



Project Implementation Report

(1 July 2021 – 30 June 2022)

Project Title:	Facility for Low Carbon Technology Deployment
GEF ID:	4927
UNIDO ID:	150188
GEF Replenishment Cycle:	GEF-5
Country(ies):	INDIA
Region:	SA - Southeast Asia
GEF Focal Area:	Climate Change Mitigation (CCM)
Integrated Approach Pilot (IAP) Programs ¹ :	NA
Stand-alone / Child Project:	Stand Alone
Implementing Department/Division:	ENE / ETI
Co-Implementing Agency:	NA
Executing Agency(ies):	Bureau of Energy Efficiency
Project Type:	Full-Sized Project (FSP)
Project Duration:	60 months
Extension(s):	One
GEF Project Financing:	USD 8,712,328
Agency Fee:	USD 827,672
Co-financing Amount:	USD 59,770,000
Date of CEO Endorsement/Approval:	12/23/2015 Insert the date as per letter from GEF CEO
UNIDO Approval Date:	8/10/2016 Insert EB approval date of the project
Actual Implementation Start:	1/1/2016 Insert the PAD issuance date of the project
Cumulative disbursement as of 30 June 2022:	6,345,083
Mid-term Review (MTR) Date:	1/31/2020 If applicable, insert expected/actual date of MTR submission to the GEF.
Original Project Completion Date:	1/16/2021 Insert the indicated project completion date as per CEO Approval /

¹ Only for **GEF-6 projects**, if applicable

	<i>Endorsement document.</i>
Project Completion Date as reported in FY21:	2/16/2024 <i>Insert the project completion date as reported in the previous PIR for Fiscal Year 2021 (FY21)</i>
Current SAP Completion Date:	2/16/2024 <i>Insert the project completion date as currently seen in the system</i>
Expected Project Completion Date:	2/16/2024 <i>If the date is the same as above, please confirm; if you plan to extend the project completion date, please indicate here and elaborate further under section III.2</i>
Expected Terminal Evaluation (TE) Date:	8/16/2024 <i>Insert expected/actual date of TE submission to the GEF</i>
Expected Financial Closure Date:	1/31/2025 <i>Insert a date <u>no later than</u> 12 months after the TE submission date</i>
UNIDO Project Manager²:	Sanjaya Shrestha

I. Brief description of project and status overview

Project Objective		
To facilitate deployment and scaling up of low carbon technologies in India that can address technology gaps to mitigate climate change and promote use of energy efficiency and renewable energy technologies and systems in selected sectors.		
<i>Project Core Indicators</i>		<i>Expected at Endorsement/Approval stage</i>
1	Number of low-carbon technology innovation entries that meet the specifications of the challenges	Demonstration of approximately 120 low-carbon innovations that meet specifications of the challenges, at least 20-50% more efficient than the state-of-art available in the market.
2	Number of entities/industries where selected innovations have been commercially deployed	Commercially scaling up and deployment of approximately 40 winning technology innovations with stakeholder companies, industries and users.
3	Investment into low carbon technologies in the three technology areas due to increased interest in the project	None
4	Estimated tons of future GHG emissions reduction to be avoided due to deployment to market of energy efficiency technologies	Reduction of CO ₂ eq emissions of approximately 2,3 million tonnes over the 10-year lifetime

Baseline

² Person responsible for report content

The Indian economy grew at an average rate of 5% from 2009-2013. While growth has declined somewhat from its peak, GDP growth of 5-6% is projected to continue driven by population growth, latent demand and tremendous scope for productivity increases. India's power supply however relies on its domestic coal power plants (68% of power generation was by coal in 2010), whose efficiency levels are low and technical and nontechnical reasons have augmented the high transmission and distribution losses. In addition, the low electricity tariff has become a disincentive for investment in power supply. Meeting future demand will be even more challenging than before, as India faces escalating costs for developing conventional energy sources, depleting fossil fuel reserves, and an increasing mandate to address the local and global environmental and social impacts arising from the use of fossil fuels.

In recognition of this, the Government of India (GoI) has identified energy conservation as a critical instrument for meeting energy demand, and for achieving the national target of 20–25% reduction in carbon intensity from 2005 levels by 2020. Globally, energy-efficiency (EE) has been identified as the cheapest and most environmentally friendly way of bridging an electricity gap.

The GoI has enacted a variety of regulatory mandates and policy initiatives to unlock EE opportunities. The Energy Conservation Act of 2001 (amended in 2010) established the Bureau of Energy Efficiency to take the lead on the various EE initiatives. The National Mission for Enhanced Energy Efficiency (NMEEE), one of eight initiatives launched by India's 2008 National Action Plan for Climate Change (NAPCC), builds on the earlier policy objectives. The NMEEE introduced a number of new market-based and financial instruments aimed at accelerating the strategic deployment of energy-efficiency across India. By far, the largest of these NMEEE initiatives is the Perform, Achieve, and Trade (PAT) scheme, which has mandated energy-intensity targets for the country's most energy-intensive industrial sectors.

Overall, in the industrial sector in India, a significant number of interventions in the past for capacity building, awareness of energy efficiency has increased, however project development, technology benchmarking have not led to sufficient adoption of low carbon technologies and their replication. Therefore, a systematic approach involving a sustainable financing mechanism is required to demonstrate and scale up investments in the industrial sector.

The proposed project seeks to implement such an alternative approach: BEE, a public sector body under the Ministry of Power, tasked with the mandate to facilitate implementation of energy efficiency on a commercial basis, is the most suitably and strategically placed to fill in the gap at the implementation level.

While energy efficiency measures are the most efficient from an economic perspective, they face significant implementation barriers, including but not limited to lack of financing, weak or missing regulatory incentives, and lack of marketable technologies. While India has introduced significant policy and regulatory measures to overcome the financial and regulatory barriers, less has been done to identify measures to improve the rate of acquisition or development of innovative technologies. The enabling ecosystem for technology innovation is weak in India in general, and in the energy technology sector in particular. As a consequence, India is predominantly an importer of low carbon technologies.

To accelerate the pace of market development, several barriers need to be addressed. First, more human capital needs to be allocated towards energy-efficiency innovation. While India has extraordinary talent in science and technology, the intellectual resources that are dedicated towards solving energy-efficiency challenges are relatively limited. Due to the highly regulated nature of the energy industry, innovators have not been attracted to this field. Innovation activity is concentrated in fields with demonstrated high rates of growth and low government intervention, such as information technology, biotechnology, and textile manufacture. Potential innovators need the stimuli to direct their efforts towards energy-efficiency challenges.

