



# Business Action for Sustainable Development 2012

## Contribution for Rio+20 Compilation Document

1 November 2011

*The private sector has a key role to play in helping achieve the goals of sustainable development, in particular poverty eradication. This fact has been noted in Agenda 21<sup>1</sup> and at many United Nations conferences including the United Nations Commission for Sustainable Development (UNCSD). In addition, many around the world are part of the “private sector”, whether as self-employed, entrepreneurs, farmers, or small and medium sized as well as large multi-national enterprises. The private sector generates most of the goods and services that are utilized every day and must actively be engaged to address the implementation gaps that have limited achievements of the sustainable development goals.*

### Introduction

1. In June 2012, world leaders will meet in Rio for the twentieth anniversary of the United Nations Conference on Environment and Development (Rio+20). The objective of the Conference is to secure renewed political commitment for sustainable development, assess the progress to date, as well as the remaining gaps in the implementation of the outcomes of the major summits on sustainable development, and address new and emerging challenges.

*Note: this BASD 2012 submission consists of a main chapeau text on the two main themes of the Rio+20 Conference, complemented and supported by submissions from BASD partners and convenors highlighting their specific contribution to Rio+20. These wide range of private sector expert inputs illustrate the collaborative effort of BASD 2012 partners, conveners, and their respective memberships<sup>2</sup>.*

<sup>1</sup>Agenda 21, article 30.1; “Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment” (United Nations, available at: [www.un.org/esa/dsd/agenda21](http://www.un.org/esa/dsd/agenda21)). It was an outcome of the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, in 1992.

<sup>2</sup> For further information, please visit [www.basd2012.org](http://www.basd2012.org)

2. Since 1992, business has been deeply and constructively engaged in the many United Nations and other international conferences that have identified the crucial components of a global partnership for sustainable development. Together the outcomes of these conferences reflect a global consensus on the challenges facing humanity and set out a roadmap for cooperative action required by all actors in society – governments, business, civil society and consumers.
3. A growing number of companies around the world have already put sustainability at the forefront of their agenda, recognizing the growing relevance and urgency of global environmental, social and economic challenges. Engagement by the private sector can help ensure that the Rio+20 Conference is a launching ground for widespread global action in support of sustainability, green growth and poverty eradication.
4. Regardless of company size or location, corporate leaders understand how sustainability issues affect the bottom-line and, thus, are looking beyond traditional business and financial factors. For example, market disturbances, civil unrest or ecological strains which are happening nearby or far away can have wide-ranging and material impacts through the value chain, capital flows, public opinion or employee productivity.
5. Companies view sustainability issues from both, a risk management perspective, and the increasingly evident and appealing benefits and opportunities – particularly associated with green growth and poverty alleviation. In short, the business case for sustainability has strengthened as a response to the deep interdependencies in today's globalized world.
6. Business has already made significant contributions and developed a wide range of tools and applications to measure environmental, social, and governance impacts and help assess response measures, such as:
  - Voluntary sustainability principles based on frameworks and conventions supported by all governments, such as those of the United Nations Global Compact;
  - The International Chamber of Commerce (ICC) Business Charter for Sustainable Development – which provides companies (large and small) with the basis for sound environmental management, as well as its systems conditions for a transition towards a green economy;
  - Long-term visions such as the World Business Council for Sustainable Development (WBCSD) Vision 2050;
  - Capacity-building activities for small and medium-sized enterprises via the ICC World Chambers Federation (WCF) network;
  - Sectoral approaches, e.g. the chemical industry's "Responsible Care", the WBCSD's Cement Sustainability Initiative (CSI), the International Council on Mining and Metals "Sustainable Development Framework", the Global Gas Flaring Reduction partnership (GGFR), the Partnership for Clean Fuels and Vehicles (PCFV), WBCSD's Tire Industry Project, or the aviation industry's sector-wide climate change targets.



7. Business is willing to step up its efforts to raise more awareness about its existing commitments and achievements already made. We will also continue to broaden and deepen our thinking towards Rio+20 on key themes of the conference. **BASD 2012 via the member companies and associations stand ready to support, build, scale up, and accelerate cooperative initiatives in Rio+20 and beyond to achieve the objectives of sustainable development.**
8. It is in this context that the temporary coalition of the Business Action for Sustainable Development (BASD) has been re-established<sup>3</sup> to coordinate the participation of the private sector to the Rio+20 Conference and enhance its contribution to sustainable and inclusive markets.
9. BASD 2012 thus welcomes this opportunity to submit input to the compilation document for Rio+20 and establish leading priorities for governments to maximise the contribution of business, not only at Rio+20 but beyond. While this document will focus on the two themes of Rio+20 - a) green economy in the context of sustainable development and poverty eradication, and b) institutional framework for sustainable development - BASD 2012 has and will continue to bring forward a wide range of private sector experiences and expertise on specific topics which can be found in the appendix such as:
  - a) Access to Energy
  - b) Agriculture and Food Security
  - c) Ecosystems and Biodiversity
  - d) Food - Water - Energy Nexus
  - e) Science, Technology, and Innovation
  - f) Social Development, Human Rights, and the Role of Business
  - g) Resource and Materials Management
  - h) Transformational Partnerships
  - i) Urbanization
  - j) Water for Green Economy and Poverty Alleviation

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<sup>3</sup>For further information, please see BASD 2002: <http://basd.free.fr> and [www.basd2012.org](http://www.basd2012.org)

## Green economy in the context of sustainable development and poverty eradication

10. Business expects the Rio+20 outcome to focus on the following key deliverables to catalyse private sector action towards a green economy:

- **Take stock of progress** since the 1992 Earth Summit, and develop policies and approaches that address new and existing challenges, recognizing the economic, social, and environment pillars of sustainable development as essential components of recommended policies and solutions.
- **Encourage widespread adoption and uptake of sustainability principles** by businesses of all sizes, sectors and regions.
- **Provide the enabling environment necessary to accelerate and intensify the practice of corporate sustainability so that business can fully contribute to sustainable development.** Combating corruption and ensuring peace and security will be critical to diffuse corporate sustainability practices. The private sector is committed to work collaboratively with the public sector and civil society to create incentives and remove barriers to achieve green economies.
- **Embed the “green economy” concept in the broader sustainable development concept.** The business community believes that the term “green economy” is embedded in the broader sustainable development concept<sup>4</sup>. While business would rather speak about “greener economies” to acknowledge the many opportunities and risks for its sectors, value chains, and different national contexts, for the purpose of the Rio+20 Conference, we acknowledge the term “green economy” and view it as a unifying theme to articulate the “sustainable development direction” in which all global economies need to move albeit the existing tensions and global economic turmoil.
- **Recognize that in order to move forward, it is crucial to green all sectors in all countries and advance resource efficiency and life cycle approaches.** We consider improvements of existing processes (manufacturing technologies, jobs, logistics, research, etc.) to be as important as launching new products and technologies. Both approaches should be pursued simultaneously for a step change. It should be noted that business operates across global supply and value chains and greening all stages along the life cycle of its products and services is becoming a guiding principle for many leading companies and sectors. The actions needed to transition towards a green economy vary from sector to sector, value chain, and from country-to-country, depending on national circumstances, for example near term priorities may differ significantly especially for least developed countries.

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<sup>4</sup> ‘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.”

- **Recognize that collaboration and collective action is needed to operationalize and mainstream the concept of a green economy.** The transition towards a green economy is a shared responsibility by all actors in the value chain. No one stakeholder group, whether business and industry, governments or society, can do this on their own. Collaboration and collective action on innovation and technology development and their appropriate deployment via sustainable production and consumption (SCP) concepts are at the heart of greening economies. It should also be noted that education is the cornerstone of any strong and competitive 'green economy' and a skilled workforce is a prerequisite. Stepping up education efforts will foster the mindsets and behavioural changes needed to drive the required innovations into the direction of a 'green economy'. Public private partnerships can hereby play a major role in building the essential knowledge and skills required for the transition to a green economy.

11. 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 thus has a crucial role in delivering economically viable products, processes, services and solutions required for the transition to green economy<sup>5</sup>. A green economy should integrate the three pillars (social, economic, environment) of sustainable development. Efforts by all actors need to look beyond short-term pressures and focus on the development of long term shared value.

