

REEEP-ing the benefits: Renewable energy and energy efficiency partnership initiative

Dr. Marianne Moscoso-Osterkorn, International Director, REEEP, Vienna, Austria

If climate change is to be avoided and if the impoverished are to get the energy services they need, the finance and business communities need to feel more confident in backing sustainable energy. Dr. Marianne Osterkorn, International Director of the Renewable Energy and Energy Efficiency Partnership (REEEP), believes that regulatory and legal frameworks can help provide this confidence.

The promotion of renewable energy is much easier said than done. There are few governments, corporations or public bodies that would not agree that we need to make the mix of energy use more sustainable – using more renewable sources, promoting energy efficiency and using less oil and gas. However, our energy-intensive, high-carbon economies are so firmly established as political, economic and social structures, that changing them is a multi-faceted challenge. So action is often abandoned, postponed, or watered down. The investment models that support coal and oil are so well-established and profitable, that renewables with lower immediate returns are not considered bankable. In consequence, many well-intentioned initiatives gather dust in government, multilateral and philanthropic institutions around the world.

Partnership for sustainable, reliable and secure energy

There are initiatives that are making a difference. But they tend to be low-key, and behind-the-scenes. The Renewable Energy and Energy Efficiency Partnership (REEEP) is one of these. Although REEEP rarely makes any headlines, it is coming to be acknowledged as a global champion for a more sustainable, secure and reliable energy mix for both the developed and the developing world. Much of what the REEEP does is concerned with the unglamorous matter of helping ensure that the regulations and systems that underpin the delivery of energy are supportive of the increase in the use of renewables and energy efficiency. Only if those systems are in place will the renewable sector be able to gain the support of politicians who will drive further change, and the confidence of

the financial markets that will provide the money that makes change a reality. Alongside other initiatives that are progressing the uptake of renewable energy, including the Johannesburg Renewable Energy Coalition (JREC) and the Mediterranean Renewable Energy Programme (MEDREP), the REEEP is one of the durable achievements of the 2002 Johannesburg World Summit for Sustainable Development (WSSD).

The REEEP, now based in Vienna, is funded by the Austrian, Dutch, Irish, Italian, Spanish, UK and US governments, and the European Commission. It is a partnership, the members of which are governments, businesses and NGOs who are committed to creating a regulatory environment that will accelerate the uptake of renewable energy and energy efficiency. Their representatives within the REEEP are all committed energy practitioners, making REEEP a “partnership of partnerships” that has access to unrivalled expertise, local market knowledge and political leverage. Equally important, they are ready to facilitate and support existing government processes around the drafting of policies and regulations which support sustainable energy and energy efficiency. The key is to share relevant experiences from one part of the world with a government looking to change structures and systems that will build confidence in renewable energy and energy efficiency, and reduce the perceived risk of investing in it.

One of the key challenges that the REEEP is addressing is energy utility regulation. Electricity generation systems around the world have evolved into highly centralised grids for large-scale remote power generation using coal, oil, gas and nuclear power and long distance transmission. Such systems



Figure 1. Wind Turbine, BP Solutions.

have been very successful at delivering low-cost power, both in the developed world and increasingly in developing countries. The energy market reforms of the last twenty years have introduced to the power industry new and more complex regulatory regimes that mix the private sector, governments and independent regulators. Despite these changes in market structure, ownership, control and regulation, the emphasis on traditional technologies and systems has usually remained.

However, renewable energy and energy efficiency works in a very different way to these traditional generation and delivery systems. In terms of technology, renewable energy sources do not deliver power in the same, large-scale, continuous way as do coal-fired power stations. Localised and distributed transmission technology is required to enable wind-generated energy, for example, to phase in when the wind is blowing, and for other

forms to take up the slack when it is not. Similarly, the economics of wind farms, combined heat and power (CHP) and hydro power require different price controls and financing to ensure they attract the investment required to get them established.

Governments and regulators recognise that changes are needed to improve the energy mix. They may lack the time and the expertise to establish the regulatory foundations for such a change. This is where REEEP has a vital role to play. Based on work carried out by the Centre for Management under Regulation at Warwick University in the UK, REEEP has established the Sustainable Energy Regulation Network (SERN) to do the behind-the-scenes work necessary to promote forms of regulation that support and encourage the use of energy efficiency and renewable energy. The structure is regional, with global links, and a wide range of stakeholders involved.

