Accelerating cleantech innovation and entrepreneurship in start-ups and SMEs in Indonesia

Part I: Project Information

Name of Parent Program
Global Cleantech Innovation Programme (GCIP) to accelerate the uptake and investments in innovative cleantech solutions

GEF ID
10459

Project Type
MSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Accelerating cleantech innovation and entrepreneurship in start-ups and SMEs in Indonesia

Countries
Indonesia

Agency(ies)
UNIDO

Other Executing Partner(s)
Agency for the Assessment and Application of Technology (BPPT)

Executing Partner Type
Government

GEF Focal Area

Climate Change

Taxonomy

Climate Change, Focal Areas, Energy Efficiency, Climate Change Mitigation, Renewable Energy, Technology Transfer, Sustainable Urban Systems and Transport, Financing, United Nations Framework Convention on Climate Change, Paris Agreement, Nationally Determined Contribution, Influencing models, Strengthen institutional capacity and decision-making, Convene multi-stakeholder alliances, Demonstrate innovative approache, Stakeholders, Beneficiaries, Type of Engagement, Participation, Information Dissemination, Partnership, Private Sector, SMEs, Large corporations, Individuals/Entrepreneurs, Financial intermediaries and market facilitators, Capital providers, Communications, Education, Awareness Raising, Behavior change, Public Campaigns, Civil Society, Academia, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender results areas, Access and control over natural resources, Participation and leadership, Capacity Development, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Learning, Indicators to measure change, Innovation, Knowledge Generation

Sector

Technology Transfer/Innovative Low-Carbon Technologies

Rio Markers

Climate Change Mitigation

Climate Change Mitigation 2

Climate Change Adaptation

Climate Change Adaptation 0

Submission Date

6/18/2021

Expected Implementation Start

1/1/2022

Expected Completion Date

12/31/2026

Duration

60In Months

Agency Fee($)

159,883.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CCM-1-4	Promote innovation and technology tranfer for sustainable energy breakthroughs	GET	1,776,484.00	18,070,543.00
		Total Project Cost($)	**1,776,484.00**	**18,070,543.00**

B. Project description summary

Project Objective

Support low-carbon economic growth by promoting clean technology innovations and entrepreneurship through a Cleantech innovation platform and accelerator programme

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Transforming early-stage innovative cleantech solutions into commercial enterprises	Technical Assistance	1.1 Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator (supporting GEEW)	1.1.1 The GCIP guidebooks and certification system are adapted for the GCIP Indonesia 1.1.2 Three (3) cycles of the Annual Cleantech competition-GCIP Indonesia Accelerator are conducted (including National innovation Challenges for clean technology) (at least 27 participants per year) 1.1.3 At least two introductory Entrepreneurship training programmes per year on business models and innovation for clean technologies organized for women (150 participants) and students (150 participants) 1.1.4 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry (i.e.	GET	695,930.00	9,205,500.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Transforming early-stage innovative cleantech solutions into commercial enterprises	Investment	1.1 Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator	1.1.7 Investment mobilized for projects implementation to deploy innovative cleantech solutions across various sectors (minimum 12 enterprises provided with funds)	GET	296,575.00	3,000,000.00
2. Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity	Technical Assistance	2.1 National level platform/ coordinating mechanism established to promote clean technology innovations and entrepreneurship	2.1.1 National level Cleantech Coordinating platform, web page, Cleantech Community and Network established (including associations promoting gender equality and youth groups)	GET	92,020.00	900,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
2. Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity	Technical Assistance	2.2 The CIEE in Indonesia is strengthened and interconnected promoting gender equality and the empowerment of women	2.2.1 Institutional capacity building of the CIEE actors is conducted (1-3 events for up to 185 participants in total) 2.2.2 Linkages, collaboration, and synergies across CIEEs are promoted	GET	269,660.00	1,582,272.00
2. Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity	Technical Assistance	2.3 Cleantech innovation and entrepreneurship policies, regulations and recommendations are strengthened promoting gender equality and the empowerment of women	2.3.1. Policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender responsive) 2.3.2 Roadmap for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)	GET	102,061.00	1,000,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3. Programme coordination and coherence	Technical Assistance	3.1 Efficiency and sustainability of the GCIP Indonesia is ensured through programme coordination and coherence	3.1.1 The GCIP internal guidelines (3 guidelines) for project management unit are adopted and implemented by the GCIP Indonesia 3.1.2 Programme-level knowledge management, communication and advocacy strategy is adopted and implemented by the GCIP Indonesia	GET	92,740.00	400,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3. Programme coordination and coherence	Technical Assistance	3.2 Impacts and progress of the GCIP Indonesia are tracked and reported	3.2.1 The GCIP methodology for impact assessment is developed and applied 3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework as well as an external mid-term review is conducted 3.2.3 Independent terminal evaluation is conducted	GET	66,000.00	340,000.00
			Sub Total ($)		**1,614,986.00**	**16,427,772.00**

Project Management Cost (PMC)		
GET	161,498.00	1,642,771.00
Sub Total($)	**161,498.00**	**1,642,771.00**
Total Project Cost($)	**1,776,484.00**	**18,070,543.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
GEF Agency	UNIDO	Grant	Investment mobilized	50,000.00
GEF Agency	UNIDO	In-kind	Recurrent expenditures	150,000.00
Recipient Country Government	Agency for the Assessment and Application of Technology (BPPT)	Grant	Investment mobilized	4,500,000.00
Recipient Country Government	Agency for the Assessment and Application of Technology (BPPT)	In-kind	Recurrent expenditures	1,400,000.00
Other	SociopreneurID	In-kind	Recurrent expenditures	838,272.00
Private Sector	PT Buliso Properti Cendikia	In-kind	Recurrent expenditures	5,434,000.00
Private Sector	Nexus Indonesia	In-kind	Recurrent expenditures	2,000,000.00
Other	Bakrie Centre Foundation	In-kind	Recurrent expenditures	2,500,000.00
Recipient Country Government	Directorate of Application and Digital Economy Governance Kemenparekraf	In-kind	Recurrent expenditures	390,000.00
Recipient Country Government	Ministry of Women Empowerment and Child Protection (Kemen PPPA)	In-kind	Recurrent expenditures	808,271.00
			Total Co-Financing($)	**18,070,543.00**

Describe how any "Investment Mobilized" was identified

During project preparation, extensive consultations were carried out with Indonesian government stakeholders, industry associations, entrepreneurs, SMEs, Start-up Assistance Organisations (SAOs), organisations promoting gender equality and the economic empowerment of women (GEEW) and other

entities involved in the cleantech space. Consultations identified many synergies between existing national and international programmes and the Indonesian GCIP child project co-financing modalities were discussed with interested entities prior to and during the project preparation phase. With regards to ?Investment Mobilized?, it was agreed as follows: (a) the Project Executing Entity, BPPT, will mobilize a grant amount of USD 4,500,000 for accelerating innovative solutions identified through the project; (b) UNIDO will provide USD 50,000 in the form a grant. Moreover, (c) additional investment will be mobilised through the accelerator as direct investment in successful accelerator participants companies and technologies supported through extensive advocacy and outreach activities organized under output 1.1.6 and investment mobilized through output 1.1.7. The GEF grant is focused on supporting the formative stages of cleantech enterprises, i.e. prototyping, proof of concept, ecosystems building. Co-financing from the public sector (predominantly in-kind) creates the enabling framework conditions that de-risk the key interventions by the GCIP project. As was already confirmed by the findings of the Independent Evaluation of the previous GCIP cycles, co-financing in the form of grants, seed funding, equity from angels, venture capital funds, impact investors, crowd funding platforms etc. will be mobilized during the implementation of the project from the private sector in the phases of development, growth and scale-up of the start-ups/SMEs. In line with GEF Guidelines on Co-financing (https://www.thegef.org/documents/co-financing), paragraph 9, co-financing that will be mobilized from the private sector during the implementation of the project will be monitored and reported through the regular reporting mechanisms to the GEF. Unlike in the case of demonstration projects for example, the project contributes to market creation for new innovative cleantech products and services. It de-risks, by design, cleantech innovations and businesses through coaching, mentoring and advisory services thereby creating opportunities for follow-on investments into the cleantech companies in terms of angel investors, dedicated cleantech funds (private and public), venture capital funds (corporate and otherwise), impact investors etc. Therefore, the follow-on investments will be realised once the specific cleantech companies have been supported by the project and linked to investors. Under the umbrella project of GCIP, project 10461, a strategic partnership will be established between GCIP and the Private Financing Advisory Network - PFAN (www.pfan.net), under which GCIP alumni companies will be systematically connected to PFAN for specialized project development, business coaching and investment facilitation services and introduction to existing network of global investors, hence mobilize co-financing. Furthermore, in countries where PFAN operates, GCIP activities will be linked to PFAN network of expertise and national investors. This is one example of where investment co-financing will likely be mobilized during project implementation. Apart from the planned investment mobilized at the CEO Approval stage, it is important to underline that GCIP participants may receive substantial investment support at a later stage. There are several examples that confirm this process. Under GEF 5 the GCIP India project from 2013-2017, co-financing planned was 3,000,000 USD at CEO Approval stage, consisting out of 450,000 USD investment mobilized and the remaining amount as in-kind[1]. However, GCIP companies such as Agnisumukh and Atomberg managed to mobilize 2,650,000 USD and 10,000,000 USD respectively in investments within four years of completing the GCIP accelerator, thereby reaching a ratio of 1:13 in GEF funding to investment mobilized. Similarly in the project GCIP Malaysia, investment co-financing at CEO Approval stage encompassed 250,000 USD, while it was subsequently reported in the project?s terminal evaluation that 2,000,000 USD was received by GCIP alumni in form of investment grants by financial organizations, signaling higher involvement and

interest by the latter than initially anticipated[2]. In GCIP Turkey, investment mobilized at CEO Approval stage amounted to 250,000 USD, whereas GCIP finalists, such as Positive Energy and Episome Biotech managed to mobilize 1,620,000 USD and 1,700,000 USD respectively, thereby having successfully raised funding from private sector investment groups.[3] These examples are intended to serve as an excerpt for the successful promotion of GCIP award winning cleantech innovations and their potential to attract follow-on investment from the private sector within the project?s lifetime and beyond. GCIP India supported 89 companies, in Malaysia 79 companies and 95 in Turkey; the co-financing ratio will increase as more GCIP companies commercialise and the current project will provide a greater level of support to companies compared to the previous GCIP country projects under GEF 5&6 including investment facilitation. _____ [1] 2018, Independent Terminal Evaluation: GEF-UNIDO Cleantech programme for small and medium enterprises in India, https://www.unido.org/sites/default/files/files/2018-09/120345%20GEF%20UNIDO%20Cleantech%20Programme%20for%20SMEs%20in%20India_0.pdf [2] 2018, Independent Terminal Evaluation: GEF-UNIDO Cleantech programme for SMEs in Malaysia, https://www.unido.org/sites/default/files/files/2018-04/Cleantech%20Malaysia_120096_TE_Final%20report.pdf [3] 2018, Independent Terminal Evaluation: GEF UNIDO Cleantech Programme for SMEs in Turkey, https://www.unido.org/sites/default/files/files/2018-12/GEF%20ID-5505_GFTUR-130124_TE-2017.pdf

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNIDO	GET	Indonesia	Climate Change	CC STAR Allocation	1,776,484	159,883	1,936,367.00
			Total Grant Resources($)		**1,776,484.00**	**159,883.00**	**1,936,367.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

50,000

PPG Agency Fee ($)

4,500

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNIDO	GET	Indonesia	Climate Change	CC STAR Allocation	50,000	4,500	**54,500.00**
				Total Project Costs($)	**50,000.00**	**4,500.00**	**54,500.00**

Core Indicators

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	0	144000	0	0
Expected metric tons of CO?e (indirect)	0	720000	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)		144,000		
Expected metric tons of CO?e (indirect)		720,000		
Anticipated start year of accounting		2022		
Duration of accounting		10		

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		291		
Male		539		
Total	0	830	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided

Part II. Project Justification

1a. Project Description

(Changes between the original PFD (and related child project concepts) and the CEO Approval Request

1. From the substantive point of view, the project design proposed in this Request for CEO Approval is fully consistent with that presented in the original concept (approved by the GEF CEO in December 2019).

2. However, as deemed appropriate and based on additional consultations with relevant stakeholders in the PPG phase: 1) terminologies and wording used in the Project Description Summary (Table B) and accordingly in the Project Description were amended in order to better align this child project to the GEF-UNIDO Global Cleantech Innovation Programme (GCIP) Framework (GEF ID 10408) and to be more gender responsive; 2) selected Components/Outcomes/Outputs were merged or split A) In the child PIF Outputs 1.1.1 and 1.1.2 were merged and moved to into component 2 under 2.1 (see table below). This was done to reflect the fact that in the global programme, pillar 2/component 2 contains all activities around building the national capacity to support and promote clean energy technology innovations. B) Component 3 remains the same in overall substance, but it has been modified to include more detail and align with the global programme (see table below). An overview of the main changes is further detailed in the two tables below. 3) the budget allocation was moderately adjusted, the amount of co-financing was increased, and the attribution of co-financing was revised based on confirmed co-finance during the PPG phase. (Global Framework refers to GEF ID 10408 and GCIP Global refers to GEF ID 10461 from here on)

An overview of the main changes is further detailed in the two tables below.

TABLE 1 COMPARISON OF THE PROJECT DESCRIPTION SUMMARY (TABLE B) BETWEEN THE ORIGINAL CONCEPT AND THE CEO VERSION.

Original version	CEO version

1. Finding, fostering and developing cleantech innovations and businesses in Indonesia	1. Transforming early-stage innovative cleantech solutions into commercial enterprises
1.1 National level platform/ coordinating mechanism established to promote clean technology innovations and entrepreneurship	1.1 Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator (supporting GEEW)
1.1.1 National level Cleantech Coordinating platform and mechanism established (including adaptation of methodologies and guidelines for the accelerator) 1.1.2 Indonesian Cleantech Community and Network established (incl. associations promoting gender equality and youth groups)	1.1.1 The GCIP guidebooks and certification system are adapted for the GCIP Indonesia 1.1.2 Three (3) cycles of the Annual Cleantech competition-GCIP Indonesia Accelerator are conducted (including National innovation Challenges for clean technology) (minimum 80 Accelerator participants)
1.2 Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator	1.1.3 At least two introductory Entrepreneurship training programmes per year on business models and innovation for clean technologies organized for women (150 participants) and students (150

1.2.1 Three Annual Cleantech competition-based accelerators conducted across selected SME clusters (including National Innovation Challenges for clean technology challenges) 1.2.2 At least 2 entrepreneurship training programmes per year on business models and innovation for clean technologies organized for students from local universities and youth 1.2.3 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry 1.2.4 National pool of mentors (45+) and judges (15+) identified, created and trained 1.2.5 Extensive advocacy and outreach activities organized at the national and regional level; Public private partnership forums held and knowledge/best practice shared 1.2.6 Innovative earl-stage financial mechanism to help GCIP alumni leverage funding established	participants) 1.1.4 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry (i.e., tipping-point investment facilitation support given for minimum 15 enterprises) 1.1.5 National pool of mentors and judges identified, created and trained (at least 40) 1.1.6 Extensive advocacy and outreach activities organized (13 events in total) at the national and regional level in a gender-responsive manner including: Public private partnership forums held; and knowledge/best practice shared 1.1.7 Investment mobilized for projects implementation to deploy innovative cleantech solutions across various sectors (minimum 12 enterprises provided with funds)
2. Building national capacity to support and promote clean energy technology innovations	2. Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity
	2.1 National level platform/ coordinating mechanism established to promote clean technology innovations and entrepreneurship
	2.1.1 National level Cleantech Coordinating platform, web page, Cleantech Community and Network established (including associations promoting gender equality and youth groups (1-3 events for up to 185 participants in total)
2.1 National institutional capacity built to support and organize the Cleantech accelerator during and beyond the project duration	2.2 The CIEE in Indonesia is strengthened and interconnected promoting gender equality and the empowerment of women

2.1.1 Capacity of national institutions and industry associations to host, support and sustain the Cleantech programme built	2.2.1 Institutional capacity building of the CIEE actors is conducted 2.2.2 Linkages, collaboration, and synergies across CIEEs are promoted
2.2 Policy and institutional framework strengthened to promote clean technology innovations in Indonesia	2.3 Cleantech innovation and entrepreneurship policies, regulations and recommendations are strengthened
2.2.1. Policy and regulations to promote cleantech innovation developed and policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender-responsive) on how to enhance clean technology innovation and entrepreneurship ecosystems developed (with special focus on gender dimensions 2.2.2 Roadmap for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)	2.3.1. Policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender responsive) on how to enhance CIEE (with special focus on gender dimensions) 2.3.2 Roadmap for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)
3. Programme Coherence and Coordination including Project Monitoring & Evaluation	3 Programme coordination and coherence
3.1 Adequate monitoring of all project indicators to ensure successful project implementation and evaluation	3.1 Efficiency and sustainability of the GCIP Indonesia is ensured through programme coordination and coherence
3.1.1 Periodic reviews and independent terminal evaluation (TE) conducted 3.1.2 National impact monitoring established and linked to Global GCIP	3.1.1 The GCIP internal guidelines (3 guidelines) for project management unit are adopted and implemented by the GCIP Indonesia 3.1.2 Programme-level knowledge management, communication and advocacy strategy is adapted and implemented by the GCIP Indonesia
	3.2 Impacts and progress of the GCIP Indonesia are tracked and reported

	3.2.1 The GCIP methodology for impact assessment is developed and applied 3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework including operationalization and monitoring of gender mainstreaming action plan, and an external mid-term review is conducted 3.2.3 External terminal evaluation is conducted

TABLE 2 COMPARISION OF THE BUDGET ALLOCATION (USD) TO PROJECT COMPONENTS BETWEEN THE ORIGIONAL CONCEPT AND THE RCE VERSION

Original concept version	**CEO version**
Component 1 budget GEF project financing: 1,297,618 Co-financing: 10,500,000	Component 1 budget GEF project financing: 992,505 Co-financing: 12,585,000
Component 2 budget GEF project financing: 255,000 Co-financing: 5,000,000	Component 2 budget GEF project financing: 541,140 Co-financing: 3,482,272
Component 3 budget GEF project financing: 62,367 Co-financing: 500,000	Component 3 budget GEF project financing: 81,341 Co-financing: 740,000
Project management budget: GEF project financing: 161,499 Co-financing: 500,000	Project management budget: GEF project financing: 161,498 Co-financing: 1,263,271
Total GEF project financing: 1,776,484 Total co-financing: 16,500,000	Total GEF project financing: 1,776,484 Total co-financing: 18,070,543

a) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description)

3. In 2011, the United Nations Industrial Development Organization (UNIDO), with the support of the Global Environment Facility (GEF) and the Government of South Africa, successfully implemented the ?Greening the COP17? project. One of the four components of the project focused on the design and implementation of the first South Africa Clean Technology Competition (2011 SA Cleantech) for green entrepreneurs (mainly small and medium-size enterprises, further referred to as SMEs) with innovative ideas and concepts in the areas of energy efficiency, renewable energy and green building practices. All participants were given an opportunity to present their solutions and get feedback, while the best ones were offered additional training, mentoring and access to cleantech networking events.

4. This success of the 2011 SA Cleantech encouraged the project expansion into the Global Cleantech Innovation Programme (GCIP) for SMEs, simultaneously implemented in Armenia, India, Malaysia, Pakistan, Turkey and South Africa in 2014. The GCIP takes a competition-based approach to identify pool of promising entrepreneurs and support them through ongoing mentoring, webinars and networking events to grow their innovative ideas and concepts into full-fledged products and services ready for entering the national and global markets. Under the 2014 competition cycle, a total of 555 applications were received across the six countries, from which 159 innovative cleantech entrepreneurs were selected to take part in an accelerator programme. The entrepreneurs were chosen across four cleantech categories; 58 in renewable energy, 41 in energy efficiency, 32 in waste to energy, and 28 in water efficiency.

5. Having progressed through the GCIP, these entrepreneurs were connected with potential customers, investors, partners and policy-makers at national and international levels through Investor Connect events and National Academies. In addition, the very best entrepreneurs from the GCIP were given the opportunity to attend the Cleantech Open Global Forum, held in November 2014 in Silicon Valley, USA, involving more than 100 cleantech exhibitions and networking events, giving the GCIP winners a high level of exposure to broaden their networks, and to benefit from the global linkages.

6. In 2015 Thailand joined GCIP and about 10 countries, including Vietnam, Brazil, Ukraine, Nigeria, Indonesia and Kazakhstan had expressed interest in becoming part of it thereafter. In the period from 2014 to 2016, GCIP received almost 3000 applications in the eight countries it was operating, from which 580 entrepreneurs were selected for further acceleration and mentoring, as well as receiving access to investors and media. The growth rate of applications GCIP has received between 2014 to 2015 and 2015 to 2016 was 62.5% and 33% respectively, indicating strong and constant increase in interest towards the acceleration programme.

7. Building on the success and the lessons learned within GCIP in the first 5 years and taking into account the increased need to accelerate the pace of cleantech innovation, UNIDO together with its counterparts has developed this project. The project is in line with the GEF?s Climate Change Mitigation Focal Area Strategy under the GEF-7 Programming Directions and the GEF Private Sector

Strategy. It is also fully aligned with key national priorities of the Republic of Indonesia as well as UNIDO?s mandate to promote inclusive and sustainable industrial development (ISID).

Indonesia, general overview:

8. Indonesia is a diverse archipelago in Southeast Asia and is home to over 300 ethnic groups. The country has a population of around 270.2 million people, 49.65% of whom are women. Approximately 26.42 Indonesians live below the poverty line.[1] Over half (56.6%) of the population reside in urban areas.[2] Indonesia has made steady economic gains since the 1990s and is the largest economy in Southeast Asia. The country has also made significant progress in reducing poverty. Before the pandemic, it maintained consistent economic growth.[3]

Indonesia and Climate Change:

9. Indonesia has two main seasons: the dry season, which typically spans from June to September and a wet season from December to March. Tropical areas experience rain almost throughout the entire year. Average temperatures range from 23?C in mountainous, high altitude areas to 30?C in inland areas. Average relative humidity varies between 70 and 90 percent. Since 1990, the average temperature has increase by 0.3^{o}C and temperatures are expected to increase at a rate of 0.2^{o}C to 0.3^{o}C each decade through 2100.[4]

10. With regards to precipitation, annual rainfall in Indonesia has decreased by 2-3% since 1990. Precipitation patterns across the country have also changed. For example, in the country?s southern regions, average annual rainfall has declined but rainfall in the wet season has increased. In the north, average rainfall has increased but rainfall during the dry season has decreased.[5]

11. Sea level rise is also a critical concern for Indonesia, as 42 million Indonesians live on low lying land less than 10 meters above sea level. Sea levels are projected to rise 27.5-40 cm by 2050 and 60-80 cm by 2100 from the baseline measured in 2000. Additionally, Indonesia is vulnerable to extreme hydro-meteorological events such as floods and droughts. Cities such as Jakarta, Medan and Bandung routinely experience floods and flood inducing landslides and mudslides.[6]

12. Indonesia?s agriculture sector, freshwater resources, and coastal and forest ecosystems are expected to be particularly vulnerable to climate impacts. It is expected that subsistence and cash crops will be negatively affected by climate change. Additionally, changing precipitation patterns, evaporation, run-off and soil moisture could all impact agricultural production levels. Sea level rise can

affect rice and maize production and aquaculture production may be affected as well. Threats to aquaculture production can jeopardise food security as Indonesians rely heavily on seafood for their protein intake.[7]

13. Interventions in Indonesia to support climate-constrained development are globally significant, due to the country?s sizeable population of 250 million people ? the fourth-largest in the world ? and its substantial role as a major producer and consumer of energy in regional and international markets. Indonesia is also the largest economy in ASEAN.

14. Indonesia is one of the world?s largest emitters of greenhouse gases (GHG). Currently, the land-use and energy sector contribute to 80% of GHG in Indonesia.[8] Indonesia?s First Biennial Update Report (BUR) to the UNFCCC, submitted in 2015, includes a GHG inventory for the period 2000 to 2012 which shows LULUCF (including peat fires) as the greatest source of emissions (47.8%), followed by energy (34.9%), agriculture (7.8%) waste (6.7%) and IPPU (2.8).[9] The national government has committed to unconditionally reducing GHG emissions by 29% against a 2030 business-as-usual case and up to 41% with international assistance.

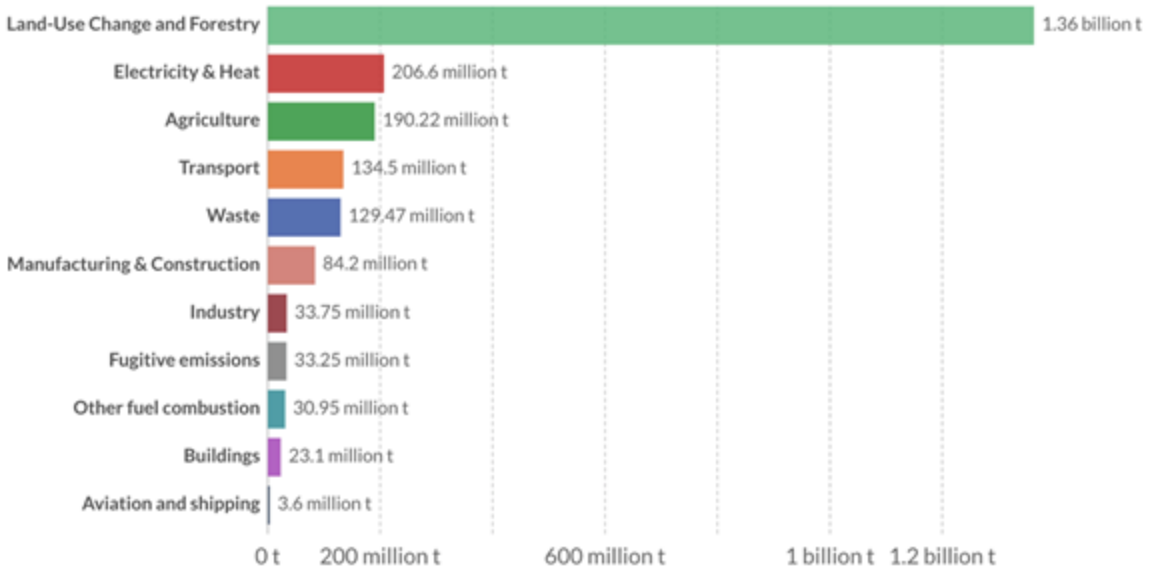

Figure 1 greenhouse gas emissions by sector, Indonesia, 2016 (source: CAIT climate data explorer via. Climate watch)

15. Indonesia remains a net energy exporter: This resource-rich archipelagic nation is the world?s fourth-largest producer of coal and a top coal exporter and Southeast Asia?s biggest gas supplier (45% of its production). However, its imports of oil and oil products have been rapidly increasing in recent years. In terms of renewable energy, Indonesia is the largest producer of biofuels in the world and is increasingly scaling up efforts to exploit its extensive renewable energy potential, particularly in

geothermal power while, renewable energy, particularly hydro and geothermal still have a low share of 6% in its energy mix. [10]

16. The primary energy mix remains vastly dominated by fossil fuels with a share of approximately 67% for coal, oil, and gas. The situation is no different for power generation, where the fossil fuel share is at 90%. 74 new contracts for renewable power plants were signed between 2017 and 2018, adding about 1.5 GW to the pipeline, but the new electricity plan indicates that 12.2 GW of coal and gas power plants will be installed.[11] This fossil fuel expansion is likely to bind the country to a carbon-intensive power sector for many decades. Furthermore, the financial agreements for coal-fired power plants increase risk of locking-in costly capacity payments to thermal power plants while renewables become cheaper. The total renewable installed capacity in 2018 reached 9.5 GW in the end of 2018 which is well below the government target of 15.5 GW for the same year.[12]

17. Generation capacity growth in Indonesia has been lower than growth in electricity demand, leading to power shortages and a low electrification ratio. Insufficient power generation is due to several issues including inadequate supporting infrastructure, difficulty obtaining land-use permits, subsidized tariffs, and an uncertain regulatory environment. [13] With the current fossil fuel dominated energy mix as well as continuous raise of energy demands expected in the country, the energy sector is projected to dominate Indonesia?s greenhouse gas emissions by 2026?27.[14] Promoting renewable energy source and energy conservation offers significant emission abatement potential.

18. Reducing GHG emissions through resource efficiency and cleaner production technologies and methods stemming from the industry and energy related emissions from the industrial sector presents a significant contribution for Indonesia's CO_2eq reduction targets under the Paris Agreement. Despite the government?s recognition of the urgency to integrate climate change considerations in policies, strategies, plans and operations, structural barriers remain. This is particularly the case with regards to the use of natural resources in industrial activities and treatment of industrial wastewater as one of the most important environmental impacts. With regards to resource efficiency, there is a lack of institutional capacity to implement the concept of industry-urban symbiosis and resource (energy, water and raw material) efficiency principles.

19. Despite barriers to resource efficiency, Indonesia?s large industrial sector emitters such as cement and steel sectors have shown initiative to enhance material efficiency and decarbonise their production processes. Nevertheless, the benchmark efficiency is not yet within reach in Indonesia even for these sectors despite the efforts. The Climate Action Tracker identified that all new installations in emissions-intensive sectors need to be zero or low carbon such as zero-carbon steelmaking technologies, including carbon capture and storage (CCS) and material efficiency needs to be maximized.[15] However, technologies and business models for rapid deployment are not yet scalable.

20. With regards to the SME sector, resource efficiency and cleaner production principles are harder to achieve, There is a lack of capacity in particular for small and medium sized enterprises (SMEs) to install and employ effective resource efficient technologies and processes such energy management systems, efficient water technologies and wastewater treatment systems for effluent discharged in terms of limited technology, knowledge, concepts, deployment methods and financial access through loan application processes.

21. Aside from those energy related emissions, the LULUCF sector is the major source of GHG emissions in the country, particularly due to deforestation and peatland burn back for expanded palm oil crop and agricultural exploitation. While many large multinational palm oil companies have agreed to purge their supply chains of deforestation, the practice is still common in Indonesia. The Government faces challenges to curb the practice, particularly for fear of wide-reaching economic impacts, especially for small farmers. It is widely agreed that small farms do not need more land to improve their lives if improved income opportunities and diversified income are accessible. Small farmers can increase their yields if they have access to basic training and agricultural technology. In this sense, for example, the Agency for the Assessment and Application of Technology (BPPT) has supported technology development in the field of peatland management through peat mapping using remote sensing solutions. The new method to measure peat will help government protect and cultivate carbon-rich areas and limit fires. However, the deployment of technology to reduce emissions in the LULUCF sector faces a number of challenges from technical capacity of farmers, the remote nature of the locations where it will be deployed and in particular, the affordability of technology and scalability of deployment models to remote regions, particularly on outer lying small islands.

Indonesia and MSME and cleantech innovation

22. Indonesia, like many South-East Asian countries, faces several threats associated with climate change and as a result has a lot to gain from innovative clean technologies that support climate change mitigation decoupled with economic growth and sustainable industrialization, which would also support climate change adaptation. In addition, the fostering of innovation, particularly within SMEs, will result in a number benefits for both Indonesian economy and society.

23. Indonesia?s economic growth has historically been driven by the country?s natural resources, which accounts for 60% of exports. The country has the 24th largest export economy in the world; most of its exports are consumed by other Asian countries. Indonesia is also the world?s largest producer of palm oil, which accounted for 10.2% of total exports in 2016. The resource sector?s share of the economy has decreased since 2000. Since 2000, Indonesia?s economy has been largely driven by labour productivity enhancements in wholesale and retail trade, transport equipment and apparatus manufacturing, transport and telecommunications. Production is focused largely on low technology activities despite demand for high tech goods.[16]

24. It is difficult to ascertain the number of SMEs operating in Indonesia because sole proprietors, including subsistence farmers, are included in official SMEs statistics. Using this definition, approximately 57.9 million SMEs are operating in Indonesia. 99% of these (57.2 million) are micro enterprises. 645,222 are classified as small enterprises, 106 are medium-sized enterprises and 5,066 are considered large enterprises.[17]

25. Law No. 12/2011 (on Making Rules) governs the process of developing and submitting new regulations and legislation. Public-private consultations are held but not regularly in the planning

phase. SMEs participate via associations and only when they are directly affected by proposed regulation/legislation. There is no formal requirement that consultations take place, though a good practice handbook has been developed by Bappenas on how to conduct them.

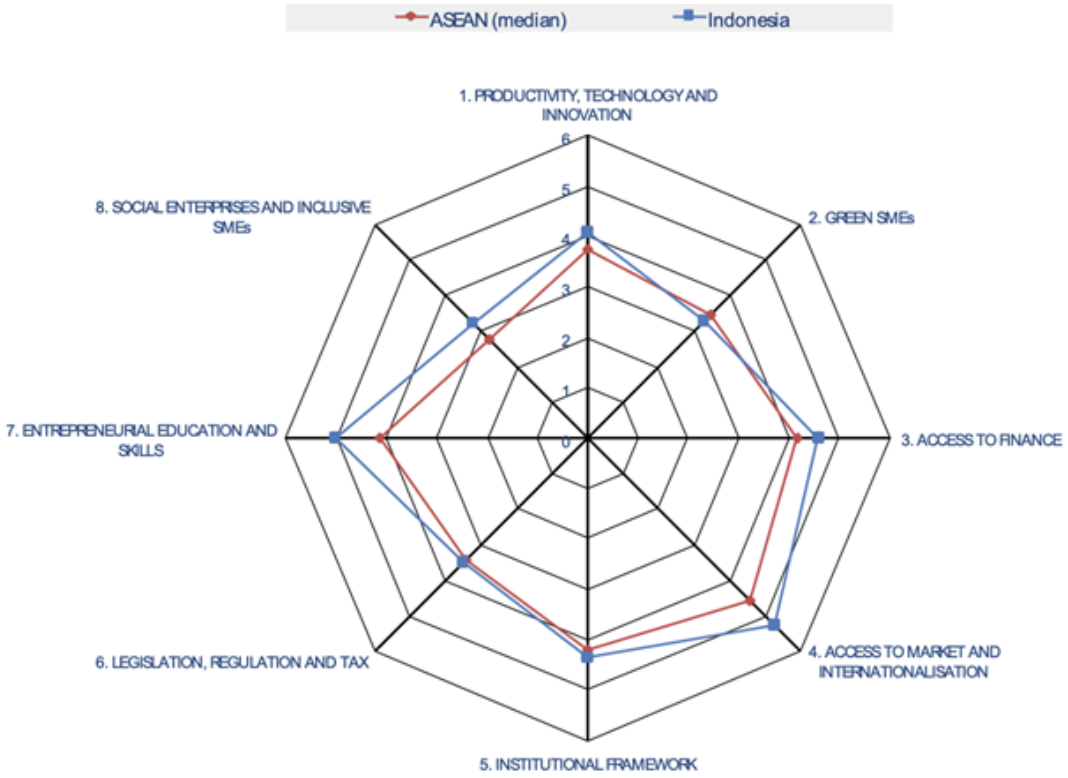

Figure 2 2018 SME policy index scores for Indonesia (Source: OECD)

26. The increased promotion and adoption of clean technology innovations will further strengthen the resilience of the Indonesian economy to climate change, while also having positive economic and social benefits through the promotion and support of entrepreneurs and innovation and through its contribution to energy security. The positive impacts of such interventions are magnified when applied to SMEs which operate in a business climate that can be difficult and in a policy environment that is not adequately adapted to their specific needs.

Barriers (and pathways) to change:

27. SMEs have the potential to drive the transformational change towards a resource efficient and low carbon economy in Indonesia by actively developing and adopting innovative cleantech solutions. SMEs are the mainstay of the Indonesian economy. Given the reach and operations of SMEs across various economic sectors, they can identify opportunities and develop appropriate and scalable innovative cleantech solutions, which reduce GHG emission and create jobs and new clean industries. Furthermore, SMEs operate at very local levels and hence they significantly influence decisions and choices by society.[18]

28. Despite the clear benefits of promoting clean technology innovations in SMEs in Indonesia, a number of barriers stand in the way of progress in this field. Cleantech SMEs face serious barriers in transforming promising innovative cleantech ideas into viable businesses since the ?valley of death? they face is deeper and wider compared to those in developed countries. The following key barriers have been identified as hindrances to the introduction and adoption of innovative clean technologies in Indonesia, as well as the development and growth of SMEs.

29. In summary, the following key barriers have been identified that must be addressed:

TABLE 3 KEY BARRIERS FACED BY CLEANTECH SMEs

Barriers faced by cleantech SMEs in developing and scaling-up innovative cleantech solutions	
Barrier category	**Description**
Weak policy and regulatory framework	**Complex institutional, policy framework related to innovation and research and development (R&D)** While the Ministry of Cooperative and SMEs (MoCSME) is the key Ministry for the implementation of SME development strategies, policies related to technology transfer and research and development (R&D) are generally included in policy documents in an ad hoc manner by various Ministries with limited coordination. A similar lack of coordination also exists for innovation, with a generally fragmented R&D and innovation governance framework in place. Unlike with SME policy, however, there has been limited effort to coordinate these policies in a cohesive manner.

	Business environment does not foster cleantech market transformation Fostering of innovation and entrepreneurial spirit requires a supportive business environment that encourages investment. Despite some efforts made by the Indonesian government to provide additional SME-tailored services to the SME community, limited impact has been made due to the lack of a solid policy framework to support efforts and a cumbersome and costly business registration process that persists despite government?s efforts to improve it. In the current system the business registration process remains cumbersome, in total requiring 8 procedures, costing up to 22.7% of total per capita income, and taking a total of 47 working days.[19]
	Dysfunctional IP infringements and ineffectiveness of enforcement Indonesia does have intellectual property (IP) rights frameworks in place, however, shortcomings in the IP enforcement mechanisms have led to lack of confidence among business houses and other stakeholders; limited venture capital; weak networks between investors and reduced foreign direct investment among other issues.[20][21]
Poor institutional coordination	**Complex innovation ecosystem and underserved cleantech start-up assistance sector** The Indonesian national innovation ecosystem is considered to be complex, including a lot of organisations, institutions and universities, while collaboration networks with academia and industry remain poor. Furthermore, there is a weak link between innovators and other relevant stakeholders at the global level. Currently, over 50 start-up assistance organisations (SAOs) ?incubators, accelerators, ecosystem builders such as hubs and coworking spaces, as well as other activities such as start-up competitions and bootcamps? are operating in Indonesia[22]. However, very few SAO specifically target the cleantech sector with programs targeting start-ups in clean tech, renewable energy, gender and social entrepreneurships sectors. Since the entrepreneurial ecosystem in Indonesia is relatively new and rapidly evolving, there is a distinct disparity in terms of numbers and quality of ventures across different sectors. As a result, SAOs that express preferences for a certain sector end up accepting applications from a variety of sectors or become sector agnostic.[23] Additionally, there are limited start-ups in clean tech and renewable energy sectors that meet the criteria and standards of the SAOs, compared to start-ups in ICT, finance, e-commerce, and food sectors that dominate the SAO?s programmes.
	Poor technology transfer and dialogue/cooperation between international technology producers, universities/research institutes and the industrial sector Indonesia is a net importer of advanced technologies from developed countries. A number of technology transfer barriers including poor dialogue between international technology developers, national universities/research institutes and the industrial sector, limited support from industrial players contributes to Indonesia?s poor research development and technology transfer, especially in cleantech sector. This is due to the lack of incentives, relevant policies and awareness of the need for research among industrial players. The contribution from private companies stood at around 20% of total research spending in Indonesia.[24] Without sufficient communication between universities/research institutes and the industrial sector, innovation capacity and the research and development needs of the cleantech sector cannot be met.

