

TURKEY COMMERCIALIZING SUSTAINABLE ENERGY FINANCE PHASE II (CSEF II) PROGRAM PROPOSAL

IFC Responses to the comments from Trust Fund Committee members

Germany

COMMENTS:

We appreciate the approach and the substantial co-financing from IFC and the private sector but we seek clarification on the cost-effectiveness. The program proposal states that the total investment cost is expected to be around USD 1,000 per t GHG emission reductions. To us such a high cost-effectiveness indicates that the marginal abatement cost is likely to exceed USD 100 per ton of CO₂-equivalent. At the October 2013 Meeting it was decided, that in such case MDBs/countries will undertake a marginal abatement cost analysis to show that the threshold for CTF eligibility at the marginal abatement cost of USD 200 per t of CO₂-equivalent reduced will be met.

Could you therefore please provide the TFC with this analysis?

IFC RESPONSE:

We would like to clarify that we did not anticipate that the marginal abatement cost (MAC) under the Program would exceed US\$71/MtCO₂e – a value below the US\$100 threshold that triggers the requirement for MAC analysis. Specifically, we expected the MAC value to be in the vicinity of the CTF subsidy value per MtCO₂e, which constitutes only a fraction of the CTF investment value per MtCO₂e (US\$71). The MAC analysis, therefore, was not included in the CSEF II Program proposal. However, to address the concern expressed by the Trust Fund Committee, the MAC analysis for this Program is provided below:

- The Program proposal indicates that *energy savings of up to 27% (B level in the context of Turkey) over the minimally required C level can be achieved by implementing EE measures that increase construction costs by a mere 1%*;
- The 1% incremental construction cost increase, given the expected Program size of US\$420 million (US\$30 million CTF and US\$390 million non-CTF financing), constitutes US\$4.16 million;
- The total incremental cost of green buildings is no higher than the incremental construction cost, as the non-construction expenses of “operating” green buildings will likely be lower than these of the traditional buildings (lower operation costs, less frequent equipment replacement, etc.). The total incremental costs are, therefore, no higher than US\$4.16 million;
- Direct GHG savings estimated in the proposal are 420,000 MtCO₂e over the 30-year life;
- The total MAC is, therefore, no higher than US\$10/MtCO₂e (US\$4,160,000/420,000).

However, we would like to further note that the low MAC value is achieved by including complex and integrated energy efficiency (EE) measures at the building design stage, resulting in changes of many facets of building construction. The EE measures include enhanced roof and walls insulation, reflective paint/tiles for roof and walls, low-E coated glass, high efficiency boilers for space heating and hot water, heat pump, smart meters; energy-saving light bulbs, among others. A holistic and systematic approach to integrating EE features at the design stage allows keeping incremental costs to minimum, while fully realizing the environmental benefits potential.

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COMMENT 1: Baseline and expectation for the jobs created indicator

Please could IFC identify a baseline and expectation for the jobs created indicator in the results framework?

IFC RESPONSE:

The CTF funds will be invested alongside IFC's own financing and the CSEF II Program will follow established IFC internal guidelines and procedures to collect and report data on various sub-project outcomes. At this time, however, IFC does not anticipate tracking a *jobs-created* indicator as part of this Program, as IFC currently does not have reliable data collection methodologies that could be applied to housing finance projects undertaken through financial intermediaries.

The lack of IFC's ability to collect these data stems from the fact that most financial intermediaries themselves do not have the necessary systems in place to track and report on the relevant, jobs-related outcomes. IFC does recognize this shortcoming and, for the last several years, has been working to develop required methodologies and systems as well as promote their use by IFC clients. However, given the complexity of the task and multitude of clients, IFC has been first focusing on areas with direct and verifiable links between investments and jobs-related impact, such as credit lines to SMEs.

In short, given the difficulties in assuring that the employment-related indicators can be tracked and verified at the individual sub-project level, the program-level baseline and/or targets cannot be assembled at this point. This approach is consistent with the one undertaken in all other previously-approved IFC CTF programs that operate through the financial markets in various countries, including Colombia, the Philippines, Thailand, and even the Turkey CSEF Phase I Program.

Nevertheless, we expect that, by spurring the growth of green buildings, the CSEF II Program will lead to an increased number and quality of jobs needed to install and maintain various EE components and equipment. Growing demand generated by the green buildings sector will support development and expansion of supply chain of more efficient materials, products, and equipment (low-energy lighting, efficient cooling and heating systems, thermal insulation, etc), further stimulating economic and jobs growth in related segment of the market.

COMMENT 2: IFC co-investments and 'green' element

In Section 1.6, is the IFC's \$100m counted as part of or in addition to the \$390m of private sector funds? Will IFC's funds be used to support the 'green' element of the mortgage or the general capital investment?