Given the nature of the innovation process, GEF support is crucial to helping establish India's FLCTD, bringing international expertise and funding. The UNIDO will avail of its credentials in building institutions and capacities to establish the Facility, with the active cooperation of industry, government, academia and international partners. The Facility will also have the mandates to push for South-South cooperation and provide technology transfer services in countries with similar climatic conditions, where such technologies can be quickly disseminated and adopted.

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e. FY22. Please also provide a short justification for the selected ratings for FY22.

In view of the GEF Secretariat's intent to following the ability of projects to adopt the concept of adaptive management³, Agencies are expected to closely monitor changes that occur from year to year and demonstrate that they are not simply implementing plans but modifying them in response to developments and circumstances or understanding. In order to facilitate with this assessment, please introduce the ratings as reported in the previous reporting cycle, i.e. FY21, in the last column.

Overall Ratings ⁴	FY22	FY21
Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating	<i>Satisfactory (S)</i>	<i>Satisfactory (S)</i>
Implementation Progress (IP) Rating	<i>Satisfactory (S)</i>	<i>Satisfactory (S)</i>
Overall Risk Rating	<i>Low Risk (L)</i>	<i>Low Risk (L)</i>

II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Please fill in the below table or make a reference to any supporting documents that may be submitted as annexes to this report.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress to-date
Component 1: Innovation Ecosystem for selecting technology innovators and instituting competitive awards and policy incentives				
Outcome 1 – Collaboration between government agencies, industry, innovators, the research community, financing institutions, and technology experts in the field of innovative low carbon technologies strengthened.				
Output 1.1: : Expert Panels instituted for three selected technology areas	Number of challenge competitions that are with at least two winning entries for each area meeting the technical specifications	0	Create approximately 20 challenge competitions that are able to attract at least two winning entries for each area, meeting the technical specifications)	<ul style="list-style-type: none"> - Six meetings of expert panel members were held for all six verticals to develop Terms of Reference for 5th innovation challenge and develop methodology to select the innovation challenge winners in following verticals. - (i) Space Conditioning, (ii) Pumps Pumping system and Motors, (iii) Waste Heat Recovery and Thermal Efficiency, (iv) Industrial Resource Efficiency and Circular Economy, (v)

³ Adaptive management in the context of an intentional approach to decision-making and adjustments in response to new available information, evidence gathered from monitoring, evaluation or research, and experience acquired from implementation, to ensure that the goals of the activity are being reached efficiently

⁴ Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

				Industrial IoT, and (vi) Electrical Energy Storage.
Output 1.2: Twenty challenge competitions conducted	Number of entities (Challenge winners) that accessed technical and advisory services under the project (gender-disaggregated)	0	Complete challenge cycle, from identification to announcement and testing, in 12 to 18 months.	<ul style="list-style-type: none"> - Issued 19 contracts in FY 22 to the winners of 4th Innovation Challenge after receiving endorsement from BEE. - The 5th Annual Innovation Challenge under the (i) Space Conditioning, (ii) Pumps Pumping system and Motors, (iii) Waste Heat Recovery and Thermal Efficiency, (iv) Industrial Resource Efficiency and Circular Economy, (v) Industrial IoT, and (vi) Electrical Energy Storage was announced in 01st April 2022 and closed on 30th June 2022 and received 300 expressions of Interest. - 3rd Accelerator program was launched in partnership with Startup India on 11th August 2021 and received 206 applications by the closing deadline of 26th September 2021. Thereafter 3rd cohort was launched with 22 start-ups and 24 mentors on 22nd October 2021. The startups underwent rigorous training for the next 3 months and programme was launched on 20th October 2021 virtually. The launch event was followed by a series of weekly webinars, discussion sessions, mentor-mentee interaction, workshops, weekly update calls and practice pitch sessions. For cohorts to meet in person and interact with each other the Mid-Term Assessment was conducted virtually in the second week of February. The in-person Demo Days were successfully conducted in Delhi from 27th February 2022 to 1st March 2022.
Output 1.3: Financial institutions revalidated in the inception phase and engaged to manage the funds and provide debt and	Number of Financial Institutions that provide debt and equity to the	0	At least 3 Financial Institutions identified that provide debt and equity to the	<ul style="list-style-type: none"> - Intellecap Advisory Services Private Limited has been selected through a competitive bidding process to provide financial due-diligence and fund-raising support to 30 winners of the innovation challenge to

equity to the participating entities.	participating entities.		participating entries.	<p>accelerate the commercialisation of low carbon technologies.</p> <ul style="list-style-type: none"> - Intelicap will prepare the roadmap for fund raising and provide connect with institutions providing equity and debt financing.
<p>- Outcome 2: Adoption of improved low-carbon technologies in the Indian economy, that would include reduced need for new energy generation capacity</p>				
Output 1.2.1: Targetted innovation and technology development to meet identified low carbon technology needs awarded	Allocation of awards to winners in trenches (gender-disaggregated)		Allocation of awards to winners in tranches- 50% success in innovation challenge, 30% meeting deployment-linked milestones, 20% legal and technical services for winning prototypes	<ul style="list-style-type: none"> - Based on the recommendations of the Mid Term Review, and approval of Project Steering Committee the award to winners will be disbursed as per four progress-based milestones. These are: <ul style="list-style-type: none"> • 20% on receipt of the implementation plan by the Winner after contract signing. • 30% on completion and acceptance of 1st set of field trials. • 35% on completion and acceptance of balance field trial. • 15% on receipt of the final M&V report.
Output 1.2.2: Approximately 120 low carbon innovations demonstrated	<p>Number of entities participating in the competitions.</p> <p>Number of commercially deployed carbon technology prototypes</p>	0	Demonstration of around 120 low-carbon innovations that meet specifications of the challenges, at least 20-50% more efficient than the state-of-art available in the market, and 40 winning technology innovations	<ul style="list-style-type: none"> - The project invites applications from innovations which are at least at the stage of 'proof of concept' or 'functional prototype'. - 1232 expressions of interest received for capacity building and demonstration support to commercialize innovative low carbon technology solutions out of which 95 low carbon technologies have been identified and supported under the programme. - Till date 3 accelerator cohorts have been completed which received 373 expressions of interest, out of which 36 have been provided capacity building support. - Till date 18 innovation challenge competitions have been conducted and 859 Expressions of Interests received out of which 59 have been awarded financial support for technology validation and 13 technologies commercialized.
Component 2 – Technical assistance for Technology Transfer Support Facility				
Outcome 2: Establishment of deployment support eco-system for low carbon climate mitigation technologies				