Limited access to markets and finance	**Limited access to suitable credit for cleantech start-ups** While Indonesia has a comparatively healthy credit system in place compared to many of its ASEAN neighbours, there are no specialized credit bureaus for SMEs. Limited access to suitable early stage and bridging finance for SMEs is a common issue in Indonesia, particularly for the underserved cleantech sector. Access to credit is considered a key determinant of competitiveness for SMEs on the regional scale. Only 30% of SMEs loans are guaranteed by the government and many SMEs rely on microfinance institutions or discretionary funds from the capital market to finance their investments.[25]
	Poor market access and promotion to support cleantech business growth opportunities. This is caused by some factors such as remote location of SMEs, high costs, limited knowledge, and the lack of business skills. Although it is growing, the market for clean technology and renewable energy in Indonesia is still small, limited and scattered, such as communities living in rural areas without access to major energy sources.
	Insignificant R&D expenditures R&D expenditures in companies remain insignificant (Business Expenditure on R&D in 2008 was merely 0.01%).[26] Overall, Indonesia?s gross expenditure on R&D was only 0.08% in 2013.[27]
Limited capacity and information gaps	**Limited institutional and human capacity to provide adequate services for SME development.** Although SME are the backbone of the Indonesian economy, services provided for their development are not adequately delivered. There are projects and stakeholders supporting SMEs, both generally for business development services and specifically for access to finance. However, there is no single source of information on the various services or funds available. It is intended that the MoCSMEs should provide such a central facility, but this has not occurred to date.[28] Furthermore, at local level, there is insufficient support for SMEs and start-ups by the local governments due to disparity on the capabilities between central and the local governments in Indonesia.

30. Ultimately, there is a need for an innovation ecosystem which can provide systemic support to SMEs in transforming cleantech innovations into viable enterprises that can attract investment at local and global levels, which in turn would allow them to scale and to deliver transformational economic, social and environmental impacts. The project will contribute, through its activities and continual engagements with the national government, universities, the private sector and other relevant stakeholders to mitigating barriers in a holistic manner, promoting the development and deployment of clean technology innovations particularly in the field of renewable energy and energy efficiency and innovative business models for the deployment of these technologies.

b) The baseline scenario and any associated baseline projects

31. SMEs create jobs and are essential for the overall development of the economy, globally accounting for 99% of business numbers[29]. In Indonesia, SMEs account for 99.9% of total enterprises and 97.2% of total employment, thus playing a significant role in the country?s development. Furthermore, as SMEs account for 58% of total GDP, their growth is key to the health of the larger Indonesian economy. [30] Despite recognition by the Indonesian government of the important roles played by SMEs and innovation for economic growth and stability, cleantech SMEs face serious barriers in transforming promising innovative cleantech ideas into viable businesses. Since access to capital and business development support are harder to access in Indonesia and other developing countries, the ?valley of death? they face is deeper and wider compared to those in developed countries.[31]

32. In terms of investment in innovation, Indonesia allocates less than 0.08% of its GDP for R&D investment, which is below one-tenth the average of the BRIC economies.[32] Indonesia is the second among the ASEAN countries by means of annual foreign direct investments (FDI) inflows and inward stock (after Singapore). Indonesia's FDI inward stock doubled between 2000 and 2015, leaving behind Thailand and staying above Vietnam and Malaysia, which are the other major FDI recipients among the ASEAN countries[33]. However, capital stemming from FDI is also modest considering the size and potential of Indonesia and tends to be highly volatile thus increasing risk.

33. The need for Indonesia to improve on its innovation and research has been highlighted in Indonesia?s poor performance in a number of global indexes. Currently, Indonesia ranks 85 of 141 in the Global Innovation Index, and the Global Competitiveness Index (50 of 144).[34] While recent years have seen the establishment of around 30 incubators (mostly in universities) and science parks, these remain at the nascent stage with limited scope or capacity. This offers the opportunity for the Cleantech programme to utilize these established services, while improving on their capacity, reach and visibility.

34. While a large number of start-ups have suffered during the pandemic, COVID-19 has also led to an increase in entrepreneurial activity.[35] While these innovative start-ups are undoubtedly essential for the future of innovation and supporting them is critical, the current COVID-19 crisis also shows the importance of small businesses with more incremental approaches to innovation and the need for support through GCIP Indonesia. The nature of innovation is often incremental but, at the same time, essential for survival and adapting to the ?new normal?.

35. The economic recovery packages provide a possibility for countries to recover better, greener and in a more sustainable manner. Cleantech innovations can not only make Indonesia more resilient to climate change but also enhance its capability to adapt through creating new opportunities for economic development.

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National Initiatives:

36. The government of Indonesia has in recent years undertaken a number of activities to promote and accelerate cleantech innovation in all economy sectors. The child project executing entity, the Agency for the Assessment and Application of Technology (BPPT) is a non-ministerial government agency under the coordination of the Ministry for Research and Technology of Republic of Indonesia, which has the tasks of carrying out government duties in the field of assessment and application of technology. The Balai Inkubator Teknologi (Technology Based Incubation Centre, BIT) operated by BPPT was established as a vehicle to commercialize research and technology innovation from BPPT?s researchers and engineers or other research institutions so that it can be developed into technology based new ventures. Furthermore, BIT also acts as a place to foster technology-based SMEs and cooperatives (UKMK) and innovation.

37. Indonesia has ratified the Paris Agreement[36] supported by regulatory frameworks specifically on climate change mitigation, and the National Action Plan on Climate Change Adaptation (RAN-API). Based on this, Indonesia has made a national commitment to reduce its Green House Gas (GHG) Emissions by 29% (unconditionally) by 2030 against business as-usual (BAU) baseline scenario and up to 41% (conditionally) subject to international assistance and support. The national determined contribution (NDC) of Indonesia to mitigate GHG emissions by 2030 includes mitigation activities in the areas of energy, waste, IPPU/ Industry and Agriculture, and Forestry. The Energy Sector shall contribute with a mitigation target of 314 million tons of CO2e by 2030. Among the government programs and initiatives that are either ongoing or under development, the following ones are those that the proposed project will build on and synergize with:

38. Based on the Government Work Planning (RKP 2018) the 5th National Priority is Energy Security. Specific energy priorities are included under the two programmes:

39. 1st Priority Program: Renewable Energy and Energy Conservation (EBTKE) Development

Priority Activities:

a. Development of Hydro & Nuclear Power Plant

b. Bioenergy Development

c. Development of Geothermal Power Plant

d. Clean & Efficient Technology Implementation

e. Development of Energy Supply on Small Grid System

40. 2nd Priority Program: Fulfilment of Energy Needs

Priority Activities:

a. Development of Electricity Power Plant, Transmission & Distribution

b. Capacity Building for Oil and Gas Infrastructure

c. Establishment of Energy Reservation Backup (CPE)

d. Increasing Oil and Gas reservation

e. Increasing Oil and Gas Production

f. Fulfil Coal & Gas DMO ? Domestic Market Obligation

41. Indonesian Policy is influenced by the long-term governmental development planning, currently summarised in the **"National Long-Term Development Plan" (RPJPN 2005-2025).** The RPJPN was divided into four phases. The first and second phase were already implemented - **"National Medium-Term Development Plan" (RPJMN) from 2005-2009 and 2010-2014**. The RPJPN is a development plan and focuses on conducting institutional restructuring. The first phase (2005-2009) was implemented during the economic and financial crisis. The second phase (2010-2014) was mainly aimed at increasing the quality of human resources (including the role of science and technology and boosting the national competitiveness). The third phase is focusing on economic competitiveness and on the basis of natural resources, human resources capital quality increase and science, technology and innovation prioritisation. The fourth and final phase **(RPJMN) 2020-2024** targets the quality of human resources, the development of infrastructure, the application of S&T and improve the state sovereignty and territorial integrity. In addition to the RPJPN, the Indonesian government embarked on a national innovation strategy called "**Master Plan for the acceleration and Expansion of Indonesian Economic Development (MP3EI)**", which is implemented by the Ministry of Research, Technology and Higher Education. MP3EI is aimed at the acceleration of the transformation to become a developed country. [37]

42. The MoCSME has developed their own specific targets for SMEs, included in policy documents under the **RPJM 2020-2024** with a focus on increasing the contribution of SMEs to the economy and improving support services specifically targeted to the needs of SMEs. In terms of support services to innovation in SMEs offered by the government, MoCSME Strategic Plan 2015-2019 provided a range of programs, including business incubators, business development services and centres for integrated commercial services. Centres for integrated commercial services known as PLUT (Posit Layanan Usaha Terpadu) are a network of decentralised one-stop shop business development centres with SME-customized services operating at the provincial level. While in 2014-2016 over 192,000 businesses received assistance from these centres, there are no specific services reported for cleantech SME.

43. While there are around 90 business incubators in Indonesia[38], very few specifically target the cleantech sector. Efforts have also been made to establish an incubator business legal framework within the Indonesian economy[39], but currently no legal framework exists for this. The online portals established for SME services have also had a limited impact, as they are either not easily accessible or non-user friendly for the SME community.

44. Indonesia does have an intellectual property (IP) rights framework in place, but improvement is still required in terms of increasing user confidence, awareness, creation of comprehensive database

and actual enforcement. It has also been highlighted by an OECD report that the IP rights system in itself is not enough to stimulate innovation, and complementary innovation policies are still required to effectively boost innovation in Indonesia.[40]

45. Financial support services for Indonesian SMEs primarily stem from the government rather than private sources. While a number of such schemes have been piloted such as the Working Capital Assistance for Start-Ups, their scope has remained small due to a limited government budget. The Working Capital Assistance for Start-Ups, targets fresh entrepreneurial graduates from vocational schools, academies and universities who are still unemployed; start-up capital of up to IDR 25 million (~US$ 2,100) is offered and entrepreneurs are not required to pay back the grant. To date, 2,160 graduates have taken part in the programme.

46. In terms of national policy focusing on innovation within SMEs, the MoCSME, together with the Ministry of Education and Culture (MoEC), and RISTEKDIKTI, has introduced a joint regulation on **National Movement for the Development of Business and Technology Incubator aimed to develop Innovative Entrepreneurship,** as well as plans to issue a new Presidential Regulation on an **Incubator for Innovative Entrepreneurs.** The government has also created a website of the **National Innovation System**[41] which provides a database of innovation service providers, as well as information on support programs, but to date the information is still incomplete.

47. RISTEKDIKTI has the responsibility to assist the President of the Republic of Indonesia in formulating national policies and implementing coordination in the field of research, science and technology. In addition, the Ministry has created a Research and innovation fund (around $40 million). It is envisaged that RISTEKDIKTI will be a project partner, for instance the project will work with the ministry on innovation policies and also analyse how there could be mutual benefits between the project and the research and innovation fund.

48. The Indonesian private sector has also undertaken a number of initiatives supporting entrepreneurship as part of their companies? Corporate Social Responsibility (CSR) activities. The Ciputra Group, one of Indonesia?s leading property corporations, for instance, has established the Ciputra Foundation and the Universitas Ciputra Entrepreneurship Centre with the aim to educate more than 4 million Indonesian people on the principles of entrepreneurship. A variety of courses are offered at university campuses or online.

49. From the roughly 50 SAO?s currently operating in Indonesia, very few offer programs targeting start-ups in cleantech, renewable energy, gender and social entrepreneurship sectors. The section below summarises SAO?s and other organisations and funds currently operating in Indonesia as well as other related projects supporting cleantech start-ups.

TABLE 4 BASELINE INITIATIVES

Name of SAO or project	Description of activities
Technology Incubator Centre (Balai Inkubator Teknologi / BIT), Incubation Program	BIT is a government-based SAO. It is an implementing unit of the BPPT. BIT aims to carry out technology incubation services to create new strong, independent and competitive companies. BIT provides: 1) Office space and facilities to develop the business at an early stage; 2) Access to research, professional networks, technology, international networks and investment; 3) Access to existing funding sources or funding institutions; 4) Consultancy on the management and market issues, financial and legal aspects, trade information and technology; 5) Trainings to prepare business plans, management and other abilities; 6) Networking with universities, research institutions, the private sector, professionals and the community. BIT partners are SMEs, entrepreneurs, experts, research units in government and private research centres, financial institutions, communities and others who give priority to technology and innovation in business activities and therefore provides a network for GCIP to build on. At least 38 start-ups (tenants) have participated in BIT programs.
Ministry of Research and Technology / National Research and Innovation Agency (RISTEK-BRIN), Research and Innovation Funds	Previously, RISTEK-BRIN is a part of the Ministry of Research, Technology, and Higher Education (RISTEKDIKTI) that is currently divided into two ministries, RISTEK-BRIN and Ministry of Education and Culture (MEC). Under the RISTEKDIKTI, there is a USD $35 million fund for research and innovation. However, after the separation into two ministries in October 2019, there is no clear information yet who will administer this fund and how this fund will be distributed. All research groups within universities are under the MEC, while other government research institutions are under the RISTEK-BRIN. The research fund will be a financing resource for GCIP beneficiaries to further develop their innovations.

New Energy Nexus (NEX) Indonesia, Incubation and Boot-camp Program	NEX Is an international non-profit that supports clean energy entrepreneurs with funds, accelerators, and networks. Its activities include: 1) Offering early-stage incubation, events, hackathons and skills training for start-ups; 2) Supporting later stage start-ups with matchmaking and commercial partnerships; and 3) Providing a $4M clean energy seed fund to support the growth of enterprises that show potential to scale. There are two main NEX?s programs First, Smart Energy Incubation Program that provides hands-on business advisory and support services to outstanding start-up teams focusing on innovative, smart and clean energy ventures. Second, Smart Energy Start-up Boot camps that are designed to provide engineers, developers, designers, energy professionals and entrepreneurs who are passionate about clean energy to learn how to build their own smart and clean energy start-ups. Boot camp participants with dynamic and innovative business models are invited to take part in the NEX Indonesia Smart Energy Incubation/Acceleration Program to further develop their business and receive potential seed funding. The boot camps are held in major cities across Indonesia in collaboration with local partners. NEX provides a successful model for BPPT through BIT to learn from especially around bootcamps, hackathons and matchmaking.
Angel Investment Network Indonesia (ANGIN) Investment and Advisory Programme	ANGIN is the first and largest group of prominent high-net-worth individuals in Indonesia providing funding and mentoring to early-stage companies active in Indonesia. ANGIN team of professionals provides strategic sourcing, due diligence support and legal implementation to its investors while bringing entrepreneurs to investment readiness. Since its inception in 2013, ANGIN investors have invested in more than 30 companies with a unique mix of technology (or ICT), offline companies, and social enterprises. Leveraging its Angel Network, the ANGIN team has expanded its expertise to research, venture building and consulting work for both Indonesian and International organizations. ANGIN frame its services under ANGIN Investment and ANGIN Advisory.

Kopernik, ?Wonder Women? Programme	Kopernik is an Indonesia-based non-profit organisation connecting simple technology with last mile, or rural, often isolated communities to reduce poverty. In many cases, these communities have limited access to major energy sources such as electricity networks (PLN) and gas stations (Pertamina). Therefore, they depend on the local energy sources (off grid) such as fuelwood, micro hydro, solar panel, and wind turbines. Kopernik?s Wonder Women Programme is a proven and award-winning program with a distribution network of primarily female sales agents. This initiative empowers Indonesian women to become clean energy micro-social-entrepreneurs. Women participate in training in order to successfully sell simple solar lights, clean cook-stoves and water filters in their communities, boosting their income and expanding access to these life-changing technologies. Since 2011, more than 300 Indonesian women have participated in Kopernik?s women?s economic empowerment programs in East Nusa Tenggara, West Nusa Tenggara, East Java and Aceh. They have sold almost 10,000 technologies which have reduced carbon emissions by more than 5,000 tonnes to date. The programme establishes a foundation of initiatives that GCIP may learn from to best support women-led enterprises in the project.
The Clean Energy Investment Accelerator (CEIA), Indonesia Program	CEIA brings together large commercial and industrial users to demonstrate innovative renewable energy purchasing models and strengthen policy frameworks. It is an innovative public-private partnership jointly led by Allotrope Partners, World Resources Institute, and the U.S. National Renewable Energy Laboratory. The CEIA Model is built on three essential pillars for mobilizing clean energy investment at scale. The CEIA is testing, proving, and scaling clean energy solutions to transform key emerging markets including Indonesia. CEIA provides a model for public-private partnership that GCIP may mirror.
New Ventures Indonesia (NVI) Program	The NVI program is harnessing the power of SMEs to support a new development approach that values communities and the environment. Main activities include: Hosted business seminars, international investor forums, networking of entrepreneurs, screening sustainable enterprises, growing a portfolio of sustainable enterprises and has established an IT-training facility for SMEs. Embedded within NVI activities are strategic partnerships that include business incubators, venture capital funds, multinational companies, multilateral organizations and business schools. In the end, NVI works toward the long-term conservation and sustainable use of natural resources in Indonesia by employing a market-driven approach that focuses on supporting environmentally sustainable and socially responsible small and medium enterprises.

Engie Project	One huge milestone for Indonesian geothermal energy was the financial closing for a large geothermal plant by Engie, one of the world?s largest energy utility companies in the Southern Solok region in West Sumatra province. Historically challenged by lack of funding in renewable energy sectors, the Engie plant is an excellent example of Indonesians seeing the increasing importance of renewable energy as a resource, and provides an example to GCIP enterprises that their technologies have a potential market within Indonesia. The geothermal industry has huge potential in Indonesia, with Indonesia ranking as one of the world?s largest potential geothermal resources.
Indonesian Institute of Science (LIPI), Annual Indonesian Clean Technology Meeting	LIPI is responsible in conducting research and development, including in clean technology sectors. It is conducting Annual Indonesian Clean Technology Meeting. This is a platform for meeting experts, practitioners, policy makers and young people from universities, research institutes, non-governmental organizations, industry, and governments throughout Indonesia who care about clean technology and the latest environmental issues. It is expected that all participants and stakeholders from both government and industry institutions can form cooperation in order to realize research products that can be utilized for the people of Indonesia. The topics in the meeting include: clean production process, environmentally friendly products and materials, wastewater treatment technology and management, environmental measurement, green energy, etc. LIPI provides GCIP with a platform for connecting with cleantech researchers and a broader network of experts, that may be helpful in strengthening the CIEE in Indonesia.

Coordination with UNIDO initiatives:

50. **The Private Financing Advisory Network (PFAN)**, is an initiative hosted jointly by UNIDO and the Renewable Energy and Energy Efficiency Partnership and is a global network of climate and clean energy financing experts that offer business coaching and investment facilitation to entrepreneurs developing climate projects in emerging markets. PFAN mobilizes private financing to reduce greenhouse gas emissions and build climate resilience ? contributing to Paris Agreement and SDGs i.e., SDGs 7 (Energy), 9 (Industry), 13 (Climate Action), and 17 (Partnership). A network of ninety-nine (99) in-country private sector experts in 39 countries are supported by network of forty-five (45) investment partners globally to provide investment advisory services, investment facilitation and financing. To date, PFAN has supported at least 127 climate and clean energy businesses to mobilize more than USD 1.7 billion of investment. Furthermore, PFAN currently has a pipeline of hundreds of projects across the globe that are being supported. Further results demonstrate that through this investment, 3.3 million tonnes of CO2 have been mitigated annually and an additional 975 MW of clean power installed. This year already, PFAN has facilitated at least 69 investment-ready projects.

51. It is also foreseen that the project is closely coordinated with other participating countries in UNIDO GCIP, in neighbouring countries Cambodia and Thailand and other similar ongoing country

and regional initiatives to avoid overlap of activities. This could also create opportunities for Indonesia, e.g., through the participation of Indonesian entrepreneurs at the Cleantech Global Forum or other shared training programmes for the project teams and other events. Additionally, the project will be executed with taking into account lessons learned and experience during implementation of other GEF/UNIDO Cleantech and international development projects

52. **Promoting Industrial Energy Efficiency through System Optimization and Energy Management Standards in Indonesia ? UNIDO/GEF** project promotes industrial energy efficiency through system optimization approach and introduction of ISO energy management standards. The project was completed in December 2017. The projects activities helped to develop industry experience in emissions reduction and energy efficiency technologies as well as ISO energy management approaches. The project helped to establish technical expertise and networks within Indonesia that will support the development of the GCIP network.

53. The expertise developed in the project will also provide a baseline for development of clean technologies and experts will be encouraged to participate in the GCIP accelerator programme.

Other donor funded initiatives:

54. **Global Project to Leapfrog Markets to Energy Efficient Lighting, Appliances and Equipment? UNEP/GEF** aims to mitigate climate change by transforming national and regional markets to energy-efficient products. Expertise, clean technologies and businesses in the energy-efficient product market supported under this project may be suitable for business development support and scaling up through the GCIP accelerator program. The GCIP project will also draw upon national and regional experts who participated in the UNEP project to join the GCIP Indonesia Network.

55. **Global Programme to Support Countries with the Shift to Electric Mobility Project (concept note stage) ? UNEP/GEF** aims to shift to more sustainable modes of electric mobility. The GCIP project will support the establishment of businesses and entrepreneurs in the E-mobility sector in Indonesia working closely with the UNEP regional program during GCIP Indonesia implementation.

56. **Indonesia Geothermal Resource Risk Mitigation Project - World Bank/GCF** has the goal of harnessing geothermal energy development to help reduce greenhouse gas emissions while meeting electrification needs in Indonesia. The GCIP project aims to create synergy with the project and further reduce the business risk of geothermal exploration through offering support to businesses and entrepreneurs in the geothermal sector.

57. Focusing on innovation policy, the World Bank?s **Research and Innovation in Science and Technology Project** aims to create an enabling policy environment for R&D in science and technology, to improve the public research and development institutes performance, and to improve human resource capacity in the area of science, technology and innovation. The project?s deliverables have mostly focused on BPPT?s capacity which will help form a solid baseline for the GCIP project?s activities.

58. The 4th Development Objective of the **USAID?s Country Development Cooperation Strategy (CDCS) for Indonesia 2014-2018** is to ensure that a collaborative achievement in Science, Technology, and Innovation is increased, with an estimated annual budget of $15-25 million. This Development Objective focused on three key intermediate results; i) Academic Capacity and Scientific Research Strengthened; ii) Evidence-based Decision-Making Enhanced; and iii) Innovative Approaches to Development Utilized. These objectives are closely in line with those of the GCIP project, and as the activities will primarily be targeted at universities and research institutes, a number of potential areas of synergy exist.

59. Micro-turbine Cogeneration Technology Application Project (MCTAP) and Wind Hybrid Power Generation (WHyPGen) Marketing Development Initiatives ? UNDP/GEF will benefit GCIP project by connecting with project stakeholders to disseminate information about the competition and involve project counterparts/beneficiaries where relevant, to take part in the Cleantech competition and accelerator programme.

60. Indonesia is one of the 23 Mission Innovation (MI) members[42]. The GCIP project could also help accelerate entrepreneurs that will support Indonesia?s participation in MI. Furthermore, the priorities of GCIP could also be aligned to MI challenges to ensure that Indonesia start-ups will be showcased at the upcoming MI Ministerial events.

61. This project will also seek cooperation and synergies with the Clean Energy Investment Accelerator (CEIA). CEIA is an innovative public-private partnership jointly led by Allotrope Partners, World Resources Institute, and the U.S. National Renewable Energy Laboratory.[43].

c) The proposed alternative scenario with a brief description of expected outcomes and components of the project

62. The Sustainable Development Goals and the Paris Agreement are the world?s commitment to safeguarding the global commons. The United Nations Industrial Development Organization (UNIDO), with its unique mandate to support inclusive and sustainable industrial development, has partnered with the Global Environment Facility (GEF) to address the most pressing global environmental challenges of our time. Through fostering innovation and entrepreneurship ecosystems, UNIDO and GEF seek to promote affordable and scalable solutions enabling partner countries to leapfrog to cleaner, more resilient economies. There is a need for full engagement in mobilising the private sector to leverage innovation, knowledge transfer, investment and market access. The recipient countries involved in this effort face substantial environmental challenges.

63. In 2011, the United Nations Industrial Development Organization (UNIDO), with the support of the Global Environment Facility (GEF) and the Government of South Africa, successfully implemented the ?Greening the COP17? project. One of the four components of the project focused on the design and implementation of the first South Africa Clean Technology Competition (2011 SA Cleantech) for

green entrepreneurs and small and medium-size enterprises (SMEs) with innovative ideas and concepts. This success of the 2011 SA Cleantech saw the project expand into the Global Cleantech Innovation Programme (GCIP) for SMEs, simultaneously implemented in Armenia, India, Malaysia, Pakistan, Turkey and South Africa in 2014 and has been expanding worldwide ever since.

64. The conducted evaluation of the GCIP programme in 7 countries (covering period 2011 ? 2017), showed that the GCIP provides a platform for measuring impact in GHG emission reductions, growth of the cleantech industry and number of new cleantech jobs created[44]. The GCIP supports achievement of the Paris Agreement and the Sustainable Development Goals (SDGs), by targeted: SDG7 - Affordable and Clean Energy, SDG8 ? Decent and Economic Growth, SDG 9 ? Industry, Innovation and Infrastructure, SDG 5 - Achieve gender equality and empower all women and girls, SDG 6 - Clean water and sanitation, and SDG13- Climate Action. In addition, GCIP is currently developing and enhancing its M&E tools to comprehensively capture the impact of the programme, and will also expand into innovation for sustainable cities, thus contributing to SDG11 ? Sustainable Cities and Communities.

65. Experience from GCIP implementation has shown that after successful completion of the GCIP Accelerator, start-ups and SMEs required further support in accessing additional sources of finance and to break into the market. Therefore, the GCIP GEF framework programme has been designed. The GCIP framework sets out the following objectives: promoting integrated solutions and multi-focal area approach, geographic expansion, added focus on investment facilitation & commercialisation, and deployment of demand-drives solutions.

66. The global framework currently includes ten child-projects, all of which are designed to effect change through three driving pillars. More specifically, those include:

Pillar 1. Transforming early-stage innovative cleantech solutions into commercial enterprises;

Pillar 2. Cleantech innovation and entrepreneurship ecosystems strengthening and connectivity;

Pillar 3. Programme coordination and coherence.

67. Entrepreneurs and start-ups in the GCIP participating process acquire skills development in business models, clean technologies and other related areas to succeed and increase their potentials of securing investors in their start-ups. Furthermore, the developed new clean technologies by alumni of the GCIP now, will be further improved and promoted at the national, regional and global levels to achieve widespread commercialization, enhance access to venture capitalists, angel investors and grant funding. Ultimately, this programme will ensure adoption of these technologies and have a positive impact on the carbon trajectory of the local communities in different countries.

68. In light of above, the project focus is on promotion of innovation and entrepreneurship ecosystem by identifying and nurturing cleantech innovators and entrepreneurs in the fields of energy efficiency, renewable energy, energy storage, waste to energy, resource efficiency, waste beneficiation, water treatment, water efficiency, green building, low emissions transport, agro-industry, life sciences,

internet of things and digitization. By developing and promoting a culture of ?innovation? among entrepreneurs, it will build a transformational national programme in cleantech.

69. Involvement of policy makers for strengthening the policy framework for SMEs and entrepreneurs in investment activities to support and accelerate start-ups will provide an added value to the economic green growth and contribute towards climate change mitigation and its sustainability beyond the project duration. Furthermore, the accelerator programme, as part of the project?s focus, will provide substantial support to entrepreneurs in products commercialization and the best cleantech start-ups progress through the GCIP. An enabling conducive business environment for cleantech innovation and entrepreneurship is an essential and integral part of GCIP , with aim to build sustainable ?ecosystem? for innovation and entrepreneurship in small businesses, for green jobs creation (with particular focus on young and women entrepreneurs) in the Indonesia. Through this cleantech ecosystems and accelerator approach, the GCIP catalyses investment to support and accelerate start-up entrepreneurs towards the development and commercialization of their innovative ideas.[45]

Project approach

70. This project is developed as a child project of the GCIP Framework. As such, it will link the GCIP cleantech innovation and entrepreneurship ecosystem (CIEE) of Indonesia to the global network of CIEEs in other GCIP partner countries, as well as it will receive support from the GCIP Global coordination child project . More specifically, the BPPT, which has been selected as the national project executing entity (national PEE), will be supported by three global project executing entities (global PEEs), including PFAN (Private Financing Advisory Network), Network for Global Innovation (NGIN) and Cleantech Group (CTG).

71. As part of the larger GEF-UNIDO global programme, the Global Cleantech Innovation Programme (GCIP) for SMEs in Indonesia, is synchronized with the GCIP Global and aims to support and nurture clean technology entrepreneurship and innovation. The project has three components, in line with the GCIP Framework, which have been designed based on the current needs of developing countries and GCIP partner countries including Indonesia, as well as recommendations from the GEF?s independent evaluation of GCIP conducted in 2018, and with feedback from the previous nine GCIP country projects implemented between 2013 and 2019. In particular, the project will 1) transform early-stage innovative cleantech solutions into scalable enterprises; 2) strengthen the capacities of CIEE stakeholders and connect them; 3) supporting and working with national policy makers to strengthen the supportive policy framework for SMEs and entrepreneurs; and 4) engage with the GCIP Global to ensure programme coordination and coherence.

72. The project will adopt an inter-disciplinary holistic approach involving start-ups, SMEs, national ministries and institutions, academia and research centres, business associations, financing institutions, foundations, venture capitalists and utilities within and beyond Southeast Asia. The project will closely coordinate with the GCIP Global, as well as other similar national and international efforts, as it is

critical to maximize synergies and share knowledge and best practices that can help in enhancing entrepreneurs? contributions towards climate change mitigation, while increasing productivity and generating growth and wealth.

73. The project takes a particular focus on cleantech in the energy sector which is one of Indonesia?s most significant emitting sector due to its fossil fuel dominated energy mix, which is projected to expand further towards 2026?27.[46] As the country is the world?s largest producer of biofuels, there are opportunities for efficient technology in the biofuels sector. Furthermore, the project identifies two areas of critical focus to reduce GHG through 1) a focus on reducing Indonesia?s dependence on import of oil and oil products through increased generation capacity or efficiency in geothermal and micro and pico- hydro as well as energy efficiency and demand side reduction technologies 2) efficiency or reduction in dependency on biomass as energy for cooking, lighting and process heat in rural areas.

74. Given the identified needs, the project will help SMEs and entrepreneurs in the Cleantech sector focusing efforts in the priority sectors identified which include: energy efficiency, renewable energy, energy storage, waste to energy, and resource efficiency with additional categories such as waste beneficiation, water treatment, water efficiency, green building, low emissions transport, agroindustry, life sciences, internet of things and digitization to compete on the global market, connect with potential investors, customers, and partners through the global Cleantech network. Fostering of innovation, particular within SMEs, will result in a number of social benefits ? as such, emphasis will be placed on those business proposals with scalable social and economic benefits ? particularly those in underserved regions and population clusters.

75. In order to accelerate the project activities, an integrated, inter-disciplinary and multi-stakeholder ?ecosystems approach? involving start-ups and SMEs, national ministries and institutions, academia and research centres, industrial associations, financing institutions, foundations, venture capitalists and utilities within and beyond Indonesia will be applied.

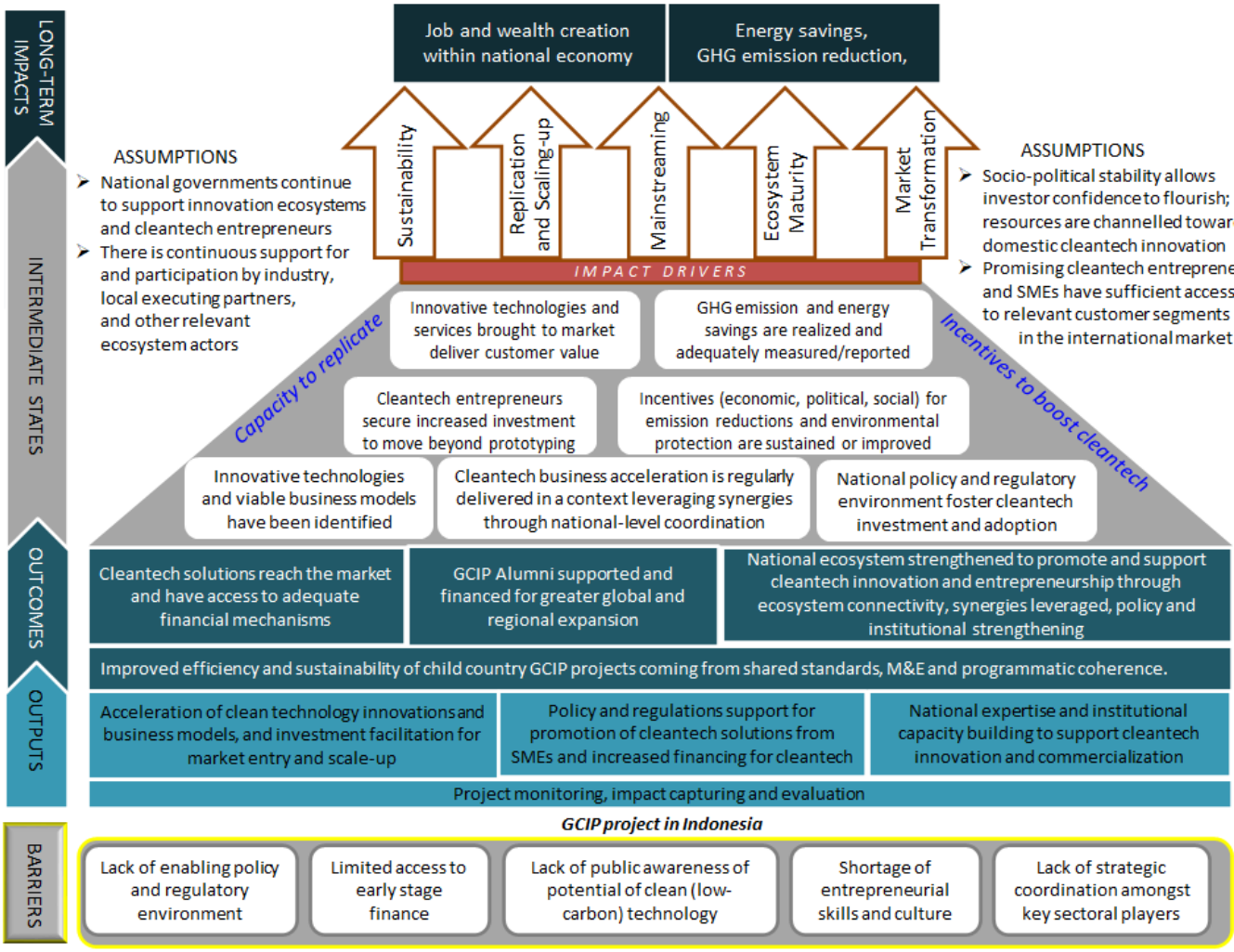
76. The project will closely coordinate with other similar national and international efforts as well as with other GCIP partner countries under the global coordination platform of the GCIP, to maximise synergies, knowledge and information exchange, as well as to facilitate market access and expand financing options (for further information on the linkage with the GCIP, please refer to section 1c).

77. By doing so, with a relatively minimal GEF grant and through the creation of a cleantech coordination and knowledge platform, this project will support mobilization of investment to support and accelerate start-up entrepreneurs towards development and commercialization of their innovations.[47]

78. UNIDO?s extensive experience in implementing GCIP over the years ensures Indonesian investors? confidence in the quality and chances of success of the cleantech enterprises supported. This is considering almost 10 years of experience and proven track records, and a brand that is recognized and trusted internationally by investors. Moreover, the project will ensure an immediate integration of the CIEE in Indonesia and the supported entrepreneurs in a global network of cleantech developers and investors. Also, this project will aim to increase market adoption of clean technology innovations, thus

leading to a reduction in emissions and fossil fuel consumption, to increasing green jobs, national capacity and market developments. Also, active involvement of innovation and research institutions, universities and other project partners will provide added value to the clean tech areas and support to the participating innovators and entrepreneurs.

79. Figure 3 shows the Theory of Change (TOC) for this project and the description of the TOC is highlighted in the associated text box.



79 i. The entrepreneurs (start-ups and SMEs) in Indonesia face several barriers, as described in the section a) ?the global environmental and/or adaptation problems, root causes and barriers that need to be addressed?. These barriers include: lack of an enabling policy and regulatory framework, limited access to early-stage finance, lack of public awareness of the potential of cleantech, shortage of entrepreneurial skills, lack of strategic coordination among key CIEE players, as pictured on the bottom of the graph above.

79 ii. In order to alleviate the above-mentioned barriers, the GCIP Indonesia focuses on the following lines of intervention (outputs): 1) adaptation of GCIP Indonesia guidebooks; training and certification of a pool of cleantech innovation and entrepreneurship experts (trainers, mentors, judges); organization of three cycles of the annual competition-based GCIP Indonesia Accelerator; 2) provision of targeted business growth support services to selected cleantech enterprises; connection of enterprises to financing opportunities and provision of tipping-point investment facilitation support; provision of mentoring and partnership support to cleantech enterprises for global market expansion; provision of investment mobilization support; 3) institutional capacity building of the CIEE actors; development of cleantech innovation and entrepreneurship policies, regulations and recommendations; promotion of linkages, collaboration, and synergies across CIEEs; 4) adaptation and implementation of the GCIP internal guidelines for project management teams; adaptation and implementation of the programme-level knowledge management, communication and advocacy strategy; creation of the GCIP Indonesia web platform; adaptation and application of the GCIP methodology for impact assessment; tracking and reporting of project activities based on the GCIP monitoring and evaluation (M&E) framework; and external terminal evaluation.

79 iii. If the above listed outputs are successfully realized; THEN: innovative cleantech is brought to market to deliver customer value, GHG emission and energy savings are realized and adequately measured/reported, cleantech entrepreneurs secure increased investment to move beyond prototyping, incentives(economic, political, social) for emission reductions and environmental protection are sustained or improved, innovative technologies and viable business models are identified, cleantech business acceleration is regularly delivered in a context leveraging synergies through national-level coordination, and national policy and regulatory environment fosters cleantech investment and adoption; BECAUSE: cleantech solutions with high-impact potential are supported to reach commercialization, start-ups and SMEs are supported through advanced and gender-responsive business growth and investment facilitation services, the CIEE in Indonesia is strengthened and interconnected, and the efficiency and sustainability is ensured through coordination and coherence with other GCIP country projects, as well as impacts and progress are tracked and reported.

79 iv.. Ultimately, the project will deliver multifaceted environmental and socio-economic high-level impacts, including job and wealth creation, energy savings, and GHG emissions reductions.

Figure 3 Indonesia GCIP Theory of Change ? graphical and descriptive presentation

80. The GCIP approach in Component 1 especially, accelerates innovations that have highest GHG emission reduction potential and have highest chances of going to the market through a number of phases and together with its partners like PFAN, continually de-risks the enterprise?s business model in

order to increase the likelihood of investor interest. This is important to note since the sources of investment that the GCIP start-ups will be able to mobilize will depend on the alignment of the priorities of the institutions that have shown interest to invest.

