June 9, 2014

# World Bank Response to the TFC – Approval by mail:

# Morocco: Clean and Efficient Energy Project

| Comments from Canada | Responses from World Bank team |
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| We would appreciate the IBRD's clarification of how the proposed "soft terms" are consistent with the CTF financing guidelines (CTF Financing Products, Terms, and Review Procedures for Public Sector Operation), which state that softer concessional loans should only be used for projects with negative rates of return. We note that the sensitivity analysis indicates that the cash flows for the first phase of the solar program are positive under both scenarios using soft and hard concessional CTF financing. Additionally, the economic rates of return for the overall project show that it is economically viable. | The CTF financing guidelines for public sector operations (CTF Financing Products, Terms, and Review Procedures for Public Sector Operations, November 7, 2013) state in page 6 that Softer concessional loans can be offered for projects with: (i) Negative rates of return, or (ii) Rates of return below normal market threshold.<br><br>The proposed project falls in the second case scenario (ii) as shown in Annex 6 of the Project Appraisal Document (PAD). The Rate of return of the solar PV Component financed by CTF is 3.97%, which is well below the discount rate used to assess the economic viability of infrastructure projects in Morocco at around 6%.<br><br>As shown in the financial analysis of the solar PV component (Paragraphs 27-29 of Annex 6), CTF soft financing terms are critical to make the solar PV project component possible and financially sound. Despite the fact that harder concessional terms yields an NPV of US$ 4 million, this potential revenue is too small and at risk to become negative in case of a CAPEX increase or in case of a lower solar radiation. If the project had an expected CAPEX increase of 5%, for example, the project's cash flow would be negative US$ 2 million with CTF hard concessional terms, but positive US$ 3 million if it was financed with soft concessional terms. For all the above-mentioned reasons, the proposed CTF soft concessional terms are fully consistent with |

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| | CTF financing guidelines. |
| The project document indicates that ONEE and the Government are negotiating a Framework contract in view of improving ONEE's financial sustainability, with progressive increases in tariffs over a four-year period for most of ONEE's clients. It is not clear that this Framework can be implemented in the near-term, nor whether these changes will bring tariffs to cost-recovery levels. Therefore, we would appreciate receiving further information from the IBRD on the potential for this to occur. We note that soft CTF financing could be a disincentive for the necessary tariff reforms, as it provides a larger subsidy to maintain the status quo, and this not only would negatively impact the proposed investment, but also sustainable investment in the sector more broadly. | It should be noted that the mentioned "Program Contract" between ONEE and the Moroccan Government for the period 2014-2017 was signed on May 26, 2014, few days after IBRD's submission of the project document to CTF. The "Program Contract" aims at restoring ONEE's financial viability gradually by introducing a range of diverse actions, including management, pricing, financial, tax and regulatory. The "Program Contract" includes a financing effort of up to 45 billion dirhams (US$ 5.4 billion), which will be covered 70% by financial contributions from the State and improved performances by ONEE, and 30% by gradual tariff increases.<br><br>Tariffs will therefore be increased gradually starting from August 2014 over a period of four years. The soft financing will help to bring down the cost of solar PV, which is still above generation costs of conventional fossil fuel power plants, and therefore make it possible to the Government of Morocco to speed up sustainable investments in the sector to achieve the medium term target of 42% renewables by 2020. |
| **Comments from United Kingdom** | **Responses from World Bank team** |
| The $CO_2$ savings and cost-effectiveness indicators presented on pg. 65 of the PAD are different to those presented in the table on pg. 60. The underlying data and assumptions provided support the ones included in the table. Could IBRD amend in the text? | Yes, we will amend it. As noted, the $CO_2$ savings values in table of page 60 are correct, but paragraph 12 of page 65 needs to be amended to read "Considering CTF support for the proposed project and the projected emissions savings of about 1.95 million tons of CO2 over its lifetime, the cost of each ton of CO2 saved would amount to approximately US$ 12.31 of CTF funding and US$ 78.5 of the project total cost". |
| Additionally, do you think that it would it be possible to quantify the jobs that will be created both in the construction of the plants and their maintenance? We note that | We have estimated the job creation potential for the construction of the solar PV plants to be between 750-1,000 job years. The jobs potentially created for the |

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| the developmental benefits of the project would be greatly advanced if there was an attempt to build local manufacturing capacity for some of the components of the plant as we have seen in the proposed MENA TA project document | operation and maintenance period of the solar PV plants are estimated at 60. These figures are consistent with available references and research.<br>According to the World Bank report “Competitiveness Assessment of MENA countries to develop a local solar industry” (April 2014), Morocco could develop a local industry of support structures for solar PV modules and an engineering services industry. |