World Business Council for
Sustainable Development

World Business Council for Sustainable Development

Insights from Business in Response to the Bali Action Plan

The World Business Council for Sustainable Development with its 200 member companies and regional partners in 57 countries have participated for many years in the debate on climate change, energy access, security and competitiveness. We have engaged in the United Nations Framework Convention on Climate Change process to share insights that we believe would enhance the effectiveness of a future international climate change agreement.

Business is already addressing climate change. However, it can do more. It can assist governments by further:

- Delivering emissions reductions through a focus on efficiency improvements
- Developing and deploying low-carbon technologies
- Leveraging financial resources
- Increasing forest carbon sequestration
- Adopting innovative solutions to adapt to climate change.

This WBCSD submission sets out business insights on:

- Technology development and deployment
- Finance and carbon markets
- An international framework that encompasses cooperative sectoral approaches.

Summary of key recommendations

- A future climate change framework must provide the elements to enable all countries to collectively work towards a decarbonized global economy with the urgency needed. This includes GHG emission reduction targets for developed countries and supporting infrastructure to enhance the financial and technology flows to developing countries to manage emissions growth and work towards net emission reductions in the longer term. These pathways should recognize the social and economic drivers of national and regional importance.
- Low-carbon technologies exist and have the potential to significantly reduce global emissions, but enabling frameworks and specific policy responses are needed to support their rapid deployment.
- New technologies will also be needed. A future framework must facilitate the scale-up of research, development and demonstration of these clean energy technologies through new financial mechanisms and international cooperation.
- A future framework must strive to unleash large-scale investment by enhancing carbon markets and effectively using public funding to leverage private finance. The framework will support global cost-effective mitigation actions by providing the necessary elements that enable carbon markets to link as they develop at national levels.
- By addressing investment barriers, streamlining the CDM and establishing new mechanisms to drive large scale investments, financial flows to developing countries will be enhanced.
- Cooperative sectoral approaches can be used as a mechanism to enhance national mitigation actions.

1. Technology development and deployment

The International Energy Agency (IEA) has advised governments that a "revolution" is needed to change the global energy system and achieve a 50% reduction in global carbon emissions by 2050. According to the IEA this will depend on a "dramatic shift" in government policies, by creating greater long-term policy certainty and unprecedented levels of cooperation among major economies to support business investment in low-carbon technologies.[1] Governments will lay the foundation for a global technology revolution and business insights and actions are required for delivery of effective and efficient solutions.

Business is the biggest investor in technology. Generally, it is companies that develop, own, use and deploy technology, rather than governments. Business understands "technology transfer" as the global deployment and diffusion of mature technologies. This involves much more than patents, and includes capacity building, market development, technological and business know-how, consumer education and long-term industrial policies. With patents representing a small percentage of energy project investment costs, a specific focus on sharing patent property will not enhance "technology transfer". The focus must be on establishing adequate investment frameworks.

The energy sector is an important source of global carbon emissions, and therefore an important focus of global mitigation efforts. Technology is needed to ensure all mitigation and adaptation needs can be met within required timeframes. To deliver the potential of existing and new technologies there is a need to:

- Provide clear signals for investments that reflect the different technology investment cycles. Many existing and new lower emission technologies are more expensive than the technologies they replace, so policy support and incentives are required, tailored to the stage of maturity and particular barriers they face (see fig. 1).
- Overcome policy, institutional and financial barriers for technology diffusion in developed and developing countries. Both developed and developing countries need to have the policy frameworks, legal systems including protection of intellectual property rights (IPR), infrastructure, skills and institutions that facilitate investment.
- Foster an unprecedented level of international cooperation on technology, which includes incentives to support the deployment of existing technologies, as well as reversing the global decrease in basic R&D investment, demonstration programs and capacity building.