GCIP connection to PFAN to support the start-up to scale up journey of cleantech enterprises

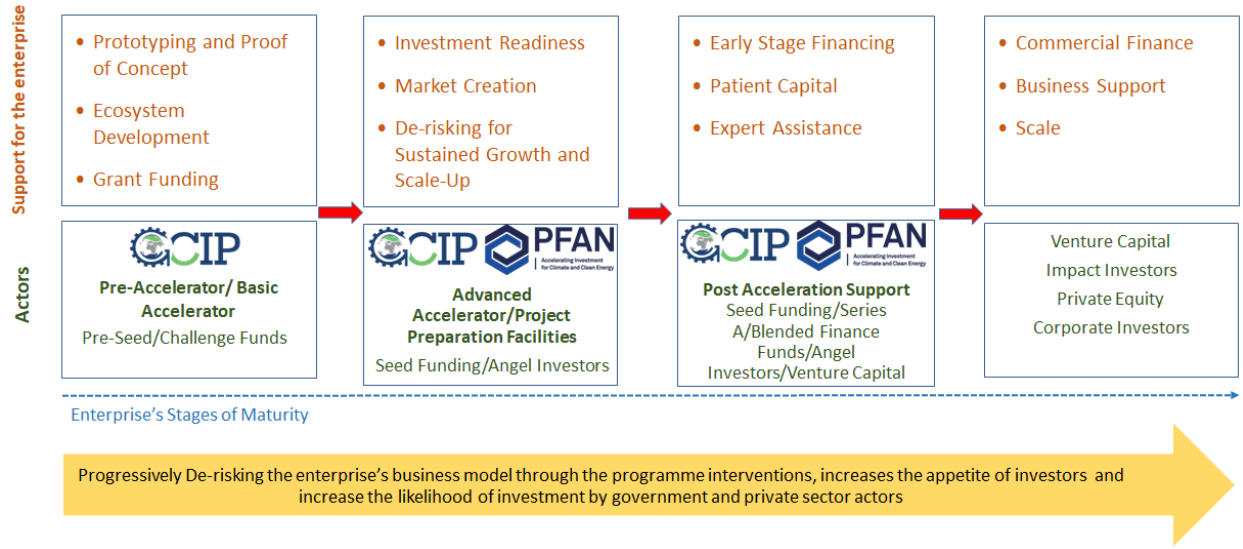


Figure 4 Start to Scale-up Journey, De-risking for Investment Readiness

81. The objective underpinning the linkages established between GCIP and PFAN is to offer the ventures supported by the project a continuum of support services as they mature towards commercial viability and scaling up. GCIP combines a top-down (policy support) with a bottom-up (support for home-grown innovation) approach. It is technology-neutral and its theory of change is grounded in sustainability (incl. energy) transition theories and as such, the type of the innovations that are supported are not pre-determined.

82. The final investment decisions are made between the start-up and the investor, once they find common value. A start-up may have several investors mixing public and private financing. The connection between the country child project and the Global project enables investors at a global level to also access start-ups from each country i.e., through activities like Investor Connect, National Forums and the Global forums.

Project Description

83. This project will assist Indonesia in establishment of a supportive innovation ecosystem for sustainable green growth. This will be achieved through organization of an annual competition, with associated accelerator programmes, by creation of an enabling policy environment and institutional capacity for clean technologies innovation, and establishment of the Cleantech Platform to further support project activities. The Platform will be responsible for forming of the prerequisite conditions to launch the best innovative ideas in Indonesia?s economy, to support science and implement various projects at the national level. This will be further enlarged by establishment of the special fund for support and development of industrial start-ups to finance on competitive basis the measures to facilitate start-ups to faster enter into operation phase. Furthermore, assistance will be provided in drafting/improving the National Innovation and Entrepreneurship Strategies and regulations in Indonesia.

84. As part of a global initiative to promote innovative and environmentally friendly energy technologies (green technologies), the project is in line with the national programmes and GEF focal area priorities. As a result of the competition and the accelerator programme, promoted clean energy technologies will lead to a reduction in GHG emissions and contribute to Indonesia?s sustainable green growth, thereby addressing a global issues of climate change. It will target the following SDGs: Goal 13: Climate action, Goal 17: Partnerships for the goals, Goal 9: Industry, innovation and infrastructure, Goal 7: Affordable and clean energy, Goal 6: Clean water and sanitation, Goal 5. Achieve gender equality and empower all women and girls, Goal 8: Decent work and economic growth.

85. GCIP is composed of three main components to promote clean technology innovation and M&E. The components have been specifically designed to address identified barriers and ultimately support sustainable and competitive entrepreneurship and creation of green jobs in Indonesia while ensuring coordination and effective connection with the GCIP global GEF framework document.

Component 1 ? Transforming early-stage innovative cleantech solutions into commercial enterprises

86. Component 1 aims at providing direct support to early-stage enterprises to enhance their capacity and competitiveness, and to leverage market opportunities. More specifically, Outcome 1.1 focuses on entrepreneurial training and business acceleration support, as well as investment facilitation services to the cleantech enterprises at growth stages that demonstrate market traction and evidence of commercialization and can benefit from specialized support.

87. The diagram below shows the types of assistance required by cleantech enterprises, depending on their stage of growth.

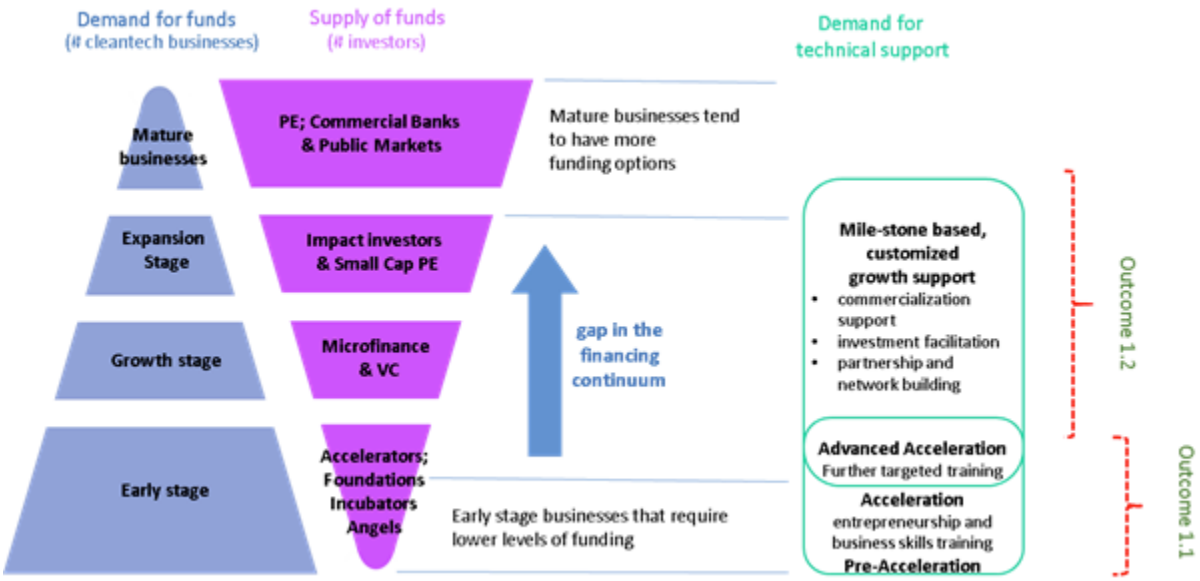


Figure 5 Demand for funds and technical support per development stage

88. For clarification, a brief overview of the three types of GCIP support is given below, in addition to pre-acceleration support.

TABLE 5 OVERVIEW OF THE AVAILABLE GCIP BUSINESS ACCELERATION SUPPORT

Pre-Acceleration ? support activities to enable the early-stage teams in their pipeline to develop their initial concepts, team and communication. This could consist of workshops, hackathons, start-up camps or mini-competitions. These activities and events would take place before the launch of the main GCIP accelerator and would be focused on improving concept formation and proof of concept, leading to increasing the applicant pool whilst simultaneously improving the ability of each team to communicate and initially validate their concept.

The **GCIP Accelerator** is a four-to-six-month curriculum designed specifically to support cleantech innovations stemming from developing and emerging countries, to develop viable business models and grow cleantech enterprises. Through the GCIP Accelerator, a cohort of cleantech innovations with high-impact potential are identified and invited to receive intensive business and entrepreneurship mentoring and coaching to accelerate their growth as businesses. Support is provided to improve their business skills and investor pitch and in connecting them to potential business partners, financiers or investors. The goal is for participating enterprises to validate, among others, their market, product and technology leading to their first investment and customer. The tailored mentoring programme combines international expertise through an ongoing training programme with carefully chosen mentors to support the entrepreneur teams. Specific guidance will be provided to help the enterprises to maximize their potential climate benefits and to minimize any negative environmental or social impacts identified, particularly relating to local climate risks
Advanced Acceleration is support focused on building individual businesses in a manner that is tailored to their needs rather than a focus on a whole cohort and creation of specific deliverables (such as investor presentation) in the GCIP accelerator. The intervention would still be time-bound and the level of support would be specific to the needs of those startups but will be underpinned by a few key webinars. The objectives would also be very precise and outcome focused such as: entering the first overseas market, closing a partnership, investment agreement or raising venture capital and corporate investment. Unlike a mentor-mentee relationship under the annual accelerator with defined coaching roles (e.g., specialist and general mentors) advanced acceleration requires hands-on tailored support and direct operational input. This would typically take the form of an Executive in Residence (EIR) who would be a senior executive or serial entrepreneur with experience of growing cleantech ventures. They work intimately with a startup on tackling operational, financial and strategic issues relating to a very specific targets outcome. As part of an advanced accelerator a startup may work with multiple specialist EIRs according to their needs and growth.
The **Post Acceleration support** requirements are much deeper and broader than the support from acceleration. Effective support requires an ability to respond quickly and authoritatively to urgent questions from alumni ventures. This could include guidance/facilitation on investment (e.g., close a VC investment or an IPO), team development (e.g., filling team gaps, recruitment etc.) and entry into new markets (e.g., market intelligence, connection

89. To ensure coherence and to achieve the highest impact potential of GCIP interventions along the start-up to scale-up journey of a cleantech enterprise, detailed eligibility criteria/milestones will be defined for the three windows of support under GCIP, by the global child project. These will include proof of concept, level of technology readiness (TRL), business and market readiness levels (BRL/MRL), market potential, proof of evidence of growth before, during and after participation in the GCIP accelerator, further growth potential, environmental and social impact potential, and effectiveness of environmental and social mitigation measures, among others. The criteria will include appropriate definitions of start-ups and SMEs. For each window of support, the criteria will define the scope and required impact of the GCIP support and will be in line with the needs and priorities of GEF-7 climate change focal area and the SDGs.

Outcome 1.1 Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator (supporting GEEW)

90. Early-stage cleantech innovations with high impact potential will receive business acceleration support for increased market and investment readiness. To enable this, the GCIP Indonesia will be provided with assistance by the GCIP Global, which will encompass provision of guidebooks for operation and management of the GCIP Indonesia Accelerator, Advanced Accelerator, and Post-Accelerator.

Output 1.1.1 The GCIP guidebooks and certification system are adapted for the GCIP Indonesia

91. The GCIP guidebooks (for Accelerator, Advanced Accelerator, and Post-Accelerator), that are to be developed under the GCIP Global, will be comprehensive documents that articulate the GCIP approach to promoting cleantech innovation and entrepreneurship in developing countries. As such, they will guide the operation and management of the GCIP Indonesia Accelerator, Advanced Accelerator, and Post-Accelerator, in that they will for example include proposed schedules; eligibility requirements and selection criteria for the participants; competition rules; training curricula and handbooks for applicants, experts (mentors, trainers, judges), and EIRs. The guidebooks will be shared with BPPT and appropriate training will be provided on their adaptation and use. National context and priorities will be fully considered in refining the approach and methodology of Indonesia, in order to ensure that the child project maintains coherence with other GCIP child projects at the global level, and at the same time offer optimal interventions to achieve the priorities of Indonesia.

92. **The GCIP guidebooks will be reviewed and adapted for BPPT to reflect the context of Indonesia?s cleantech ecosystem** including market conditions, policy environment, development priorities, technology priorities, local examples etc., to produce two GCIP Indonesian Accelerator Guidebooks. In addition, the GCIP Indonesia Accelerator, Advanced Accelerator, and Post-Accelerator training curricula and delivery format will be customized to meet national needs, with the support from the GCIP Global. The GCIP Indonesia Accelerator guidebooks will then be used as operations and management plans to conduct the annual national cleantech innovation accelerator. The guidebooks will be translated into the local language as required. Improvements and suggestions from the national guidebooks may be incorporated into the global guidebook for application to the next Accelerator cycle.

93. With due consideration of the framework conditions developed by the GCIP Global for each type of the available GCIP support, the GCIP Indonesia guidebooks will set the final selection criteria for the Accelerator, Advanced Accelerator, and Post-Accelerator. In particular, in line with preferences expressed in the PPG phase by the private sector and state sector organisations potentially interested in innovation and investment, the technology focus is expected to be placed on cleantech solutions in, among others, the following areas: energy efficiency, renewable energy, energy storage, waste to energy, resource efficiency, waste beneficiation, water treatment, water efficiency, green building, low

emissions transport, agroindustry, life sciences, internet of things and digitization. By developing and promoting a culture of ?innovation? among entrepreneurs, it will build a transformational national programme in cleantech.

94. Lessons learned from the GEF 5 GCIP include reference to the need for ?better technical support? under Pillar 1. As such, in addition to the guidebooks and competition criteria establishment support provided to BPPT, NGIN will develop tools for a) assessment of needs of GCIP Indonesia entrepreneurs (applicants, participants, and alumni), b) planning and monitoring of key GCIP Indonesia events and develop (including the identification of interested corporate partners) c) pilot the Global Innovation Challenge as part of the GCIP Global Accelerator (as from 2022).

95. The **training and certification of the cleantech experts** will be supported through the development of methodologies, tools and training materials. It is envisaged that BPPT will select and manage technical partners to assist in the design and coordination of the training programmes. In addition, BPPT will work with key partners from the global programme in preparing a customised certification protocol that responds to the technical needs within Indonesia. The global partners that will participate in the activities under Output 1.1.1 include the Network for Global Innovation (NGIN) which offers extensive experience in working with national institutions in developing country contexts, and the Private Finance Advisory Network (PFAN), which offers matchmaking services between investors and high potential climate projects.

96. To align GCIP guidebooks and certification system, special attention will be dedicated to integrate the gender action plan and ensure alignment with environmental and social screening criteria (as outlined in the annexes): Gender equality and empowerment of women will be achieved through (i) recruitment of women trainers, mentors, judges; (ii) specific training and mentoring to promote women innovators, entrepreneurs, women-led start-ups; (iii) design of specific prizes and follow-up support programmes for women innovators, entrepreneurs, women-led start-ups that will have a significant impact on women?s entrepreneurial development; and (iv) design of specific prizes for innovations that have significant impact on women?s livelihood. Furthermore, the guidebooks will outline how every application for support from the GCIP Indonesia Accelerator and Post-Accelerator will be assessed against strict E&S screening criteria, including e.g., possible impacts of climate change on the entrepreneurs, e.g., due to a reduction in bioenergy or water sources, logistic disturbances, increased utility prices and costs of insurance, etc. The entrepreneurs will be supported in the development of appropriate climate change adaptation strategies for their businesses

Output 1.1.1 The GCIP guidebooks and certification system are adapted for the GCIP Indonesia	**Responsibility**

Activity 1.1.1a	to review the GCIP guidebooks for Accelerator, Advanced Accelerator, and Post-Accelerator; to share suggestions for improvement of the GCIP guidebooks with NGIN (feedback loop) to adapt the GCIP guidebooks to reflect the context of Indonesia?s CIEE, including market conditions, policy environment, development priorities, technology focus, local examples, etc. (i.e., to develop the GCIP Indonesia guidebooks); to organize information and consultation sessions with relevant stakeholders; to disseminate the GCIP Indonesia guidebooks among relevant stakeholders (translation required) to produce localized guidebooks and supporting materials for national PEEs, applicants, trainers, mentors and judges based on identified gaps and priorities.	BPPT with support from NGIN
Activity 1.1.1b	to conduct an assessment of the landscape and capacities of potential GCIP Indonesia applicants (start-ups, SMEs) and experts (mentors, trainers, judges) capturing the different needs to women and men. to conduct analysis of i) potential accelerator participants (start-up ventures and SMEs) and ii) potential mentors, trainers and judges. to implement specific interventions to target the identified weakness within the i) potential accelerator participants (start-up ventures and SMEs) and ii) potential mentors, trainers and judges	BPPT with support from NGIN
Activity 1.1.1c	to develop a calendar of all planned GCIP Indonesia events, and to investigate the possibility of incorporating a National Innovation Challenge into the GCIP Indonesia Accelerator (as from 2022)	BPPT
Activity 1.1.1d	to get acquainted with the GCIP cleantech innovation and entrepreneurship expert training and certification system; to share suggestions for its improvement with NGIN (feedback loop) to ensure that the GCIP certification of national experts is integrated with national needs, partner requirements and any existing certification processes.	BPPT with support from NGIN
Activity 1.1.1e	to adapt the GCIP cleantech innovation and entrepreneurship expert training and certification system to national circumstances, including translation where relevant (i.e., to develop the GCIP Indonesia cleantech innovation and entrepreneurship expert training and certification system), and to operationalize the training and certification system to customize global curriculum and training content for national needs and priorities	BPPT with support from NGIN

Output 1.1.2 Three (3) cycles of the Annual Cleantech competition-GCIP Indonesia Accelerator are conducted (including National innovation Challenges for clean technology challenges) (minimum 80 Accelerator participants)

97. The project intends to strengthen the national clean tech innovation ecosystems by implementing the global GCIP narrative into the Indonesian context. The national annual Accelerator will be conducted in accordance with the global GCIP cycle (typically launched in March and concluding at the end of November each year) in total three times. The accelerator cycle will be based on GCIP Indonesia guidebooks developed under Output 1.1.1. The timing of the cycles will be guided by the GCIP Global to ensure appropriate coordination across different child projects. This will allow synergies among GCIP partner countries, and also ease of operation and coordination across countries. The outreach and communication activities related to the launch of and calls for applications for the annual GCIP Indonesia Accelerator cycles will be led by the BPPT, with involvement of business associations, universities and research institutions and SAOs. Each competition will consist of approximately 100-150 applications, with higher numbers of entrants expected in the later cycles. From these entrants, around 20-40 semi-finalists and 10-15 finalists will be selected to receive support, and ultimately, winners and runners-up will be identified. The selection of winners, runners-up, finalists, and semi-finalists will be made by judge panels based on their evaluation of the business plans and/or pitches delivered by entrepreneurs with the support from their trainers and/or mentors.

Figure 6 GCIP accelerator process

98. During the PPG phase, consultation was carried out with various stakeholders in Indonesia and it was agreed that the country will benefit from customized assistance in developing a pool of potential applications prior to the launch of the Accelerator. Therefore, a Pre-Accelerator support will be provided to around 50 entrepreneurs that would normally not qualify for the Accelerator, so that a pipeline of suitable high-quality projects is generated. The GCIP Global will assist the BPPT in the delivery of the Pre-Accelerator which will be a 10-day (7 days virtual/3 day in-person) programme held each year 6-8 weeks prior to the GCIP Indonesia Accelerator application deadline.

99. In general, the GCIP Global will support BPPT in establishing and conducting the first cycle of the GCIP Indonesia Pre-Accelerator, Accelerator, Advanced Accelerator, and Post-Accelerator. The assistance will be gradually phased out of in the second cycle with a view to capacitating the national institutions to be fully independent by the third cycle.

100. The GCIP Indonesia Accelerator will be a four to six-month curriculum designed specifically to support cleantech innovators to develop viable business models, and thus transform their ideas into fast-growing scalable and investable enterprises. Through the GCIP Indonesia Accelerator, a cohort of cleantech innovators with a high-impact potential will be identified and invited to receive intensive business and entrepreneurship training (as a group training in the framework of the GCIP National Academy), mentoring, and coaching based on the state-of-the-art international expertise including through GCIP webinar and mock judging, in particular with the aim to a) improve their business skills and investor pitch, b) connect them to potential business partners, financiers, and investors, c) maximize the expected net climate benefits of their solutions.

101. In order to promote the Annual Cleantech Accelerator under output 1.1.2, the project will then begin national and regional awareness raising events and outreach and engagement activities (social media, email campaigns, virtual bilateral meetings and events). These activities will include a preliminary call for participation in different regions of Indonesia, particularly in the areas with the highest concentration of Cleantech start-ups. Aligned with the establishment of the Accelerator, the project will also (i) begin delivering entrepreneurship trainings (output 1.1.3) to increase the number of potential start-ups to be accelerated, (ii) establish the approach and systems necessary to deliver post-accelerator support (output 1.1.4), (iii) identify and train judges and mentors (output 1.1.5)

102. The project will conduct Regional Accelerator rounds and events which will address market access barriers including the remote location of some SMEs, high costs, limited knowledge, and the lack of business skills. The accelerator competition will be tailor made on the experience gained in the successful Cleantech business competition and accelerator pilot programme carried out across the world. Typically, the first cycle will begin with clean energy technology categories such as energy efficiency, renewable energy, energy storage, waste to energy, and resource efficiency with additional categories such as waste beneficiation, water treatment, water efficiency, green building, low emissions transport, agroindustry, life sciences, internet of things and digitization.

103. In addition, to ensure demand-driven solutions, National Innovation Cleantech Challenge Categories will be designed in collaboration with partners (public and private) with willingness to invest in the identified solutions.

104. It is planned to select start-ups annually that are expected to be granted a prize money primarily from the GEF grant. In order to increase the scope and the impact of the project, financial support for specific prizes for entrepreneurs/SMEs will be considered from parties including venture capital funds

105. During the first year of the programme the cleantech challenges will be described in detail and endorsed by the PSC and the respective partners (public and private). This will include analysing whether there are any innovation funds or programmes from private and public sector that

could benefit from the GCIP project activities. This can bring mutual benefits and create synergies e.g., when GCIP participants can be linked to public funding schemes

106. The accelerator programme consists of official launches, investor conferences, a 3-day training programme known as the National Academy, Business Clinics, Mock Judging and specific activities, namely trainings, facilitating access to capital and showcasing best practices to SMEs/Start-ups and students.

107. Throughout all cycles of the GCIP Indonesia Accelerator, special attention will be paid to gender mainstreaming activities, as outlined in the gender action plan. These include: (i) recruitment of women trainers, mentors, judges; (ii) efforts to ensure that women and men are given equal opportunity to lead, access, participate in and benefit from the project; and (iii) awareness raising. The project will also seek to ensure women empowerment through (i) specific training and mentoring to promote women innovators, entrepreneurs, start-ups; and (ii) design of specific prizes and follow-up support programmes for innovative start-ups that will have a significant impact on women?s entrepreneurial development and gender responsive employment creation. What is more, the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP) will be strictly followed. It is expected that at least 35% of supported entities will be women led given the baseline established in the gender analysis.

108. Additional programmed government resources allocated to BIT will facilitate the continuation of the annual Accelerator programme after the closure of the GEF project. In addition, it is expected that private sector resources from SAO and private sector will continue to support funding the challenge awards and provide funding for ?calls for innovations.?

Output 1.1.2 Three (3) cycles of the Annual Cleantech competition-GCIP Indonesia Accelerator are conducted (including National innovation Challenges for clean technology) (minimum 80 Accelerator participants)		**Responsibility**
Activity 1.1.2a	to deliver the GCIP Indonesia Pre-Accelerator as a 10-day (7 days virtual/3 day in-person) programme for around 50 participants annually, around 6-8 weeks prior to the Accelerator application deadline to deliver in-country /virtual pre-accelerators for GCIP country accelerators that need customized assistance in developing their pool of potential applications prior to the launch of the accelerator	BPPT with support from NGIN

Activity 1.1.2b	to deliver three annual cycles of the GCIP Indonesia Accelerator (each year for around 20-40 semi-finalists per region and 12 finalists selected from a pool of 100-150 applicants), including the 4-day GCIP National Academy to deliver in-country training support provided to GCIP countries in facilitate national academies, and development of participating national teams and support would also include the capacitation of national mentors and trainers - includes travel costs for two NGIN trainers	BPPT with support from NGIN
Activity 1.1.2c	to oversee, through a gender expert, gender-related outcomes and the integration of gender-responsive project implementation throughout the programme	BPPT
Activity 1.1.2d	to execute operation of a live helpdesk for queries from national PEEs, mentors and trainers over 45 working weeks per year. The helpdesk is operational during the working hours of all 10 GCIP countries.	BPPT with support from NGIN

Output 1.1.3 At least two introductory Entrepreneurship training programmes per year on business models and innovation for clean technologies organized for women (150 participants) and students (150 participants)

109. The gender analysis revealed imbalances in gender power dynamics, low rates of participation of women entrepreneurs, women led SME as well as specific challenges faced by women to participate in previous international GCIP Accelerators as well as similar national accelerator programs. Moreover, it has been found that science, technology, engineering and mathematics (STEM) students and recent graduates often lack experience in their relative fields as well as entrepreneurship and business skills. Output 1.1.3 aims to address gender equality and the economic empowerment of women as well as encourage women and STEM students and recent graduates (both male and female), to participate more effectively in the accelerator programme. The project will provide specific support programmes to overcome the challenges faced by women and youth and support entrepreneurship education in selected universities and SME centres, by delivering entrepreneurship training on business models and innovation, developing case studies and co-hosting events. Furthermore, given the current social-distancing context necessitated by the COVID-19 pandemic, the project will consider during inception whether the training programmes would be in-fact physical trainings or rather virtual classroom trainings and/or uploaded online lessons, or a combination. This programme will be tailor made to encourage and motivate these groups to become cleantech entrepreneurs and to enrol in the Cleantech accelerator programme.

Output 1.1.3 At least two introductory Entrepreneurship training programmes per year on business models and innovation for clean technologies organized for women (150 participants) and students (150 participants)	**Responsibility**

Activity 1.1.3a	to organise two entrepreneurship training programmes at universities: Identification of the teachers/professors, adaptation of the GCIP accelerator course, delivery of training programme and initial delivery of training to students	BPPT

Output 1.1.4 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry (i.e., tipping-point investment facilitation support given for minimum 15 enterprises)

110. The purpose of this activity is to directly address financial barriers including limited access to suitable early stage and bridging finance for SMEs as well as address research, development and commercialisation barriers.

111. In Indonesia, the winners of challenge categories and winners of the GCIP cycle will receive the additional support to commercialize their products and access finance including reach market entry (i.e., technical support, laboratory services, equipment, linking to finance etc.). Relevant SAOs would be invited to participate in the mentoring programme, judging in the competition, capacity building, supporting to access networks and investors for the competition winners, assisting the competition winners in market access, funding further research and technology innovation for the competition winners

112. There will be Advanced Accelerator service offered to selected entrepreneurs participating in the GCIP Indonesia Accelerator that will be focused on providing tailored and needs-based individual support rather than a group training, mentoring, and coaching. The Advanced Accelerator is time-bound and outcome-focused, i.e., there are concrete milestones that need to be achieved within a specific timeframe. The support is provided by one or several Executives in Residence (EIR) that are senior practitioners (executives or entrepreneurs) with hands-on experience in scaling up cleantech enterprises, and it is focused on problem-solving, i.e., tackling very specific operational, financial, and strategic issues.

113. To assist start-ups and SMEs post-Accelerator advanced investment and commercialization support will be provided to selected enterprises. This support is open to all enterprises that completed the Accelerator and may also be applicable to non-GCIP alumni enterprises in exceptional cases if high-impact potential can be showcased. The support involves help with establishing connections with potential investors and partners, half-day events will be organized at partner corporations and government agencies to highlight opportunities for investment, loans, grants, technology adoption and partnerships. Under the supervision of the Project team, technical and financial advice will be given by the Specialist Mentors, to foster venture capital funds investing in successful clean technology start-ups in the country, with a regional outreach where it is possible. The intention is to assist as many companies as possible to receive financing (grant and equity), to find the customers and build partnerships, to ensure sustainability of the project?s efforts.

114. The GCIP Indonesia Accelerator alumni will be eligible for the GCIP Indonesia Post-Accelerator support (provided in four related, but not necessarily linear dimensions: advanced business growth and commercialization support, investment readiness, market readiness, and technology readiness) if they meet requirements set out in the GCIP Indonesia guidebook for the Post-Accelerator (Output 1.1.1).

115. More specifically, a series of trainings (in form of webinars) will be organized by NGIN, covering topics such as: 1) corporate partnerships and government relationships (3-4 virtual training modules of 1-2 hours each); 2) international market entry, mergers and acquisitions, and exit strategy (3-4 virtual training modules of 1-2 hours each); 3) challenges specific for selected industry sectors (3-4 virtual training modules of 1-2 hours each). The trainings will be based on the state-of-the-art international knowledge and best practices.

116. Moreover, for selected GCIP Indonesia Accelerator alumni with high impact potential, there will be technology verification, product development, and testing facility support provided by BPPT. This may include collaboration with research institutions and universities that house relevant expertise, as well as with the industrial sector. In addition, partnerships will be explored with national agencies responsible for standardization and appraisal of product quality. The GCIP Indonesia will also provide support in overcoming product related market entry barriers, including protection of intellectual property and product life cycle assessments.

Output 1.1.4 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry (i.e., tipping-point investment facilitation support given for minimum 15 enterprises)		**Responsibility**
Activity 1.1.4a	to identify Accelerator participants that would benefit from the Advanced Accelerator support from an EIR to tackle specific operational, financial, and strategic issues; and to facilitate this support	BPPT
Activity 1.1.4b	to conduct three cycles of the GCIP Indonesia Post-Accelerator focused on advanced business growth and commercialization support, investment readiness, market readiness, and technology readiness (based on the GCIP Indonesia guidebooks developed under Output 1.1.1) to benefit 10-15 GCIP Accelerator graduates annually (40 firms) to conduct country specific virtual training and support for alumni innovators and entrepreneurs based on stage of maturity and size of the alumni community	BPPT with support from NGIN
Activity 1.1.4c	to provide needs-based tipping point needs-based investment facilitation support to the GCIP Indonesia Post-Accelerator enterprises (minimum 15 enterprises) in accessing additional sources of finance, market entry, identifying networking opportunities, dealing with technical and administrative issues, accessing IT services, and tax registration, etc.	BPPT

Activity 1.1.4d	to provide technology verification, product development and testing facility support to enterprises with high impact potential (minimum 15 enterprises)	BPPT
Activity 1.1.4e	to nominate GCIP Indonesia alumni for support by the GCIP Global Accelerator	BPPT

Output 1.1.5 National pool of mentors and judges identified, created and trained (at least 40)

117. Developing a pool of cleantech innovation and entrepreneurship experts to act as mentors, coaches and judges[48] is critical to the effectiveness of accelerators in providing the right support to the participating teams. Advanced GCIP accelerator services and venture capital-based investment mobilization require specific and highly skilled and trained mentors/experts. Mentors are national and international advisors assigned to the participating teams of the accelerator to provide guidance as required on a rolling basis for the duration of the advanced accelerator cycle. Mentors play an essential role in supporting the start-ups/SMEs. In order to ensure coherence of approach among mentors, a GCIP cleantech innovation and entrepreneurship expert training system will be developed at the global level. Similar to the GCIP Accelerator Guidebook, the training system will be reviewed by the Indonesia GCIP PMU and adapted as per the national contexts, ensuring that the training materials accurately reflect market, business, policy and investment climates. Trained GCIP experts are also going to support start-ups/SMEs through conducting networking activities (meetings conducted under activity 1.1.2) which would significantly increase a chance of securing seed financing. Furthermore, trained experts will ensure the project?s sustainability and effective exit strategy.

118. The mentoring programme consists of both mentoring methodology and training development. Each semi-finalist team will be matched with one ?generalist mentor? and multiple ?specialist mentors? based on mutual areas of interest and proper matching of team needs and mentor strengths. This 1-to-1 approach has proven to be a key comparative advantage of the GCIP methodology, and GCIP alumni companies have evaluated this as one of the most valuable features of the GCIP.

? Generalist Mentors - A generalist mentor is the general guide and advisor for the team, typically with extensive Cleantech or start-up experience. Often, generalist mentors are serial entrepreneurs and active investors who can become trusted advisors to and investors in the company once the competition has concluded. Mentors will be invited from universities having business development programs, national banks, investment companies. Mentors are unable to join or invest in a mentee company during the competition cycle.

? Specialist Mentors - A specialist mentor is an expert in a key functional discipline such as finance, marketing, engineering or law. They act as on-call subject-matter experts and may be from both large corporations, start-ups, academia, FIs, NGOs or the public sector.

? Women?s mentors ? Special mentors will be identified with the purpose of supporting women Cleantech entrepreneurs, thereby increasing the successful participation of women and women led teams in the Accelerator programme. Women mentors will also act as role models showing women entrepreneurs possible pathways to professional success. In addition, special mentors for women, that can be both women and men, will act as a conduit to address women?s issues and provide additional support necessary for women, e.g., training on self-confidence.

119. To ensure the maximum impact of the Accelerator, the mentors and judges will receive training on the specific requirements of the programme, as well the opportunities it presents. In the initial years there may be reliance on international expertise in strengthening the capacity of mentors and judges in Indonesia. Through repeated execution of the Accelerator, knowledge transfer will occur to ensure capacity strengthening of the national mentors, and also to ensure that international expertise is fully contextualized as per the specifics of the Indonesian context. This will not only be to the benefit of the entrepreneurs taking part in the programme but will also have a long-lasting impact on the capacity of the mentors and judges to strengthen the cleantech innovation ecosystem of Indonesia. For instance, alumni could become mentors and judges in subsequent years if their qualification allows.

120. Specific focus will be placed on successful women entrepreneurs and their participation as mentors and judges in the programme. In addition, awareness raising, and sensitization will be part of the training for mentors and judges to enhance their gender responsiveness and reduce bias. Also, the Project is expected to cooperate with the national associations and groups of entrepreneurs. The possibility of engaging local students in business schools and MBA programmes to support the mentors as part of the mentoring team will also be explored. This will allow opportunities for business students to be exposed to the cleantech sector, and gain experience with business models that are specific to the cleantech industry, which is expected to contribute to the strengthening of the national cleantech ecosystem in the longer term.

121. All UNIDO consultants and contractors providing training under GCIP Indonesia will have to complete the ?I know gender? training course from the UN Women, and provide evidence on how gender equality was addressed in the training material they delivered.

Output 1.1.5 National pool of mentors and judges identified, created and trained (at least 40)	**Responsibility**

Activity 1.1.5a	to provide training and certification for at least 40 experts (trainers, mentors, judges) with at least 35% being women (i.e., at least 3 trainings with minimum 10 experts), as well as to conduct the evaluation of experts (based on the NGIN assessment framework) and to support their accreditation	BPPT

Output 1.1.6 Extensive advocacy and outreach activities organized (13 events in total) at the national and regional level in a gender-responsive manner including: Public private partnership forums held; and knowledge/best practice shared

122. In order to raise public awareness and the profile of the programme, as well as its alumni, this project will continuously conduct and support outreach activities.

123. A number of regional and international events will be organized and/or attended by the project team and GCIP participants and alumni to encourage the participation of more investors from the national, regional and global level at the seed stage. Thus, will leverage on the experience and knowledge of other GCIP countries, particularly Thailand. Some cleantech and investment promotion forums recently organized are: 7th Annual Private Equity & Venture Forum Indonesia[49], 16th International Conference on Envirotech, Cleantech & Greentech (ECG), 14-15 July 2017, Bali, Indonesia.

124. This will include opportunities to participate in the regional and global events, to showcase their concepts and access the regional and international markets and investors. Further, the national winner will be given the opportunity to attend a GCIP Global Forum and compete for the Global Prize with the winners of other Global programme countries.

125. Objectives of advocacy and outreach activities include:

? Enhance participation, i.e., national outreach activities to motivate entrepreneurs to apply to the accelerator, get on board mentors, coaches and judges.

? Raise awareness on Indonesia GCIP winners and entrepreneurs through briefing sessions, press releases, social media activity, attendance at events and advertising

? Continually identify investment and promotion opportunities for GCIP Indonesia alumni enterprises at the national and regional levels, and facilitate their engagement

? Raise awareness with the public and private sector, youth and in the broader public on the need for cleantech innovation through briefing sessions, press releases, social media activity, attendance at events and advertising

Output 1.1.6 Extensive advocacy and outreach activities organized (13 events in total) at the national and regional level in a gender-responsive manner including: Public private partnership forums held; and knowledge/best practice shared		**Responsibility**
Activity 1.1.6a	to continually identify investment and promotion opportunities for GCIP Indonesia alumni enterprises at the national and regional levels, and facilitate their engagement (minimum 10 alumni enterprises supported per year)	BPPT
Activity 1.1.6b	to conduct all communication and promotional activities in line with the GCIP guidelines including national and regional cleantech stakeholder meetings, public-private partnership forums, women targeted cleantech events, youth targeted cleantech events, briefing sessions, press releases, social media activity, attendance at events and advertising	BPPT
Activity 1.1.6c	to support UNIDO and the global project coordination team by providing information and data for communication and promotional activities	BPPT

Output 1.1.7 Investment mobilized for projects implementation to deploy innovative cleantech solutions across various sectors (minimum 12 enterprises provided with funds)

126. Identifying investment opportunities for cleantech products and services is a lengthy and iterative process. In many instances, high-impact and high-market potential cleantech innovations/businesses fail due to lack of access to financial resources. Recognizing this need, support will be provided to early-stage enterprises in addressing the financing gap. The intention is to assist as many GCIP Indonesia Accelerator alumni as possible to raise funding, find customers, and build partners within 12 months of completing the Accelerator.

127. Taking advantage of various investment and promotion opportunities in Indonesia, direct support for the GCIP Indonesia Accelerator alumni will be provided to connect them with potential investors, financiers, and tech scouts of large corporations. To this end, half-day Investor Connect events will be co-organized regularly (at least 2 events after each cycle) with partners including corporations and government agencies to highlight opportunities for investment, loans, grants, technology adoption and partnerships. The project will also explore targeted investment/financing vehicles and connect them with selected GCIP Indonesia Accelerator alumni as appropriate.

128. In addition to support services designed to benefit enterprises, specific activities to engage the investment community (e.g., venture capital funds, angel investor networks, impact investors, etc.) will also be conducted. BPPT through BIT will establish a robust network with national

financial institutions and funds to raise their awareness, as well as to train and sensitize financiers on the opportunities and risks associated with cleantech products and market trends. For example, communication efforts tailored for investors will be made to promote the profitability and impact potential of the cleantech businesses, thereby influencing the investment landscape for the cleantech sector. The intention is to broaden the engagement of impact investors in the country, both in terms of number of investors (i.e., beyond the current SAOs that are already linked with investors involved in an existing angel investor network ? such as New Energy Nexus), as well as scope of their interest. Therefore, awareness raising events and trainings will be provided to the local investor community by specialist financiers with in-depth experience in the cleantech sector (at least 1 event/training after each cycle).

129. From the global budget, Workshops will be conducted for local financial experts, including brief presentations on PFAN (REEEP), its project development journey and coaching process. Selected experts may become future PFAN (REEEP) advisors, and will be sensitized project sourcing and investment facilitation skills and tools. PFAN will lead some initiatives for GCIP Global, and it will launch open calls for GCIP alumni applications

130. In addition, in order to encourage the participation of seed funding providers from the national, regional and global stages in the GCIP Indonesia and to leverage on the experience and knowledge of other GCIP countries, a number of suitable regional and international events will be organized or attended by a representative of the GCIP Indonesia.

131. Stakeholder consultations in Indonesia confirmed that due to significant barriers to financing that still persist, there is a need for a financial mechanism that would enable de-risking and leveraging of public and private investment. Therefore, in the first year of project implementation such a financial mechanism will be designed, i.e., it will be considered to establish a separately operated early-stage development fund that would provide pre-seed and seed financing to selected enterprises supported by the GCIP Indonesia. However, if this turns out not to be a viable option, it might be decided that grants are disbursed directly from the GCIP Indonesia budget. The process of application for the pre-seed and seed financing or grants might be adapted from that used already in BIT and other SAO start-up competitions (for example New Energy Nexus).

132. The financial mechanism (an early-stage development fund providing pre-seed and seed funding; or disbursement of grants from the GCIP Indonesia budget) will be operationalized under this output. It is expected that more than five innovative solutions could be supported in this way, and that as a result (due to de-risking) they will be able to mobilize public or private investment.

133. Furthermore, nine business matching and investor forums will be held in total (3 per year). The intention is to support teams that have finished the Accelerator to access seed funding, carry out business matching and through networking, introduce entrepreneurs, SMEs and investors. Subsequently negotiations with relevant partners to provide seed funding to the project will be carried out and supported by the project.

