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: 14th September 2009 Screener: Lev Neretin

Panel member validation by: N.H. Ravindranath

I. PIF Information

GEFSEC PROJECT ID: 3824
COUNTRY(IES): CHINA
PROJECT TITLE: SINO-SINGAPORE TIANJIN ECO-CITY PROJECT (SSTECP)
GEF AGENCY(IES): World Bank
OTHER EXECUTING PARTNER(S): SINO-SINGAPORE TIANJIN ECO-CITY ADMINISTRATIVE COMMITTEE (SSTEAC)/ TIANJIN ECO-CITY INVESTMENT AND DEVELOPMENT CO. LTD.(TECID)/TIANJIN CONSTRUCTION COMMITTEE
GEF FOCAL AREA (S): Climate Change
GEF-4 STRATEGIC PROGRAM(S): STRATEGIC PROGRAM 1. PROMOTING ENERGY EFFICIENCY IN RESIDENTIAL AND COMMERCIAL BUILDINGS STRATEGIC PROGRAM 5. PROMOTING SUSTAINABLE INNOVATIVE SYSTEM FOR URBAN TRANSPORT
NAME OF PARENT PROGRAM/UMBRELLA PROJECT: SINO-SINGAPORE TIANJIN ECO-CITY

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

The PIF from SSTEC aimed at addressing climate change mitigation in city planning and management is very innovative, futuristic and of great relevance to the future GEF and its role in reducing GHG emissions. The project aims to develop, implement and manage the Eco and low carbon city in an integrated manner. STAP fully appreciates the concept of low carbon cities and supports the project. However, STAP has the following observations to be considered when preparing project document:

1. STAP recommends considering systems approach for urban and transportation sectors using GHG mitigation potential and cost-effectiveness as guiding principles.
2. Project's justification of incremental reasoning for GEF support requires further elaboration. It's not clear why a large integrated Master Plan for SSTEC cannot incorporate the objectives for a low carbon city? There is a need for baseline scenario assessment including GHG emissions to show the no-GEF project situation. The assessment of GHG and other co-benefits to be delivered by the project is necessary.
3. There is a need for barrier analysis to highlight the reasons for GEF support and how the project can overcome such barriers to a low carbon city.
4. The project proposes demonstration of best practices. It is not clear which technologies will be demonstrated. The IPCC and IEA reports present a large list of mitigation technologies for urban and transportation sectors. It is suggested to conduct a detailed technology assessment with respect to GHG emissions and cost effectiveness of GHG mitigation for different technological interventions. In addition to energy efficiency technologies, a large menu of potential renewable energy technologies for residential and transportation sector have to be included in the assessment.
5. Low carbon city is a long-term concept with implications lasting decades or more. STAP strongly recommends consideration of potential climate change risks, e.g., on building design and infrastructure development in the project document. Furthermore, a project of this scale will face several operational risks apart from capacity and commercialization risks. It is desirable to conduct a detailed risk assessment for the project and develop a comprehensive risk management plan.
6. This is highly innovative project testing and developing new approaches/methodologies for the integrated environmentally sustainable urban development. Lessons learned are of global significance and have to be presented and disseminated for the benefit of the entire GEF partnership (one of expected GEBs of the project). STAP recommends development of a dedicated results dissemination strategy / knowledge management plan, probably as a separate project component. RBM framework has to be applied when developing such strategy/plan.