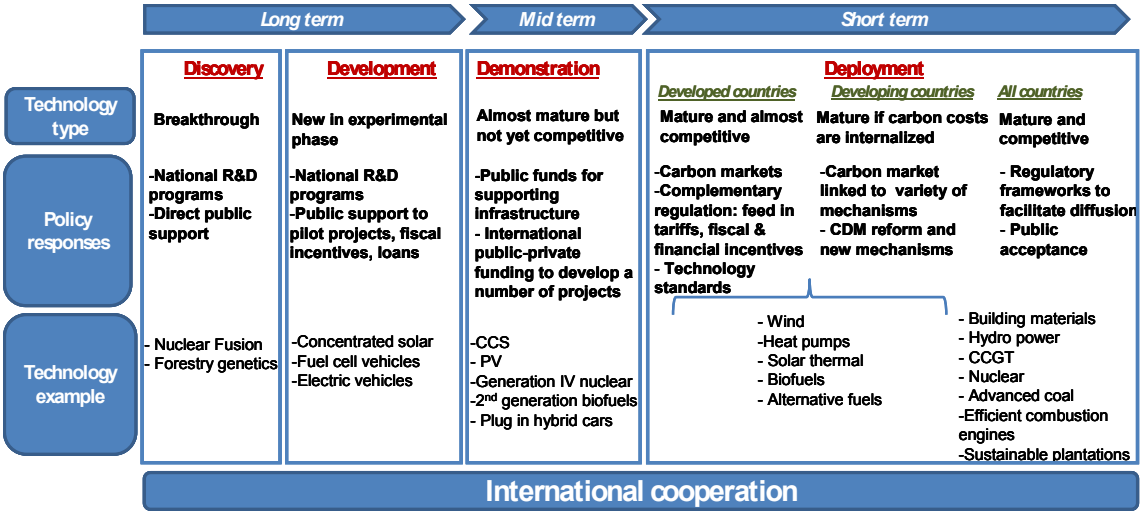

Figure 1: Technology innovation chain and policy needs

[1] IEA, Energy Technology Perspectives, 2008.

Key insights from business

To realize the potential of existing and new mitigation and adaptation technologies, business believes the new global climate change agreement needs to:

1.1 Clearly signal governments' intended level of ambition in reducing global carbon emissions

The new agreement should establish a long-term emissions pathway with intermediate targets and a review of national progress towards them. Ideally the emissions pathway and targets should reflect the different technology cycles to enable investment in technology development and deployment on a commercial basis (fig. 1).

1.2 Unleash the potential of the diffusion of low-carbon and energy efficient technologies

Low-carbon and energy efficient technologies exist and have potential to significantly reduce global emissions. Business believes an array of harmonized policy measures is required to urgently enhance their rapid diffusion, including: effective energy pricing, developing carbon markets, providing other market-based incentives, improving product information, well designed norms and technical standards, and methodologies for standard setting. Changes in consumer behavior and technology choices, together with these measures, would create further energy savings (fig. 2).

Energy efficiency is widely accepted as the most cost-effective way to mitigate climate change, and accounts for half of the potential to halve CO_2 emissions by 2050.[2] The case for energy efficiency includes: reducing energy costs, alleviating energy dependency, decreasing vulnerability to energy prices and reducing emissions.

Barrier	Why?	How to overcome the barriers?
Low or volatile energy prices	– Subsidies – Prices don't include environmental costs	– Eliminate perverse subsidies – -Put a value on carbon
High upfront costs	– Most consumers value the present cost of consumption – Lack of capital	– Economic incentives (e.g., tax reductions) to decrease first cost – Use finance mechanism to leverage investment
Slow diffusion of technologies	– Lack of incentives for energy companies to reduce customer demand – Lack of skills, knowledge and support – Fragmented and non integrated industry structures (e.g., building sector) – Lack of effective IPR protection	– Internalize carbon prices in energy services – Promote ESCOs – Technology standards – Enhance capacity building – Ensure IPR protection in accordance with WTO regulations
Information failures	– Lack of information or imperfect information regarding future energy prices and EE alternatives	– More effective technology standards (e.g., building codes) – Product energy labeling – Advice on energy smart metering
Split incentives	– Those making decisions on EE do not benefit (e.g., building owners and tenants)	– Provide clear information and incentives (e.g., tax rebates, mortgage discounts, rebates) – Introduce standards (e.g., building codes)
Uncertainties on investment and risks	– Uncertainties add a premium to investments	– Economic incentives to reduce costs and risks – Develop robust energy and carbon markets – Establish stable regulatory frameworks
Consumer behavior	– Lack of awareness and information on energy consumption and costs	– Develop carbon markets – Raise education and awareness on EE

Figure 2: Addressing barriers to the deployment of low-carbon and energy efficiency technologies

[2] IEA, Energy Technology Perspectives, 2008.