Output 1.1.7 Investment mobilized for projects implementation to deploy innovative cleantech solutions across various sectors (minimum 12 enterprises provided with funds)		**Responsibility**
Activity 1.1.7a	to organize national investment facilitation events (Investor Connect) for GCIP Indonesia alumni enterprises (two at each cycle) which will include training and awareness raising in order to encourage the participation of seed funding providers from the national, regional and global stages in the GCIP Indonesia and to leverage on the experience and knowledge of other GCIP countries	BPPT
Activity 1.1.7b	to establish a robust network with national financial institutions and funds, and to manage related communication and outreach activities, including awareness raising and training events for the local investor community to increase investor confidence and ensure accurate risk perception with regard to cleantech solutions (at least 1 event after each cycle)	BPPT
Activity 1.1.7c	to design a financial mechanism (an early-stage development fund providing pre-seed and seed funding; or disbursement of grants from the GCIP Indonesia budget) that would enable de-risking and leveraging of public and private investment, including the process of application for the pre-seed/see financing or grants	BPPT
Activity 1.1.7d	to operationalize the financial mechanism designed under this Output (an early-stage development fund providing pre-seed and seed funding; or disbursement of grants from the GCIP Indonesia budget) and to facilitate the disbursement of funds (e.g., run calls for applications for pre-seed/seed funding or grants and conduct their technical evaluation) to minimum 3 enterprises (annually from year two)	BPPT

Component 2 ? Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity

134. The policy framework and institutional capacity are integral parts of GCIP?s ?ecosystems approach?, and also of strategic relevance in ensuring that the outputs and outcomes of the project are contributing to the national priorities and are sustained after the project closure. Therefore, the objective of the Component 2 is to build capacity of BPPT and other key CIEE stakeholders in Indonesia to engage in cleantech acceleration and commercialization. Further, the GCIP Indonesia will assist the government in improving national policies and regulations that are conducive to cleantech innovation and commercialization.

135. The GCIP Global will provide recommendations (e.g., for enhancing the capacity of national institutions in the CIEE) and tools (stakeholder engagement strategy framework; Global Cleantech Innovation Ecosystem Benchmark; cleantech innovation cluster strategy framework; cleantech innovation capacity building framework) for CIEE strengthening and connectivity, which

will be reviewed and adapted for Indonesia by BPPT. In addition, policy best practices and roadmaps will be identified through desk research and interviews with relevant policy makers by the GCIP Global.

Outcome 2.1 National level platform/ coordinating mechanism established to promote clean technology innovations and entrepreneurship

136. Coordination and dialogue are critical to the success of cleantech activities. In Indonesia, collaboration networks with academia and industry remain poor. Furthermore, cleantech is currently underserved by the SAO sector.

137. Barriers include both a complex innovation ecosystem and underserved cleantech start-up assistance sector as well as poor dialogue and connectivity between universities/research institutes and the industrial sector.

138. To address these barriers, the project will establish a National Cleantech Coordination Platform and a Cleantech Community and Network (incl. associations promoting gender equality and youth groups) through BPPT?s programme ?Balai Inkubator Teknologi? (Technology Based Incubation Centre ? BIT). The National Cleantech Coordination mechanism at the national and province/regional level will act as umbrella for the National Cleantech Coordinating Platform and Start-up Assistance Organisations (SAOs) and organize annual cleantech competitions to identify innovators, facilitate training and mentoring and set up an accelerator programme. The innovations sought by the competition will be specified during the development of the selection criteria, challenge competitions and guidelines and disseminated for feedback within the network.

139. Experience accumulated in other GCIP partner countries has shown the value of peer networking among start-ups within and outside of the country, across sectors and technologies. Therefore, a stakeholder mapping conducted during project development has identified relevant network stakeholders including start-up assistance organisations (SAOs) ?incubators, accelerators, ecosystem builders such as hubs and coworking spaces, as well as other activities such as start-up competitions and bootcamps? are operating in Indonesia. Stakeholders discussed the modalities of implementation and coordination under the national project and defined their roles and involvement (for detailed stakeholder engagement plan under the national platform/coordinating mechanisms see section 2) *stakeholders*).

Output 2.1.1 National level Cleantech Coordinating platform, web page, Cleantech Community and Network established (including associations promoting gender equality and youth groups)

140. In order to address prevalent knowledge gaps and market barriers facing SMEs, the project will establish a **National Cleantech Coordinating Platform** at the national and province level (through existing PLUT centres) that will organize annual cleantech competitions to identify innovators, facilitate training and mentoring and set up an accelerator programme for entrepreneurs and SME.

141. It has been decided that the National Cleantech Coordinating Platform will be hosted within the executing entity BPPT?s BIT programme ?Balai Inkubator Teknologi? (Technology Based Incubation Centre ? BIT). BIT was established as a vehicle to commercialize research and technology innovation from BPPT?s researchers and engineers or other research institutions so that it can be developed into a technology based new venture or innovation that has tough competitiveness and independence. Furthermore, BIT also acts as a place to foster Technology Based Small Medium Enterprise and Cooperative (UKMK) or innovation.

142. The ?**National Cleantech Coordinating Platform**? will be a centre within BIT defined as the physical GCIP centre including BIT staff as well as the Child Project PMU. The centre will also establish a coordination mechanism (established for sharing resources with partners) as well as an online web-platform and monthly newsletter that provides information and technical support to start-ups and SMEs with promising innovative clean technologies, products, services, and business ideas. The activities of the centre will be guided by those established under the GCIP Accelerator Guidebook under output 1.1.1 and adjusted to the national context. **Additional programmed government resources allocated to BIT will ensure continued operation of the National Cleantech Coordinating Platform beyond the project period.**

143. With the support of GCIP global programme executing partners, the National Cleantech Coordination Platform will be responsible for:

a. Development of competition and accelerator guidelines and methodologies under output 1.1.1 the adaption including:

b. Eligibility and selection criteria for inclusion in the accelerators including as a minimum: sector eligibility (GEF 7 CCM 4 priorities plus sustainable cities and food systems), business growth potential (market size/scalability) and environmental impact potential (minimum threshold for GHG emission mitigation)

c. a schedule, and coordination protocols between key stakeholders (including updated stakeholder engagement plan)

d. competition rules, and

e. handbooks for applicants, mentors and judges

f. Execution of the Annual Cleantech competition under output 1.1.2

g. Implementation of cleantech mentoring and trainings under output 1.1.2, 1.1.3 and 1.1.4

h. Selection, training and certification of trainers, mentors and judges under output 1.1.5

i. Extensive advocacy and outreach activities at the national and regional level under output 1.1.6

j. In collaboration with global PEEs and the international GCIP network, identify partnership and investment opportunities and facilitate engagement of GCIP Indonesia alumni enterprises under output 1.1.7

k. Establishment and maintenance of the web platform and the cleantech community network mechanism under output 2.1.1

l. Sharing resources with existing incubation centres, Universities and regional PLUT support centres

144. Supporting national connectivity, the National Cleantech Coordination Platform will maintain a country web page under the umbrella GCIP Global web platform. The web page will be an interactive online community for GCIP to be used from the beginning of the GCIP Accelerator cycle (call of applications and receipt of applications), during the Accelerator cycle (webinars, submission of assignments etc.), as well as after the Accelerator cycle for alumni companies and potentially investors (impact tracking post-Accelerator, investor matching etc.). The web page and cleantech newsletter mailing list (and the address list to which newsletters and other correspondence) will be operated continuously to support SMEs and start-ups as well as alumni and promote participation of government agencies, R&D institutions, financial institutions, academic institutions, private sector, and others helping to create network in the Indonesia cleantech ecosystem.

145. The web page will be a modern, user friendly, online system that empowers the PMU with local ownership of data and GCIP alumni with a sound networking tool. There will be a global GCIP web platform launched to serve as the main vehicle for internal and external communication at the programmatic level, and in particular it will serve four key functions:

a. to support project management by the BPPT and UNIDO (as a platform for dissemination of relevant documents, e.g., guidelines, guidebooks, frameworks),

b. to enable execution of the Accelerator (as a platform for calls for application and their receipt, as well as for submission of assignments and delivery of trainings/webinars during the Accelerator),

c. to facilitate the maintenance of the GCIP community at national and global levels (all CIEE stakeholders, e.g., investors, enterprises, including alumni, and experts will be invited to join the online community, and the enterprises will be given an opportunity to showcase their cleantech solutions to increase their visibility among potential investors),

d. to provide a knowledge depository for the general public (all relevant knowledge, communication, and advocacy materials will be available on the website).

146. The GCIP Indonesia will be assigned a section of the global GCIP web platform (i.e., a GCIP Indonesian web platform). Therefore, this web platform is developed at the global level, with contribution from GCIP Indonesia and in collaboration with other GCIP partner countries, to also establish and maintain a global GCIP community and network. It is expected that hosting and ownership of the web platform will be responsibility of UNIDO and PMU initially, with the intention to transfer ownership to a national executing entity for sustainability purposes.

147. On the global GCIP web platform there will be affinity/interest fora created to spur interactions, such as for example self-directed introductions, in specialized groups and to facilitate collaboration, for example between various enterprises from different GCIP Indonesia cohorts, between alumni and currently supported entrepreneurs, or between entrepreneurs and investors. The GCIP Indonesia web platform will be used from the beginning of the GCIP Indonesia Accelerator cycle (call for applications and receipt of applications), during the GCIP Indonesia Accelerator cycle (e.g., for webinars/trainings, submission of assignments), as well as afterwards (e.g., by alumni companies and potential investors for the purpose of matching, progress tracking).

148. As identified, there is a clear need to enhance cleantech sector and entrepreneurship networking activities in Indonesia to address poor institutional coordination barriers to successfully develop the Cleantech Community and Network. Therefore, as part of the National Cleantech Coordinating Platform, **the Indonesia Cleantech Community and Network** will be established, hosted and maintained. The project will provide the incubation centre support to (i) establish the Indonesia Cleantech Community and Network through the National Cleantech Coordinating Platform at BIT (ii) begin outreach activities (social media, email campaigns and virtual bilateral meetings) and engagement of SAOs to promote the Indonesia Cleantech Community and Network and membership, (iii) enhance existing network activities and connect SMEs and start-ups as well as alumni to support services within the accelerator programme and the SAO network, (iv) develop capacity through networking events and a contact database and advertising on the GCIP website to increase dialogue between universities/research institutes and the industrial sector. In order to ensure GCIP Indonesia alumni network launched and maintained by gathering GCIP Indonesia Accelerator entrants, a special section for alumni network is assigned on the GCIP Indonesia website.

149. Women and youth are typically underrepresented in the cleantech and entrepreneurship sectors and networks in Indonesia. BIT, with the support of the Ministry of Women Empowerment and Child Protection (MoWECP) (and selected associations promoting gender equality and youth groups) will lead the establishment of the Cleantech Community and Network activities that target and engage participation of, and provide support to, women and youth stakeholders. Targeted and purpose led outreach activities will be used to increase membership of these groups (social media, email campaigns and virtual bilateral meetings). All UNIDO consultants and contractors providing training under GCIP Indonesia will have to complete the ?I know gender? training course from the UN Women, and provide evidence on how gender equality was addressed in the training material they

delivered. The networks will be created in a manner ensuring equal representation of women; or creating a separate network chapter for women.

150. To facilitate continued networking among entrepreneurs during and after the annual Accelerator cycle, BIT will maintain the Cleantech Community and Network beyond the project period with additional programmed government resources allocated to BIT.

Output 2.1.1 National level Cleantech Coordinating platform, web page, Cleantech Community and Network established (including associations promoting gender equality and youth groups)		**Responsibility**
Activity 2.1.1a	to set-up clean tech coordination platform (mechanism and office) at national and regional level and establish PSC in gender responsive manner	BPPT
Activity 2.1.1b	to establish Indonesian Cleantech Community and Network (incl. associations promoting gender equality and youth groups)	BPPT
Activity 2.1.1c	to create and maintain a section for the GCIP Indonesia on the global GCIP web platform	BPPT
Activity 2.1.1d	to launch the GCIP Indonesia alumni network and create a special section on the GCIP Indonesia web platform to maintain it	BPPT

Outcome 2.2 The CIEE in Indonesia is strengthened and interconnected promoting gender equality and the empowerment of women

151. To ensure the long-term growth of the Cleantech competition and accelerator in Indonesia and to support Cleantech start-ups and foster a vibrant and sustainable Cleantech ecosystem through partnerships and collaboration, partners and stakeholders will be trained on best practices for management of the Cleantech platform. Capacity building initiatives, among others, will include training of trainers on acceleration and incubation of start-ups, needs of entrepreneurs, knowledge management and exchange of information on best practices. The strengthening of institutional capacity and management of knowledge and data/information will be important to allow for sustainable operation of the accelerator also beyond this project. A strategy will also be developed to ensure continued operation and sustainability of the accelerator beyond the GEF project. Furthermore, specific focus will be placed on raising awareness on bias, including gender dimensions, sensitizing stakeholders on the need for an inclusive approach since gender equality benefits everybody.

152. Activities within this work stream will include participation of the PMU at the Global Cleantech competitions and meetings, which brings together competition hosts and partners from around the world to share best practices and experiences. A special focus will be given to increase the capacity related to recognition of value added that results from implementation of cleantech solutions. It is of up most importance to transfer sound knowledge and best practices derived from the ongoing GCIP projects elsewhere. Therefore, following the global GCIP framework approach is crucial.

Output 2.2.1 Institutional capacity building of the CIEE actors is conducted (1-3 events for up to 185 participants in total)

153. A CIEE assessment is to be conducted by the BPPT, which will be instrumental in identifying the capacity building needs (with attention to the needs of women) and deciding on the optimal set of interventions. A kick-off workshop will be held with relevant CIEE stakeholders to discuss drivers and challenges of cleantech innovation in Indonesia, as well as to present selected findings of evaluations of CIEEs globally.

154. In addition, based on the stakeholder engagement strategy framework and cleantech innovation cluster framework (that will be provided by the CTG), a national stakeholder engagement strategy and a cleantech innovation cluster strategy will be drafted, and they will also both encompass an action plan and a progress measurement framework. Subsequently, two engagement workshops (kick-off and a follow-up) will be organized to train up to 10 national facilitators (>35% women) to act as agents of change and support the implementation of both strategies.

155. What is more, there will be tailored training materials developed and capacity building events organized for selected CIEE stakeholders, including national institutions, industry associations, and business platforms on how to support cleantech innovations. Capacity building initiatives, among others, will include training of trainers on and on-the-job training for acceleration and incubation of start-ups, needs of entrepreneurs, knowledge management, and exchange of information on best practices and knowledge management.

156. Particular attention will be placed on raising awareness on bias, including gender dimensions, sensitizing stakeholders on the need for an inclusive approach since gender equality benefits everybody. Appropriate efforts will be made to promote gender equality in the framework of the capacity building events, in that the participation of women will be encouraged; gender balance of the training participants, as well as trainers and other experts will be secured; and gender aspects will be appropriately considered in the training materials. The training materials will also incorporate elements relevant in the context of the ESSPP.

157. Managing knowledge and data/information will be important to allow for the sustainable operation of the accelerator also beyond this project. Institutional capacity will be built, and a strategy developed for sustainability. Nominated BPPT experts and the PMU will be offered a workshop on cleantech innovation policy and strategy to be held by the CTG for a cohort of all national PEE representatives. As it is envisaged that the management of the project will be handed over to the BPPT post-GEF funding, the experience gained by the BPPT representatives will enable the sustainability of the GCIP Indonesia beyond the project closure and support policy and institutional framework strengthening under output 2.3.

Output 2.2.1 Institutional capacity building of the CIEE actors is conducted (1-3 events for up to 185 participants in total)		**Responsibility**
Activity 2.2.1a	to conduct analysis of Indonesia?s CIEE (including consultations with relevant CIEE stakeholders)	BPPT

Activity 2.2.1b	to develop (and share with BPPT) relevant tools for CIEE strengthening and connectivity (as well as to provide guidance on their use), including: stakeholder engagement strategy framework, and cleantech innovation cluster framework; and to support BPPT in developing a stakeholder engagement strategy and a cleantech innovation cluster strategy (in consultation with relevant CIEE stakeholders); as well as to conduct two engagement workshops (kick-off and follow-up) to train up to 10 national facilitators to implement national capacity building activities: 1.Mapping of existing ecosystem (govt support (national, state, key cities), corporates, University, etc). 2.Initial discussion of gap between Global Framework and National needs/capacity 3.Capacity building kick-off workshop 4.Development of National Stakeholder Engagement Strategy Framework including Identification of key stakeholders in entrepreneurship, enterprise, capital, policy, and research. 5.Interviews and analysis of data. 6.Assessment of Local Strengths 7.Stakeholder Engagement Workshop 8.National Cleantech Clusters Development Framework including Primary and secondary research, evaluating cleantech innovation clusters in comparable countries 9.Interviews with in-country innovators and experts. 10.Qualitative analysis of innovation resources and potential for 'traded' value 11.Alignment with Local Strengths 12Innovation Clusters Workshop 13.Global Synergies Strategy including Gap analysis, resource needs identification based on in-country observations and results from 14.Cleantech Group's country-level assessments 15Suggest cleantech innovation programs, innovation clusters, industry associations globally for GCIP countries to engage (includes expenses for 2 consultants for two trips)	BPPT with support from CTG

Activity 2.2.1c	to conduct capacity building events (based on the cleantech innovation capacity building framework developed by CTG) for selected CIEE stakeholders, including national institutions, industry associations, and business platforms on how to support cleantech innovations to conduct global engagement activities 1.Global investment outlook briefing developed for GCIP Stakeholders including Cleantech Group identifies global investment trends relevant to the key local industries in each GCIP country 2.Global engagement strategy framework with national alignment with global ecosystem assessment including Benchmark attractiveness of ecosystem / stakeholders against global ecosystem 3.Global Alignment Workshop: Long-term global corporate engagement strategy developed including a roadmap for engaging and attracting private companies to GCIP country 4.Global ecosystem engagement strategy workshop with in-country stakeholders to determine strategy on engaging international bodies and multilateral organizations for growth 5.Start-ups listed on i3 database: Start-ups considered for CTG event features	BPPT with support from CTG
Activity 2.2.1d	1.to deliver at least two cycles of the Entrepreneurship Train-the-Trainer Programme	BPPT

Output 2.2.2 Linkages, collaboration, and synergies across CIEEs are promoted

158. Under the GCIP Global there will be an annual GCIP Forum organized as an integral part of efforts to ensure connectivity between CIEEs. As outlined under Output 1.1.7, the GCIP Forum will bring selected finalists of the global and national Accelerators together for recognition and awards, and for opportunities to be connected with potential partners, customers, technology scouts and investors from around the world. Importantly, the GCIP Forum will also serve as a platform for innovation showcasing, and investment matching, and will be an important annual milestone for networking, advocacy, and knowledge exchange among CIEE players. The GCIP Forum will not be a stand-alone event, but it will be organized on the margins of highly visible global gatherings, such as for example the UNFCCC COP, Cleantech Group forums, etc.

159. In addition, as part of the global GCIP Framework, Indonesia will receive membership in the Network for Global Innovation for the duration of the project. This will provide the BPPT and other GCIP Indonesia stakeholders with access to international best practices and with opportunities to build cross-border connections with partners in additional countries.

160. In particular, bilateral cooperation will be promoted and formalized between the GCIP Indonesia and other GCIP CIEEs in the region (e.g., with Thailand and Cambodia). Indonesia has already established close relationships with US, UK and Switzerland, all of which have their own start-up programmes in place. This provides excellent opportunities to network with other stakeholders, to exchange knowledge and best practices, and to support entrepreneurs across borders. There will be also fora set up to share lessons learned with the aim of feeding into Indonesia?s policy recommendations developed under output 2.3.1.

Output 2.2.2 Linkages, collaboration, and synergies across CIEEs are promoted		**Responsibility**
Activity 2.2.2a	to promote cooperation (in particular bilateral cooperation) and facilitate its formalization between the GCIP Indonesia with other GCIP CIEEs in the region to provide guidance to national PEEs on GCIP national forums and integration with the annual global forum, including themes and private sector participation.	BPPT with support from NGIN
Activities conducted by the NGIN under GCIP Global at no extra cost to the country child project and will be utilised to support the activities listed above: 1. NGIN: to organize the Global Forum 2. NGIN: to facilitate Indonesia?s membership in the Network for Global Innovation for the duration of the project		

Outcome 2.3 Cleantech innovation and entrepreneurship policies, regulations and recommendations are strengthened promoting gender equality and the empowerment of women

161. In Indonesia there is a need for coordination of fragmented strategies and policies related to technology transfer and R&D in policy documents. In order to support the cleantech sector, the project will assist in reviewing existing policies and regulations relating to the promotion of clean technologies, innovation and entrepreneurship to identify those that need to be developed and/or improved, especially from the perspective of encouraging and supporting increased engagement and participation of SMEs. The related policies and regulations can be those promoting clean technologies in SMEs, as well as those governing the protection of intellectual property rights, agreements on sponsorships, roles, responsibilities, and rights of different stakeholders involved in the Cleantech Competition/Accelerator (competition organizer and entrants, sponsors, mentors, judges, etc.). Special efforts will be made to formulate gender responsive policies and ensure a participative approach.

Output 2.3.1. Policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender responsive) on how to enhance CIEE (with special focus on gender dimensions)

162. There will be a review of existing policies and regulations relating to the promotion of cleantech, innovation, and entrepreneurship carried out by the BPPT with support from government ministries, and CTG, on the basis of which a gender-responsive ?policy gap analysis report? will be provided to define and detail the status and prospects of the development of key economic sectors attractive for Cleantech. The review will encompass interviews with relevant CIEE stakeholders across the country, including associations that promote gender equality and the empowerment of women. On the basis of the gap analysis, as well as of the gender analysis, there will be policy recommendations developed. The gap analysis report and the policy recommendations will be presented to relevant stakeholders during a dedicated workshop. Following a stakeholder discussion, both documents will be amended in line with feedback received. The government may use the report to develop and implement a low carbon development strategy for Indonesia and facilitate the implementation of the low carbon development strategy of Indonesia, promote the development of expert potential and best practice dissemination, raising investment into energy efficiency and renewable energy. Undoubtedly, the project goal is the creation of the potential for low carbon economic growth, by supporting national programmes of investments into energy- and resource-efficient technologies.

163. Under the leadership of BPPT, as well as in a process of wide consultations with GCIP alumni and relevant national CIEE stakeholders, a roadmap will be prepared to guide a long-term implementation of the policy recommendations, also beyond the GIP Indonesia timeline.

164. The project will assist in reviewing the existing policies and regulations relating to the promotion of clean technologies, innovation and entrepreneurship, R&D and technology transfer in order to identify those that need to be developed and/or improved, especially from the perspective of encouraging and supporting increased engagement and participation of SMEs. Policies, guidelines and regulations that may be reviewed include:

a. National Movement for the Development of Business and Technology Incubator aimed to develop Innovative Entrepreneurship

b. Presidential Regulation on an Incubator for Innovative Entrepreneurs.

c. Master Plan for the acceleration and Expansion of Indonesian Economic Development (MP3EI)

d. RPJM 2020-2024

165. Additionally, the project will support the government with the development of policy instruments on innovation technology usage for the purpose of the adjustment to climate change.

166. The related policies and regulations can be those promoting the clean technologies of the competition categories, as well as those governing the protection of intellectual property rights, agreements on sponsorships, roles, responsibilities, and rights of different stakeholders involved in the

Cleantech Competition/Accelerator (competition organizer and entrants, sponsors, mentors, judges, etc.). These enhanced policies will help support the entrepreneurs that progress through the Accelerator Programme, as well as their sustainable commercial success beyond the project period.

167. The project will also assess the existing policies and regulations relating to the development and deployment of clean technologies in order to identify those that still need to be further developed and/or improved, especially from the perspective of encouraging and supporting increased engagement and participation of start-ups and SMEs. Once in place, the network of GCIP alumni enterprises will also become a valuable source of data, by conducting surveys on policy and regulatory obstacles encountered during commercialization efforts, including intellectual property rights and patents, agreements on sponsorships, company registration, etc. By assessing the actual hurdles of innovators, the project will focus its recommendations on those policies that affect the majority of innovators and entrepreneurs.

168. Experience in GCIP partner countries have shown that the policy related dialogue is best initiated when successes of GCIP alumni enterprises are visible. The optimal modality to engage stakeholders and the type of policy recommendation to be developed, as well as the appropriate channels of communication and dissemination will need to be developed during implementation, and PMU will monitor the progress made continuously.

169. In 2017, the Global Cleantech Innovation Index- GCIP Country Profiles assessed the innovation landscape of GCIP partner countries by surveying the inputs to innovation and assessing the outputs to innovation. The GCII-GCIP report will serve as a valuable tool to support advocacy work for policies that support the development of innovation ecosystems for sustainable technologies.

Output 2.3.1. Policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender responsive) on how to enhance CIEE (with special focus on gender dimensions)	**Responsibility**

Activity 2.3.1a	to review existing policy and regulations relating to the promotion of cleantech, innovation, and entrepreneurship, and to develop a gender-responsive gap analysis report to conduct national policy localization: 1.Build off of global policy exercises to create baselines assumptions for national project 2.Highlight opportunities for improvement, supported by examples from case studies and observed best practices 3.Identify policies that may be inhibiting innovation 4.Framework for translation of global findings and best practices into national actions 5.Suggest KPIs to account for additional details 6.Revise opportunities and challenges observed at global level 7.Recap findings from global evaluations, frameworks and workshops	BPPT with support from CTG
Activity 2.3.1b	to develop gender-responsive recommendations for the cleantech innovation and entrepreneurship policy; and to conduct a stakeholder engagement workshop to discuss and validate the gap analysis report and the policy recommendations	BPPT
Activity 2.3.1 c	to conduct policy implementation activities: 1.National Cleantech Innovation Policy Framework Baseline which is an assessment of strengths and setting goals: Prioritizing market areas of focus (climate transition modelling, priorities) 2.Policy Implementation Plan including National Cleantech gender and youth empowerment strategy framework, including Primary and secondary research, evaluating successful cleantech innovation in comparable countries; Interviews with in-country innovators and experts; Gender and youth empowerment framework; Interviews with innovators in underrepresented demographics, Cleantech Innovation Policy Workshop 3.Long-term Policy Implementation Plan - gap analysis, Data/interviews, Alignment with Priorities, Framework that outlines strategy for adjusting policy over long-term time horizons and capitalizing on advantages that may emerge in the future	BPPT with support from CTG

Activities conducted by the CTG under GCIP Global at no extra cost to the country child project and will be utilised to support the activities listed above:

1. CTG: Disseminate and international best practices concerning policies and CIEE building

2. CTG: Document lessons learned from GCIP countries

3. CTG: Develop gender and youth mainstreaming strategies and action plans:

One (1) climate transition model (year 1)

One (1) global cleantech innovation policy strategy (year 1)

One (1) global cleantech innovation policy strategy workshop (year 1)

One (1) cleantech innovation policy strategy gap analysis (year 3)

One (1) cleantech innovation policy strategy gap analysis workshop (year 3)

Output 2.3.2 Road map for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)

170. Based on the assessment report (output 2.3.1), a roadmap to strengthen the national framework for clean technologies will be developed, specifying the key directions for an optimal government-led support scheme and mode of engagement of GCIP Indonesia. This will include directions of the policy framework, financial channels and improvement of investment climate defined together with existing innovation/entrepreneurship related initiatives, as well as consider a gender-responsive approach.

Output 2.3.2 Road map for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)		**Responsibility**
Activity 2.3.2a	to prepare and consult (with GCIP alumni and relevant national CIEE stakeholders) a roadmap guiding a long-term implementation of the policy recommendations	BPPT

Component 3: Programme coordination and coherence

171. The activities under Component 3 are aimed at ensuring that the achievements of the GCIP Indonesia are captured and communicated globally, as well as that the GCIP Indonesia and other GCIP country projects are implemented in a coherent and coordinated way. To this purpose, BPPT will collaborate with the GCIP Global through the global PEEs (PFAN, NGIN, CTG), as well as to contribute to information gathering, knowledge sharing, and dissemination efforts.

Outcome 3.1 Efficiency and sustainability of the GCIP Indonesia is ensured through programme coordination and coherence with other GCIP country project

172. To maintain coherence of the GCIP approach across multiple countries, GCIP internal guidelines for project management teams will be developed and disseminated by UNIDO, including 1) operational guidelines for the Project Management Unit (PMU) to be established within BPPT, 2) a sustainability and exit strategy framework (to be developed in the first year of project implementation, and subsequently shared in the second year with BPPT for review and adaptation, i.e. for development of the GCIP Indonesia sustainability and exit strategy).

Output 3.1.1 The GCIP internal guidelines (3 guidelines) for project management teams are adopted and implemented by the GCIP Indonesia

173. The operational guidelines will cover: a general introduction to the GCIP Framework, including explanation of organizational roles within it (e.g. of Global Advisory Board and Project Steering Committees); description of communication channels between GCIP Indonesia and the GCIP Global; information on risk management and data protection; a list of foreseen support activities to be available from the GCIP Global; introduction to the IT management of the GCIP web platform; environmental/social management principles, as well as gender mainstreaming and ESSPP principles to be applied by the PMU in the course of project management. In addition, annual meetings for national PEE representatives (including BPPT) will be organized to offer a platform for training and exchange of experiences/insights related to the implementation of the GCIP internal guidelines.

Output 3.1.1 The GCIP internal guidelines (3 guidelines) for project management teams are adopted and implemented by the GCIP Indonesia		**Responsibility**
Activity 3.1.1a	to review and adopt GCIP internal guidelines for project management teams, and to participate in the annual meetings for national PEE	BPPT

Activity 3.1.1b	to develop the GCIP Indonesia sustainability and exit strategy	BPPT with support from UNIDO

Output 3.1.2 Programme-level knowledge management, communication and advocacy strategy is adopted and implemented by the GCIP Indonesia

174. The experience so far has shown that an exchange of learnings and experiences among national PEEs and PMUs is key for their successful operation. To facilitate this exchange, a knowledge management, communication, and advocacy strategy framework will be developed by UNIDO with a particular focus on:

a. Promoting visibility of GCIP and communicating its impacts achieved at national and global levels;

b. Increasing awareness of the catalytic role of cleantech in addressing climate change and environmental issues;

c. Showcasing cleantech innovations from the GCIP alumni and enhancing their visibility and credibility.

175. The global GCIP knowledge management, communication, and advocacy strategy framework will be shared with BPPT for review and adaptation to the GCIP Indonesia needs. As a result, the GCIP Indonesia knowledge management, communication, and advocacy strategy will be developed.

176. In line with the knowledge management, communication, and advocacy strategy framework, BPPT will to provide briefing sessions, press releases, social media presence and advertising, all of which will be targeted at different audience groups, with a special attention to the needs of women and youth. These activities will be supported by partners, including local entrepreneurs, celebrities, GCIP alumni, relevant service providers (e.g., patent attorneys, accountants), university departments and societies (e.g., engineering, entrepreneurship and energy clubs), organizations that are in frequent contact with cleantech entrepreneurs (e.g., trade groups, entrepreneur groups), and investors (e.g., venture capital funds, angel networks).

Output 3.1.2 Programme-level knowledge management, communication and advocacy strategy is adapted and implemented by the GCIP Indonesia		**Responsibility**
Activity 3.1.2a	to review and adapt the knowledge management, communication, and advocacy strategy framework, i.e., to develop a GCIP Indonesia knowledge management, communication, and advocacy strategy	BPPT

Activity 3.1.2b	to capture knowledge gathered by the GCIP Indonesia through policy briefs, impact reports, brochures, webinars, and other types of promotional materials, and to disseminate this knowledge through briefing sessions, press releases, social media presence and advertising, etc. (in line with the knowledge management, communication, and advocacy strategy framework)	BPPT
Activity 3.1.2c	to seek partnerships that would support implementation of the GCIP Indonesia knowledge management, communication, and advocacy strategy (e.g., with local entrepreneurs, celebrities, GCIP alumni, relevant service providers, university departments and societies, organizations that are in frequent contact with cleantech entrepreneurs, investors, etc.)	BPPT with support from UNIDO

Outcome 3.2 Impacts and progress of the GCIP Indonesia are tracked and reported

177. The monitoring of project progress is essential for the adequate and timely delivery of results. This project component covers project monitoring and oversight by UNIDO in close coordination other relevant stakeholders. Initial activities under this component include the definition of progress and impact indicators and the design of a detailed monitoring plan and methodology.

Output 3.2.1 The GCIP methodology for impact assessment is reviewed and applied

178. National impact monitoring will be established and linked to the Global GCIP coordination project, especially the impacts on business development and expansion, approved funding, the number of contestants, the GHG emissions reductions, and the range of sectors included in the acceleration activities.

179. The GCIP methodology for impact assessment will be developed by the GCIP Global and shared with the GCIP Indonesia for review and application. This will ensure a common understanding of estimation, tracking, and reporting approaches amongst all involved stakeholders, and will allow for data aggregation, comparisons, and extrapolation, not only on the national, but also on the global programme level. The methodology will enable assessment of social, economic, and environmental impacts, and at a minimum, it will account for global environmental benefits (GEBs), energy saved and increase in installed renewable energy capacity, job creation, gender mainstreaming, and investment leveraged. The data will be sex-disaggregated and gender-sensitive, and youth participation will also be recorded.

180. BPPT will receive an online training on the GCIP methodology for impact assessment from UNIDO, and subsequently BPPT will train (online or in person) all GCIP Indonesia Accelerator semi-finalists. BPPT may request further support to provide a training on the GCIP methodology for impact assessment also to other enterprises supported by the GCIP Indonesia.

181. The GCIP Indonesia enterprises will be expected to periodically provide relevant impact data to BPPT for validation and consolidation. The enterprise impact data will then be used to develop and publish a GCIP Indonesia impact report, as well as to create other promotion and advocacy materials (news articles, social media posts, brochure and leaflets, videos, etc.) that are tailored to diverse types of audiences (investors, national government agencies, donors, students, etc.). Data will benefit the GCIP Indonesia enterprises by providing increased credibility and visibility. The impact data will also be shared with the GCIP Global for consolidation on the programme level.

Output 3.2.1 The GCIP methodology for impact assessment is reviewed and applied		**Responsibility**
Activity 3.2.1a	to review the GCIP methodology for impact assessment (including the accompanying tools) and to participate in the training on its use provided by UNIDO	BPPT with support from UNIDO
Activity 3.2.1b	to provide training on the GCIP methodology for impact assessment to the GCIP Indonesia Accelerator semi-finalists	BPPT
Activity 3.2.1c	to validate and consolidate the GCIP Indonesia enterprise impact data, and to develop and publish a GCIP Indonesia impact report	BPPT

Output 3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework including operationalization and monitoring of gender mainstreaming action plan, and an external mid-term review is conducted

182. Monitoring and Evaluation (M&E) component provides detailed and extensive M&E structure in consistency with UNIDO and GEF procedures. Regular reporting mechanisms will be established to monitor progress made and serve as a platform for an overall project impact assessment on a rolling periodic basis, built-up from the project?s different components at the PPG stage. A detailed monitoring plan for tracking and reporting on project time-bound milestones will be prepared by UNIDO in collaboration with the BPPT and project partners at the beginning of project implementation and then periodically updated. The impact assessment results of project components will provide an input for the preparation of periodic reviews of the project?s ?Theory of Change? and subsequent implementation strategies and work plans. Beyond this tailor-made M&E and IA approach, the proposed project will be designed in compliance with UNIDO?s standard M&E approach for GEF funded projects. This will include preparation of annual, mid-term and terminal evaluation reports, and the final evaluation will focus on similar issues as the mid-term evaluation, mainly focusing on early signs of potential impact (later on the long term) and sustainability of project results.

183. There will be a GCIP monitoring and evaluation (M&E) framework provided by the GCIP Global, based on which BPPT will prepare a GCIP Indonesia M&E plan, including time-bound milestones and deliverables. BPPT will also draft progress review reports every six months, while UNIDO will conduct a mid-term review (MTR) half way through project implementation and inputs to the Project Implementation Reports (PIRs). The ESSPP considerations, as well as gender-responsive targets, indicators and baseline will be appropriately captured in the GCIP Indonesia M&E plan, in the progress review reports, as well as in the collection and assessment of relevant data.

Output 3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework including operationalization and monitoring of gender mainstreaming action plan, and an external mid-term review is conducted		**Responsibility**
Activity 3.2.2a	to prepare the GCIP Indonesia M&E plan and regular (every six months) progress reports, MTR and PIRs including the status of operationalization of gender mainstreaming action plan	BPPT UNIDO

Output 3.2.3 Independent terminal evaluation is conducted

184. An independent terminal evaluation will be started six months prior to the expected completion date of the project. The independent terminal evaluation will focus on the assessment of project progress and impact, as well as its long-term sustainability. There will be an evaluation report prepared that will also include recommendations for follow-up activities.

Output 3.2.3 Independent terminal evaluation is conducted		**Responsibility**
Activity 3.2.3a	to conduct the external terminal evaluation	UNIDO

a) Alignment with GEF focal area and/or Impact Program strategies

185. GCIP generally, and this child project specifically, are fully aligned with the objectives of GEF-7 Climate Change Focal Area Strategy CCM 1-4, ?Promoting innovation and technology transfer for sustainable energy breakthrough?. This project seeks to foster private sector engagement in

accelerating the uptake and investments in innovative cleantech solutions at scale. The project prioritizes cleantech innovations in the domains that are fully aligned with GEF 7 priorities i.e. electric drive technologies and electric mobility, accelerating energy efficiency, decentralized renewable energy power with energy storage, and cleantech innovations related sustainable cities and sustainable food systems. In particular, the project supports cleantech innovation and entrepreneurship by providing catalytic support to early-stage cleantech innovation SMEs so that they commercialize and scale-up their operations thereby delivering climate and sustainable energy solutions that reduce GHG emissions.

186. The proposed project will promote innovation in clean technologies to build sustainable innovation ecosystems for small and medium-scale enterprises and start-ups. This will foster commercially viable clean energy technology innovations in Indonesia that will have lasting positive effects on the global environment, as well as on development of a dynamic and vibrant local market for clean technologies.

187. Therefore, GCIP is a transversal intervention that supports all priorities of GEF 7?s Climate change focal area. The project provides much needed and best available catalytic technical assistance to cleantech SMEs so that they commercialize and scale-up globally and in the process create new industries and green jobs. On behalf of the GCIP framework (10408), the child project promotes synergies with other GEF Programmes to leverage more impacts. In particular, it looks to establish operational, investment and/or knowledge management links with other GEF flagship initiatives such as the prospective Africa Minigrids Programme, Sustainable Cities IP, GreenChem and FOLUR. Furthermore the Indonesia child project will also exchange knowledge and lessons on opportunities for technology and business model innovations across these programmes.

b) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

188. Indonesia requires further incremental technical and financial assistance from GEF in strengthening of its institutional capacities and promoting clean technology innovations for long lasting positive effects on environment and socio-economic benefits by enhancing economic green growth. This assistance is essential to encourage and ensure the required stable co-financing particularly by attracting foreign and domestic investments for employing advanced technologies with all related benefits.

189. Taking into consideration lessons learned from the COP17 in 2011 and the on-going projects under the GCIP (particularly in the region), development and promotion of clean energy technology innovations is essential part for economic growth and is closely aligned with country?s national priorities. Based on the "National Long-Term Development Plan" (RPJPN 2005-2025), the clear government prioritization is given to promote innovations and SMEs in Indonesia and put the necessary

policies and strategies in place. However, due to existing barriers, among them is a lack of linkages between the support services required to support innovation and entrepreneurship, GEF funding is crucial. This will enable to address the barriers and stimulate development of a dynamic local market for a long-term shift in SMEs and innovation towards clean energy technologies and achieve long lasting positive effects on the global environment. As a result, this will allow a balance between growing economic activity and its global environmental impact.

190. Indonesia is applying GEF funding to help address the barriers to cleantech innovation, which will lead to positive socio-economic (economic growth, green job creation, attraction of foreign and domestic investment, etc.) and environmental (contribution to the reduction of GHG emissions and to global environmental sustainability, etc.) impacts. What is more, these impacts will be amplified through opportunities for coordination and connectivity with other GCIP partner countries, and thus for global cleantech innovation scale-up. In total, at least 144,000 (directly) and at least 720,000 (indirectly) CO_2eq emissions should be mitigated thanks to the GCIP Indonesia which is expected to translate into cost effectiveness of 5 to 10 USD/tCO_2e.