Output 2.1: Appropriate networks and centres for research and deployment of low-carbon technologies verified.	Number of networks and centres for research and deployment identified	None	5-10	<ul style="list-style-type: none"> - Desk research was carried to review the literature available for India specifically on Technology Transfer and Academia – Industry links. Additionally, the PMU reached out to Center for Policy Research of Department of Science and Technology, in Chandigarh and 10 other academic and research institutes (public funded and private) to explore the nature and extent of their technology commercialization / transfer offices. - DST-Centre for Policy Research, Panjab University, Chandigarh conducted two focus group discussion (FGD) sessions on 12th - 13th August for the PMU on the topic of 'Technology Transfer and Commercialization'. - Terms of Reference prepared to engage an agency to study the Technology Transfer Centres to increase commercialization of Innovation in India.
Output: 2.2: Technology Transfer Support Facility established	Technology Transfer Support Facility is established	None	Technology Transfer Support Facility becomes fully operational At least 5 consultations / workshops held to promote participatory and inclusive approach	<ul style="list-style-type: none"> - Consultations with at least 20 technology transfer centres and offices are planned to be held to identify the training needs and to develop a targeted training programme. - The list of institutes with Technology Transfer Centres / Technology Transfer Office is under preparation and will be shared with BEE.
Output 2.3: Consultations/ workshops with international/ national experts, with documentation and dissemination of the Facility carried out	Number of consultations held to promote participatory and inclusive approach		Targets for gender balance and women's empowerment will be defined during inception based on the baseline study	<ul style="list-style-type: none"> - Activities will be developed based on the above outputs.

III. Project Risk Management

1. Please indicate the overall project-level risks and the related risk management measures: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

Describe in tabular form the risks observed and priority mitigation activities undertaken during the reporting period in line with the project document. Note that risks, risk level and mitigations measures should be consistent with the ones identified in the CEO Endorsement/Approval document. Please also consider the project's ability to adopt the adaptive management approach in remediating any of the risks that had been sub-optimally rated (H. S) in the previous reporting cycle.

	(i) Risks at CEO stage	(i) Risk level FY 21	(i) Risk level FY 22	(i) Mitigation measures	(ii) Progress to-date	New defined risk ⁵
1	Political risk: Changes in government priorities resulting in reduced support for the project, delays in activities and overall ineffectiveness of the interventions	Low risk (L)	Low risk (L)	The project seeks to facilitate deployment of low carbon technologies in India that can address technology gaps to mitigate climate change and improve the energy efficiency in selected sectors. The low carbon technology interventions are considered a high priority of the Government. Thus, the risk of a drastic change is unlikely. To mitigate this risk the Project Steering Committee will be closely involved in the project's activities, giving guidance and advice throughout the identification, selection, and intervention processes.	<ul style="list-style-type: none"> - UNIDO is working closely with the Bureau of Energy Efficiency and providing monthly progress updates. Additionally, a quarterly progress review is carried out with BEE to highlight issues in project implementation. - To mitigate this risk the Project Steering Committee is closely involved in the Project's activities, giving guidance and advice throughout the identification, selection, and intervention processes. 	<input type="checkbox"/>
2	Technical risk: Lack of energy savings from deployment of efficient technologies	Low Risk (L)	Low Risk (L)	The project builds upon the work done in the past where such technologies have been identified based on field studies and cluster level energy audits. Moreover, the demonstration projects to be conducted using the GEF grant will ensure that only those technologies where the technical performance risk is minimal are taken up. UNIDO and BEE will ensure this by leveraging technical expertise from all stakeholders, including industry, government and others.	<ul style="list-style-type: none"> - The project has developed a rigorous selection criterion which is referred by the expert panel members to select the innovations which exhibit potential for energy saving and greenhouse gas reduction. - The project has developed a measurement and verification procedure which validates the energy saving and greenhouse gas reduction and the potential of reduction due to replication. 	<input type="checkbox"/>
3	Sustainability risk: The risks envisaged here include inability to scale up implementation and lack of financing beyond the project period.	Low risk (L)	Low risk (L)	BEE has committed financial resources to ensure that replication occurs beyond the project's implementation period. The Technology Transfer Support Facility will be established in close coordination with a financial institution, which will also ensure that the best practices of project design and implementation are replicated in other clusters	<ul style="list-style-type: none"> - The project engaged Intellect Advisory Services to provide financial due-diligence and fund-raising support to 30 start-ups supported under the FLCTD innovation challenges and develop an overall roadmap for raising commercial capital from the inception to fund raise stage. - The project is implementing an Accelerator programme to offer business mentoring to technology-based entrepreneurs to access finance and take innovation to market. 	<input type="checkbox"/>
4	Financial risk: The risk of non-	Moderate risk (M)	Moderate risk (M)	UNIDO and BEE will not only provide training to industries for	The project engaged Intellect Advisory Services to provide	<input type="checkbox"/>

⁵ New risk added in reporting period. Check only if applicable.

	payment for investments made by EESL/ESCOs			building their capacity on the long-term financial benefits of investing in energy efficiency, but the project will also leverage risk mitigation measures that are being set up by BEE, such as the Partial Risk Guarantee Fund under NMEEE.	financial due-diligence support to start-ups supported under FLCTD, to enable them to raise equity/debt from the markets.	
5	Climate change risk: The project is not subject to any climate change risks.	NA	NA	While no climate changes risks are foreseen, the project will mitigate any potential risks to project demonstration sites by including criteria related to such risks in the cluster surveys, and if a risk is identified, develop a mitigation strategy before implementation begins.	NA	<input type="checkbox"/>
6	Social and Gender Risk:	Moderate risk (M)	Moderate risk (M)	Risk of resistance against, or lack of interest in, the project activities from stakeholders, especially with regard to the active promotion of gender equality. Low participation rates of suitable female candidates due to lack of interest, inadequate project activity or missing qualified female population within engineering sector. This Project will pursue thorough and gender responsive communication and ensure stakeholder involvement at all levels, with special regard to involving women and men, as well as CSOs and NGOs promoting GEEW, and a gender expert. This shall mitigate social and gender related risks, promote gender equality, create a culture of mutual acceptance, and maximize the potential contribution of the project to improving gender equality in the energy field.	<ul style="list-style-type: none"> - The Project is pursuing gender responsive communication and ensure stakeholder involvement at all levels, particularly with regards to involving women in all its initiatives. - Third accelerator cohort had 7 start-ups with woman co-founders. The program also had 5-woman mentors to help the start-ups throughout the program. 	

