STAP guidelines for screening GEF projects

Part I: Project Information	Response
GEF ID	10370
Project Title	Accelerating adoption of super-efficient technologies for sustainable thermal comfort in buildings in India
Date of Screening	May 12, 2020
STAP member screener	Saleem H. Ali
STAP secretariat screener	Sunday Leonard
STAP Rating	Minor issues to be considered during project design
STAP Overall Assessment of the project proposal	STAP welcomes the UNDP project on "accelerating adoption of super-efficient technologies for sustainable thermal comfort in buildings in India." The project aims "to curb GHG emissions through accelerating the provision of energy-efficient technologies." We note that the PIF was well-prepared, and it presents useful background information and projections relevant to the project objectives and proposed interventions. The proposal covers an important priority area for energy efficiency and climate mitigation in the thermal control and building cooling sector of India. A good feature of this project is that it considers not only the energy efficiency of the appliances but also the use of refrigerants and India's compliance with the Kigali Amendment to the Montreal Protocol on Ozone Depleting Substances. The use of HCFCs, which have a very high GWP, is being phased out as well, and the proposal considers this aspect of the total climate change mitigation approach. The inclusion of passive cooling opportunities has been noted in the project, which is excellent. We would recommend that the project planners review the following publication, which is available on request from the STAP Secretariat: Karthik et al. 2017. Passive Cooling Potential in Buildings under Various Climatic Conditions in India. *Renewable and Sustainable Energy Reviews* 78 (October): 1236–52. https://doi.org/10.1016/j.rser.2017.05.030. The project comes at a time when the International Energy Agency is keenly engaged in global conversations on the rapid rise of energy usage for cooling. The project leaders should consider the findings of the report, which IEA released on "The Future of Cooling (https://www.iea.org/futureofcooling/) in considering their impact potential metrics and benchmarking. It is noted that the project will connect with accelerator platforms, including the Global Programme on Sustainable Cities of the GEF Sustainable Cities Impact Program (SCIP). Given that India is one of the countries involved in the child projects of the SCIP, this interaction should be established immediately to

	ensure synergy and enhance GEBs from the project. Early interaction between the two projects will also prevent duplication of efforts. The SCIP child project cities should also be considered during the selection of Indian states where this project will be implemented under Output 1.1.5. Given STAP guidelines, the proposal should, however, consider a "theory of change" in terms of the "roadmap" that is proposed (Output 1.1.3) and its overall impact on the performance metrics for climate impact mitigation. Please see STAP's theory of change primer for further guidance on theory of change preparation (https://stapgef.org/sites/default/files/publications/STAP%20ToC%20Primer_webposting.pdf). There are also some definition issues which need to be addressed and are noted in specific sections below. For example, the word "super-efficient" is ambiguous and seems like a hyperbolic term without a clear definition. It is not clear what the project intends to implement under output 1.1.4. The description indicates that a labeling system already exists and applies to office spaces, hospitals, BPO buildings, shopping malls, and will soon be extended to data centers and hotels. However, no clear information was presented on what "innovative tool" will be developed in this project under this output, and its exact purpose and function. Please clarify. Climate risk: The PIF recognized the role of increasing global warming, and consequently, rise in average summer temperatures as factor resulting in growth in the demand for air conditioners. It is essential to assess the projections of global warming for the selected cities to ascertain the expected temperature increase, and design solutions that consider this. Climate risk consideration should also be included in the recommendations from the project on the design of new energy-efficient buildings.	
Part I: Project Information **B. Indicative Project Description Summary**	**What STAP looks for**	**Response**
Project Objective	Is the objective clearly defined, and consistently related to the problem diagnosis?	Yes – the objective is clearly defined though the use of the word "super-efficient" is ambiguous. This seems like a hyperbolic term without a clear definition.
Project components	A brief description of the planned activities. Do these support the project's objectives?	Yes – these are defined adequately
Outcomes	A description of the expected short-term and medium-term effects of an intervention. Do the planned outcomes encompass important global environmental benefits?	The STAP-GEF methodology for calculating carbon reduction benefits has been used.

	Are the global environmental benefits/adaptation benefits likely to be generated?	Yes
Outputs	A description of the products and services which are expected to result from the project. Is the sum of the outputs likely to contribute to the outcomes?	Yes
Part II: Project justification	A simple narrative explaining the project's logic, i.e. a theory of change.	This is missing – a paragraph or a diagram in this regard would be important to include
1. Project description. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)	Is the problem statement well-defined?	Yes – the problem statement with reference to cooling is well-defined and barriers are also noted in detail in Table 1 of the proposals.
	Are the barriers and threats well described, and substantiated by data and references?	
	For multiple focal area projects: does the problem statement and analysis identify the drivers of environmental degradation which need to be addressed through multiple focal areas; and is the objective well-defined, and can it only be supported by integrating two, or more focal areas objectives or programs?	The energy efficiency of cooling infrastructure as well as the replacement of refrigerants such as HCFCs which are causing higher GWP is noted adequately.
2) the baseline scenario or any associated baseline projects	Is the baseline identified clearly?	Yes – current inefficient buildings and leakage from cooling infrastructure is noted.
	Does it provide a feasible basis for quantifying the project's benefits?	Yes
	Is the baseline sufficiently robust to support the incremental (additional cost) reasoning for the project?	Yes
	For multiple focal area projects:	
	are the multiple baseline analyses presented (supported by data and references), and the	Yes

