

February 16, 2012

## **Response of the Government of Honduras to Switzerland and Spain on the Honduras Investment Plan**

Dear Zhihong

On behalf of the Government of Honduras, I am sending you the responses to the comments by Switzerland and Spain. I hope that this document can be circulated tomorrow to the Subcommittee for information, together with the document package.

Best regards

Claudio Alatorre (INE/CCS)

### **SREP Honduras**

#### **Responses to comments from SREP donor countries to the Investment Plan**

<b>Comments from Switzerland</b>	<b>Responses from the Government of Honduras</b>
We thank Honduras for a well prepared Investment Plan. We welcome a good balance between capacity building, grid-connected measures to assure energy security and productive use of electricity as well as sustainable rural energization. We support the endorsement of the SREP Investment Plan for Honduras.	Thank you.
We have the following questions and comments:	
1. The IP mentions that the national power utility ENEE has awarded PPAs for a total of 708 MW of renewable energy (49 projects representing an investment of \$2.5billion). To what extent is ENEE able to sustain these PPAs from income? Are government (or other) subsidies foreseen/necessary? From what sources will these be financed?	While the government provides some subsidies to ENEE, these new PPAs should enhance ENEE's financial sustainability. The reason for this is that the awarded price levels (average monomial price of US\$ 10.7 cents/KWh) are (i) significantly lower than the prices paid for the thermal generation they aim to replace (US\$ 27.3 cents/KWh), and (ii) significantly lower than the selling prices of electricity for almost all consumption categories (including residential; the exceptions are the prices for interruptible service and for industries in priority areas). This can be seen in table 4, page 17 of the IP.

<p>2. A key component in the ADERC is the establishment of a Risk Capital Fund (\$10 million SREP capital contribution + \$10 million from the MDBs). It is not clear from the IP how flow-backs to this fund are used to extend the program beyond the initial projects (12-15 projects representing 60 MW). Could this be clarified and quantified?</p>	<p>These details will be examined during the feasibility study currently being prepared and we will certainly address this issue in the Program Proposal. If a venture capital fund structure is proposed, the instrument may likely have a 10 year horizon before exit, and the potential to sell and reinvest funds more than once in the early part of that time frame.</p>
<p>3. In the ERUS program, with regards to electricity access for rural households, the IP does not state any preference for a certain technology, except that it should be off-grid. Is there such a preference? Which and why?</p>	<p>The technology options will be examined during the feasibility study currently being prepared. Nevertheless, we foresee that there will not be a pre-determined preference among renewables. Technology choices will be made on a community- and/or regional-specific basis, following an assessment of energy resources, energy needs, social acceptability and other considerations in each district.</p>

<p>4. In the ERUS program, we also miss a more detailed outline of the mechanisms that should bring the scaling-up of sustainable rural electrification using RE. We understand that such mechanisms are dependent to some extent on the choice of technology. Yet we would welcome at least some indications as to how the \$24 million to be spent (incl. \$6 million from the SREP) should bring a transformational impact.</p>	<p>This will depend, as stated in the comment above, on the choice of technologies and recommendations and business model proposals to come from the preparation-phase studies. It is expected that a considerable amount of the funds allocated to off-grid electrification will support the installation of solar home systems (SHSs) in remote areas. The design of the implementation modalities and mechanisms will consider and build on various existing models and experiences, one of them being the Solar Program (PROSOL) implemented by the Honduran Social Investment Fund (FHIS) under the blended IDA-Rural Infrastructure Project and GEF-Rural Electrification Project. A dealer model supported by the provision of capital subsidies and microfinancing to cover the capital costs of the SHSs has proven successful, with about 5,000 systems installed to date in 6 <i>mancomunidades</i>. The project, which is close to an end, will carry out an evaluation of the PROSOL and of other experiences already implemented in the country and in the region, taking special care on studying sustainability issues. The design of the SREP component will build on the results of this work.</p>
<p>5. Many of the baselines and objectives in the result framework remained undefined (“tbd”).</p>	<p>The data required for some of the baseline values was not available at the time of preparation of the IP. The studies and activities to be carried out during the project preparation phase will allow determining the missing baselines, as well as reasonable targets.</p>

