Part I: Project Information

GEF ID
10989

Project Type
MSP

Type of Trust Fund
GET

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

Project Title
Promoting technology innovation and entrepreneurship to mitigate climate change and combat land degradation in informal settlements and peri-urban areas

Countries
Namibia

Agency(ies)
UNIDO

Other Executing Partner(s)
Environmental Investment Fund of Namibia

Executing Partner Type
Government

GEF Focal Area
Multi Focal Area

Sector
Technology Transfer/Innovative Low-Carbon Technologies

Taxonomy

Focal Areas, Land Degradation, Sustainable Land Management, Community-Based Natural Resource Management, Restoration and Rehabilitation of Degraded Lands, Sustainable Agriculture, Sustainable Livelihoods, Sustainable Forest, Land Degradation Neutrality, Carbon stocks above or below ground, Land Productivity, Land Cover and Land cover change, Sustainable Development Goals, Mangrove, Biomes, International Waters, Biodiversity, Protected Areas and Landscapes, Terrestrial Protected Areas, Productive Landscapes, Community Based Natural Resource Mngt, Mainstreaming, Infrastructure, Agriculture and agrobiodiversity, Forest, Forest and Landscape Restoration, Climate Change, Climate Change Mitigation, Energy Efficiency, Renewable Energy, Technology Transfer, Agriculture, Forestry, and Other Land Use, United Nations Framework Convention on Climate Change, Nationally Determined Contribution, Community Based Organization, Civil Society, Stakeholders, Academia, Non-Governmental Organization, SMEs, Private Sector, Individuals/Entrepreneurs, Gender Mainstreaming, Gender Equality, Beneficiaries, Sex-disaggregated indicators, Smallholder Farming, Food Security in Sub-Sahara Africa, Integrated Programs, Small and Medium Enterprises, Capacity Development, Capacity, Knowledge and Research, South-South, Knowledge Exchange

Rio Markers

Climate Change Mitigation

Principal Objective 2

Climate Change Adaptation

No Contribution 0

Biodiversity

No Contribution 0

Land Degradation

Principal Objective 2

Submission Date

4/6/2023

Expected Implementation Start

7/1/2024

Expected Completion Date

6/30/2027

Duration

36In Months

Agency Fee($)

85,316.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
CCM-1-4		GET	431,621.00	1,671,500.00
LD-1-4		GET	466,439.00	1,671,500.00
		Total Project Cost($)	**898,060.00**	**3,343,000.00**

B. Project description summary

Project Objective

Promote the acceleration of high-impact clean technology innovation for large-scale deployment and creation of green jobs in informal settlements and peri-urban areas of Namibia.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Transforming early-stage innovative cleantech solutions into scalable, commercial enterprises	Technical Assistance	1.1 GCIP is adapted to the Namibian context and early-stage cleantech innovations are accelerated	1.1.1 GCIP methodologies, tools, training systems, guidebooks for cleantech innovation and entrepreneurship accelerator are adapted for Namibia 1.1.2 Pool of 20 cleantech innovation and entrepreneurship experts (trainers, mentors, judges) is trained and certified to support the Namibia Accelerator (with at least 40% women trainers, mentors, judges) 1.1.3 Three cycles of the annual competition-based Namibia Accelerator are conducted (at least 50 enterprises with at least 40% women-led and at least 20 enterprises with a strong focus on LD will be supported)	GET	111,000.00	438,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Transforming early-stage innovative cleantech solutions into scalable, commercial enterprises	Technical Assistance	1.2 Start-ups and SMEs are supported through advanced and gender-responsive business growth and investment facilitation services	1.2.1 Targeted business growth support services are provided to select cleantech enterprises (up to 15 enterprises with at least 40% women-led) towards commercialization 1.2.2 Enterprises (15 enterprises with at least 40% women-led) are connected to financing opportunities and provided with tipping-point investment facilitation support 1.2.3 Mentoring and partnership support is provided to cleantech enterprises (up to 10, with at least 40% women-led) for regional market expansion in collaboration with the global GCIP network	GET	190,000.00	405,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
1. Transforming early-stage innovative cleantech solutions into scalable, commercial enterprises	Investment	1.2 Start-ups and SMEs are supported through advanced and gender-responsive business growth and investment facilitation services	1.2.4 Innovative early-stage financing mechanism is designed to deploy innovative cleantech solutions to mitigate climate change and combat land degradation in informal settlements and peri-urban areas (up to 10 enterprises, with at least 40% women-led)	GET	130,000.00	1,350,000.00

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	2.1 The CIEE in Namibia is strengthened and interconnected	2.1.1 Gender-responsive CIEE analysis is conducted (market conditions, policy environment, development priorities), including mapping of supply of and demand for cleantech solutions and their prioritization in accordance with national strategies and action plans 2.1.2 Cleantech innovation and entrepreneurship policies, regulations and recommendations are submitted for adopt ion to policy makers (gender-responsive) 2.1.3 Linkages, collaboration, and synergies across CIEEs are promoted	GET	273,060.00	565,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3. Knowledge management and project coordination	Technical Assistance	3.1 Project outcomes are enhanced through use of guidelines, knowledge management, as well as communication and advocacy	3.1.1 Guidelines for project management teams are adapted and implemented 3.1.2 Knowledge management, communication and advocacy strategies of GCIP are adapted and applied 3.1.3 National web platform is operated as part of the GCIP global web platform to maintain local and global community and network	GET	48,000.00	150,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
3. Knowledge management and project coordination	Technical Assistance	3.2 Impacts and progress of the project are tracked and reported	3.2.1 Environmental and social impacts of project are estimated, tracked and reported 3.2.2 Project progress monitoring and reporting as per UNIDO and GEF guidelines including development and monitoring of Gender Mainstreaming Action Plan, the Environmental and Social Management Plan and Stakeholder Engagement Plan is ensured 3.2.3 Independent mid-term review and terminal evaluation are conducted	GET	65,000.00	100,000.00
			Sub Total ($)		**817,060.00**	**3,008,000.00**
Project Management Cost (PMC)						
				GET	81,000.00	335,000.00

Project Management Cost (PMC)		
Sub Total($)	**81,000.00**	**335,000.00**
Total Project Cost($)	**898,060.00**	**3,343,000.00**

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($)
Recipient Country Government	Ministry of Environment, Forestry and Tourism	Grant	Investment mobilized	100,000.00
Recipient Country Government	Ministry of Environment, Forestry and Tourism	In-kind	Recurrent expenditures	400,000.00
Recipient Country Government	Environmental Investment Fund	In-kind	Recurrent expenditures	300,000.00
Recipient Country Government	Ministry of Higher Education, Training and Innovation	In-kind	Recurrent expenditures	250,000.00
Other	University of Namibia	In-kind	Recurrent expenditures	500,000.00
GEF Agency	UNIDO	Grant	Investment mobilized	50,000.00
GEF Agency	UNIDO	In-kind	Recurrent expenditures	150,000.00
Private Sector	Investment Promotion & Development Board	In-kind	Recurrent expenditures	300,000.00
Private Sector	Impact Tank	Equity	Investment mobilized	1,000,000.00
Private Sector	SMEs Compete	In-kind	Recurrent expenditures	180,000.00
Private Sector	NCCI	In-kind	Recurrent expenditures	65,000.00
Private Sector	Development Bank of Namibia	In-kind	Recurrent expenditures	48,000.00
			Total Co-Financing($)	**3,343,000.00**

Describe how any "Investment Mobilized" was identified

Recipient government: Through close consultations with the GEF Focal Point, the project concept was presented to and in-kind contributions were received by i) the Ministry of Environment, Forestry and Tourism, ii) Ministry of Higher Education, Training and Innovation, iii) University of Namibia, Environment Investment Fund of Namibia) vii) NCCI, viii) SMEs Compete, IX) Impact Tank and X) the Development Bank of Namibia. Private sector: Non-committal meetings were held with various private sector entities who showed great interest to provide co-financing. The Namibia Investment Promotion & Development Board, SMES compete and the Namibian Development Bank have committed in-kind co-financing. Impact Tank has committed to provide equity and debt financing to finance entrepreneurs. Estimates are based on initial consultations with the government counterparts and UNIDO?s prior experience in mobilizing co-financing for projects with similar objectives and market conditions. Co-financing in the form of grants is expected to be used under the establishment of the financing mechanism (Output 1.2.4) to provide financing to supported enterprises. In-kind co-financing is expected to be used for the use of premises, training and the development of a land degradation core indicator calculation methodology, legal services and other support and advisory services, depending on the expertise of in-kind co-financing providers. The first year of the project implementation will include focused work on aligning GEF support with existing financing for cleantech assistance both national and international in order to mobilize additional private sector co-finance to sustain the project?s vision after the GEF implementation period. The project will in particularly focus on mobilizing additional co-financing from banks, angel investors and VC funds. Communication has been initiated with the following financial institutions: Nedbank Namibia, Bank Windhoek, Standard Bank Namibia, and First National Bank. The intention is to secure co-financing from these banks within the initial year of the project. 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 project. As was already confirmed by the findings of the Independent Evaluation of previous GCIP cycles in other countries, co-financing in the form of grants, seed funding, equity from angels, venture capital funds, impact investors, crowdfunding 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, 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 realized once the specific cleantech companies have been supported by the project and linked to investors. There are several examples demonstrating that GCIP participants receive substantial follow-on investment support at a later stage. 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. 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, signalling higher involvement and interest by the latter than initially anticipated. 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. These examples are intended to serve as an excerpt for the successful promotion of GCIP award winning cleantech innovations and their potential to attract investment from the private sector within the project?s lifetime and beyond as confirmed by GEF?s independent evaluation report available on : https://www.gefieo.org/evaluations/cleantech-programme-2018.