Therefore, business and industry believes that the **Rio+20 outcome should outline high level system conditions**, including the following core items (*please see appendix for a detailed description*) which seek to describe what is required to transition towards a green economy, from both business and governments:

#### **Social innovation**

1. Awareness
2. Education and skills
3. Employment

#### **Environment innovation**

4. Resource efficiency and decoupling
5. Life cycle approach

#### **Economic innovation**

6. Open and competitive markets
7. Metrics, accounting, and reporting
8. Finance and investment

#### **Mutually enforcing cross-cutting elements**

9. Integrated environmental, social and economic policy and decision making
10. Governance and partnerships.

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<sup>5</sup> International Chamber of Commerce (ICC), 2011



## Institutional Framework for Sustainable Development

12. Green economy and international institutional framework for sustainable development should become mutually reinforcing, as there is a need for structural change in institutions. Improving these institutions and their ability to enable the right frameworks are critical so that all actors can deliver on their shared responsibility and ensure better coordination and policy implementation.
13. BASD believes that the following key points should be considered in the Rio+20 compilation document:
  - ***A system-wide strategy for sustainability across the United Nations system,*** including strengthening synergies across the various bodies involving the economic, social and environmental pillars of sustainable development. Sustainability challenges, such as climate change, food, resource scarcity, water, energy, waste management, corruption and social inclusion, poverty eradication, awareness, employment, education, call for an integrated, strategic approach and collective United Nations vision. We encourage the development of synergies between compatible multilateral environmental agreements, while preserving and complementing the independence and tailored nature of multilateral agreements should be a priority.
  - ***Enhancement of the engagement of business and business organizations*** at global, regional, and national levels; business is a primary contributor to prosperity as recognized in Agenda 21, article 30.1.
  - ***Strengthening the science-policy interface*** within international institutions, with the full and meaningful participation of developing countries. This must also include channels for credible and robust science from stakeholders, particularly from business and industry.
  - ***Identification of priorities by United Nations institutions and concentration on their specific expertise.*** In the past two decades, a number of new challenges to sustainable development have surfaced which have required the international community to develop collaborative, global efforts. Climate change, the loss of biodiversity, water management, the spread of desertification and land degradation, damages to marine life, all these issues have been taken by the United Nations in an effort to offer concerted solutions. A clear process leading to a thorough assessment of emerging issues would assist in the allocation of tasks and responsibilities amongst a variety of actors within and outside the United Nations.

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## Appendix

### Contribution for Rio+20 Compilation Document

# Draft Ten Systems Conditions for a Transition towards a Green Economy

Author: International Chamber of Commerce (ICC)

*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<sup>6</sup>. 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 has a crucial role in delivering the economically viable products, processes, services, and solutions required for the transition to a green economy.**”*

*The Task Force undertook extensive analysis and global consultation to determine what is required to further a transition towards a Green Economy, including the development of the following ten high level systems conditions that will form part of a longer term ICC Green Economy Roadmap.*

## The Ten Green Economy Systems Conditions

### Social innovation

#### 1. Awareness

The shift towards a Green Economy requires awareness about the depth of global economic, environmental and social challenges as well as new opportunities. Awareness and understanding are pre-requisites for setting priorities and action and require a shift in the global debate. It is a shared priority and challenge for all actors, whether government<sup>7</sup>, inter-governmental bodies, business or civil society and consumers.

#### 2. Education and Skills

Education is paramount for the operationalization of the Green Economy. Education must be enhanced by policy makers, academia and business in order 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 STEM<sup>8</sup> and inter-disciplinary disciplines, in human and natural capital, sustainable livelihoods, capacity building.

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<sup>6</sup> ‘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.”

<sup>7</sup> “Government” is used as an umbrella term for governments at national, regional, and local level.

<sup>8</sup> STEM: science, technology, engineering, and mathematics

### 3. Employment

Employment is a critical element to 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. 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 contribute to green all aspects of the economy.

### **Environmental innovation**

#### 4. Resource Efficiency and Decoupling

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, Green Economy strives to increase economic, social, and environmental benefits to achieve sustainability while decoupling economic activities and societal developments from negative environmental impacts.

#### 5. Life Cycle Approach

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, spillover implications, and competition for resources.

### **Economic innovation**

#### 6. Open and Competitive Markets

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 toward greener economic activity and prosperity. In order to become a functional economic system, Green Economy needs to become ingrained in international and global markets and operationalized in the market and business 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.

#### 7. Metrics, Accounting, and Reporting

For a Green Economy to become operational, indicators, metrics, accounting measures and better disclosure and reporting must be developed that make sense in economic terms while ultimately including the cost for externalities. This entails the simultaneous pursuit of developing operational green growth measures at company level (bottom up) and strategic macro-political accounting standards and economic indicators at the system level beyond Gross Domestic Product (GDP; top down). A flexible approach which balances the cost-benefits remains critical for success; flexibility will also be essential to incorporate new knowledge and scientific understanding in coming decades.



## 8. Finance and Investment

A Green Economy actively drives innovation in private and public finance and investment into the direction of sustainable development. To succeed, it should set supporting policy and regulatory frameworks that promote informed investment decisions for both public and private investors. It 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.

### **Mutually enforcing cross-cutting elements**

## 9. Integrated environmental, social and economic policy and decision making

A Green Economy has 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.

## 10. Governance and Partnerships

A Green Economy is based on governance structures that allow all actors can meet their shared responsibilities. Governance structures at local, regional, national and global level 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, including effective intellectual property rights protection, strong contractual arrangements, and safe and stable communities. A key modus operandi of a Green Economy is working through new approaches that facilitate innovative collaborations and partnerships between business, government and civil society. Such collaborations can take many forms including public private partnerships, business value chain engagements and alliances with academia and consumers. No one can do this alone.

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## Specific topic contributions

*As outlined in point 9 above, please find following a wide range of private sector expert inputs provided by BASD conveners and partners. Please note that contributions are regularly posted on the BASD website [www.basd2012.org](http://www.basd2012.org).*

### a) Access to Energy

Lead Authors: International Chamber of Commerce (ICC), UN Global Compact, and World Business Council for Sustainable Development (WBCSD)

*Access to reliable, affordable, economically viable, socially acceptable and environmentally sound energy is fundamental to economic growth and sustainable development. Energy poverty induces poor living conditions in many developing countries and global poverty. In this context, providing access to modern energy services and reducing greenhouse gases (GHG), are key challenges for society.*

#### Key Messages

- Businesses stand ready to work with the United Nations Secretary-General's initiative on Sustainable Energy for All.
- All energy options will be required to meet the challenges outlined above and must remain open to meet pressing demands for access to and security of energy while reducing greenhouse gas emissions.
- Substantial progress needs to be made on reducing energy poverty if the Millennium Development Goals are to be achieved. Priority should be given to reduce energy poverty by deploying renewable sources of energy, where appropriate, as this can reduce the exposure of poor communities to volatility of energy prices.
- Diversification of energy mix and infrastructure needs to be supported through enhanced technology development and deployment. In order to accelerate the development and deployment of key technologies, new financing approaches will be required. Carbon financing will bridge some of the gap, but multilateral development financing and other policy incentives will help accelerate deployment.
- Also innovative business models demonstrate how the private sector is already succeeding in expanding energy access by providing more affordable and reliable products and services; overcoming key market barriers or failures; and increasing the profitability and scalability of sustainable engagement in low-income energy markets. There is significant scope for these new business models to be scaled and replicated.

- Energy efficiency needs to be significantly increased both on the demand and supply side in order to optimise emissions, reduce resource use and improve affordability particularly for low-income consumers.

## Narrative

Business is the primary solution provider for expanding access to energy, and will work with key stakeholders to forge ahead and to pursue sustainable and scalable market solutions to help deliver universal energy access. This role includes not just extending the reach of energy services, but also supporting the *quality* and *reliability* of the services that are delivered, which significantly increases the benefits that energy access has for low-income consumers and producers. These efforts can be enhanced and accelerated by effective government efforts to support market solutions, provide incentives, and address risk and regulatory issues.

Public and development finance mechanisms should be specifically designed to leverage additional private investment that is needed to achieve universal access. The broader financing architecture must be well-designed with appropriate consideration to the quality of the regulatory and investment climate, which significantly drives the risks and returns associated with these investments.

The International Energy Agency (IEA) estimates that the 17% (USD 46 trillion) increase in energy investment required globally between 2010 and 2050 to deliver low-carbon energy systems would yield cumulative fuel savings equal to USD 112 trillion (IEA, 2010). The private sector has already taken concrete actions in all sectors towards green growth, from reducing environmental impacts across value chains, to increasing energy and resource efficiency, investing in low-carbon and renewable energy, utilizing ICTs to limit energy use, manage scarce resources and reduce waste.

## Policy Recommendations

- a) Energy security, economic growth and development are interwoven, so energy and development policies should be addressed in an integrated way. Coordinated international effort is needed to ensure an enabling framework and markets.
- b) To meet growing demand, all energy options should be kept open. Public policy should establish criteria and guidelines for safe, cleaner energy supply and responsible use of resources. Energy efficiency should be a key focus and needs to be further promoted.
- c) Business is already succeeding in expanding energy access by providing more affordable and reliable products and services; overcoming key market barriers or failures; and increasing the profitability and scalability of sustainable engagement in low-income energy markets. There is significant scope for these new business models to be scaled and replicated. Thus, policy measures should support market-based innovation to promote energy access through diversification of supply and introduction of more efficient supply and end-use technologies as well as enable new and innovative business models. Strong

research, development and deployment policies and programmes must be fostered and maintained.

- d) Governments should establish stable, long-term energy policy, recognizing the need for open, competitive markets supported by reliable legal, fiscal and regulatory frameworks to encourage energy investment and innovation that responds to and marshals market forces taking into account that sector-wide changes can take decades. The quality of the regulatory and investment climate significantly drives the risks and returns associated with these investments.
- e) Partnerships and cross-sector collaborative approaches between key stakeholders are essential to make all of these opportunity areas successful. Effective public private partnerships (PPPs) will be particularly important drivers of progress toward universal access to energy. National and international governance infrastructure should enable a global open market trading system in energy, energy feedstocks, and energy intensive goods. A variety of market mechanisms fit for national/local circumstances have to be identified.

