

# CLIMATE INVESTMENT FUNDS

November 8, 2010

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## **SREP FINANCING MODALITIES**



## PURPOSE OF DOCUMENT

1. This document defines the financing products that the multilateral development banks (MDBs) may deploy using SREP resources, the terms for such financing and standard SREP co-financing conditions. These financing options are not a closed list, and it is recognized that funding proposals may be presented for approval that will include other financing products. It is proposed that these financing modalities be reviewed by the SREP Sub-Committee on the basis of actual experience in their application and that the MDBs prepare a report for consideration by the Sub-Committee within 24 months of start-up to identify any changes that would serve to enhance the effectiveness of the SREP.

2. At its meeting in March 2010, the Sub-Committee reviewed the document entitled, *Elements of Financing Modalities* (document SREP/SC.2/4), and provided comments and guidance to the CIF Administrative Unit and the MDB Committee for the finalization of a paper based on the elements to be submitted to the next SREP Sub-Committee meeting. The SREP Sub-Committee requested the CIF Administrative Unit and the MDB Committee to enhance the proposed operational guidelines by, among other things:

- a. elaborating upon the use of grants and innovative uses of grant resources,
- b. including to support market mechanisms such as advanced market commitments and performance-based grants;
- c. reexamining the appropriateness of using concessional loans to provide assistance to low income countries;
- d. exploring other innovative tools that may make use of SREP resources;
- e. Elaborating on how to create markets to bring in private sector resources.

3. At its meeting in June 2010, the Sub-Committee noted the importance of working within UNFCCC principles and the Bali Action Plan. Some Sub-Committee Members called for special focus on developing countries that are particularly vulnerable to the adverse effects of climate change, especially Least Developed Countries, Small Island Developing States and countries in Africa impacted by drought and desertification.

## ADDITIONAL COSTS AND RISKS OF RENEWABLE ENERGY

4. SREP financing will address the additional costs and risks associated with renewable energy technologies which adversely affect the viability of investments. Financing modalities will be designed and deployed to meet the specific requirements of removing financial and institutional barriers. The key drivers of additional costs and risks for renewable energy are the following:<sup>1</sup>

- a. Higher investment costs: Even though lower fuel and operating costs may make renewable energy cost-competitive on a life cycle basis, renewable energy investments tend to have higher initial capital costs, as well as costs related to additional storage or reserve capacity. This makes the cost of renewable energy investments more dependent

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<sup>1</sup> RE Toolkit: A Resource for Renewable Energy Development, World Bank (2008)

on the cost of capital than conventional energy systems, which are more sensitive to the cost of fuel.

- b. Lack of access to capital: Renewable energy developers may lack access to capital to invest and finance a renewable energy project because of typically greater collateral requirements relative to conventional projects, lack of technology track record, poor creditworthiness, uncertainty about power purchase agreements, and short tenors.
- c. Real and perceived technology risks: Proven, cost-effective technologies may have a higher risk profile than conventional technologies, or may be perceived as risky, if there is little or no experience with them in a new application or region. These perceptions may increase required rates of return and result in less capital available.
- d. Lack of technical or commercial skills and information: Skilled personnel, who can install, operate and maintain renewable energy technologies may not exist in large numbers, while lenders and government officials often lack information about renewable energy technology characteristics. The lack of skills and information may increase perceived uncertainties and block decisions.
- e. High transaction costs: Renewable energy projects are typically smaller than conventional energy projects. In addition, renewable energy projects may require information not readily available or may require additional time because of unfamiliarity with the technology. For these reasons, the transaction costs of developing renewable energy projects may be much higher on a per-kilowatt capacity basis than conventional power plants.
- f. Constrained ability to pay: The upfront cost of connection is a more serious barrier to extending access than the monthly payments for the poor, whether through grid-connection or renewable-based mini-grids.

## **FINANCING MODALITIES: GENERAL PRINCIPLES**

5. A number of financing products (such as grants, contingent grants or loans, concessional loans, guarantees and equity) will be available under the SREP. All SREP financing will be denominated in US Dollars.<sup>2</sup> It will be important to ensure that concessional terms of SREP financing do not displace investments that might have taken place anyway using commercial or regular MDB borrowing or guarantees, or other carbon finance mechanisms. SREP financing should be designed to minimize market distortions and potential disincentives to private investment.<sup>3</sup>

6. A key feature of the SREP will be its ability to provide the MDBs with the instruments to blend SREP resources with other sources of financing to tailor terms to a target level of

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<sup>2</sup> The MDBs may denominate SREP financing according to their policies and procedures, subject to the MDB assuming the exchange rate risks.

<sup>3</sup> The issue of optimal size of projects and programs for SREP funding will be addressed on a case-by-case basis. It is expected that experience will be gained on whether large projects manage more easily to access commercial financing and whether there is a stronger role for public financing for medium-to-small projects.

concessional, which will vary depending on project-specific factors. Blending would be encouraged where appropriate, but there is no presumption that all SREP funding will be blended.

7. Adding grants and other forms of concessional finance from SREP to the financing package could help unlock demand for the financing of renewable energy investments. Blending SREP resources and multilateral development bank loans could augment the volume of financing available, and better tailor concessional to country-based needs and/or requirements, with the degree of concessional calibrated to achieve transformative investments which would otherwise not proceed.

8. It is proposed that the SREP provide a menu of financing options to accommodate different needs of client countries and program interventions. The SREP could co-finance MDB loans and grants or provide additional financing of new components within ongoing investment operations, on more concessional terms. SREP technical assistance grants could complement investment or development policy operations by supporting specific tasks related to their preparation and implementation (such as organizational arrangements, staffing methods, and technical, physical or financial resources in key agencies). Resources from the SREP would thereby increase the concessional of the overall financing, as well as leverage other resources, for the project. The development of such co-financing arrangements can be done in a relatively low-cost manner when fully embedded in the MDBs' project preparation and supervision process.