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($)
UNIDO	GET	Namibia	Climate Change	CC STAR Allocation	431,621	41,004	472,625.00
UNIDO	GET	Namibia	Land Degradation	LD STAR Allocation	466,439	44,312	510,751.00
				Total Grant Resources($)	**898,060.00**	**85,316.00**	**983,376.00**

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 ($)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNIDO	GET	Namibia	Climate Change	CC STAR Allocation	25,000	2,375	**27,375.00**
UNIDO	GET	Namibia	Land Degradation	LD STAR Allocation	25,000	2,375	**27,375.00**
				Total Project Costs($)	**50,000.00**	**4,750.00**	**54,750.00**

Core Indicators

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
6000.00	6000.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
Cropland	3,000.00	3,000.00		

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
3,000.00	3,000.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
4000.00	4000.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
4,000.00	4,000.00		

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

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)	45000	45000	0	0
Expected metric tons of CO?e (indirect)	225000	225000	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)	45,000	45,000		
Expected metric tons of CO?e (indirect)	225,000	225,000		
Anticipated start year of accounting	2024	2024		
Duration of accounting	20	20		

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)				
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

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 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	315	315		
Male	585	585		
Total	900	900	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

This project aims to support cleantech innovations. Cleantech is defined as technologies and services in the area of climate change mitigation as well as land degradation (i.e. clean energy, energy efficiency, smart agriculture, sustainable water management, smart irrigation technologies, reforestation, sustainable forest management). Methodology for estimating GHG emissions follows the GEF approved program GEF ID 10408. The figures mentioned in the indicators section are tentative and subject to potential changes. Methodology for estimating GHG emissions is to be further elaborated during the PPG phase while taking into account the approach applied in the approved GEF programme titled ?Global Cleantech Innovation Programme (GCIP) to Accelerate the Uptake and Investments in Innovative Cleantech Solutions?, GEF ID 10408 (further referred to as GCIP Global), Other environmental and socio-economic co-benefits are also expected and will be measured and tracked. The estimation of avoided direct and indirect GHG emissions is based on a review of GHG reductions that were achieved by GCIP alumni under GEF 5 and 6 as captured in the GEF Independent Evaluation Office (IEO) evaluation. These reductions are based on three pillars of information i) a survey of 14 GCIP alumni, ii) a sample of alumni?s projected avoided emissions found by the GEF independent evaluation - , iii) the assessment of GHG reduction by GCIP alumni through the Mission Innovation Framework for Assessing Avoided Emissions. The design of GCIP in GEF 5&6 assumed a range unit abatement costs (for GEF funding) of between 0.68 USD/tonne CO2e in Turkey to 29.77 USD/tonne CO2e in Armenia. The proposed benchmarks 5 to 10 USD/tCO2e in reduction are within the same range and quite realistic and conservative. The range of mitigation potential, will allow the project to support a mix of technologies with different CO2 emission reduction potentials as long as this minimum average across the programme is achieved. As a key focus of GCIP is to identify and support cleantech innovations with high impact potential, this benchmark will guide the accelerator to take into account the GEB potential as a key criterion in accepting applications into the accelerator. Through the initial selection process and the early training on impact calculation, each enterprise will determine its baseline scenario for its technology. By delivering the training and mentoring in the main accelerator, advanced and post accelerators described in the ?Alternative Scenario?, enterprises are supported to commercialize and sell innovative cleantech products. Methodology for accounting of areas under improved management practices and areas restored: A list of previously selected GCIP beneficiaries will serve as a basis for an outline on the calculation methodology. Previous GCIP project have accelerated technological innovations in the fields of efficient water irrigation as well as agricultural business intelligence for smallholder farmers, among others. GEMS in Morocco has proven to help save up to 50% of water due to a water efficiency solution for the agriculture and irrigation sector through a nano-irrigation system that significantly reduces water consumption, and also reduces operational and labour costs related to the daily management of irrigation, fertilizers and treatment, while ensuring an

increase in productivity. More than 100,000 farmers in Turkey have used a platform called Tarla.io, which was supported by GCIP in 2016, offering online services informing users about the climate risks on their fields, checking historical data gathered from many data silos (weather forecasts, meteorological stations and radars) on subject field and providing hyperlocal statistics and derived insights. Precipitation, temperature, hail, thunderstorm distribution and probabilities are used for determining the operations, plant health, credit and insurance risks. This project will benefit at least 20 innovations with significant CCM mitigation potential and 20 innovations with significant LD mitigation potential. CCM innovations will contribute towards core indicator 6 and LD innovations will contribute towards core indicators 3.1, 3.2 and 4.3 by offering a technological or business model innovation. The average farm size of a smallholder farmer in Namibia is 3 hectares. Based on the experience from previous GCIP enterprises (i.e GEMS, tarla.io and mysmartfarm) in the agricultural sector, it can be expected that this project will directly support up to 3,300 farmers located in informal settlements and peri-urban areas. A total of at least 10,000 hectars are thus expected to be improved or restored under the core indicators mentioned above, amounting to at least 670 hectars per supported enterprise that is directly attributable to LD.

Part II. Project Justification

1a. Project Description

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

1. Namibia has a population of 2.55 million people that is very young (38% of the population under the age of 14), with roughly 50% of the population living in rural areas. Having one of the lowest population densities in the world (3 per km2), Namibia is also the driest country in Sub-Saharan Africa, rich in mineral resources including uranium and diamonds.

2. Namibia, despite socio-economic inequalities, has experienced an average annual economic growth rate of 4,4% between 1991 and 2015, allowing it to become an upper-middle income country (GDP per capita of USD 4,957 in 2019). Within the same period, the CO2 emissions have almost quadrupled from 1,1 kt to 4,3 kt per year. Although Namibia contributes only a small fraction of the GHG emissions (0.01%), its per capita emissions have more than doubled between 1991 and 2018 and are above the world average. [1]

3. The COVID-19 pandemic alongside severe drought conditions in 2019 have had unprecedented impact on Namibia?s economy. GDP contracted by 7.4% in 2020, including the mining sector (by 12.2%) which is central to the Namibian economy. The drought in 2019 has led to a sharp decline in harvest outputs, also affecting the electricity generation which heavily relies on hydropower. [2] Namibia?s primary energy supply is based of fossil fuels, mostly oil. Currently, less than 50% of the population has access to power. The country?s traditional generation capacity consists of a mix of hydropower, coal, diesel and thermal, of which less than a third is supplied locally. Namibia is heavily reliant on imported electricity and coal. Furthermore, 80% of the rural population rely on wood fuel for cooking, which is a major driver for deforestation.

4. The arid environment of the Republic of Namibia is very sensitive to the negative impacts of land degradation, and restoration and rehabilitation of degraded land is particularly difficult and can only be achieved over the long term. Committing to maintaining the land degradation levels in Namibia at specific levels is crucial for protecting vital ecosystems that support all aspects of the Namibian economy and the livelihood its people. The annual cost of land degradation in Namibia is estimated at 1.6 billion United States dollars (USD). This is equal to 19% of the country's Gross Domestic Product. Land degradation leads to reduction in the provision of ecosystem services that takes different forms - deterioration in food availability, soil fertility, carbon sequestration capacity, wood production, groundwater recharge, etc. with significant social and economic costs to the country.

5. Namibia?s key ecosystem services include livestock, ground and surface water, fish, soil formation and composition, chemical condition of fresh and saltwater, global and regional climate regulation,

tourism and recreation, and spiritual interactions. Many of these services are facing pressure from habitat change, pollution, invasive species, climate change, illegal use, and exploitation. Habitat change has negatively impacted soil formation and composition and erosion control and flood protection, largely due to land degradation caused by overgrazing, bush encroachment and loss of woodland. This is expected to continue, which could diminish the capacity of the land to deliver provisioning services relating to livestock and crops. Groundwater recharge has also been negatively impacted, largely via bush encroachment, which reduces the water available for domestic, agricultural, and industry use. Pollution is expected to continue to undermine the chemical condition of freshwaters, particularly in ecosystem zones with perennial rivers. Climate change may have already had a negative effect on groundwater recharge (if higher carbon dioxide levels have increased the rate of bush encroachment), and we expect that it will detract from groundwater recharge in the future if it increases aridity and/or changes precipitation patterns. The services relating to global and regional climate regulation and ventilation and transpiration are generally not well understood. The flow of cultural services relating to physical interactions has increased significantly over the past 50 years, primarily as a result of exploitation. This trend is expected to continue into the future.

6. The Agriculture, Forestry and Other Land Use sector (AFOLU) represents the main source of GHG emissions (83%), followed by the energy sector (15%). Agriculture is a key sector of the Namibian economy. It is not only the largest employer that is critical to livelihoods, but it is also important for ensuring food security. Over two-thirds of households practice subsistence cropping and pastoralism, mostly on communally held lands. Less than 10% of the land surface is used for crop production, while nearly 75% is used for livestock production. Irrigation for agricultural production is estimated to consume more than 60% of Namibia?s surface water resources, as well as a significant fraction of extracted groundwater. Increasing demands from other sectors and areas, particularly cities, will increase competition for scarce resources such as water and productive land. While being the main GHG emitter, the AFOLU also contributes to serious forms of land degradation, adversely impacting biodiversity, groundwater recharge and land productivity. Land degradation [3] in Namibia can be linked to four main drivers: population pressure, livestock density, rainfall, and erosion hazards.

7. Namibia is becoming an urbanized country [4] This is illustrated by the fact that between 1990 and 2011, urbanization grew from 28% to 42% and current projections are that by 2030 more than 70% of the population will live in urban areas. As the urban population is growing, the need for serviced land and housing is also increasing. Namibia has failed to respond through appropriate strategies to facilitate this change in the human geography of the country, leading to poorly managed informal settlements. These settlements are often far from jobs, [5] services and social and economic amenities, thus further increasing poverty levels in the urban areas. Due to the absence of electricity in these areas, residents require firewood for their heating and cooking needs, which has led deforestation to become widespread in peri-urban areas. Further, the lack of water and waste management systems has led to increased soil and water pollution and land degradation and caused the spread of diseases such as Hepatitis. More recently, settlement upgrading initiatives have emerged, bundling efforts across the country to improve livelihoods in settlements that are expected to remain in the long-term.

8. In 2021, Namibia has updated its Nationally Determined Contributions (NDCs) [6], increasing its commitment to a 91% reduction in GHG emissions compared to the Business as Usual (BAU) baseline

over the 2015-2030 period. This follows the road to net zero emissions by 2050 that Namibia has committed to under the Paris Agreement. Therefore, as Namibia is looking for new ways to recover its economy, significant decoupling of economic growth from GHG emissions needs to happen.

9. The environmentally sound management of waste and sustainable land management are identified as national priorities in terms of Namibia?s Fifth National Development Plan (NDP5) [7] which covers the period of 2017-2022. Furthermore, the areas of transport, energy, industrial production, agriculture, waste and water management are seen as central to moving towards a low-carbon and climate-resilient development. This is well aligned with Namibia?s third national action plan (2019- 2024) [8] to combat desertification and broader measures to promote sustainable land management and climate change adaptation across the country.