## b) Agriculture and Food Security

Lead Author: Croplife International

*As a sector, agriculture plays a key role in supporting the economic development and well-being of societies. With a predicted 9 billion people by 2050, agricultural production will have to increase to meet new demands for food, feed, fuel and fibre. Agriculture must not only meet demand – it must also do so while minimizing its environmental footprint and creating sustainable livelihoods for farmers and others along the supply chain, while helping mitigate and adapt to climate change.*

*In a time of food insecurity where the poorest people are most vulnerable, the world must proactively leverage the potential of agriculture to positively contribute to the triple goals of a secure food supply, poverty reduction through improved rural livelihoods, and environmental sustainability. Food sufficiency, quality, availability and environmental footprint must be central elements of any political commitment directed toward the green economy and poverty eradication. Rio+20 outcomes should reflect a continued and long term commitment to achieving food security through increased productivity in agriculture and sound natural resources management.*

*However, agriculture by nature represents a mosaic of solutions and practices, with no silver bullet and no single ‘best practice’ able to meet the needs of all farmers. In addition, sustainability is a moving target towards which farmers in different geographies and farming systems are already progressing and they will all need support to continuously improve. Whatever type of agriculture a farmer chooses to adopt, they must be supported by availability of tools, appropriate technology and knowledge, which can be employed under ‘good agricultural practices’ to optimise productivity, while minimising any adverse impact.*



## Key Messages

- Rio+20 outcomes should be focused on the goal of sustainable intensification of food production, and support the role of knowledge, science and technology in achieving this goal. Rio+20 outcomes should endorse the notion that agriculture in a green economy means a broad-based, knowledge-centred approach to development through agriculture.
- Poverty reduction: Make agriculture a driver for poverty reduction by ensuring policies link producers, in particular smallholders, to markets and enable value to be created throughout the supply chain to help create income opportunities and diversify rural activities.
- Focus on enhancing sustainable production and productivity of all farmers: the world will need to produce more with less to meet demand and reduce its environmental footprint. Increasing production and productivity should be a priority to protect natural resources while meeting demand for food, feed, fuel and fiber.
- Invest in agricultural research and development, capacity building, knowledge sharing, to close the uptake gap for existing tools; ensure new solutions are available for today and tomorrow by incentivising and supporting both public and private innovation.

## Narrative

### *Reducing Poverty*

Agriculture can be a potent driver for poverty reduction. The World Bank estimates that GDP growth from agriculture generates at least twice as much poverty reduction than any other sector. Currently 65 percent of people in developing countries are involved in agriculture, and 1.3 billion are small farmers with limited access to inputs, infrastructure and markets. In countries where agriculture represents one of the primary livelihoods, concerted efforts to improve productivity through sustainable practices as well as access to food through improved markets could change the lives of millions, by raising incomes and addressing food security needs.

A dynamic and productive agriculture sector is also essential for the urban sector. In 2010, for the first time ever, more people lived in urban areas than in rural areas globally. Urban populations are dependent on the agricultural sector for most of their consumption, so improving local production and trade is crucial; but it also means a world of opportunities for farmers who can reach the urban market.

Making agriculture a dynamic sector will require the adoption of supportive frameworks and investment in infrastructure and markets. Farmers need to be able to access markets at the local, regional and global level in order to sustain a livelihood from their activities. In some areas, this means improving access to transport, storage and market facilities. In Tanzania, US\$2.4 billion of investment is being directed towards tripling the area's agricultural output and maximising the trade potential of the Dar-es-Salaam port for Tanzania's neighbouring landlocked countries. Through the Southern Agricultural Growth Corridor of Tanzania project



(SAGCOT), both public and private sector organisations are supporting 20,000 smallholders to become commercial farmers to bring in annual revenues of an estimated US\$1.4 billion into the country.

Access to weather and price information and risk management tools also helps farmers grow better crops, improve their production practices and sell at better prices. For example, in Zambia, the Zambia National Farmers Union market information system (ZNFU 455) allows farmers to find out the current prices being offered for a commodity by sending an SMS. They receive a response listing prices and buyer codes and they can then make an offer to the best buyer directly by using SMS. In Kenya, another scheme using cell phones offers banking services to farmers as well as support for a crop and input insurance scheme. Farmers can insure a kilogram of maize seed or of fertilizer against drought with an index insurance product. They buy the insurance at a local agro-dealer and receive confirmation of purchase and of any payout through the M-PESA service on their phones. Going forward, the use of ICTs could be expanded to supporting pest control and other extension services.

#### *Enhancing sustainable productivity*

Improving the footprint of agriculture while increasing production needs a concerted effort in two areas: first closing the uptake gap of existing best practices and technologies by focusing on capacity building and knowledge sharing and creating supportive public and private extension services networks; and second investing in agricultural research and development and supporting innovation to provide the solutions for tomorrow and ensure a supportive, science based regulatory framework and policies.

Enhancing sustainable productivity must be the centre of efforts to make agriculture both environmentally sound and economically dynamic— we need to achieve more crops per drop of water, per acre of land, per measure of inputs. This is essential to ensure the surface of land under cultivation does not expand, in order to preserve biodiversity and natural carbon sinks. While productivity is a concern for all farmers, specific attention to address the challenges faced by smallholder farmers in raising their productivity is also required.

Climate change is expected to have severe negative impacts on agriculture, both through the intensification of severe weather events (such as droughts and floods) as well as changing weather patterns, increased pest prevalence and generally greater uncertainty. Improving the resilience of farming systems will be crucial to any strategy to address not only long term productivity but also to reduce food price volatility.

The United Nations Convention to Combat Desertification estimates that by the year 2050, half of the current arable land will become unusable. Improved seeds will help to maintain yields under drought conditions and prevent erosion. The 2009 Keystone 'Field to Market' research found that gains in yield per acre in the past 20 years in the USA had also been accompanied by significant improvements in the overall efficiency of resource use. The project looked at key crops such as soybean and maize and found reduced use of irrigated water, reduced soil loss, reduced habitat loss, reduced energy use, and lower carbon emissions. The Field to Market study clearly showed that progress has been made by farmers in the path to increased sustainability while enhancing their productivity. Producers need to be

integrated in value chains and new activities need to be developed in processing and other sectors to improve rural incomes and ensure that growth in productivity translates into better livelihoods. In this context, specific attention should be paid to the challenges faced by smallholder farmers in accessing markets and securing adequate value from their participation.

Additionally, efforts should be increased to promote sustainable agri-food systems throughout the lifecycle. In 2010, FAO estimated that poorly developed systems for handling, storage, packaging, transportation, and marketing of agricultural products in developing countries results in post-harvest losses ranging from 15% to a staggering 50%. Investment in food infrastructure and handling could reduce losses and improve food safety as well as help reduce price volatility by improving stocks. Developed countries also face losses due to food waste from harvest, through delivery to food services, and in households. Waste is worst in fresh produce which delivers vital nutrients to humans around the globe.

Finally, improving farmers' access to inputs and supporting technology uptake and diffusion is essential. In some areas, creative strategies that enable access to existing knowledge networks can make real differences to farmers. For instance, in India, a late December harvest of mustard seeds was causing up to 30 percent of crop to be lost to frost, so breeders worked on a seed with a shorter duration period. This enabled farmers to harvest in early December, avoiding the issue of frost. Farmers also benefited from better prices as they were able to bring their seeds to the market before the usual excess occurred in January.

#### *Research, Innovation and Capacity Building*

Agriculture is a knowledge-intensive sector. Farmers need to have access to training, services, capacity building, and sharing of traditional knowledge that can encourage the production of abundant and nutritious crops and mixed diets. Knowledge helps farmers adopt practices that maximize the efficiency of the inputs they use and help protect the natural resources they depend on. Training programmes should specifically involve women and young farmers in developing countries as essential partners for household nutrition and welfare.

Providing this education to rural communities in a systematic, participatory manner that is maintained, rather than a 'one-off' activity, is essential to improving their production, income and quality of life. Extension services disseminate practical information related to agriculture, including correct use of improved seeds, integrated pest management, including the use of pesticides, fertilizers, farm implements, tillage practices, water management, livestock management and welfare, marketing techniques, and basic business skills to address poverty. Extension is also an essential pillar for rural community progress including support for the capacity building at farm level.

Farmers must constantly adapt, and the challenge of climate change is making that need ever more acute. Investing in research and development, in both public and private sector, is essential to ensure farmers have the tools they need in the future and that the gains obtained in productivity and footprint are not undermined.

Targeted investment in research, combined with supportive frameworks for the roll out, diffusion and uptake of new improved technologies and the products are essential to support continuous improvements in agricultural sustainability. Governments need to support both public and private research by creating supportive regulatory and incentive frameworks that promote not only innovation but collaboration. Global alignment of regulations and these frameworks is vital to support freedom to operate and important trade. Specific efforts to localise and adapt existing scientific knowledge to serve the needs of small farmers in different geographies are also required. In this area, public-private partnerships can play a role but localisation and technology adaptation need to be supported by strong national and regional scientific capacity and active efforts to create markets in order to spur private investment, not only in farming itself but in the agro-food industry that surrounds it.