Much of this work is low-key and unglamorous: facilitating exchanges of experience and knowledge between regulators on the different policy and regulatory mechanisms; promoting better understanding of the economic benefits of renewable energy such as greater energy security, utilisation of indigenous resources and opportunities for income generation, particularly in rural areas. Good practice guides and training courses for regulators on all forms of renewables are prosaic, but they are essential for changing the energy environment, for greater energy security.

Various regulatory initiatives are now being developed through SERN. These include market obligations on energy companies to source some energy from renewable sources, and targets to improve energy efficiency for their customers. Some governments and regulators are also beginning to examine the need for more fundamental changes to energy systems to promote localised and distributed power sources and demand management responses on an equal or preferential basis to traditional large scale power generation and transmission.

REEEP has a number of projects underway that will facilitate a more conducive regulatory environment for renewable energy. The Renewable Energy International Law (REIL) project, for example, seeks to ensure that



Figure 2. Solar panel in rural school located in NE Brazil benefits from BP technology in a project supported by the local government.

new and existing international treaties and agreements on everything from free trade to biodiversity take into account the emerging need for diversification into renewable energy, and do not unintentionally create barriers.

Financing renewable energy

Regulations make things clear, and raise the comfort levels of everyone involved. Such assurance is particularly important for those financial institutions whose money will actually finance the introduction of renewable energy and energy efficiency. Bankers are conservative and cautious – which is why we put our savings with them. However, that same attitude often inclines them against putting their financial weight behind new energy projects of which the technology and its application may be immature and the economics untried. Renewable energy and energy efficiency investments do yield economic returns, but the perception of higher up-front capital costs and long-term payback periods is unattractive to investors.

The banking sector is reluctant to consider renewables because the projects are often small, and do not provide sufficient returns on investment. Furthermore, there is often limited capacity and awareness within existing financial institutions about the value of renewable energy and energy efficiency, and this issue needs to be addressed to free-up funds for projects. The industry is still

dominated by government backed programmes and developments. Given a relatively small energy service industry, the recognition that many renewable technologies carry a higher start-up cost (but generally lower operating costs) and

that the current interest is to develop smaller, dispersed power distribution systems and/or to provide energy at a household level, it is little surprise that the orthodox finance markets show limited interest in such opportunities. The result is a perception of increased risk.

Creating systems and networks that provide bankers with the necessary level of comfort to invest is a crucial REEEP role. Regulations and pricing that give preference to renewable energy sources are an important part of this process. However, direct financial backing using government money is also essential to encourage investment. Public funds can be used to encourage a greater supply of financing to renewable energy and energy efficiency, either through guarantee mechanisms or by buying-down the rate of return required by financiers.

Our REEEP partners in the Association of South East Asian Nations (ASEAN) identified this as a particular need. In Asia as elsewhere, renewable energy and energy efficiency projects tend to be smaller-scale, modular and capital intensive investments. Locally owned Small and Medium Sized Enterprises (SMEs) in Asia could provide energy services to those most in need, but they often lack the business development skills and necessary financial resources. There are a number of regional organisations involved in addressing the barriers to renewable energy, promoting such resources and providing development assistance. Few however have access to the level of financial support that is needed for project implementation. Asian bankers are as conservative in their attitude to renewables as their European and North American counterparts.

REEEP is therefore pioneering a new and innovative approach through the creation of a Fund for Sustainable Energy. This builds on a concept suggested in 2000 and recommended by the

G8 Task Force on Renewables. It is envisaged that the finance to be offered through the Fund would be “patient capital” – public and private sector investment sources melded together to provide finance that will yield a return but at lower rates than typically expected from the private capital market. This model is at the core of the European Commission’s initiative

to develop a Global Renewable Energy Fund of Funds. Envisaged as a not-for-profit entity, the Fund will allow donor money to be attracted and utilised in a manner that will leverage public and private sector sources.