2. If the project received a **sub-optimal risk rating (H, S)** in the previous reporting period, please state the **actions taken** since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

Not applicable

3. Please indicate any implication of the **COVID-19** pandemic on the progress of the project.

- Most of the industries stopped operations due to 1st wave in March 2020 and deferred any new activities until production reached 80% of the capacity, the field-trial of innovations of 10 winners selected in 2019 and three winners of 2018 Innovation Challenge were delayed. Due to business uncertainty resulting from 2nd wave, few industries declined to permit field-trial at their facility. New industrial site could be identified in June 2021 delaying the field-trial by 12 months.
- The application review, screening, scoring and selection by the expert panel members had to be made on-line, which had to be developed, integrated into the project website which caused a 3-month delay. Because of travel restrictions imposed by Government of India and various state governments in 2020 and in 2021, inter-state and inter-city travel were affected. The PMU could not visit industries for on-site due-diligence thereby delaying the contract award by over 6 months. Performance validation (M&V) of the innovations have been delayed by additional 6 months due to 2nd wave in April 2021.

4. Please clarify if the project is facing delays and is expected to request an **extension**.

Yes. Project FLCTD would require minimum period of 18 months extension as mentioned above.

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

Recommendation 1 (to the PMU and PSC): Review the FLCTD Project Results Framework (PRF) with the intention of revising it, and re-defining the outputs of Components 1 and 2 with SMART indicators and targets that can be used for M&E activities for the remainder of FLCTD.

Recommendation 2 (to PMU and PSC): Revise the design of Component 2 for the technical assistance towards a technology transfer support facility (TTSF).

Recommendation 3 (to PMU, UNIDO and BEE): Manage FLCTD with much more administrative flexibility and urgency since it is an innovation project with inherent risks to outcomes to all of its investments. This, importantly, would include streamlining the approval time for FLCTD grant support for demonstrations.

Recommendation 4 (PSC, UNIDO and BEE): Set up mechanisms for additional funding and technical assistance for strengthening of results of high replication demos

Recommendation 5 (PSC, UNIDO and BEE): Approve greater roles of importance to expert panel members and financial advisors.

Recommendation 6 (UNIDO and BEE): Approach the addition of more technology verticals by holding stakeholder consultations to identify and select which technology verticals have the most potential for innovation and benefits

Recommendation 7 (PSC, UNIDO and BEE): Engage convenor and panel experts as paid positions as soon as possible to conduct mandatory peer reviews of each demo project.

Recommendation 8 (PSC, UNIDO and BEE): Consider additional flexibilities in grant conditions as a measure of increasing effectiveness of grant funds into successful technologies for replication and scale-up

Recommendation 9 (UNIDO): Increase the size of the PMU to manage the increased pace of grant approvals for technology demonstrations.

Recommendation 10 (UNIDO, BEE and PMU): Institute regular meetings between NPD and UNIDO reps (PMU and UNIDO rep) on a quarterly basis.

Recommendation 11 (PMU): Improve the website to provide a dashboard of FLCTD progress on key performance indicators with restricted access to BEE, PMU and CII

Recommendation 12 (PMU): Improve application quality to include mandatory disclosure of energy and GHG impact of innovation

Recommendation 13 (PSC, UNIDO and BEE): Expand PSC membership to include more stakeholders who can promote and support low carbon innovation

Recommendation 14 (PSC, UNIDO and BEE): Intensify outreach to other partners in an effort to institutionalize the industry-innovator-government-financing institute interface.

Recommendation 15 (PSC, UNIDO and BEE): Strengthen gender mainstreaming activities of FLCTD

Recommendation 16 (to PMU and GEF): Prepare request for a 3.5-year extension of FLCTD from 5 January 2021 to 5 July 2024 that can provide FLCTD with a reasonable timeframe to reach 120 innovation demonstrations and exhaustion of the GEF grant.

Actions have been taken on all the recommendations and reported in the 5th Project Steering Committee Meeting held on 27th October 2020.

IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

☐ Category A project

☐ Category B project

☐ Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

Notes on new risks:

- If new risks have been identified during implementation due to changes in, i.e. project design or context, these should also be listed in (ii) below.*
- If these new/additional risks are related to Operational Safeguards #2, 3, 5, 6, or 8, please consult with UNIDO GEF Coordination to discuss next steps.*

- Please refer to the [UNIDO Environmental and Social Safeguards Policies and Procedures \(ESSPP\)](#) on how to report on E&S issues.

Please expand the table as needed.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement	NA	NA	NA
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	NA	NA	NA

V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

Project Component 1: Innovation Ecosystem for selecting technology innovators

- The innovation challenge winners in Pumps, Space Conditioning and Waste Heat Recovery categories were issued contracts in July to conduct field trial and validation
- Application screening and shortlisting were held in April and June for the technology verticals of Electrical Energy Storage, Industrial IoT and Industrial Resource Efficiency. The expert panel selected 19 winners.
- Based on the approval received from BEE on Scope of Work to engage a firm to Support to the Project Management Unit in Planning and Implementation of Innovation Challenge in Electrical Energy Storage, the Procurement unit announced the Request for Proposal on 29th April and Customized Energy Solutions was given the contract to carry out the implementation in September 2021.
- 3rd Accelerator program being implemented by Sangam Ventures under FLCTD project was launched in partnership with Startup India on 11th August 2021 and received 206 applications by the closing deadline of 26th September 2021. Applications were scrutinized by Sangam team and the PMU and thereafter 3rd cohort was launched with 23 start-ups and 15 mentors on 22nd October 2021. The startups underwent rigorous training for the next 3 months programme was launched on 20th October 2021 virtually. The in-person presentations were conducted in New Delhi on 27th February 2022 and the winners were selected on 1st March 2022.
- On the occasion of 20th Foundation Day of BEE, PMU organized a National Innovation Conclave on Low Carbon Technologies on 1st March 2022 at India Habitat Center, New Delhi. The event was illuminated by the presence of prominent representatives from the Government of India including Shri R.K. Singh, Union Minister of Power and New and Renewable Energy and Shri Krishan Pal Gurjar, Minister of State of Power and Heavy Industries. In addition, an exhibition of the winners of the FLCTD innovation challenge and start-ups from FLCTD Accelerator programme was organized to provide them a platform to showcase their technology solutions and 34 companies participated (28 – FLCTD winners and 6 – FLCTD accelerator participants)
- FLCTD website was revamped with support from UNOICT and launched during the National Innovation Conclave on 1st March 2022.