## Policy Recommendations

- a) The outcomes of UN CSD17 represent agreed negotiated language by the same Parties that are involved in Rio+20 and as such should represent the basis for any outcome on agriculture for Rio+20.
- b) Reaffirming the importance of agriculture as a key sector for both poverty reduction, food security and environmental sustainability,
- c) Recognizing that agriculture policies must be tailored to local conditions in order to be effective and sustainable,
- d) Emphasizing the need to proactively support the agriculture sector in efforts to adapt to and mitigate climate change as a pre-requisite for sustainability and food security,
- e) Expressing deep concern for the risks posed by ongoing food price volatility for the livelihoods of farmers and consumers around the world,
- f) Recognizing the specific challenges faced by smallholder farmers,
- g) Governments commit themselves to fulfilling the pledges made at CSD17 and through other forum, including the L'Aquila Commitments, in the five following areas:
  - a. Enhancing agriculture production, productivity and sustainability.
  - b. Create a strong enabling environment for sustainable agriculture.
  - c. Manage sustainably competing uses of water and land resources
  - d. Develop sustainable agricultural value chains and improve farmers' and agro-industry enterprises access to and participation in markets.
  - e. Provide secure access to food and social safety nets.

## c) Ecosystems and Biodiversity

Lead Author: World Business Council for Sustainable Development (WBCSD)

*Biodiversity is the variability among living organisms within species, between species, and between ecosystems.*

*An ecosystem is a dynamic complex of plant, animal and micro-organism communities and their non-living environment, interacting as a functional unit. They make up the environment around us and are effectively habitats for example, coral reefs, forests, grasslands, rivers, farmland and urban parks, that support various species.*

### Key Messages

- Support for the key principle of The Economics of Ecosystems and Biodiversity (TEEB) report for policy makers; namely, that biodiversity and ecosystem values should be integrated more consistently and effectively into policy and regulation
- Businesses have a strong interest in ensuring ecosystems continue to function properly to deliver both business and societal value. To this end, businesses are already helping to deliver improved conservation outcomes through their own actions including through investment in conservation-related research and development, through the creation and strengthening of sustainable supply chains and through programs which build capacity, transfer technology and enhance monitoring and reporting performance.
- Businesses are keen to work more closely with policy makers on the design and implementation of biodiversity and ecosystem related policy and this collaboration can significantly improve the chances of delivering policies that work.

### Narrative

The current rate of loss of biodiversity, induced through human activity, is at unprecedented levels. Over the next 40 years, ecosystems will be altered faster and more extensively than ever before – posing significant business risks as well as bringing opportunities for new eco-efficient goods, services and technologies. Meeting the vision for the sustainable management of ecosystems in 2050 requires that all stakeholders, including business, recognize the real benefits of ecosystems and the true value of ecosystems services and account for them. A key must-have is thus to integrate the value and sustainable management of ecosystems into economic planning and decision-making. Policy makers also have a key role to play in setting up smart policies that include flexible, innovative, market-oriented approaches. Key Elements:

- Deeper local & environmental understanding
- Incentives for behavior change
- Global, local & corporate leadership

- Infrastructure investment
- New measures of success
- Commitment to true value pricing
- Removal of subsidies
- Freer & fairer trade
- Global carbon price

Business and ecosystems interdependency: Business depends and impacts on biodiversity and ecosystem services. Consequently, ecosystems degradation will affect how business operates. Business cannot function if the ecosystem services it relies on are degraded or out of balance.

Assessing and valuing ecosystems: There is the need to recognize the full value of ecosystems and their services to ensure their sustainable use. Ecosystem assessment and valuation can help business manage risk and consider new business opportunities, while valuing ecosystem-related impacts and dependencies helps business make better decisions. Ecosystem valuation will increasingly be considered by governments, finance sector and business-to-business customers.

Policy responses: Current responses from business and existing policy measures have not been sufficient to halt biodiversity loss and ecosystem degradation. Good policy ideas exist – these need to be recognized and then implemented and enforced more widely: in many cases policy is already adequate but enforcement is poor. Ecosystem and biodiversity policies need to have clearly-defined goals, supported by targets which are Specific, Measurable, Attainable, Relevant and Time-bound (SMART); many businesses are willing to work with policy makers, which can improve policy effectiveness, and some businesses are already positively responding to the UN Convention on Biological Diversity's 2010 Aichi targets.

Business responses: Business has an important role to play in achieving biodiversity conservation and sustainable use and this role goes beyond financial support. The business community should proactively:

- i. Measure, manage and mitigate risks and impacts
- ii. Improve decision-making by undertaking corporate ecosystem valuation to quantify business risks and opportunities
- iii. Innovate and help develop new markets for ecosystem services and eco-efficient goods, services & technologies
- iv. Encourage suppliers & purchasers to adopt best practices
- v. Enter into local partnerships to address on-the-ground issues
- vi. Promote "smart" ecosystem regulation that leverages market forces and business solutions that halt degradation and "levels the playing field" for companies competing in the same markets, or to use the same resources



## Policy Recommendations

- a) Establish guiding principles for policy and regulatory frameworks:
  - Set realistic but challenging targets and clearly assign accountability for their delivery.
  - Provide clear policy signals into the future (at least 5-10 years and longer where policy will influence long term business decision making).
  - Establish a level playing field both for companies competing in the same markets, and for companies competing to use the same resources.
  - Respect, protect or assign property rights.
  - Be cognizant of and commensurate with relative ecosystem value wherever possible.
  - Be aligned with specific and clearly stated policy objectives and create the right incentives for the delivery of those policy objectives.
  - Deliver stated policy objectives at the lowest economic and social cost or with the greatest economic and social benefit.
  - Provide incentives as directly as possible to resource managers to maintain and enhance the provision of valuable ecosystem services.
  - Seek to achieve consistency between nations to assist in the management of trans-boundary issues.
  - Internationally relevant proposals should allow sufficient flexibility to reflect cultural differences when they are implemented at a national level.
- b) Establish a framework for closer collaboration between business and policy makers on biodiversity conservation is needed. This framework should include a more defined role for business within the Convention on Biological Diversity as well as in other multilateral environmental agreements. The Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES) could be another platform for engagement.
- c) Much biodiversity and ecosystem policy and regulation relies on the private sector in its implementation, and in any event, it is often the private sector which has the resources and flexibility to develop and implement solutions at scale. For these reasons, as part of increased involvement from business it is essential that overarching objectives and targets are designed to be relevant for business.
- d) New biodiversity and ecosystem policy and regulation should draw from successful examples from other policy fields and should seek to build on and scale up successful private sector voluntary initiatives in the field of biodiversity and ecosystem conservation.
- e) New biodiversity and ecosystem policy and regulation should also be based on sound principles, and input from business to inform these. Principles should include providing clear signals for business, creating a level playing field, recognizing the importance of

property rights, being mindful of potential economic and social impacts and adaptable to cultural differences between nations.

- f) It is important to note that in many cases it is not new policy and regulation that is required, but the capacity and resources for more effective implementation and enforcement of existing policy and regulation.
- g) Beyond policy and regulatory reform, governments can take a leading role in the implementation of measures to enhance biodiversity and ecosystems by using their direct influence over state owned enterprises to drive the implementation of such measures.

## d) Food - Water - Energy Nexus

Lead Authors: Croplife International and World Business Council for Sustainable Development (WBCSD)

*Food, Energy and Water security , sustainability of resource use – in particular water - and the availability of energy are key issues that underpin the availability of societies to function and are fundamental to the challenge of sustainable development. Water, food and energy are interlinked and interdependent so understanding the connection between these three areas is essential in order to support integrated approaches to these issues.*

*The sustainability of food, water, and energy - and the security of these resources - underpins the ability of societies to function. Food, water, and energy also are interlinked and interdependent. Understanding the connections between these three resources is essential to support integrated approaches to addressing sustainable development.*

## Key Messages

- Water, energy and food are increasingly and intrinsically related, and essential component of sustainable development strategies
- Employing an integrated, cross-sectoral approach to planning and managing these resources is critical to sustainable development
- Research, innovation, knowledge sharing, and access to improved technologies are essential to efforts to tackle the challenge of efficient use and equitable distribution

## Narrative

Meeting the Resource Efficiency Challenge: By 2050, the world's population will have reached an estimated 9 billion people, with global demand for water, energy and food rising dramatically. By 2030 it is predicted that the world will need 40 percent more available freshwater and 50 percent more food and energy.

Climate change, urbanization and increasing prosperity in certain regions of the world will also impact the availability, affordability, access and use of these resources. These three areas are closely interdependent and policies need to address these challenges in an interlinked and coherent manner.

Managing natural resources such as land, water, and energy need to be at the core of the way in which sustainable development issues are considered because they underpin the ability of all activities to succeed over time. Water and energy are interlinked in many sectors, such as manufacturing, waste management, recycling, and energy production. The primary energy sector is becoming more water intensive. With a significant projected increase in electricity demand, a significant increase in water withdrawal and/or consumption is expected, in both water and energy use is critical and often underestimated.

Agriculture and the broader food value chain are one of the sectors in which water and energy are essential dimensions of sustainability and for which the water-food-energy nexus is the most central. As one of the main user of water, provider of food and potentially both a consumer and producer of energy, agriculture needs to be a focus area for managing this three thematic resource challenges. Each issue goes beyond the production (growing) phase however. The processing, transformation, packaging, distribution and trade of agriculture-based products also involve the use of both water and energy sources. Water and energy use for food production are indeed essential elements in determining the sustainability of agriculture and food production systems.

Biofuels exemplify the connection between food, energy and water in a vivid manner.. The sustainability of biofuels depends on the ability to use input resources efficiently, such as water, so as to ensure the footprint of biofuels is acceptable. But it also depends on the ability to not compete with food production to avoid affecting food security.

