

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: January 26, 2012

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

FULL SIZE PROJECT GEF TRUST FUND

GEF PROJECT ID: 4784

PROJECT DURATION : 5

COUNTRIES : Ukraine

PROJECT TITLE: Introduction of Energy Management System Standard in Ukrainian Industry

GEF AGENCIES: UNIDO

OTHER EXECUTING PARTNERS: - State Agency on Energy Efficiency and Energy Saving of Ukraine;
- Institute on energy conservation and energy management of the National Technical University of Ukraine "Kyiv Polytechnical Institute";
- State Statistics Committee of Ukraine;
- State Committee for Technical Regulation and Consumer Policy; - National Accreditation Agency of Ukraine.

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): **Minor revision required**

III. Further guidance from STAP

The Project aims at introduction of energy management system standards for the industrial sector in Ukraine. STAP supports the project, however some of the following issues should be addressed in future project elaboration including generic project components, outcomes and outputs.

1. Table 1 provides an impressive list of existing policies and measures. It is not explained, however, why additional policy, legal and regulatory frameworks for EE are required when there are already a large number of policies and regulations in place. An analysis of the adequacy or inadequacy of existing policies and regulations is needed. On page 7, there is a statement saying " The analysis of national policies and measures adopted in Ukraine proves the need for further improvement of legislation " Where is this analysis presented, and what is the reference?
2. Table 2 clearly states that the GHG emissions in 2008 were 53.5% lower compared to the base year 1990. A very large reduction has already occurred. What additional reductions will be achieved from the proposed interventions?
3. The PIF states that the "Ferrous metallurgy industry accounts for more than 75% of the energy consumption". It is not clear if this industry is included in the proposal. All other industries may be insignificant compared to this sector. It is not clear which industries will be targeted in this project, and the selection criteria used.
4. The project aims at promoting a systemic approach - and while desirable there is a need for a rationale for adopting this approach. A systemic approach would also involve additional costs so the trade-offs between costs and benefits are necessary.
5. The project's main focus remains on the promotion and support of ISO 50001 in the Ukrainian industrial sector. Only component 3 proposes technology diffusion and deployment in selected companies. It is not clear how this project will support technology transfer including building capacity nationally and at the individual enterprise level. To have a long-lasting impact, the project needs to strategically select companies and technologies for tech transfer support with clear uptake pathways. Criteria for this selection taking into account cost-effectiveness, GHG mitigation potential,

replicability and sustainability should be detailed at CEO endorsement stage. Specific activities promoting technology transfer to selected companies and its impacts at the national level should be described.

6. The PIF does not justify convincingly the application of voluntary energy certification in the industrial enterprises in Ukraine. Depending on the scale of companies to be targeted (large or SMEs) the effectiveness of voluntary measures can be different. For example, because of the dispersed nature of SMEs, the lack of compliance and difficulties to introduce mandatory auditing of energy systems suggest that mandatory policies can be more effective than voluntary ones (e.g., C.-C. Cheng (2010). Energy Policy 38, 5614-5624). While there is still a lot of experimentation going on in both developed and developing countries in introducing mandatory and voluntary standards, STAP recommends conducting more detailed analysis of the situation of the industrial sector in Ukraine that would justify promotion of voluntary standards.

7. In promoting EnMS and system optimization, STAP recommends exploring the possibility for generating additional GHG benefits such as reduction in release of unintentional POPs, water use reduction and introduction of different end-of-pipe techniques and technologies reducing negative impacts on the environment beyond GHG reduction. STAP's advisory document "Benefits and trade-offs between energy conservation and releases of unintentionally produced POPs" can provide useful advice for exploring these co-benefits.

8. The barriers presented seem to be very generic. The PIF states that there are many impediments for existing EE programmes, however, there is a need for a clear analysis of the barriers specifically related to the industries selected. The PIF further states "Adoption of energy management system standards addresses all the barriers". This is perhaps an overly ambitious statement.

9. The PIF states "Energy management tool encompasses all issues in the context of energy including quality of energy generation, supply, expenditures, conservation, purchase, efficiency, technologies, socio-economic and ecological energy needs including emissions and pollution". This seems to be a very broad and too optimistic and not feasible. STAP suggest that it is likely better to focus on key interventions to make a maximum impact in the project.

10. It is necessary to consider the risk associated with the large investment required for adopting the systemic approach to energy management and the resulting benefits or internal rate of return.

<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.	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: <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 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.