

# Realising the promise of 'sustainable energy for all'

The private sector must be front and centre in delivering the Rio+20 Sustainable Energy for All agenda, in partnership with the public sector and NGOs, says **Lisa Jacobson**

**S**ustainable energy will be front and centre of discussions taking place in Rio this month. As tens of thousands of governments, civil society and industry leaders prepare to converge for the 20th anniversary of the first Earth Summit, it is critical to look at the advancements made in its development and deployment over the past two decades – and the crucial role of the private sector in realising the Rio+20 objective of 'sustainable energy for all'.

The Business Council for Sustainable Energy (BCSE), a coalition of businesses and trade associations in the renewable energy, energy efficiency and natural gas industries, was established in 1992 by industry leaders who also attended the first Earth Summit. These executives brought to the negotiations business expertise as well as technology solutions needed to meet development challenges. They were among the first to engage constructively in policy discussions focused on creating a sustainable energy future that would foster economic growth, social development and environmental protection worldwide.

The 1992 summit, which produced two international environmental treaties, the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity, highlighted the need for private sector partnerships between government and stakeholders to address the challenges of sustainable development. Twenty years later, the private sector has become a strong partner in sustainable development in many parts of the world, and clean energy investment has grown dramatically, reaching \$260 billion in global investment in 2011.

However, the International Energy Agency (IEA) estimates over \$40 trillion in global investment is needed in energy infrastructure between now and 2035, two-thirds of which must be in emerging economies to meet grow-

ing energy demand. Public and private sector partnerships will be essential to leverage private capital toward this level of investment. It will be critical that this investment flows to clean, low-emissions energy sources and technologies, to satisfy both rising energy demand and sustainable development objectives.

The BCSE advocates a diverse energy portfolio as the key to creating a sustainable energy future at the local, national and global levels:

- Renewable energy can deliver energy access and meet new incremental demand with zero or low-carbon emission technologies.

- Supply-side and demand-side energy efficiency technologies can help communities use energy in smarter and more economically-efficient ways.

- Natural gas is a lower-carbon source of fossil fuel that is affordable, reliable and efficient.

Clean energy companies are implementing solutions that can reduce energy consumption and deliver energy more efficiently, extend energy access to those that are without and produce

cleaner, low-carbon energy. This recognition and partnership must be supported and amplified at Rio+20, especially given the urgent need for jobs and development in many parts of the world and the fiscal challenges facing many nations.

In contrast to the first Rio Summit, the emphasis at Rio+20 will be less on the adoption of political treaties and more on forging lasting partnerships between businesses, governments and communities with a view to achieving sustainable development goals on the ground. Public-private partnerships will be in the spotlight across a range of sectors, and collaboration in the energy sector can have a high impact in improving the livelihoods of 1.6 billion people who do not have access to electricity.<sup>1</sup>

**R**io+20 speaks to the need for a wholesale approach to 'renewing' the way we think about energy, from a perspective of economic growth, environmental protection, national security and quality of life. Clean energy industries want Rio+20 to be a platform to encourage the widespread adoption of an integrated approach to sustainable energy deployment around the world that includes policies that encourage incentives, standards, stable investment climates, research and development, public education and increased energy awareness.

To further encourage a sustainable energy path, UN Secretary General Ban Ki-Moon announced an ambitious agenda for clean energy deployment in anticipation of Rio+20. The Sustainable Energy for All initiative (SE4ALL) calls for universal access to modern energy services, the doubling of the rate of improvement in energy efficiency, and doubling of the share of renewable energy in the global energy mix by the year 2030.

In making this announcement, Ban put out a call to action to policy-makers and industry alike to undertake actions that are needed to improve the economic, social and environmental

### A cross-border wind partnership

PARTNERSHIPS CAN EMERGE between developing and developed countries, to match supply and demand, especially in renewable energy. Semptra Energy's Energía Sierra Juárez project in Baja California, Mexico, proposes to tap into one of the region's strongest wind resources to generate a new supply of clean energy for California in the US. Construction on the first phase of the installation is expected to begin in 2013 and when completed in 2014 will generate up to 156 megawatts or enough power for approximately 65,000 average homes.

The transmission line, dedicated to renewable power, requires international cooperation and special cross-border permitting, but exemplifies how demand created by California's renewable energy portfolio standard can drive private investment into new markets. Future phases of this groundbreaking wind project, which could generate an additional 1,000 megawatts, could provide clean power to utilities in the US or Mexico.

