

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: 26-3-2008

Screener: Douglas Taylor, STAP Secretary

Panel member validation by: N.H. Ravindranath

I. PIF Information

GEFSEC PROJECT ID: 3653

GEF AGENCY PROJECT ID:

COUNTRY(IES): Russia

PROJECT TITLE: Energy Efficiency in the Russian Federation
(Umbrella Programme)

GEF AGENCY(IES): UNDP (coordinating agency),
EBRD, UNIDO

OTHER EXECUTING PARTNERS:

GEF FOCAL AREAS: Climate Change

GEF-4 STRATEGIC PROGRAM(S): CC-SP 1 and CC-SP 2

NAME OF PARENT PROGRAM/UMBRELLA PROJECT:

Full size project GEF Trust Fund

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):
Minor revision required

III. Further guidance from STAP

2. The "Umbrella Programme" on "Energy Efficiency in Russian Federation" has a very large potential for energy conservation as well as GHG emission reduction in a cost-effective way. It is a large project aiming to improve energy efficiency in buildings and industrial sector.

i) **Scientific and Technological Interventions:** IPCC (2007) (<http://www.mnp.nl/ipcc/>) has broadly estimated a technical mitigation potential (over baseline) of 26-47%, economic mitigation potential of 13-37% and market mitigation potential of 14% in Economics in Transition. The technologies identified with the largest mitigation potential for EITs include the following;

Measures covering the largest potential;

1. Pre- and post- insulation and replacement of building components
2. Efficient lighting, esp. shift to CFLs
3. Efficient appliances such as refrigerators and water heaters

Measures providing the cheapest mitigation options;

1. Efficient lighting and its controls
2. Water and space heating control systems
3. Retrofit and replacement of building components

The proposal lists a broad category of technical intervention in; heating, cooling, lighting, appliances, building operation, building construction material (embedded energy) in the building sector. In the Industrial sector the project aims to promote energy efficiency in 'Industrial Production and Manufacturing'. Given there are hundreds of potential technological interventions in building and industrial sector, it is desirable to have criteria for selecting and prioritizing activities for technological interventions. The criteria could include

- GHG mitigation potential
- Financial viability of the investment or benefit-cost ratio
- Cost-effectiveness of mitigation potential
- Energy or carbon intensity of activity or material
- Ease of removal of barrier and potential impact on spread of technologies.