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Policy and Financing Efficiency for Promoting Renewable Energy

by

Frank Pinto

GEF Executive Coordinator and Deputy Leader Energy and Environment Practice, UNDP

Key Elements of a Strategy

- It is essential that the share of renewable energies (RE) in the energy mix be increased rapidly to contribute to more sustainable energy futures and reduce the current volatility of energy markets
- Constraints arise in both the North and the South
- The promotion of RE will require simultaneously addressing all market, institutional, regulatory, technological and informational barriers that limit large-scale adoption
- Policy and financing issues are just two dimensions of this multidimensional scenario, and capacity strengthening of LDCs in accessing resources and structuring operational projects are critical challenges for both the public and private sectors

Critical Importance of a Coherent Policy Framework

- In many developing countries, UNDP/GEF experience has shown that national energy policy and regulations play a critical role in determining which energy sources dominate
- Examples include developing country policies and regulations that subsidize diesel fuel and kerosene. While these may be necessary to help the poor get access to energy supplies, they are a barrier to the introduction and commercialization of RE resources, and thus alternative arrangements need to be explored
- Also, developing country tarriffs and licensing procedures often favour fossil fuel use (oil, coal, gas) which act as a brake on RE development. Targeted efforts aimed at levelling the playing field for RE are necessary

Energy Policy Implications

- Power sector reform becomes quite important to give IPPs access to energy transmission and distribution grids so that they can increase their RE market share
- Additionally, universal rural access to productive electricity is closely linked to the incentives offered to private enterprise and the overall business environment, so that a reasonable rate of return can be expected by the private sector venturing its own resources
- Therefore effective private participation in the delivery of energy services is often a key element that can encourage RE development and utilization

Fiscal Policies and Incentives

- Slowly phasing out diesel/kerosine subsidies for the poorest communities is an essential first step and establishing transitional arrangements that realign service with cost is another needed step
- The next step is more proactive the use of "smart" subsidies" to push RE development. These could be in the form of tax incentives (lower import tariffs) for renewable energy equipment and reduction of non-tariff barriers
- RE portfolio standards have proven useful in many developing countries, but the extent to which their application in emerging/ developing economies could be fruitful will depend on local energy sector governance schemes and regulatory arrangements

UNDP/GEF Renewable Energy Project Experiences (1)

- In Bolivia, GEF and govt. subsidies are lowering the cost of microcredits delivered by local financial NGOs to provide PV panels to 3,000 families. In addition, a debt swap for environment and social funds from the Popular Participation Law allow 3 communities to gain access to hydro energy.
- In Botswana, a rural electrification programme (grid extension) is heavily subsidized and the Govt. has decided to subsidize off-grid rural electrification using PV. This decision has helped start a GEF supported solar PV programme.
- In Fiji, a medium-sized project is promoting the sustainability of RE based power generation for rural electrification through the private sector and will involve RESCOs.

UNDP/GEF Renewable Energy Project Experiences (2)

- The **Pacific Islands** Renewable Energy Project is facilitating and promoting the cost-effective application of RE resources in each participating Pacific Island country. It includes in-country assessment of RE resources, identification of barriers to RE applications, and specific RE projects.
- In the **Philippines**, a UNDP/GEF project is addressing the persistent barriers (policy, market, information, financing, technical) to RE applications for electricity and other purposes. It will also establish a market sevice center to facilitate and provide support for development and implementation of RE projects.

UNDP/GEF Renewable Energy Project Experiences (3)

- In Slovakia, Latvia and Poland, as part of the rehabilitation of heating systems, opportunities for a fuel switch to biomass energy were identified and implemented.
- In **South Africa**, in the context of preparing a wind energy programme, a power purchase agreement has been finalized allowing a renewable energy IPP access to the grid.
- In **Tunisia**, arrangements with the Govt. are being finalized to tender out a 100MW contract to a wind IPP on least subsidy requirement terms. This example of a "smart" time-bound subsidy may set a good example for private sector participation in other countries in the region.

Options to Meet the Finance "Gap"

- GEF recognizes the financing gap that hinders the development of renewable energies
- GEF uses grant financing to reduce the barriers (and thus the risk) to the introduction of renewable energies. However, this grant financing is normally pooled with significant non-grant financing to make it viable
- In a typical GEF project, the non-grant portion comes from the public sector, private sector, and/or financing institutions
- Hybrid fossil fuel/renewable energy systems can be a viable short-term transitional solution

UNDP/GEF Financing Experiences (1)

- In **Belarus**, a biomass energy project is financing demonstrations through low interest loans and is creating a revolving fund, with repayments timed to maximize the cost-effectiveness of GEF resources.
- Under the Caribbean RE Development Programme (CREDP), financial mechanisms are being developed to promote investment in RE projects.
- In Cuba, a sugar bagasse project includes a guarantee fund and a BLT (build, lease, transfer) agreement to diversify investment risk.

UNDP/GEF Financing Experiences (2)

- In the **Eritrea** Wind Energy Project, GEF grant funding of \$2 million has been pooled with government public sector spending of \$2 million plus investments by private investors and the national utility.
- The **Thailand** biomass power generation project has, as one activity, increasing the access to commercial financing, with a feasibility study looking at partial guarantees in support of independent loans from national banks

Experience of the GEF Small Grants Programme (SGP)

- Under the GEF SGP, implemented by UNDP on behalf of the GEF family, over \$20 million in small-scale grants have been given out for community-level energy/climate change projects since 1992, and half of these are for RE projects
- The projects supported include solar, microhydro, wind, use of biogas and biofuels
- SGP is thus contributing at the local community level to the adoption of RE by removing barriers and reducing implementation costs, thereby helping these communities meet their basic need for energy services

Concluding Observations

- 1. Getting policies and financing right is necessary but not sufficient for a successful RE resource strategy. Other barriers such as lack of awareness and inadeuate capacities need to be addressed simultaneously.
- 2. RE policies and their effectiveness are often shaped by power sector reforms, privitization, and fiscal incentives. Therefore, it subsidies are needed, it is essential to structure them in an effective manner.
- 3. Pooling of financial resources (grant, loan, private sector) is essential to bridge the financing gap, with GEF providing the grant financing to kick-start the market, often with an element of catalytic technical assistance.