Project Component 2: Technical Assistance for Technology Transfer Support Facility

- The PMU carried out desk research to review the literature available for India specifically on Technology Transfer and Academia – Industry links. Additionally, the PMU reached out to Center for Policy Research in Panjab University, Chandigarh and 10 other academic and research institutes (public funded and private) to explore the nature and extent of their technology commercialization / transfer offices.
- The PMU with the help of Centre for Policy Research, Panjab University, Chandigarh conducted two focus group discussion (FGD) sessions on 12th - 13th August on the topic of 'Technology Transfer and Commercialization'.
- Based on the inputs, the Terms of Reference to conduct a Study of 'Technology Transfer Centres to increase Commercialization of Innovation' prepared.
- After receiving BEE approval on the ToR for "Financial Due diligence and Fund Raising support", the request for proposal was announced by the Procurement Unit in December and Intellectap Advisory Services Private Limited was selected through competitive bidding process in 21 May 2022.
- 6th Project Steering Committee meeting of the FLCTD project was held virtually on 3rd December 2021.
- Promotional videos of six winners from 2019 innovation challenge were prepared by engaging Adology Private Limited and uploaded on the FLCTD website
- As advised by BEE, the deadline of the innovation challenge was extended by a month to 30th June. The following outreach activities were carried out:
 - Innovation challenge was publicized on Startup-India portal
 - Challenge was publicized on Unstop (Dare2Compete) portal
 - Emails sent to 150+ Technology Business Incubators, 200+ engineering colleges, 100+ emails sent to technology providers.
 - A total of 8 promotional webinars were conducted in partnership with CII, CES and AEEE
- 3 interactive outreach sessions were held under the accelerator programme
- 5 in person visits were made to introduce the project and explore possible collaboration with innovation clusters and technology innovation centers.
- Discussions held with Centre for Policy Research at Panjab University to conduct the study of the Tech transfer ecosystem in the country.

2. Please provide any feedback submitted by national counterparts, GEF OFP, co-financiers, and other partners/stakeholder

I. Feedback from project partner - CII-GBC

- Meetings should be held with major local industry associations and major key industries related to the innovation challenges to make them aware about the innovation challenges and overall project.
- Some of the large corporate groups should be involved at the starting of the innovation challenge cycle, to deploy the pilots in their plants post selection of winners. This will significantly reduce the time for identifying the pilot site and deploying the innovation.
- Involving the local offices of CII and other similar organisations before the webinars to garner support for creating awareness among local industries and to participate in the innovation challenges.
- Promoting the innovation challenges and overall project in the GreenCo forum meetings conducted by CII with sustainability heads of major OEMs.

- The last three cycles of the innovation challenge were able to bring innovation in new areas, where energy optimization was not attempted before such as innovations related dairy and cold chain industry are able to provide solutions to tap the energy and resource wastage.
- The constant handholding and funding support from CII, UNIDO and expert panel members respectively, helped the innovators to improve their innovations to suit the field conditions and this programme provided a platform to bring innovations to the markets for scale up of the technology.
- Meetings should be held with the CII council members related to the FLCTD innovation challenges and take their feedback on new topics or areas for innovation challenges.
- The findings of M&V should be shared via series of webinars to the relevant stakeholders/sectors to promote the technology at larger scale.

Feedback from the project partner managing Accelerator Programme - Sangam Ventures

- Managing Active Participation in the Programme: From the start, the Sangam team needs to select cohort members based on the level of active participation. The start-ups which included their team members to attend the weekly webinars were able to maintain their attendance and work on their assignments actively. Therefore, apart from the start-up founders, other team members should also be actively involved in the Accelerator Programme. Going forward, the Sangam team would like to encourage the start-up founders to involve team members from the specific domain in the business and technical side, to get the most out of the programme and its sessions.
- Staying focused is imperative to moving fast and achieving success: Having clear, concrete goals and a strategy for getting there keep everyone in the company on the same page working towards the same thing. Start-ups that were focused from the beginning, attended the sessions regularly and submitted the assignments timely were the ones that made the most out of the programme.
- Keeping engagement through progress and update group calls: Weekly progress update calls also helped to discipline the start-ups and to keep working and learning. The start-ups that were lagging, got help from the Sangam team during these calls to keep the pace and make progress.
- Dedicated Workshops/ Bootcamps for Start-ups: Dedicated sessions were also organized for start-ups like 'IP-Bootcamp' and 'AMA-Sessions' to help the start-ups in their journey in the programme. Some of the start-ups also used this opportunity to e-network and make new useful connections.
- Alumni Interaction: Alumni interaction helped the start-ups in their advancement activities. This also helped in creating meaningful relationships with alumni. Alumni sessions to get insights on – fundraising, making the most of the program, and innovation challenges were also very helpful for the third cohort.
- Intra-Cohort Interaction: From the first sessions, the Sangam team often split the participants of the third cohort into breakout rooms, this served as an opportunity to get to know other cohort members better. This also helped spark various relevant discussion topics during such sessions.
- Opportunity to tailor to every team's individual needs: One-on-one sessions with the start-ups were helpful to identify the needs of entrepreneurs and involving mentors and experts from the network. This gave great value to the program since the third cohort was quite diverse, it was a learning experience even for the Sangam team to cater to the start-up's individual needs.

Feedback from the participants of accelerator programme – Sangam Ventures

- The overall feedback on the programme was positive. This programme provided a good learning experience to all the start-ups that were part of the third cohort. As per the start-ups' responses, the programme sessions were rated well. Out of 5, the average rating by start-ups for all the sessions was 4.2. Start-ups found the content of the sessions relevant and valuable for their start-up. The start-ups also gave positive feedback on the programme execution and coordination.

3. Please provide any **relevant stakeholder consultation** documents.

Please list here the documents which will be submitted in addition to the report, e.g.:

1. 4927 - Approved MOM – 6th PSC (December 2021)
2. 4927 - CES report FLCTD
3. 4927 - CII – progress Report FLCTD
4. 4927 - Sangam Capital Advisors – Progress Report FLCTD
5. 4927 - TOR for Tech transfer study FLCTD

Attachments are to be named as per the GEF required format, i.e.: “GEFID_Document Title”, e.g. 9714_PSC minutes.

