. 	<ul style="list-style-type: none"> • Foster results-based management and alignment in development cooperation integrating all three dimensions of sustainable development. • Adapt a system-wide strategy for sustainability across multilateral and other public bodies, including encouraging the development of synergies between compatible multilateral sustainability related agreements while preserving and complementing the independence and tailored nature of multilateral agreements. • Enhance domestic and international inter-policy coordination of regulatory frameworks and incentive programmes. This may include for example analysing how policy mixes interact with each other by assessing the environmental and social dimensions while taking into account competitiveness. • Support building institutional capacity to create aligned and balanced policy changes that can also be implemented. • Provide dialogue forums where business of all sizes can interact with government and other stakeholder in green growth efforts, e.g. sharing scientific and technical inputs and expertise.

The road ahead

The prospect of critical, interlocking economic and financial crises with pressing environmental and social challenges in the areas of resource use, food security, water, oceans and seas, infrastructure and cities, energy and climate, etc. poses extraordinarily complex and interconnected societal challenges. The need to create economic opportunities for a growing population provides business opportunities through the full use of solutions the private sector has to offer.

Despite the challenges of increasing levels of government debt in some countries and international economic and financial instability, the integration of environmental, social and economic policy and decision-making and the investment of limited resources for capacity building and new, sustainability driven business development for green growth must continue.

Greening the global economy is a long-term and cross-cutting effort that requires balancing all aspects of the economy. Moving towards a “green economy” involves joint efforts to identify and capitalize on the hidden, or not immediately obvious, opportunities of these interdependences. Framing the “green economy” in this manner helps to align the economy wide intra-policy and intra-industry coordination at all levels.

Role of SMEs

SMEs are of particular value in niche areas and their inclusion in green growth should be leveraged further. Chambers of commerce can play an active role in engaging the SME sector and should contribute to identify relevant business opportunities as well as areas of challenge or where policy can be better adapted to support the SME sector.

Governance and partnerships

High-level condition

A “green economy” is based on governance structures that allow all actors to meet their shared responsibilities. Governance structures at local, regional, national and global levels need to be aligned and mutually reinforce each other for innovation to occur. Elements include, but are not limited to, multilateral rules-based trade and investment, a stable economic environment governed by the rule of law, effective intellectual property rights protection, strong contractual arrangements, and safe and stable communities.

The more effectively governments govern, the more investments they will attract. A key modus operandi of a “green economy” is new approaches that facilitate innovative collaborations between business, government and civil society. Such collaborations can take many forms, such as public-private partnerships, business value chain engagements and alliances with academia and consumers.

State of play

Global and national governance structures must not only be conducive to sustainable production and consumption efforts at company level (individual level, bottom up), but in parallel must address the systemic challenge of macro-economic models (top down).

Institutional structures and frameworks that govern financial flows will become critical. They will require sound governance and transparency, particularly if this involves transfers between countries.

The right combination of rights, responsibilities, laws, incentives and agreements can encourage environmental protection, rational use of natural resources, while fostering social progress and ensuring the sustainability of economic activities.

Collective action and public-private cooperation play an important role in building the essential governance structures, knowledge and skills required for the transition to a “green economy”. A “green economy” needs to provide the governing structures and platform which allow new and transformative partnerships to be shaped and implemented.

International cooperation, especially business partnerships between industrialised and developing countries are required, including support of the replication and scaling up of best practices to create a multiplier effect.

There are thousands of best practices available and we encourage businesses to showcase them through products such as this Roadmap so that governments and intergovernmental bodies can make good use of them.