1.3 Enhance international technology cooperation and build strong technology enabling frameworks

International cooperation on technology between governments and companies is needed to facilitate the wide-spread development and deployment of technology. This cooperation is based on the provision of enabling frameworks for the diffusion and demonstration of technologies, especially in rapidly emerging and developing countries, including:

- Strengthening national institutions and policy frameworks, including protection of intellectual property rights. By giving business an exclusive right to its inventions for a limited period, patents promote and protect ongoing investment and innovation and facilitate the dissemination of new technologies.
- Building national skills, absorption capacity and competency to use technology (e.g., organization, manufacture, operation). This involves improving education systems through programs that increase technology literacy in society, governments and business.
- Providing the basic infrastructure (e.g., distribution networks, roads) to support deployment of new technologies, and ensure its climate resilience.
- Recognizing the importance of the technology demonstration phase and ensure that supporting mechanisms are implemented to usher technology through this stage (see 2.3).

2. Finance and carbon markets

Significant action is required to scale up and mobilize public and private investment to address climate change and to increase financial flows to developing countries. The UNFCCC Secretariat concluded that the investment and financial flows needed to address climate change are much larger than the funding currently available under the UNFCCC and Kyoto Protocol.[3] In the energy sector alone, the IEA estimates additional investment needs of U$ 45 trillion up to 2050 to be able to halve global emissions, of which 50% would go to developing countries.[4]

Private sector investments currently constitute 86% of global investment and financial flows. Moving forward, business investment will be enhanced if governments provide the incentives, institutional structures and market frameworks that support investment and reduce risks, including stability and reliability of carbon pricing. This means governments should:

- Implement an enabling framework that will "push" the development of new technologies, including through the use of public investment in early stage demonstration and deployment of new mitigation and adaptation technologies
- Improve market mechanisms so they can "pull" these investments through the innovation chain (fig. 1), generate revenues and enhance the flow of investment to developing countries.

Carbon markets will have an important role in tandem with various other financial tools in directing investment to support the achievement of long-term emissions goals and are a mechanism to ensure cost-effective abatement. Carbon markets now operate in many parts of the world, but they are not yet delivering finance at the scale needed to meet mitigation needs over coming decades. In the post-2012 agreement, cap and crediting systems need to be balanced. The long-term goal needs to be strong enough to create a demand that will incentivize the development of technologies that deliver large-scale emission reductions. In some sectors a carbon price will be insufficient and other policy responses will be necessary to drive emission reductions.

Key insights from business

To enable investment to be brought forward, scaled up and focused on developing countries, business believes the new global climate change agreement needs to:

2.1 Build fungible and effective global carbon markets

An effective global carbon market requires the establishment of a long-term emissions pathway with intermediate targets to create a critical mass in national carbon markets, boost investor confidence in the market, and drive investment in new technologies. Effective design and subsequent linking of current and emerging carbon markets will enable the progressive harmonization and fungibility of global carbon markets and increase stability.[5]

2.2 Reform the Clean Development Mechanism

Business supports CDM extension and reform to drive the deployment of low-carbon technologies and practices more effectively, improve the regional distribution of projects, streamline and expedite project approval and credit issuance, broaden the range of allowable projects, and improve regulations for additionality. Specific reforms include:

- The CDM Executive Board should refocus on its original mandate on "big picture" issues, such as CDM function and operations, and use external organizations for project-by-project approval activities. Efforts should be directed to reducing execution risk, timing and selection criteria and increasing predictability.
- Update the current assessment criteria for additionality to allow measurement on a wider basis, e.g., additionality could be measured for the whole renewable sector in a country, rather than project-by-project.

[3] UNFCCC, Investment and financial flows to address climate change: an update, UNFCCC Secretariat, November 2008, Technical paper FCCC/TP/2008/7.
[4] IEA, Energy Technology Perspectives, 2008.
[5] See more detail in WBCSD, *Establishing a Global Carbon Market*, 2007.