VI. Gender Mainstreaming

1. Using the previous reporting period as a basis, please report on the **progress achieved on implementing gender-responsive measures and using gender-sensitive indicators**, as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent),.

Realizing the need to encourage and bring women entrepreneurs into the low-carbon / clean technology space, efforts were made during the announcement of call for applications for FLCTD Accelerator and 2022 Innovation Challenge in the outreach efforts.

Special attention was given and selection process to bring women entrepreneurs into the accelerator programme to ensure they have equal access to information and knowledge for making their start-up successful.

- Third accelerator cohort had 7 start-ups with woman co-founders. The program also had 5 woman mentors to help the start-ups throughout the program.
- Fourth innovation challenge had one startup with woman cofounder.

VII. Knowledge Management

1. Using the previous reporting period as a basis, please elaborate on any **knowledge management activities / products**, as documented at CEO Endorsement / Approval.

Video clips of six winners of 2nd Annual Innovation Challenge and Introductory video were prepared and upload on the project website.

2. Please list any **relevant knowledge management mechanisms / tools** that the project has generated.

FLCTD Website (www.low-carbon-innovation.org) acts as a knowledge portal regarding all information on the project. For publicity and awareness creation, following are the Social Media links of FLCTD project:

<https://www.linkedin.com/company/flctd/>

Twitter: @TheFLCTD <https://twitter.com/TheFLCTD>

Facebook: <https://www.facebook.com/FLCTD/>

Attachments:

6. 4927 FLCTD Accelerator Flyer
7. 4927 ToR-Industrial IOT Innovation Challenge 2022 FLCTD
8. 4927 ToR-Industrial Resource Efficiency challenge 2022 FLCTD
9. 4927 ToR-Electrical Energy Storage Innovation challenge 2022 FLCTD

10. 4927 TOR – Pumps Innovation challenge 2022 FLCTD
11. 4927 TOR – WHR challenge 2022 FLCTD
12. 4927 TOR – Space conditioning challenge 2022 FLCTD
13. 4927 Fact Sheet FLCTD
14. 4927 Compendium of Low carbo technology innovations – Accelerator FLCTD
15. 4927 Exhibition directory FLCTD

VIII. Implementation progress

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes achieved/observed** with regards to project implementation.

- The innovation challenge winners in Pumps, Space Conditioning and Waste Heat Recovery categories were issued contracts in July to conduct field trial and validation
- The financial assistance forms of 19 winners in the technology categories of Electrical Energy Storage, Industrial IoT and Industrial Resource Efficiency were finalized by the PMU in October for BEE's approval, after conducting due diligence of winners between July and September. The due diligence was affected due to travel restrictions. Contracts to the 20 winners worth USD 0.81M were issued.
- 3rd Accelerator program was launched in partnership with Startup India on 11th August 2021 and received 206 applications by the closing deadline of 26th September 2021. Applications were scrutinized by Sangam team and the PMU and thereafter 3rd cohort was launched with 23 start-ups and 15 mentors on 22nd October 2021. The startups underwent rigorous training for the next 3 months programme was launched on 20th October 2021 virtually. The in-person presentations were conducted in New Delhi on 27th February 2022 and the winners were selected on 1st March 2022.
- On the occasion of 20th Foundation Day of BEE, PMU organized a National Innovation Conclave on Low Carbon Technologies on 1st March 2022 at India Habitat Center, New Delhi. The event was illuminated by the presence of prominent representatives from the Government of India including Shri R.K. Singh, Union Minister of Power and New and Renewable Energy and Shri Krishan Pal Gurjar, Minister of State of Power and Heavy Industries. In addition, an exhibition of the winners of the FLCTD innovation challenge and start-ups from FLCTD Accelerator programme was organized to provide them a platform to showcase their technology solutions and 34 companies participated (28 – FLCTD winners and 6 – FLCTD accelerator participants)
- FLCTD website (www.low-carbon-innovation.org) was revamped and launched during the National Innovation Conclave on 1st March 2022.
- CII-GBC & PMU organized four Stakeholder Consultation Meeting on New Innovation Challenge Verticals/ Areas to seek inputs on the TOR. As per the inputs received from the stakeholders and expert panel members, waste heat recovery category is renamed as "Waste Heat Recovery & Thermal Energy Efficiency" and expanded the scope. Details of the stakeholder meetings are:

Sl. No.	Description	Date	No. of participants
1	Industry Consultation	07/09/2021	12
2	Young and Emerging leader consultation	08/09/2021	05
3	Energy awards judges' consultation	10/09/2021	07
4	Technology Supplier Consultation	16/09/2021	10

- DST-Centre for Policy Research, Panjab University, Chandigarh conducted two focus group discussion (FGD) sessions on 12th -13th August for the PMU on the topic of 'Technology Transfer and Commercialization'. 12 senior officials representing technology transfer centers participated in the discussion. The purpose of the FGD was to seek feedback on the issues and appraise the participants about the FLCTD project and the study planned under FLCTD project. The terms of reference have been submitted to BEE for approval to issue the request for proposal.
- Due-diligence visits were carried out by CII-GBC/CES/PMU to discuss and finalize the funds required from FLCTD project by the winners of Innovation challenge in new technology areas.
- The 5th innovation challenge in all the six technology verticals was launched on 1st April, 2022 and application were closed on 30 June 2022. 8 Webinars organised to promote the innovation challenge in partnership with CII-GBC, CES and AEEE.
- M/s Intelicap Advisory Services Pvt Ltd was awarded the contract as consultant for the activity "Financial due diligence and fund raising support".
- 6th Project Steering Committee meeting of the FLCTD project was held virtually on 3rd December 2021.

2. Please briefly elaborate on any **minor amendments**⁶ to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

<input type="checkbox"/>	Results Framework	
<input type="checkbox"/>	Components and Cost	
<input type="checkbox"/>	Institutional and Implementation Arrangements	
<input type="checkbox"/>	Financial Management	
<input type="checkbox"/>	Implementation Schedule	
<input type="checkbox"/>	Executing Entity	
<input type="checkbox"/>	Executing Entity Category	
<input type="checkbox"/>	Minor Project Objective Change	
<input type="checkbox"/>	Safeguards	
<input type="checkbox"/>	Risk Analysis	
<input type="checkbox"/>	Increase of GEF Project Financing Up to 5%	
<input type="checkbox"/>	Co-Financing	
<input type="checkbox"/>	Location of Project Activities	
<input type="checkbox"/>	Others	

3. Please provide progress related to the **financial implementation** of the project.

⁶ As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **minor amendments** are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5%.