10. The national sustainable energy strategy of Namibia sees the main driver of the 2030 goal to reduce the deforestation rate by 75%, expecting a decrease in CO2e by over 13.5 MtCO2e over the next 10 years. Namibia has acknowledged that reforestation, agroforestry and urban forests are vital alongside introducing new emissions reducing technologies to encourage healthier practices, such as climate-friendly and energy-efficient refrigeration and air conditioning (RAC). In the waste sector, energy utilization measures such as Municipal Solid Waste (MSW) transformation into compost and electricity are identified as the most important opportunities.

11. The Small and Medium Enterprises (SME) sector in Namibia is small in comparison with other African countries, contributing about 11% of GDP and accounting for a share of the labor force employed full-time at about 20%. Nonetheless, the Namibian government estimates this sector as a great potential for the socio-economic development of the country in terms of economic growth and poverty alleviation. A special emphasis is given to the use of renewable energies for productive purposes. A study in 2017 found that between 2000 and 2016 a total of 15000 SMEs was registered in Namibia, with many of them experiencing challenges with regards to access to finance, employee turnover, and lack of start-up capital.[9]

12. The Namibian Government puts great hope into the role SMEs should play in economic growth and recognizes the vital role which small and medium enterprises can play in Namibia?s socio-economic development. SMEs are sometimes even seen as the ultimate means for job creation, income generation, economic growth and poverty alleviation. Currently around 35% of SMEs are women-led and thus play an important role in advancing gender equality and financial independence of Namibian women.

13. With a continuously growing economy and a steady population growth, Namibia is heading towards a high emission trajectory, further accelerated by deforestation and land degradation in the coming years. The need for a multi-pronged approach, targeting these interconnected challenges becomes apparent. Therefore, it is crucial to support the development and deployment of cleantech innovations across all sectors relevant to the economies in informal settlements, to reduce GHG emissions and to decrease deforestation rates as well as soil degradation. This project will promote the development and large-scale deployment of clean technology products, business models and services so as to provide much needed solutions to the key economic sectors of the country, especially in informal settlements relating to the provision of innovative approaches to waste management,

renewable energy and energy efficiency, and efforts to combat land degradation and deforestation in peri-urban areas.

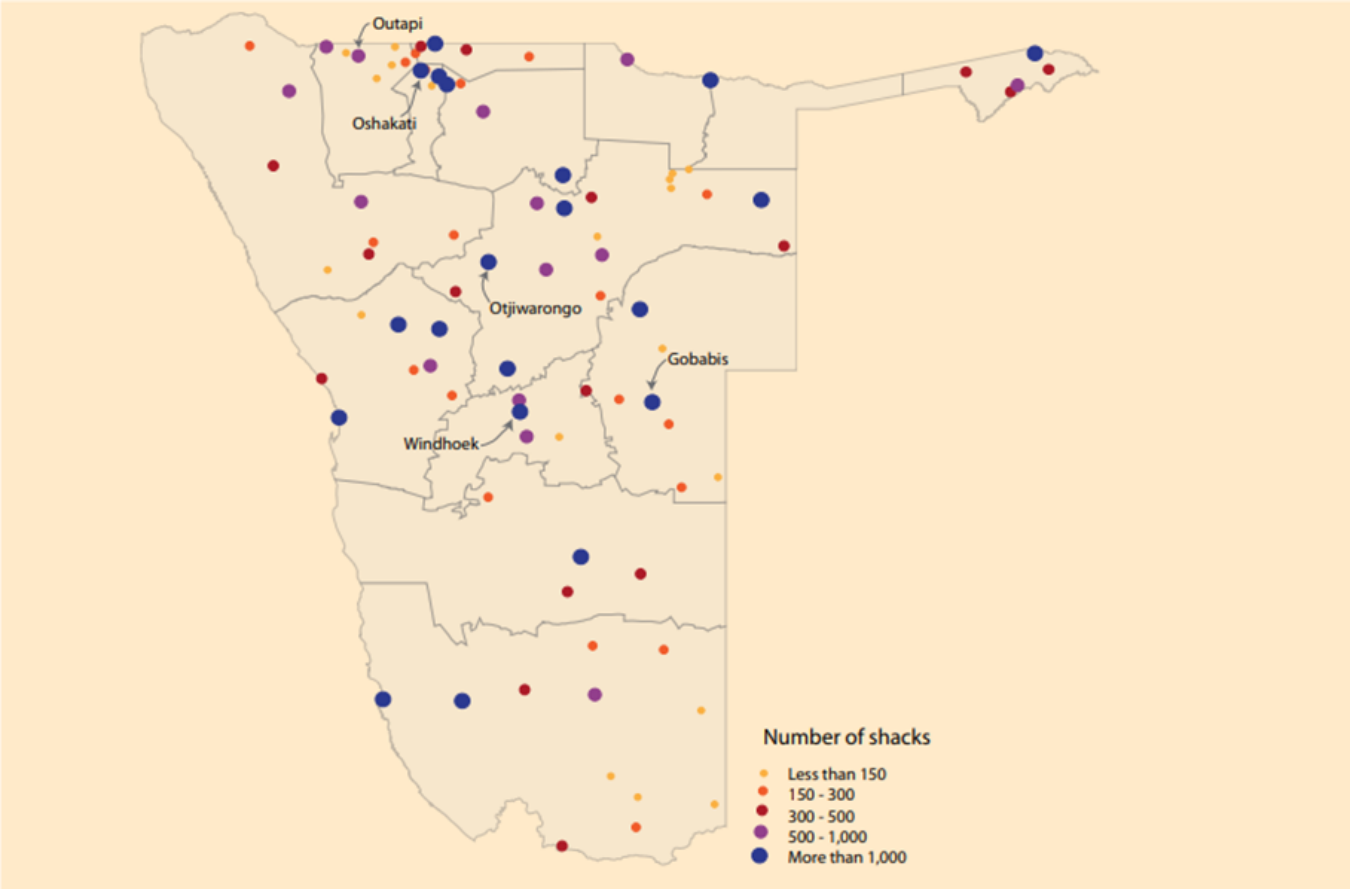

Figure 1: Number and size of shacks in Namibia (2011)

Root causes and barriers that need to be addressed

14. As stated in its fifth National Development Plan (2017-2022) [10], Namibia plans to accelerate development by upgrading ICT infrastructure across the country and expanding bulk transmission and energy distribution infrastructure, as well as to strengthen research capacities and facilitate technology and infrastructure development.

15. The Global Competitiveness Index [11] that analyses institutions; infrastructure; ICT adoption; macroeconomic stability; health; skills; product market; labor market; financial system; market size; business dynamism; and innovation capability, ranked Namibia at 94 out of 140 countries in 2019.

16. In the Global Knowledge Index [12] published by the UNDP, Namibia?s position stands as 98 among 154 countries in 2021. Although Namibia ranks considerably better in technical and vocational

education and training as well as the general enabling environment, it ranks poor on pre-university education and ICT.

17. Despite the recognized importance of innovation in the national economy, there are still a number of challenges that limit SMEs from contributing towards the development and commercialization of cleantech solutions as presented in table below.[13] Major challenges, that SMEs in Namibia face, cut across finance, training, government regulations, infrastructures, markets as well as technology. Barriers hampering a transition of innovative ideas into fully fledged formal business include poor infrastructure and considerably high costs of registering a business. In order for Namibia to realize the full potential of its SMEs, a lot still needs to be done by the Namibian government as well as the private sector and other cleantech innovation and entrepreneurship ecosystem (CIEE) stakeholders.[14]

Land Degradation related barriers include:

Unsustainable land management practices are widely applied and forest/ agricultural systems lead to negative land degradation trends

18. A survey among the Sustainable Land Management Committee members on the causes of land degradation revealed factors contributing to land degradation in Namibia. The survey also revealed the degree to which these factors contribute to land degradation (Figure 2).

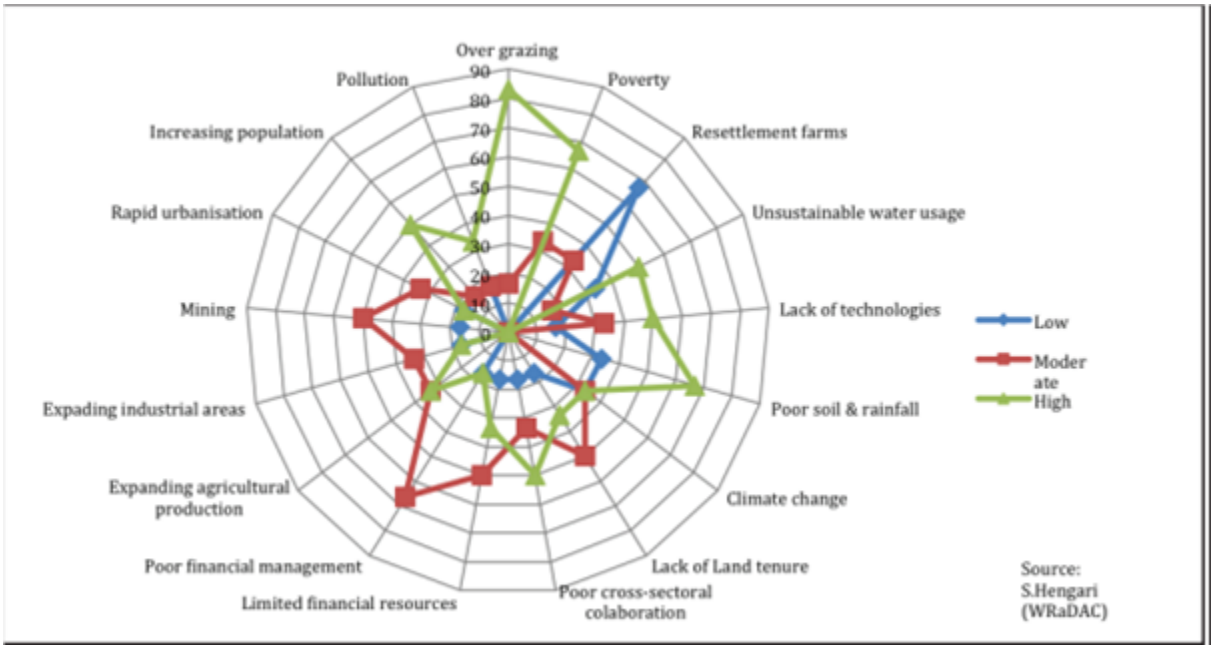

Figure 2: Factors contributing to land degradation in Namibia

19. The survey identified over-grazing and population pressure as having the greatest contribution to land degradation. Namibia?s cattle rearing culture, including the meaning and status associated with owning many cattle, was also identified as a major background factor driving overgrazing and leading

to land degradation. It is therefore necessary to address all these factors causing land degradation in Namibia. Data from the Joint Research Center of the European Union (JRC-EU) showed that the land productivity on 44 816 km2 (4 million ha or 6 % of total national surface area) has decreased. Therefore, the vegetation productivity potential has been decreasing and land degradation has therefore been increasing. Soil organic carbon (SOC) content gives an indication of the ?health? of ecosystems, the more there is the healthier the ecosystem. Namibian SOC content is about 4 ? 18 t/ha. Increasing this value will require tremendous efforts including increasing vegetation cover while providing conducive conditions for soil fauna to flourish. Changing the SOC content therefore is a long-term effort that will also require actual changes in local climate including increasing rainfall and it can only be achieved through long term strategic efforts. These efforts will have to include changes through technological innovation as well as behavioral change.