9. Co-financing from the SREP may be provided through a variety of financing instruments utilized by the MDBs for investment and development policy lending. For example, these would include instruments that:

- a. Support the creation, rehabilitation, and maintenance of economic, social and institutional infrastructure.
- b. Provide phased support for long-term development programs through a series of loans that build on lessons learned from the previous loan(s) in the series.
- c. Build institutional capacity.
- d. Provide long-term resources to local financial institutions to finance real sector investment needs.
- e. Provide fast-disbursing loans or grants to help a borrower/recipient address actual or anticipated development financing requirements through a program of policy and institutional actions.
- f. Provide loans or grants for investment in public and private renewable energy projects.

## **FINANCING MODALITIES FOR PUBLIC SECTOR INVOLVEMENT**

10. SREP funds used for public sector initiatives will seek to avoid market distortion and crowding out of the private sector. SREP funds will not be priced or structured to displace commercial financing or to set unsustainable expectations in a market. SREP funds will be used to "crowd in" the private sector by enabling projects and investments to happen that otherwise would not by catalyzing those investments with their concessional.

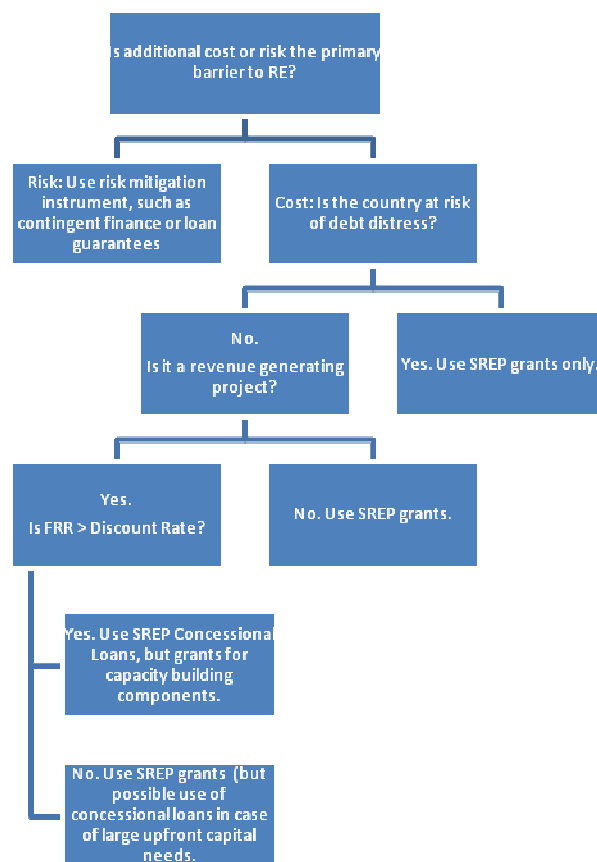
11. Figure 1 below provides a decision tree to determine the appropriate use of grants, concessional loans and risk mitigation instruments with SREP funding. The starting point of the decision-tree is what barrier the intervention seeks to remove. If the focus of the SREP support is on reducing cost volatility or technology performance risk for the project developer or supplier, then a risk mitigation instrument rather than direct financing might be the appropriate modality.

12. However, if the SREP intervention is targeted at decreasing costs, increasing revenues, or reducing revenue volatility for renewable energy technologies, then some form of direct financing might be the appropriate instrument. In this context, the countries' risk of debt distress should be assessed. It is proposed that the risk ratings follow the same practice as in IDA and the relevant Regional Development Banks, that is from country-specific forward-looking debt sustainability analyses. For IDA, this is based on the joint [IMF-World Bank debt sustainability framework](#) (DSF) for low-income countries. The IDA grant framework then translate these debt distress risk ratings into "traffic lights", which in turn determine the share of IDA grants and highly concessional IDA credits for each country: high risk or in debt distress ("red" light) is associated with 100 percent grants, medium risk ("yellow" light) with 50 percent grants and 50 percent credits, while low risk ("green" light) is associated with 100 percent credits and zero grants.

13. For SREP, it is proposed that countries with high and medium risk ratings from IDA and/or the relevant Regional Development Bank, receive all SREP funding in the form of grants. Countries with low risk of debt distress could receive SREP funding as concessional loans, depending on the nature of the project.

14. If the project is revenue generating, and the financial rate of return is greater than the discount rate, then SREP funding would be provided in the form of concessional loans. If the project does not generate sufficient revenue (for example, if significant resources are allocated to capacity building or are targeted at consumers with low ability to pay), then SREP resources should be deployed as grants even in low risk countries.

Figure 1: Decision tree for investment projects: grants, loans or risk mitigation instruments?



15. There is a strong financial case for deploying SREP funds as concessional loans if the project rate of return is higher than the rate of return which equalizes the net present values of the investment made through a grant and the investment made through a loan with the same grant-equivalent cost.<sup>4</sup> More simply, there is a threshold financial rate of return which can be identified for any financial investment, given a certain discount rate and other variables identified. If the financial rate of return of the investment is higher than that threshold, a larger volume flow of concessional loan is preferable because the NPV with a loan investment will be higher than the NPV with the grant investment (see example in Box 1 below).

<sup>4</sup> Assessing the Comparative Suitability of Loans and Grants for Climate Finance in Developing Countries, Overseas Development Institute (December 2009)

## Box 1: Applying the threshold investment rate of return to a SREP investment<sup>5</sup>

Assumptions: A 15-year project with a rate of return of 15%, assuming a discount rate of 10%. In the case of a concessional loan- financed project of US\$ 100 million (with a grant element of 30%, the investor will receive a loan of US\$ 100 million at an interest rate of 4.3% with a maturity period of 15 years. The hypothetical project net cash flows are presented below and the net present value of the investment would be US\$44 million.

