New policy approaches are key to attracting massive private capital needed to scale up renewable energy

Governments should consider scaling up of renewable energy as part of their robust economic development strategy, rather than as an environmental strategy with the secondary benefits of job creation. Such an approach is fundamental for attracting new private-sector investment to finance renewable projects at a scale that is needed to address climate change. Proven mechanisms should not be abandoned, but new policies have to target ways to reduce the risk-to-reward ratio in order to enhance private sector investor confidence for investment in large-scale renewable energy.

These are the main conclusions and recommendations from the report '*Strategies To Finance Large-Scale Deployment Of Renewable Energy Projects: An Economic Development And Infrastructure Approach*', a report authored by Clean Energy Group, commissioned by IEA-RETD (Renewable Energy Technology Deployment). IEA-RETD is a cooperation of nine countries under the umbrella of the International Energy Agency IEA.

> *Matthew Kennedy, IEA-RETD co-chair: "This report concludes that governments need to consider new and more innovative approaches to address the challenge of scaling up finance for the deployment and delivery of large-scale renewable energy projects in the short term."*

Making the switch to large-scale renewable energy systems will require the significant investment with magnitudes in trillions of dollars. The necessary transformation is on the scale of the information technology revolution of the past three decades.

Renewable energy investments are on a growth trajectory, reflected by $ 243 billion of globally CAPEX in 2009. However, these recent figures do not reflect international consensus among many policymakers on the future levels of investment required to finance the large-scale deployment of renewable energy technologies to address climate change risks. Such commitments have been made all the more difficult in the current financial crisis.

However, the level of capital is available with new, conventional investors, but only on terms that are within their investment parameters. Governments have an important role in providing the right conditions. Simply scaling up of public subsidies is not a viable solution.

Policies should specifically reduce the technical, institutional, policy risks associated with renewable energy technologies and, at the same time, increase the profit potential of these investments. An economic and infrastructure systems-approach is required.

The report highlights the menu of options for policy and decision makers, focusing on the years up to 2015. Some major recommendations are:

- Build local markets for a country's renewable energy products.
- Fill identified gaps in industry value chains such as manufacturing support or workforce development.
- Institutionalize – e.g. with an investment bank - the functions to manage the economic development, finance mechanisms, and technology innovation.
- Create investment incentives that will attract investments from new pools, e.g. corporations.
- Consider creation of 'green bonds'.
- Increase private and public research and development in renewable energy technologies.
- Combine feed-in tariffs (FITs), national tax credit schemes, and mandatory renewable procurement for utilities into successful instruments.
- Public procurement of renewable energy and mandatory use of renewable technologies in new buildings are possible 'quick wins' in policies.
- Establish the 'emerging technology renewable auction mechanism' (ET-RAM) that requires local utilities to procure renewable energy project outputs from specific technology classes. This would be a driver for innovative renewable energy technologies to enter the market.

In the phase 2016-2020 policies have to build on these experiences, stimulating reinvestment and attracting even more cautious investors. In the period 2020-2050 a fully formed 'infrastructure investment' portfolio will continue along the new renewable energy economy path, producing jobs, wealth, and environmental benefits.

The report can be downloaded at:
http://iea-retd.org/wp-content/uploads/2011/12/111205-FINANCE-RE-Final-Report.pdf

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