High cost of competing land use is putting pressure on natural resources and ecosystem services

20. In Namibia, the total annual cost of land degradation is estimated at 1.6 billion USD, equal to 19% of the country's GDP. Moreover, a considerable share of the costs of land degradation (70%) is due to the decline in provisioning ecosystem services (e.g. food availability, wood production, etc.), which has a significant impact on the population of the country. The remaining share refers to the regulating ecosystem services (e.g. carbon sequestration, water regulation flows), which has an impact not only at the country level, but also on the regional and global scale due to the transboundary nature of these services that provide incentives for international cooperation. Land degradation often stems from land-use decision-making processes driven by high market prices of specific ecosystem services ? for example, food. In this context, land-use decisions may largely neglect the significance of other ecosystem services for which no markets exist, but which are also of high value to the society. Given the significant economic burden of land degradation, research has also focused on the study of the costs of action against land degradation through restoration and sustainable land management practices. These costs of action are often compared to the costs of inaction ? the latter being derived from the projection of past degradation rates to the future. In this context, a recent global assessment on land degradation shows that for Namibia the returns on taking action against land degradation versus inaction are estimated at 4 USD for every dollar invested in reverting degraded land, underlining the strong economic incentives for bold actions on achieving LDN.

Barriers faced by start-ups and SMEs in developing and scaling-up innovative cleantech solutions

Limited access to finance	Limited access to finance is a key barrier for start-ups and SMEs in Namibia in further developing their business activities. The limited access to finance, especially private sector finance, is due to a number of reasons (women are more strongly constrained by these barriers): a) difficulty to access capital for innovation projects that normally observe specific risks b) limited understanding of investors of opportunities and specific risk of investing in (local) cleantech markets c) limited awareness about financial schemes and respective requirements and procedures available to cleantech businesses as well as limited government financial incentives to support private sector in advancing and adopting innovation in the cleantech space d) limited knowledge about cleantech innovation and investment amongst local investors and subsequently a very low risk appetite e) lack of interaction between start-ups/SMEs and potential investors f) entrepreneurs lack the ability to prepare and present adequate business cases and financial models In August 2016, Namibia put into effect the Namibia Investment Promotion Act (NIPA). However, the country has not yet enforced it due to substantive legal concerns raised by the private sector. Therefore, the Foreign Investment Act of 1990 (FIA) remains the guiding legislation on investment in Namibia.
Lack of capacity	A lack of capacity in start-ups/SMEs is observed in view of: a) missing key skills and know-how on how to transform a technological innovation into a viable enterprise, leading to high rates of failure for early-stage cleantech enterprises b) insufficient capacity to develop robust business models, leading to high risk of failure of established businesses b) no awareness in the private sector of new developments and trends on innovations related to their operations, manufacturing and distribution locally or globally, which limits their deployment, and adoption c) limited access to international expertise and limited knowledge about markets and potential partners outside the country which could help expand their business
Barriers related to cleantech innovation and entrepreneurship ecosystems (CIEEs)	
Lack of institutional coordination	There is a lack of institutional coordination in Namibia in view of supporting entrepreneurs. There is still a need for establishing a well-interacting network which would serve as a basis to further enhance the CIEE of the country.

Limited enabling policy and regulatory environment	Fostering innovation and entrepreneurship demands a robust and enabling policy and regulatory environment that in turn is crucial for attracting investments. Therefore, it is of utmost importance to support the uptake of supportive policies and enabling business environments that encourage investments in cleantech products, businesses and services. Particularly, the legislative framework addressing private sector involvement in cleantech innovation is underdeveloped, registration procedures are long and costly, hampering potential investment in innovation.
Lack of clean cleantech innovation ecosystem	In Namibia, there is a lack of innovation ecosystem specifically tailored towards cleantech and SMEs. Although there is some innovation infrastructure established, such as the Tech Innovation Hub (ICTIH), Namibia Business Innovations Institute (NBII), and Start-up Namibia, there is still a need for an ecosystem that is exclusively dedicated to cleantech and SMEs.
Lack of public awareness	While climate change and land degradation are taking a toll on the country?s economy and population, there is still a lack of public awareness regarding the market potential of cleantech. Awareness raising about cleantech is crucial in terms of enhancing the understanding of the public on benefits derived by the utilization of cleantech products, services and business models.
Lack of trained experts and information about cleantech	A potential barrier to a national innovation and acceleration programme for cleantech in SMEs and start-ups in Namibia is the lack of trained experts for mentoring entrepreneurs involved in cleantech innovations and also a lack of information about technology options, best practices, and benchmarks.

21. This project will also analyze the barriers faced by women in cleantech and fill the gap regarding their equal access to networks, market opportunities, and finance. In summary, Namibia?s cleantech sector currently lacks capacity and coordination. There remains a need for further support in the field of advanced commercialization, incubation, access to early-stage financing, national networking, commercialization, and widening the geographical reach of and support to national partners.

b)The baseline scenario and any associated baseline projects

Land Degradation:

Policy Baseline:

22. At the UNCCD COP 12 in 2015 held in Ankara, parties agreed that voluntary land degradation neutrality (LDN) targets will be selected by countries themselves and LDN will be mainstreamed into national plans for combating land degradation. Land degradation neutrality aims to avoid or reduce land degradation, while also reversing past land degradation, in order to achieve the goal of no net loss of healthy, productive land at the national level. LDN encompasses inter alia approaches such as Sustainable Land Management (SLM) and Sustainable Forest Management for avoiding or reducing the risk of degradation, and restoration and rehabilitation for reversing past degradation. As per the LDN scientific conceptual framework, the LDN approach aims to counterbalance (within individual land types or landscapes), the expected loss of productive land with the recovery of degraded areas through a set of measures to conserve land resources, maintain the delivery of ecosystem services, and restore and rehabilitate degraded land.

23. Namibia, as a signatory to the UNCCD, developed its third National Action Programme (NAP3) for the implementation of the UNCCD during the period 2014-2024. The NAP3 takes cognizance of Land Degradation Neutrality (LDN) and it has integrated LDN objectives in its targets aimed at reducing land degradation. In 2015, Namibia committed to the UNCCD LDN voluntary targets including:

- reforestation and increase the productivity of 13.8 km2 (1380 ha) forests that have been converted into croplands or shrubs, grasslands and sparse vegetation by 2040, improve the productivity of the 414,3 km2 (41 430 ha) forest area currently showing early signs of decline and having declining productivity by 2030

- improve the productivity of 104 013 km2 (10,4 M ha) of shrubs, grasslands and sparsely vegetated areas currently showing signs of declining productivity by 2040

-improve the productivity of 14 849 km2 (1.5 M ha) of cropland by 2035

-reduce bush encroachment on 18 880 km2 (1,9 M ha) by 2040

-maintain the current soil organic carbon levels beyond 2040: Forests at 17 t/ ha; Shrubs, grasslands, sparsely vegetated land, cropland at 14 t/ha; Wetlands at 16 t/ha

24. **Namibia?s Drought Policy and Strategy** was drafted in 1997 and is concerned with developing an efficient, even-handed and sustainable approach to drought management. In line with Namibia?s National Agricultural Policy, the Drought Policy recognizes that aridity and highly variable rainfall are normal phenomena. Farmers must also take into account the risks associated with variable input and output prices, exchange and interest rates, in addition to weather conditions. The policy aims to shift responsibility for managing drought risk from Government to the farmer, with financial assistance and food security interventions only being considered in the event of an extreme or disaster drought. The objectives of the policy are inter alia to ensure that household food security is not compromised by drought; to encourage and support farmers to adopt self-reliant approaches to the risk of drought; to minimize the degradation of the natural resource base during droughts; to preserve adequate reproductive capacity in livestock herds in affected areas during drought periods; and to ensure the continuous supply of potable water to communities, and particularly to their livestock, schools and clinics.

25. **The National Land Use Planning Policy** was drafted by the Ministry of Lands and Resettlement in 2002. It provides a framework for the implementation of regionally integrated land use plans.

26. **The 1997 National Resettlement Policy** regulates that resettlement must be institutionally, socially, economically and environmentally sustainable, to enable the beneficiaries to become self-supporting.

27. Approximately 8.9% or about 7,290,000 ha of Namibia is forested and reducing the deforestation rate by 75% from 0.9% per year to below 0.25% is considered a major drive to achieving the 2030 target, with increasing resources being channeled towards this target. Namibia considers reforestation, agroforestry, and urban forestry as key emissions reduction strategies. In its National Forest Policy,

Namibia recognizes the importance of promoting the sustainable and participatory management of forest resources and other woody vegetation, to enhance socio-economic development and environmental stability. This should particularly be done by reconciling rural development with biodiversity conservation by empowering farmers and local communities to manage forest resources on a sustainable basis.[19]

28. **The 2003 National Land Tenure Policy** covers all land tenure systems in urban, communal, commercial (freehold) and resettlement areas, and is intended to guide all land tenure rights in Namibia. The policy promotes the sustainable utilization of land and other resources. By regulating different land tenure rights, it provides secure tenure for informal urban settlers, farm workers and occupiers (those who have been employed less than ten years on a single farm and do not have secure tenure elsewhere). Furthermore, it provides guidelines on compensation for occupiers of expropriated land. In line with the 1995 National Agricultural Policy the National Land Tenure Policy recognizes the environmental limitations of the country.

