

Annex B: Outline for the review

1. Title of the investment plan - SCALING-UP RENEWABLE ENERGY PROGRAM INVESTMENT PLAN FOR NEPAL
2. Program under the SCF - SREP
3. Name of the reviewer - Drona Upadhyay
4. Date of submission - 23 September 2011
5. Part I: General criteria

General

Criteria	Reviewer Comments
complies with the principles, objectives and criteria of the relevant program as specified in the design documents and programming modalities	The investment plan (IP) generally complies with the principles, objectives and criteria of the SREP.
takes into account the country capacity to implement the plan	<p>The IP provides a detailed analysis of the capacity of the financial institutions in the country to provide the support that will be necessary for SREP to achieve its goals, and in general has a positive assessment of the capacity.</p> <p>The IP should take into consideration the required infrastructure that needs to be in place for the 4,000 MW to be produced (as per the GoN plans). Even though the SREP component is small, due to the nature of intervention (i.e. complementing the existing initiatives), the IP should consider this aspect. New roads and transport infrastructure and facilities will be required as a precondition to installing the anticipated amount of hydro and other RETs. Existing transmission and distribution systems will need to be upgraded, and new ones will need to be built, as also indicated in paragraph 107. A more thorough consideration of this aspect should be given in the IP so that any risks are identified and right investment decisions are made. Barriers analysis does not seem to address the above adequately. This aspect is important if SREP is to work in unison with the government targets.</p> <p>Section 5.0 of the IP sets out Roadmap for the development of SHP. It is not clear whether the roadmap is the existing GoN plan or it is SREP roadmap, as the language used in the section is ambiguous. It becomes apparent that it is an</p>

	<p>existing GoN plan and the GoN seems to have set an ambitious target – i.e. 4000 MW in the next 16 years. It should be noted that only 700 MW of total electrical power has been installed in the last several decades, and less than 200 MW of RETs have been installed in the last two decades (Ref table 4.1 of IP).</p>
<p>has been developed on the basis of sound technical assessments</p>	<p>The investment plan uses several selection criteria (please refer to Table 4.2) based on impact, but technical criteria are limited.</p> <p>Additionally, it is not clear in some cases why the impact of a technology related to a particular criterion is low, medium or high for each technology, and may appear to be arbitrary. For example, it can be argued that improved watermill should have a high impact on gender/social effectiveness. Additionally, it is not clear how the overall impacts are arrived at from the individual impacts.</p> <p>Regarding selection of technologies for SREP support (section 4), availability of accessible and sustainable resource should be given a proper consideration. It is clear that Nepal has a vast hydropower resource, but a consideration of sustainable use is important. This is more important for biogas technology, as there may not be enough resource available to generate the target amount of power/energy or there may be competing uses of the resource.</p>
<p>provides for prioritization of investments, stakeholder consultation and engagement, adequate capturing and dissemination of lessons learned, and monitoring and evaluation and links to the results framework</p>	<p>The IP has clearly demonstrated that it has prioritized investment in certain areas of RETs, even though investment could be made into a multitude of technologies. There is a clear and comprehensive monitoring and evaluation plan.</p> <p>Referring to paragraph 33, Independent Power Producers’ Association Nepal (IPPAN) seems to have cast some doubts about allowing government institutions the management of the funds. IP should provide clear justification as to why the fund should be managed by a government agency and not by private agencies as suggested by IPPAN.</p>
<p>adequately addresses social and environmental issues, including gender</p>	<p>“Gender/social inclusiveness” is one of the criteria used while selecting the technologies to support. However, it doesn’t provide adequate analysis as to why a particular technology addresses this criterion. Climate Change mitigation is also chosen as one of the criteria in selecting</p>

