

A Framework for a 2015 Climate Change Agreement and Accelerated Clean Energy Deployment

Introduction

The coalition of clean energy industries represented by the Business Council for Sustainable Energy (BCSE) calls for governments to deliver a clear, concise and ambitious climate change agreement at the 21st Conference of the Parties (COP21) of the United Nations Framework Convention on Climate Change (UNFCCC) in Paris, France in December 2015. The design and structure of this new agreement is critical, as it will affect investment in, and deployment of, the clean energy technologies that are needed to enable economies to adopt low-carbon development pathways.

A framework for a meaningful new international climate change agreement is:

AMBITION → INVESTMENT + INNOVATION

An ambitious agreement will drive low-carbon investment and innovation.

The **AMBITION** of a new international agreement expresses the political motivation and ability of countries to reduce greenhouse gas emissions in order to keep global warming below 2 degrees Celsius (°C). This can be done by setting

targets, developing time frames and creating protocols for monitoring, reporting, and verification. It also focuses on the need to close the gap between country pledges and what is needed to protect Earth's atmosphere.

The **INVESTMENT** in a new international agreement is measured by investments of financial and human capital, the ability to use market-based mechanisms, a commitment to public-private partnerships, and the building of capacity and strengthening of existing institutions dedicated to climate change. A new agreement will need to capture the value and potential that partnering with the private sector will bring to government efforts to mitigate emissions and build a more resilient future.

The **INNOVATION** that a new international agreement would catalyze could take us to a decarbonized future – if the ambition and resources allocated are high enough, and if the fundamental policy frameworks are in place. The world needs both existing clean energy technologies and the next generation of low-carbon solutions. A strong intellectual property regime will ensure that both technology avenues are available. New market-based tools will also emerge and adapt to a changing financial landscape that is directed by an ambitious agreement.

How BCSE Industries Are Part of the Climate Change Solution

How the world consumes energy to produce electricity, heating and cooling is a major source of global greenhouse gas emissions. According to the Intergovernmental Panel on Climate Change's Fifth Assessment Report (2014), the main sources of direct global emissions are: electricity and heat production (25%); agriculture, forestry and other land use (24%); industry (21%); transport (14%); buildings (6.4%) and other energy sources (9.6%).¹

A diverse and clean portfolio of energy solutions – including demand-side and supply-side energy

efficiency, natural gas, carbon capture use and storage, and renewable energy resources (biomass, biogas, geothermal, hydro, solar and wind) – is a necessary element of any country strategy to reduce emissions and promote low-carbon, sustainable economic growth.

The BCSE seeks a new international agreement that provides clarity and transparency to businesses and the marketplace that will drive accelerated investment in cleaner energy sources and more-efficient energy use.



The Road to Paris: BCSE Recommendations for a 2015 Agreement

As the global community collectively works toward Paris, the Council offers its views on how the design of a new international climate change agreement can leverage growth in clean energy deployment and deliver the ambition, investment and innovation needed to tackle the challenge of climate change head on.

ON AMBITION

It is essential for governments to clearly demonstrate their ambition to mitigate greenhouse gas emissions and invest in building more-resilient communities at a scale commensurate with the challenges.

Targeted energy efficiency measures – including in buildings, transport, lighting, appliances, district energy and industry – have the potential to reduce global energy-related emissions by 1.5 gigatons in 2020 and to generate annual savings of US\$250–325 billion.²

This should be evident both in countries' nationally determined contributions and in a 2015 international agreement. Strong ambition will create domestic policy frameworks that will attract global investment

to induce immediate investments and to begin the bigger shifts needed to meet a long-term goal.

- » A clear and durable structure that provides country targets and timetables, and that provides a predictable schedule for review of country actions and the opportunity to adjust country commitments over a longer time horizon.
- » Inclusion of market-based mechanisms as a cost-effective tool for countries to meet their national targets.

Ambitious mitigation targets will lead to domestic policy and investment frameworks that will help unlock additional investment in clean energy and energy efficiency. The International Energy Agency estimates that \$500 billion by 2020 and \$1 trillion by 2050 will need to be invested in low-carbon energy in order to keep global warming below 2°C and avoid the worst effects of climate change.³

in existing and new markets for clean energy and more-efficient energy technologies.

Key elements of an ambitious agreement include:

- » A concise political agreement where all countries agree to take action.
- » Country commitments that include both short- and long-term policy targets. Near-term targets are necessary

However, because climate change is already affecting communities around the world – often disproportionately in developing countries – the new agreement also should recognize the important contributions of a country's adaptation efforts. A key area of new work for the international community will be developing standards for measuring adaptation efforts, through bodies such as the International Organization for Standardization.

An opportunity exists for developing countries to advance their development goals along a path that is both low carbon and more climate resilient. For example, significant adaptation co-benefits can arise from mitigation actions related to energy supply (such as the use of distributed generation of renewables or combined heat and power)

ON INVESTMENT

As demand for energy rises, an estimated \$45 trillion in new energy infrastructure will be needed around the world between 2015 and 2030.⁴ This presents an investment opportunity for countries to restructure the production and consumption of energy in a more efficient, less carbon-polluting way.