29.The aims of the **National Agricultural Policy** are largely economic, focusing on increasing agricultural productivity. One of the policy?s objectives is to promote national and household food security while recognizing the limitations imposed by the country?s climate and soils. The policy seeks to promote sustainable utilization of the land and other natural resources within the context of a vulnerable ecosystem. Potential problems such as deforestation, soil erosion, bush encroachment and overgrazing are also addressed.

30. Within **Namibia?s National Development Plan** [15]? the country?s lead strategy for economic and social development in the medium and long term ? the government prioritizes enterprise development to achieve inclusive, sustainable and equitable growth. It clearly calls for the decrease of the degradation of environmental resources and seeks to ensure the protection of biodiversity, as well as encourages the sustainable valorization of natural resources while reinforcing institutional capacities to capture finance for green jobs, as well as calls for the uptake of renewable energy and energy efficiency measures. 30.

31. There is not a specific strategy targeting informal settlements on the national level, but the **National Housing Policy** [20] recognized it as a key challenge to create an enabling environment for settlement upgrading by communities under the People?s Housing Process. The policy is currently under review, aiming to have one policy that covers all relevant aspects of a sustainable approach towards urban development, including a national strategy for settlement upgrading. Due to a lack of data regarding informal settlements, the Shack Dwellers Federation of Namibia and the Namibia Housing Action Group agreed with the former Ministry of Regional, Local Government and Housing to conduct national profiling of informal settlements in 2006. The outcome was an estimate that there were 134,800 households established in 235 informal settlements across the country. It is recognized that more local infrastructure does not only necessitate the process of sheltering people, but also sustain the provision of basic services such as water, sanitation and energy to communities, for which the government of Namibia wishes to increase the amount of private sector financing.

32. Additional historical policies include:

? The Green Plan of 1992

? Sustainable Animal and Rangeland Development Programme (SARDEP)

? Northern Regions Livestock Development Programme (Nolidep)

? Namibia?s Programme to Combat Desertification 1994-2004 (Napcod)

? Country Pilot Partnership (CPP) on SLM

National Cleantech Ecosystem baseline and institutions:

33. The **Ministry of Environment, Forestry and Tourism (MEFT)**, (former Ministry of Environment and Tourism) of Namibia is the key ministry to develop, update and implement climate related policies. Thus, the MEFT is the national entity with the overall responsibility for organizing and coordinating the compilation of National Communications, Biennial updated reports, GHG inventory and submitting them to the UNFCCC Secretariat. The MEFT hosts the Namibia Climate Change Committee (NCCC), a broad-based multi-stakeholder committee, established in 2001 in place of an ad hoc committee (the Climate Change Advisory Committee) led by the Directorate of Environmental Affairs (DEA) in the MEFT.

34. The **Ministry of Agriculture, Water and Land Reform (MAWLR)** promotes the potential of the agricultural, water and forestry sectors towards an efficient and sustainable socio-economic development for a prosperous Namibia. The MAWLR administers several projects such as the a) Green Scheme, which encourages the development of irrigation based agronomic production in Namibia with the aim of increasing the contribution of agriculture to the country's GDP and to simultaneously enable social development and upliftment of communities located within irrigation areas; b) the urban and peri-urban horticulture project, which targets marginalized groups such as slum dwellers by promoting employment and access to quality fresh products.

35. The **Namibian Chamber of Environment (NCE)** is an umbrella Association that provides a forum and mouthpiece for the broader environment sector, that can lobby with government and other parties, that can raise funds for its members and that can represent the sector. The Chamber aims to become a financial (and other) resource center, sponsored by industry, but at the same time keeping industry at arm's length and ensuring complete independence. It is a body representing the interests of environmental practitioners and organizations that support the environmental interests of Namibia as set out in the national Constitution. It helps facilitate the sector to be more informed, effective and connected.

36. The **Ministry of Urban and Rural Development (MURD)** coordinates and spearheads the decentralization process, which was set in the 1998 decentralization policy, directing central authorities to transfer full responsibilities for selected powers and functions to the subnational government level. Relevant directorates include the Regional and Local Government and Traditional Authority Coordination; Housing, Habitat, Planning and Technical Services Coordination; Rural Development; and Finance, Human Resources, Administration and Information Technology. These are supporting the

decentralization either through direct decentralization measures or through more general ancillary services to the regional and local authorities.

37. **Environmental Investment Fund Namibia (EIFN)** is a recognized leader in the development and application of innovative financing mechanisms to support environmentally and technologically sound growth in the country. The Fund promotes sustainable economic development of Namibia through investment in and promotion of activities and projects that protect and maintain the natural and environmental resources of the country. The fund is experienced in leading projects in the fields of sustainable land management, land restoration as well as climate change mitigation. The EIFN was identified as the Project Executing Entity (PEE) for this project by the GEF Operational Focal Point in Namibia.

38**. Desert Research Foundation of Namibia (DRFN**) has a Land Desk which is involved in issues to do with the productive use of Namibia?s agricultural resources. This includes management of farming-based livelihoods and particularly communal area livestock farming, support to resettlement farms, and preparedness for climate variability and climate change. DRFN was closely involved in **Namibia?s 10-year Programme to Combat Desertification (Napcod, 1994-2004**), and during this programme built expertise in community-based management of natural resources and rural livelihoods. The approach of putting communities in the driver?s seat of their own development? through establishment of Forums for Integrated Resource Management (FIRMs) is now widely accepted as a means to integrate planning in rural communities with government service providers and donor agencies.

Baseline Projects:

39. The Government of the Republic of Namibia, with funding from the support from the Global Environment Facility (GEF) and technical support from the United Nations Development Programme (UNDP) is currently implementing the 6-year Namibia **Integrated Landscape Approach for Enhancing Livelihoods and Environmental Governance to Eradicate Poverty (NILALEG)** Project.

40. Since 2017, UNIDO has been implementing a project titled **Promoting sustainable bush-processing value chains in Namibia**. The project aims at strengthening important sources of food and income through stimulating utilization of invasive bush species, e.g. in the animal feed, charcoal and food industry as well as in energy production sectors. The bush-processing value chains are promoted in Namibia and in the region to contribute to the sustainable development of the Walvis Bay Corridor. Direct outcomes of the project encompass the identification and testing of appropriate collection and manufacturing technology solutions which can further be used in Namibia for the effective and productive consumption of bush resources. In addition, the project encompasses a design of a processing plant to convert Acacia and other raw materials into coal, chips, high-value livestock feed, coal, chips, Arabic gum and other selected products. The sustainable utilization of invasive bushes like Acacia helps to mitigate bush encroachment as a form of land degradation. Through these measures, higher levels of agricultural productivity can be achieved, resulting in a better supply of food, increased resilience of farmers to droughts and reduced poverty, especially in rural communities.

41. In 2018, World Resources Institute (WRI) launched the **Land Accelerator Africa,** the world?s first training and mentorship program targeted specifically toward businesses that restore degraded forests, farmland and pasture.

42. **Th!ink Namibia** is a national information campaign first launched in 2015 which looks at various key topics in incremental phases. The Campaign serves both targeted groups and individuals as well as the general public with information and educational content relating to key issues including environmental awareness and climate change, water conservation, climate-smart agriculture, sustainable forest management, renewable energies and sustainable development.

43. EU has established **bilateral and regional cooperation programmes** with Namibia, supporting the country?s prosperity and stability by focusing on agriculture and education. The goal is to create more wealth from Namibia?s agriculture sector, notably in the livestock sector, to enable sustained growth while also addressing issues of poverty and unemployment. What is more, better links between rural primary producers and markets are created, by helping rural entrepreneurs adapt to climate change and new business environments. Efforts include capacity building, by supporting civil society organizations and promoting good governance, guidance on a better public finance management, and enhancement of policy dialogue. Although there are programs and policies underlying the importance of innovation in Namibia, there are differences in the level of knowledge and understanding of green economy among the government, business community, and the general public. In addition, there is a lack of entrepreneurs that are able to bring proven concepts and validated technologies to market, especially in the cleantech sectors including waste management and and sustainable land management. Namibian entrepreneurs face several difficulties such as acquiring knowledge, identifying mentors and seed funding opportunities, expanding into foreign markets, accessing resources and infrastructure, and growing a team.

44. Additional actions include:

? Comprehensive Conservation Agriculture Programme, Ministry of Agriculture, Water and Forestry (MAWF)

? National Rangeland Management Strategy and Action Plan, MAW

- Bush encroachment management, MAWF

? Bush Control and Biomass Utilization Project, GIZ and MAWF

45. According to the World Resources Institute there is a need to invest in entrepreneurs who are leveraging sustainable agriculture and forestry value chains to create permanent jobs and regreen their ecosystems in sub-Saharan Africa, since these locally led business models present a promising path to reverse decades of land degradation while creating jobs for the world?s youngest continent. if the business sector increasingly supports and adopts sustainable land management techniques along its value chain, businesses can be a part of the solution to multiple development challenges.

46. With the majority of entrepreneurs being at very early-stage, they need support to build up their business skills and capacity to absorb funding. To this end, there are already some initiatives such as like the WRI?s Land Accelerator Africa and the WEF?s **UpLink Challenge,** which are equipping budding entrepreneurs with the training and mentorship they need to collectively turn the tide against land degradation. When land restoration companies thrive, they provide new sources of income for the farmers whose crops they buy and process; this presents an alternative to deforestation-linked agricultural expansion. They can also improve food security by cutting food loss and waste; repair soils damaged by chemical fertilizers; and build up resilience to climate-induced floods, droughts and landslides by growing the right trees on farms and terraced hills. Their close connection to the areas where they work enables them to tailor their restoration strategies to the ecology of the landscape and the environmental, social and economic goals of the people living there. 47. Pilot project, financed by the GCF is built on the strong institutional foundation of the Namibian Community-based Natural Resource Management (CBNRM) network, which consists of communal conservancies and community forests in the rural communal areas of Namibia. It comprises 8 Non-Government Organizations (NGOs) and the University of Namibia. These existing institutions are ideally placed to be the conduits for the implementation of local-level climate action. 48. This project will be implemented in close links with the approved GEF program entitled ?Global Cleantech Innovation Programme (GCIP) to Accelerate the Uptake and Investments in Innovative Cleantech Solutions? GEF ID 10408. This means that the Namibia project may benefit from the guidelines, tools and methodologies developed from programme 10408.