191. Furthermore, in case that the GEF funding will not be provided to assist Indonesia in these areas, it is very likely that clean technology innovations will not be adequately developed at the market (or at very low level distributed at the national level). There would still be constraints for entrepreneurs lacking the business skills and supporting mechanisms to fully commercialize their innovative products. This will result in many unrealized opportunities in reducing GHG emissions, strengthening partnerships with the private sector interested in investing in clean energy technologies, and providing support to entrepreneurs and innovators seeking to establish commercial ventures in clean energy technologies.

c) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

192. The long-term lifetime of cleantech innovations introduced in the market and the strengthened and interconnected CIEE will be reflected in multiple GEBs including, primarily, GHG emission reductions. The GEBs achieved through the implementation of this project will be identified and quantified on the basis of the innovations marketed and their uptake. Given the nature of the project, the low-carbon products and services developed and commercialized will contribute to the GEBs beyond the project life and scope.

I. Background on GCIP?s target for avoided GHG emission for the GCIP Framework (GEF ID: 10408)

193. In order to ensure that GCIP supports innovative cleantech solutions with high impact potential, and delivery of GEBs at the programme level, a target approach is applied. To achieve cost

effectiveness of GEF funding for GEBs, a value of 5 to 10USD/tCO2e avoided is targeted (corresponding to an overall cost per tonne at programme level of USD38-76/tCO2e). This means that, with GEF funding of almost USD 18 million, GCIP Framework aims to deliver between 1.8 million and 3.6 million tonnes CO2e by 2030. As 10 countries will be a part of the overall GCIP Framework, almost 1000 semi-finalists are expected to be supported through the accelerators in all countries across the programme. Therefore, the target for the minimum projected potential of avoided GHG emissions per enterprise is between 1,800 to 3,600 tCO2e by 2030.

194. To put this minimum target approach in context, a review of previous GCIP alumni GHG reductions was carried out. The review, looking at three sources of information, shows that the proposed avoided emission target is plausible and quite conservative. It also demonstrates the huge likely variety of emission reductions due to the different country contexts and technology innovations. The review also shows that where an innovation has real market potential, the avoided GHG emissions are very significant and that the GCIP approach has experience in successfully identifying and accelerating such companies

195. Firstly, a survey carried out by UNIDO of 14 of its GCIP alumni showed that these companies had already generated 600,000 tCO2e savings by 2017 and projected to generate over 4.8 million tonnes of GHG emission savings by 2020 (or 340,000 tCO2e/year per company).

196. Secondly, the Independent Evaluation Office (IEO) report of eight GCIP projects included a sample of alumni in its annex with projected avoided emissions between zero (either they had not been estimated yet or the cleantech was not related to CCM) and 5 million tCO2e per year. A median for emission reductions that were reported (which occurred only for a small proportion of the total alumni, namely 60 out of 900) is 88 tCO2 per year. If alumni with estimated reduction are included (34) in the calculations, then the median increases to 12,200 tCO2/year with the interquartile range from 350 tCO2 to 81,000 tCO2/year.

197. Thirdly, the Mission Innovation Framework for Assessing Avoided Emissions, in which a number of GCIP alumni (selected as part of Mission Innovation's 100 innovative clean energy solutions in 2019) were included, shows for example that Atomberg Technologies (which manufactures an energy efficient fan) is estimated to avoid 5 million tCO2e/year by 2030. In turn BEAD, an energy management AI optimization enterprise, is estimated to avoid 319 million tCO2e/year by 2030. These two companies were also covered by the IEO report mentioned above, but Atomberg had not provided an estimate (so was assumed zero) and BEAD's estimate was 5 million tCO2e/year.

198. A ten-year horizon was selected for estimating the GHG emission savings. However, assessing a priori the GHG reduction potential of cleantech solutions (products, services) to be identified through GCIP has proven to be difficult, as by definition GCIP encourages open innovation, and the types and categories of cleantech products and services that will be supported can only be determined after the selection of semi-finalists as part of the GCIP Accelerators. Also, expected difficulties include attribution of the incremental GEBs of the cleantech solutions to the GCIP support. However, the design of past GCIP assumed abatement costs (for GEF funding) of between 0.68 USD/tonne CO2e in Turkey to 29.77 USD/tonne CO2e in Armenia. As the targets were exceeded in those countries, and as the proposed benchmarks are within the same range, they are considered realistic and conservative.

199. The target of between 5 to 10 USD/tCO2e avoided, that is set for the GCIP Framework, translates into avoided GHG emissions per enterprise of between 1,800 to 3,600 tCO2e. The provided target range will enable the GCIP country child projects to support a mix of technologies with different CO2 emission reduction potentials, and in particular allow innovations into the GCIP Accelerators that a) have a relatively low CO2 reduction potential, but a considerable demand and market growth potential (that can lead to amplification of GEBs), as well as b) that create multiple benefits (including socio-economic, such as job creation, gender mainstreaming, etc.).

200. In addition, indirect GEBs facilitated through the CIEE strengthening are also expected. In particular, indirect GHG emission reductions could result from: strengthened capacity of institutions and human resources to support commercialization and uptake of cleantech solutions at large; investments mobilized for cleantech solutions at large due to reduced risk perceptions; as well as longer-term emission reductions from behavioural change. An estimated factor of 5 is chosen to provide a projection for indirect GEBs. Where possible, efforts will be made to verify the indirect GHG emission reductions achieved at national and global levels through terminal evaluations.

201. This target-based approach for the estimation of GHG emission reductions will be applied across all 10 child projects under the GCIP Framework (GEF ID: 10408). A GCIP methodology for the calculation and monitoring of GHG reduction potential will be developed by the GCIP Global (GEF ID: 10461) in the first year of the project implementation, as well as it will be shared with all GCIP partner countries to enable coherent approach. In order to ensure that the desired GEBs are cumulatively delivered by the GCIP Framework, appropriate measures will be applied across the programme. They will entail placing a benchmark for the estimated GEB to be delivered by the cleantech innovations at the GCIP Accelerator application stage, so that only solutions with sufficient impact potential are supported. If the projected GHG emission reduction does not meet the minimum requirement set, the innovation will not be accepted into the GCIP Accelerators.

II. Estimation of Global Environmental Benefits of the GCIP Indonesia (10459)

202. Some potential high impact areas for GHG emissions reduction identified under the GCIP Indonesia project include:

a. Smart agriculture and food systems which aim to avoid further land degradation and deforestation as well as to restore already degraded land along with climate change adaptation and food security measures. Benefits will be achieved through reducing agricultural GHG emissions, carbon sequestration and maintaining biodiversity within the agricultural landscape in rural, peri-urban and urban areas.

b. Low-carbon energy systems which seek to introduce and disseminate energy efficient technologies and renewable energy sources to lower the energy demand while maximizing the use of available and sustainable energy resources.

c. Urban design and sustainable cities which targets to support the appropriate management tools and technologies for resilient, inclusive and resource-efficient cities that contribute to local liveability and global public goods.

203. The three cycles of GCIP Indonesia Accelerator are expected to support 80 enterprises (semi-finalists), as a result of which the avoided direct GHG emissions over a ten-year horizon are estimated at between 144,000 tCOe and 288,000 tCO2e of direct GHG emission savings and 720,000 tCO2 and 1,440,000 tCO2e of indirect GHG emission saving (based on an estimated factor of 5). The lower range has been used as input to the GEF corporate core GHG indicator target (indicator 6) as a conservative estimation.

204. To facilitate the achievement of GEBs, there will be awareness raising and promotional activities during the call for applications to the GCIP Indonesia Accelerator, and also the applicants will be supported in calculating GHG emission reduction potential of their innovations. Additional training on GHG monitoring and calculation will be provided to all semi-finalists.

205. In addition to the substantial mitigation of CO2 emissions, it is expected that other environmental co-benefits will result from this project. These are likely to include reduction in waste, material use, air pollutants (e.g., NOx, SOx, PM and CO), and improved water quality, among others.

d) Innovativeness, sustainability and potential for scaling up

Innovation:

206. Technology and innovation are the key enablers of low-carbon development, and in the last years, innovation and entrepreneurship as well as low-carbon development have become a high priority for the government of Indonesia, as today?s clean technology innovations will shape tomorrow?s economy and job market. Several accelerators and incubators ? financed through public and private sources? have been created in silos. The GCIP is unique in its approach of fostering the expansion of SMEs and start-ups into cleantech products and markets. From the assessment of the current policy framework and the identification of innovative technologies to their development and commercialization. In contrast to other accelerators and incubator programmes, GCIP not only promotes innovation per se but also uses an innovative approach that is cross-sectoral and multi-tiered to strengthen the national innovation and entrepreneurship ecosystem by building capacity in national institutions, creating strong linkages between the most relevant ecosystem players and by raising awareness among them.

207. Importantly, the GCIP Indonesia supports entrepreneurs across the whole innovation value chain to develop demand-driven and investment-ready cleantech solutions that will have an extensive positive impact in the global markets. What is more, GCIP enables achievement of not only

environmental, but also socio-economic benefits, in that it for example promotes gender equality and women?s empowerment

Sustainability:

208. The sustainability of this project is ensured by involving representatives from public and private sector institutions and by effectively building local capacity to make sure that the activities under the different components can be carried out by them after project closure. Besides, the comprehensive trainings conducted for participants, judges and mentors will create a critical mass of experts with sound business skills in different regions of the country. This knowledge can be easily transferred to create a virtuous cycle. Finally, the project will support the creation of strong networks and the effective communication channels to maintain them even after project closure. The project will use a strong national partner as executing agency for GCIP Indonesia and strengthen its institutional capacity in order to effectively absorb the knowledge and technical capacity created by GCIP Please refer to output 2.1.1 dedicated to building of national institutional capacities for sustainability. The policy framework and institutional sustainability are integral parts of GCIP?s ?ecosystems approach?, and also of strategic relevance in ensuring that the outputs and outcomes of the project are contributing to the national priorities and sustained after project closure.

209. The objective is for the target enterprises to be commercially viable, and for the accelerator efforts to be embedded in national institutions for post-project continuation of the initiative. Component 2 will aim to build capacity in the lead executing agency BPPT and other government departments that can take action to support the cleantech ecosystem, to incorporate GCIP and cleantech innovation into Indonesia?s institutional frameworks at all levels (e.g., policy framework, knowledge, access to finance).

210. Additionally, the GCIP Indonesia will link with CIEEs across countries and creating incentives for cleantech start-ups/SMEs, policy makers, industry associations, etc. to formalize their commitments, and in particular to sign bilateral cooperation agreements that would guide their cooperation for the next years, without further involvement of GCIP Indonesia.

211. The GCIP Indonesia will create and provide several tools that can be referred to and used by different CIEE stakeholders beyond the lifetime of project, such as guidebooks, systems, tools, guidelines, website, etc.

212. The creation of the GCIP Indonesia section of the global GCIP web platform to be used also after the project lifetime (as a market place, where entrepreneurs will continue to showcase their solutions, investors will continue to scout for new innovations, policy makers and regulators will continue to interact). In fact, the web platform will catalyze connectivity between different stakeholders in a long term.

213. A GCIP Indonesia sustainability and exit strategy will be developed based on a framework delivered by the GCIP Global, and it will among other include specific considerations related to a formal project handover process and the point in time when UNIDO?s exit takes place (based on targets achieved by the GCIP Indonesia).

Scalability:

214. The GCIP Indonesia fosters long-term project sustainability through multiple strategies. First, the project is closely aligned with national priorities and actively coordinates its activities with ongoing initiatives from government-supported programmes, such as BIT. The GCIP Indonesia was conceived and is designed to utilise GEF funds to help leverage new finance to support green technologies that match the national vision for economic growth outlined in the Indonesian National Middle Term Development Plan (RPJMN) 2020-2024.

215. Second, GCIP Indonesia bears a considerable potential for local and regional expansion in terms of cooperation and networking, as well as sectoral expansion through inclusion of additional cleantech categories. For example, through close relationship with other GCIP partner countries, the GCIP Indonesia stakeholders are enabled to form international partnerships and to enter foreign markets. What is more, through continuous extension of GCIP into additional countries, these opportunities are continuously augmenting. With regard to the cleantech categories, while it is foreseen that, in order to tackle the most pressing challenges, at the beginning the GCIP Indonesia will focus on energy efficiency, renewable energy production and energy storage, other cleantech categories may be supported in addition in the future.

216. Thirdly, the ecosystem approach of the project has been conceptualized to support project scalability. It involves public and private sector institutions throughout and builds capacity in both sectors through components 1 and 2 to make sure that the activities under the different components can continue after project closure. The comprehensive trainings conducted for participants, judges and mentors will create a critical mass of technicians with sound business skills in different regions of the country, creating a virtuous cycle wherein in-country expertise enables others in-county to gain more expertise beyond the project?s lifetime.

217. Finally, the project is designed to capitalize upon demonstration effects. Activities under Component 1 and 2 will provide a platform for disseminating and demonstrating lessons learned within Indonesia, both to attract new investors and to demonstrate proof-of-concept for other firms within Indonesia and abroad.

[1] https://www.worldbank.org/en/country/indonesia/overview

[2] https://www.cia.gov/library/publications/the-world-factbook/geos/id.html

[3] https://www.worldbank.org/en/country/indonesia/overview

[4] https://www.climatelinks.org/sites/default/files/asset/document/indonesia_climate_vulnerability_profile_jan2013.pdf

[5] Ibid.

[6] Ibid.

[7] Ibid.

[8] http://wri-indonesia.org/en/publication/how-can-indonesia-achieve-its-climate-change-mitigation-goal

[9] https://unfccc.int/resource/docs/natc/idnbur1.pdf

[10] https://www.iea.org/countries/Indonesia/

[11] https://climateactiontracker.org/countries/indonesia/2019-06-17/

[12] https://www.bsdglobal.com/sites/default/files/publications/coal-pollution-lessons-indonesia.pdf

[13] https://www.eia.gov/beta/international/analysis.php?iso=IDN

[14] WRI, 2017 How Can Indonesia Achieve Its Climate Change Mitigation Goal? An Analysis of Potential Emissions Reductions from Energy and Land-Use Policies by Arief Wijaya, Hanny Chrysolite, Mengpin Ge, Clorinda Kurnia Wibowo, Almo Pradana, Andhyta Firselly Utami and Kemen Austin - October 2017 (see: https://www.wri.org/publication/how-can-indonesia-achieve-its-climate-goal)

[15] https://climateactiontracker.org/documents/658/CAT_2019-10-10_ScalingUp_INDONESIA_FullReport_ENG.pdf

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[17] oecd-ilibrary.org/docserver/9789264305328-en.pdf?expires=1608308590&id=id&accname=guest&checksum=9E5E5332A0277D24BB50EEA90D5FE6AE

[18] https://www.oecd-ilibrary.org/docserver/9789264305328-en.pdf?expires=1608308590&id=id&accname=guest&checksum=9E5E5332A0277D24BB50EEA90D5FE6AE

[19] http://www.oecd.org/globalrelations/regionalapproaches/ASEAN%20SME%20Book%20to%20Bali%20Final.pdf

[20] https://www.abacademies.org/articles/Dysfunctional-IP-infringements-and-ineffectiveness-of-enforcement-mechanisms-under-Indonesian-law-1544-0044-22-1-287.pdf

[21] National Intellectual Property Systems, Innovation and Economic Development with Perspectives on Colombia and Indonesia, OECD, 2014

[22] http://angin.id/2018/06/15/sao-in-indonesia-taxonomy-landscape

[23] http://www.angin.id/2018/06/15/sao-in-indonesia-taxonomy-landscape

[24] https://theconversation.com/moving-indonesian-research-forward-with-more-private-sector-support-lessons-from-germany-109382

[25] OECD, http://www.oecd.org/globalrelations/regionalapproaches/ASEAN%20SME%20Book%20to%20Bali%20Final.pdf

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[27] UNESCO http://data.uis.unesco.org/

[28] https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-jakarta/documents/publication/wcms_695134.pdf

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[32] World Bank 2012, Knowledge Economy Index

[33] UNCTAD 2016, https://unctad.org/en/PublicationChapters/wir2016_AnnexTables_en.pdf

[34] The Global Innovation Index 2020, INSEAD; World Bank 2012, The Global Competitiveness Report 2019, World Economic Forum.

[35] See: https://www.weforum.org/agenda/2020/04/how-an-entrepreneurial-approach-can-help-end-the-covid-19-crisis/

[36] Presidential regulation no 16 of 2015

[37] https://www.indonesia-investments.com/projects/government-development-plans/masterplan-for-acceleration-and-expansion-of-indonesias-economic-development-mp3ei/item306

[38] Start-up Assistance Organizations in Indonesia: Taxonomy and Landscape First Insights into Gender Inclusion

[39] Regulation from The Ministry of Manpower, Regulation number 144 (2019) not specifically addressing cleantech

[40] National Intellectual Property Systems, Innovation and Economic Development with Perspectives on Colombia and Indonesia, OECD, 2014

[41] http://sinas-indonesia.org/

[42] See: http://mission-innovation.net/our-members/

[43] https://www.cleanenergyinvest.org/

[44] Based on a representative number of case studies from the participating countries, results showed that 624 ktons of CO2 have been reduced, US$23M of revenue was generated and 329 jobs were created. These figures are projected to increase to 4.8 Mtonnes of CO2, US$ 263M of generated revenue, and 1,219 jobs, by 2020.

[45] The Global Cleantech Innovation Programme for SMEs and Startups, GCIP Brochure, UNIDO and GEF, 2017, p.5

[46] https://www.wri.org/publication/how-can-indonesia-achieve-its-climate-goal.

[47] According to the Global Cleantech Innovation Index 2012 Report, innovations, specifically innovation entrepreneurs, are identified as, ?companies introducing incremental innovations; those transferring technological applications from one industry or geography to another; and those presenting business model innovations.?

[48] From GCIP Global: mentors are advisors assigned to the participating teams of the Accelerator to provide guidance as required on a rolling basis for the duration of the accelerator cycle. Coaches are experts delivering parts of the accelerator curriculum as per their expertise, to the cohort of participating teams. Judges are specialists in the feilds of technology, business, investment, sustainability etc. invited to participate in the selection panel of the accelerator as required

[49] https://www.avcjforum.com/indonesia

[50] The GEF-7 Climate Change Focal Area Strategy is specifically designed to be complementary to programming by the GCF and other climate funds, based on the GEF's unique role in the global environmental finance architecture to lay the foundation for enhanced climate action, namely by: 1) harnessing synergies across the different focal areas in line with an integrated approach to generate multiple global environmental benefits; and 2) building on the GEF's long-standing track record of driving innovation and funding demonstration and pilot activities that are too early in the market adoption chain to be within the reach of other providers of environmental finance. Building on the GEF-6 Focal Area Strategy and in alignment with UNFCCC COP guidance, the GEF-7 Climate Change Focal Area Strategy aims to support developing countries to make transformational shifts towards low emission and climate-resilient development pathways. To achieve this goal, the strategy emphasizes three fundamental objectives:

a) Promote innovation and technology transfer for sustainable energy breakthroughs; b) Demonstrate mitigation options with systemic impacts; and c) Foster enabling conditions for mainstreaming mitigation concerns into sustainable development strategies. In GEF-7 these objectives will be addressed through country driven investments in the focal areas and impact programs.

1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

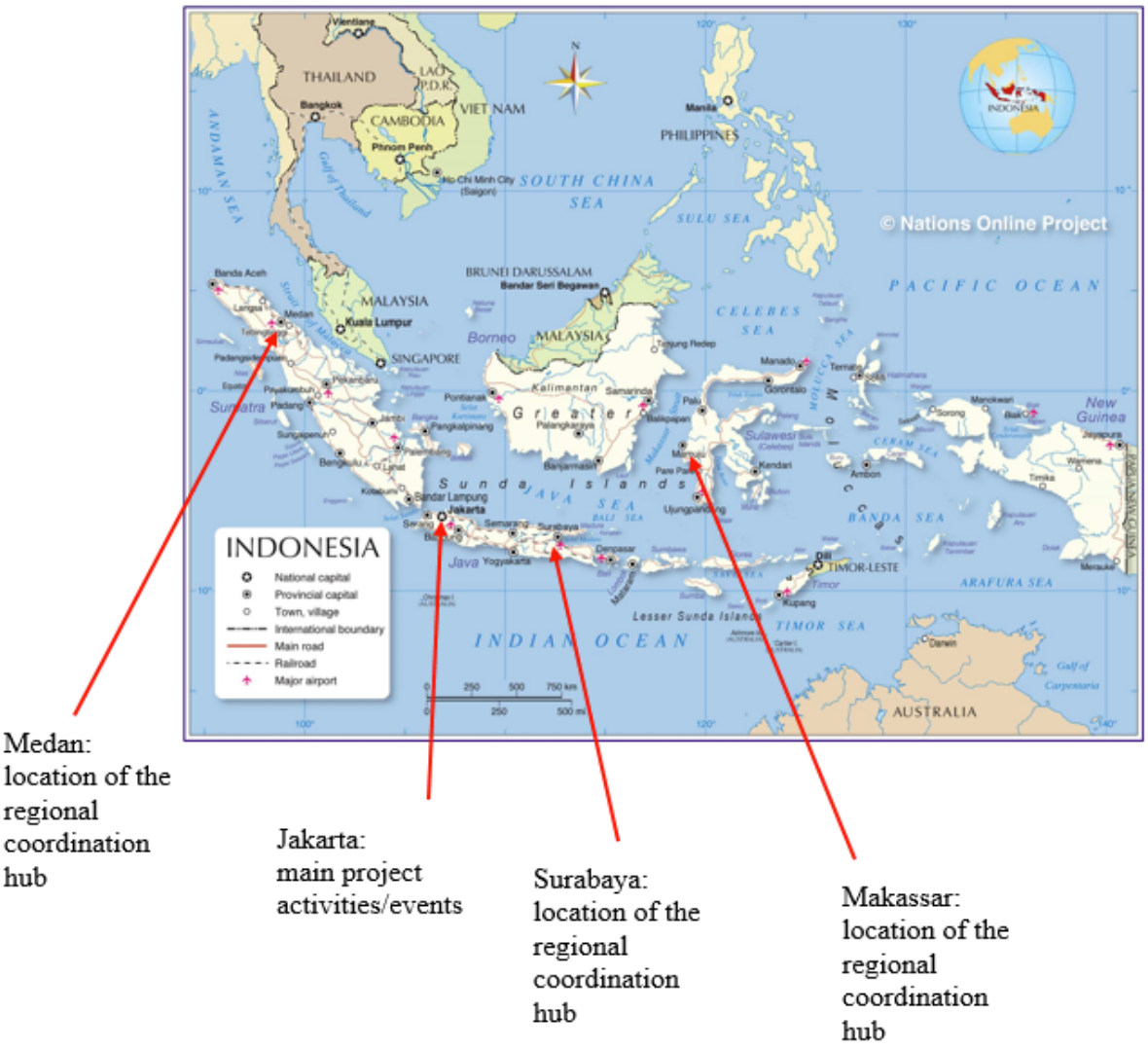
218. While the project is targeted at beneficiaries (entrepreneurs and all relevant CIEE stakeholders, such as universities, policy makers, financiers, and R&D institutions) from all over the country, the main project events will be conducted in the capital city, Jakarta, and the regional coordination hubs at Medan, Surabaya and Makassar in Indonesia . This is due to the benefits resulting from a relatively dense concentration of relevant stakeholders there, and well developed infrastructure. The project boundary will not overlap any other country?s territory. The geo-coordinates for these cities are as following:

Jakarta: 6.2087? S, 106.8455? E

Medan: 3.59544? S, 98.67170? E

Surabaya: 7.25362? S, 112.75153? E

Makassar: 5.14875? S, 119.44041? E



1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

219. The national Indonesia child project will engage with the global framework to ensure synergies, knowledge sharing, learning, consistence and efficiency as well as additional support to enable national SMEs to scale globally. The outputs and outcomes from the national child project will contribute to the overall project impact through the number of cleantech innovations, entrepreneurs and SMEs supported, finance mobilized and the resulting green growth, jobs created and GHG emission reductions. The following figure shows how the Global programme will support the child project and how the national child project will feed into the global programme.

220. The project will also collaborate with NGIN, and CTG, which are both official partners within the Global Programme. It is also expected that the Cambodia child project will collaborate with UNFCCC Climate Technology Centre and Network (CTCN) and the Private Financing Advisory Network (PFAN), which are UNIDO hosted initiatives with expertise in supporting the technology innovation value chain. Engagement with the global framework is integrated into all components of the project and will include all stakeholders. It includes the following main activities:

a. Methodologies, guidelines, tools for acceleration, and training systems: These will be developed and harmonized at the global level and the national project will focus on adapting these to the national circumstances. Experiences in applying the tools and systems across child project will be used to improve the tools. The global accelerators and global forums will help national enterprises to bring their innovations to the global stage and link with entrepreneurs and from other countries to explore opportunities for joint co-innovation, joint ventures and mobilizing investments.

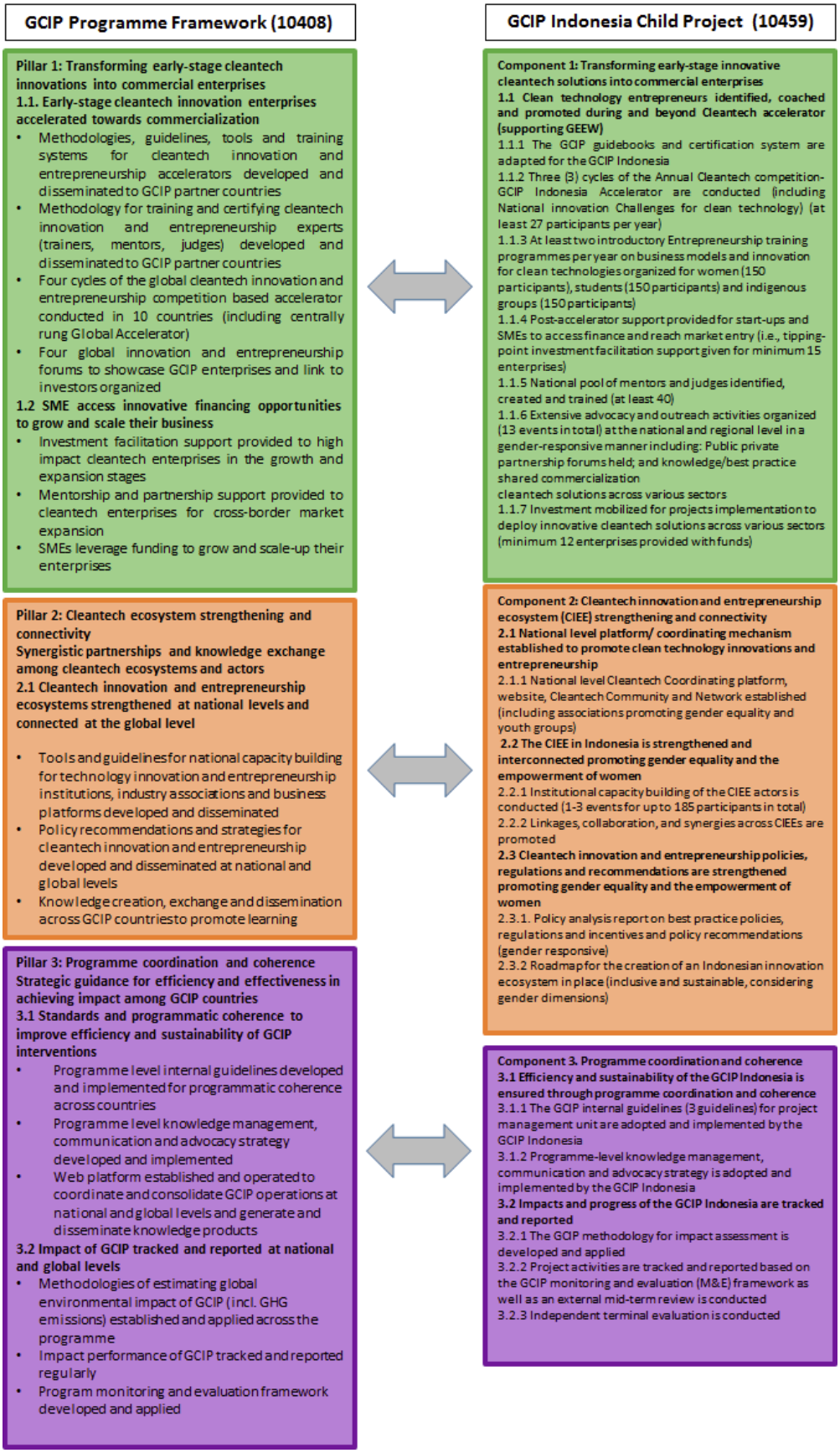
b. Enterprise?s growth support, investment facilitation and cross border growth support: Through global project, national cleantech SMEs will be supported to expand their businesses to other countries. In addition, the global framework will provide investment facilitation services to national enterprises so that they can be linked to investors (impact, venture, angels, and commercial) at regional and global levels. Furthermore, the global framework will provide support to the national child project in establishing market enabling frameworks to promote investments in cleantech.

c. Targeted training, innovation policy support, knowledge management, and peer-to-peer networking and learning: The global framework will provide methodologies for training national institutions, development of policies on cleantech innovation and entrepreneurship, and document best-practices. By linking policy makers, institutions, financiers and entrepreneurs across countries, the global framework will facilitate knowledge exchange and documentation of best-practices and peer-to-peer networking and learning.

d. Program standards, communication and advocacy, and monitoring and evaluation: to promote coherence and coordination across all GCIP countries, the global framework will develop program guidelines that will be applied by the countries. Through the global web platform that will be developed by the global framework, communications and advocacy will be promoted across countries. In addition, the global framework will develop methodologies for impact tracking and monitoring and evaluation that will then be applied across countries.

Figure 7 below illustrates how the Indonesia national project aligns with the global programme:

FIGURE 7 ALIGNMENT WITH GLOBAL FRAMEWORK


GCIP Programme Framework (10408)
Pillar 1: Transforming early-stage cleantech innovations into commercial enterprises
1.1. Early-stage cleantech innovation enterprises accelerated towards commercialization
• Methodologies, guidelines, tools and training systems for cleantech innovation and entrepreneurship accelerators developed and disseminated to GCIP partner countries
• Methodology for training and certifying cleantech innovation and entrepreneurship experts (trainers, mentors, judges) developed and disseminated to GCIP partner countries
• Four cycles of the global cleantech innovation and entrepreneurship competition based accelerator conducted in 10 countries (including centrally rung Global Accelerator)
• Four global innovation and entrepreneurship forums to showcase GCIP enterprises and link to investors organized
1.2 SME access innovative financing opportunities to grow and scale their business
• Investment facilitation support provided to high impact cleantech enterprises in the growth and expansion stages
• Mentorship and partnership support provided to cleantech enterprises for cross-border market expansion
• SMEs leverage funding to grow and scale-up their enterprises
Pillar 2: Cleantech ecosystem strengthening and connectivity
Synergistic partnerships and knowledge exchange among cleantech ecosystems and actors
2.1 Cleantech innovation and entrepreneurship ecosystems strengthened at national levels and connected at the global level
• Tools and guidelines for national capacity building for technology innovation and entrepreneurship institutions, industry associations and business platforms developed and disseminated
• Policy recommendations and strategies for cleantech innovation and entrepreneurship developed and disseminated at national and global levels
• Knowledge creation, exchange and dissemination across GCIP countries to promote learning
Pillar 3: Programme coordination and coherence
Strategic guidance for efficiency and effectiveness in achieving impact among GCIP countries
3.1 Standards and programmatic coherence to improve efficiency and sustainability of GCIP interventions
• Programme level internal guidelines developed and implemented for programmatic coherence across countries
• Programme level knowledge management, communication and advocacy strategy developed and implemented
• Web platform established and operated to coordinate and consolidate GCIP operations at national and global levels and generate and disseminate knowledge products
3.2 Impact of GCIP tracked and reported at national and global levels
• Methodologies of estimating global environmental impact of GCIP (incl. GHG emissions) established and applied across the programme
• Impact performance of GCIP tracked and reported regularly
• Program monitoring and evaluation framework developed and applied
GCIP Indonesia Child Project (10459)
Component 1: Transforming early-stage innovative cleantech solutions into commercial enterprises
1.1 Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator (supporting GEEW)
1.1.1 The GCIP guidebooks and certification system are adapted for the GCIP Indonesia
1.1.2 Three (3) cycles of the Annual Cleantech competition-GCIP Indonesia Accelerator are conducted (including National innovation Challenges for clean technology) (at least 27 participants per year)
1.1.3 At least two introductory Entrepreneurship training programmes per year on business models and innovation for clean technologies organized for women (150 participants), students (150 participants) and indigenous groups (150 participants)
1.1.4 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry (i.e., tipping-point investment facilitation support given for minimum 15 enterprises)
1.1.5 National pool of mentors and judges identified, created and trained (at least 40)
1.1.6 Extensive advocacy and outreach activities organized (13 events in total) at the national and regional level in a gender-responsive manner including: Public private partnership forums held; and knowledge/best practice shared commercialization
cleantech solutions across various sectors
1.1.7 Investment mobilized for projects implementation to deploy innovative cleantech solutions across various sectors (minimum 12 enterprises provided with funds)
Component 2: Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity
2.1 National level platform/ coordinating mechanism established to promote clean technology innovations and entrepreneurship
2.1.1 National level Cleantech Coordinating platform, website, Cleantech Community and Network established (including associations promoting gender equality and youth groups)
2.2 The CIEE in Indonesia is strengthened and interconnected promoting gender equality and the empowerment of women
2.2.1 Institutional capacity building of the CIEE actors is conducted (1-3 events for up to 185 participants in total)
2.2.2 Linkages, collaboration, and synergies across CIEEs are promoted
2.3 Cleantech innovation and entrepreneurship policies, regulations and recommendations are strengthened promoting gender equality and the empowerment of women
2.3.1. Policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender responsive)
2.3.2 Roadmap for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)
Component 3. Programme coordination and coherence
3.1 Efficiency and sustainability of the GCIP Indonesia is ensured through programme coordination and coherence
3.1.1 The GCIP internal guidelines (3 guidelines) for project management unit are adopted and implemented by the GCIP Indonesia
3.1.2 Programme-level knowledge management, communication and advocacy strategy is adopted and implemented by the GCIP Indonesia
3.2 Impacts and progress of the GCIP Indonesia are tracked and reported
3.2.1 The GCIP methodology for impact assessment is developed and applied
3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework as well as an external mid-term review is conducted
3.2.3 Independent terminal evaluation is conducted

2. Stakeholders

Please provide the Stakeholder Engagement Plan or equivalent assessment.

221. Inclusive stakeholder consultations, that took place during the project design period, paved the way for strong involvement and commitment from all relevant actors. This will continue throughout the project, as the facilitation of coordination between all CIEE stakeholders is a key objective of the GCIP Indonesia. A Stakeholder Engagement Plan (SEP) was developed (Annex J) to outline the strategy for engaging with stakeholders, including a range of activities and approaches, from information sharing and consultation, to participation, negotiation, and partnerships. The SEP also sets out resources and responsibilities as well as any related monitoring and reporting requirements.

222. An overview of the stakeholders as well as their foreseen roles and engagement modalities in the project is included below.

Table 6 Overview of the STAKEHOLDER ROLES

Type of organisation and primary role	Institution	Description	Envisaged role in the project / engagement

Executing Agency and stakeholder Project Steering Committee (PSC)	Agency for the Assessment and Application of Technology (BPPT)	BPPT is the Agency for the Assessment and Application of Technology (BPPT) is an Indonesian government research institute, which has the tasks of carrying out government duties in the field of assessment and application of technology, and prioritizes the partnership through maximum utilization of technology and engineering outputs. BPPT has vision to be the centre of leading technology which prioritizing innovation and technology services to achieve national independence, increased competitiveness and improvement of public services. BPPT has mission to carry out an assessment and application of technology in the fields of agro-industry, biotechnology, information technology, energy, industrial design, engineering, natural resources, including policy to produce innovation and technology services through assessment, intermediation, solutions, clearing house, and technology audit. Moreover, BPPT has to implement good governance through bureaucratic reform in order to create innovation and technology services sustainably.	Role in the project BPPT is the main executing agency for the project. It will execute the project on behalf of the Government of Indonesia (GoI) and will be actively involved throughout the project execution period and take the role of sustaining and expanding the Cleantech Competition and Accelerator programme after the completion of the present project. BPPT will be the secretariat of the PSC and will report to the PSC. BPPT will hold the chairmanship of the PSC while ensuring the segregation of the function between chairmanship and secretariat within the agency. PSC Chair will sign minutes of meetings of the PSC.

SAO	Technology Incubator Centre (Balai Inkubator Teknologi / BIT), Incubation Program	BIT is a government-based SAO and an implementing unit of the BPPT. BIT aims to carry out technology incubation services to create new strong, independent and competitive companies. BIT provides: 1) Office space and facilities to develop the business at an early stage; 2) Access to research, professional networks, technology, international networks and investment; 3) Access to existing funding sources or funding institutions; 4) Consultancy on the management and market issues, financial and legal aspects, trade information and technology; 5) Trainings to prepare business plans, management and other abilities; 6) Networking with universities, research institutions, the private sector, professionals and the community. BIT partners are SMEs, entrepreneurs, experts, research units in government and private research centres, financial institutions, communities and others who give priority to technology and innovation in business activities. At least 38 start-ups (tenants) have participated in BIT programs.	BPPT will be the executing agency for the GCIP Project in Indonesia. Therefore, BIT under the BPPT will act as the aggregator / facilitator in the establishment of the New Indonesian Clean-tech Community and Network. Under output 1.1.1 the BIT would coordinate all start-up assistance organisations (SAOs) that would join as partners to support the GCIP project, setting up the criteria for the GCIP project participants (SAO, start-up, SME, etc.), identifying and inviting all potential accelerator participants and sharing the. The proposed approach would aim to create a collaborative environment between SAOs supporting SMEs and entrepreneurs as they progress through the accelerator programme.

