

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 29, 2012

Screener: Lev Neretin

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

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

FULL SIZE PROJECT **GEF TRUST FUND**

GEF PROJECT ID: 4718

PROJECT DURATION : 5

COUNTRIES : Brazil

PROJECT TITLE: Production of Sustainable, Renewable Biomass-based Charcoal for the Iron and steel Industry in Brazil

GEF AGENCIES: UNDP

OTHER EXECUTING PARTNERS: Ministry of Science and Technology

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 to reduce GHG emissions from the iron and steel sector in the state of Minas Gerais by developing and demonstrating enhanced, clean conversion technologies for renewable biomass-based charcoal production, supported by an effective policy framework. This is a very well thought through and well written PIF. The concept is very clear and it is based on good preliminary analysis of technology status, biomass production and economic aspects. Brazil has already launched a protocol on sustainable charcoal production. Thus, this project will address the technology barriers for sustainable, renewable biomass-based charcoal based iron and steel industry.

STAP commends this proposal, and would like to suggest a number of minor issues be addressed during the project development stage:

1. Efficient charcoal-based conversion technology: Outputs 3.1 and 3.2 indicate that the project will design and test prototype components under laboratory and field conditions, followed by design and construction of a full-scale charcoal production plant using the new advanced design. The only concern is the time-frame involved in design and commissioning of such a new technology. It is common in all RD & D projects that there will be time and cost overruns which have to be built into the project. Who will design this technology? Will it be through an industry R&D process or will it be through a research institute?
2. Sustainable biomass production: There seems to be no project component or activity aimed at producing plantation biomass sustainably. It is presumed that financial resources for sustainable biomass production through plantations will come from other sources.
3. Information and analysis: The project aims to conduct an analysis of technical, economic, environmental and operational parameters in the production chain of RE biomass-based charcoal production as well as conversion technology for iron and steel production. This is a commendable step before launching all other activities of this project. This analysis should be preferably conducted in the first year of the project so that it will feed into all the other decisions of the project.

<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>