PROJECT DELIVERY REPORT

Project:	150188 - FACILITY FOR LOW CARBON TECHNOLOGY DEPLOYMENT	Project Manager:	Sanjaya Shrestha	Project Validity: Status:	01.02.2016 - 16.02.2024 Implement
Project Theme:	Energy and Environment	Country:	India	Region	Asia and Pacific
Grant	Grant Description	Fund	Currency	Grant Status	Grant Validity
2000003301	GEF-5: INDIA	GF	USD	Authority to implement	16.02.2016 - 16.02.2024

	Description	Released Budget Current Year (a)	Obligations Current Year (b)	Disbursements Current Year (c)	Expenditures Current Year (d=b+c)	Total Agreement Budget (e)	Released Budget (f)	Obligations + Disbursements (g)	Funds Available* (h=f-g)	Support Cost (i)	Total Expenditures (j=g+i)
2000003301		USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
150188-1-01-01	1.1 Collaboration among partners										
1100	Staff & Intern Consultants	199,718.24	11,508.87	7,774.60	19,283.47	221,000.00	221,000.00	29,565.23	191,434.77	0.00	29,565.23
1500	Local travel	9,188.25	(4,017.90)	10,453.52	6,435.62	105,720.83	105,720.83	95,968.20	9,752.63	0.00	95,968.20
1700	Nat.Consult./Staff	265,933.87	40,812.44	67,428.12	106,240.56	837,580.34	837,580.34	589,887.03	247,693.31	0.00	589,887.03
2100	Contractual Services	896,656.27	472,989.05	487,345.65	960,334.70	3,251,920.07	3,251,920.07	3,255,598.48	(3,678.41)	0.00	3,255,598.48
3000	Train/Fellowship/Study	30,000.00	0.00	0.00	0.00	37,500.00	37,500.00	0.00	37,500.00	0.00	0.00
3500	International Meetings	35,565.81	0.00	0.00	0.00	41,647.01	41,647.01	1,081.20	40,565.81	0.00	1,081.20
4300	Premises	20,024.94	589.56	26,503.31	27,092.87	211,580.45	211,580.45	213,848.38	(2,067.93)	0.00	213,848.38
4500	Equipment	26,544.08	700.82	913.56	1,614.38	58,790.19	58,790.19	28,859.59	29,930.60	0.00	28,859.59
5100	Other Direct Costs	28,117.35	72.46	1,082.74	1,155.20	61,484.78	61,484.78	29,022.61	32,462.15	0.00	29,022.61
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	401,482.17	401,482.17
150188-1-01-01	Total	1,541,749.71	522,655.30	601,501.50	1,124,156.80	4,827,223.65	4,827,223.65	4,243,630.72	583,592.93	401,482.17	4,645,112.89
150188-1-01-02	1.2 Adoption of improved LCTs in India	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	284,814.10	0.00	0.00	0.00	296,000.00	296,000.00	185.90	295,814.10	0.00	185.90
1500	Local travel	13,831.88	(1,423.34)	3,501.68	2,078.34	37,000.00	37,000.00	18,246.46	18,753.54	0.00	18,246.46
1700	Nat.Consult./Staff	160,214.47	41,459.76	52,504.60	93,964.36	415,000.00	415,000.00	293,749.89	121,250.11	0.00	293,749.89
2100	Contractual Services	39,923.43	(123,074.69)	127,762.72	4,688.03	1,110,613.00	1,110,613.00	905,377.60	205,235.40	0.00	905,377.60
3000	Train/Fellowship/Study	50,000.00	0.00	0.00	0.00	60,000.00	60,000.00	0.00	60,000.00	0.00	0.00
3500	International Meetings	20,000.00	0.00	0.00	0.00	27,500.00	27,500.00	0.00	27,500.00	0.00	0.00
4500	Equipment	1,461.96	0.00	9.90	9.90	13,028.18	13,028.18	1,576.12	11,452.06	0.00	1,576.12
5100	Other Direct Costs	(10.74)	(7,169.40)	7,563.48	394.08	62,804.82	62,804.82	50,509.64	12,295.18	0.00	50,509.64
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	120,616.26	120,616.26
150188-1-01-02	Total	570,235.10	(90,207.67)	191,342.38	101,134.71	2,021,946.00	2,021,946.00	1,269,645.61	752,300.39	120,616.26	1,390,261.87
150188-1-01-03	2.1 Technology Transfer Support Facility	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	55,784.29	0.00	0.00	0.00	96,000.00	96,000.00	34,215.71	61,784.29	0.00	34,215.71
1500	Local travel	22,410.38	(1,202.77)	1,091.01	(111.76)	36,000.00	36,000.00	3,477.86	32,522.14	0.00	3,477.86
1700	Nat.Consult./Staff	225,939.21	15,568.77	19,713.08	35,281.85	320,000.00	320,000.00	89,342.64	230,657.36	0.00	89,342.64
2100	Contractual Services	382,842.62	300,000.00	723.26	300,723.26	635,000.00	635,000.00	392,880.64	242,119.36	0.00	392,880.64
3000	Train/Fellowship/Study	25,000.00	0.00	0.00	0.00	40,000.00	40,000.00	0.00	40,000.00	0.00	0.00
3500	International Meetings	22,971.90	0.00	0.00	0.00	31,000.00	31,000.00	2,028.10	28,971.90	0.00	2,028.10
5100	Other Direct Costs	24,891.41	2.95	321.40	324.35	39,582.00	39,582.00	4,014.94	35,567.06	0.00	4,014.94
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49,966.16	49,966.16
150188-1-01-03	Total	759,839.81	314,368.95	21,848.75	336,217.70	1,197,582.00	1,197,582.00	525,959.89	671,622.11	49,966.16	575,926.05
150188-1-51-01	Project Management	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	4,437.35	0.00	0.00	0.00	37,553.03	37,553.03	30,115.68	7,437.35	0.00	30,115.68
1500	Local travel	16,362.71	(0.02)	1,799.42	1,799.40	42,000.00	42,000.00	17,436.69	24,563.31	0.00	17,436.69
1700	Nat.Consult./Staff	59,023.50	31,211.98	27,195.87	58,407.83	212,904.19	212,904.19	197,288.52	15,615.67	0.00	197,288.52
2100	Contractual Services	52,974.97	0.00	0.00	0.00	75,000.00	75,000.00	7,025.03	67,974.97	0.00	7,025.03
4300	Premises	0.00	0.00	0.00	0.00	75.49	75.49	75.49	0.00	0.00	75.49
4500	Equipment	15,429.35	0.00	0.00	0.00	27,500.00	27,500.00	4,570.65	22,929.35	0.00	4,570.65
5100	Other Direct Costs	7,552.80	0.00	339.88	339.88	24,324.51	24,324.51	10,711.59	13,612.92	0.00	10,711.59
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25,386.41	25,386.41
150188-1-51-01	Total	155,780.68	31,211.94	29,335.17	60,547.11	419,357.22	419,357.22	267,223.65	152,133.57	25,386.41	292,610.06
150188-1-53-01	Monitoring and Evaluation	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
1100	Staff & Intern Consultants	33,563.22	0.00	0.00	0.00	63,485.04	63,485.04	24,901.82	38,583.22	0.00	24,901.82
1500	Local travel	15,000.00	0.00	0.00	0.00	27,021.31	27,021.31	21.31	27,000.00	0.00	21.31
1700	Nat.Consult./Staff	72,792.82	0.00	0.00	0.00	100,000.00	100,000.00	7,207.18	92,792.82	0.00	7,207.18
2100	Contractual Services	15,000.00	0.00	0.00	0.00	31,468.83	31,468.83	6,468.83	25,000.00	0.00	6,468.83
5100	Other Direct Costs	18,000.00	0.00	0.00	0.00	24,243.95	24,243.95	24.82	24,219.13	0.00	24.82
9300	Support Cost IDC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3,669.32	3,669.32
150188-1-53-01	Total	154,376.04	0.00	0.00	0.00	246,219.13	246,219.13	38,623.96	207,595.17	3,669.32	42,293.28
2000003301	Total	3,181,981.34	778,028.52	844,027.80	1,622,056.32	8,712,328.00	8,712,328.00	6,345,083.83	2,367,244.17	601,120.32	6,946,204.15
150188	USD Total	3,181,981.34	778,028.52	844,027.80	1,622,056.32	8,712,328.00	8,712,328.00	6,345,083.83	2,367,244.17	601,120.32	6,946,204.15

