

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: January 20, 2012

Screener: Lev Neretin

Panel member validation by: Nijavalli H. Ravindranath
Consultant(s): Margarita Dyubanova

I. PIF Information *(Copied from the PIF)*

FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 4742

PROJECT DURATION : 4

COUNTRIES : Armenia

PROJECT TITLE: Green Urban Lighting

GEF AGENCIES: UNDP

OTHER EXECUTING PARTNERS: Municipalities of Yerevan and other main cities, Ministry of Nature Protection

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

The project aims at the removal of barriers to energy efficient lighting in Armenian cities. STAP welcomes this project and suggests addressing the following issues as the project is developed:

1. The focus of this project is on public lighting. However, figure 1 shows that the use of incandescent lighting is very low (20%) in public lights, but incandescent bulbs account for nearly 80% of the national lighting. This would suggest that public lighting is less inefficient compared to private lighting. In public lighting there will be a shift from more efficient (compared to incandescent light) fluorescent light. In fact, there is large potential in private buildings probably where incandescent bulbs account of 90% of lighting.
2. The PIF mentions installation of new lights using green lighting technology. Are these new lights part of the baseline?
3. Information barrier may not be such as serious issue for municipalities who control public lighting.
4. Ancillary benefits have been over-stated, since lighting service will be roughly the same no matter what type of bulb is used for a given street.
5. The PIF talks about both public-private partnership as well as community-led and financed public lighting projects. Is it feasible to have both systems in the project, unless it is proposed to test these systems in different locations.
6. Financial viability analysis of the green lighting system is suggested to highlight the incremental cost of the new system and the financial benefit from the energy saved. There is a need to clarify the incentives for the private sector to participate in municipally-owned public lighting systems? Similarly, when the lights are owned by the municipalities, what is the rationale or incentive for the community-led and financed systems? These incentives should be analyzed and appropriately addressed during project preparation.
7. The rationale for focusing on public lighting system should be explained since the use of inefficient incandescent lights is almost 90% in privately owned homes and establishment.

<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.	<p>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:</p> <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 <p>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.</p>
3. Major revision required	<p>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.</p> <p>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.</p>