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Climate Change Mitigation:

Policy Baseline:

48. With the **Harambee Prosperity Plan II** [16] for the economic recovery of Namibia, Dr. Hage G. Geingob, the President of Namibia, recognized the importance of green economies as an enabler of socio-economic development. The economic recovery programme is set to generate new and diversified frontiers of growth and optimize the stewardship of natural resources and public assets, while proactively pursuing opportunities in the blue and green economy. One of the key activities is to develop an implementation plan to attract private sector investment into the green economy.

49. In 2021, Namibia ambitiously raised its target to reduce total GHG emissions from 89% to 91% by 2030, through updating its **NDCs** , and ? through that ? committing to enhance its mitigation efforts with policies and measures to be implemented in four key economic sectors ? Energy, Industrial Processes and Product Use (IPPU), Refrigeration and Air Conditioning (RAC), AFOLU and Waste.

50. Namibia?s **National Renewable Energy Policy** [18] aims to drive emerging technologies that reduce GHG emissions and support cleaner practices. The goal is the substitution of existing higher emission technologies with cleaner, more efficient, and lower-cost technologies. Namibia?s efforts seek to achieve a 30% reduction in the total quantity of electricity imported in 2018, which would result in 0.8 TWh (800 GWh) of new renewable energy generation per annum until 2030.

51. Published in 2013, the **National Climate Change Strategy & Action Plan** 2013-2020 sets out strategies for mitigation, adaptation and cross-cutting issues. So far, the focus of Namibia?s climate change response has generally been on adaptation to moderate the negative impacts and to some extent exploit beneficial opportunities associated with the impacts of climate change. Although adaptation measures are set as key priorities in climate change action, the country is also committed to undertaking mitigation measures where they strongly contribute to national development goals.

52. **Vision 2030** [21] has been devised as a long-term framework for national development and is setting several targets, such as providing access to adequate shelter for 60% of the low-income population by the year 2025. Sanitation and waste management is of particular concern in rural areas. Vision 2030 projects a 100% access to adequate sanitation by 2030 in urban areas and 50% in rural areas. Overall, the main goal of Vision 2030 is enabling Namibia to be a fair, gender-responsive, providing affordable and good-quality health care, as well as maintaining stable, productive and diverse ecosystems that managed for long-term sustainability.

53. In 2016, the Ministry of Industrialization, Trade and SME Development published an updated **National Policy on Micro, Small and Medium Enterprises in Namibia 2016-2021** [22]. The document states that SMEs are instrumental in contributing to job creation, economic growth and poverty reduction. Recommendations are given in the following areas: policy and regulatory framework, access to infrastructure, culture of entrepreneurship in society, access to finance, business development services, innovation and technology development and adaptation, access to local, regional and international markets, and enhancing state capabilities to manage and support SMEs.

54. In November 2021, the Ministry of Higher Education, Technology and Innovation, in collaboration with national science, technology and innovation (STI) stakeholders, launched a consultative process that led to the revised **National Science, Technology and Innovation Policy (NSTIP)** 2020-2030. [23] The policy is designed to promote investment in R&D by integrating STI in all socio-economic sectors, aiming to reach the national development goals and to comply with international global efforts, such as the achievement of SDGs. The policy includes 20 approaches to restructure the R&D institutional configuration and create mechanisms for strengthening links between public R&D and industry. Objectives include the acceleration of research in the areas of technological advancement, improvement of research and innovation infrastructure provision, and an increase of scientific productivity and technological output.

Ecosystem Baseline and Institutions:

55. **The Ministry of Energy and Mines (MME)**, develops and implements energy sector policies, strategies and plans in support of government's commitment to efficiently ensure sustainable, reliable, affordable, and equitable electricity to all Namibians. To enforce and monitor quality issues, MME has formulated a National Technical Committee on Renewable Energy (NTCRE) with the role of certifying solar energy technologies and services. The NTCRE is the first technical committee (TC1) of the Namibian Standards Institution (NSI).

56. **The Ministry of Industrialization and Trade (MIT)** promotes economic growth and development through the formulation and implementation of appropriate policies to attract investment, increase trade, as well as develop and expand the country?s industrial base. The ministry handles amongst others the import & export application processes as well as SME certificate applications.

57. **The Ministry of Finance (MoF)** together with the Development Bank of Namibia launched a strategy for SME financing and a skills-based lending facility for the youth in 2019. The aim of the strategy is to unlock the growth, job creation and self-employment potential of the SME sector. The lending facility should both enhance access to affordable finance and foster entrepreneurship and SME development across the broad range of economic sectors in all regions of the country.

58. **The National University of Science and Technology (NUST)** is the leading university in Namibia advancing innovation as well as cleantech and enterprise development. Some of its initiatives include: i) **The Innovation Design Lab** is a center of multi-disciplinary research applied to Namibia and, more broadly, Africa, pursuing the transformation of problems into a challenge, and a challenge into an opportunity. The goal is to foster a new generation of creative innovators through research; ii) **The Namibian Business Innovation Institute** provides training, mentoring and business support services to innovative entrepreneurs looking to establish their own company as well to researchers interested in commercializing their technologies; iii) **The Tech Innovation Hub (ICTIH)** project aims at including minorities and vulnerable groups into innovation processes. Funded by the Finnish Embassy, the Hub seeks to enhance ICT innovation skills for a minimum of 300 young community members at selected rural and urban pilot sites. The project aims to ensure that products developed by marginalized young people enter the market successfully.

59. **The Center for Enterprise Development (CED)** [24] was established in 2000. It spearheads short tailor-made training courses, offers accredited industry focused training, ICT courses, skills building for SMEs including vital soft skills for entrepreneurs such as financial and project management, and provides business consultation services for industry. The Centre develops and implements programmes that add value to the Namibian labor market. To date the Centre has transferred skills to more than 23,000 participants in Namibia.

60. **NamPro Fund** is an investment fund established to support SME that are suppliers and require funding to execute their contracts. The primary focus of NamPro is to provide required short-term working capital to SMEs that have been awarded supply contracts by large, reputable organizations.

National baseline activities:

61. **SUNREF Namibia project** by the Agence Fran?aise de D?veloppement (AFD) whose objective is to facilitate access to affordable green technologies, thereby guaranteeing the achievement of a low environmental footprint and contributing to the mitigation of the causes of climate change and other environmental disturbances in Namibia. A total investment of 15 million Euro for green investments in the sustainable agriculture, sustainable tourism, efficient technologies, and renewable energy market segments will be provided by 3 commercial banks to finance enterprises under this programme.

62. The Green Climate Fund (GCF) supports a paradigm shift in achieving low emission and climate-resilient development in Namibia. The GCF promotes Ecosystem-based Adaptation (EbA) as a cost effective and low risk approach to build climate resilience across eight targeted landscapes in Namibia. To reduce food insecurity, knowledge on conservation agriculture and climate-resilient agricultural practices is transferred to project beneficiaries. The **Mashare Climate Resilient Agriculture Centre of Excellence (MCRACE)** carries out demonstration pilots, including a fertilizer mixing plant, organic manure and guano trials. Farmers are provided with sustainable access to off-grid solar energy technologies including water pumping for small-scale micro horticultural systems, and refrigeration for harvested food, reducing the dependency on imported fuels.

63. In 2020, the African Development Bank (ADB) approved a total of **USD 127 million in loans to Namibia to tackle shortcomings in the water and sanitation sector as well as to boost economic governance and competitiveness**. The aim is to facilitate sustainable production and transfer of water resources to improve access to potable water and for agricultural and industrial use, enhancing sanitation in rural areas and advancing institutional capacity. The programme is building on innovative technology in sanitation in Namibia which treats its wastewater in Windhoek to potable standards and injects 30% of the recycled water into the system for distribution to consumers. Rural residents will gain better health from improved environmental and sanitary conditions. Special attention is given to vulnerable households within the programme areas for improved sanitation facilities. It also provides job opportunities and empowers women and youth to start businesses along the water and sanitation value chain. In particular, it seeks to increase access to sustainable water services from the current level of 85% and sanitation services from 54% to the universal 100% target by 2030.

64. UNDP supports the government of Namibia in identifying key challenges in meeting its Vision 2030 and the SDGs by improving capacities at the national, regional and local levels, including through the **Integrated Landscape Approach for Enhancing Livelihoods and Environmental Governance to Eradicate Poverty (NIALEG)** and the SDG Investor Map for Namibia laying out 5 key sectors and 15 Investment Opportunity Areas (IOA) such as infrastructure, agriculture, services, health, and education. In 2020, UNDP introduced the **Namibia Accelerator Lab** [25], as part of a network of labs in 115 countries finding new approaches to current development challenges by focusing on strengthening and fast-tracking climate change adaptation through locally and regionally sourced innovative interventions and knowledge.

65. The GIZ project **?Start-up Namibia?** [26] runs an incubation and innovation center which seeks to improve the conditions for establishment and growth of start-ups in selected regions, spurring innovation and creating a competitive business environment. The center includes co-working spaces, maker-spaces, a community area and a small shop. It serves as a ?one-stop shop? for all the needs that start-ups face during their ideation, establishment, incubation and growth phases. The project also

improves access to financial services for start-ups by making them investment-ready. The best-performing start-ups have access to Start-Up Namibia?s ?Slingshot Fund?, with milestone-based grants of up to 5,000 Euros.

66. USAID has been focusing on microenterprise development in Namibia. Business-to-business partnerships and linkages with larger firms were established and program-supported SEMS were able to obtain supplier credit from wholesalers, increasing business transactions. In 2021, the **Namibia Investor Roadmap** report was commissioned. Through the **Southern African Trade and Investment Hub**, USAID increases international competitiveness, intra-regional trade, and food security throughout the Southern African community. The Hub works closely with several relevant entities to provide technical assistance to both public and private sectors.

67. **Empower to Adapt** is a GCF funded projects which aims to create Climate-Change Resilient Livelihoods through Community-Based Natural Resource Management in Namibia. It empowers Rural Communities of the Namibian CBNRM Network to Respond to Climate Change in Terms of Awareness, Adaptive Capacity and Low-Carbon Development.

68. In addition, initiatives are lacking coordination and there is no strong CIEE to provide necessary services to entrepreneurs, resulting in a lack of availability of a project pipeline ready to access green finance. This proposed project will further strengthen Namibia`s efforts to address domestic environmental challenges at the intersection of water, energy and land issues, leading to a greater competitiveness of the economy by achieving other socio-economic and environmental benefits. This will create economic opportunities and support a shift towards a sustainable development of the country. The proposed project is designed to directly address the barriers described above.