	the technologies to support.
supports new investments or funding is additional to on-going/planned MDB investments	<p>There are multitudes of ongoing and planned initiatives and programmes, including several donor/MDB led initiatives, supporting the promotion of RETs including a major GoN initiative (see para 82-95 of the IP). Analyses of every such initiative have been provided in the IP document (section 3.6). The IP is very clear on how SREP funds will be an integral part of the overall national RET programme, and it clearly shows that it is a complimentary activity, and has clear plans about where and how it will support the RET promotion in the country, along with other initiatives.</p> <p>The IP also provides very detailed and elaborate financing mechanisms to deliver the capacity additions proposed.</p>
takes into account institutional arrangements and coordination	IP should highlight how all the initiatives are coordinated and SREP support is able to leverage all the support that is available.
promotes poverty reduction	Poverty reduction is one of the criteria chosen while selecting the technologies for support by the SREP. However, it should be noted that about one quarter of the SREP funding is proposed to be spent on Solar Home Systems (SHS). Due to the power output limitation and storage requirements (for 24 hour supply), SHS are not best suited for direct income generating activities and hence are likely to have a limited poverty reduction impact. However, SHSs are suitable for remote areas where the requirement for electrical power is limited to lighting, and hence contributes to energy access. IP should make this point clear to avoid any confusion.
considers cost effectiveness of investments	The selection of technologies for investment has been based on the impact of the intervention, and hence cost effectiveness is indirectly achieved. Also, the support programme is designed to leverage other investments – this will also help in achieving cost effectiveness.

6. Part II: compliance with the investment criteria or business model of the relevant program

Criteria	Reviewer Comments
Catalyze increased investments in renewable energy in total investment	As also highlighted earlier, there are a number of support programmes for RET in place in Nepal, and SREP is designed to work in tandem with the rest of the initiatives, with government agencies acting as focal points. The SREP contribution needs to be complemented by other funding sources (e.g. MDBs, GoN initiatives and private sector equity), some of which are not in place at this time.

	<p>Approximately 50% of the total planned investment is expected to come from the private sector equity and other sources.</p> <p>However, there are several aspects in the IP that aim to promote leveraging of investments from other players in the sector. For example promotion of SHP is a key component of SREP in Nepal and the financing mechanism for this has been designed to include funds from other sources, with SREP funds acting as a complementary fund. A number of alternatives have been suggested – each of the alternative will leverage funds from other sources.</p> <p>The IP suggests that some of this shortfall can come from a reserve SREP fund, which may not be in keeping with the objective of catalyzing increased investments. This point needs to be clarified.</p>
Enabling environment	<p>One of the key aspects of SREP support in Nepal is that the programme will support the existing and planned initiatives. GoN is a major player in the RET promotion in the country, and SREP will work with the GoN in order to assist the sector. One of the key aspects of working with the government is strengthening of the existing institutions and assistance in policy development. For example, the SREP technical assistance component is planned to assist in the restructuring of AEPC to create the new AEPB, with a new mandate of developing RETs of up to 10MW. AEPB will maintain a high profile Central Renewable Energy Fund (CREF). The funds from SREP will be channelled through CREF.</p>
Increase energy access	<p>The IP deals with increase in energy access, not least in setting the targets for the number of households connected in the monitoring and evaluation section of the document. Energy access is one of the key motivations behind selecting micro/mini energy initiatives.</p>
Implementation capacity	<p>Major part of the SREP funding support will be channelled through government agencies including AEPB, and SREP fund will help set up AEPB.</p> <p>Referring to Para 75 – the IP ought to address the manufacturing capacity and the whole supply chain support available in Nepal to deliver the proposed power output from Hydro, PV and biogas. If there are gaps, appropriate support should be provided through SREP and other sources.</p>

Improve the long-term economic viability of the renewable energy sector	The SREP IP does not adequately address the issue of how the required infrastructure and supply chain support will be provided for a long term sustainability of the RET sector. Also, operation and maintenance and other services are the key to long term economic viability, and the IP does not provide much detail on how these aspects are going to be supported.
Transformative impact	Transformative impact of the SREP is something that is dealt with adequately throughout the IP.

7. Part III. Recommendations

1. Referring to Para 151, there should be in place proper support structure and mechanisms to identify and undertake feasibility studies for the potential sites.
2. Programme Targets (Section 6.4) and Financing Plan (section 6.6) show a significant investment in Solar Home Systems (SHS). SHSs generally only provide light and smaller loads such as TVs and Radios, fundamentally non-income generating. IP/SREP should support rigorous assessment of suitable alternatives (e.g. hydro) that can be effective in generating income by allowing end uses of electricity. Additionally, it is not clear if there will be a real demand for 500,000 units of Solar Home Systems. Similarly, it's not clear whether there is a real demand for 150,000 biogas units.
3. A one-stop shop is not necessarily the best approach for promotion of RETs (refer section 3.2). The roles of existing institutions need to be clarified so that there is no competition and confusion between agencies.
4. There is not enough coverage and support provided under SREP on tariff setting (such Feed in tariffs) and PPA. Competitive and attractive tariff and a transparent PPA are key factors to encourage investment. SREP should assist in these areas.