Business as solution provider

Energy+ Private Sector Consultations – Rio 18 June 2012

The International Energy and Climate Initiative – Energy+ - is reaching out to the business community and soliciting their view on ways and means to take investments in renewable energy and energy efficiency to scale. The private sector has much to say and many lessons learned about what works and what does not. Energy+ wants to engage and learn in order to develop the right incentive structures and successful business models. Why not try to reach out by asking them the questions, instead of providing ready-made answers? – is our thought. Based on inquiries and works shops in Washington in November 2011 and in Nairobi in March 2012, Energy+ came to the Rio+20 sustainability summit with a broader sense of what it takes to mobilize private capital and commercial investment in clean and reliable energy in developing countries.

The Rio Energy+ event was organized under the aegis of the Corporate Sustainability Forum. The event brought together a range of governments, civil society and businesses leaders in discussions on how to leverage commercial investments and climate finance to scale up renewable energy deployment and energy efficiency in developing countries. The attached memo sums up the main findings of the Energy+ Private Sector Consultations as presented at Rio. Energy+ is grateful for the kind assistance of CEO David Rothkopf and Managing Director Claire Casey of Washington based Garten Rothkopf in preparing the memo and consultations at Rio 18 June 2012.

Business as solution provider - seizing the strategic moment

Governments in low and middle income developing countries are today making strategic decisions about their national energy mix towards 2030 and beyond. Now is the time to assist them with making investments in renewable energy and a low carbon economy into an attractive business opportunity.

What is, then, the problem?

While making economic sense in the longer term, investments in renewable energy as a rule meet with added incremental costs and disadvantages compared to fossil fuels. This is as much a structural problem as economic, fossil fuel consumer and production subsidies distort the fledgling energy market development in developing countries.

This notwithstanding, there are encouraging signs for governments and private investors. In 2010 the clean energy sector grew by 30% above 2009 levels to achieve a record 243 bill USD worth of finance and investment. Private investment in clean energy technologies is expected to reach 450 bill USD by 2012 and 600 bill by 2020, according to UNEP. Each year the poor spend $37 billion on poor-quality energy solutions to meet their lighting and cooking needs – this is an untapped market.

Energy+ is demand-driven and works only with governments that are wholly dedicated to national and regional energy policies and plans, and a results-based (*payment-on-results*) approach to public-private financing of energy sector development.

At the country level Energy will be implemented in three phases to support the use of results-based payments and other incentives;

- support the development of low-carbon and energy sector strategies, establishing a reference level for project emissions from energy production and work to strengthen the technical and institutional capacity to support private sector investment,

- establish credible monitoring and reporting systems, enable transparent and efficient regulatory regimes, and enable the functioning of incentive mechanisms,

- develop viable results-based payment systems aligned with strategies on emission reduction and increased energy access relative to the reference level based on agreed-upon country level indicators.

What is needed in order to set up a results-based funding structure is an actively engaged local business community in the energy sector: There must be co-financers, there must be banks – there must be local ownership, and local content. There must be institutions that are invested with a 'national' interest in taking energy infrastructure to scale; be it on-grid, mini-grid or off-grid. Investments may come from venture/equity capital sources – but also insurance / pension funds - and have different risk/return requirements. Households and consumers may be counted among potential investors in some cases.

Key policy information to governments from the event:

- ODA is insufficient to do the job – build effective public-private and community partnerships through new and innovative financing models

- Free money/grants will not do the job – but up-front public money can play a crucial role in kick-starting activities

- Predictability is most the important single factor for investor security – predictable framework conditions for business and stable policy priorities in the energy sector

- "Less is more" – optimistic perspectives on potential for scaling-up through small-scale business development
- Cell phone-based support to energy deployment and access is a great untapped potential – win-win for deployment of communication and energy services
- There is neither time nor need to wait – start now with making developing countries Green Fund "ready" – notwithstanding that it will take many years before the fund becomes operational.