Fund for Sustainable Energy

The key aims of the Fund will be the provision to the private sector of business development skills, project preparation funding, seed capital and limited project finance. The available finance will be a combination of donor grant funds and low return investment sources that will provide borrowers and partners mutually acceptable terms and returns.

For off grid and distributed generation, for example, the Fund will offer support to the local private sector to develop credible service operations of an appropriate scale by providing finance that is partially matched by the energy business. For grid connected generation projects the Fund will provide support to the local private sector to develop business capacity to become project partners. Where appropriate, a loan facility will be available to allow project preparation and to cover expenses through to financial closure.

An initial investment target over the first three years of operation of US\$50 million is now under consideration. The proposal has been endorsed by the June 2004 ASEAN Energy Ministers' meeting and is now part of the ASEAN Plan of Action for Energy to 2009. The Fund is also seen as a vehicle through

which a number of bilateral and multilateral donors, philanthropic organisations and corporations, regional institutions and the private sector can cooperate and build on the commitments made at the WSSD in Johannesburg to provide practical and appropriate support for the acceleration of renewable energy projects in Asia and the Pacific. The fund is already in discussions with the EC Patient Capital Initiative (PCI) and EU Energy Initiative (EUEI). The establishment of strong partnerships with existing organisations in the region will be of fundamental importance to maximise the impact of the Fund.

If REEEP can put the nuts and bolts in place of an energy structure that will admit renewables into the energy mix, the politicians and financiers have no excuse if they fail to deliver.

The amount of money involved in the Fund may seem small given the world's need to diversify its energy use from high-carbon sources to include renewables and energy efficiency. However, relatively small policy and financial initiatives of this sort have an impact way beyond their immediate size and scope. They are not limelight projects, but they put the structures and systems in place without which change will be impossible to implement, and they create the confidence and reduce the



Figure 3. Biogas, China..

impression of risk that are essential for securing investment. We have to face the fact that, despite widespread efforts over the last ten to fifteen years and repeated assertions by many international agencies and conferences about the needs for the sustainable delivery of energy services, there has been limited practical implementation of renewable energy and energy efficiency projects, particularly in developing economies. It has been easy to make announcements about aspirations, but such intentions are of little value if we do not make the effort to adjust established energy generation, transmission and financing systems to give renewable energy a necessary helping hand.

If REEEP can put the nuts and bolts in place of an energy structure that will admit renewables into the energy mix, the politicians and financiers have no excuse if they fail to deliver. REEEP's achievements in establishing the SERN, REIL and ASEAN Fund for Sustainable Energy may not grab the headlines, but there has arguably been too much of that in the history of encouraging renewables.

ABOUT THE AUTHOR



Before being appointed International Director of REEEP, Marianne Osterkorn was Head of the Executive Office of Austrian Power Trading, a subsidiary of Verbund, Austria's largest utility. After an early career in banking, Mrs Moscoso Osterkorn joined Verbund in 1981, and became the first female manager in the male-dominated world of Austrian electricity. She has since held several management positions in Verbund, including head of Organisational Development and Divisional Manager for International Relations. In this latter role she was active in the development of the EU renewable directive and the European renewable certificate system (RECS). In 2003 Mrs Moscoso Osterkorn was elected President of RECS International. Mrs Moscoso Osterkorn was honoured as one of the key women in European energy in 2003.

ABOUT THE ORGANISATION

The REEEP is an International Partnership established to enhance the sustainable delivery of energy through the use of renewable resources and energy efficiency programmes in the developed and developing world. This partnership of governments, businesses and NGOs is committed to creating regulatory and fiscal frameworks which will encourage public and private sector participation to accelerate the uptake of renewable energy and energy efficiency.

First proposed at the World Summit for Sustainable Development in August 2002, the REEEP is based in Vienna with funding from the Austrian, Dutch, Irish, Italian, Spanish, UK and USA governments, and the European Commission.

ENQUIRIES

Dr. Marianne Osterkorn
REEEP – International Director
VIC / D 1733
Wagramerstrasse 5
1400 Vienna
Austria

Tel: +43 (1) 26026 3679
Fax: +43 (1) 21346 3678
E-mail: marianne.osterkorn@reeep.org
Web site: www.reeep.org