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

69. Private sector is key to the creation and expansion of the market for cleantech products and services, achieving GEBs, generating jobs and supporting economic growth. Therefore, the proposed alternative scenario aims to promote the development and large-scale deployment of clean technology products, business models and services so as to reduce GHG emissions and restore land across urban and peri-urban areas. Specifically, the project will support the increase of competitiveness of SMEs to develop innovation cleantech solutions and introduce them to the market. This is because market-based dissemination of cleantech products and solutions will directly create environmental benefits, and at the same time contribute to social and economic development of Namibia.

70. In particular, the project will promote cleantech innovation by supporting the strengthening of innovation ecosystems and the acceleration of feasible cleantech innovations, products, services and business models. The above-described baseline projects, will serve as the basis for this project?s intervention by utilizing existing infrastructures such as stakeholders, existing technologies and businesses identified.

71. The project will be implemented in coordination with the approved GEF project 10408 entitled GEF-UNIDO Global Cleantech Innovation Programme (GCIP) that seeks to support and nurture clean energy technology entrepreneurs and help then transform into fast-growing, scalable enterprises that will attract funding. This means that guidelines, tools and methodologies developed from project 10408 will be made available to this project n Namibia. In addition, by creating partnerships with the partner countries of GCIP, the project will enable Namibian cleantech SMEs to connect with cleantech ecosystem actors globally. To ensure a sustainable and lasting impact, the project will be closely aligned with national priorities and strategies and will thus seek to coordinate with ongoing initiatives in the country. Furthermore, with Namibia experiencing considerable economic growth rates and keen on increasing the role of SMEs, the integration of cleantech SMEs into the growth trajectory of the country will effectively reduce the associated increase in GHG emissions and reduce land degradation.

72. Therefore, GEF funding is requested to remove the barriers currently present in the market and stimulate a long-term shift in SMEs and innovation towards clean technologies, and also to establish a sustainable national innovation ecosystem for acceleration and support of SMEs in the field of innovative clean technology to contribute towards a sustainable use of resources, decrease dependency on fossil fuels to reduce GHG emissions, reduce pressure on soils, as well as improve the livelihoods of informal settlement dwellers.

Project Approach

73. The GCIP was first launched in 2011 in partnership with the Global Environment Facility (GEF) and piloted the first Clean Technology Competition for green entrepreneurs and SMEs in South Africa with innovative ideas and concepts in the areas of green buildings, energy efficiency, and renewable energy. Building on this success UNIDO continued to design GCIP for its member states, and by the end of 2019 GCIP was implemented in Armenia, India, Malaysia, Morocco, Thailand, Turkey, South Africa and Ukraine, with over 1300 start-ups and SMEs supported towards commercialization of their innovative solutions and technologies for environmental action and energy transition. Having evolved from a project in one country to a multi-country programme within only ten years, GCIP now features a proven, carefully constructed, and replicable service modules that can be easily adjusted to country needs. Importantly, GCIP is able to account for specific national circumstances such as economy structure and it is sensitive to market forces. GCIP design is mission-oriented, which means that any cleantech solution can be supported as long it has a strong potential to reduce GHG emissions as well as improve degraded lands and contribute to a sustainable economic development of the country. Yet, it does not mean that the GCIP support is confined within national boundaries. On the contrary, GCIP also works with local entrepreneurs to introduce their solutions to global markets through linking actors across ecosystems and leveraging its international network of partners. Promoting innovation and providing tailored training and mentoring to cleantech entrepreneurs can enable them to refine their business models and seek meaningful partnerships within the cleantech ecosystems nationally and internationally. In 2022, GCIP is continuing its operations in Cambodia, Indonesia, Kazakhstan, Lesotho, Moldova, Morocco, Nigeria, South Africa, Turkey, Ukraine, and Uruguay with approved financing of over 18 million USD. In addition to these 10 partner countries, the GCIP is expected to expand to 25 countries by year 2025 in partnership with the GCF, GEF, the government of Denmark, and the EU.

74. The project will promote the CIEE in Namibia by: (i) identifying and nurturing innovative cleantech ideas into enterprises (cleantech is defined as products or services that bring significant benefits to climate change mitigation and/or sustainable land and forest management); (ii) strengthening the national capacity within institutions and partner organizations for the sustainable implementation of the cleantech CIEE and accelerator approach; (iii) supporting and working with national policy makers to provide a conducive policy framework for entrepreneurs; and (iv) engaging with GCIP Global with the aim to enabling international scale-up and networking opportunities. Through the initial GEF grant funding the project will catalyze investment to support and accelerate start-up and SMEs towards development and commercialization of their innovative concepts.

75. Accordingly, the project is structured into three components, as shown in the Theory of Change in Figure 2 below namely:

1) Transforming early-stage cleantech innovations into commercial enterprises;

2) Cleantech innovation and entrepreneurship ecosystems strengthening and connectivity; and

3) Strategic programme coordination and programmatic coherence.

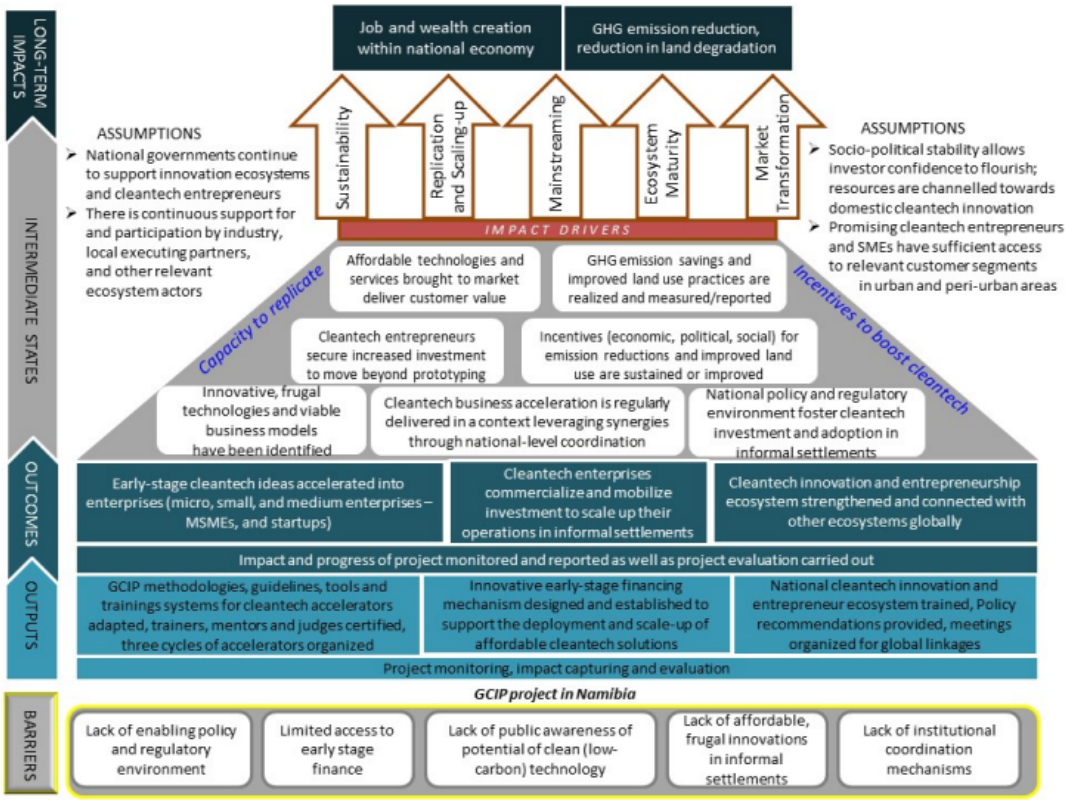

Figure 3: Theory of Change

76. The project has been designed to address the barriers set out in the previous sections. Specifically, the barriers faced by innovators will be alleviated by the provision of support from concept through to commercialization while helping them adopt different approaches to entrepreneurship. This will include: provision of ideation and concept validation services, holding annual accelerators, advanced accelerators to provide follow-on support to the alumni as well as targeted support services, investment facilitation, mentorship and partnership support - across the country targeting at least 50 entrepreneurs.

77. In particular, the deployment and scale-up of frugal innovations with a focus on low carbon circular economy as well as in the priority sectors in informal settlements of per-urban areas (clean energy, waste- and water management, smart agriculture and reforestation) will be pursued.

78. Capacity gaps will be addressed with targeted capacity building activities for policy makers and institutional actors, and the policy and regulatory environment will be strengthened. In particular, areas such as access to finance, behavioral change of consumers and in value chains, and circular economy promotion will be targeted. Networking, advocacy, knowledge generation and exchange will enhance awareness amongst ecosystem stakeholders and increase impact of the project whilst close cooperation and linkage with GCIP Global will increase international opportunities for Namibian entrepreneurs and strengthen the CIEE as a whole.

79. **IF** the outputs are delivered **THEN** the following outcomes will be realized: promising early stage cleantech innovations are accelerated across the country by being supported from concept through to commercialization; Alumni are supported and financed for national, regional and global expansion; and the national ecosystem and institutions are strengthened to promote and support cleantech innovation and entrepreneurship. All the outputs are underpinned by a gender mainstreaming action plan that contributes toward the debunking of gender stereotypes and ensuring that women, men and youth can equally lead, contribute to and benefit from the programme.

80. **BY** identifying and supporting innovative cleantech and viable business models whilst increasing institutional capacity and ecosystem connectivity, the cleantech entrepreneurs are able to secure increased investment from more aware investors, **AND** they are enabled to commercialize their innovative products. At the same time, IF a supportive policy and regulatory environment, including incentives exists, **THEN** cleantech investment and adoption is fostered. **ALSO,** in turn these interventions will bring innovative cleantech to market and drive uptake, delivering customer value and contributing to the reduction of GHG emissions and to the mitigation of land degradation. Continued growth and the mainstreaming of the technologies will result in market transformation and job and wealth creation within Namibia, accompanied by global environmental benefits including GHG emission reductions and increased carbon sequestration through reduced deforestation rates as well as adequate bio-diversity habitats.