Business and Intra-industry action	Collaborative action
<ul style="list-style-type: none"> • Identify sectoral and value chain priorities where governance opportunities can be improved and address them through collaboration and partnership efforts. • Engage in business to business pairing exercises on best practice sharing and set up cooperation, for example on technology deployment. • Develop partnerships (including public-private) to transfer skills and technology to new areas of business development. • Promote good corporate governance, that includes partnership approaches to fighting corruption, e.g. through government recognition or endorsement of private sector anti-corruption initiatives, such as the ICC's 2011 Rules on Combating Corruption, and contributing to human rights within business' responsibilities²⁵. 	<ul style="list-style-type: none"> • Lead the development of national plans. These plans ought to set out transparent long-term investment strategies, articulate strong and predictable policies, provide for supportive regulatory frameworks, and define and outline shorter-term performance measures with robust indicators for a "green economy". Joint participation will be indispensable from sub-national governments, utilities, investors, international financial institutions, and donor agencies. • Agree on credible framework for measuring sustainable development outcomes through collaboration with concerned stakeholders, including business. • Engage in dialogues with business experts on "green" technologies and solution to leverage best practices. • Target and leverage technical assistance on strategy, planning, resource mapping and capacity building as core actions in the preparation phase of a partnership that different stakeholders could support. • Stimulate innovative approaches to collaboration to deliver the jobs and innovative business models outlined above.

²⁵ The reference in this area is provided by the UN Guiding Principles on Business and Human Rights. Please see [ICC-IOE-BIAC Joint Recommendations to the United Nations Working Group on Business & Human Rights, 2011 for further information.](#)

The road ahead

Enabling governance structures for new forms of collaboration and partnerships are vital prerequisites to accelerate a transition to a “green economy”.

Governments, business and civil societies should join forces to achieve sustainable policy development, identify implementation gaps, and create new forms and mechanisms of collaboration to address them. This may for example include collaborating to create a blueprint for public-private cooperation within national or regional innovation strategies, as well as within multilateral and development cooperation bodies.

Role of SMEs

SMEs play an important role in value chains and touch on many cross-cutting areas in society. To allow SMEs to efficiently participate and shape “green economies” locally, the following points are critical:

- simplified legal and regulatory frameworks;
- capacity development of SMEs to implement good governance schemes;
- full inclusion of SMEs, through value chain and life cycle approaches;

Partnerships between multinational enterprises and SMEs should be encouraged, especially by sectoral and global business associations, through greater promotion of the many successful existing cases.

Separate annexes: best practices and calls for collaboration

Available at www.iccwbo.org

Direct link: <http://www.iccwbo.org/uploadedFiles/ICC/policy/environment/pages/ICC-GreenEconomyRoadmap-casestudies-June2012.pdf>

The International Chamber of Commerce

ICC is the world business organization, a representative body that speaks with authority on behalf of enterprises from all sectors in every part of the world.

The fundamental mission of ICC is to promote open international trade and investment and help business meet the challenges and opportunities of globalization. Its conviction that trade is a powerful force for peace and prosperity dates from the organization's origins early in the 20th century. The small group of far-sighted business leaders who founded ICC called themselves "the merchants of peace".

ICC has three main activities: rule setting, dispute resolution, and policy advocacy. Because its member companies and associations are themselves engaged in international business, ICC has unrivalled authority in making rules that govern the conduct of business across borders. Although these rules are voluntary, they are observed in countless thousands of transactions every day and have become part of the fabric of international trade.

ICC also provides essential services, foremost among them the ICC International Court of Arbitration, the world's leading arbitral institution. Another service is the World Chambers Federation, ICC's worldwide network of chambers of commerce, fostering interaction and exchange of chamber best practice. ICC also offers specialized training and seminars and is an industry-leading publisher of practical and educational reference tools for international business, banking and arbitration.

Business leaders and experts drawn from the ICC membership establish the business stance on broad issues of trade and investment policy as well as on vital technical and sectoral subjects. These include anti-corruption, banking, the digital economy, telecommunications, marketing ethics, environment and energy, competition policy and intellectual property, among others.

ICC works closely with the United Nations, the World Trade Organization and other intergovernmental forums, including the G20.

ICC was founded in 1919. Today it groups hundreds of thousands of member companies and associations from over 120 countries. National committees work with ICC members in their countries to address their concerns and convey to their governments the business views formulated by ICC.

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