### Net present value of the concessional loan-funded project

Investment	100														
Project rate of return	15.00%														
Discount rate	10.00%														
<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
Net revenues	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Debt service	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Net cash flows	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
NPV	44														

In the case of a pure grant financed project, the investor will receive a grant equivalent of US\$21 million which represents the grant element of the concessional loan described above. The project net cash flows would be as presented below and the net present value of this grant investment would be US\$24 million.

### Net present value of the equivalent grant-funded project

Investment	21														
Project rate of return	15.00%														
Discount rate	10%														
<b>Year</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
Cash flows	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
NPV	24														

Under these conditions, with a project rate of return of 15%, the investor is better off receiving a concessional loan.

## Grants for Preparation Activities

16. SREP grants may be used for the following preparation activities:
  - (a) Preparation of SREP investment plans, where needed.
  - (b) Preparation of SREP co-financed projects.
  
17. *Preparation of Investment Plans:* In countries lacking an adequate basis for preparing investment plans, the SREP may provide financing for the preparation of such plans and associated advisory services. Such grants can be used to finance, among other things:
  - (a) strengthening consensus among key national stakeholders; and,
  - (b) Ensuring that SREP investments are based on sound analytical work linking energy sector investments to economic growth and poverty-alleviation strategies.
  
18. A SREP preparation grant for an investment plan and associated advisory services will be for an appropriate amount based on country needs<sup>6</sup>. Such funding would be included within the envelope of SREP funding allocated to the country for its SREP program.

<sup>5</sup> This example draws on examples presented in “Assessing the Comparative Suitability of Loans and Grants for Climate Finance in Developing Countries”, Overseas Development Institute (December 2009)

19. An advance of this grant, of an appropriate amount based on country need<sup>7</sup>, may be requested after the initial scoping mission to assist the country to fully engage in leading the design of the SREP program.

20. Requests for funding of the preparation grants should be submitted to the Sub-Committee for approval. However, the Sub-Committee agrees to delegate its approval authority for preparation grants up to \$1.5 million and for advances of such grants up to \$375,000 to the MDB Committee. Such requests should be submitted to the MDB Committee for approval through the CIF Administrative Unit. Upon approval by the MDB Committee of such grants, the CIF Administrative Unit will circulate to the Sub-Committee for information the proposal requesting the funding, including the approved amounts of funding and proposed uses. If the funding requested exceeds these limits, the CIF Administrative Unit will seek approval by mail from the Sub-Committee. After 18 months, the CIF Administrative Unit and the MDBs will submit a report to the Sub-Committee on the experience in applying these procedures in the pilot countries.

21. Preparation grants will generally be recipient-executed, but may be executed by an MDB if justified.

22. *Project preparation grants:* The purpose of SREP project preparation grants is to develop a quality investment project or program by financing feasibility studies and associated analytical and design tasks. These grants could also support investment preparation-related consultations, workshops and capacity building.

23. No cap will be set for a SREP preparation grant for investments. Funds for project preparation grants would be included within the envelope requested for the Investment Plan. Proposals for project preparation grants should be included in the Investment Plan and the SREP Sub-Committee would be requested to approve the requested funding when it endorses the Investment Plan. Annex A provides guidelines for the approval and management of SREP preparation grants for Investment Plan and projects.

### ***Grants for Investment Programs/Projects***

24. SREP grants may be deployed by the MDBs in a number of different ways to support development of markets for renewable energy technologies, which may be seen as a continuum of instruments ranging from upfront capital grants to performance-based payments. A key determinant in selecting the appropriate intervention is access to finance in the targeted sector. With well-functioning capital markets, the credible promise of future results-based payments could allow project developers to borrow for upfront investment costs.

- a) *Decrease Costs (including financing costs) through capital or buy-down grants*, which are used to lower the cost of a renewable energy project or system that is not yet commercially viable. Buy-down grants can come in the form of co-investment funds, which are typical for demonstration projects, or in the form of rebates, which are more

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<sup>6</sup> See paragraph 32 and 33 of the *SREP Programming Modalities and Operational Guidelines*.

<sup>7</sup> See paragraph 32 and 33 of the *SREP Programming Modalities and Operational Guidelines*.

common in the case of market development.<sup>8</sup> Grants could also be deployed for seed capital, long-term and/or low interest loans, and loan guarantee programs in the pilot country, in order to overcome the problem of inadequate access to capital, short loan tenors, high interest rates and severe collateral requirements that may not match the needs of renewable energy projects.

b) *Increase revenue or reduce revenue volatility through performance based payments*, which are often formally categorized as ‘results-based financing’ or ‘RBF’. RBF describes payments where a principal entity provides a financial or in-kind reward, conditional on the recipient undertaking a set of predetermined actions or achieving a predetermined performance goal<sup>9</sup>. RBF includes a number of performance-based mechanisms such as Output-based aid (OBA), Advance Market Commitments, provider payment incentives, performance-based inter fiscal transfers and conditional cash transfers.

25. Output-Based Aid: The OBA approach refers to pre-agreed level of payment for delivery of pre-agreed services, normally targeted to low-income populations. In the renewable energy sector, two types of OBA schemes have been implemented:

- Connection subsidies reimburse the service provider for part of the costs of establishing new connections once these connections have been verified. Thus, they ensure affordability of connections, and provide an incentive to the provider to establish and maintain as many customers as possible.
- Transition subsidies bridge the gap between revenues collected through monthly tariffs and the costs incurred in providing service. They are mostly applicable in areas where the general customers’ ability to pay electricity tariffs is well below costs. These subsidies support on-going operations and maintenance costs, but only for a transitional period and would be phased out over time.