Going forward, we need to increasing resource efficiency in a way that will also generate benefits and creating new opportunities that go beyond the ability to simply cope, including creating more jobs and stimulating broad economic development.

Water, energy and food are intrinsically inter-related. Producing more food requires more water, and so too do many forms of energy production; we need water to cool power plants, refine crude oil and produce biofuels. Managing water poorly can have a detrimental impact on energy supplies and agricultural production, and vice versa. We also need to be aware that global warming, increasing urbanization and growing consumption of water, energy and food continue to disrupt our already fragile ecosystem. For example, water provides important

ecosystem services .It serves as a non-substitutable input for all biomass growth, which in turn supports climate regulation, carbon sequestration and other critical ecosystem services.

Finding new ways to minimize waste both in the production and consumption phases of the value chain is important. In addition, managing uncertainty and risks (such as floods), particularly due climate change-induced weather variations, will require increased planning, advance warning systems and careful coordination.

1. Employing an integrated, cross-sectoral approach to managing these resources is critical. 'Silo' planning is no longer practical given the complex relationship between water, food and energy. There is a need for collaborative planning, as demonstrated by the US Environmental Protection Agency (EPA), which in 2008 announced an inter-agency agreement between the offices of air and water to collaborate on energy and climate efforts at water utilities. Cities, industry, businesses and the public sector all need to act to address shared risks and opportunities.

2. Research, innovation, knowledge sharing and access to improved technologies are essential to tackle the challenge of efficient use and equitable distribution. This ranges from promoting efficient irrigation and farming practices to providing the best available seeds (including drought- and stress-tolerant plants) to training farmers to optimize fertilizer use and employ stress management techniques. For example, when Indonesian farmers sowed pre-germinated rice seeds directly into the wet mud of their rice paddies, they could avoid flooding and shorten growing cycles through this direct seed technology. This has increased yields, and has limited methane gas emissions as well as reducing water use by 20 percent. Second generation biofuels produced from agricultural waste can maximize the efficiency of the use of resources put into growing a crop and minimize competition with food crops.

**Risks of Inaction:** Inaction in this area will profoundly impair the ability of communities to develop sustainably and risk creating a vicious circle of poverty, resource depletion and food insecurity. Energy poverty is a major obstacle to the ability of communities, in particular rural communities, to improve their livelihoods, access services and pursue economic opportunities. Water scarcity is an issue across the globe but threatens the most vulnerable communities in disproportionate and life threatening manner through drought and desertification. Food security is one of the primary concerns of millions of people around the globe, whose livelihoods are compromised by inadequate access to a secure supply of nutritious food which impairs not only adults lives but also children's with long term consequences for their development. The challenges and threats may be different in other circumstances but fundamentally sustainable development cannot occur on the basis of an unsustainable use of water, insufficient production of food, and lack of access to sustainable energy.

## Policy Recommendations

- a) Recognizing the interlinked and interdependent nature of water and energy use, and their centrality in several sectors, in particular with regards to achieving food security
- b) Recognizing the importance of coordinated and cross-sectoral approaches to managing natural resources
- c) Emphasizing the central nature of both food, water and energy to the realization of sustainable livelihoods

Governments should commit themselves to:

- d) Improving data collection and research into the issue of water management, energy production and availability, agricultural productivity and footprint, and in particular with regards to how the three dimensions are interconnected, to assist in informing policies at all levels
- e) Encouraging collaborative and cross-sectoral approaches, as well as public-private collaborations to improve resource management, risk prevention and reduce the footprint of different activities
- f) Increase funding and support for both public and private research in the areas of energy, water and food production

## e) Science, Technology, and Innovation

Lead Author: Digital Energy Solutions Campaign

*Innovation, and scientific and technological advance in particular, are neither a luxury nor an accessory, nor things to be feared or muted. Rather they constitute an exciting and essential element of our transformative journey to future sustainable development and growth.*

*Acknowledging that the world population will keep growing in the coming years and decades, particularly in urbanized areas and in developing and emerging countries, and that the earth's resources are finite, and in some cases already reaching a level of scarcity, it becomes obvious that improvements in efficiencies of all types will be keys to addressing sustainability challenges, enabling us to do more with less. This will be accomplished through regular, continuous improvement of existing technologies and through the entry into service of reliable breakthrough technologies.*





## Key Messages

- Science, technology, and innovation are essential enablers to future sustainable development and growth, and especially to the goals to which Rio+20 aspires.
- Sustainability will increasingly depend on the capacity to generate, access and leverage science, technology, and innovation to ensure society makes the best use of scarce resources as the world's population grows.
- Business will play a leading role, but expects to -- and must -- do so in partnership with governments and policy makers, and in a policy and regulatory environment that encourages sustainability innovation and scientific and technological advances.
- This policy and regulatory environment needs to include both public and private investment in research and development, as well as supportive regulatory frameworks (i.e. stable and enabling investments in long-term research), including adequate protections for intellectual property rights and support for small business.
- Governments should seek international cooperation and public-private partnerships that both (i) help ensure innovation and scientific and technological advance, and (ii) strengthen the capacity of developing countries to absorb, adapt, and utilize these advances where appropriate.
- Information and communications technologies will be critical enablers of healthy communities, and increased access to them must be facilitated.

## Narrative

To achieve sustainable development and growth, we need major technological transformations. These transformations will require infrastructure, education, and enabling policy environments that put a premium on smart creativity and innovation, and that support the rollout and uptake of technology. These will become crucial preconditions for achieving the goals set at Rio+20. The sustainability successes of governments, business, and individuals around the globe will increasingly depend on their capacity to generate and access science, technology, and innovation.

Business plays a leading role in harnessing the enabling potential of innovation and scientific and technological advance. However, business will only be able to do so in partnership with governments and other stakeholders, and in a policy environment that both encourages innovation as well as scientific and technological advance, and that strengthens the capacity of developing countries to absorb, adapt, and utilize these advances to their local settings.

There is no single policy that, by itself, will ensure success, but rather comprehensive policy approaches are required to create regulatory and policy environments that fosters innovation and scientific and technological advances, both in local settings and globally. Governments should avoid policies that could impede innovation and technology adoption, and should instead adopt supportive policies, such as: investment in education and skills; investment in research and development, conducted in partnership with business and the scientific community; investment in infrastructure; investment in mechanisms that support knowledge transfer; protection and enforcement of intellectual property rights; promotion of competition; support for entrepreneurship, small business, and the creation of new firms; open markets; regulatory transparency and long-term thinking; support for voluntary, global, market-driven technology standards; and, promotion of and access to information and communication technologies.

The public at large should know more about the science and technology that supports sustainable development and growth; governmental authorities, industry professionals and other decision makers should be educated through capacity-building initiatives.

While business plays a key role in developing new science and technologies, it is clear that diffusion and adoption remain a challenge in many countries. The private sector, through collaborations with governments and through public-private partnerships can help bring solutions to this issue. However, adequate market and regulatory conditions combined with available local knowledge and capacity remain an essential factor in the success of technology diffusion and adoption. Governments can play a key role in this arena, which also then facilitates local businesses' own learning curve and innovation so that technology development can become localized and appropriate to the needs of local actors. Global efforts of this nature are already taking place through a variety of mechanisms, such as the Asia-Pacific Partnership (APP) on Clean Development and Climate, now continued through the Global Superior Energy Performance Partnership (GSEP) and the Telecommunication Technology Centers as well, as a host of partnerships. At the meta-level, current negotiations on the creation of a 'technology mechanism' under UNFCCC are also a cornerstone for a

global effort to improve technology development, diffusion and uptake in areas critical to sustainable development. Rio+20 outcomes should reinforce these efforts and recognize the need for localized solutions based on the participation of public and private sectors.

Organizations around the world continue to cite the importance of information and communications technologies to healthy communities, and stress the desire for greater access to these technologies.

## Policy Recommendations

- a) Recognize that innovation and scientific and technological advance are essential enablers to achieving the goals for sustainable development and growth that Rio+20 is targeting
- b) Encourage all governments to adopt policies that foster transformational innovation and scientific and technological advance, with special attention to policy frameworks that provide adequate protection for intellectual property rights and increased public support for sustainability-enhancing research and development.
- c) Call on the private sector to both provide sustainability innovation and scientific and technological leadership, and to partner with governments towards these ends.
- d) Agree to seek mechanisms for international cooperation and public-private partnerships that help spur the innovation and scientific and technological advances needed to meet the Rio+20 goals, and that strengthen the capacity of developing countries to absorb, adapt, and utilize these advances to their local settings.
- e) And finally, call for improved access to information and communications technology to facilitate growth towards healthy communities in every sense – civic engagement, health, education, food security, clean and efficient energy, and stability.

