

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: April 16, 2014

Screener: Lev Neretin

Panel member validation by: Ralph E. Sims
Consultant(s):

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

FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 5734

PROJECT DURATION : 4

COUNTRIES : Argentina

PROJECT TITLE: Sustainable Business Models for Biogas Production from Organic Municipal Solid Waste

GEF AGENCIES: UNDP

OTHER EXECUTING PARTNERS: Secretariat of Environment and Sustainable Management (SAyDS)

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

1. STAP welcomes this project whose aim is to strengthen institutional capacities and encourage uptake by municipalities of converting organic MSW into power (and heat), for integration into the grid. Around three quarters of total budget is to support two demonstration projects mostly via a government loan, one for a small town, the other for a large town. Business models include fertiliser co-products and a set of guidelines will be produced to enhance knowledge by stakeholders.
2. Several anaerobic digestion plants already exist in Argentina using local manufacturers and some with MSW feedstocks with the biogas used for heat; so the technology is well understood. Generation of electricity has not been done to date. Future feed-in-tariffs are expected for landfill gas sites " [So would this not be a disincentive for MSW-to-biogas plants via anaerobic digestion? Though perhaps there is some confusion here with the term "biogas" in this proposal which at times refers to both "landfill gas" as well as "biogas" from anaerobic digestion]. If the tariffs are to target both landfill gas and biogas from MSW, there is no conflict.
3. How the project will address regulatory environment to facilitate grid connection and power dispatch? It's not clear why on-grid and not off-grid solutions are sought in the project.
4. How will the small and large towns be selected for the demonstration plants? To encourage replication, they need to be central to other municipalities and typify the current MSW treatment. Having 50% of the GEF funding based on plant performance is commendable.
5. For treating MSW, it can be simply landfilled; landfilled with lining and covering; the organic fraction digested; incinerated; or "waste-to-energy" incineration with heat collection. Has the preferred option for Argentina been fully evaluated?
6. For anaerobic digestion plants, it is not clear how the organic MSW will be separated out from inorganic components such as plastics. Will this be at source or at the waste treatment plant?
7. Assessing the greenhouse gas impacts has mentioned avoiding methane from open landfills but no attempt was made to include it in the assessment which only covers displaced fossil fuels. Avoiding landfill methane emissions is likely to be of far greater significance.
8. The risks have been clearly identified, but mitigation measures remain unclear.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
1. Consent	STAP acknowledges that on scientific or technical grounds the concept has merit. However, STAP may state its views on the concept emphasizing any issues where the project could be improved.

	<p>Follow up: The GEF Agency is invited to approach STAP for advice during the development of the project prior to submission of the final document for CEO endorsement.</p>
<p>2. Minor revision required.</p>	<p>STAP has identified specific scientific or technical challenges, omissions or opportunities that should be addressed by the project proponents during project development.</p> <p>Follow up: One or more options are open to STAP and the GEF Agency: (i) GEF Agency should discuss the issues with STAP to clarify them and possible solutions. (ii) In its request for CEO endorsement, the GEF Agency will report on actions taken in response to STAP's recommended actions.</p>
<p>3. Major revision required</p>	<p>STAP has identified significant scientific or technical challenges or omissions in the PIF and recommends significant improvements to project design.</p> <p>Follow-up: (i) The Agency should request that the project undergo a STAP review prior to CEO endorsement, at a point in time when the particular scientific or technical issue is sufficiently developed to be reviewed, or as agreed between the Agency and STAP. (ii) In its request for CEO endorsement, the Agency will report on actions taken in response to STAP concerns.</p>