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<sup>8</sup> RE Toolkit, World Bank (2008)

<sup>9</sup> This note incorporates information from the following publication: Mumssen, Johannes and Kumar *Output-based aid: lessons learned and best practices* The World Bank, 2010.

## Box 2: Examples of Output-Based Aid

Addressing the “Last Mile” Paradox: The current gap between connection and access rates stems from the fact that many customers cannot afford to pay the cost of a connection. Even though the cost of connecting households to the grid represent a small fraction of the total investment, the connection cost constitutes a significant barrier for poor households because the average connection cost could represent as much as 15 percent of the average annual income per household – although poor households can often afford to pay for electricity once connected. One way to address the last mile effect is to provide poor consumers with the necessary micro-credit to pay for the cost of connection. For example, in Ethiopia, an OBA grant covers the utility’s costs of financing the concessional loans extended to poor household customers.

Supporting mini-grid and off-grid solutions: Since 2003, the Bangladesh Rural Electrification and Renewable Energy Development Project (RERED) have provided 320,000 low income consumers in rural areas of Bangladesh with electricity supply from Solar Home Systems. The upfront costs of connection are supported by a grant (funded by the Global Environment Facility, KfW, GTZ, the Global Partnership for Output Based Aid using funds provided by DFID and SIDA), which is structured as OBA and pays a subsidy of US\$50 towards the cost of the SHS (a 50 Wp unit typically costs in the region of US\$450). Subsidy payment is made to the installers only once inspectors employed by government-owned Infrastructure Development Company Limited (IDCOL) have verified proper installation and compliance with specifications. Until inspection, the upfront costs of connection are part-supported by loans from micro-credit agencies. Under the same scheme, OBA is also being used to develop mini-grids using solar, biogas and other technologies.

Sources: OBA Approaches, June 2009; Global Partnership for Output Based Aid Commitment Paper: OBA for Rural Electrification and Renewable Energy Development in Bangladesh, November 2009.

26. Advance Market Commitments (AMCs): AMCs may be defined as a funding commitment, made in advance, designed to spur the creation of a market that does not exist or functions poorly.<sup>10</sup> AMCs are interventions that have two characteristics<sup>11</sup>:

- a) An intervention that increases the size of the market by directly creating demand
- b) An intervention that makes market outcomes (e.g., prices) more certain.

27. This definition of AMCs includes a number of policy interventions, such as feed-in tariffs (minimum price), renewable obligations (minimum quantity), and government procurement. AMCs are “demand pull” measures that can be contrasted with “supply-push” measures, such as capital grants. Therefore, they are better suited to technologies where there are few supply-side constraints (see Box 4). AMCs differ from OBA subsidies, which increase revenues, but may otherwise leave them volatile and uncertain.

<sup>10</sup> Pilot Advance Market Commitment for Vaccines against Pneumococcal Diseases, The World Bank, (March 2009)

<sup>11</sup> Advance Market Commitments for low carbon development: an economic assessment (Vivid Economics for UK DFID, March 2009).

### Box 3: Pilot Advance Market Commitment for Vaccines against Pneumococcal Diseases

In the public health sector, an AMC works as follows. First, donors commit to fund an AMC for a specified market size and price for a product with specifications targeting effectiveness and development impact in the recipient countries. Second, as and when candidate products become available, a credible independent body determines if the products meet target specifications. Approval by that independent body entitles a manufacturer to enter into a supply agreement giving it access to AMC funds which subsidize purchase of the target product. Finally, when AMC funding is depleted, the manufacturer continues to provide the product at an established “tail price” for a specified period to meet continuing demand.

Based on this concept, donors created a pilot AMC for pneumococcal vaccines as an un-front financial commitment on their part to subsidize purchase of vaccines that meet a specified target product profile. To spur production capacity scale-up, the pilot AMC will offer \$1.5 billion in subsidies in exchange for commitments by manufacturers to supply a target level of 200 million doses annually for ten years. The subsidy component of the supply agreement – which is front-loaded -- is meant to cover capital cost, while the capped tail price is designed to cover variable costs. Countries provide a co-payment per dose depending on income levels. To mitigate demand risk to manufacturers, a demand guarantee of 45% of one year’s demand is spread out over the first three years of the supply obligation.

Source: Pilot Advance Market Commitments for Vaccines against Pneumococcal Diseases, The World Bank (March 2009)

### Box 4: When to consider demand-pull measures (such as AMCs and OBA) rather than supply-push interventions, such as capital grants?

1. When private sector firms have a clear advantage in managing risks associated with the delivery of an output relative to the public sector.
2. When there is a particular aspect that should be encouraged, e.g. output rather than capacity.
3. When risks of public credibility in providing and maintaining long-term commitments are manageable.
4. When there is a diversity of different products with different characteristics that might qualify for support and it is unclear which might be superior.
5. When there are relatively few supply-side barriers, so that suppliers can respond to demand-pull measures.

In particular, if there are good sources of finance and the commitment to pay based on outputs is credible, then developers may be able to collateralize the results-based payment to allow borrowing for the upfront costs.

Source: Advance Market Commitments: An Economic Assessment (Vivid Economics for DFID, March 2009)

28. Over the years, a number of positive characteristics have been associated with the use of RBF. The advantages of an RBF approach include:

29. *Increased focus on required outcomes.* Payments are dependent explicitly on the delivery of results. This focuses activities/efforts towards the required results and may lead to more effective use of funds. For instance, feed-in tariffs focus the investor on delivering qualifying energy (capacity and dispatch) rather than generating capacity but not to the required levels of

dispatchability. A generating station with a low dispatchability would likely qualify for full upfront capital grants but would not qualify for sufficient RBF payments predicated on delivery of power. RBF therefore allocates risk to suppliers or service providers, in contrast to upfront payments where risks remain with the entity disbursing the subsidy.