	multiple benefits specified, including the proposed indicators;	
	are the lessons learned from similar or related past GEF and non-GEF interventions described; and	Yes - GOI-GEF-UNDP initiative on energy efficiency improvements in the commercial buildings sector helped in removal of barriers for the adoption of the ECBC (energy conservation building codes) is mentioned. However, what lessons are to be gleaned from this is not elaborated upon
	how did these lessons inform the design of this project?	Clarity on this is needed.
3) the proposed alternative scenario with a brief description of expected outcomes and components of the project	What is the theory of change?	No mentioned even though there is considerable literature on this.
	What is the sequence of events (required or expected) that will lead to the desired outcomes?	Diagram would be helpful
	What is the set of linked activities, outputs, and outcomes to address the project's objectives?	Noted
	Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?	Yes
	Is there a recognition of what adaptations may be required during project implementation to respond to changing conditions in pursuit of the targeted outcomes?	Indirectly mentioned but need to be considered in light of COVID pandemic and ventilation and air flows in buildings.
5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co-financing	GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?	Yes – these will clearly be there but there should be a maintenance plan for buildings that are upgraded to ensure the benefits are sustained.
	LDCF/SCCF: will the proposed incremental activities lead to adaptation which reduces vulnerability, builds adaptive capacity, and increases resilience to climate change?	See above

6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF)	Are the benefits truly global environmental benefits/adaptation benefits, and are they measurable?	Yes
	Is the scale of projected benefits both plausible and compelling in relation to the proposed investment?	Yes
	Are the global environmental benefits/adaptation benefits explicitly defined?	Yes
	Are indicators, or methodologies, provided to demonstrate how the global environmental benefits/adaptation benefits will be measured and monitored during project implementation?	GEF methodology is referenced
	What activities will be implemented to increase the project's resilience to climate change?	Building location in sites which are less vulnerable
7) innovative, sustainability and potential for scaling-up	Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?	Building energy passport tool is innovative. Likewise, are the proposed market and incentive mechanisms: subscribe for cooling, pay-as-you-save, and e-market enabled scale.
	Is there a clearly-articulated vision of how the innovation will be scaled-up, for example, over time, across geographies, among institutional actors?	Yes
	Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?	There is vast variation in building quality in India and a lot will depend on the way this project is multiscaled
1b. Project Map and Coordinates. Please provide geo-referenced information and map where the project interventions will take place.		Map provided with cities named but georeferencing of neighborhoods or buildings where project may be prototyped is not provided.
2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities.	Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?	Yes

If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement.		
	What are the stakeholders' roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?	Noted
3. Gender Equality and Women's Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/ tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision-making; and/or economic benefits or services. Will the project's results framework or logical framework include gender-sensitive indicators? yes/no /tbd	Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?	Gender sensitivity elements noted in training to be provided. Since women spend far more time in buildings in India than men, specially with reference to cooking, attention will be needed to also give women household members a voice on adaptability to building changes.
	Do gender considerations hinder full participation of an important stakeholder group (or groups)? If so, how will these obstacles be addressed?	No

5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design	Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control? Are there social and environmental risks which could affect the project? For climate risk, and climate resilience measures: • How will the project's objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately? • Has the sensitivity to climate change, and its impacts, been assessed? • Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? • What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?	See STAP's overall assessment for advice of climate risk
6. Coordination. Outline the coordination with other relevant GEF-financed and other related initiatives	Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?	Yes – previous projects noted
	Is there adequate recognition of previous projects and the learning derived from them?	Yes
	Have specific lessons learned from previous projects been cited?	Could be augmented
	How have these lessons informed the project's formulation?	Yes
	Is there an adequate mechanism to feed the lessons learned from earlier projects into this project, and to share lessons learned from it into future projects?	Yes
8. Knowledge management. Outline the "Knowledge Management Approach" for the project, and how it will contribute to the project's overall impact, including plans to learn from	What overall approach will be taken, and what knowledge management indicators and metrics will be used?	Adequate

relevant projects, initiatives and evaluations.		
	What plans are proposed for sharing, disseminating and scaling-up results, lessons and experience?	Awareness campaign is noted in proposal

Notes

STAP advisory response	Brief explanation of advisory response and action proposed
1. Concur	STAP acknowledges that on scientific or technical grounds the concept has merit. 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.
	* In cases where the STAP acknowledges the project has merit on scientific and technical grounds, the STAP will recognize this in the screen by stating that ***"STAP is satisfied with the scientific and technical quality of the proposal and encourages the proponent to develop it with same rigor. At any time during the development of the project, the proponent is invited to approach STAP to consult on the design."***
2. Minor issues to be considered during project design	STAP has identified specific scientific /technical suggestions or opportunities that should be discussed with the project proponent as early as possible during development of the project brief. The proponent may wish to:
	(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised;
	(ii) Set a review point at an early stage during project development, and possibly agreeing to 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 issues to be considered during project design	STAP proposes significant improvements or has concerns on the grounds of specified major scientific/technical methodological issues, barriers, or omissions in the project concept. If STAP provides this advisory response, a full explanation would also be provided. The proponent is strongly encouraged to:
	(i) Open a dialogue with STAP regarding the technical and/or scientific issues raised; (ii) Set a review point at an early stage during project development including an independent expert as required. 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.