<p>6. The IP foresees heavy investments into the power transmission infrastructure (\$56.5 million incl. \$4 million from the SREP) which seem to be in the traditional large grid long distance high voltage field (although not clearly specified). We would like to emphasize that transmission and/or distribution infrastructure should be conceived taking into account the specificities of connecting electricity generation from RE to the grid. Since the sources of power in the case of RE are much smaller and more numerous than with traditional power generation, the grid connections and development should be adapted. We would expect more local (medium voltage) distribution networks, rather than long distance high voltage transmission lines. Also, the specific issues in regard to grid protection should be addressed, as well as the grid control and management issue.</p>	<p>The transmission and distribution infrastructure to be developed with SREP funds will be limited to investments needed to connect renewable energy projects to the grid based on the modeling of the grid that incorporates different scenarios including a more significant role of small scale projects. Notwithstanding the above, in some cases there could be a geographical concentration of these projects that may deserve transmission of higher capacity. With respect to grid control and management, with the support from IDB, ENEE is investing in strengthening the expansion of the grid and in the incorporation of SCADA to manage the grid.</p>
<p>7. With regards to the ERUS program, we believe that larger scale replication can be achieved best by inducing the beneficiaries to pay for their off-grid installations, using a micro-credit scheme to finance them. Also, issues like maintenance, after sales service and recycling/disposal of used equipment must be addressed. For solar PV systems, life cycle considerations should ensure that the most sustainable and environmentally sound technology is used.</p>	<p>Agreed. The business model to be adopted by the program — which will be determined following a series of preparatory studies looking at previous experiences, community-specific energy resources, energy needs, willingness-to-pay levels, etc. — will take these factors (lifecycle costs, environmental impacts, maintenance needs, etc.) and financing scheme possibilities into consideration.</p>
<p><b>Comments from Spain</b></p>	<p><b>Responses from the Government of Honduras</b></p>

<p>Thanks for the last week discussions in Washington. Our consideration of the Investment Plan of Honduras is positive and we understand that the projects previewed can have an important impact on the development of renewable energies in Honduras, while they can also help to improve the quality of life for its citizens.</p>	<p>Thank you. Agreed.</p>
<p>We would anyway like to raise a couple of important aspects that we expect will be carefully beard in mind when developing the three components included in the Plan.</p>	
<p><b>Adequacy of the IP to the needs of Honduras</b></p>	
<p>The proposed document reflects the difficult situation of the electricity sector in Honduras, and also the main areas where progress is needed in order to be able to deal with this situation, so in that sense, the Investment Plan is considered to fit the needs of Honduras at the moment.</p>	<p>Agreed.</p>
<p><b>Appropriateness of the planned activities to achieve the objectives</b></p>	
<p><b><i>Component 1 - Strengthening the RE Policy and Regulatory Framework (FOMPIER)</i></b></p>	
<p>As for the three pillars that comprise the IP, this first one to strengthen institutional and regulatory framework is definitely considered a priority. The lack of public investment in the sector responds among other things, to a lack of government planning in the energy field. As stated in the document, privatization has not been completed and the current situation causes conflict of interest.</p>	<p>Agreed</p>