Government counterpart and stakeholder PSC	National Research and Innovation Agency RISTEK-BRIN and Ministry of Research of Technology	Previously, RISTEK-BRIN is a part of the Ministry of Research, Technology, and Higher Education (RISTEKDIKTI) that is currently divided into two ministries, RISTEK-BRIN (Ministry of Research of Technology) and Ministry of Education and Culture (MEC). Under the RISTEKDIKTI, there is a USD $35 million fund for research and innovation. However, after the separation into two ministries in October 2019, there is no clear information yet who will administer this fund and how this fund will be distributed. All research groups within universities are under the MEC, while other government research institutions are under the RISTEK-BRIN	It is envisaged that RISTEK-BRIN and Ministry of Research of Technology will be a project partner, for instance the project will work with the ministry on innovation policies and also analyse how there could be mutual benefits between the project and the research and innovation fund. Depending on the future circumstances, GCIP project can potentially access this fund for research on clean-tech innovation. Project participants (start-ups and SMEs) in the early stages that need support on product development could be promoted and supported to access this fund for their research and development activities. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

Government counterpart and stakeholder PSC	Ministry of Finance (and Fiscal Policy Agency (BKF)) And Indonesia?s Centre for Climate Finance and Multilateral Policy (within the Ministry of Finance) is the National Designated Authority (NDA) for the Green Climate Fund (GCF)	Fiscal Policy Agency ? Ministry of Finance is responsible for performing fiscal policy analysis in Indonesia, and directed by the Minister of Finance. The Ministry is also responsible for implementing international economic and financial cooperation. Furthermore, within the Ministry of Finance is Indonesia?s Centre for Climate Finance and Multilateral Policy which is also the National Designated Authority (NDA) for the Green Climate Fund (GCF)	The Agency will be a project partner for the policy of government on incentive disbursement for start-ups and SMEs. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.
Government counterpart and stakeholder PSC	Ministry of Cooperative and SMEs (KEMENKOPUKM)	KEMENKOPUKM has the responsibility to assist the President of Republic Indonesia in formulating national policies on cooperatives and SMEs, as well as monitoring the implementation the operation to comply the regulation on cooperative and SMEs.	The Ministry will be a project partner for coordination and synchronization of the national policy on SMEs. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

Government counterpart and stakeholder PSC	Ministry of Tourism and Creative Economy (BEKRAF)	BEKRAF has the responsibility to assist the President of the Republic of Indonesia in formulating national policies and implementing the creative economy as well as to stimulate and nurture start-up businesses and SMEs.	The agency will be a project partner for utilizing their environment of creative business, start-ups community and financial access to SMEs and start-ups. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.
Government counterpart and stakeholder PSC	State Minister of State-Owned Enterprises (KEMENEG BUMN)	KEMENEG BUMN has the responsibility to assist the President of the Republic of Indonesia in organizing the government linked companies and oversee the development of state-owned enterprises, including those in clean technology sectors.	The Ministry will be a project partner and foster the start-ups and SMEs to fit in to companies under their coordination. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

Government counterpart and stakeholder PSC	Ministry of Energy and Mineral Resources (EBTKE)	ESDM has the responsibility for government affairs in the field of energy and mineral resources. In early 2016, it contributed around over $325 million in a Renewable Energy Fund to renewable energy investment, taking on both large and small projects, providing funding for rooftop solar systems at airports and government buildings, as well as funding over 500 solar PV mini/micro-grid projects. Additionally, it has created new regulations to support solar systems for utilities, furthering the future of Indonesian clean tech. Taking on both large and small projects, providing funding for rooftop solar systems at airports and government buildings, as well as funding over 500 solar PV mini/micro-grid projects. Additionally, it has created new regulations to support solar systems for utilities, furthering the future of Indonesian clean tech.	The Ministry will be a project partner on directing the clean technology policy and technical assessment of the proposal from potential candidates. SMEs and entrepreneurs with renewable energy ventures might access this fund. The REF will particularly support underserved areas by promoting and supporting project early and later stage funding, especially ventures that focus on renewable energy sectors targeting markets in rural areas As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

Government counterpart and stakeholder PSC	Ministry of Environment and Forestry (MoEF)	MoEF has the responsibility in managing and conserving forest and the environment, including quality improvement of the environment, pollution control, reducing environmental damage, climate change mitigation and adaptation. MoEF is responsible to conserve forest and to manage watershed to ensure water availability for hydropower. Indonesia is among the top ten countries with the biggest hydropower potential in the world. Micro-hydro power, producing about 5KW to 100KW of electricity, has seen a growth rate of over 700% since 2000[1], with over 450 MW of electricity currently coming from micro-hydro power in Indonesia.	MoEF will be a project partner on directing the clean technology policy and technical assessment of the proposal from potential candidates with regards to environmental impacts and benefits. MoEF is also the GEF Operational Focal Point and will be responsible for reporting national matters of importance during project implementation to the GEF. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.
counterpart and stakeholder PSC	Ministry of Industrial and Trade (BPPI)	Ministry of Industry in responsible in the coordination and synchronization of formulation, determination, and execution of ministerial policy in industry; execution of technical guidance and supervision of policy implementation in industry; research and development in industry, including the implementation of innovation and clean technology in industrial sectors.	MoI will be a project partner on directing implementation of innovation and clean technology in industrial sectors. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

Government counterpart and stakeholder PSC	Ministry of National Development Planning of the Republic of Indonesia (BAPPENAS)	BAPPENAS is responsible in overseeing government affairs in the field of national development planning, including the implementation of innovation and clean technology for SMEs and start-ups.	BAPPENAS will be a project partner on directing development planning related to the implementation of innovation and clean technology for SMEs and start-ups. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.
Government counterpart and stakeholder PSC	Ministry of Youth and Sport Affairs (Kemenpora)	Kemenpora is a ministry that is in charge of youth and sports affairs of Indonesia. It aims to increase youth potential resources and to manifest youths' character, capacity, and competitiveness through the preparation of youth cadres according to the characteristics of youth who have the spirit of stability, volunteerism, and responsibility.	The Ministry will be a project partner for promoting entrepreneurship mind-set and technological innovation among the youth. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.
Government counterpart and stakeholder PSC	Ministry of Public Work (MoPW)	Ministry of Public Works is in charge of public works matters providing infrastructures such as roads and bridges, dams, irrigations, waterways, water supply, public buildings to serve economic activities in Indonesia. Its role includes the application and implementation of innovation and clean technology in building infrastructures.	MoPW will be a project partner through its role with regards to public works matters and cleantech use, innovation and SME involvement in the infrastructure and public works sector. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

Government counterpart and stakeholder PSC	Ministry of Women Empowerment and Child Protection (MoWECP)	MoWECP is a government ministry responsible for the right and welfare of women and children of Indonesia. MoWECP handles government affairs in the context of sharpening, coordinating, and synchronizing government programs to ensure GEEW. To realize the success of women's empowerment, the government has developed policies and strategies through five-year development stage (Pelita).	MoWECP will be a project partner through its role with regards to GEEW matters. MoWECP will be heavily involved with gender aspects of the project, supporting all events targeting women as well as assisting awareness raising and tracking of gender related project targets. MoWECP will also support the project through the program of economic growth and empowerment of women. As a PSC member, it will ensure proper oversight and institutional ownership of the project, as well as provide advisory inputs.

State Owned Enterprise and stakeholder	Indonesia Oil and Gas (PERTAMINA)	Pertamina is an Indonesian state-owned oil and natural gas corporation based in Jakarta. It was created in August 1968 by the merger of Pertamin (established 1961) and Permina (established 1957). The firm is currently (2013) the second-largest crude oil producer in Indonesia behind the US-based Chevron Pacific Indonesia. In 2013 for the first time, Pertamina ranked No. 122 in the Fortune Global 500 list of companies with revenues totalling to $70.9 billion, Pertamina is also the sole Indonesian company to be featured in the list.	Pertamina will contribute in the project through its Social and Environmental (S&E) responsibilities programs. Pertamina have implemented Policy regarding S&E Responsibility in accordance with the Corporate Social Responsibility (CSR) principle contained in ISO 26000. Pertamina undertakes 2 S&E Responsibility approaches through SME Development activities and CSR activities managed by the SME Partnership Program and CSR Functions (SMEPP & CSR Functions). S&E Responsibility is implemented by each of Pertamina?s operating units throughout Indonesia as part of the Community Relations and Development activities.
State Owned Enterprise and stakeholder	Electricity PLN	PLN is an Indonesian government-owned corporation which has a monopoly on electricity distribution in Indonesia and generates the majority of the country's electrical power, producing 176.4 TWh in 2015. It was included in the Fortune Global 500 lists of 2014 and 2015.	PLN will contribute in the project through its Corporate Social Responsibility (CSR) programs. PLN has run several CSR programs that could be related to this project such as Self-sufficient Energy Program for Villages. This program has been run by developing micro hydropower and small-scale biogas plants in remote areas.

International Private Sector Network	Private Financing Advisory Network (PFAN)	The Private Financing Advisory Network (PFAN) is a multilateral public private partnership initiated by the Climate Technology Initiative and the United Nations Framework Convention on Climate Change (UNFCCC). It identifies and nurtures promising, innovative clean and renewable energy projects by bridging the gap between investors, clean energy entrepreneurs and project developers t	Overall, PFAN is part of the consortium leading the Global Child Project Execution and has a potential to Provided inputs for the implementation of the child project. Furthermore, PFAN could be used to provide financing facilitation services. It can help the start-ups develop their ideas into an investment-ready proposal, introduce those to investors, and facilitate deal closure. PFAN has already supported GCIP alumni.
International Private Sector Network	Network for Global Innovation (NGIN)	The Network for Global Innovation is an international network of entrepreneurial support agents. Its mission is to accelerate the expansion of new sustainable technologies while simultaneously generating significant economic growth in both developed and emerging markets.	Overall, NGIN is part of the consortium leading the Global Child Project Execution and has a potential to Provided inputs for the implementation of the child project. Furthermore, NGIN could be used to provide financing facilitation services. It can help the start-ups develop their ideas into an investment-ready proposal, introduce those to investors, and facilitate deal closure. NGIN has already supported GCIP alumni.

International Private Sector consulting	Cleantech Group (CTG)	CTG provides research, consulting and events to catalyse opportunities for sustainable growth powered by innovation. We bring clients access to the trends, companies and people shaping the future and the customized advice and support businesses need to engage external innovation.	Overall, CTG is part of the consortium leading the Global Child Project Execution and has a potential to Provided inputs for the implementation of the child project. Furthermore, CTG could be used to provide financing facilitation services. It can help the start-ups develop their ideas into an investment-ready proposal, introduce those to investors, and facilitate deal closure. CTG has already supported GCIP alumni.
Financial Sector and stakeholder	Local banks and other financial institutions	Indonesia has an advanced banking sector with over 120 commercial banks in Indonesia (4 state owned banks and 117 private banks.	Local banks engaged during project preparation will be engaged as partners during project implementation. Close coordination with the banking sector will be maintained through project implementation. Banks will work closely with the Accelerator programme to identify financing barriers and opportunities to support successful entrants of the programme. They will be invited as participants and speakers at events.

Financial Sector and stakeholder	PTSMI ? infrastructure bank	PTSMI a national entity with the goal of serving as a catalyst for accelerating national infrastructure development in Indonesia. PT SMI supports the fulfilment of its government?s infrastructure development objectives by implementing projects through public?private partnerships. In addition, the entity mobilizes resources from multilateral and bilateral financial institutions in order to finance infrastructure projects. PT SMI is contributing to the sustainable development and climate resilience of communities in Indonesia by financing water, renewable energy generation, transport and agriculture-related infrastructure projects.	PTSMI will be engaged throughout the project to support the accelerator programme as a key partner providing financing and investment services, advisory services to participants and potentially supporting business and project development through direct investment (particularly in the infrastructure sector).
Financial Sector and stakeholder	Authority of financial services (OJK)	Financial Services Authority of Indonesia is an Indonesian government agency which regulates and supervises the financial services sector.	OJK will be heavily engaged during the review of the financial services sector regulatory framework and support the identification of incentives and enabling environment financial and regulatory frameworks to support cleantech sector development. OJK will also facilitate access with the Fintech community
Financial Sector and stakeholder	Indonesia Stock Exchange	Indonesia Stock Exchange is a stock exchange based in Jakarta, Indonesia. It was previously known as the Jakarta Stock Exchange before its name changed in 2007 after merging with the Surabaya Stock Exchange.	The Indonesia Stock Exchange will be engaged to support the inclusion of cleantech companies on the Indonesia Stock Exchange

Industrial Association Counterpart and stakeholder	Chamber of Commerce and Industry (KADIN)	KADIN is an association of business organisation in Indonesia. Members of this organisation consist of entrepreneurs or a combination of national businesses from various sectors, both private-owned enterprises, cooperatives and government-owned enterprises. Kadin is headquartered in Jakarta, but it functions in coordinating, consultation and cooperation of chambers of commerce throughout 34 Indonesian provinces.	KADIN operates in all areas of the economy, including promoting the development of start-ups and SMEs as well as stimulating market access for clean technology.
NGO Counterpart and stakeholder	Indonesian centre for cleaner production (ICPC) under Chamber of Commerce and Industry (KADIN)	ICPC aims at facilitating, promoting and catalysing Cleaner Production implementation in Indonesia. In other words, it stimulates and encourages the cleaner production market in Indonesia. Furthermore, it leads the objectives of the 10 Year Framework of Programmes on Sustainable Consumption and Production (10Y-SCP), through advocacy knowledge management of Resource Efficient and Cleaner Production (RECP) and establishment of the network for RECP Indonesia (NRECPI).	ICPC will be engaged as a project partner through its role to stimulate and encourage the Cleantech market in Indonesia through RECP and its NRECPI network.
Counterpart and stakeholder	Indonesia Climate Change Trust Fund (ICCTF)	ICCTF is a key instrument in reducing emission intensity and greenhouse gases emission through actions of low carbon development and adaptation on climate change impact. ICCTF also strives to integrate climate change issues into development plans at the national, provincial and regional level as well as implementing the initiatives on climate change mitigation and adaptation.	ICCTF will contribute to this project by leveraging and channelling domestic resources and international funds into this project to support Indonesia?s emission reduction target.

Counterpart and stakeholder	Industrial Associations	Relevant Industrial Associations will be invited to participate, where relevant, during project implementation e.g., Chamber of Commerce and Industry (KADIN)	Industrial Associations will be engaged as a project partners through their role in stimulating and encouraging the clean-tech market and business opportunities and partnerships in Indonesia through their networks. Also, Industrial Associations will contribute in the project by promoting entrepreneurship mind-set and technological innovations.
Counterpart and stakeholder	Private sector	Private Sector Enterprises identified in the PPG phase of the project to support, and also benefit from, project activities. In particular, they could be involved in defining and sponsoring the technology challenge awards.	A number of private sector enterprises engaged in previous UNIDO-GEF project in Indonesia have shown their willingness to support the Indonesia GCIP project through sponsoring the technology challenges. Technology challenges aim to find solutions to specific technical issues facing the industry sector in Indonesia.
Counterpart and stakeholder Counterpart and stakeholder	Universities	Some leading universities in innovation and clean technology include Bandung Institute of Technology (ITB), University of Indonesia (UI), Sepuluh Nopember Institute of Technology (ITS), IPB University (Institut Pertanian Bogor), Surya University, Bakrie University, Ciputra University, UNS, President University	Universities will be heavily engaged during project execution to take part in project activities and provide technical expertise.

Academic and research and development institutions Counterpart and stakeholder	Academic and R&D institutions	This could include the Indonesian Academy of Sciences (IAS), the National Innovation Committee (NIC), the National Research Council (NRC) and the Provincial Research Council (PRC)	Other academic and research and development institutions will be engaged during project execution to take part in project activities and provide technical expertise.

Start-up assistance organizations (SAOs) Counterpart and stakeholder	New Energy Nexus (NEX) Indonesia, Incubation and Boot-camp Program	NEX Is an international non-profit that supports clean energy entrepreneurs with funds, accelerators, and networks. Its activities include: 1) Offering early-stage incubation, events, hackathons and skills training for start-ups; 2) Supporting later stage start-ups with matchmaking and commercial partnerships; and 3) Providing a $4M clean energy seed fund to support the growth of enterprises that show potential to scale. There are two main NEX?s programs First, Smart Energy Incubation Program that provides hands-on business advisory and support services to outstanding start-up teams focusing on innovative, smart and clean energy ventures. Second, Smart Energy Start-up Boot camps that are designed to provide engineers, developers, designers, energy professionals and entrepreneurs who are passionate about clean energy to learn how to build their own smart and clean energy start-ups. Boot camp participants with dynamic and innovative business models are invited to take part in the NEX Indonesia Smart Energy Incubation/Acceleration Program to further develop their business and receive potential seed funding. The boot camps are held in major cities across Indonesia in collaboration with local partners.	Given the similarities of the GCIP project accelerator programme to NEX activities, the GCIP project will collaborate closely with NEX?s programs. The NEX?s Boot camp that are held in major cities across Indonesia could be an instrument to identify potential start-ups and SMEs to participate in the GCIP Accelerator Programme. The Boot camp could be useful to ensure that opportunities to participate in the accelerator are delivered not only in Jakarta area, but also in other regions of Indonesia. NEX Indonesia, its network and alumni will play an integral role in 1) the national level coordination platform, coordination mechanism and network under the GCIP project. The USD $4 million clean energy seed fund granted by the NEX Indonesia for winning start-ups can be accessed by GCIP accelerator winners to increase project impacts. NEX Indonesia will also be invited to participate in the mentoring programme, judging in the competition, capacity building, supporting to access networks, investors, and assisting in market access.

	Angel Investment Network Indonesia (ANGIN)	ANGIN is the first and largest group of prominent high-net-worth individuals in Indonesia providing funding and mentoring to early-stage companies active in Indonesia. ANGIN team of professionals provides strategic sourcing, due diligence support and legal implementation to its investors while bringing entrepreneurs to investment readiness. Since its inception in 2013, ANGIN investors have invested in more than 30 companies with a unique mix of technology (or ICT), offline companies, and social enterprises. Leveraging its Angel Network, the ANGIN team has expanded its expertise to research, venture building and consulting work for both Indonesian and International organizations. ANGIN frame its services under ANGIN Investment and ANGIN Advisory.	ANGIN will participate in the mentoring programme by engaging in the new national level coordination platform, coordination mechanism and network and will also be invited to participate in the mentoring programme, judging in the competition, capacity building, supporting to access networks, investors, and assisting in market access. Although ANGIN is not specifically targeting the cleantech sector, activities of the GCIP project will support ANGIN to target start-ups in cleantech sectors.

	Clean Energy Investment Accelerator (CEIA)	CEIA brings together large commercial and industrial users to demonstrate innovative renewable energy purchasing models and strengthen policy frameworks. It is an innovative public-private partnership jointly led by Allotrope Partners, World Resources Institute, and the U.S. National Renewable Energy Laboratory. The CEIA Model is built on three essential pillars for mobilizing clean energy investment at scale. The CEIA is testing, proving, and scaling clean energy solutions to transform key emerging markets including Indonesia. CEIA?s focus is to drive deployment of renewable energy solutions for large consumers and conveying policy solutions, best practices and effective financing approaches to reduce Indonesia?s dependence on coal.	CEIA will play a key role to support renewable energy solutions under the project and support the projects policy interventions. The GCIP project collaboration with CEIA would provide market access and investment for the GCIP participants (start-ups and SMEs), transforming early-stage innovative clean-tech solutions into commercial enterprises. It will also support entrepreneurship training programmes on business models and innovation. CEIA and GCIP will also collaborate in strengthening policy and institutional framework to promote clean technology innovations in Indonesia.

	New Ventures Indonesia (NVI) Program	The NVI program is harnessing the power of SMEs to support a new development approach that values communities and the environment. Main activities include: Hosted business seminars, international investor forums, networking of entrepreneurs, screening sustainable enterprises, growing a portfolio of sustainable enterprises and has established an IT-training facility for SMEs. Embedded within NVI activities are strategic partnerships that include business incubators, venture capital funds, multinational companies, multilateral organizations and business schools. In the end, NVI works toward the long-term conservation and sustainable use of natural resources in Indonesia by employing a market-driven approach that focuses on supporting environmentally sustainable and socially responsible small and medium enterprises.	NVI will participate in the GCIP project, especially in the mentoring programme, judging in the competition, capacity building, supporting access to networks and investors for the competition winners, assisting the competition winners in market access, funding further research and technology innovation.
	Sasakawa Peace Foundation	As a public interest foundation dedicated to serving the international community, the Sasakawa Peace Foundation (SPF) explores novel approaches to pursue new forms of governance for human society through policy recommendations, international cooperation, and exchange programs. One of the programs is the Gender Investment and Innovation program.	Under the project, SPF will promote gender equality and women?s empowerment, including women entrepreneurship and addressing the gender imbalances in SMEs to provide a solid basis for gender mainstreaming in clean technology innovations.

	Kopernik, ?Wonder Women? Programme	Kopernik is an Indonesia-based non-profit organisation connecting simple technology with last mile, or rural, often isolated communities to reduce poverty. In many cases, these communities have limited access to major energy sources such as electricity networks (PLN) and gas stations (Pertamina). Therefore, they depend on the local energy sources (off grid) such as fuelwood, micro hydro, solar panel, and wind turbines. Kopernik?s Wonder Women Programme is a proven and award-winning program with a distribution network of primarily female sales agents. This initiative empowers Indonesian women to become clean energy micro-social-entrepreneurs. Women participate in training in order to successfully sell simple solar lights, clean cook-stoves and water filters in their communities, boosting their income and expanding access to these life-changing technologies. Since 2011, more than 300 Indonesian women have participated in Kopernik?s women?s economic empowerment programs in East Nusa Tenggara, West Nusa Tenggara, East Java and Aceh. They have sold almost 10,000 technologies which have reduced carbon emissions by more than 5,000 tonnes to date.	This program provides lessons learned for the Indonesia GCIP projects. First, the GCIP projects should target women as the project?s participants. Gender inequality remains an important issue in Indonesia. Kopernik program shows that women are particularly effective in the development, promotion and service delivery or sale of cleantech. Second, the GCIP project will also target project beneficiaries from marginalised and vulnerable communities living in remote areas particularly with technologies that support energy access and support income generation. The GCIP project will also collaborate with Kopernik in implementing the project at the local levels, particularly the targeting of women and marginalised people.

	UPC Sidrap Bayu Energi Project	With help from the US-based Overseas Private Investment Corporation (OPIC), UPC Sidrap Bayu Energi has secured funding to build a $120 million wind farm, providing 70 MW of wind-generated electricity to Indonesians in South Sulawesi. UPC Sidrap Bayu Energi, a joint venture between UPC Renewables and Binatek Energi Terbarukan, is further looking at adding over 1,000 MW of wind energy to Indonesia in the next 5 years. With this project being the first utility-scale wind-power, Indonesia?s goal of increasing its amount of renewable energy from 6% in2016 to 23% by 2025 is becoming increasingly more realistic.	GCIP will invite private sector cleantech companies such as PT UPC Sidrap Bayu Energi to provide insights, expertise, and experiences in specific cleantech sector such as wind energy. The collaboration might also open more partnerships opportunity for other GCIP project participants (start-ups and SMEs).
	PT Supreme Energy (Engie) Project	One huge milestone for Indonesian geothermal energy was the financial closing for a large geothermal plant by PT Supreme Energy (Engie), one of the world?s largest energy utility companies in the Southern Solok region in West Sumatra province. Historically challenged by lack of funding in renewable energy sectors, the PT Supreme Energy (Engie) plant is an excellent example of Indonesians seeing the increasing importance of renewable energy as a resource. The geothermal industry has huge potential in Indonesia, with Indonesia ranking as one of the world?s largest potential geothermal resources.	Private sector cleantech energy companies such as PT Supreme Energy (Engie) will share expertise and experiences to the project participants on how to develop start-up and SMEs, especially in the field of geothermal and other renewable energy.

	Fluidic Energy Project	Fluidic Energy is a company emerging from its start-up roots and becoming a true industry power in Indonesian clean tech. Fluidic Energy?s rechargeable zinc-air battery technology has drawn intense interest from the energy investment community. Fluidics? ?500 Islands? project promotes both rural development and increasing renewable energy usage to Indonesia?s weak power grid environment. Fluidic has so far delivered energy to over 90 villages in the archipelago nation, making its efforts one of the region?s largest rural electrification projects. With over 40MWh of energy storage worldwide, Fluidic Energy leverages its zinc-air energy storage technology to bring sustainable energy to developing regions such as Indonesia, bolstering the growing clean tech market in this nation.	Fluidic Energy shows that communities living in remote areas are potential markets for clean technology that would be promoted by the GCIP project. These communities have limited access to major energy sources such as electricity networks (PLN) and gas stations (Pertamina). Collaboration between GCIP projects and Fluidic energy could open more opportunities to distribute clean technology in rural areas.
	Hivos	Hivos is an SAO that aims to innovate for social change, working towards more open and green societies. Two of its focus areas are women empowerment and renewable energy.	These SAO?s and others interested will be engaged in supporting the project through the national level of coordination platform, coordination mechanism and network in clean technology. Furthermore, SAOs will be engaged in the in the mentoring programme, judging in the competition, capacity building, supporting access to networks and investors for the competition winners, assisting the competition winners in market access, funding further research
	Platform Usaha Sosial Indonesia (PLUS)	PLUS aims to support growth of impact in Indonesia through social entrepreneurship and social innovation.	
	UnLtd Indonesia	UnLtd run programs for supporting early-stage social enterprises in Indonesia.	

	Simona Ventures by Digitaraya	Simona Ventures by Digitaraya is a platform that provides access and opportunities to empower businesses and initiatives that solve the gender gap challenges.	and technology innovation.
	Other associations, networks and start-up assistance organisations (SAOs)	In Indonesia there are currently more than 50 start-up assistance organisations (SAOs) ? incubators, accelerators, ecosystem builders such as hubs and coworking spaces, as well as other activities such as start-up competitions and bootcamps ? operating.	It is envisaged that the project will actively involve relevant players and create a common network focusing on clean technology innovations.
Counterpart and stakeholder	Associations promoting gender equality and women?s empowerment, Gender Focal Points and Gender Experts	Indonesia boasts many small associations and gender experts involved in activities promoting gender equality and women?s empowerment.	Relevant women entrepreneurs, gender experts, associations that promote GEEW and gender focal points will be involved in all activities of the project. The project will deliberately mobilize interest from women entrepreneurs by targeting the involvement of their associations in the project process. This will be done by taking into consideration the cultural context that exists in Indonesia. That way, the project would adequately address the gender imbalances in SMEs and provide a solid basis for gender mainstreaming in clean technology innovations.

Counterpart and stakeholder	Youth and United Nations Major Group for Children and Youth	UNMGCY leads activities for young people to enhance their understanding, knowledge, and skills in relation to sustainable development, meaningful engagement with the UN.	The UNMGCY will support activities related to engagement of children and young people in the project.
Counterpart and stakeholder	Indonesia Women IT Awareness (IWITA)	IWITA is an Indonesian women's organization aims to educate Indonesian women through information technology. IWITA supports Indonesian women in responding information technology through advancement, learning, implementation and socialization, to increase women?s roles and participations in the development of Indonesia.	IWITA will contribute in the project by promoting entrepreneurship mind-set and technological innovations among women.
Counterpart and stakeholder	PT Permodalan Nasional Madani (PNM)	PNM is a venture capital intended for underprivileged women of ultra-micro businesses, both those who want to start a business or develop a business. It was noted that around 70,000 entrepreneurs have joined their program and it was noted that the involvement of the program was important especially to enhance gender responsiveness of the project.	PNM will contribute in the project by promoting entrepreneurship mind-set and technological innovations among women.

Counterpart and stakeholder	SociopreneurID	SociopreneurID were established as a university club called Technopreneurship for Youth focusing on improving creativity and innovation skills for children and youth. By 2015, the club started to provide platforms for innovative ideas by connecting specific needs of stakeholders such as government and business. The club continued to grow until it transformed into a social enterprise in early 2018, now focusing on social innovation and entrepreneurship education. SociopreneurID aims to nurture the growth of Social Entrepreneurship through Entrepreneurship Education to create a ?Responsible Ecosystem.? SociopreneurID is an ecosystem designer. Since 2013, it has initiated entrepreneurship programs to improve human quality through education and collaborative actions with multi-stakeholders.	SociopreneurID will contribute to the project by promoting entrepreneurship mind-set and technological innovations among the youth.
Counterpart and stakeholder	Bakrie Center Foundation (BCF)	The Bakrie Center Foundation (BCF) aims to provide Indonesia?s best and brightest with a chance to study for a higher education at some of the best universities at home and abroad. It is a private sector initiative to identify and develop leaders in Indonesia, creating a talent pool that will eventually drive economic development and growth.	BCF will contribute to the project by promoting entrepreneurship mind-set and technological innovations among the youth.

[1] See: http://www.indosight.com/blog/investing-hydro-solar-power-indonesia

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.

Select what role civil society will play in the project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

223. Gender equality is a fundamental human right. While some progress has been achieved towards gender equality and women?s empowerment globally, women continue to suffer from discrimination and violence in some parts of the world. Gender issues need to be addressed by creating equal employment and capacity building opportunities, as well as social infrastructure and safe working conditions responding to the specific needs of women. The importance of gender equality and women?s empowerment, particularly women?s economic empowerment, is at the core of UNIDO?s mandate. Commitment of UNIDO towards gender equality and women?s empowerment is demonstrated in its policy on Gender Equality and the Empowerment of Women (2019), and the UNIDO Strategy for Gender Equality and the Empowerment of Women (2020-2023). UNIDO has also developed an operational energy-gender guide to support gender mainstreaming within its sustainable energy initiatives

224. Gender equality enhances economic growth, reduces household poverty, and enables human development. Women?s entrepreneurship, that can directly contribute to the economic empowerment of women, is often seen as crucial for increasing the quality of life of women in the developing world, as well as a trigger for changes of the status-quo of women and for re-addressing the balance of power within the family

225. The focus of dialogue on gender and cleantech is shifting from women being identified as part of the vulnerable groups to them becoming key agents of change as consumers, entrepreneurs, distributors and decision makers across the value chain. Women and their organizations have the potential to play a critical role in contributing to the SDGs. A large number of women are engaged in entrepreneurship, with a women ownership of 30-70% of all SMEs in emerging markets (IFC and McKinsey, 2011).

226. Nevertheless, the enterprises led by women in developing countries tend to be concentrated on a relatively narrow range of activities. Moreover, they are often very energy intensive, rely on biomass fuels and have disproportionately low rates of return compared to the activities undertaken by men. Nonetheless, networks of women entrepreneurs could be leveraged to promote innovative cleantech.

227. The most recent Global Gender Gap Index of the World Economic Forum (2020) ranks Indonesia 85th out of 144 countries. In line with many other G20 and Asian countries, the country has close to universal primary and secondary education completion rates that are almost equal for boys and girls; in 2018, expected years of schooling were 12.9 years for both female and male, and 44.5% of Indonesian adult women (25 and older) have at least some secondary education (and 53.2% of men). In 2017, about 16% of young adults in Indonesia had attained a tertiary education, well below the G-20 average of 38%. More young adults in Indonesia have earned a bachelor?s degree than a short-cycle tertiary qualification, but few have attained a master?s degree[1]. The percentage of Indonesian women graduating from Science, Technology, Engineering and Mathematics (STEM) programmes in tertiary education was 37.1 % in 2018. Women entrepreneurship is considered a key tool in enabling women?s empowerment. The most recent Global Gender Gap Index of the World Economic Forum (2020) ranks Indonesia 85th out of 153 countries. Labour force participation rate of Indonesian woman above 15 years old is 52.2 %, indicating that women play a significant role. Demonstrating an apparent gender gap in industry, in 2019, the percentage of women employed in industry was 17%, with the share of women employed in senior and middle management was 19.4%.

228. A report by IFC and USAID indicates that in Indonesia, around 34% medium-sized enterprises and 51% of small-sized enterprises are owned by women, contributing 9.1% of GDP and job creation as much as male-owned SMEs. Though weaker business metrics are often attributed to women-owned enterprises, their performance is not lower than that of men-owned SMEs and women are more likely to report their businesses are profitable than men. Based on these findings, the GCIP Indonesia aims to address the gaps, and foresees that a minimum of 35% of the total number of experts trained and GCIP-supported entrepreneurs will be women.

229. The GCIP Framework overall, including the GCIP Indonesia, has been identified as having ?significant gender mainstreaming? impact according to the Gender Marker used in categorizing UNIDO projects. It is expected to significantly contribute to gender equality and/or women?s empowerment. These projects possess multiple entry-points for gender mainstreaming activities and/or affirmative action, but do not explicitly state gender equality and/or women?s empowerment as a principal objective. Rather, gender equality and/or women?s empowerment is a secondary objective, and the project has corresponding outputs and indicators that measure how gender equality will be advanced.

230. A guiding principle of the project is to ensure that both women and men can equally lead, participate in and benefit from the project (UNIDO Gender Policy 2019). Particularly, in the GCIP Indonesia Pre-Accelerator, Accelerator, Advanced Accelerator, and Post-Accelerator, gender-responsive activities will be streamlined to ensure the achievement of this goal. Special efforts will be made to promote equal participation of women and men, both at managerial and technical levels, as consultants, participants, entrepreneurs, mentors, etc. in all stages of project implementation. Previous GCIP projects have already shown higher levels of women?s participation than other acceleration and

incubation programmes, with 25% of the 900 alumni supported to date being women-led enterprises. This project aims at continuation of this trend and even at an increase of the proportion of women beneficiaries (with a target of at least 35% women beneficiaries).

231. UNIDO?s Guide on Gender Mainstreaming in Energy and Climate Change Projects, as well as a draft gender mainstreaming action plan developed in the framework of this project (Annex K) will serve as a framework for the project implementation, as to ensure that both UNIDO and GEF requirements are fulfilled. Based on the guidelines, attention will be paid to 1) Gender-sensitive recruitment at all levels where possible, especially in selection of project staff. Gender responsive TORs will be used to mainstream gender in the activities of consultants and experts. In cases where the project does not have direct influence, gender-sensitive recruitment will be encouraged. Furthermore, existing staff will be trained and their awareness raised regarding gender issues; 2) gender dimensions will be considered in all decision-making processes (e.g. efforts to achieve gender balance/representation in such processes), including PSC meetings; 3) sex-disaggregated data will be collected; 4) Consultations will be held with stakeholders promoting gender equality and women?s empowerment, such as gender experts and organizations, CSOs and NGOs, e.g. for outreach purposes.

232. A gender analysis was carried out and a draft gender mainstreaming action plan developed (Annex K) in the framework of this project, which also influenced the ultimate project design. In the project design UNIDO has ensured that the gender dimensions are considered, and that the project log-frame reflects key gender dimensions in the respective outputs, activities, indicators and targets. Also, a review of previous GCIP projects enabled insights into how the GCIP Indonesia can best contribute to gender equality and women?s empowerment.

233. A summary of integrated approaches to gender mainstreaming is shown in the table below. A full list and further details are provided in the Gender Analysis Report (Annex K). Upon the start of project implementation, BPPT will review and validate the Draft Gender Mainstreaming Action Plan included therein and incorporate it into its annual work plans.

Table 7 Overview of the GENDER EQUALITY MEASURES

Stage/Activity	Gender equality measure

Project execution	Gender sensitization workshops will be conducted for all stakeholders involved in GCIP Indonesia; A gender training package (material for national capacity building on gender awareness) will be adapted for Indonesia from the training package developed by the GCIP Global; Gender focal point will be nominated within BPPT. Gender mainstreaming targets will be included in the ToR for the national PEE and international contractors.
Training of GCIP Indonesia consultants and experts	Consultants/experts will be required to complete the ?I know gender? UN course; Mentors and judges will be provided with training on awareness raising and gender-bias; Consultants will be expected to provide evidence on how gender equality is addressed in the material they develop
Development of GCIP Indonesia guide books	Guidebooks will highlight the need to make special effort to encourage women to apply for the GCIP acceleration support, including targeted outreach and gender specific communications material (e.g., videos, success stories) and explicit statements that GCIP encourages applications from women; Training materials for entrepreneurs will include topics on gender awareness; Gender equality will be addressed in the curricula and content of all training material developed for experts.
Application stage for GCIP Indonesia Accelerator	Sex-disaggregated data will be collected in application forms; There will be targeted and gender responsive outreach; It will be considered to organize events specifically targeted at connecting women technicians and engineers with businesswomen; A target of the 35% of women-led enterprise applications is set.
Selection of GCIP Indonesia semi-finalists and recruitment of experts	Stringent selection criteria will be de ned that provide equal opportunities for both women and men; Women will be involved in the mentoring/training and judging processes so that more role models are created; Efforts will be made to ensure gender balance of judges; Special support will be provided to women to prepare for the competition, e.g. women could receive possibility to select their slot, so it does not overlap with their household responsibilities or could be offered safe transport to the competition venue; Evaluation methodology for selection of semi-finalists will consider the gender balance within entrepreneur?s management teams and beneficiaries, as well as gender-responsive policies within their firms.
Special awards	Special consideration will be given to the creation of a gender related prize (e.g., a prize for the women?s entrepreneur of the year and/or a special award for the team with the product/service with the highest gender equality impact potential). Such a prize was offered in a number of previous GCIPs, which led to an increase in the number of women-led innovators applying for support (e.g., in South Africa, Pakistan, and Morocco the number of applications from women entrepreneurs was between 25% and 40%). In sum, the project design will acknowledge the differences between women and men considering distribution of economic activities and social roles.

Provision of support to entrepreneurs participating in the GCIP Indonesia Accelerator, Advanced Accelerator, and Post-Accelerator	Where considered necessary, GCIP will seek to remove barriers to ensure inclusion of women (e.g., segregated financial training might be offered); There is a specific training module foreseen as part of the GCIP Accelerator curriculum to address gender-related challenges and barriers; The training material will be gender-responsive (e.g., stereotypes will be avoided); Trainings will be organised at times suitable for both women and men, and recordings will be provided.
Forums/events	Women participants will be encouraged to attend the forums/events through focused outreach activities; It will be ensured that topics of interest to women entrepreneurs are included in the forum/event agendas; There will be a targeted event or panel to discuss women?s entrepreneurships; Participant data will be disaggregated.
Investment facilitation	Gender lens investing principles will be applied in all of investment decision making processes; specific training material and guidelines on gender lens investment will be developed for financiers and other stakeholders.
Capacity building	Capacity building on gender equality will be mainstreamed throughout the project implementation and with regard to all stakeholders; Support will be provided to the Ministry of Women and Children; A gender sensitization training for relevant stakeholders will be organized.
Policy support	Gender and youth empowerment policy framework will be developed

[1]OECD (2019) Education at a glance 2019. Country Note.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources;

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women

Will the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on private sector engagement in the project, if any

234. The private sector engagement is key for the success of this project, as confirmed in stakeholder consultations in the PPG phase. The GCIP Indonesia foresees several areas of interaction with the private sector:

a. There will be direct interactions with and support for entrepreneurs (SMEs and start-ups) offering innovative cleantech solutions. The entrepreneurs are considered as agents of change that bear the potential of instigating a market transformation. The SMEs and stat-ups will be supported in the framework of GCIP Indonesia Pre-Accelerator, Accelerator, Advanced Accelerator, and Post-Accelerator, as described before. It is expected that at least 200 entrepreneurs will take part in this project, so the private sector engagement will be crucial part of the project. In addition, there will be active involvement of private investors, banks and other institutions that will be led by the Chamber of Commerce and Industry to ensure promotion and stimulation of clean energy technology innovations in targeted industrial sectors.

b. The private sector companies SociopreneurID, PT Buliso, Nexus Indonesia, Bakrie Centre Foundation (providing over 10.5 million USD in co-finance) intend to provide, and support access to, private equity investment to selected enterprises supported by GCIP Indonesia.

c. Corporate partnerships will be formed to connect GCIP Indonesia participants with various companies with the aim to create joint venture opportunities across borders, to facilitate market expansion and product co-development. This has already been successfully piloted with the Korean Financing Technology Corporation (KOTEC) with collaborations established between Korean SMEs and GCIP alumni from Morocco, Pakistan, Thailand and Turkey. Similar partnerships are expected under this project

d. The GCIP Indonesia will also partner with corporations that seek to identify and invest in innovative cleantech. More specifically, the National Innovation Challenge, to be integrated into the GCIP Indonesia Accelerator, will connect selected corporations ? looking for concrete demand-driven solutions ? with GCIP entrepreneurs.

e. Moreover, the GCIP Indonesia will target financing institutions, venture capitalists, and angel investors in its communications and outreach activities that seek to raise awareness and strengthen the knowledge of opportunities and risks associated with investments in cleantech. In addition, Investor Connect events will be organized to connect potential financiers with entrepreneurs and to facilitate investments

f. The GCIP Indonesia will also cooperate with industry and business associations to leverage their know-how, capital and interest in cleantech innovations, as well as to build their capacity.

g. In addition, industry experts will be engaged as mentors, trainers, judges, and EIRs to support the GCIP Indonesia Accelerator, Advanced Accelerator, and Post-Accelerator

h. In line with GEF strategy on private sector engagement, the child project capitalizes on the growing interest by national and international private actors in the sustainability agenda and creates the conditions for SME driven creation and transformation of cleantech markets. This ultimately harnesses the ingenuity and creativity of SMEs and ?crowds-in? private sector investments to deliver environmental benefits beyond business as usual.

235. The private sector is key to the creation and expansion the market of cleantech products and services, achieving GEBs, generating jobs and supporting economic growth. The proposed project is designed in line with the GEF policy on Stakeholder Engagement that sets out the core principles and mandatory requirements for stakeholders.

