

# CLIMATE INVESTMENT FUNDS

SREP/SC.IS.1/CRP.3  
September 8, 2011

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Intersessional Meeting of the SREP Sub-Committee  
Washington, D.C.  
September 8, 2011

**COMMENTS ON KENYA'S INVESTMENT PLAN  
SUBMITTED BY SUB-COMMITTEE MEMBER FROM NORWAY**

## **Norwegian Comments on Kenya's SREP Investment Plan**

Overall, Norway is impressed by the broad and inclusive process behind the IP and the strong national ownership to the Investment Plan (IP). That is very promising. It shows a strong political will and is a manifestation of Kenya's overall ambitions to pursue renewable energy, giving RE an important role in its energy mix as a basis for economic development and poverty reduction.

Norway views it as highly positive that the IP involves three different types of energy services; on-grid, mini-grid and water heating. All three individual planned SREP interventions appear to involve important demonstration effects, something that Norway views as an important objective and role for SREP financing. As a group, the interventions target different energy sources, different energy services and different business models, and thus go a long way in addressing the entire spectrum of the "energy sector". Further, while the IP appears to successfully encompass this range, it also manages to focus efforts and resources on 3 projects/programs, thus maintaining a certain level of confidence that the IP can be implemented successfully.

### **A few more specific comments/observations/questions, based on input from our Energy Sector Advisory Services**

- **Financing Modalities.** The IP stops well short of defining the type(s) of SREP financing modalities, simply noting; "will likely include a combination of grant, concessional loans, and possibly guarantees. The modalities will be determined at the time of appraisal, in accordance with relevant SREP guidelines." As outlined in SREP guidelines on financing modalities, it is encouraged to also test and demonstrate results based financing. For Kenya, this may particularly be relevant for mini-grids and solar water heaters, as these types of investments both can benefit from business model innovations and often require some level of continued support to ensure sustainability. Norway would encourage Kenya to look into whether result based approaches may be useful and effective for some of the components in the IP, and possibly enter into a dialogue with cifadminunit and ESMAP to look into different relevant tools .

- **Reliability of the Results Framework.** Norway questions the reliability of some of the numbers presented in the Results Framework (pg. 8). For example, according to the Financing Plan (pg. 7), Hybrid Mini-Grid Systems will require a total investment of \$68 million but only provide access to some 11,000 mini-grid customers. This implies a price of more than \$6,000 per connection, which is extremely high and almost surely uneconomical. Are these numbers correct? If so, one would question whether the funds could be better spent, e.g. on grid connections or solar home systems etc, which would give a much lower cost per connection? (see below) Another example is that it states that the 200MW of geothermal generation will lead to about 1,000 tons of GHG emission reductions a year. This compares with a UNEP study which estimated that a 35MW site (Olkaria III, Phase 2) would lead to some 171,026 tCO<sub>2</sub> reductions annually – indicating a calculation mistake of more than 100x in great underestimation of reductions in the SREP project. Although this is likely a simple calculation error, emission reductions is a primary objective of SREP and should be quantifiable. A final comment regarding the Results Framework is that "Targets" for a large number of the

“Indicators” remain “to be confirmed” (TBC). Norway does not immediately see why, for a number of these important indicators, targets cannot yet be defined.

- **Financing to the geothermal project appears to be a good use of SREP funds.** The geothermal investment carries with it both considerable risk and considerable potential benefit for Kenya and possibly the region. Not only could this specific project provide up to 400MW of power to Kenya, but it could also contribute as an important demonstration project that would encourage even private sector investments in a stable, secure and scalable energy source for the entire region. Providing “first-mover” capital for this investment appears to be a highly productive use of SREP funds.

- **Is the hybrid mini-grid program feasible and/or economical?** Norway remains concerned with the implications of the high cost associated with the hybrid mini-grid (if correctly estimated). The \$6,000 per customer would compare with some \$350-500/connection for both highly successful grid electrification programs in South Africa and Ghana, as well as mid-range solar home systems basically anywhere. Indeed, such an investment would imply a 5-yr loan repayment of \$100/month at 0% interest. Indeed, \$100/month would be well out of reach for nearly all poor rural households. This raises the question; in the country’s efforts to provide modern energy services to the rural population, what criteria/selection process lead to the rolling out of solar/wind hybrid mini-grids as the best target of SREP funding?

Norway is concerned not only about the high cost level but the existing plans and/or ambitions regarding the \$42m from development partners/commercial loans (note that the Annex only specifies development partners). Norway cannot find any additional information and would thus question the amount of risk being assumed by SREP in terms of either ending up with a larger financing portion of a smaller program than that envisioned in the IP, or that the program is scrapped altogether. We would appreciate more information regarding the status of the other financing.

- The Solar water-heating component may provide important energy efficiency benefits and improved living standards for the urban middle-class, but may only indirectly contribute to poverty reduction. This is because the primary beneficiaries of such a program most likely will be urban dwellers with disposable income to purchase such units, albeit with a subsidy. However, to the degree that the program reduces energy use among these households, emissions will be reduced and energy will be made available for others, including the poor. In general, these trade-offs are simply noted and Norway views this as a reasonable use of SREP funding, assuming that it will be particularly effective at stimulating private investment and the market for such units.

- Lastly, we would like to raise the issue and question why the plan is already now counting on a certain amount of the reserved funds (more than 50%). These funds have so far not been allocated.

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