Project Delivery Report Attached

IX. Work Plan and Budget

1. Please provide **an updated project work plan and budget** for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

Please fill in the below table or make a reference to a file, in case it is submitted as an annex to the report.

Outputs by Project Component	2021				2022				2023				GEF Grant Budget Available (US\$)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Component 1 – Innovation Ecosystem for selecting technology innovators and instituting competitive awards and policy incentives														
Outcome 1.1: Innovation Ecosystem for selecting technology innovators and instituting competitive awards and policy incentives														
Output 1.1.1: Expert Panels instituted for selected technology areas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US\$ 583,592.93	
Output 1.1.2: Twenty Challenge competitions conducted	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
Output 1.1.3: Financial Institutions revalidated	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Outcome 1.2: Adoption of improved low-carbon technologies in the Indian economy, that would include reduced need for new energy generation capacity														
Output 1.2.1: Targeted innovation and technology development to meet identified low-carbon technology needs awarded.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	US\$752,300.39	
Output 1.2.2: Approximately 120 low carbon innovations demonstrated	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Component 2 – Technical assistance for Technology Transfer Support Facility														
Outcome 2.1: Establishment of deployment support eco-system for low carbon climate mitigation technologies														
Output 2.1.1: Appropriate networks and centres for research and deployment of low-carbon technologies verified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US\$671,622.11	
Output 2.1.2: Technology Transfer Support Facility established	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Component 3 – Monitoring and Evaluation														
Outcome 3: Monitoring and evaluation mechanisms and indicators established to facilitate successful project implementation and sound impact assessment.														
Output 3.1: Regular monitoring exercises conducted;	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	US\$207,595.17	
Output 3.2: Midterm and final evaluation conducted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

X. Synergies

1. **Synergies** achieved:

Describe potential synergies arising out of UNIDO internal cooperation and/or cooperation with (external) bilateral and multilateral projects/programmes, if applicable.

3. Stories to be shared (Optional)

Please provide a brief summary of any especially interesting and impactful project results that are worth sharing with a larger audience, and/or investing communications time in. Please include links to any stories/videos available online.

EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2021 – 30 June 2022.
2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.
3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.
4. **Results-based management:** The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings	
Highly Satisfactory (HS)	Project is expected to achieve or exceed <u>all</u> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice".
Satisfactory (S)	Project is expected to <u>achieve most</u> of its <u>major</u> global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.
Moderately Satisfactory (MS)	Project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits.
Moderately Unsatisfactory (MU)	Project is expected to achieve <u>some</u> of its major global environmental objectives with major shortcomings or is expected to <u>achieve only some</u> of its major global environmental objectives.
Unsatisfactory (U)	Project is expected <u>not</u> to achieve <u>most</u> of its major global environmental objectives or to yield any satisfactory global environmental benefits.
Highly Unsatisfactory (HU)	The project has failed to achieve, and is not expected to achieve, <u>any</u> of its major global environmental objectives with no worthwhile benefits.

Implementation Progress (IP)	
Highly Satisfactory (HS)	Implementation of <u>all</u> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as "good practice".
Satisfactory (S)	Implementation of <u>most</u> components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.
Moderately Satisfactory (MS)	Implementation of <u>some</u> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
Moderately Unsatisfactory (MU)	Implementation of <u>some</u> components is <u>not</u> in substantial compliance with the original/formally revised plan with most components requiring remedial action.

Unsatisfactory (U)	Implementation of <u>most</u> components in <u>not</u> in substantial compliance with the original/formally revised plan.
Highly Unsatisfactory (HU)	Implementation of <u>none</u> of the components is in substantial compliance with the original/formally revised plan.

Risk ratings	
Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
High Risk (H)	There is a probability of greater than 75% that assumptions may fail to hold or materialize, and/or the project may face high risks.
Substantial Risk (S)	There is a probability of between 51% and 75% that assumptions may fail to hold or materialize, and/or the project may face substantial risks.
Moderate Risk (M)	There is a probability of between 26% and 50% that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.
Low Risk (L)	There is a probability of up to 25% that assumptions may fail to hold or materialize, and/or the project may face only low risks.