- Expand programmatic CDM to allow the large scale "bundling" of programs to increase volume and reduce cost and implementation time.

2.3 Establish new financial mechanisms to increase financial flows to developing countries

Expansion and reform of the CDM alone is unlikely to trigger the required financial flows to developing countries. New financial mechanisms should be created to:

- Ramp up the demonstration of technologies with large mitigation potential.
- Introduce approaches to the CDM that could be based on sectoral baselines (e.g., cement sector) or harmonized methodologies for efficiency standards. This will incentivize the diffusion of existing low-carbon technologies on a large-scale.

International public funding will also be necessary to leverage private sector investment for:

- Deployment of existing and new technologies. This funding should be directed to remove distortionary policies and barriers, provide capacity building and cover some of the risks involved in those investments.
- Development of new technologies that face financial challenges during and after demonstration. These arise from the high risk levels associated with such technologies and because financial support through markets is focused on the deployment of technologies. Public finance has a critical role in bridging the funding gap for innovators as they attempt to scale-up demonstration projects. The criteria for such financing will need to be set out in a transparent framework.

3. Elements of a future international climate agreement

All countries must work collectively towards a decarbonized global economy. Developed countries must take on and implement GHG emission reduction targets, and developing countries must manage emissions growth, enhance carbon sequestration and eventually work towards net emission reductions over the longer-term. The pathways for the management of GHG emissions should be expressed in terms of a long-term trajectory of carbon emissions and based on science, including up-to-date results from climate research, an understanding of the impacts of climate change, and the social and economic drivers of national and regional importance. A framework that provides the elements to enable this is key to the sustainability and effectiveness of any international agreement on climate change.

The framework would start with a global long-term goal. This goal would not just be a distant aspiration, but would be supported by intermediate targets for developed countries, the first of which should be no later than 2020. The target would provide the context for necessary reductions at national and regional levels.

The number of countries taking targets must increase over time through the provision of supporting infrastructure to enhance financial and technical capacity. This infrastructure would include:

- Mechanisms to facilitate the deployment of existing low-carbon technology – such as a reformed Clean Development Mechanism, or new financial mechanisms
- Direct funding for clean technologies – with a particular focus on early large-scale demonstration of new technologies
- Infrastructure that facilitates the development and linkage for a global carbon market
- A series of robust processes to ensure that actions taken are measurable, reportable and verifiable
- Direct funding for adaptation projects
- A framework to support cooperative sectoral approaches and sector specific activities.

The recommendations related to the use of clean technology funds and CDM reform have been outlined above. The following proposes insight on what a cooperative sectoral approach can deliver and how it might function under the future climate framework.

Insight on cooperative sectoral approaches

Business has considerable experience implementing mitigation activities on a sectoral basis. Sector-based initiatives and projects have led to positive contributions to GHG emission reductions through technology development, deployment and capacity building. Business believes a new cooperative sectoral approach should be adopted to enhance the scale of mitigation actions globally.

Cooperative sectoral approaches can be developed as a new, large-scale mechanism within the international framework. It would focus on establishing activities to support emissions reductions across countries and sectors, drawing from incentive and support mechanisms provided by the international framework. Individual agreements would be developed through the voluntary participation of countries – developed and developing – and business working together to achieve emissions reductions or increase sequestration in specific sectors through specific activities.

These would promote action in developing countries by introducing new infrastructure and technologies, together with the capacity for ongoing operation and future expansion. Over time developing countries could take on a number of activities, allowing them to build up national mitigation actions to substantial levels, as appropriate given their development needs and capabilities.