The mitigation and adaptation efforts of developing countries deserve the continued technical and financial support of the United States and

The cost of renewable energy technologies is plummeting, making renewable energy a cost-competitive choice in many markets. The cost of solar photovoltaic panels, for example, has fallen 80 percent since 2008 and is expected to keep dropping.⁵

other advanced economies. The BCSE calls on donor countries to deliver on their pledges to capitalize the Green Climate Fund (GCF) and to continue to partner with the private sector to establish

a successful institution. The operationalization of the GCF and the provision of public finance should be smartly placed so as to leverage and redirect private sector investments to cleaner, low-carbon energy choices and more climate-resilient initiatives.

ON INNOVATION

The delivery of clean energy technologies – both commercially available and next-generation solutions – will be best supported through an ambitious agreement that includes a commitment to helping developing countries create the necessary enabling environments, and strengthening the absorptive capacity that will incentivize innovation and establish sustainable markets for doing business.

When the private sector makes investment decisions, it assesses a potential market based on elements such as policy stability, sound infrastructure, open markets, and effective legal frameworks that encourage competition and innovation and that protect intellectual property rights (IPRs). The protection of IPRs is an enabler, not a barrier, to supporting innovation and investment in developing countries.

as well as actions related to energy end-use (such as demand response or more energy-efficient buildings).

Ultimately, the transparency and accountability of country actions will be the unifying backbone to the deal and will send the private sector the signals it needs to increase low-carbon investments.



The new agreement should recognize the role of market-based mechanisms, such as emissions trading schemes, as a practical and cost-effective option for countries to meet their mitigation and development objectives. The international community, under the UNFCCC, should also provide a set of rules and a standardized system of accounting for emissions and offsets, in order to protect environmental integrity and to avoid double-counting across a spectrum of country actions.

An ambitious agreement will stimulate additional investments of capital – both financial and human – in countries' capacities to adopt low-carbon pathways of economic development. For example, strengthening the absorptive capacity of a developing country is essential to the successful deployment and long-term use of a renewable energy or energy efficiency technology. Another way to support these types of investments is to strengthen existing climate institutions, such as the GCF and the Climate Technology Centre and Network, to continue to grow their portfolio of work.

A new international agreement should acknowledge the important role of the private sector in developing and deploying low-carbon technology solutions, leveraging additional capital investments and sustainably growing economies around the world.



Foreign direct investment, commercial cooperation agreements, joint ventures, licensing and local training, and technology cooperation are critical conduits for sharing clean energy technologies. This kind of trade and investment activity, supported by IPR protection, creates investor confidence; opportunities for partnerships, jobs and training; and supply chains that support the sharing and transfer of good business practices and technological know-how.

Global coordination of policy and investments in large-scale carbon capture and storage demonstration projects is needed to achieve commercialization of this critical solution.



Conclusion

The creation of a new international climate change agreement in December 2015 provides the global community with a tremendous opportunity to integrate goals to reduce global

Natural gas has displaced coal-fired electricity generation in many markets, resulting in half the amount of carbon dioxide emissions.

greenhouse gas emissions, invest in a more climate-resilient future and promote sustainable economic growth.

The Business Council for Sustainable Energy

calls on governments to seize this opportunity and to deliver an ambitious agreement that will stimulate investment and innovation in a low-carbon, clean energy future for all nations.

For the BCSE, the key elements of such an agreement include:

- » Vision and commitment by all countries to address climate change over a sustained time horizon – through targets for mitigation and emissions reduction, investments in adaptation, and the provision of technical assistance and finance.
- » Direct engagement and partnership with the private sector as the providers of technology solutions to mitigation and adaptation challenges, both now and in the future.
- » Clarity of country commitments – both short and long term – and a transparent schedule and system for monitoring, review and evaluation of country actions.
- » Application of market-based mechanisms as a cost-effective mitigation tool, and use of a standardized accounting system to protect environmental integrity and to avoid double-counting of emissions reductions and offsets.

ENDNOTES

¹ Intergovernmental Panel on Climate Change (IPCC), “Summary for Policymakers,” in Climate Change 2014, Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the IPCC (Cambridge and New York: Cambridge University Press, 2014), http://report.mitigation2014.org/spm/ipcc_wg3_ar5_summary-for-policymakers_approved.pdf.

² Sustainable Energy for All, Global Energy Efficiency Accelerator Platform, 2014, www.se4all.org/energyefficiencyplatform.

³ International Energy Agency, Energy Technology Perspectives 2012: How to Secure a Clean Energy Future (Paris: 2012), www.iea.org/etp/etp2012.

⁴ Global Commission on the Economy and Climate, “Chapter Four: Energy,” in Better Growth, Better Climate: The New Climate Economy Report, 2014, <http://newclimateeconomy.report>.

⁵ International Renewable Energy Agency, RETHinking Energy (Abu Dhabi: September 2014), www.irena.org/rethinking.

ABOUT THE BCSE

The Business Council for Sustainable Energy (BCSE) is a broad coalition of clean energy business sectors, including renewable energy, supply-side and demand-side energy efficiency, and natural gas and electric utilities in North America. The BCSE is an advocate for policies that increase the use of commercially-available clean energy technologies and drive investment into a low-carbon, diversified energy portfolio. The BCSE has represented the views of clean energy industries in the United Nations Framework Convention on Climate Change (UNFCCC) since 1992. For more information, please visit <http://www.bcse.org> to download the *Sustainable Energy in America Factbook* for the latest market data, and follow on Twitter: @BCSECleanEnergy.