## f) Resource and materials management

Lead Authors: Aquafed, International Council on Mining and Metals (ICMM), World Business Council for Sustainable Development (WBCSD)

*As populations grow and lifestyles develop, the consumption of materials and natural resources is increasing, in many cases exponentially. This means that there will be increasing stress on the supply of many of the natural resources and substances that are required to sustain societies, the economy and the environment. In some regions and for some substances, the lack of materials or resources is already, or will shortly, constrain Green Growth and Poverty Alleviation efforts. A variety of existing concepts seeks to minimise this problem and extend the “carrying capacity” of the earth sustainably into the future. These include; sustainable consumption and production, sustainable value chains, the circular economy, and sustainable materials management. Each of these approaches has advantages, but individually none provide a unique or complete solution, because*

*each has real and practical limits. A more productive way forward is to address all of these lifecycle approaches together to combine the strengths of each.*

*Promoting Green Growth and establishing Green Economies requires action by all stakeholders throughout the lifecycle of materials and products, including consumers, producers, and governments. A combination of behaviour and regulatory policy changes will be required.*

## Key Messages

1. An "ideal" green economy would be one where there is a complete decoupling of development from the depletion of natural resources, and where all the materials originating from biological sources return to the biosphere after use and all those originating from mineral or non-renewable sources are recycled. This vision of a circular economy is unrealistic, but sets a target for resource and materials management.
2. Existing approaches to products and services need to be reviewed to reduce or eliminate their demand for natural resources. New business models and societal expectations with corresponding products and services need to be defined that decouple growth and material consumption.
3. Recognising this, increased knowledge of the magnitude and effect of the strategy of the 3R's (reduce, reuse, recycle) needs to be incorporated into macro-economic models and indicators, to guide consumer, industrial and government behaviour, decisions and actions.
4. The change from a product-consumption economy to a product-service economy, which replaces the sale of products and services with the marketing of their use, is one way to achieve the decoupling of growth and material consumption.
5. Any approach to decoupling (both absolute and relative) must address the current limitations of recycling efforts and the unsustainable rates of primary resource consumption, with the understanding that a major change to material usage patterns will be required urgently.
6. Integrated materials management policy frameworks are required at all levels to ensure that natural resources are used/reused productively and sustainably throughout their lifecycles. This requires a holistic lifecycle approach to the design, production, use, and recycling of products and services. In addition, different materials will require different management approaches to ensure a sustainable resource base for society.
7. Collaboration between businesses, consumers, policy makers and civil organizations can help create the enabling environment necessary to support a more sustainable consumption and production model. To facilitate this, standards for measuring and assessing the sustainability impacts of material use in value chains are required.
8. Policy makers can accelerate progress toward more sustainable consumption and production models, by focusing on specific areas: market-based mechanisms and economic instruments, regulatory structures, encouraging development of technology and innovation, promoting and supporting efficient use and recycling of materials, collection and sharing of information on materials and material flows, and promoting research into human behaviour to encourage sustainable consumption and production.

## Narrative

Escalating public and governmental concerns about poverty, climate change and biodiversity loss are linked in many ways to how we use natural resources. Society as a whole uses vast amounts of materials that come from and return to the Earth such as wood, minerals, fuels, chemicals, agricultural plants and animals, soil and rock. The scale of this use is such that associated impacts are beginning to pose serious threats to the health of ecosystems and overdraw Earth's natural capital.

A central objective of Green Growth and establishing Green Economies is the decoupling of development from the depletion of natural capital and resources. Decoupling has two aspects that must be implemented together to be successful. Absolute, decoupling restrains the growth in total consumption of raw materials, while relative decoupling reduces the share of primary (virgin) resources in the total consumption of materials. This objective drives the three 'R' approach, "Reduce" (the amount of natural resources required – Absolute decoupling), "Reuse" (extend the life or the number of times a product or service is used – Relative decoupling), "Recycle", (turn materials that would otherwise become waste into valuable resources – Relative decoupling).

Currently governments and the private sector are tackling these challenges through a number of common but often independent policy and operating frameworks. These include natural resource management policies, product policies and waste management policies. Within each of these areas, decision-makers have a variety of options for exercising economic, physical, or operational influence upon material flow patterns. However to successfully manage and reduce negative impacts and maximize benefits a more integrated, lifecycle-based approach is required. Governments in the developed world are beginning to consider this as seen in the emerging policy discussions on Sustainable Materials Management at the OECD. Emerging economies are also well suited to rapid assimilation of integrated materials management approaches (e.g. China's policy on the circular economy).

The production and use of materials involves energy and water inputs at key stages in the materials lifecycle. This interrelationship is at the root of the ecological footprint associated with industrial economies. However, this also denotes that any changes in material usage may inadvertently trigger changes in the consumption of energy, water, or other critical resources in other parts of a materials lifecycle. It is therefore imperative that an integrated materials management approach is taken at the global level to ensure that natural resources are used/reused productively and sustainably throughout their lifecycles.

Increased competition for raw materials and markets coupled with sustained growth in emerging economies has given rise to two major materials sustainability issues: access to raw materials and resource efficiency. Part of the answer is to progressively move towards a circular economy. This is an economy in which today's primary resource is tomorrow's secondary resource. To achieve this in today's global economy a fuller lifecycle-based understanding of material flows within and between economic domains is vital. This is necessary to manage system-wide impacts effectively and to ensure net-positive outcomes for man and the environment.

Materials are the building blocks of industrial society from which products are manufactured and services derived. Products, including both goods and services are developed and created to serve societal needs. Society obtains the materials it needs from natural resources. The interdependence between resources, materials and products needs more detailed understanding and differentiated yet integrated management



approaches. Different materials need different management approaches to build a more sustainable resource base for society. To focus on the “source” of resources without acknowledging the role that society plays in extracting, refining, utilizing and re-utilizing materials from natural resources is short-sighted. It diminishes the opportunity for policy makers, businesses and users to maximize the eco-efficiency of goods and services.

Lifecycle thinking is essential to sustainable development. The main goal of lifecycle thinking is to ensure consideration of socio-economic and environmental impacts associated with goods and services throughout their lifecycles and to improve performance of resources and materials. This requires effective links between the economic, social and environmental dimensions of the entire value chain. To achieve these linkages the principles of sustainable development need to be applied to the conception of products and services and to supply chain management. All business levels need to identify opportunities, manage risks and determine responsibilities throughout the value chain.

## Policy Recommendations

1. Develop policies to decouple development from resource use, recognising the need to employ both absolute decoupling and relative decoupling.
2. Encourage a shift in society towards norms of sustainable consumption and production.
3. Develop social and economic incentives to reduce the demand for natural resources.
4. Develop regulation to improve the management of supply and demand for natural resources.
5. Build an integrated lifecycle-based approach to materials management at the local, national, regional and global level.
6. Promote lifecycle thinking within supply chains to improve economic, social and environmental performance of resources and materials.
7. Recovering value from and creating markets for the materials and energy produced from used products and waste have to become key policy targets.
8. Develop macro-economic models and indicators that incorporate and advance knowledge on the magnitude and effect of policies aimed at the 3R's (Reduce, Reuse and Recycle).
9. Establish at both global and national level a system of materials/resource accounting to track the sustainability of prime resources against the three measures of: i) total consumption growth rate (recycled and primary materials), ii) rate of growth of net additional stock, iii) recycling rate.
10. Create a fuller lifecycle-based understanding of material flows and seek to develop closed-loop systems.
11. Develop integrated planning for significant levels of recycling of materials and resources
12. Address the need for restoration of ecosystem resources as part of sustainable consumption and production efforts

## g) Social Development, Human Rights and the Role of Business

Lead Author: International Council of Mining and Minerals (ICMM)

*States bear the primary duty for social development, poverty alleviation and ensuring the protection and realization of human rights. They also have responsibility for the effective management of the natural resources on which development often depends. These aspects are closely interlinked and require a vibrant and well-functioning private sector, working together with government and stakeholders, to enable significant progress against the Millennium Development Goals, and the realization of economic, social and cultural rights. At the same time, states also have a duty to ensure that the enjoyment of these rights is supported by progress against civil and political rights.*

### Key Messages

- Recognizing that the primary duty for social development, poverty alleviation and the protection and realization of human rights lies with states, and that states also have responsibility for the effective management of the natural resources on which development depends,
- Acknowledging that the Millennium Development Goals' (MDGs) vision of sustainable environmental, social and economic progress provides a foundation for, or explicitly addresses, many of the human rights set out in the International Bill of Human Rights,
- Recognizing that business has a responsibility to respect human rights – meaning to not infringe on the enjoyment of rights by others and remediating negative impacts with which they are involved,
- Acknowledging that many business organizations have formally established or embraced principles and codes of practice that set an expectation for business to behave in an economically, socially and environmentally responsible manner,
- Emphasizing that business has an extraordinary potential to enable and contribute to social development, poverty alleviation and the realization of rights in a variety of ways,
- Acknowledging that a vibrant private sector – and effective stewardship of the natural resource base – is essential to achieve significant social and economic progress against the MDGs and broader realization of many economic, social and cultural rights,
- Emphasizing that no one development actor can deliver the MDGs in isolation, and that significant progress is dependent on engagement and various forms of collaboration (including partnerships) between states, business and other stakeholders.

## Narrative

The primary responsibility for social development, poverty alleviation and the protection and realization of human rights lies with individual states. It is states that have ratified a range of international conventions and have adopted UN resolutions relating to human rights, poverty alleviation, development and environmental protection. States are also responsible for developing national legal frameworks in support of social and economic development and the effective management of natural resources, as well as protecting the rights of their citizens. However, business has a responsibility to respect human rights and an important role to play in contributing to social development and poverty alleviation.

In 2000, the then 189 member states of the United Nations established the Millennium Development Goals' (MDGs): eight time-bound objectives to reduce poverty and improve people's lives by 2015. The MDGs vision of sustainable environmental, social and economic progress – in areas such as poverty alleviation, food security, water and sanitation, health, education and environmental protection – address many of the rights set out in the Universal Declaration of Human Rights in 1948, and elaborated on in the International Covenants on Civil and Political Rights and on Economic, Social and Cultural Rights of 1966. They also explicitly recognize that sustainable social and economic progress is critically reliant on protecting the natural resources on which development depends. This includes clean water, productive lands, biodiversity and the many services it provides that benefit mankind.