Finding solutions to the problems…

There is, however, a range of traditional market barriers and hurdles that Energy+ seeks to address together with the business community:

- Energy security and investor security go hand in hand. Accountability is to public money what the bottom line is to private capital (UNDP). Investors need to have a clear sense of how and where individual projects fit into an overall national strategy.
- Private sector investment is also impeded by a range of regulatory obstacles including inefficient project approval, permits, licensing and land leasing procedures; and uncompetitive electricity markets dominated by vertically integrated national energy companies.
- Real and perceived risks that are keeping investors out and driving interest rates up call for new financing models that pool risk more effectively, for instance by public and private mechanisms for de-risked investment environment in developing countries.
- Absent a price on carbon, it is difficult to make renewable energy investments cost competitive compared with fossil fuel. Ideally subsidies for fossil fuels would be reduced or removed. Renewables investments are capital intensive and have higher risk management costs.
- Addressing intermittency and base-load challenges is often a concern. Any clean energy solution that we promote and facilitate, will have to interact and work within a national energy mix heavily leaning on carbon sources.
- In the off-grid market segment there is a range of practical problems if we are to develop successful and scalable business models. A principal hurdle is that the

off-grid segment is an immature market for energy services; this poses severe challenges for effective financing mechanisms and schemes.

- Rural communities are often unable to afford the sizable upfront costs of renewables projects and lack access to reliable credit. While the demand is great; from a supply side - lack of standards, product guarantees, and maintenance of equipment can hinder private sector competition.

Three most common recommendations - "what is known to work":

- Feed-in-tariffs
- Reversed auctions
- Standard Power procurement Agreements (PPAs)

Conclusions and Recommendations:

The Energy+ Partnership helps to identify targeted interventions to overcome key barriers and bottlenecks for different stakeholders in the value chain through an on-going dialogue with the commercial sector. This dialogue, coupled with other key elements such as taking a sector-wide approach to energy access, working through three specific phases, and applying results-based payments to prepare countries to access climate finance, is what makes the Energy+ approach unique.

Private sector needs to be supported by an appropriate policy, legal and regulatory environment.

Energy+ countries will be compensated through the Energy+ Partnership with results-based payments based on measured, reported and verified (MRV) results. The developing country Partner can, but is not required to, use these payments to support various tools used to attract commercial investment, leading to further increased energy access and emissions reductions.

There is no direct cash flow between the Energy+ Partnership and commercial investors.

A study of over 100 enterprises shows that with the right business models and enabling conditions, the private sector can help to close the energy access gap. The commercial sector brings essential expertise and capacity that will be critical for accelerating the pace of which energy access is provided.

- A first step is to develop an energy access and climate change strategy. This should not be done in isolation but, rather, within the context of a longer-term economic development framework.

- Perhaps as important as the existence of a long-term energy access and climate change strategy is its transparency. Access to information on policy, regulations, resource assessments and future planning is critical for project developers to identify opportunities to invest in energy access and renewable energy.

- Early stage project development support has the potential to bring a reliable pipeline of bankable projects to market. This could include technical capacity building, both managerial capacity for project developers and building the capacity of local financial institutions to accurately assess project risk.

- New financing models that pool risk more effectively and a range of public and private mechanisms that create a de-risked investment environment need to be developed.

The Energy+ Partnership will convene dialogue meeting with representatives from the private sector in key markets and strengthen its knowledge base through the work of the Technical Working Group and consultancies.

New Energy+ commitments - next steps:

- Continue analytical work – develop the analytical basis of Energy+ International Partnership

- Dialogue with private sector – continue international Private Sector Focus Group consultations – next stops are India and China

- Expand scope of country level interventions – today Ethiopia, Kenya and Liberia – new states could include Mozambique, Tanzania, Uganda, Senegal, Nepal and Bhutan

- Take the international Energy+ activities one step further - develop and possibly formalize the International Partnership and Energy+ Guiding Principles

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Energy+ grateful for the highly professional help to conduct the Private Sector Consultations under the leadership of President and CEO David Rothkopf and managing Director Claire Casey of Garten Rothkopf. Garten Rothkopf has provided Energy+ with leadership, advice and assistance in previous Private Sector Consultations in Washington in November 2011 and Nairobi in March 2012, allowing the International Energy+

Partnership to draw on their important insights in transformational trends in energy, climate and the global economy. These business consultations will continue, new rounds are planned in India and China in the autumn of 2012.