30. *Funding can be better targeted to specific consumers.* For instance, the Pamir Private Power Project in Tajikistan uses a combination of transitional and ongoing consumption subsidies in OBA form to ensure that tariffs remain affordable for specific low income residents of the Gorno-Badakshan region. This is a much more targeted and therefore effective outcome than universal subsidies for fuel that are prevalent in many parts of the world.

31. *Transparency and value for money in use of public funds.* The explicit and upfront design of RBF makes it an effective tool for improving governance and accountability in use of funds. Competitive award of OBA subsidies, together with the transfer of performance risk to the service provider, can increase efficiency and contain costs.

32. *Monitoring of program outcomes is simplified* – as desired outcomes from the program are clearly formulated at the design stage and monitoring of delivery on these outcomes is an existing and fundamental part of making payments under the scheme.

33. There are also challenges with implementation of RBF projects. Specific OBA programs often need *extra efforts at the design stage* to ensure that targeting, quantity of results-based payments and process for verification of outputs and subsequent payments is appropriate. For programs involving larger upfront costs, lack of upfront payment can lead to greater difficulties in *access to finance*. However, good design of the RBF and its certainty is important as there are also many examples where banks are able to offer upfront financing – in some cases for large amounts - on the basis of RBF. In the case of the Bangladesh SHS program, several micro-credit agencies provide significant portions of the up-front costs of the SHSs.

### ***Grants for Capacity Building and Advisory Services to Support Delivery and Results***

34. SREP will also provide grant funding for *capacity building and advisory services* including knowledge management and outreach. Capacity building and advisory services should be demand driven, country owned and flexible and incorporated into the investment plan of each pilot. Such services should be tailored to SREP recipient country needs and local conditions and generally integrated into the design of investments. On an exceptional basis, capacity building and advisory services activities may also be delivered separately and funded independently from the investment activity.

35. Governments will take a lead in identifying their needs and will be supported by MDBs and other development partners active in the country. Recipient governments should decide what, how and with whom to work in these areas. Recipient countries will also be responsible for identifying delivery partners in their investment plan.

## Concessional Loans

34. As discussed above, in certain circumstances, it might be appropriate for SREP to provide concessional loans for renewable energy investments. It is important to note that lending on concessional terms will contain a grant element, which is defined as the difference between the loan's face value and the sum of the present value of debt service to be made by the borrower, expressed as a percentage of the face value of the loan. Care should be taken not to overlap or duplicate concessional financing that is available from other sources such as bilateral donors, other development partners or GEF grants.

35. MDBs may provide SREP financing support through: (a) lending to national governments; (b) lending to national governments for on-lending to sub-national entities (which include state-owned enterprises); or, (c) lending to sub-national entities<sup>12</sup>. The SREP loan will have the same legal ranking as the MDB loan for the project (i.e., if the MDB loan is unsecured, the SREP loan will be unsecured and if the MDB loan is collateralized, the SREP loan would also be collateralized). MDBs' standard appraisal criteria will address credit risk through their assessments of borrower creditworthiness, financial viability, corporate governance, and safeguards against irresponsible borrowing.

36. Consistent with MDBs' standard lending practice, they will not seek any guarantee or security for SREP loans to sovereign governments. If a SREP loan is made to a sub-national entity, the member country, where appropriate, will be required to guarantee the grant or loan, where MDB sub-sovereign lending requires such guarantees.

37. The following concessional loan terms for public sector projects are proposed. It is proposed that the SREP Sub-Committee reviews these terms after experience is gained in developing SREP programs and projects.

### Box 6: Proposed Public Sector SREP Loan Terms<sup>13</sup>

SREP Loans	Maturity	Grace Period	Principal Repayments Year 11-20	Principal Repayments Years 21-40	FY10-11 Service Charge a/	Grant Element b/
	40	10	2%	4%	0.1 %	~75%

38. Consistent with the objective of simplified loan administration procedures and streamlined project processing, it is proposed that the SREP will have uniform financing terms,

<sup>12</sup> Sub-national entities would be eligible for support under either the public or the private sector window depending upon the source of complementary multilateral support. SREP financing could also be provided to special purpose vehicles owned either by the private sector or owned in part by the private sector and the government to carry out a project on a limited recourse basis where the resources for the project are derived from government entities. Such entities would be eligible for support under either the public or private sector windows depending upon the source of complementary multilateral support.

<sup>13</sup> a) The service charge is charged on the disbursed and outstanding loan balance. Principal and service charge payments accrue semi-annually to the SCF trust fund.

b) Grant element is calculated using the IDA methodology (assumptions: 6.33% discount rate for harder loans; 6.43% discount rate for softer loans; semi-annual repayments; 8-year disbursement period)

rather than terms varying by country and/or projects, or each MDB applying different terms. Increasing or decreasing the proportion of SREP concessional financing blended in the overall financing plan would calibrate the grant element to the country, sector and project contexts. For example, a project with relatively high marginal abatement cost could have SREP concessional financing accounting for a higher proportion of the total financing, while an investment that is lower on the abatement cost curve might merit SREP concessional financing at a lower proportion of the financing package.

### ***Guarantees***

39. Guarantee instruments are used to improve conditions for investment in, or lending to, projects by mitigating risks that lenders and investors would not be willing or able to accept. SREP resources may be deployed as guarantees to promote renewable energy investments which would otherwise fail to attract adequate capital. Proceeds from the SREP may be used to issue such guarantees by the MDBs, in accordance with their policies for determining eligible beneficiaries, eligible forms of investment, maximum tenor and maximum amounts. While guarantee support can be structured flexibly and may take various forms, these guidelines are intended to set generic parameters to guide MDBs in designing proposals which include the use of guarantees and similar risk mitigation mechanisms.