<sup>1</sup> UN Industrial Development Organization, UN-Energy, *Energy, Development, and Security*, [www.unido.org/fileadmin/user\\_media/Publications/documents/energy\\_development\\_and\\_security.pdf](http://www.unido.org/fileadmin/user_media/Publications/documents/energy_development_and_security.pdf)



needs of our global community. The road to success involves the creation and support of well-designed, multi-sector partnerships that will drive capital flows into existing, clean energy solutions.

The built environment – existing buildings and new stock – provides a ripe opportunity for such a public-private partnership to meet SE4ALL objectives. Buildings use more than 80% of electricity and 40% of energy globally. They consume more than half of energy globally if construction materials are taken into account.<sup>2</sup> Doubling the rate of energy efficiency in buildings would dramatically shift global consumption of resources and free up budgetary resources for other critical social investments.

In 2008, for the first time in history, more than half of the world's population – 3.3 billion people – lived in urban areas. That number is expected to increase to 5 billion by 2030. According to a report by Global Construction Perspectives and Oxford Economics, the global construction market will grow from \$7.2 trillion today to \$12 trillion by 2020.<sup>3</sup> As that urbanisation takes place, we can choose to lock in energy inefficient buildings and their accompanying greenhouse gas emissions, or we can choose to pursue a low-carbon future.

In preparation for Rio+20, a new consortium of key actors in the build-

ing sector has come together to explore a public-private partnership on energy efficiency in buildings. Under the auspices of the UN Foundation, the BCSE has joined several other leading international organisations, companies and NGO partners to develop a strategy and design for such a partnership, which will be announced at Rio+20. The partnership would support the energy efficiency objectives of SE4ALL and would identify and support the actions to accelerate the global deployment of energy efficiency in buildings. It would offer a coordinated yet distributed model, based on private sector leadership, to support and improve the effectiveness of the work public institutions are doing on this public policy issue.

As currently envisioned, the partnership will identify and promote proven policy and regulatory approaches that support best practice standards and business models that

Locking in sustainability – a growing energy imperative as urbanisation accelerates

increase the flow of commercial market investment. It will raise awareness through the design and execution of a global communications and advocacy strategy, raise visibility of the issue at high-level venues, and engage the UN system in a more coordinated fashion. For example, the partnership could assist the UN in improving building energy efficiency in the 10 UN member countries that will pilot the SE4All initiative.<sup>4</sup> It could also engage with the five newly created UN Regional Commission Energy Efficiency Policy Forums to help member countries to improve national planning and implementation in the buildings sector.

**K**ey focus areas will likely include energy efficient building codes, voluntary green building standards, zero or low-energy construction, retrofit of existing buildings, increasing energy use awareness and the new ISO 50001 energy management standard.

An example of the type of work that can be fostered and shared under a buildings partnership is the Driving Transformation Toolkit. Developed by Johnson Controls, in collaboration with BCSE, the Center for Clean Air Policy, the US Green Building Council and the World Green Building Council, the toolkit reviews the policy options available to emerging economies to drive a transformation to more energy efficient buildings. A second outcome from this collaboration will be released at Rio+20 on the importance of buildings for sustainable development, giving a private sector perspective on policy priorities and providing a tool for policy-makers to conduct a self-assessment on building efficiency policy.<sup>5</sup>

The emphasis at Rio+20 will be rightly placed on forging new and strengthening existing partnerships between businesses, governments and communities that are implementing sustainable development actions at the local level. Public-private partnerships are needed to galvanise and coordinate efforts and the business community stands ready to do its part. **EF**

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### The Rio+20 opportunity

RIO+20 PROVIDES an opportunity to:

- Affirm the role that the private sector plays as a partner in achieving sustainable development;
- Support the objectives of the UN's Sustainable Energy for All (SE4ALL) initiative on energy access, energy efficiency improvements and renewable energy deployment;
- Call for partnership and implementation support for SE4ALL objectives;
- Showcase technology solutions and promote policies that will result in sustained markets for clean energy products and services; and
- Offer commitments that reflect the work that the private sector can contribute to advance the Rio+20 and SE4ALL objectives.

<sup>2</sup> WBCSD (2010), *Transforming the Market. Energy Efficiency in Buildings*. www.wbcd.org/transformingthemarketeeb.aspx

<sup>3</sup> Global Construction Perspectives and Oxford Economics (2011), *Global Construction 2020: A global forecast for the construction industry over the next decade to 2020*, www.globalconstruction2020.com

<sup>4</sup> UN missions are under way to identify 10 developing countries that will pilot SE4All.

<sup>5</sup> Managan, K, M Araya and J Layke (December 2011), *Driving Transformation to Energy Efficient Buildings: Policies and Actions*, Johnson Controls, www.institutebe.com/energy-policy/Driving-Transformation-Energy-Efficient-Buildings.aspx