

Scientific and Technical Advisory Panel



The Scientific and Technical Advisory Panel, administered by UNEP, advises the Global Environment Facility

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

Date of screening: 17th March 2009

Screeener: Lev Neretin

Panel member validation by: N.H. Ravindranath

I. PIF Information

Full size project GEF Trust Fund

GEFSEC PROJECT ID: 3874

GEF AGENCY PROJECT ID: P115064

COUNTRY(IES): BENIN

PROJECT TITLE: BENIN ENERGY EFFICIENCY PROGRAM

GEF AGENCY(IES): World Bank, (select), (select)

OTHER EXECUTING PARTNER(S): ENERGY DIRECTORATE BENIN

GEF FOCAL AREA (S): Climate Change,(select), (select)

GEF-4 STRATEGIC PROGRAM(S): CC-SP1

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: WEST AFRICA ENERGY PROGRAM

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

1. Based on this PIF screening, STAP's advisory response to the GEF Secretariat and GEF Agency(ies):
Minor revision required

III. Further guidance from STAP

STAP supports this Benin energy efficiency program with the goal to enhance standards and labels for efficient light bulbs and air-conditioners in Benin. The project is a part of the Bank's West Africa Energy Program. STAP has the following comments, which it requests to be addressed within the further development of the program brief:

1. STAP acknowledges the "*scientific soundness*" of the project framework, but suggests clarification on the potential implications of some of the interventions. The project aims to address major market transformation barriers for efficient lighting and air-conditioners. Experience in other countries shows that major barriers for penetration of energy efficiency appliances to domestic market include consumer awareness, price dynamics, CFL quality issues, consumer purchasing behaviour, and market entrance barriers. Proponents are advised to consider these and other market barriers in a systematic way when conducting market study and survey.
2. The project puts major emphasis on capacity building for regulatory authorities and consumer education, while other upstream segments of the market (exporters and retailers) are not sufficiently targeted. Proponents are advised to consider and design interventions aimed at providing regulatory and financial incentives for these players, who are central to the supply side of the market for EE appliances.
3. Project aims at transforming markets for key household appliances and lighting in residential and commercial buildings in Benin. These two sectors require differential approaches. Proponents are advised to distinguish these two sectors in market survey analysis and design interventions accordingly.
4. STAP suggests assessment of the effectiveness and sustainability of the proposed one time CFL bulk procurement. Providing consumers with a one-time opportunity to purchase CFLs at a subsidized price will hardly have a long-lasting impact on CFL market transformation. Project proponents may look for more efficient upstream interventions, e.g. facilitating agreements between Energy Directorate Benin and retailers that provide the latter with incentives to participate actively in the market transformation process.

5. Project interventions do not address demand side of the market. How energy consumption will be monitored (lighting audits) and risk of potential 'rebound effect' avoided? What financial incentives consumers may have to make a switch to CFLs and more EE air conditioners (subsidy, electricity tariff or etc.)?
6. Baseline Scenario emissions: Benin imports 85% of electricity. It is important to consider the source of the imported electricity - hydro- or oil- or coal-based? GHG benefit from the project depends on the energy source of the imported power. When energy is used from renewable sources, no net emission reductions will occur.
7. How the issue of retrofitting of the existing air-conditioners will be addressed or the project targets only new air-conditioners?
8. If ACs and CFLs are going to be imported, then regulations on imports may be necessary, more than the development of domestic labels and standards. Similar, the rationale for establishing laboratory for testing needs to be clarified.
9. Benin's capacity for Hg-containing CFL disposal has to be addressed in the final project document.
10. The risk of meeting the incremental first cost of ACs and CFLs in the long term, from the perspective of consumers, needs to be addressed.

<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.