IFC RESPONSE:

Investments on IFC's own account are counted as part of the US\$390 million estimated financing leveraged. IFC funds, alongside with the CTF funds, will be provided to financial institutions, to be on-lent to ultimate clients – mortgage borrowers. The 'green' element of mortgages cannot be separated, as capital costs are linked with full building construction and there is no methodology on how to extract cost related to 'greening' itself (please also see response to *Project boundaries*).

In other words, the Program takes a holistic and integral approach, which involves various measures that reach far beyond simple add-ons (like efficient light bulbs) and include modifications to structural elements and construction techniques. The "extras", therefore, cannot be financed independently of the rest of the building, as, for example, it is not possible to separately finance the cost of additional wall insulation.

COMMENT 3: Project boundaries

Having noted the exceptionally high investment cost per tonne, please could the IFC verify the project's boundaries? The proposal is to use CTF finance to support the uptake of green mortgages. However, the project document claims the 'leverage' associated with the total cost of the housing construction. The proposal suggests that the incremental cost of green buildings is only 1%, therefore if the total cost of the mortgages deployed through this scheme is \$420m, then the amount that should be claimed as 'leverage' by the IFC is just less than \$4.2m, as the CTF finance is only targeted at mobilising the 'green' element of the mortgage.

IFC RESPONSE:

The estimated additional cost of “greening” buildings (\$4.16 million for the entire program) cannot be viewed as the only green portion of the Program. For example, a similar approach in the solar PV industry would require defining what component of the solar PV farm is actually responsible for “greening” the energy (perhaps, solar cells, which account for only a fraction of the total PV farm cost) and excluding all others, as they (or similar items) are also used in generating “dirty” energy (land, mounting hardware, cables, etc.). By the same token, green buildings are radically different from traditional buildings, even though they share some features. Green buildings are designed differently, constructed differently, use different materials, and, as such, should be compared with the traditional buildings on a “package” level rather than component level.

Further, the 1% increase should be compared to the required subsidy value, not to the amount of financing. In other words, the higher cost of green buildings creates a financing gap that is intended to be partially shouldered by the CTF funds. The amount of these funds needed for a specific sub-project depends on the depth of concessionality, but in any event is many folds greater than the gap itself.

Finally, please note that the IFC's CSEF II Program is structured to find an effective balance between achieving high leverage, while at the same time maintaining an attractive level of concessionality and setting the right conditions for a transformational impact. The Program is premised on the idea that green mortgages could be a sustainable commercial product in Turkey, but some demonstration and awareness building effort is needed first to stimulate the market. Thus, the Program boundaries need to be drawn broader, covering the entire segment of the market and with the objective for market-wide replication.

COMMENT 4: Passing the concessionality to the borrowers

How will the concessionality of CTF funds be passed onto the mortgage borrowers?

IFC RESPONSE:

Each sub-project's financial structure and the level and structure of CTF concessionality will be determined during negotiations with potential clients on a project-by-project basis. Preliminary discussions, however, indicate that one of the effective mechanisms could be a pricing discount for mortgages received by ultimate borrowers. As indicated in the Program proposal, low awareness and low motivation to accept incremental upfront costs and increased monthly payments are currently some of the most significant barriers. Hence, these barriers could be effectively addressed through a project structure that reduces the homebuyer's burden of a downpayment and following monthly payments to the level closer to the one of traditional mortgages. These could be achieved, for example, by providing a price discount to the homebuyer.

COMMENT 5: Gender

How will gender be included and measured in the project?

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IFC RESPONSE:

Similarly to the jobs-created indicator, IFC does not anticipate tracking gender benefits as part of this Program, because at this time there is no cost-effective reliable data collection and verification methodologies that could be applied to tracking gender impacts in housing finance projects undertaken through financial intermediaries. Given the difficulties in assuring that the gender indicators will be tracked on the individual sub-project level, the program-level targets and measurements cannot be developed at this point.

As explained earlier, the lack of IFC's ability to collect these data stems from the fact that most financial intermediaries themselves do not have the necessary systems in place to track and report on the relevant outcomes. IFC does recognize this shortcoming and, for the last several years, has been working to develop required methodologies and systems as well as promote their use by IFC clients. By now, IFC has successfully introduced methodologies for tracking gender benefits for some classes of commercial borrowers, but not for residential ones. For example, in case of commercial borrowers, IFC tracks and measures the number and volume of outstanding loans issued to women entrepreneurs or women-owned businesses in the portfolio of a financial intermediary. At this time, however, IFC does not have reliable means for tracking gender benefits for housing finance projects.

Nevertheless, we expect that, as the Program will help making financing of more energy efficient properties more affordable, more households will be able to get "roofs over their heads" as well as better "roofs". As such, the Program is expected to assist about 9,000 Turkish families, benefiting about 18,000 women and girls (average Turkish household size is four, of which two are females).