<p>Therefore, before carrying out other actions in the sector, it would be necessary, as the document points out, to strengthen the Energy Commission as regulator entity, and to generate a tariff system favoring renewable energy.</p>	<p>We agree with the need to strengthen the Energy Commission. However, we consider that the regulatory and institutional framework, although still far from perfect, is adequate enough to carry out the proposed investments.</p> <p>Supporting a first group of RE projects which have received government power purchase agreements (PPAs) will build expertise in the industry, lower perceived risk, and create data that will allow more robust investment in the future as the various components of the IP progress.</p> <p>Moreover, by applying their fiduciary requirements, the MDBs will make sure that the projects are financially sound, and this includes the regulatory framework.</p> <p>Therefore, we consider that getting the regulatory and institutional framework right is a long process that should be carried out in parallel with the investments.</p> <p>With regards to the tariff system, if you refer to the rates to be paid to the renewable energy power producers, the Government considers that the policies in place are adequate.</p>
<p>Viewed then the first component of the IP as a priority, the results obtained in this component would reveal the strong political will of the Government in this area. Therefore, it would be advisable, from our point of view, to subordinate the actions of the second component (structured finance and technical assistance to specific projects) to some indicators that show that progress has been made in this first component.</p>	<p>See previous answer</p>

<b><i>Component 2 - Grid-Connected RE Development Support (ADERC)</i></b>	
---	--

For what we have seen in the IP, it has not been considered in the plan the high level of losses in electricity in the area of electricity distribution in Honduras, which is around 25%. There seems to be consensus that it does not seem to make sense in the short term to further increase the generation in the country as long as the distribution network problem is not solved. In this sense, both to create a portfolio of renewable energy projects, and the proposed extension of the distribution network to access new renewable generation projects should be complemented with a renewal of the current network that would maximize the possibility of using the new energy that will be generated.

In 2011, the electricity loss index in Honduras was close to 27%, 10% being technical losses and 17% nontechnical (namely, nonregistered connections, losses in meter reading and billing, and defaults in bill payments). The ongoing Power Sector Efficiency Enhancement Project (PROMEF), supported by a USD30 million IDA credit through the WB, aims to improve ENEE's operational and financial performance by (i) improving ENEE's commercial and corporate resource management, (ii) rehabilitating ENEE's regional distribution sub-networks; and (iii) strengthening ENEE's institutional capacity and corporate governance. The project will contribute to the reduction of technical losses by replacing transformers and purchasing related equipment for the regional distribution sub-networks. Non-technical losses will be reduced by the installation of automatic metering equipment and the implementation of an automated commercial management system. ENEE's Cash-Recovery Index (CRI) is expected to improve by 10%, while the System Average Interruption Duration Index (SAIDI) and the System Average Interruption Frequency Index (SAIFI) are expected to improve on an annual basis.

Additionally, with IDB's support and in line with the PROMEF, ENEE is developing a strategic plan with a very strong component related to the reduction of non-technical losses. The plan includes a reorganization of the company into separate business units that will help manage losses by creating a unit devoted to reducing the loss index and to facilitating performance evaluation (currently these responsibilities are split among several units). The plan also includes the hiring of key personnel, based on technical criteria, in the area of distribution and commercialization. The reduction of losses is a critical element of a policy-based loan that the IDB is preparing for Honduras.



<b>Conclusion</b>	
<p>The consideration of the Investment Plan is positive; the planned activities are directed towards three key aspects of the sector: planning and regulation, implementation, and rural electrification. We would anyway like to have some assurance that both aspects raised will be taken into account:</p>	<p>Agreed. Thanks.</p>
<ul style="list-style-type: none"> <li>• If it could be considered the subordination of some actions or components to the attainment of certain indicators in other components. Especially if it has been considered subordinate implementation actions (component 2) to achieved results in component 1.</li> </ul>	<p>See replies above.</p>
<ul style="list-style-type: none"> <li>• If it has been taken into account, when establishing the actions or projects, that their impact is going to be conditioned by the current situation of the distribution network and the high level of the network losses. This issue has already been highlighted during the sub-committee meeting. It served the purpose, on the one hand, to get confirmation from the representatives of the Government that this is indeed the situation and, on the other hand, to be informed that they are taking steps to redress it. To the extent that the situation of the distribution network affects the effectiveness of the projects to be financed under Component 2, it is advisable to receive reports on the status, or preferably improvements, of the distribution network when those projects would be circulated for to approval.</li> </ul>	<p>We will include information on the status of the distribution network and actions being taken when submitting for approval the ADERC component.</p>