236. The private sector is a key source of co-financing, thus the project PMU will be explicitly tasked to connect the start-ups to as many potential investors (public, private, national, regional, global) through activities like Investor Connect, National Forums and the Global forums especially. Accordingly, the PMU will become a platform through which GCIP start-ups will be connected and establish relationships with network of private investors, industry association, VCs, impact investors, etc.

5. Risks to Achieving Project Objectives

Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

Table 8 General risk analysis

Risk	Rating	Mitigation
Institutional Risk ? Lack of absorptive capacity by the national counterpart	Low	Capacity building of BPPT will be an ongoing process throughout the project implementation period to ensure that staff are comprehensively trained, and sustainability of the programme is ensured

Institutional Risk ? Insufficient administrative and organizational capacity of the BPPT for successful execution of the project	Low	An organizational assessment (a micro assessment under the Harmonized Approach to Cash Transfers framework) was previously conducted by another UN agency in 2017. The results showed the risks to be low in all areas under consideration.UNIDO verified the results.
Institutional Risk ? Insufficient technical capacity of BPPT for successful execution of the project	Low	BPPT was nominated by the GEF OFP in consultation with key stakeholders as the most appropriate national agency to execute the project, and as a technology incubator agency with a strong track record in cleantech therefore it is assumed that it has the pertinent mandate and technical capacity for successful achievement of the project objective and associated outputs and activities.
Institutional Risk ? Lack of effective coordination between various project partners	Low	Proper coordination will be ensured through the establishment of the Project Steering Committee (PSC) and ad-hoc working groups will be formed if necessary
Operational Risk ? On-going global restrictions due to global shock S (e.g., COVID-19)	Medium	In case of travel and/or group meeting restrictions, the GCIP Indonesia trainings and meetings/events will be organized on-line
Sustainability Risk ? Lack of ownership of project results and inability to source funding to continue the activities in the medium and long term	Low	A GCIP Indonesia sustainability and exit strategy will be developed based on a framework delivered by the GCIP Global, and it will among other include specific considerations related to a formal project handover process and the point in time when UNIDO?s exit takes place (based on targets achieved by the GCIP Indonesia
Political Risk ? Lack of political support to mainstream innovative cleantech	Low	The project is supported by the Government of Indonesia, and different ministries have been involved in the design of the project
Market Risk ? Failure of businesses supported by GCIP Indonesia	Medium	The GCIP guidebooks (for Accelerator, Advanced Accelerator, and Post-Accelerator) will be comprehensive documents that articulate the GCIP approach to promoting cleantech innovation and entrepreneurship in developing countries. As such, they will help ensure that the businesses supported have real market potential. In particular, the GCIP Indonesia guidebooks will define eligibility requirements and selection criteria for the participants.

Finance risk - Incentive and financial support system are insufficient	Low	The outreach and communications activities will be targeted at, among others, financing institutions, venture capitalists, and angel investors. Moreover, the strong GCIP brand, and the direct involvement of renowned global PEEs are expected to build confidence of national and international financiers. The PSC will include at least one representative of a financing institution or an investor.
Coordination Risk: Lack of effective coordination between various project partners/stakeholders	Low	A proper coordination will be sought through the Project Steering Committee and the established working groups.
Climate Change Risk	Low	The climate change it is not likely to have severe impacts on this project, with an exception for cleantech innovation dependent on biomass or water supplies. To safeguard against climate change risks, the screening of technologies to be supported by the GCIP Indonesia will include an assessment of the climate risks with a time horizon of 30 years, and where a risk is identified, it will be necessary for the entrepreneur to propose suitable adaptation or management measures. The GIZ?s Climate Expert Tool could be used as a tool available to entrepreneurs in that context.
Environmental Risks	Low	It is recognized that some technologies that could potentially be supported by GCIP, such as ICT could lead to GHG emissions, unless powered entirely by renewable energy. Similarly, technologies related to energy storage can have harmful environmental impacts if not managed effectively. Therefore, any cleantech innovation supported by GCIP Indonesia will need to meet strict environmental screening criteria. In addition, an Environmental and Social Management Plan (ESMP) was prepared (Annex L) to mitigate the environmental (and social) risks.
Social/ Gender Risk:	Low	To ensure gender inclusiveness of all project activities, UNIDO methodology for gender assessment and gender responsive communication showing the benefits of gender equality for both women and men will be applied. To mainstream women and youth entrepreneurship, adequate and gender responsive communication strategy will be implemented, and sensitization workshops will be organized. A full gender analysis was carried out and its recommendations were incorporated into the project design.

TABLE 9 COVID-19 RISK ANALYSIS

Technical expertise is not readily available due to the pandemic	Low	Necessary efforts will be made to identify alternative technical experts in case it is required. Planning will be flexible enough to reschedule activities onsite that require specific expertise
Possible re-instatement of COVID-19 containment measures limits available capacity or effectiveness of project execution/ implementation	Medium	The capacity of stakeholders, and especially the beneficiaries, for remote-work and online interactions will be strengthened by securing access to commercially available conferencing systems. The current design of the curriculum for entrepreneurs is based on online interactions and deliverables, using webinars and web platforms, and therefore COVID-19 is not expected to pose a significant risk to the conduct of the acceleration cycles
Some project supporters, co-financiers or beneficiaries may not be able to continue with project execution/implementation	Low	The situation will be closely monitored in order to find alternate supporters or co-financiers, or to readjust the list of beneficiaries if needed.
Price increases for procurement of goods/services	Medium	The project team will undertake efforts needed to find alternative providers and make sure that competitive pricing is obtained.

TABLE 10 COVID-19 OPPORTUNITY ANALYSIS

Opportunity	**Opportunity level**	**Opportunity optimization measures**

New business opportunities created in response to COVID-19 related restrictions and measures	High	Response to COVID-19 restrictions, such as remote working arrangements and no-contact business modalities will require solutions that can be turned into new business models. These opportunities will be analyzed at the national level and shared with the GCIP Indonesia entrepreneurs. Examples of former GCIP alumni responding to new business opportunities by providing innovative solutions during the pandemic are summarized here: https://www.unido.org/stories/cleantech-innovators-take-covid-19
New business opportunities to build back better for business continuity and economic recovery post-COVID-19	High	By design, the GCIP Indonesia engages private sector to promote and scale up cleantech products and services, and business models with resilience to climate change (e.g., circular business models). Information on relevant new business opportunities as well as policy/regulations will be added to the GCIP Indonesia curriculum so that the entrepreneurs are fully informed of the market and policy trends

CLIMATE RISK SCREENING ? GEF-GCIP UNIDO
Projected climate trends and likelihood of hazards, impacting project outcomes

Indonesia?s location as an archipelago nation in southeastern Asia and Oceania (between Indian and Pacific oceans) majorly determines the features of its climate and biodiversity. Primarily tropical, warm waters (that make up about four-fifths of the country) ensure fairly consistent temperatures throughout the islands. Prevailing wind patterns interact with localized topographic features to produce variations in rainfall and introduces microclimate in the different islands.

Climate change impacts are ubiquitous among the islands, with more frequent droughts, heat waves and floods being observed. These trends will pose an increasing threat to the country?s development and undo

progress on several indicators. Due to high population density in hazard prone areas, about 40% of Indonesia?s population (the fourth largest in the world) are exposed to these climate risks, which are expected to intensify and become more frequent. In fact, a World Bank analysis ranked Indonesia 12th among 35 countries that face high mortality risks due to multiple hazards, including tsunamis, floods, landslides, droughts, and earthquakes.

Therefore, there are likely to be exacerbating trends observed for droughts in the southern islands, floods and cyclone intensity across the country, and sea level rise in coastal areas.

Food security and water availability will be heavily affected by temperature increase, shorter growing seasons, unpredictable rainfall, and salt-water intrusion. By 2100, climate change impacts will cost an estimated 2.5-7% of GDP, according to the World Bank.[1]

The GCIP Child Project focuses on delivering global environmental benefits through GEF and co-financing investments in clean technology innovations, SMEs and institutional capacity building. In this context, the consideration of climate risks and mitigation of these issues is important to ensure that the GCIP project is resilient to climate shocks, but also to ensure that the outcomes and consequent impacts of the project endure.[2] Mainstreaming climate risks in project design takes cognizance of both GEF STAP guidance[3], and also Indonesia?s recent Climate Resilient Development Policy announced on April 1st 2021. This policy provides directives for the Medium-Term Development Plan, and ambitiously increases Indonesia?s targets to reduce GHG emissions by (from 29% to 41%) by 2030.

Observed and projected temperature changes

Indonesia is the world?s largest archipelagic state, with more than 17,000 islands. The country?s temperatures are fairly constant over the year, around 28?C for the coastal plains, 26?C for the mountain areas, and 23?C for higher mountains.[1][4]

Some climatic trends have been observed in Indonesia. According to a report by the World Bank, surface temperatures have increased at a rate of 0.04 ?C per decade over the last 30 years. Reported total temperature increases range from 0.64 ?C for 1960-2006 to 0.76 ?C for 1985-2005. According to the Third National Communication (NC3), the observed temperature at Jakarta climatic station shows steady raise of the temperature at 0.02 ?C annually[2][5]. The increase of temperature raise is similar for all seasons, but there are some regional differences: more rapid increases are reported over the larger islands in the west of the country. The frequency of ?hot days? and ?hot nights? has increased significantly between 1960 and 2006, especially during the driest months (July-September), by 24% and 26%. At the same time, the frequency of cold nights has decreased by 6.8%. NC3 projects continued temperature raise towards 2100. The magnitude of temperature increase varies depending on the scenario. It is estimated to range from 0.67 to 1 ?C in 2026-2050, from 0.75 to 1.8?C in 2051-2075, and from 0.75 to 2.7?C in 2076-2100. Projected warming is more rapid for larger islands than for the sea and small islands..

Precipitation trends

According to the NC3, the climate change may cause mixed impact on the country?s rain fall pattern. In general, it was observed that it tends to be drier in dry season and wetter during the rainy season. The change in a rain fall pattern also varies across the region for example, the mean annual rainfall was projected to increase in the northern part of the country especially in Sumatra, Kalimantan and Papua while decrease of rainfall was observed mostly in the southern part of the country.

In a previous study, the proportion of annual rainfall that falls in heavy events was generally projected to increase by up to 15% by the 2090s.[3][6] Maximum 1-day and 5-day rainfalls are also expected to increase by up to 86 mm for 1-day maxima and up to 123 mm for 5-day maxima by the 2090s. The onset of the dry season (April-June) may experience a rainfall increase of 10% by 2050 while rainfall during the peak of the dry season (July-September) is expected to decrease by 10-25% by 2050 ? with peak decreases up to 75%. Moreover, the probability of a 30-day delay in the onset of the rainy season is expected to increase significantly by 2050 (30-40% probability, compared to 9-18% presently) ? according to research conducted into rice agriculture.[4][7]

Natural and climate-induced hazards

Indonesia is ranked in the top-third of countries in terms of natural hazard risk (59th out of 191) by the 2019 INFORM Risk Index.[5][8] In particular, Indonesia has high exposure to flooding, (ranked 17th most at risk from this natural hazard). Indonesia is similarly highly exposed to tropical cyclones (ranked the 23rd). Despite this high exposure to natural hazards, Indonesia ranks moderately in terms of its coping capacity and vulnerability, where it is ranked in the top half (104th and 81st respectively).

? Floods: The World Resources Institute?s AQUEDUCT Global Flood Analyzer can be used to establish a baseline level of exposure to large-scale river flooding.[6][9] As of 2010, assuming protection for up to a 1 in 25-year event, the population annually affected by flooding in Indonesia is estimated at 1.5 million people and expected annual urban damage is estimated at $1.4 billion. Development and climate change are both likely to increase these figures. By the 2030s, climate change is expected to increase the annually affected population by 400,000 people and increase urban damage by $6.1 billion under the RCP8.5 emissions pathway (AQUEDUCT Scenario B).

? Droughts: Two primary types of drought may affect Indonesia, meteorological (usually associated with a precipitation deficit) and hydrological (usually associated with a deficit in surface and subsurface water flow, potentially originating in the region?s wider river basins). At present, Indonesia faces an annual median probability of severe meteorological drought of around 4%, as defined by a Standardized Precipitation Evaporation Index (SPEI) of less than ?2. Droughts are strongly associated with El Ni?o Southern Oscillation, which contributes to severe escalation and extension of manmade fire events in Indonesia, such as those that took place in 1997 and 2015.[7][10] Following persistent droughts in the dry season from June to November 2019, an increase in forest fires has been observed in the Sumatra region during October.

Coastal areas

An additional effect of climate change is sea level rise, which will have a debilitating along Indonesia?s 81,000 km of coastline. NC3 estimates the sea level rise at the margin of between 0.6cm per year to more than 1.2cm per year in the period of 2006-2040. The estimations that consider melting ice dynamics may be peg the number higher. Indonesia is particularly exposed to sea-level rise, with the country ranked fifth highest in terms of population inhabiting the lower elevation coastal zone. The total population likely to be exposed to permanent flooding by the 2070s through the end of the century is high, at 4,215,690 without adaptation.

Global mean sea-level rise was estimated in the range of 0.44?0.74 meters (m) by the end of the 21st century in the IPCC?s Fifth Assessment Report. However, some studies published more recently have highlighted the potential for more significant rises ? with burdens on developing, coastal economies. Indonesia?s NC3 describes how rising sea levels and strong wave action contribute to significant coastal erosion ? a situation exacerbated by climate change. Coastal areas are exposed to permanent inundation, high tides and land subsidence, affecting settlements, rice fields, ponds and harbors/airports. These changes will affect food security and water availability. Water deficits due to climate change have already been reported for Bali and East Nusa Tenggara, while food deficits resulting from climate change occur in various regions including South Sumatra and Lampung, East Kalimantan and Papua.[8][11]

Forest and land use changes

Indonesia harbors some of the world?s richest terrestrial biodiversity but since the turn of the century ? its species, many which are endemic to its islands, have come under increasing pressure from human development. Between 2000 and 2012, an estimated 6 million hectares of primary forest cover was lost (equivalent to just over 3% of national land area), around 40% of which took place within areas with designated protections.[9][12] Studies in different settings show primary forest degradation and conversion (often into palm oil plantations) resulting in declines in species richness up to or above 50%.[10][13] Species loss is not restricted to Indonesia?s terrestrial space, rare species in the coastal zone, such mangroves and seagrasses are also under threat, as well as many other marine species.

While human development pressure is likely to remain the dominant threat to species richness and diversity in Indonesia, climate change presents new challenges. A key threat is the potential shift in suitable habitat ranges, as rising temperatures shift ranges away from the equator, and upslope. In island environments, where many species have limited mobility and land area can be very limited, there can be an amplified extinction risk as species become trapped.

One study looking at bird communities in Sulawesi highlighted a particular climate-risk to species occupying high elevation areas ? reporting potential bird population declines as high as 60% by

2050.[11][14] Another study, based in Borneo, suggested 11%-36% of mammal species could lose over 30% of their suitable habitat by 2080 as a result of climate changes, likely driving significant population declines.[12][15]

In agricultural sector, the temperature raise will result in the decrease in the yield significantly. The decreased rainfall and longer dry seasons expected in the southern part of the country will have devastating effect as the agricultural areas are located in the southern part of equator such as South Sumatra, Lampung, Java, Bali, west Nusa Tenggara, Suth Sulawesi. NC3 projects, for example, that rice production in Java area will decrease 1.8 million tons by 2025 and 3.6 million tons by 2050. In addition, the change in rainfall pattern and temperature will also affect the interactions of crop pests and diseases including the significance and pattern shifts and spread to the area where such pests and diseases were not normally observed in the past. Further, the climate change also affects animal production causing. While there are direct impacts on productivity due to the change in climatic condition, there are also indirect impact by climate change induced low crop yield which will result in feed shortage resulting in low productivity, reduced reproduction, increased mortality etc.

Table 11. Outcome-based climate risk analysis (scale: low, moderate and high)

Key Project Outcomes	**Potential effect of climate risks on project implementation and outcomes**	**Risk Level**	**Mitigation Measures**

Promote the acceleration of high-impact clean technology innovation for large-scale deployment and green job creation; Implement national cleantech innovation competition-based accelerators;	Participation at events due to heat stress/flooding Technologies supported, increase the likelihood of adverse effects that exacerbate climate risk Failure of businesses supported by GCIP due to risk from hazards within the project area.	Moderate	Some of the support is intended to be face to face. However, if this is not possible due to climate events then the training/events will be organized on-line with the aim of providing an experience as close as possible to the physical events, with side events and one to one meetings also possible. To safeguard against climate change risks the screening of technologies for selection for GCIP support will include an assessment of the climate risks, over the next 30 years, and where a risk is identified it will be necessary for the SME/entrepreneur to propose suitable adaptation or management measures. GIZ?s Climate Expert Tool[16] for example could be used as one tool available to entrepreneurs. Once selected the alignment of proposed technologies will continue to be reviewed against local climate risks, as part of the support provided within the accelerator.
Enhance access to financing through investment facilitation support targeted for start-ups and SMEs in early and growth stage to support commercialization and deployment of cleantech solutions with highly transformational impact for the global commons;	In-country financing diluted or diverted to disaster and resilience	Low	Introduce new categories of technologies to address some of the prevailing climate risks Facilitate the connectivity of ecosystems and greater opportunities for scaling-up of innovations across different countries and globally through the global programme; Raise awareness with PMUs to assess climate risk on an annual basis Increase impact tracking and monitoring of Climate Risk profile through tools like ?Think Hazard?
Build a cleantech community consisting of relevant ecosystem players at national and global level and build strategic partnerships with key influencers that can lead and guide policy and business decisions in the cleantech space;	Diverted human and political resources and stakeholder attention to disaster and resilience measures	Low	Enhance visibility, credibility and understanding of identified solutions to the local political community through the stakeholder engagement plan and communications plan; Support policy roadmaps that anticipate the effects of possible climate risk factors through project outcome 2. Through the global programme ensure coordination and cooperation among GCIP national execution partners for knowledge and experience sharing on how to anticipate and mitigate the risks identified;

Production, scale up and deployment of cleantech innovations	Floods, fires, and droughts endangering cleantech production infrastructure, deployment and disbursement	Moderate	Once accelerated cleantech SMEs/ start-ups are starting to scale up the production of their products or services, climate risks, such as fires or floods could slow down the entire process. Awareness-raising and education, communication around climate information and early warning systems will be conducted as part of the projects capacity building activities for enterprises.

Technical and institutional capacity and information needed to address climate risks and resilience enhancement measures

Potential responses to the climate risks in the focus sectors, i.e., energy, water and agriculture, of the project in Indonesia include:

? Ensuring favourable market conditions for climate technologies (e.g., support to an enabling environment for cleantech; identification of incentives for innovation)

? Policy environment to regulate energy production, climate-smart agriculture, cleantech innovation in industry sectors and in the digital economy

? Planning infrastructure should anticipate mitigation and adaptation to climate risks. Buildings can be designed using features that promote adaptation, for example to enable circulation of air for cooling, and with shaded windows in the direction of the sun ? whilst also being constructed with energy-efficient materials

? Urban management (e.g., natural ventilation for cooling, safeguard critical infrastructure; create rainwater storage and flood retention areas)

? Land-use planning (e.g., protect high-yield agricultural land, environmentally sensitive areas and natural landscapes from urban sprawl; plan greater inter-connectivity between different land uses and transport; intensify land uses where appropriate; revise flood lines).

? Fire-management planning (e.g. forestry maintenance and consideration of SME interaction and engagement in forest zones) can be employed as appropriate

? Soft adaptation options, e.g., livelihood protection, social safety nets, support towards cleantech SMEs that target the promotion of women and women?s needs

? Encouraging the opportunities for innovation in this sectors and technology areas through the GCIP also provide alternative mitigation and adaptation benefits in the future

? Awareness-raising and education, communication of climate information and early warning systems are important adaptations across all sectors. These require institutional cooperation and coordination across sectors, particularly in planning and development practices that reduce vulnerability to climate hazards

[1] Karmalkar et al. (2012); World Bank (2014); Climate Change and Water Resources in Indonesia (2009): Country Report; Soesilo, I. (2014): Climate change: Indonesia?s adaptation and mitigation efforts. *The Jakarta Post.*

[2] GEF and UN Environment. (2019) *STAP guidance on climate risk screening.*

[3] *ibid.*

[4] Wingqvist and Dahlberg (2008); World Bank (2014); Karmalkar et al. (2012); Syaukat, Y. (2011): The impact of climate change on food production and security and its adaptation programs in Indonesia.

[5] Indonesia Third National Communication (2017)
URL: https://unfccc.int/sites/default/files/resource/8360571_Indonesia-NC3-2-Third%20National%20Communication%20-%20Indonesia%20-%20editorial%20refinement%2013022018.pdf

[6] Case, M.; Ardiansyah, F.; Spector, E. (2007): Climate Change in Indonesia: Implications for Humans and Nature. WWF.

[7] Naylor, R.L.; Battisti, D.S.; Vimont, D.J.; Falcon, W.P.; Burke, M.B. (2007): Assessing risks of climate variability and climate change for Indonesian rice agriculture. PNAS.

[8] Westra, S., Fowler, H. J., Evans, J. P., Alexander, L. V., Berg, P., Johnson, F., Kendon, E. J., Lenderink, G., Roberts, N. (2014). Future changes to the intensity and frequency of short-duration extreme rainfall. *Reviews of Geophysics.*

[9] WRI (2018). AQUEDUCT Global Flood Analyzer.

[10] Naumann, G., Alfieri, L., Wyser, K., Mentaschi, L., Betts, R. A., Carrao, H., . . . Feyen, L. (2018). Global Changes in Drought Conditions Under Different Levels of Warming. *Geophysical Research Letters*

[11] FCDO (2021). Climate Change Profile: Indonesia.

[12] Margono, B. A., Potapov, P. V, Turubanova, S., Stolle, F., & Hansen, M. C. (2014). Primary forest cover loss in Indonesia over 2000?2012. *Nature: Climate Change.*

[13] The World Bank and Asian Development Bank (2021). *Climate Risk Profile: Indonesia.*

[14] Harris, J. B. C., Dwi Putra, D., Gregory, S. D., Brook, B. W., Prawiradilaga, D. M., Sodhi, N. S., . . . Fordham, D. A. (2014). Rapid deforestation threatens mid-elevational endemic birds but climate change is most important at higher elevations. *Diversity and Distributions.*

[15] Struebig, M. J., Wilting, A., Gaveau, D. L. A., Meijaard, E., Smith, R. J., Abdullah, T., . . . Kramer-Schadt, S. (2015). Targeted Conservation to Safeguard a Biodiversity Hotspot from Climate and Land-Cover Change. *Current Biology*.

6. Institutional Arrangement and Coordination

Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

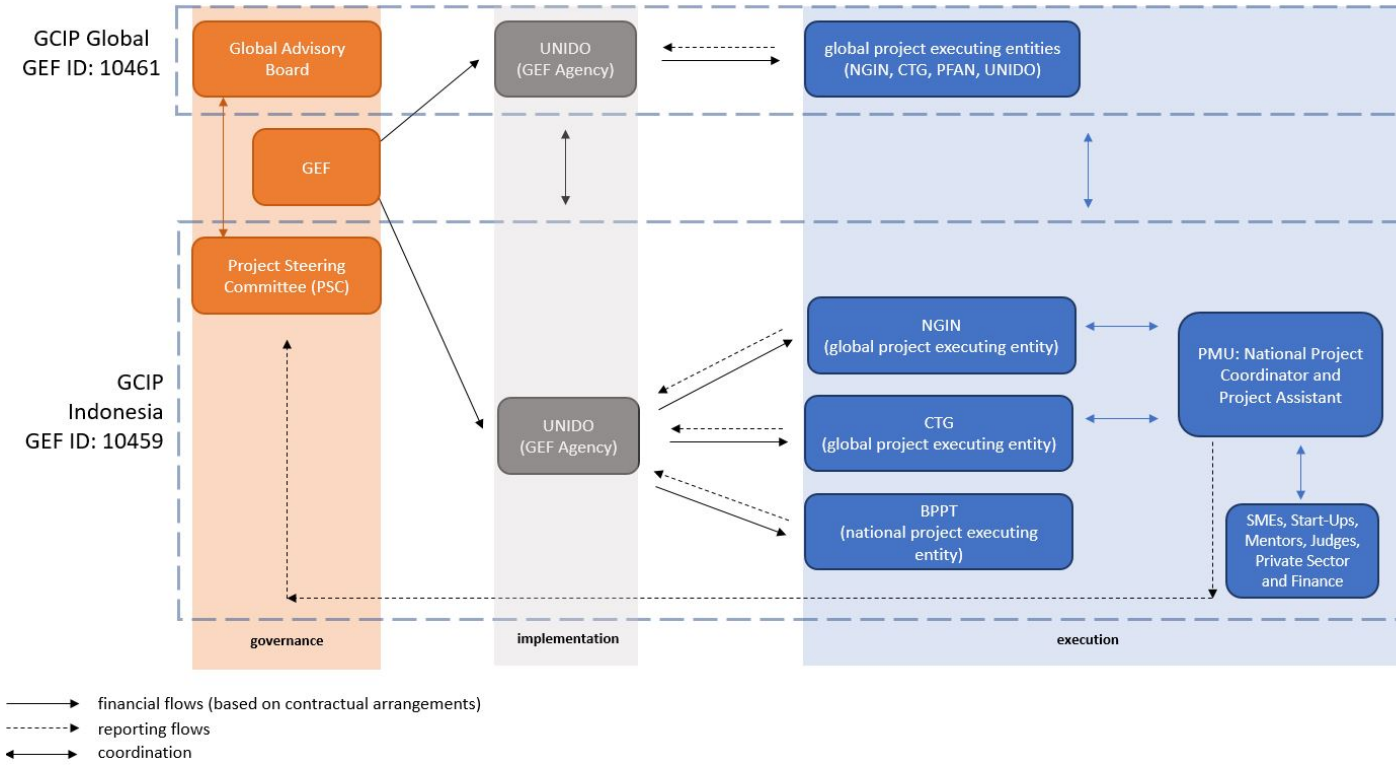


Figure 8 Relationships between project stakeholders under the framework of coordination

Implementation:

237. UNIDO as the GEF Agency will be responsible for the implementation of the GCIP Indonesia, which entails oversight of project execution to ensure that the project is being carried out in accordance with agreed standards and requirements. UNIDO as the GEF Agency will also be accountable to the GEF Council for the GEF-financed activities, as well as it will be responsible for project cycle management services and corporate activities

Execution

238. GCIP Indonesia will be executed by a national PEE with support from three global PEE. BPPT was nominated by the GEF OFP in Indonesia to be the national PEE. BPPT was assessed by another UN agency in November 2017 using the HACT methodology. The outcome of the assessment provided UNIDO an understanding of how BPPT operates and an appropriate agreement shall be established. The BPPT will designate internally or recruit externally project management personnel to form the project

management unit (PMU). The PMU will consist of the National Project Technical Expert and Coordinator and a Project Assistant (PA).

239. The PMU will be responsible for the day-to-day management, as well as monitoring and evaluation of project activities, as to be specified in the project workplan. BPPT will sub-contract qualified service providers for the execution of certain activities. An open and competitive process will be applied to select the service providers. Also, a number of activities, as outlined in this document, will be delivered by the global PEEs.

240. The global PEEs, that will support the execution of GCIP Indonesia, are PFAN (Private Financing Advisory Network), Network for Global Innovation (NGIN), and Cleantech Group (CTG). The global PEEs will perform several activities - some at no cost to the GCIP Indonesia (i.e., covered from the GCIP Global budget) and some covered from the GCIP Indonesia budget - as specified in details in the tables outlining "Activities and responsibilities" in the project description. NGIN, CTG, and PFAN were identified and selected by UNIDO through an open competitive process according to UNIDO procurement rules and regulations. There will be a contractual agreement between UNIDO and NGIN, CTG and PFAN detailing the expected outputs and deliverables

241. With regard to GCIP Indonesia, NGIN and PFAN will be supporting the execution of outputs related to enterprise acceleration, post-acceleration support and investment facilitation (Component 1), whilst CTG will support the execution of outputs related to policy and ecosystem development (Component 2). An integral role of all global PEEs will be to facilitate collective interaction, training, knowledge sharing, and communication with the GCIP country projects through the national PEEs. This includes the development of tools and guidelines for dissemination to BPPT, as well as training and workshops provided to BPPT to strengthen its capacity to adopt and operationalize the tools and guidelines developed.

Project Steering Committee (PSC)

242. To ensure proper oversight and institutional ownership of the project, as well as to provide advisory inputs, a PSC will be established under the chairmanship of BPPT. BPPT will ensure segregation between the function of chairmanship and secretariat within the agency. Representatives from institutions involved in the different project components will be members of the PSC.

243. The PSC will meet twice per year to review the project implementation and execution progress and confirm the workplan for the subsequent year. Any amendments proposed to the workplans and budgets by the PSC are done in accordance with the approved project document, the GEF policy, and UNIDO rules and regulations. Minutes of meetings are signed by UNIDO and the PSC chairperson(s). BPPT forms the secretariat of and reports to the PSC, and it is not a voting member of the PSC.

Global Advisory Board

244. The GCIP Framework is supported through a Global Advisory Board that is to be established under the GCIP Global and that fulfils a role of a PSC. The Global Advisory Board will provide strategic guidance to the GCIP Framework, including the GCIP Global and GCIP country projects, and is the approval body for items of major impact on the programme. It will meet once a year to monitor progress against the objectives of the overall GCIP at the programmatic level, address potential problems and discuss strategic and policy issues affecting the programme. It will review impact tracking and it will also be responsible for defining strategy and advocacy messages.

Coordination with other projects and initiatives

245. This project will be conducted in coordination with ongoing GEF projects in Indonesia, as well as other projects and initiatives identified above in the baseline scenario, as to build upon lessons learned, increase synergies, and avoid duplication of efforts.

246. There are several other bilateral/multilateral initiatives in the project area with which the proposed project will coordinate its activities to build upon lessons learned, increase synergies, and avoid duplication of efforts. For example, in identification and coordination with innovators, the existing network of the BIT will be utilized and further elaborated. In addition, Indonesian Institute of Science (LIPI) conducts Annual Indonesian Clean Technology Meeting which will provide the project with a platform for connecting with cleantech researchers and a broader network of experts that may be helpful in strengthening the CIEE in Indonesia.

247. Effort will be made to channel with the domestic funding initiatives such as those given by RISTEK-BRIN, New Energy Nexus (NEX) Indonesia, Incubation and Boot-camp Program, Angel Investment Network Indonesia (ANGIN) Investment and Advisory Programme, Kopernik, The Clean Energy Investment Accelerator (CEIA), New Ventures Indonesia (NVI) Program, as applicable during and post accelerator stages in order to leverage the project impacts for commercialization of innovations. For this purpose, project outreach and information sharing will be conducted as a part of knowledge management activities through the PMC and the planned activities under those initiatives will be discussed and aligned with the project activities as possible in terms of, for example, timing, scale and scope.

248. UNIDO hosts the Private Financing Advisory Network (PFAN) together with the Renewable Energy and Energy Efficiency Partnership. Through coordination with PFAN, the project will be provided a global network of experts who can offer business coaching and investment facilitation and increase their visibilities and opportunities for interacting with investors.

249. There are several ongoing initiatives which may be coordinated with the project including e.g. Global Project to Leapfrog Markets to Energy Efficient Lighting, Appliances and Equipment by UNEP, Global Programme to Support Countries with the Shift to Electric Mobility Project (at concept note stage) by UNEP, Indonesia Geothermal Resource Risk Mitigation Project by the World Bank, the Research and Innovation in Science and Technology Project by the World Bank etc. which can provide national and regional expertise into the project activities in each specific thematic area. The project seeks for

cooperation with these ongoing initiatives through PSC as a fora to discuss strategic direction of the projects.

Legal Context

250. The Government of the Republic of Indonesia agrees to apply to the present project, mutatis mutandis, the provisions of the Standard Basic Assistance Agreement between the United Nations Development Programme and the Government, signed and entered into force on 2 October 1992.

Transfer of assets

251. Full or partial ownership of equipment/assets purchased under the project may be transferred to national counterparts and/or project beneficiaries during the project implementation as deemed appropriate by the government counterpart in consultation with the UNIDO Project Manager.

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

252. This project will be implemented in alignment with the key national priorities of Indonesia such as national commitment of the country under the Paris Agreement. Indonesia has made the commitment to reduce its Green House Gas (GHG) Emissions by 29% by 2030 against business as-usual (BAU) baseline scenario and up to 41% subject to international assistance and support. This national determined contribution (NDC) of Indonesia to mitigation GHG emissions by 2030 includes mitigation activities in the areas of energy, waste, IPPU/ Industry and Agriculture, and Forestry. The Energy Sector shall contribute with a mitigation target of 314 million tons of CO2 by 2030. This project will support Indonesia to foster a vibrant innovation ecosystem that promoted cleantech investments that will help the country to reach their NDC.

253. Under the Paris Agreement, Indonesia has made the commitment to reduce its Green House Gas (GHG) Emissions by 29% by 2030 against business as-usual (BAU) baseline scenario and up to 41% subject to international assistance and support. This national determined contribution (NDC) of Indonesia includes mitigation activities in the areas of energy, waste, IPPU/ Industry and Agriculture, and Forestry. The energy sector shall contribute with a mitigation target of 314 tons of CO2 by 2030.

254. Indonesia's *National Action Plan for Greenhouse Gas Reduction* (RAN-GRK) sets forth a wide range of mitigation activities and emission-reduction targets across major sectors.[1] It sets out the different sectors in which Indonesia will make emissions reductions, namely Forestry and Peat land, Agriculture, Energy and Transportation, Industry and Waste Management. In addition, a new

report[2] from the Indonesian government?s Low Carbon Development Initiative found that less carbon-intensive, more efficient energy systems can deliver an average of 6 percent GDP growth per year until 2045?even more economic growth than the business-as-usual path, with continued gains in employment generation, increased incomes and poverty reduction. This strategy would cut the country?s greenhouse gas emissions nearly 43 percent by 2030, exceeding Indonesia?s international climate target. The government is now feeding findings from this new report directly into its next five-year development plan, which will cover 2020-2024.

255. The project?s focus on innovative clean technologies and supporting entrepreneurial SMEs and start-ups is line with many of the country?s policy initiatives and strategies.

256. **National Medium Development Plan (RPJMN 2015-2019):** three strategic targets to increase capacity on innovation and technology, covering: (i) Increasing quality of research, development and implementation of science and technology, (ii) Strengthening support to science and technology activities including provision of human resources infrastructure, institutions and networks., and (iii) Development of 100 Techno Parks in Regencies/Cities and Science Park in Provinces.

257. **National Medium Development Plan (RPJMN 2015-2019):** four strategic targets to develop the cooperatives and Micro, Small, and Medium Enterprises (MSMEs), covering: (i) increasing the contribution of cooperatives and MSMEs in the national economy; (ii) enhancing the competitiveness of products produced by MSMEs; (iii) developing new potential and innovative MSMEs; and (iv) improving the cooperatives? empowerment.

258. **National Medium Development Plan (RPJM 2010-2014):** seven strategic targets, including: (i) increasing the number and role of cooperatives and Micro, Small, and Medium Enterprises (MSMEs) in the national economy; (ii) improving the cooperatives? and MSME?s empowerment; (iii) enhancing the competitiveness of products produced by cooperatives and SMEs; (iv) increasing the sales of products produced by cooperatives and MSMEs; (v) providing better access to finance and credit guarantee for cooperatives and MSMEs; (vi) improving a business environment that is more inclined towards cooperatives and MSMEs; and (vii) developing new entrepreneurship in cooperatives and MSMEs

259. The **Second National Communication (2010)** of Indonesia highlighted the energy sector as a Priority Sector of their Climate Change Roadmap, and Research and Technology as a Cross-Cutting issue. The Second National Communication also specifically highlights the need for R&D, awareness raising, and capacity building to adapt and mitigate climate change.

260. **Energy Law No. 30/2007** included provisions that support energy conservation and the development of new and renewable energy through incentive mechanisms.

261. **National Energy Policy** under Presidential Decree No. 5/2006 (called PERPRES) outlined energy security objectives to move away from oil due to declining domestic reserves and maximize the utilization of abundantly available domestic energy resources. More specifically, the Policy includes specific energy supply mix target for year 2025.

262. Indonesia?s **Technology Needs Assessment of Climate Change Mitigation (2010)** selected and assessed seven sectors for the identification of technology needs for mitigation, including energy supply, industrial process, and waste. Having assesses these sectors, the following modalities for Transfer of Technology were chosen for prioritization: Development of a National System of Innovation, a National Technology Information System, multilateral and bilateral mechanisms (i.e., ODA and the GEF support), and the Clean Development Mechanism (CDM). The TNA also noted that the application of clean and advanced technology, as well as policy development, can contribute to a substantial reduction in GHG emissions.

263. Ministry of Energy and Mineral Resources has the vision and missions for 2015 - 2019: "Creating Indonesia as a Sovereign, Independent, and Good Personality State Based on Mutual Cooperation". To achieving the vision by performing the following 7 Development Missions: i) Providing national security to defend sovereignty, supporting economic autonomy by securing maritime resources and reflecting the Indonesian personality as an archipelago state; ii) Creating a developed, sustainable, and democratic community on legal basis; iii) Creating the independent and active foreign policy and strengthening the true identity as a maritime State; iv) Improving a high, developed, and prosperous Indonesian quality of life; v) Creating a competitive; vi) Materializing Indonesia as an independent, developed, strong, and national-based oriented maritime State; vii) Realizing a cultural personality community.

264. **Nationally Determined Contribution (NDC)**, November 2016. Based on Indonesia?s First Biennial Update Report (BUR) submitted to UNFCCC in January 2016, national greenhouse gas (GHG) emissions have been 1.453 GtCO2e in 2012, which represents an increase of 0,452 GtCO2e from year 2000. The main contributing sectors were LUCF including peat fires (47.8%) and energy (34,9%). Since Indonesia voluntarily pledged to reduce emissions by 26% on its own efforts, and up to 41% with international support, against the business-as-usual scenario by 2020, Indonesia has promulgated relevant legal and policy instruments, including the national action plan on GHG emissions reduction as stipulated in the Presidential Regulation (PERPRES) No. 61/2011 and GHG inventory through Presidential Regulation (PERPRES) No. 71/2011. Post 2020, Indonesia envisions a progression beyond its existing commitment to emission reductions. Based on the country?s most recent emission level assessment, Indonesia has set an unconditional reduction target of 29% and conditional reduction target up to 41 % of the business-as-usual scenario by 2030. This project aims to avoid and reduce emissions and is therefore supporting the NDC of Indonesia

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[1] https://www.iea.org/policiesandmeasures/pams/indonesia/name-42667-en.php

[2] https://www.bappenas.go.id/id/berita-dan-siaran-pers/pembangunan-rendah-karbon-pergeseranparadigma-menuju-ekonomi-hijau-di-indonesia/

8. Knowledge Management

Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

265. A knowledge base will be developed in terms of information management, sharing best practices and lessons learned, as well as engagement in effective information exchange among GCIP countries. The proposed project will share the results and knowledge, to be disseminated through participation in regional meetings, conferences and Cleantech platform. As the project progresses and implementation results become tangible and demonstrable, the knowledge management system will be used to develop benchmarks for cleantech innovations in Indonesia and to develop case-studies for promotional activities. Therefore, the knowledge management postulates main framework of this programme and facilitates to capture findings, institutionalizing learning and knowledge sharing across participant countries by making the structure of the programme accessible and replicable, as well as bringing selected finalists from around the world to showcase their innovations at the Global Forum. This facilitates the transfer, innovation and dissemination of low carbon technologies, a key challenge under the Framework Convention on Climate Change.