Summary of Rothkopf Remarks

David Rothkopf offered brief remarks on the private sector consultation process, what has been accomplished to date, and some key takeaways from the first two meetings.

The commercial sector is the engine that will drive energy sector transformation. The current level of commercial investment in renewable energy in developing countries is growing, but is still far short of the total amount needed. The IEA estimates that investment of US $48 billion per year will be needed to provide universal energy access by 2030 – more than five times the level of investment in 2009.

The capital required for transformation – now and in the future – makes it clear that meeting this challenge will require unleashing commercial sector capital through ongoing engagements and coordinated action among the public sector, civil society and the commercial sector. While attracting commercial finance is essential to achieving the goals of Energy+, leveraging the strengths of the commercial sector in the following roles is also important:

- The Commercial sector's expertise and capacity accelerates the pace at which energy access is provided
- Competitive commercial markets can reduce the costs to government and the public by achieving economies of scale, as well as develop new technologies and improve commercial services needed to increase the affordability, access and overall reliability of the energy system.
- Finally, commercial sector activity provides local capacity building, and knowledge and skills transfer which is critical to improving local know-how while establishing networks between local firms and small and medium enterprises (SMEs). These networks enable companies to more easily source inputs and connect with customers.

Energy+ has already taken steps to integrate the commercial sector into their work, through a global private sector consultation series, which started in Washington, DC in November 2011, was replicated in Nairobi, Kenya, and will continue on to other key regions and markets. Consultations with leading SMEs, development firms and financial services providers have identified some of the principle obstacles to and opportunities for scaling up the use of renewables and increasing energy access. Throughout the consultations, we also used wireless polling to both stimulate the discussion and provide clear evidence of the overall perspectives of private sector actors from around the world active in this space.

Across our consultations, there was a consistent message that more than any subsidy or incentive, the most important element in attracting investment in the development of a stable and predictable policy environment. In fact, 50% of participants in the Washington DC consultation cited a clear regulatory and policy framework as the primary metric in evaluating market risk. Providing streamlined regulatory processes and standardized PPAs were also cited in both consultations as actions that could unleash private sector investment by dramatically reducing the cost and risk profile of investments.

Notably, among the participants in the Nairobi consultation, all of whom were largely reliant on local capital markets, 59% identified access to financing, particularly in the early stages of project development as the primary hurdle to success. Participants recommended funding feasibility studies and early stage project development financing as areas in which relatively small scale public investment could be leveraged up significantly. They also noted that in the long term, empowering local financial institutions with technical capacity to evaluate project risk, conduct due diligence, and offer loans, will benefit smaller renewables projects that currently struggle to access to financing.

Participants in both consultations also cited a need for better access to information to reduce start up costs and level the playing field: in particular, comprehensive national and local-level resource assessments to evaluate the revenue generation and energy production potential of certain regions and projects, and baseline information to evaluate market demand. Access to a central portal containing this type of information, as well as policy and regulatory frameworks and plans, will help prevent a duplication of efforts and expense, enabling investors to allocate capital more efficiently and lowering entry costs across the board.

We have heard a consistent message from the private sector that reforms that focused on leveling the playing field for new projects would be more valuable than any subsidy or other incentive. In concrete terms this means tackling uncompetitive electricity markets dominated by vertically integrated national energy companies, removing subsidies to fossil fuels that have been recognized by the G20 as a major force distorting the market against cleaner forms of energy, and removing or reducing high import tariffs for renewable energy technologies.