

# 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: 30<sup>th</sup> September 2009

Screener: Lev Neretin

Panel member validation by: N.H. Ravindranath

### I. PIF Information

**GEF PROJECT ID: 4000**

**COUNTRY(IES): NAURU, NIUE AND TUVALU**

**PROJECT TITLE: "LOW CARBON- ENERGY ISLANDS": ACCELERATING THE USE OF ENERGY EFFICIENT AND RENEWABLE ENERGY TECHNOLOGIES IN TUVALU, NIUE AND NAURU**

**GEF AGENCY(IES): UNEP**

**OTHER EXECUTING PARTNER(S): IUCN-OCEANIA**

**GEF FOCAL AREA (S): Climate Change**

**GEF-4 STRATEGIC PROGRAM(S): CC-SP1, CC-SP3,**

**NAME OF PARENT PROGRAM/UMBRELLA PROJECT (IF APPLICABLE): GEF PACIFIC ALLIANCE FOR SUSTAINABILITY (GPAS)**

### 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):  
**Consent**

### III. Further guidance from STAP

Given the low population levels of the 3 islands, the selection of technology becomes critical. The energy needs have to be clearly identified. Which energy needs are targeted; lighting, heating, shaft power, cooking, etc. The demand for power will be in the scales of kilowatts for power and similarly for heating or process heat. STAP suggests an assessment of energy needs and target the project for meeting the energy needs. This would also determine the technologies to be selected. Technologies for power generation and heat application need to be assessed. It is not clear why biomass technologies are not included, since large biomass resources are likely to be available and bioenergy technologies are always cost-effective and robust compared to say SPV.

Sustainability of project efforts depends entirely on the capacity to integrate provision of clean energy services into sustainable development of small islands. Small size of SIDS provides an opportunity to design integrated solutions for energy supply/demand and sustainable use of natural resources. STAP recommends exploring opportunities for promoting integrated approach to energy use conducting detailed baseline assessment of energy needs in different sectors of the economy, develop cost-effective mitigation scenarios, and develop solutions that are not only beneficial for provision of clean energy, but also benefit other services such as clean water, sustainable waste management, integrated coastal management, and sustainable land management.

Baseline and incremental cost assessment is necessary.

STAP recommends conducting systematic analysis of major barriers for penetration of clean low-carbon energy technologies in selected countries and align proposed interventions closer to identified barriers.

STAP notes the lack of project's support for demand-side management, though energy efficiency is mentioned, specifically improved monitoring of energy consumption by end-users.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. <b>Consent</b>	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. <b>Minor revision required.</b>	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>(i) Opening a dialogue between STAP and the proponent to clarify issues</p> <p>(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> <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>
<p>3. <b>Major revision required</b></p>	<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>