40. For each SREP operation, MDBs will appraise whether risk mitigation instruments could be an efficient and effective means to facilitate the mobilization of debt capital to finance the project, instead of, or in combination with, loan support from the SREP. Risk mitigation instruments should also be considered if the government or sub-national entity is not able to borrow debt on terms required for financial viability or attract financing without support, or if there is a perceived technology risk.

41. For purposes of SREP support, a distinction is required between conventional risks for which adequate mitigation measures are already available, for example through the MDBs, and “incremental” risks that are not assumed by sponsors and lenders, despite the appearance of financial viability of the investment. The additional risks of renewable energy projects can be quantified as the relative variance of a project’s returns, as perceived by the main investors, for a given level of expected return.

- a) Technical and economic performance risks generally constitute conventional risks because they can be mitigated by the quality of project design and the structure of mutually reinforcing contracts. However, technical and economic performance can also represent risk barriers insofar as they are attributable to the application of commercially viable technologies in new markets. Lack of experience with renewable energy technologies may create risk to project operations that may be reflected in higher rates of return required by sponsors and lenders. Risk mitigation instrument could address increases in operations and maintenance costs above estimates and where the operator has refused to guarantee additional cost coverage because of a new management or conservation technique.
- b) Commercial and financial risks such as high transaction costs, small project scale, weaknesses in domestic capital markets, and perceived credit risks are often primary risk barriers at the project level in the specific context of developing countries,

contributing to the increased required rates of return or otherwise general unavailability of financing. Such risks are relevant to the application of risk mitigation instruments with SREP resources.

- c) While country or political risks are more easily differentiated from commercial risks in private sector projects, differentiation of these risks is more difficult for public sector investments, where the project or program will be implemented by the government and its agencies. The SREP would not, therefore, provide “political risk guarantees” in public sector projects to protect lenders against specific political risks. Regulatory and institutional barriers are generally more effectively addressed through support for policy reform, capacity building and technical assistance, or other risk mitigation instruments available in the market as well as from bilateral and multilateral institutions.

42. It is proposed that SREP resources may be deployed for two categories of guarantee products:

- a) Loan guarantees covering the loss on account of debt service default for lenders up to an agreed portion of the actual loss<sup>14</sup>, with a view to extending maturities of commercial loans for renewable energy projects so that they are competitive with fossil fuel projects, or to address specific incremental operating or management risks that could cause default.
- b) Contingent finance disbursed to the project upon underperformance of a renewable energy technology and where such risk is not commercially insurable at reasonable costs or has occurred beyond the period for which commercial insurance is available.

43. In both types of guarantees, the borrower may be a sovereign government, sub-national government, state-owned utility, or any other public sector entity which implements the proposed investment. Guarantees from SREP resources offered to public sector projects will have the following general terms:

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<sup>14</sup> Depending upon the project and market needs, the amount guaranteed could be up to 100%. Some sharing could be useful for providing the right incentives to guarantee holders.

## Box 7: Proposed Public Sector SREP Guarantee Terms

	<b>Loan Guarantees</b>	<b>Contingent Finance</b>
Guarantor	MDB will issue the guarantee acting as the Implementing Entity for the SREP (i.e. the guarantee beneficiary's recourse is solely to funds in the SCF).	MDB will be the provider of contingent finance acting as the Implementing Entity for the SREP (i.e. the Contingent Finance provider will provide funding solely from funds in the SCF).
Guarantee Beneficiary	Commercially-run institutions providing debt	Project entity
Guaranteed Debt	Any form of debt instrument (e.g. loans, bonds)	Not applicable
Guarantee Charge	0.1 % per annum on the disbursed and outstanding amounts of the guaranteed financing (accrues to the SCF trust fund).	0.1% per annum of the committed and undisbursed balance of the contingent finance (accrues to the SCF trust fund).

44. The following general terms are applicable for both types of guarantees:

**Fund management:** In order to maintain the creditworthiness of the guarantor in the eyes of commercial financiers, the MDB will retain SREP funds in an amount to match guarantees committed on a one-to-one basis.

**Currency of Denomination:** US Dollars.<sup>15</sup>

**Maximum Maturity:** Loan Guarantee term will be consistent with the maturity of the guaranteed debt. The term of the contingent finance will be decided on a case by case basis but not exceeding 20 years.

**Minimum Maturity:** No restriction. MDB will ensure that the proposed tenor for either Loan Guarantee or Contingent Finance will make the proposed project or program financially viable and affordable in the given regulatory environment of the country.

**Counter-Guarantee:** No requirement for sovereign government indemnity for any Loan Guarantee or Contingent Finance. Credit risk exposure under the SREP financing will be borne by the SCF trust fund.

**Cross Default Clause:** There will be an optional cross default clause with MDB loans for the project/program.

**Conditions:** Application of standard MDB policies and procedures. This should also ensure that the borrower has in place acceptable warranties and insurance consistent with industry practice.

<sup>15</sup> In the event that an MDB issues a guarantee in another currency, it bears the foreign exchange risk.

## **MODALITIES FOR COST RECOVERY**

45. Paragraph 51 of the Governance Framework for the Strategic Climate Fund provides: “the Administrative Unit, the MDBs and the Trustee will perform specific administrative services and project related activities. Consistent with MDB policies on management of trust funds, compensation for administrative services and project related activities will be on the basis of full cost recovery for the entities but should be guided by the principles of value for money, reasonableness, and transparency.” A separate paper is being prepared for the SCF meetings in November 2010 to propose how fees will be determined and approved for all SCF programs (i.e. PPCR, FIP and SREP).