The basic responsibilities of business are set out in the legal frameworks of the states within which they have activities, and include compliance with laws relating to labor rights and environmental protection at a minimum. At the international level, a number of voluntary guidelines or codes have also been developed (notably the OECD Guidelines for Multinational Enterprises and the UN Global Compact) which set out expectations for responsible business behavior. In addition, many business organizations have formally established or embraced principles and codes of practice that set an expectation for business to behave in an economically, socially and environmentally responsible manner. At the international level, the consensus agreed at the Human Rights Council in 2008, and supported by major industry associations, is that business has a responsibility to respect human rights – to not infringe on the rights of others and to remediate any negative impacts with which they are involved. This responsibility is articulated in the UN's "Protect, Respect and Remedy Framework", and elaborated on in the UN's "Guiding Principles on Business and Human Rights".

Business also has an extraordinary potential to enable and contribute to social development, poverty alleviation and the realization of human rights. For example, business plays a significant role in producing the basic materials and developing and operating essential infrastructure that enables social and economic advances. In many post-conflict situations and fragile states, business has been essential in kick-starting economic and social progress, helping to sustain peace-building efforts as well as encouraging respect for the rule of law. Where governments embrace a market-economy and create the enabling environment for business to flourish, progress against the MDGs can be accelerated. In parallel, opportunities for the realization of many human rights are enhanced.

The reality is that without a thriving competitive private sector, significant social and economic progress against the MDGs is unlikely to be achieved and impossible to sustain. A healthy business environment — where companies make investments, create jobs, deliver services and improve productivity—helps alleviate poverty by contributing to economic growth, increasing employment and enhancing people’s incomes and opportunities. However, states effectiveness in enabling development depends on good governance and on the quality of its institutions – social, political and economic. States need to: create an enabling environment that incentivizes businesses to expand their productive capacity in a responsible manner; provide social protection for the most vulnerable and strengthen their capacity to sustain livelihoods; and encourage collaboration between the state, business and other stakeholders in support of enhanced developmental outcomes.

To create a healthy business environment, states must ensure that markets and entrepreneurial activity are not stifled by excessive regulation and taxation, unfair competition, corruption, or an unstable policy environment. They must establish rules that: clarify property rights; reduce the cost of resolving disputes; increase the predictability of economic interactions; and provide contractual partners and investors with certainty and protection against abuse. This is the conclusion of the World Bank/International Finance Corporation’s Doing Business series over the past eight years (<http://www.doingbusiness.org/>). At the same time, states also have an important role to play in ensuring that business behaves responsibly, in a manner that respects human rights, supports rather than undermines the natural resource base, and contributes to sustainable social and economic progress. Part of this is about incentivizing responsible practices and players – and part is about creating strong disincentives for irresponsible behaviors.

If those already living in poverty are to enjoy the benefits of an improved business environment, they must be able to actively participate in the potential opportunities that this brings. To do so, requires investments in social and economic infrastructure – notably health, water and sanitation, and education – but also access to training, energy and credit without discrimination. It also requires specific attention to empowering women through access to education and healthcare. In addition, it involves a sustained focus on governance reforms, particularly those that focus on promoting transparency and eliminating corruption. Corruption exacerbates poverty by impairing service delivery, constraining responsible investment, reducing incomes of the poor and undermining programs designed to address their basic needs, such as sanitation and healthcare.

## Policy Recommendations

Sustainable social and economic progress critically depends on states taking steps to:

- a) Fulfil all of their human rights obligations in support of sustainable social and economic progress, with particular emphasis on those at risk of being vulnerable and marginalized, and in line with the UN Guiding Principles on Business and Human Rights, set out clearly the expectation that that business respects human rights through the conduct of effective due diligence
- b) Ensure the effective management of land, water, biodiversity and other natural resources on which development depends, through adequate planning, protection and enforcement
- c) Create the conditions necessary to encourage responsible investment (domestic or foreign), job creation, and improved productivity in support of economic growth and poverty alleviation, to ensure that business expands rather than constrains social and economic development progress
- d) Empower poor and potentially vulnerable or marginalized people to participate in economic opportunities, through investments in health, education, and gender equality, while addressing governance issues (particularly corruption) which can have a disproportionate impact on the poor
- e) Effectively use the revenues from natural resource endowments and other economic activities in support of enhancing social capital, the rule of law, the protection of human rights, establishing social and economic infrastructure, and fostering participatory development and economic diversification
- f) Engage with international institutions, business and other stakeholders on the effective delivery of services and products in support of social and economic progress, through partnership approaches or other forms of collaboration where appropriate
- g) Encourage business to apply ethical principles, practices and effective systems of corporate governance, in support of state-led efforts to address corruption
- h) Encourage business to integrate sustainable development considerations within corporate decision-making processes, and seek continuous improvement in sustainable development performance – social, environmental and economic – and report progress in a systematic and credible manner that engenders the trust of relevant stakeholders
- i) Create incentives for business to expand economic opportunities along their value chains, either through involving the poor within the value chain (as employees, suppliers, customers, etc.) or through developing their human capital
- j) Create incentives for business to contribute to the social, economic and institutional development of local communities, in addition to mitigating any adverse impacts that business might have



## h) Transformational Partnerships

Lead Author: UN Global Compact

*While businesses can make significant contributions to sustainable development independently, partnerships can often contribute to enhancing impacts. There are many systemic challenges that can only be addressed with the coordinated efforts of a wide variety of actors. The convergence of interests between the public and the private sector has provided an opportunity for exploring innovative models for collaboration that achieve greater impact and scale.*

### Key Messages

- Transformational partnerships are necessary to address systemic challenges. Solving complex global development challenges requires systemic change which is only possible with the coordinated efforts of a wide variety of actors.
- Transformational partnerships can address fundamental market or governance failures in an integrated manner.

### Narrative

In the past, partnerships with the private sector were often conceived of only as fund-raising activities. Today, however, it is widely recognized that many of the most effective and sustainable partnerships leverage the core competencies of all partners. Both the public and private sectors have come to realize that the real potential in partnering lies in the synergy and scalability of competencies, resources and expertise that drive successful initiatives.

As an outcome of Rio+20, and building on the legacy of Johannesburg in 2002, Governments are asked to continue to encourage partnerships as voluntary and collaborative relationships between various parties, both public and non-public, in which all participants agree to work together to achieve a common purpose or undertake a specific task, and to share risks, responsibilities, resources and benefits. From philanthropic and strategic partnerships to broader issue-based networks and advocacy partnerships, there are a wide range of partnerships that have the capacity to contribute to sustainable development.

Governments are also asked to support the development of more transformational partnerships which have the potential to transform the ways in which we realize development goals. Transformational partnerships have the following characteristics:

- Address a systemic issue: Solving complex global development challenges requires systemic change which is only possible with the coordinated efforts of a wide variety of actors. Transformational partnerships should address fundamental market or governance failures in an integrated manner.

- Involve all stakeholders who play a necessary role and pertain to the relevant geographies, and do not involve any who fail to meet the criteria.
- Leverage the core competencies of all partners – such as convening power, resources, local presence and technical expertise – to address the systemic issue across all relevant value chains.
- Have an in-built capacity to reach scale and leave a lasting impact – which requires long-term efforts towards instituting new policies and rules, correcting market failures and shifting behavioural norms. Incentives and funding are designed to drive scale and sustained impact.

The challenge of sustainable development requires the participation of all sectors and actors in society. Partnerships can play a key role in helping meet some of the more complex sustainable development needs and should be recognised by governments in Rio as a key mechanism to be supported and leveraged.

## Policy Recommendations

- a) Partnerships can play a key role in helping meet some of the more complex sustainable development challenges and should be recognised by governments as a key mechanism to be supported and further leveraged.
- b) Governments should support the development of transformational partnerships which have the potential to transform the ways in which we realize development goals given they address systemic issues; involve all relevant stakeholders; leverage the core competencies of all partners; and have an in-built capacity to scale.

## i) Urbanization

Lead Author: World Business Council for Sustainable Development (WBCSD)

*By 2050, the global population will reach 9 billion, with more than 6 billion living in cities. A thoughtful and integrated approach to urban challenges is necessary in order to meet the basic needs of this urban population, enable dignified lives, and support meaningful roles for people in their communities.*

### Key Messages

- Sustainable urban development requires an integrated approach, inviting all relevant and concerned stakeholders at all stages and balancing resource efficiency, competitiveness, social equity, environmental impacts, with many other social and economic factors.
- Involving business early in the urban planning process will help create a cross-cutting strategy and provide competitive and effective solutions.
- On our way to sustainable urbanization, a broad understanding of 'green' is necessary, adequately addressing social, economic and ecological dimensions of sustainability. 'Green' is not a final state but a process, and support of 'green' cities, industries, and jobs goes hand-in-hand with efforts toward 'greener' cities, industries, and jobs.
- Education is an important lever to foster understanding of 'greener' urbanization.
- The Rio+20 process should aim at improving ways and structures to strongly promote 'greener growth' in urban areas worldwide. Existing targets can best be reached by prioritizing actions adjusted to local/regional circumstances.