266. A key aspect in knowledge management will be the creation of a national pool of mentors and judges, by the ?training the mentors? approach, to enhance the sharing of best practices and business skills among participants and stakeholders in a structured manner. The national pool of mentors/judges will be created and trained to provide entrepreneurs required skills to enable their participation in this programme, and ultimately to bring their innovations to be commercialized at the market. Mentors and judges will broaden the impact of the programme by providing one-on-one training for entrepreneurs and alumni of the programme. The PMU will be responsible for including various stakeholders (as indicated in section 2 on stakeholders), to ensure that the selection process for entrepreneurs is inclusive and impactful in identifying the right candidates for the programme.

267. This is in line with the one of key government?s goals, to expand innovative activities to ensure sustainable economic development and support scientific potential and innovative activity, that is crucial for a knowledge-based economy. In order to support innovative entrepreneurship and developing new activity types and products in clean energy technology innovations, the government measures will be taken to establish industrial parks and innovation zones applying advanced technologies and designing knowledge intensive products and technologies in Indonesia.

268. In light of the above, the continuation of GCIP programme will be further build upon the experiences and lessons learned at the global level. This will contribute to creating a vibrant platform and network members. It can represent a key partner for the implementation and delivery of this programme and also facilitates the transfer, innovation and dissemination of green technologies, a key challenge under the Framework Convention on Climate Change. The new trends in innovation cleantech areas and integration of lessons learned, based on completed and ongoing GCIP projects, will be incorporated. Through organization of trainings, workshops, roundtable, expert group meetings, printing materials and through the Cleantech platform, the knowledge sharing will be strengthened as the programme expands into new countries and cleantech areas. These combined set of outreach activities will ensure recognition of and support for the programme beyond the competition cycle. In order to ensure sustainability of this project beyond project duration and to attract more interest, the national coordinators will be tasked to ensure the visibility of the programme and accessibility of key findings through the Cleantech Platform. This will provide the opportunity to reach out to future entrepreneurs and investors, while raising public awareness on clean energy technologies and ultimately contribute to the climate change mitigation. A

number of regional and international events to bring project teams and semi-finalists together will be organized, as stated in the outputs. The project will strive to create a vibrant and sustainable Cleantech ecosystem through partnerships with various stakeholders, holding expert meetings with partners and SME associations to review successes in the various competition cycles and establish commitments to moving forward.

269. For its sustainability and further innovation fostering in the region, the inclusive and sustainable methods will be also discussed, in order to identify and apply tangible solutions to existing challenges in the country. These results will be made accessible to the public through the Cleantech platform and accelerator programme.

270. All project reports will be shared with the relevant counterparts and disseminated through their institutional websites and UNIDO?s open data platform. All knowledge management material will be gender mainstreamed. For instance, gender responsive training and advocacy material will not perpetuate gender stereotypes through presenting women only in their traditional roles.

271. A knowledge management, communication, and advocacy strategy framework will be developed by UNIDO with a particular focus on a) Promoting visibility of GCIP and communicating its impacts achieved at national and global levels; b) Increasing awareness of the catalytic role of cleantech in addressing climate change and environmental issues; c) Showcasing cleantech innovations from the GCIP alumni and enhancing their visibility and credibility. The knowledge management, communication, and advocacy strategy framework will be shared with the BPPT for review and adaptation to the GCIP Indonesia needs, as specified under Output 3.1.2.

272. The GCIP Indonesia knowledge management, communication, and advocacy strategy will specify the exact knowledge products to be delivered along with relevant timelines and milestones. The table below provides a general overview of deliverables relevant for knowledge management.

TABLE 12 PRELIMINARY TIMELINE FOR KNOWLEDGE MANAGEMENT ACTIVITIES

Deliverable	Timeline
A pool of experts (trainers, mentors, judges) created	By the 6th month of project implementation/execution with regular updates after every halfa year
The knowledge management, communication, and advocacy strategy framework reviewed and adapted to GCIP Indonesia (Output 3.1.1)	by the 6th month of project implementation/execution with regular updates each year

Policy briefs, impact reports, brochures, webinars and other types of promotional materials distributed through briefing sessions, press releases, social media presence, advertising, etc. ? in line with the GCIP Indonesia knowledge management, communication, and advocacy strategy	from the 6th month of project implementation/execution and according to the timeline as to be specified in the GCIP Indonesia GCIP knowledge management, communication, and advocacy strategy
GCIP Indonesia web platform created and operationalized (Output 2.1.1), including a special section for the GCIP Indonesia alumni network	by the 6th month of project implementation/execution
GCIP Indonesia Forum and GCIP Global Forum, as well as Investor Connect and regional technology brokerage events organized	annually / bi-annually

9. Monitoring and Evaluation

Describe the budgeted M and E plan

273. The monitoring and evaluation (M&E) will be conducted in accordance with established UNIDO and GEF procedures. The overall objective of the M&E is to ensure successful and quality implementation of the project by: i) tracking and reviewing project activities execution and actual accomplishments; ii) providing visibility into progress as the project proceeds so that the implementation team can take early corrective action if performance deviates significantly from original plans; and iii) adjusting and updating project strategy and implementation plans to reflect possible changes on the ground, results achieved and corrective actions taken.

274. According to the M&E policy of the GEF and UNIDO, follow-up studies like Country Portfolio Evaluations and Thematic Evaluations can be initiated and conducted. All project partners and contractors are obliged to (i) make available studies, reports and other documentation related to the project and (ii) facilitate interviews with staff involved in the project activities.

275. The Project Result Framework (Annex A) provides performance and impact indicators for project implementation/execution along with their corresponding means of verification. The actual progress will be reported against the workplan approved by the PSC. In case there are significant deviations between the forecasted workplan and actual implementation, corrective measures will need to be taken.

276. There will be a GCIP M&E framework provided by the GCIP Global, based on which BPPT will prepare a GCIP Indonesia M&E plan, including time-bound milestones and deliverables. BPPT will also draft progress review reports every six months. There will be an external mid-term review of the project conducted halfway through project implementation. The ESSPP considerations, as well as gender dimensions and baseline for gender related targets will be appropriately captured in the GCIP Indonesia M&E plan, in the progress review reports, as well as in the collection and assessment of relevant data. The M&E plan will encompass monitoring of the Environmental and Social Management Plan, the Stakeholder Engagement Plan, the Gender Analysis Report, and a risk analysis.

277. The GCIP methodology for impact assessment will be developed by the GCIP Global and shared with the GCIP Indonesia for review and application. This will ensure a common understanding of estimation, tracking, and reporting approaches amongst all involved stakeholders, and will allow for data aggregation, comparisons, and extrapolation, not only on the national, but also on the global programme level. The methodology will enable assessment of social, economic, and environmental impacts, and at a minimum, it will account for global environmental benefits (GEBs), job creation, gender mainstreaming, and investment leveraged. The data will be sex-disaggregated and gender-sensitive, and youth participation will also be recorded.

278. An overview of indicative costs of M&E activities is provided in the table below.

TABLE 13 M&E ACTIVITIES AND BUDGET

M&E Activity	Timeframe	GEF Budget (USD)	BPPT in-kind co-financing (USD)	Responsible Parties
M&E plan	First 3 months after implementation start	6,000	10,000	BPPT
Periodic progress reports	6-monthly	10,000	10,000	BPPT
Mid-term review	at 1.5 years	20,000	20,000	External evaluator, submission to UNIDO
External terminal evaluation	started six months prior to the expected completion date of the project	30,000	20,000	External evaluator, submission to UNIDO
Total		66,000	60,000	

10. Benefits

Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

279. The project will act as a catalyst for increased innovations in clean energy technologies, as well as more Cleantech enterprises being established, in particular the SMEs, thus creating more jobs and generating more income at the local and national levels. The clean technologies deployed will contribute to the reduction of GHG emissions and waste, and to the improvement of resource efficiency, resulting in environmental improvements, and reducing health risks, in particular for women and children. The project can also improve energy access for people living in rural areas. For instance, the lives of local

communities, especially for women and children in remote areas, could also be improved if the annual competitions focus on the promotion of clean innovation technologies in rural areas, including renewable technologies such as solar energy, biomass-based energy, and micro and mini hydropower.

280. The project is expected to result in more cleantech start-ups and SMEs being identified and supported, thus acting as a catalyst for entrepreneurship development and cleantech investment in Indonesia. The GCIP Indonesia, as a dedicated national platform for promoting and supporting cleantech innovation, will result in an enhancement of human capital, thereby leading to job creation and poverty reduction as well as to an increased women participation in the entire value chain of technology development. New job opportunities in the country will in turn contribute to stemming the current brain drain. Local development and production of cleantech will very likely result in lower costs benefiting both the technology developers and end-users. Finally, the increased use of cleantech innovations supported by the GCIP Indonesia will also result in GHG emission reductions

281. The GCIP Indonesia will highlight the need for a stronger support at the national level for cleantech innovations and start-ups/SMEs. In particular, it will provide added value by bridging the gap between cleantech innovators and investors, thereby paving the way for the creation of new businesses opportunities resulting in a value added for the domestic economy. At the same time, through engaging all relevant stakeholders in the national CIEE, and encouraging their cooperation, as well as through linking different CIEEs across countries, the GCIP Indonesia will provide opportunities for international business scale-up and exchange of knowledge.

282. It is expected that special attention will be given to address gender issues as described above; therefore, the project will contribute to the promotion of women entrepreneurial development and job creation for women in Indonesia.

283. In summary, the project yields the following socioeconomic benefits as a result of supporting and introducing new cleaner technologies into the market, strengthening national institutional capabilities, enhancing the availability of financial instruments, and encouraging inclusivity in the entrepreneurial and job markets. Specifically these interventions lead to:

1) Enhancement of human capital

Entrepreneurial, environmental and technological skills development and awareness raising have the effect of a larger number of cleantech products being commercialized and entering the market. Better decisions are made by entrepreneurs regarding the sustainability and life cycle approach to the products and businesses.

2) Local product development and production with job creation, generating more income

Fostering new local technologies lowers costs benefiting both the technology developer and end-user and encourages consumers to buy more efficient products and have a great benefit from this technological change.

3) An enriched innovation ecosystem

The high quality institutions attract the build confidence in local and foreign investors as well as the small business community in an economy due to low volume of transactions costs that result in the advancement of environment friendly technologies.

4) Improved energy access for people living in rural areas

Investing in energy access, electrification and renewables are well known to contribute to the decarbonization of the economy. Also the move away from traditional cooking and heating methods reduces health risks.

5) Promotion of women and youth entrepreneurial development and job creation

The promotion of gender and youth inclusion and mainstreaming in a country tends to be productive, innovative and creative for problem solution so it is an advantage to obtain environmental targets. Mainstreaming diversity will encourage the cooperation and cohesion of people in advocating for environmentally beneficial practices and products.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

The project has been categorized as Category B as per the UNIDO ESSPP and based on an analysis of the environmental and social risks of the project; i.e. there are few likely adverse impacts, which will be site-specific, and few if any will be irreversible. In most cases, impacts can be readily avoided or

mitigated with appropriate mitigation measures or incorporating internationally recognized design criteria and standards.

The Environmental and Social Management Plan (ESMP) is included as an attachment under Annex L.

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex L Environmental and Social Management Plan Indonesia 27052021	**CEO Endorsement ESS**	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Strategy	KPIs/Indicator1	Base- line	Target (for the entire project duration)	Means of Verification	Assumptions
Objective Support low-carbon economic growth by promoting clean technology innovations and entrepreneurship through a Cleantech innovation platform and accelerator programme	USD mln investment leveraged	0	2 (at least 35 % woman lead)	Project progress reports Project evaluation reports Project impact reports	Continuous support from the Government of Indonesia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs and investors
	number of enterprises with economic gains (sales, savings)	0	30-45 (at least 35% woman-led)		
	number of additional jobs created or retained	0	40-50 (at least 35% woman-led)		
	number of enterprises with an increase in exports	0	5-10 (at least 35% woman-led)		
	number of SMEs with increased inclusion in value chains	0	10-15 (at least 35% woman-led)		
	CO2eq emissions reduced (tons) directly and indirectly	0	at least 144,000 (directly) and at least 720,000 (indirectly)		
	number of new technologies adopted	0	15		
Project Component 1 ? Transforming early-stage innovative cleantech solutions into commercial enterprises					

Outcome 1.1: Clean technology entrepreneurs identified, coached and promoted during and beyond Cleantech accelerator (supporting GEEW)					
Output 1.1.1 The GCIP guidebooks and certification system are adapted for the GCIP Indonesia	number of GCIP Indonesia guidebooks for Accelerator, Advanced Accelerator, and Post-Accelerator (gender responsive)	0	3 (1 for Accelerator, 1 for Advanced Accelerator, 1 for Post-Accelerator)	Project progress reports Attendance records from consultation meetings Meeting minutes	Continuous support from the Government of Indonesia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	number of consultation sessions on GCIP Indonesia guidebooks with relevant CIEE stakeholders (gender responsive)	0	2		
	number of stakeholders with whom the GCIP Indonesia guidebooks shared	0	185 (at least 35% women)		
	number of assessment reports on the landscape and capacities of potential GCIP Indonesia applicants and experts capturing the different needs to women and men.	0	2 (1 on applicants and 1 on experts)		
	number of corporate partners with interest to participate in the National Innovation Challenge identified	0	3-7 (at least 35% woman-led/ women in the management board)		

	number of gender experts involved to promote GEEW, e.g. gender-responsive GCIP Indonesia guidebooks,	0	1		
	number of associations involved that promote GEEW in consultation sessions	0	2		
	number of suggestions for improvement of the GCIP cleantech innovation and entrepreneurship expert training and certification system (gender responsive)	0	10		
Output 1.1.2 Three (3) cycles of the Annual Cleantech competition-GCIP Indonesia Accelerator are conducted (including National innovation Challenges for clean technology challenges) (minimum 80 Accelerator participants)	number of GCIP Indonesia Pre-Accelerator cycles conducted (gender responsive)	0	3	Project progress reports	
	number of GCIP Indonesia Pre-Accelerator participants	0	150 (at least 35% woman)		
	number of GCIP Indonesia Accelerator cycles conducted (gender responsive)	0	3		
	number of GCIP Indonesia Accelerator applicants	0	300-450[1] (at least 30% women)		

	number of GCIP Indonesia Accelerator semi- finalists	0	60-120 (at least 40% women)		
	number of GCIP Indonesia Accelerator finalists	0	36 (at least 40% women)		
	number of GCIP National Academies conducted (gender responsive)	0	3		
	number of GCIP Indonesia Forums conducted (gender responsive)	0	3-5		
	number of help-lines for queries established (gender responsive)	0	1		
	number of targeted gender-responsive outreach activities promoting the GCIP Indonesia Pre- Accelerator, Accelerator, GCIP National Academy, and GCIP Indonesia Forum	0	10-20		
	number of panels at GCIP National Academy and GCIP Indonesia Forum focusing on women entrepreneurship	0	8-10		
	number of partners involved that promote gender equality and women?s empowerment	0	5-10		

Output 1.1.3 At least two introductory Entrepreneurship training programmes per year on business models and innovation for clean technologies organized for women (150 participants) and students (150 participants)	number of student entrepreneurs trained	0	At least 150 students (30 per year, at least 50% women)	Project progress reports	
	women entrepreneurs trained	0	At least 150 women trained	Meeting attendance records Meeting minutes	
Output 1.1.4 Post-accelerator support provided for start-ups and SMEs to access finance and reach market entry (i.e. tipping-point investment facilitation support given for minimum 15 enterprises)	number of enterprises provided with Advanced Accelerator support	0	9-15 (at least 35% woman-led)	Project progress reports	
	number of GCIP Indonesia Post-Accelerator cycles conducted (gender responsive)	0	3	Meeting attendance records	
	number of enterprises participating in the GCIP Indonesia Post-Accelerator	0	30-45 (at least 35% woman-led)	Meeting minutes	
	number of GCIP Indonesia Post-Accelerator enterprises provided with needs-based support	0	9-15 (at least 35% woman-led)		
	number of enterprises provided with technology verification, product development and testing facility support	0	5-10 (at least 35% woman-led)		

	number of targeted support activities for products/services that promote gender equality and women?s empowerment	0	3-5		
	number of GCIP Indonesia alumni nominated for support by the GCIP Global Accelerator	0	5-10 (at least 35% women)		
Output 1.1.5. National pool of mentors and judges identified, created and trained (at least 40)	number of GCIP Indonesia cleantech innovation and entrepreneurship expert training and certification systems (gender responsive)	0	3 (1 for trainers, 1 for mentors, 1 for judges)	Attendance records from trainings Project progress reports	
	number of trainings provided to experts (gender responsive)	0	3		
	number of participants per one expert training	0	10 - 15 (at least 35% women)		
	share of expert that completed the ?I-know-gender? training		100%		
	number of experts evaluated	0	40 (at least 35% women)		
	number of experts accredited	0	30-40 (at least 35% women)		

Output 1.1.6 Extensive advocacy and outreach activities organized (13 events in total) at the national and regional level in a gender-responsive manner including: Public private partnership forums held; and knowledge/best practice shared	number of national and regional cleantech stakeholder meetings held (gender responsive)	0	4 national stakeholder meetings held (at least 380 participants, at least 40% women)	Project progress reports Meeting attendance records	
	number of public-private partnership forums held (gender responsive)	0	3 public-private partnership forums held (at least 150 participants, at least 40% women)	Meeting minutes	
	number of events specifically targeting women	0	3 national stakeholder meetings specifically targeting women (at least 90 participants)		
	number of events targeting youth (gender responsive)	0	3 national stakeholder meetings specifically targeting youth (at least 90 participants, at least 35% women)		
	number marketing materials and outreach campaigns (gender responsive)	0	16 (4 per year) marketing materials disseminated via 4 social media campaigns and 4 publications (3 specifically targeting women)		

	number of videos produced (gender responsive)	0	4 videos produced (1 per year) advertising the accelerator programme and showcasing winners, 1 of them focusing on promoting GEEW		
Output 1.1.7 Investment mobilized for projects implementation to deploy innovative cleantech solutions across various sectors (minimum 12 enterprises provided with funds)	number of Investor Connect events organized (gender responsive)	0	6	Project progress reports	
	number of financial institutions and funds with which contacts established	0	20-25	Meeting attendance records	
	number of investors participating in the awareness raising events	0	15-35 (at least 35% women)	Meeting minutes	
	number of trainings for local financial experts including those on gender-lens investment or gender sensitization(gender responsive)	0	3		
	number of events organized/attended to encourage seed funding providers to participate in the GCIP Indonesia (gender responsive)	0	3		

	number of financial mechanisms designed (for investment de-risking and leveraging) (gender responsive)	0	1		
	number of enterprises provided with funds through the financial mechanism	0	12(at least 35% woman-led)		
Component 2 Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity					
Outcome 2.1 National level platform/ coordinating mechanism established to promote clean technology innovations and entrepreneurship					
Output 2.1.1 National level Cleantech Coordinating platform, web page, Cleantech Community and Network established (including associations promoting gender equality and youth groups)	National level cleantech coordination platform (GCIP web page, office) (gender responsive)	0	1 National level cleantech coordination platform (web page and office)	Project progress reports Meeting attendance records Meeting minutes	Continuous support from the Government of Indonesia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	Regional cleantech coordination established in existing incubation centers in each province (gender responsive)	0	Regional cleantech coordination established by BIT in Medan, Surabaya, Makassar)		
	Establishment of PSC (gender responsive)	0	1 PSC (Project Steering Committee) established (at least 35% women)		

	Cleantech Community and Network established within the BIT Programme (gender responsive)	0	1 Indonesian Cleantech Community and Network is operating to a high standard providing linkages to network members		
	Number of potential cleantech experts identified and joined the Cleantech Network	0	300 - 450 (at least 35% women)		
	number of SAOs focused on clean technology, gender and social entrepreneurship identified and join network	0	20		
	Number of investors joined the network	0	5 (at least 35% women)		
	number of GCIP Indonesia web platforms	0	1		
Outcome 2.2 The CIEE in Indonesia is strengthened and interconnected promoting gender equality and the empowerment of women					
Output 2.2.1 Institutional capacity building of the CIEE actors is conducted (1-3 events for up to 185 participants in total)	number of analyses of Indonesia?s CIEE (gender responsive)	0	1	Project progress reports Meeting attendance records Meeting minutes	Continuous support from the Government of Indonesia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	number of tools for CIEE strengthening and connectivity (gender responsive)	0	2		
	number of stakeholder engagement strategies and cleantech innovation cluster strategies (gender responsive)	0	2 (1 engagement strategy and 1 cleantech innovation cluster strategy)		
	number of engagement workshops organized (gender responsive)	0	2		
	number of facilitators trained	0	10 (at least 35% women)		

	number of capacity building events for selected stakeholders (gender responsive)	0	1-3		
	number of participants in the stakeholder capacity building events	0	185 (at least 35% women)		
	number of stakeholders that completed the ?I- know-gender? training	0	90-185		
	Number of Train-the-Trainer Programme conducted	0	2		
Output 2.2.2 Linkages, collaboration, and synergies across CIEEs are promoted	number of cooperation agreements signed to promote linkages, collaboration, and synergies across CIEEs (gender responsive)	0	5-10		
Outcome 2.3 Cleantech innovation and entrepreneurship policies, regulations and recommendations are strengthened promoting gender equality and the empowerment of women					
Output 2.3.1 Policy analysis report on best practice policies, regulations and incentives and policy recommendations (gender responsive)	number of gender-responsive gap analysis reports on policy and regulations relating to the promotion of cleantech, innovation, and entrepreneurship in Indonesia	0	1	Project progress reports	Continuous support from the Government of Indonesia and national partner institutions Commitment by CIEE stakeholders
	number of recommendations for the cleantech, innovation, and entrepreneurship policy	0	1-3		
	number of gender experts and/ or associations involved that promote GEEW during the analysis	0	2		

Output 2.3.2 Roadmap for the creation of an Indonesian innovation ecosystem in place (inclusive and sustainable, considering gender dimensions)	number of roadmaps guiding implementation of the policy recommendations (gender responsive)	0	1		Interest by cleantech entrepreneurs
Component 3 Programme coordination and coherence					
Outcome 3.1 Efficiency and sustainability of the GCIP Indonesia is ensured through programme coordination and coherence					
Output 3.1.1 The GCIP internal guidelines (3 guidelines) for project management unit are adopted and implemented by the GCIP Indonesia	number of guidelines reviewed and adopted (gender responsive)	0	3	Project progress reports	Continuous support from the Government of Indonesia and national partner institutions
	number of GCIP Indonesia sustainability and exit strategy developed	0	1		
Output 3.1.2 Programme-level knowledge management, communication and advocacy strategy is adopted and implemented by the GCIP Indonesia	number of GCIP Indonesia knowledge management, communication, and advocacy strategies (gender responsive)	0	1		Commitment by CIEE stakeholders
	number briefing sessions, press releases, social media posts and adverts (gender responsive)	0	250-350		Interest by cleantech entrepreneurs
	number of partnerships closed (gender responsive)	0	20-30		
Outcome 3.2 Impacts and progress of the GCIP Indonesia are tracked and reported					
Output 3.2.1 The GCIP methodology for impact assessment is developed and applied	number of trainings on the GCIP methodology for impact assessment (gender responsive)	0	3	Project progress reports	Continuous support from the Government of Indonesia and national partner institutions
	number of participants in trainings on the GCIP methodology for impact assessment	0	90-105 (at least 35% women)	Training attendance records	
	number of GCIP Indonesia impact reports	0	4-5		

Output 3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework including operationalization and monitoring of gender mainstreaming action plan, and an external mid-term review is conducted	number of GCIP Indonesia monitoring and evaluation (M&E) plans (gender responsive)	0	1		Commitment by BPPT stakeholders Interest by cleantech entrepreneurs
	number of project progress reports (gender responsive)	0	10		
	number of gender mainstreaming action plans developed, approved by the PSC, implemented and monitored	0	1		
	number of external mid-term reviews conducted	0	1		
Output 3.2.3 External terminal evaluation is conducted	number of external terminal evaluations (gender responsive)	0	1		

[1] Presumes delivery of three annual cycles of the GCIP Indonesia Accelerator (each year for around 20-40 semi-finalists per region and 12 finalists selected from a pool of 100-150 applicants), including the 4-day GCIP forum

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

	GEF Secretariat Comments ? January 2020	UNIDO response
	Germany	

	Germany welcomes this innovative proposal that aims to foster cleantech start-ups and SMEs through capacity building, access to finance, policy and regulatory strengthening and learning and exchange, building on the lessons learnt from a previous project. The proposal is aligned with the relevant GEF focal strategy and comprehensive. Germany requests that the following requirements are taken into account during the design of the final project proposal:	
1	Germany asks to review the risks section of the document as to identify environmental risks for relevant strategies and develop associated mitigation measures. The proposal currently considers environmental risks to be low without providing detail. However, some (e.g. blockchain) have concerning carbon footprints, unless they are powered exclusively by renewable energies, which is rarely the case. Industrial processes related to battery-based technologies can have harmful environmental impacts if these are not mitigated through environmental regulation and risk mitigation measures, which are often not effectively enforced.	The environmental risk section has been reviewed and revised based on the comments and the environmental risks of some technologies have been acknowledged and mitigation measures proposed. The criteria for technology selection (output 1.1.1) has also been updated to include for mitigation measures for possible negative environmental and social impacts. Where necessary expertise will be used to help the entrepreneurs to minimise the negative impacts and if the mitigation measures are not sufficient then that technology will not be supported by GCIP.
2	In this context, Germany also suggests to review the technologies alignment with local climate risks, when deployed. The GIZ ?Climate Expert? tool could provide a relevant frame to do so in a local context.	The alignment of proposed technologies will be reviewed against local climate risks in the target markets, as part of the support provided within the accelerator. Minimising any negative environmental and social impacts has been added as specific guidance available to the entrepreneurs (under output 1.1.3). Adaptation strategies will also be prepared if necessary. GIZ?s Climate Expert Tool could be used as one tool available by entrepreneurs and GCIP mentors and judges.

3	Germany suggests further broadening the scope to support low-tech and lower-tech approaches to energy, resource efficiency or waste management that do not exclusively rely on strong IT skills. It might not be the local SMEs? lack of access to finance and entrepreneurial capacities alone that hinder their development and scaling up.	The scope of technologies to be supported is not prescriptive as long as it is cleantech and in line with GEF 7 CCM priorities (electric drive technologies and electric mobility, accelerating energy efficiency, and decentralised renewable energy power with energy storage) plus sustainable cities and food systems. The level of IT or technology will not be defined so low-tech and lower-tech approaches to energy will be included. A footnote has been added to section Output 1.1.1. The criteria for each national project will be defined at the national level and will take into account the local skills and technology base. The GCIP approach is designed to address other ecosystem weaknesses that may impact on SME?s ability to develop and scale-up. Component 2 is designed to address some of these weaknesses by building capacity and supporting policy development that will strengthen the local ecosystem.
4	Germany also suggests seeking synergies with KfW?s SME and start up support program for energy-efficient production processes, as well as the GIZ project on the promotion of smallest, small and medium-sized enterprises in Morocco.	The full design of the Morocco child project will consider working with GIZ?s project in the country.
	Germany further invites consideration of potential additional synergies with research institutes (e.g. by leveraging the partnership with Climate-KIC); such partnerships might be able to provide some of the IT technology needed or help to bring technologies to maturity and to foster market readiness	UNIDO is in discussion with Climate KIC, which will be a collaborating partner in the project
United States		
	We are supportive of this project, through there were initial concerns that the program appears to be duplicative of other major UN programs and IERNA efforts. Reviewers noted that as long as UNIDO, IRENA, the World Bank, Clean Energy Ministerial, CSLF, IEA, OECD, USAID, the EU, GiZ, and other major donors who are active in this space coordinate and de-conflict their efforts, or receive funding for their efforts from the program, it seems fine to promote innovation in clean technologies	From meeting: The Secretariat clarified that the GCIP uniquely combines an array of comprehensive and interlinked services to promote innovative cleantech solutions in developing countries and emerging economies. There are no known overlaps with any existing UN programmes or initiatives. Rather, the GCIP may collaborate with these institutions and initiatives so as to enhance GCIP the impact services.

	Other reviewers are supportive of this initiative and think it is well-designed for Cambodia. However, there is concern about partnering with UNIDO who has struggled with implementing programs in the past.	UNIDO has successfully implemented GCIP in a total of nine countries, namely Armenia, India, Malaysia, Morocco, Pakistan, Thailand, Turkey, Ukraine and South Africa[1]. Four of these countries have requested additional GCIP support. The independent evaluation of GCIP unequivocally concluded that GCIP was very successful. Any shortcomings and findings from the evaluation and feedback from participants has been used to design the activities of the GCIP global child project. Further details regarding the findings of the GEF IEO thematic evaluation of GCIP are provided in Annex N.
	STAP Comments ? January 2020	**UNIDO Response**
1	Good discussion is provided on barriers and lesson-drawing from past experiences. Transferability will need to be monitored closely for the new countries added (that were not in earlier GEF 5 and 6 Cleantech programs)	The coordinated approach through the global child project allows for the development of common tools and methodologies that are adapted to local contexts. Regular meetings and trainings on methodologies and operationalization of the in-country projects with all countries ensures knowledge transfer from the Global coordination team but also between countries to the benefit of the new countries especially. In particular, component 3 is primarily focused on programmatic and coherence efforts across the countries to ensure transferability.
2	Adequate presentation of stakeholders engagement is provided throughout the proposal. However, engagement with particular businesses that have experience with Clean-Tech development through organizations such as the World Business Council on Sustainable Development may be appropriate	UNIDO totally agrees with this. In the RCE several private sector stakeholder engagements have been included in the stakeholder engagement plan. This comment was also cascaded across the 10 country child projects where greater engagement with local private sector associations was prioritised.

3	The Global Environmental Benefits from this program are linked to a range of other efforts including the Sustainable Cities program. Hence the project will require coordination between this project and these other efforts. A good review article that can guide on planning and assessing potential benefits of CleanTech is recommended: Thomassen, G. et al. 2019. How to assess the potential of emerging green technologies? Towards a prospective environmental and techno-economic assessment framework. Green Chemistry, 21(18), 4868?4886. https://doi.org/10.1039/C9GC02223F	The project will be systematically coordinated with the Sustainable Cities, E-mobility and Africa Mini-grids Programmes for scaling the pipeline of technologies nurtured by the programme. The principles from the article mentioned will be applied in addition to the impact methodologies developed under the global child project.
4	There is considerable emphasis on scaling based on prior experiences. In this regard, the differential experience between the countries will need to be carefully monitored, particularly with regard to the effective implementation of co-financing arrangements.	Each country project is designed and developed with its unique context in mind while still ensuring that coherence exists in the programmatic approach i.e. common tools and methodologies. Co-financing is country-specific and will be monitored through the regular monitoring and tracking activities, such as the PIRs.

[1] More information on GCIP is available on - https://www.unido.org/our-focus/safeguarding-environment/clean-energy-access-productive-use/climate-policies-and-networks/global-cleantech-innovation-programme

ANNEX C: Status of Utilization of Project Preparation Grant (PPG). (Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	*GETF Amount ($)*		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Description of the project implementation/execution modalities and agencies, incl. - Draft TOR for contractual arrangements - HACT assessment of the proposed executing agency - Obtaining of co-financing letters from donors, NGOs, Agencies and government - Training for executing entity on execution modality	20,000	5,000	4642.77

Development of the project document (incl.), incl. - Analysis of baseline and ongoing/planned initiatives - Gender analysis/ assessment - Preparation of environmental and social management plan (ESMP) (for Category B projects)	20,000	27,642.05	0
Stakeholder engagement activities: Stakeholder Workshop to verify the project document	10,000	12,715.18	0
Total	50,000	45,357.23	4,642.77

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

While the project is targeted at beneficiaries (entrepreneurs and all relevant CIEE stakeholders, such as universities, policy makers, financiers, and R&D institutions) from all over the country, the main project events will be conducted in the capital city, Jakarta, and the regional coordination hubs at Medan, Surabaya and Makassar in Indonesia . This is due to the benefits resulting from a relatively dense concentration of relevant stakeholders there, and well developed infrastructure. The project boundary will not overlap any other country?s territory. The geo-coordinates and location for these cities are as following:

Jakarta: 6.2087? S, 106.8455? E

Medan: 3.59544? S, 98.67170? E

Surabaya: 7.25362? S, 112.75153? E

Makassar: 5.14875? S, 119.44041? E

ANNEX E: Project Budget Table

Please attach a project budget table.

This is a summary of the budget table. For a more detailed version please refer to Annex E attachment (dated 22 April 2022).

Indicative Project Budget

Accelerating cleantech innovation and entrepreneurship in start-ups and SMEs in Indonesia (GEF ID 10459)

2022-05-11

Sum of Budget (USD)	Column Labels					
Row Labels	Component 1	Component 2	Component 3	M&E	PMC	Grand Total
Selected PEE	992,505	463,741	92,740	16,000	161,498	1,726,484
Contractual Services – Company	294,410	264,510	62,400	-	-	621,320
To produce localized guidebooks and supporting materials for national PEEs, applicants, trainers, mentors and judges based on identified gaps and priorities. (year1) (4,505 USD per year) (Activity 1.1.1a)	4,505	-	-	-	-	4,505
To provide support to national PEEs in conducting analysis of i) potential accelerator participants (start-up ventures and SMEs) and ii) potential mentors, trainers and judges. (year 1) (2,691 USD per year) (Activity 1.1.1b)	13,455	-	-	-	-	13,455
To provide guidance to the national PEEs regarding the implementation of specific interventions to target the identified weakness within the i) potential accelerator participants (start-up ventures and SMEs) and ii) potential mentors, trainers and judges. (year 1) (3,830 USD per year) (Activity 1.1.1b)	19,150	-	-	-	-	
To provide support to national PEEs to ensure that the GCIP certification of national experts is integrated with national needs, partner requirements and any existing certification processes. (year 1) (1,513 USD per year) (Activity 1.1.1d)	7,565	-	-	-	-	
To customize global curriculum and training content for national needs and priorities (year 1) (USD 5,525 per year) (Activity 1.1.1e)	27,625	-	-	-	-	
To deliver in-country /virtual pre-accelerators for GCIP country accelerators that need customized assistance in developing their pool of potential applications prior to the launch of the accelerator. (year 1) (8,817 USD per year) (Activity 1.1.2a)	44,085	-	-	-	-	
To deliver in-country training support provided to GCIP countries in facilitate national academies, and development of participating national teams. Support would also include the capacitation of national mentors and trainers - includes travel costs for two NGIN trainers (year 1) (25,340 USD per year) (Activbity 1.1.2b)	126,700	-	-	-	-	
To execute operation of a live helpdesk for queries from national PEEs, mentors and trainers over 45 working weeks per year. The helpdesk is operational during the working hours of all 10 GCIP countries. (year 2 onwards) (4,650 USD per year) (activity 1.1.2d)	18,600	-	-	-	-	
To conduct country specific virtual training and support for alumni innovators and entrepreneurs based on stage of maturity and size of the alumni community. (year 1) (6,545 USD per year) (Activity 1.1.4b)	32,725	-	-	-	-	-
To conduct National Capacity Building (year 3) (141,800 USD one off package) (Activity 2.2.1b)	-	141,800	-	-	-	464,500
To conduct Global Engagement plan (year 4) (80,000 USD one off package) (Activity 2.2.1c)	-	80,000	-	-	-	25,000
To provide guidance to national PEEs on GCIP national forums and integration with the annual global forum, including themes and private sector participation. (USD2,542 per year) (Activity 2.2.2a)	-	12,710	-	-	-	25,000
To conduct national policy localization: (USD 30,000 one off package) (Activity 2.3.1a)	-	30,000	-	-	-	29,500
To conduct policy implementation. National Cleantech Innovation Policy Framework (year 5) (USD 62,400 one off package) (Activity 3.1.1b)	-	-	62,400	-	-	512,000
International consultants	105,000	79,500	10,500	-	-	195,000
Finance Expert	105,000	-	-	-	-	105,000
Knowledge Management and Communication Expert	-	79,500	10,500	-	-	90,000
Local consultants	113,190	97,231	7,340	16,000	124,740	358,501
Gender expert	46,400	5,800	5,800	-	-	58,000
E&S expert	58,000	-	-	-	-	58,000
Cleantech policy expert	7,250	65,250	-	-	-	72,500
National Project Coordinator	1,210	20,570	1,210	10,000	98,010	131,000
Project Assistant	330	5,611	330	6,000	26,730	39,001
Office supplies	-	-	-	-	21,758	21,758
Office supplies, rent, equipment, etc.	-	-	-	-	21,758	21,758
Training/workshop/meeting	83,250	22,500	-	-	-	105,750
to deliver the GCIP Indonesia Pre-Accelerator as a 10-day (7 days virtual/3 day in-person) programme for around 50 participants annually, around 6-8 weeks prior to the Accelerator application deadline(Activity 1.1.2a)	22,500	-	-	-	-	22,500
to deliver three annual cycles of the GCIP Indonesia Accelerator (each year for around 20-40 semi-finalists per region and 12 finalists selected from a pool of 100-150 applicants), including the 4-day GCIP National Academy (Activity	24,000	-	-	-	-	24,000
to conduct three cycles of the GCIP Indonesia Post-Accelerator focused on advanced business growth and commercialization support, investment readiness, market readiness, and technology readiness (based on the GCIP Indonesia guidebooks developed under Output 1.1.1) to benefit 10-15 GCIP Accelerator graduates annually (40 firms) (activity 1.1.4b)	9,000	-	-	-	-	9,000
to provide training and certification for at least 30 experts (trainers, mentors, judges) with at least 35% being women (i.e. at least 3 trainings with minimum 10 experts), as well as to conduct the evaluation of experts (based on the NGIN assessment framework) and to support their accreditation (Activity 1.1.5a)	9,000	-	-	-	-	9,000
to organize national investment facilitation events (Investor Connect) for GCIP Indonesia alumni enterprises (two at each cycle) which will include training and awareness raising in order to encourage the participation of seed funding providers from the national, regional and global stages in the GCIP Indonesia and to leverage on the experience and knowledge of other GCIP countries (Activity 1.1.7a)	11,250	-	-	-	-	11,250
to establish a robust network with national financial institutions and funds, and to manage related communication and outreach activities, including awareness raising and training events for the local investor community to increase investor confidence and ensure accurate risk perception with regard to cleantech solutions (at least 1 event after each cycle) (Activity 1.1.7b)	7,500	-	-	-	-	7,500
to develop (and share with BPPT) relevant tools for CIEE strengthening and connectivity (as well as to provide guidance on their use), including: stakeholder engagement strategy framework, and cleantech innovation cluster framework; and to support BPPT in developing a stakeholder engagement strategy and a cleantech innovation cluster strategy (in consultation with relevant CIEE stakeholders); as well as to conduct two engagement workshops (kick-off and follow-up) to train up to 10 national facilitators (Activity 2.2.1b)	-	3,000	-	-	-	3,000
to conduct capacity building events (based on the cleantech innovation capacity building framework developed by CTG) for selected CIEE stakeholders, including national institutions, industry associations, and business platforms on how to support cleantech innovations (Activity 2.2.1c)	-	15,000	-	-	-	15,000
to deliver at least two cycles of the Entrepreneurship Train-the-Trainer Programme (Activity 2.2.1d)	-	4,500	-	-	-	4,500
Travel	-	-	12,500	-	15,000	27,500
International travel	-	-	12,500	-	-	12,500
Local travel	-	-	-	-	15,000	15,000
Grants	396,655	-	-	-	-	396,655
Grants for winners of the Accelerator (Activity 1.1.2b)	150,000	-	-	-	-	150,000
Grants under the financial mechanism (Activity 1.1.7d)	246,655	-	-	-	-	246,655
UNIDO	-	-	-	50,000	-	50,000
International consultants		-	-	35,000	-	35,000
Mid-term reviev of the project				15,000		15,000
Terminal evaluation of the project				20,000		20,000
Local consultants		-	-	15,000	-	15,000
Mid-term reviev of the project				5,000		5,000
Terminal evaluation of the project				10,000		10,000
Grand Total	992,505	463,741	92,740	66,000	161,498	1,776,484

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).