

Scientific and Technical Advisory Panel

The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility
(Version 5)

STAP Scientific and Technical screening of the Project Identification Form (PIF)

Date of screening: May 08, 2012

Screeners: Lev Neretin

Panel member validation by: Nijavalli H. Ravindranath
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I. PIF Information *(Copied from the PIF)*

FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 4629

PROJECT DURATION : 5

COUNTRIES : Maldives

PROJECT TITLE: Strengthening Low-Carbon Energy Island Strategies

GEF AGENCIES: UNEP

OTHER EXECUTING PARTNERS: -Ministry of Housing & Environment (MHE)

-Ministry of Tourism, Arts&Culture

-Maldives Energy Authority(MEA)

-Environmental Protection Agency

-Maldives Association of Construction Industry (MACI)

-Maldives Association of Tourism Industry (MATI)

-State Electric Company Limited (STELCO)

-Male City Council

-Maldives Polytechnic

-UN Office for Project Services (UNOPS)-Maldives

-UN-Department of Economics & Social Affairs (UN-DESA)

GEF FOCAL AREA: Climate Change

II. STAP Advisory Response *(see table below for explanation)*

Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies): **Consent**

III. Further guidance from STAP

This project on transforming markets for energy efficiency (EE) improvements in the building sector and promoting investments meets government objectives and relates well to the GEF Strategic Objective CCM-2, although the title does not reflect this. Improvements in energy efficient building and appliance designs have good GHG mitigation potential as clearly identified by IPCC 4th Assessment Report, IEA, etc. (the principles being similar whether for small island tropical environments or for anywhere else). While STAP welcomes this project, the Panel urges that the following set of questions/issues be addressed before CEO endorsement:

Rationale: EE roadmaps have already been produced and several policies are in place "so this GEF project needs to build upon these. It is not clear how this will be done without duplicating work" such as identified in the EE Investment Study for the Maldives. The topics being covered are very broad. Targeting commercial buildings and resort facilities makes sense, assuming they have a similar occupancy all year round rather than seasonal. Social housing is the main target and street lighting is also included. Building integrated solar PV is included, as are ground source heat pumps, solar thermal and sea water cooling. Training courses are imperative for architects, builders, installers, ESCOs etc. but the building owners also need to be educated so as to appreciate that investments usually result in potential benefits of improved comfort etc. as well as quick payback periods. Cost benefit analysis or financial viability analysis is suggested for the proposed interventions during project preparation.

Barriers: These have been clearly outlined. Financial and social barriers are greater than technical ones and this has been recognized by providing ESCO demonstrations. How does low reliability of the power system (mainly diesel-gensets) or whether or not it will evolve to encompass more renewables, affect demand for more efficient systems?

Baseline: The many previous policies and initiatives relating to energy efficiency including recent development of roadmaps will make it difficult to evaluate the additional benefits arising from this GEF funding. Agreed EE can begin at the local level, but how is this to be achieved in practice?

Demonstrations: It is not clear which specific buildings will be used for demonstrations or what the baseline is, particularly for the new buildings. Exactly how will the level of energy savings be evaluated? Will meters be installed? If so where and what types? Who specifically will collect and analyze the data?

Climate change abatement and risks: Achieving 75-80% of the target savings identified in the ADB report by 2018 seems ambitious given the amount of work to be done on training needs, appliance performance identification and the rate of stock turnover of existing appliances. Future impacts of cloud cover from climate change reducing solar radiation levels is a minor risk.

EE monitoring: Is monitoring intended for individual buildings or energy savings across the community? No information is provided as to how measurements will be achieved. How many people are to be trained is not stated so it will be hard to quantify a successful outcome.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Consent	STAP acknowledges that on scientific/technical grounds the concept has merit. However, STAP may state its views on the concept emphasising any issues that could be improved and the proponent is invited to approach STAP for advice at any time during the development of the project brief prior to submission for CEO endorsement.
2. Minor revision required.	STAP has identified specific scientific/technical suggestions or opportunities that should be discussed with the proponent as early as possible during development of the project brief. One or more options that remain open to STAP include: <ul style="list-style-type: none"> (i) Opening a dialogue between STAP and the proponent to clarify issues (ii) Setting a review point during early stage project development and agreeing terms of reference for an independent expert to be appointed to conduct this review The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.
3. Major revision required	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical omissions in the concept. If STAP provides this advisory response, a full explanation would also be provided. Normally, a STAP approved review will be mandatory prior to submission of the project brief for CEO endorsement. The proponent should provide a report of the action agreed and taken, at the time of submission of the full project brief for CEO endorsement.