

# 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: February 17, 2014

Screeners: Christine Wellington-Moore

Panel member validation by: Hindrik Bouwman  
Consultant(s):

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

**FULL SIZE PROJECT GEF TRUST FUND**

**GEF PROJECT ID:** 4854

**PROJECT DURATION :** 5

**COUNTRIES :** China

**PROJECT TITLE:** POPs and Chemical Pollution Solutions through Area-based-Ecoeffective-Management

**GEF AGENCIES:** UNIDO

**OTHER EXECUTING PARTNERS:** Ministry of Environment Protection (MEP)

**GEF FOCAL AREA:** POPs

### 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 objective is stated as: "The proposed project will demonstrate an area-based chemical management model through promotion of Cradle to Cradle [C2C]\* management to systematically achieve fundamental mindset change in chemical management within two municipalities (Yiyang and Tianjin) in order to control and reduce the environmental impact of POPs and SAICM concerned chemicals, and other toxic pollutants that impact on fresh water and marine ecosystems and related biodiversity of international significance. The C2C model can be replicated throughout China especially in municipalities in river basins and coastal regions as well as dissemination of experience in South East Asia Region, thereby assuring global environmental benefits (GEB) to international waters (IW). The project will catalyze the integration and mainstreaming of C2C principles into national and regional Circular Economy and Cleaner Production programs on so that current national and regional large-scale investments can be channeled more effectively to address and curb increasing chemical negative impact on the environment and human health. \*C2C refers to bio-mimic production processes where products are developed for closed loop systems in which every output ingredient is safe and beneficial – either to biodegrade naturally and restore the soil [called a biological nutrient], or to be fully recycled into high quality materials for subsequent product generations [called a technical nutrient]. ."

This project seeks to implement an innovative approach to chemicals management using the Cradle to Cradle (C2C) management system. If successfully implemented, in working with manufacturers, there can be reduction of toxic elements used and generated in the product production process, reducing the threat to the environment. The project seeks to complement national programmes and is a good example of GEF integration of chemicals and Natural Resource Management (NRM) Focal area coordination of work (International Waters (IW), specifically), as opposed to a more independent form of project design, with inferred causality as relates to environmental protection benefits. There is a good articulation of climate change risks, problems, and the need for change, and there is a good opportunity for learning to influence future life cycle projects in the GEF and beyond.

STAP's comments:

(a) There should be a clear intent to document experiences under this project with an eye to a specific knowledge management output to benefit the GEF partnership (at least), and replication in the portfolio.

(b) The PPG of the project should have a clearer commitment to baseline setting for waters contamination by the prevailing chemical pollutants in the implementation areas. Component 4 of the PIF does indicate intent to measure results of the C2C chemicals reduction, but there needs to be baseline setting in the PPG in order to do this (unless this data is already in hand through other pre-existing monitoring networks in the project areas). Target setting for specific compounds in environmental media, waste, and products should be set a priori to ensure that GEBs will be achieved.

(c) More attention should be given to potential climate change related issues. The indicated risk of Low/non-existent for climate change might be optimistic. Production and use patterns may shift influenced by climate-related changes in supply and demand, and climate change may influence the receiving environment such that assumed GEBs might be compromised or enhanced.

<i>STAP advisory response</i>	<i>Brief explanation of advisory response and action proposed</i>
<b>1. Consent</b>	<p>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> <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>
<b>2. Minor revision required.</b>	<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>
<b>3. Major revision required</b>	<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>