Business sectors willing to participate would be consulted and work with the countries to design the cooperative sectoral approaches. Some important parameters are:

- The agreement would be between a limited number of countries who decide to engage
  - Developing countries would engage in activities that support domestic mitigation actions
  - Developed countries would also engage in relevant mitigation actions and support the developing countries on agreed elements

  - The private sector would choose to implement the nominated activities
- Agreements would focus on both current and future emission reduction activities benefiting from the incentive mechanisms provided (e.g., large-scale emission reduction programs or development of future low carbon technologies)
- The objectives, deliverables and timelines for all elements included in the scope would be defined and quantified
- The scope of an agreement would vary according to the specific needs of participating countries and sectors, and could include:
  - Supporting the deployment of existing low carbon technologies
  - Collaboration on clean technology development between governments and business
  - Crediting performance that exceeds an agreed baseline/standard within a sector, to drive the efficiency of technology performance
  - Supporting capacity building programs to provide the technical capacity needed to deploy low-carbon technologies
- The agreements would not result in the "carving out" of sector emissions from a participating developed country's overall target
- The agreements would be formally recognized under the UNFCCC:
  - A board would be established to oversee governance and compliance
  - The agreements would be negotiated by the interested Parties and then presented to this board for approval
  - Through a robust "measurable, reportable and verifiable" process, activities within the agreement will be registered
  - The agreements would then be reported and recognized by the COP.

Meeting the needs of the parties

The cooperative sectoral approach is designed to meet both the mitigation challenge and the needs expressed by the parties within the Bali Action Plan.

Each agreement leads to nationally appropriate actions enabled by technology and financing and supported by robust "measurable, reportable and verifiable" processes. Typically, an agreement would relate to a sector and deliver technology capacity building to that sector through a series of activities. These are developed by business in response to the incentives set in place within the agreement.

The mechanism responds to the call for sectoral approaches and sector-specific actions:

- It focuses on developing country economic sectors rather than targeting the entire economy
- It identifies the range of technologies that a sector may use and incentivizes their deployment
- By clustering common sector-based action across a number of countries, competitiveness concerns begin to be addressed.

Further reading

Adaptation: An issue brief for business
http://www.wbcsd.org/DocRoot/0IrHrQZvR88x2rPGNfAH/Adaptation.pdf

CEO Climate Policy Recommendations to G8 Leaders
http://www.wbcsd.org/DocRoot/hTR3nsUWPLXEqBYaX1FR/CEO_Climate_Policy_Recommendations_to_G8_leaders.pdf

Establishing a Global Carbon Market
http://www.wbcsd.org/DocRoot/wrHqIUtkoNq4sC2wodX8/linkages.pdf

Beyond REDD: The Role of Forests in Climate Change
http://www.wbcsd.org/web/projects/forestry/TFDForestsandClimate%20StatementwBriefingNotes.pdf

Investing in a Low-carbon Economy in the Developing World
http://www.wbcsd.org/DocRoot/GOOfs11Yta5VrU8mgsmQ/WBCSD_Finance.pdf

Power to Change: A business contribution to a low- carbon economy
http://www.wbcsd.org/DocRoot/gJNh7EwNedJVD4WqlBPM/PowerToChange-Report.pdf

Powering a low-carbon economy
http://www.wbcsd.org/DocRoot/Dtxv4PXlBtKDs6PYvu6o/Powering-a-low-carbon-economy.pdf

Power to Change: A business contribution to a low- carbon economy, summary of key elements and policy messages
http://www.wbcsd.org/DocRoot/H9nUSQjESsSp61cqZNQr/PowerToChange-Flyer.pdf

Policy Directions to 2050: A business contribution to the dialogues on cooperative action
http://www.wbcsd.org/DocRoot/t3R55MJo0eMEeKdVYWUQ/int_low_res.pdf

Walking the Talk on Energy & Climate
http://www.wbcsd.org/DocRoot/JIN2qtDwKMWt2kOuc7G5/ec-walking.pdf

About the WBCSD

The World Business Council for Sustainable Development (WBCSD) is a unique, CEO-led, global association of some 200 companies dealing exclusively with business and sustainable development. The Council provides a platform for companies to explore sustainable development, share knowledge, experiences and best practices, and to advocate business positions on these issues in a variety of forums, working with governments and non-governmental and intergovernmental organizations.

Disclaimer

This submission is released in the name of the WBCSD. Like other WBCSD publications, it is the result of a collaborative effort by members of the secretariat and executives from several member companies. A wide range of members reviewed drafts, thereby ensuring that the submission broadly represents the majority view of the WBCSD membership. It does not mean, however, that every member company agrees with every word.