### Narrative

With the population of cities swelling by three million a week, the case for sustainable urban environments becomes more compelling: it offers citizens better lives by lifting people out of poverty and providing appropriate services. Integrated urban management must become the norm, and be based on good governance, in order to achieve the progress necessary to reach sustainability. Involving business early in the urban planning process will help create a cross-cutting strategy and provide competitive and effective solutions. Urban sustainability requires a system-wide view of the interlinked challenges, and a balanced, integrated approach tailored to local circumstances.

## Policy Recommendations

- a) Sustainable urban development requires an integrated approach, inviting all relevant and concerned stakeholders at all stages and balancing resource efficiency, competitiveness, social equity, environmental impacts, with many other social and economic factors.
- b) Sustainable urban development requires innovation, improved technology - including access to technology - and competitiveness as prerequisites for sustainable and 'greener' cities. Governance and finance priorities need to be set accordingly with a clear definition of roles and responsibilities of all actors. Involving business early in the urban planning process will help create a cross-cutting strategy and provide competitive and effective solutions.
- c) The Rio+20 process should aim at improving ways and structures to strongly promote 'greener growth' in urban areas worldwide. Existing targets can best be reached by prioritizing actions adjusted to local/regional circumstances.

## j) Water for Green Economy and Poverty Alleviation

Lead Author: Aquafed

*To succeed with the development of a green economy and the eradication of poverty, significantly more attention must be paid to water policy. This is essential to ensure that the economic, social and environmental dimensions of water management can be satisfied and they are integrated with the other essential and interrelated elements of natural and man-made capital. At present, water is under-estimated and consequently under-resourced in green growth policies at all levels. We single out three major policy issues concerning water, green economy and poverty alleviation:*

- *The serious shortfall in the delivery of water and sanitation to meet the requirements of the Human Right to Safe Drinking Water and Sanitation, which are more precise and demanding than those set out in the MDGs.*
- *The recognition that it will very difficult to feed the growing world population unless there are significant improvements in water and energy productivity in agriculture.*
- *The current lack of treatment of polluted water needs to be overcome to ensure that water can be used multiple times as a means of overcoming forecast water stress and meeting future needs of societies, the environment and economies.*

## Key Messages

- Management of water resources and provision of water services are fundamental elements without which developing a green economy and meeting the poverty alleviation targets of the MDGs are impossible.
- Population growth, economic development and improving lifestyles are all placing heavy pressures on water resources. These pressures are causing demand to increase at least twice as fast as population growth. At the same time the stress on the finite resources of water are increasing as a result of mismanagement, pollution and climate change.
- Current data and monitoring processes are inadequate and grossly understate the scale of the problem of inadequate water and sanitation services. The number of people currently suffering from a lack of water services that satisfy all aspects of the Human Right to safe drinking water and sanitation at their dwelling place exceeds 3 billion. This is significantly more than the numbers reported by the MDG monitoring process. The number of people in urban settlements who do not have access to satisfactory water and sanitation services as defined by the MDG target is increasing instead of diminishing. This situation is morally unacceptable and extremely costly in social, economic and environmental losses and externalities. It is a serious concern to business, which sees the impact in reduced productivity of human resources and diminished purchasing power in marketplaces.
- Today 80% of the used water worldwide is discharged to the environment without treatment. This is seriously degrading the environment, threatening human and environmental health and making water unusable for downstream users. Collecting and treating water after use to make it available for subsequent uses is a realistic option for increasing the amount of water available and protecting resources and the environment to permit economic growth and poverty eradication.
- Currently agriculture is the largest user of water resources, often with low levels of efficiency. To meet the significant increase in the demand for food to feed the growing world population the water use efficiency of agriculture will have to improve substantially. This will require improved agricultural processes and practices where rain-fed agriculture is concerned. It will require a combination of agricultural and water management actions where "blue water" is used for irrigation.
- While agriculture is the largest user of water resources, the provision of energy to support development is becoming increasingly water intensive, creating competition for a scarce resource in some parts of the world. To meet the increasing demand for energy, fresh water productivity in the energy sector will have to improve significantly. This may require the increased use of non freshwater resources like sewage effluent, saline or brackish water.
- Business manufacturing and services also use significant amounts of water, either directly or through their supply chains, and also contribute to water discharge. Improvements by both public and private water users and providers are therefore also important with respect to achieving water sustainability.



## Narrative

Water is a “fundamental” that underpins all sustainable development and the green economy.

Water, with the environmental, social and economic services that are derived from it, forms part of the platform, on which life of all kinds, all societies and all economies are dependant. Combined in complex ways with the atmosphere, land and energy, water is a fundamental part of the global system on which everything else is built and is dependent. This means that there is vast array of questions that need to be asked and relationships developed between water and the green economy and poverty alleviation.

Since the Earth Summit in Rio in 1992, water has been accorded less importance than climate change. The links between the two are now becoming ever more apparent and the need to give equal importance to water as to the atmosphere is becoming evident. It is now seen by many that including a deep examination of water issues and water policy in the Rio 2012 discussions is an absolute imperative.

However, there are so many dimensions to the water challenge, that it is considered impractical and ineffective to attempt to deal with them all. For that reason, we are proposing that States focus on three particularly important policy areas.

- Water and sanitation
- Water productivity in agriculture
- Treating polluted water as a resource

These are described briefly in this paper and some key messages and policy recommendations are outlined.

Why the three themes have been selected: We have suggested the focus on the three themes because it is believed that these are particularly pressing issues that offer very significant potential to meet the objectives of the Rio 2012 conference and make a significant contribution to the future well being of mankind and the environment.

Other parts of this submission raise other aspects of water as it links with sustainable development, green growth and poverty alleviation. These are notably;

- The Energy - Food - Water Nexus
- Agriculture
- Urbanization
- Oceans

It would be possible to highlight links between water and most if not all elements of sustainable development.

## Policy Recommendations

- a) The scale and cost of the lack of adequate water and sanitation services to about half of the world's population needs to be recognised. In the context of green growth, poverty alleviation, social equity and environmental protection, the international community, national and local governments must take urgent steps to remedy the situation.
- Global Review and Revision of Water and Sanitation targets
  - International policy commitments to achieving and sustaining access to water and sanitation to meet the requirements laid out by the UN Human right to safe drinking water and sanitation by a specific date.
  - National policy commitments to developing country level targets, plans and resource allocation to enable the above.
  - Local action to ensure the investment and operation of sustainable water and sanitation services in an economically and socially sustainable way.
  - Particular attention must be paid to establishing a sound and sustainable economic basis for water and sanitation services. This can be achieved by using the tools of Strategic Financial Planning and Sustainable Cost Recovery.
- b) To reduce the stress on finite water resources, it is essential that the water productivity of agriculture, which globally uses 70% of available water, is increased substantially.
- International and National policies and incentives to improve water productivity of agriculture to be developed.
  - Set up national and international monitoring, analysis and reporting of water use and efficiency in agriculture, and also in business manufacturing and services.
  - Review of the economics and pricing of water for irrigation to ensure the optimum investment and operation of public and private irrigation infrastructure.
  - Develop public and private investment in the research and development of improved technologies for water use in agriculture and the water productivity of crops.
- c) A way to support the growth in demand for water from the finite resources available is to ensure the successive uses of water by different users in the same catchment. This can be done by reducing pollution and by collecting and treating used water to enable its subsequent use by others.
- National policy objective to be devised to support the recovery and recycling of water after use.
  - National incentives to encourage municipalities and the economic sectors to develop the recovery and recycling of water after use.



- Policies to enable the reuse of used water after treatment for secondary purposes that are consistent with public and environmental health.
- Investment in, or active encouragement of, research, innovation and development in reuse and recycling technologies.

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## Business Action for Sustainable Development 2012

**Business Action for Sustainable Development 2012 (BASD 2012)** is the official United Nations coordinator of business and industry at the upcoming Conference on Sustainable Development (Rio+20) to be held in Rio de Janeiro on June 4-6, 2012. A temporary coalition of business organizations, BASD 2012 will ensure the voice of business is heard at the event and during the preparatory process. This initiative is convened by the International Chamber of Commerce (ICC), the World Business Council for Sustainable Development (WBCSD) and the United Nations Global Compact (UNGC) and is being expanded with a number of sectoral international business organizations.

BASD 2012 will:

- Provide constructive policy input to the Rio+20 preparatory processes and coordinated business input to the formal United Nations Rio+20 Conference.
- Demonstrate business' commitment to delivering market-based solutions and showcase its active engagement in initiatives and partnerships to promote sustainable development. Market-based solutions are essential to move toward a more sustainable world.
- Represent business and industry at the UN DESA Major Groups Program aimed at enhancing Major Group participation in the Rio+20 process.
- Emphasize business solutions to sustainable development that deliver results and expand the concept to embrace poverty alleviation, job creation, environmental stewardship and social empowerment.
- Express global business positions on key sustainability issues to assist governments in making decisions that allow for a sustainable global business engagement.

The ultimate objective of BASD 2012 is to strengthen the overall contribution of Rio+20 to sustainable and inclusive markets and promote joint action between stakeholders – business, government, civil society and consumers – toward green growth.

### Conveners



### Partners

**AquaFed**

THE INTERNATIONAL FEDERATION OF  
PRIVATE WATER OPERATORS



Meeting challenges in a growing world