## **FINANCING MODALITIES FOR PRIVATE SECTOR INVESTMENTS**

46. Because each country, sector and project faces a unique set of barriers, SREP financing will not be uniformly offered to all private sector companies but will be tailored to address the specific barriers identified in each project and intervention. Below is a description of the main types of SREP instruments that may be structured to address development barriers as well as the principles for use of SREP funds in private sector investments.

47. MDBs will seek to use SREP funds in private sector markets where the risk/return profile of initial project entrants are not balanced (i.e. when the investment return on the initial projects do not compensate sponsors for the risks they assume) but where the risk/return profile for future projects are eventually expected to be sufficient to encourage private investment without future subsidies (i.e. where risks come down because of the track record established from the early projects and where costs go down – and returns go up). Given the smaller scale of SREP projects compared to CTF projects, as well as the probability that most SREP interventions will start at an earlier stage of development than CTF projects, the time lag from initial interventions to achieving long term sustainability will likely take longer in SREP than in CTF.

## **PRINCIPLES FOR USING SREP FUNDS IN PRIVATE SECTOR INVESTMENTS**

48. Involvement of the private sector, and in particular the local private sector, is a key objective of SREP. SREP funds used in private sector investments will adhere to the principles outlined below.

49. *Minimum concessionality*: MDBs will seek to provide the minimum concessionality needed to catalyze investments within a sector. In accordance with this principle, SREP investments will be structured on a case-by-case basis to address the specific barriers identified in each project/program and risks associated with the technology, market, project implementation, and the financial structure. The amount and terms of SREP funding offered to an individual client will be determined between the MDB and the client on the basis of efficient and effective use of SREP and MDB resources. While an attempt will be made to quantify the additional costs faced by early entrants and compare that with the subsidy element implicit in the financing terms being offered, country, industry and individual company dynamics will impact the amount of concessionality a company will accept in order to undertake a project. Finding the

right amount of concessionality<sup>16</sup> is largely a matter of client needs, market conditions, financial structure and negotiation, and is dependent on information not flowing between the companies or being available in the market. MDBs will always seek the minimum concessionality necessary to enable projects to happen and will justify the amount of concessionality requested in each SREP proposal.

50. *Avoiding distortion and crowding out:* SREP funds will not be priced or structured to displace commercial financing or to set unsustainable expectations in a market. SREP funds will be used to “crowd in” the private sector by enabling projects and investments to happen that otherwise would not by catalyzing those investments with their concessionality.

51. *Leverage:* SREP funds will seek to catalyze and maximize the amount of MDB and other partners’ financing as well as commercial financing available for its investments. A key feature of the SREP will be its ability to unlock both MDB and other private sector financing for renewable energy technology investments and catalyze ongoing sustainable investments in these sectors beyond the initial SREP investments.

52. *Financial Sustainability:* SREP programs will be developed to maximize the probability of long-term financial sustainability once the SREP funds are no longer available/have been used. Investments should not be approved if future sector development is likely to be dependent on a continuous flow of SREP funds. The project or program should at a minimum have the potential to achieve a substantial reduction in the need for subsidies in similar future projects beyond the initial few projects supported by SREP.

## **PRIVATE SECTOR SREP INSTRUMENTS**

53. Private sector engagement will generate both private and public benefits. For example, grants for the private sector may be justified when the intervention has clear demonstration effects that provide benefits beyond the company itself. Such public benefits could accrue to communities or advance market development. SREP funding to the private sector will encompass both grants and concessional finance.

54. Below is a description of the types of SREP instruments (list is not exhaustive) that may be structured to address the barriers identified in each case and justify the use of SREP funds in private sector investments.

### *Grants*

55. *Grants may be used for capacity building and advisory services* associated with and complementary to a specific SREP investment.

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<sup>16</sup> Concessionality (or the subsidy element) of an SREP private sector investment is calculated as the difference between the hypothetical market interest payments and the actual SREP interest payments over the life of the loan and discounted using the relevant zero-coupon swap curve in the relevant currency; divided by the amount of SREP financing. For non debt products the interest payments in this calculation would be substituted by the relevant investment payments (e.g. guarantee fees).

56. *Grants for investment* may be used for private sector investments to decrease costs through buy-downs and to increase revenue or reduce volatility through performance based payments, as described in the “Grants” section of the “Financial Modalities for Public Sector Investments”. Grants will be used only if all other forms of financing are inadequate for a SREP project to be implemented on sustainable basis, and will have to be justified on a case-by-case basis.

57. *Project Preparation Grants* may be used: (i) to ensure that SREP investments are based on sound analytical work linking low emission development to economic growth and poverty alleviation strategies; and (ii) provide feasibility studies, technical, financial and managerial project design to investments and activities. Project preparation grants for the private sector are as for the public sector, as referred to in paragraphs 17 and 18. Annex A provides guidelines for the approval and management of SREP preparation grants for investment plans and projects.

### *Concessional Loans and Equity*

58. SREP will offer concessional finance and equity products to support private sector investments that have the potential of being replicated in the future without, or with a possibly reduced level of, public support. Concessional loans and equity products will be kept to the minimum and the terms and structures of each financial investment and associated concessional component would be determined on a case by case basis and justified in light of the specific existing barriers to the implementation of such investments. These barriers could include:

- a) High costs of early entrants (the additional costs associated with being among the first players to implement a project in a given sector, under new regulations or work through unprecedented systems); they could also include higher input costs because economies of scale have not been achieved for the technology. Concessional pricing and repayment structures can offset these costs and make early stage projects with cash flow uncertainty bankable.
- b) Perceived and real risk. Equity and subordinated debt products can help mitigate risk for financiers that wouldn't otherwise support the project.
- c) Combined risk and cost barriers.

