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: October 11, 2011 Screener: Douglas Taylor

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

I. PIF Information *(Copied from the PIF)*
FULL SIZE PROJECT GEF TRUST FUND
GEF PROJECT ID: 4664
PROJECT DURATION : 5
COUNTRIES : Russian Federation
PROJECT TITLE: ARCTIC GEF-Russian Federation Partnership on Sustainable Environmental Management in the Arctic under a Rapidly Changing Climate (Arctic Agenda 2020)
GEF AGENCIES: UNEP, EBRD and UNDP
OTHER EXECUTING PARTNERS: Ministry of Economic Development, Ministry of Natural Resources and the Environment
GEF FOCAL AREA: Multi Focal Area

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): **Minor revision required**

III. Further guidance from STAP

The project aims to adopt and implement governance reforms for sustainable development of the Arctic in Russian Federation. The project has multiple goals of achieving multiple global environmental benefits under Climate Change, Biodiversity and International Waters focal areas. Though the project aims at multiple objectives, there is a need to enhance a synergy among the multiple GEBs, which is currently limited. The following issues may be considered during the next phase of the project:

1. Development of the baseline and program/project increment: A large project of this scale and magnitude requires a scientifically developed and quantitative baseline for the project and quantifiable targets. There is a need for a systematic assessment of the baseline scenario with respect to status of changes in the ecosystem services, drivers of changes in the status of natural ecosystems. Further, GHG emissions resulting from the current and future mix of energy sources and technologies under the baseline conditions, is necessary. The results table (section B) provides almost no information about quantifiable targets/indicators and have to be updated per focal area before the CEO endorsement. The proponents may wish to read the PFD for China wetlands, GEF ID 4646, which by contrast has good examples in the equivalent table.

2. The PFD describes quite well the existing problems/barriers of governance and high-level government commitment to achieve expected ambitious results improving environmental status of the Russian Arctic. One of the critical sustainability risks for the program is that the official commitment to deliver and sustain the Program may fade or that good governance may not be achieved; that minor aspect and risk remediation actions could be corrected simply by amending the risks table (PFD form section H).

3. Targeted research activities: STAP complements the agencies and Russian Federation for incorporating significant components of targeted research on climate change in particular the assessment of impacts of climate change on runoff, ice regime, permafrost melt, etc. However, currently available knowledge should be used in designing the project interventions. STAP offers to peer review this component and/or participate on any future scientific steering committee.

4. Energy intensity reduction of the Russian economy: The Russian Government has announced a target to reduce energy intensity of Russian economy by 40% by 2020, as compared to 1990. This is very important to quantitatively assess and link the implications of the GEF project in achieving the energy intensity reduction target. What role will this project play in Russian Federation achieving the target? What are the specific interventions proposed in the project?

5. Drivers of degradation and loss of ecosystem services, biodiversity, forest carbon stock, etc: Many interventions are proposed in the area of LULUCF, biodiversity, and protected area management, etc. A few generic causes of degradation are mentioned such as hunting, habitat fragmentation, pollution, etc. There is a need for a systematic assessment and quantification of the drivers of degradation of various ecosystems proposed to be addressed in the project. Climate change risks should also be included in the environment.

6. Climate change projections and impacts on the Arctic region: Climate change risks are recognized in the project. The interventions proposed in the project do not seem to have considered the climate change risks/adaptation components. A large number of studies are already available on the projected climate change as well as impacts on various sectors. A few examples are given below:
i. Integrated Climate Change Strategies for Sustainable Development of Russia's Arctic Regions (Case Study for Murmansk oblast). Summary â€“ Moscow: UN Development Programme in Russia, Russian Regional Environmental Centre, 2009.
ii. ACIA, 2004. Arctic Climate Impact Assessment. Cambridge University Press, 139 pp. www.acia.uaf.edu
iii. The impact of climate change on the Russian Arctic: analysis and paths to solving the problem. WWF-Russia â€“ Moscow, 2008 â€“ 28 pages.
iv. IPCC 2007 WG I, II and III.
v. Report on the international conference "Adaptation to climate change and its role in providing sustainable development of the regions," Murmansk, 13 May 2008.
vi. Strategic Action Program for Protection of the Russian Arctic Environment , Approved by Maritime Board at the Government of the Russian Federation (Minutes of Meeting dated 19 June 2009, No.2 (11), Section I, par. 2)

The Fourth Assessment Report of the IPCC provides climate monitoring data in the Arctic region for the last century. Increase of surface air temperature, shrinkage and shorter duration of sea ice, contraction of the ice sheet and thawing of permafrost have been registered, as well as some changes in ecosystems. Monitoring data show that air temperature in the Arctic has been increasing almost twice as fast as the average Earth temperature over the last century. Climate changes that have been observed during recent decades in Arctic regions of Russia, will continue until the middle of the 21st century. The changes includes increase of average annual air temperature, shortening of the period of uninterrupted snow cover, increased precipitation (particularly in the winter), increased run-off, ice melting, degradation of permafrost, rising sea levels, etc. The observed and forecasted effects will have both positive and negative impacts on the environment, population and economy of the Arctic zone. Current climate changes are having considerable impact on coastal zones, biodiversity of animals and plants, human health and welfare, and on the economy and infrastructure of Arctic territories. Adaptation strategies should include scientific assessment of risks, vulnerability and potential benefits of expected climate changes, taking account of natural, geographical, economic, social, and other characteristics of a particular region or economic sector. It is also important to carry out economic assessment of costs and benefits of proposed adaptation measures, in order to secure the maximum effect per unit of invested funds and to built an optimum strategy for adaptation to climate change in economic decision-making. Thus, a lot of information already exists for the Arctic region which should be used for designing strategies and programmes in all sectors.

Currently, in the PIF, the information already available is not adequately used - climate change impacts and adaptation aspects are not adequately incorporated for the Biodiversity, International Waters and Climate Change focal area interventions in the project. For example, preparation and introduction of new technical standards and regulations should take into account the following in the energy and infrastructure projects:
• Accounting for climate change when building new infrastructure facilities;
• Assessment of geocryological risk with respect to existing infrastructure sites;
• Renovation or transfer of sites from risk zones in case of major geocryological risk;
• Development and application of more climate-resilient construction technologies.

STAP advisory response	*Brief explanation of advisory response and action proposed*
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.	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: (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 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.
3. Major revision required	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. 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.