### *Guarantees and Risk sharing*

59. Guarantees and risk sharing products are typically used for the same reasons in the private sector as they are in the public sector, e.g. to mitigate risks and improve the investment conditions (risk-reward balance) for initial market projects. SREP would seek to use guarantees and risk sharing products to mitigate risks in the project cycle with the objective of establishing a project performance track record which would then entice future private investment without the need for future subsidies/risk mitigants.

60. Guarantees and risk sharing products can be for financial institutions lending to renewable energy projects by assuming a portion of the risks of the new investment portfolio.

Such products can also be used for individual projects to mitigate specific risks, such as those associated with agreement to reduce off takers risks and make rates of return acceptable for investors, or guarantees and risk sharing products associated with carbon finance agreements.

## **Annex A: Guidelines for the Approval and Management of SREP Investment Plan Preparation Grants**

1. **Objectives.** The purpose of SREP investment plan preparation grants is to develop a quality investment portfolio by: (i) strengthening consensus among key national stakeholders and development partners; (ii) enhancing capacity of national institutions for robust policy reform and priority setting; (iii) ensuring that SREP investments are based on sound analytical work linking renewable energy sector investments to economic growth and poverty-alleviation strategies; and, (iv) assessing the poverty and social impacts of programs and projects.
2. **Grant Execution Arrangements.** Investment plan preparation grants will be generally recipient-executed, but may be executed by an MDB if justified. All investment plan preparation grants will be supervised by the MDB in order to ensure compliance with its operational policies and procedures, including procurement and financial management guidelines. The closing date of grants should not normally exceed 15 months from the date of signature of the grant agreement by the MDB.
3. **Eligible Grant Activities.** Preparation grants may be used for developing SREP investment plans by recipient countries. The following activities will be eligible:
  - (a) Analytic work to inform a country's policies and programs.
  - (b) Design of policy reforms and preparation of legislation and regulations.
  - (c) Consultation workshops.
  - (d) Training.
  - (e) Institutional development.
  - (f) Feasibility Studies.
  - (g) Environmental and social impact assessments.
  - (h) Technical<sup>17</sup>, managerial, and financial project design.
4. **Eligible Expenditures.** The investment plan preparation grant will finance expenditures for: (i) consultants' services, local training, workshops and seminars and, (ii) operating costs and office equipment for the implementation management of grant activities.
5. **Ineligible Expenditures.** The following expenditures will be ineligible: (i) salaries for civil servants in recipient countries hired as consultants or otherwise; (ii) purchase of vehicles, land, land rights (lease fees) and real estate; (iii) foreign training and study tours; and (iv) salaries and travel of MDB staff and consultants.
6. **Reallocation of Investment Plan Grant Activities and Funds.** If the reallocation requires a formal amendment to the grant agreement according to the MDB's policies, then the MDB will seek approval from the SREP Sub-Committee prior to amendment. If no amendment is required according to the MDB's policies, the MDB may reallocate according to its procedures and will inform the SREP Sub-Committee upon such revision.
7. **Investment Plan Grant Cancellation Policy.** In addition to the requirement of the relevant MDB's policy on cancellation, the balance of investment plan preparation grants may be subject

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<sup>17</sup> Including environmental and social consultants.

to cancellation under the following circumstances: (i) the grant agreement has not been signed six months after approval of the grant; or (ii) there has been no implementation progress, including zero disbursements for 12 months after signature of the grant agreement. The MDB may approve exceptions on the basis of a satisfactory explanation, which will be reported to the SREP Sub-Committee.

## **Annex B: Guidelines for the Approval and Management of SREP Project Preparation Grants**

1. Grant Execution Arrangements. Project preparation grants will be generally recipient-executed, but may be executed by an MDB if justified. All project preparation grants will be supervised by the MDB in order to ensure compliance with its operational policies and procedures, including procurement and financial management guidelines. The closing date of grants should not exceed 2 years from the date of signature of the grant agreement by the MDB.
2. Eligible Grant Activities. Project preparation grants may be used for preparing SREP co-financed projects by recipient countries. The following activities will be eligible:
  - a. Analytic work to inform a country's policies and programs.
  - b. Design of policy reforms and preparation of legislation and regulations.
  - c. Consultation workshops.
  - d. Training.
  - e. Institutional development.
  - f. Feasibility Studies.
  - g. Environmental and social impact assessments.
  - h. Technical<sup>18</sup>, managerial, and financial project design.
3. Preparation grants for projects/programs. Funds for project preparation grants would be included within the envelope requested for the Investment Plan.
4. Eligible Expenditures. The project preparation grant will finance expenditures for: (i) consultants' services, local training, workshops and seminars and, (ii) operating costs and office equipment for the implementation management of grant activities.
5. Ineligible Expenditures. The following expenditures will be ineligible: (i) salaries for civil servants in recipient countries hired as consultants or otherwise; (ii) purchase of vehicles, land, land rights (lease fees) and real estate; (iii) foreign training and study tours; and (iv) salaries and travel of MDB staff and consultants.
6. Reallocation of Grant Activities and Funds. If the reallocation requires a formal amendment to the grant agreement according to the MDB's policies, then the MDB will seek approval from the SREP Sub-Committee prior to amendment. If no amendment is required according to the MDB's policies, the MDB may reallocate according to its procedures and will inform the SREP Sub-Committee upon such revision.
7. Grant Cancellation Policy. In addition to the requirement of the relevant MDB's policy on cancellation, the balance of project preparation grants may be subject to cancellation under the following circumstances: (i) the grant agreement has not been signed six months after approval of the grant; or (ii) there has been no implementation progress, including zero disbursements for 12 months after signature of the grant agreement. The MDB may approve exceptions on the basis of a satisfactory explanation, which will be reported to the SREP Sub-Committee.

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<sup>18</sup> Including environmental and social consultants.