81. Based on the lessons and experiences gained through GCIP so far, this project will put focus on cleantech innovations especially with specific focus on those related to low carbon circular economy as well as in the priority sectors in the country (clean energy, sustainable water management, reforestation and restoration of land) while ameliorating the unfavorable conditions for domestic start-ups and SMEs to successfully engage with investors. In addition, the Global Cleantech Innovation Index 2017 enables to measure where cleantech companies are likely to emerge in the next 10 years through innovation

inputs (general and cleantech-specific drivers) and innovation outputs (emerging and commercialized cleantech).

82. Accordingly, the project will be implemented in close collaboration with national and regional institutions to build an enabling CIEE for development and commercialization of innovative cleantech. Ultimately, this project will support Namibia?s governmental actions towards expanding the opportunities for economic activities; enhancing human capacity; and developing and expanding access to reliable infrastructure. By doing so, the project will support the pathway towards sustainable growth and socio-economic transformation in Namibia.

83. While a large number of start-ups and SMEs have suffered during the pandemic, COVID-19 has also led to an increase in entrepreneurial activity. Innovative enterprises are undoubtedly essential for the future of innovation and supporting them is critical. Also, the current COVID-19 crisis also shows the importance of incremental approaches to innovation and the need for a sustained support through well designed acceleration that is adapted to the ?new normal? while turning the crisis into a growth opportunity.

84. The economic recovery packages provide a possibility for countries to build back better, greener and in a more sustainable manner. Innovative cleantech start-ups and SMEs can not only make economic impacts in Namibia by creating jobs and wealth, but also they can enhance the CIEE capability to create new opportunities for green and sustainable development. 81.

85. In order to safeguard the sustainability of the project and to ensure its successful upscaling in Namibia, several public and private sector stakeholders will provide co-financing to support the CIEE development. This will ensure country ownership and enable identification of areas of special interest to national counterparts.

86. The project builds on the collective feedbacks by various stakeholders including national counterparts, partner institutions, start-ups and SMEs successfully participating in GCIP, and strategic partners at the global level. The project will also work with new partners, at the regional and local levels.

87. In addition, the project approach, in particular within Component 2, enables acceleration of innovations that have highest GHG emission reduction and sustainable land management potential as well as have greatest chances to access the market and benefit from financing opportunities. This is also supported by partners like the Private Financing Advisory Network (PFAN) that de-risks the enterprise?s business model in order to increase the likelihood of investor interest. PFAN is one of the executing entities of GCIP Global. The objective underpinning the linkages established between GCIP and PFAN is to offer the ventures supported by the project a continuum of services as they mature towards commercial viability and scaling up.

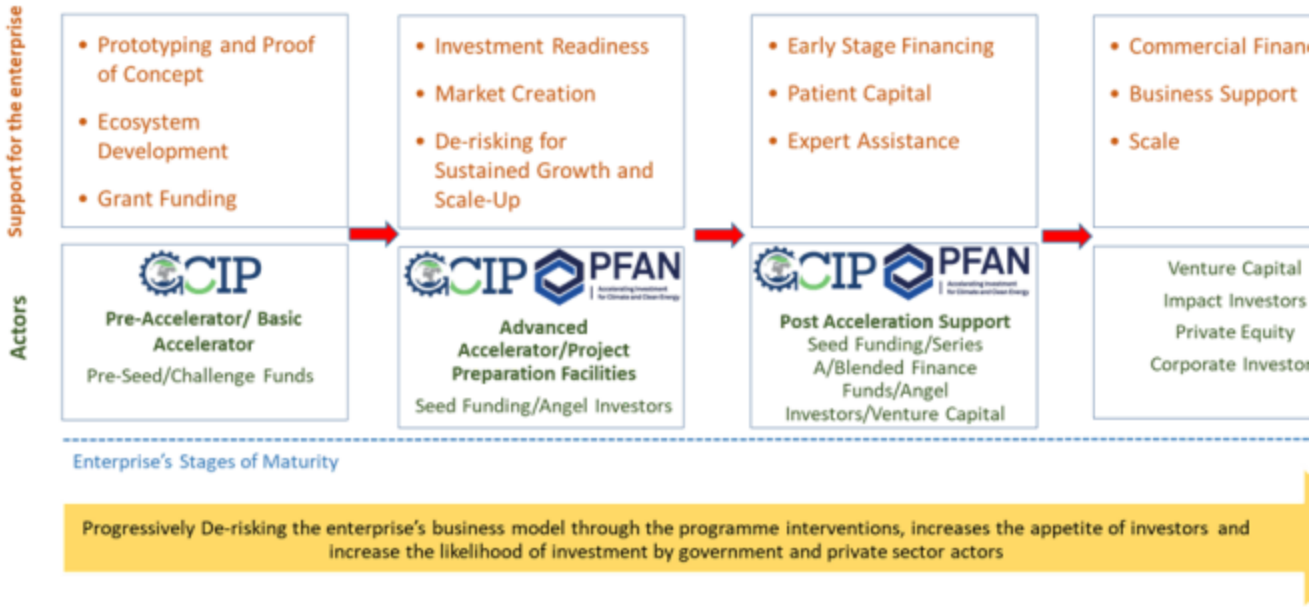

Figure 4: Start-up to scale up journey

88. PFAN, to date, has supported 31 projects in the Southern Africa region, of which 2 projects are located in Namibia. What is more, GCIP Namibia will also collaborate with the recently approved A2D facility, which would provide some of the following services to start-ups and SMEs that have previously participated in the GCIP acceleration services:

? - Project piloting: supporting pre-feasibility studies such as pilot testing innovative clean technologies

? - Knowledge production: supporting research, analysis, reports, market reviews and studies on innovation on industrial decarbonization

? - Capacity building: supporting workshops with experts for innovators on how to develop technologies

? - Data Collection: supporting the collation and dissemination of performance or survey data to identify improvement potential

Project Description

Component 1: Transforming early-stage innovative cleantech solutions into scalable, commercial enterprises

89. Component 1 focuses on providing direct support to early-stage enterprises to enhance the capacity and competitiveness of them as cleantech solution providers, and to leverage market opportunities embedded in the water-energy-land nexus and in the area of clean energy and sustainable land management. Outcome 1.1 focuses on entrepreneurial training and business access support. Outcome

1.2 pays attention to investment facilitation services for cleantech enterprises at a growth stage that demonstrate market traction and sales evidence, and can benefit from specialized support. The diagram below shows the types of assistance required by cleantech enterprises, depending on their stage of growth.

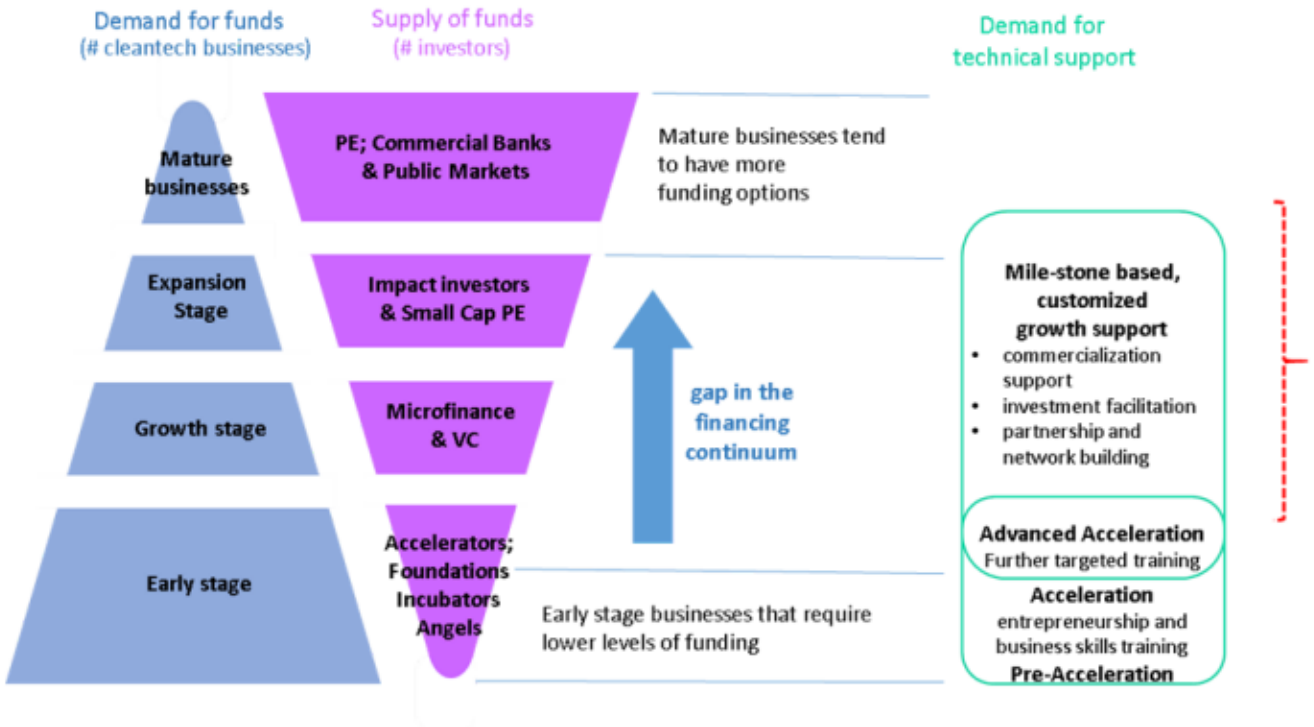

Figure 5: Demand for funds and technical support per development stage

90. For clarification, a brief overview of the available GCIP business acceleration support is provided in the Table 1 below.

Table 1: Overview of the available GCIP business acceleration support

The **Pre-Accelerator** consists of activities that enable formation of early-stage teams, as well as assist them to develop initial concepts and undergo their validation (i.e. proof of concept). This type of support encompasses workshops, hackathons, start-up camps, and mini-competitions. The Pre-Accelerator takes place before the launch of the main GCIP Accelerator, leading to an increased number of high-quality applications.
The **Accelerator** is 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 Accelerator, a cohort of cleantech innovators with a high-impact potential is 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, 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.

The **Advanced Accelerator** is a service offered to selected entrepreneurs participating in the Accelerator and it is 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.
The **Post-Accelerator** provides entrepreneurs with assistance in four related, but not necessarily linear dimensions: advanced business growth and commercialization, investment readiness, market readiness, and technology readiness. More specifically, a series of trainings (on corporate partnerships and government relationships, international market entry, mergers and acquisitions, exit strategy, challenges specific for selected industry sectors, etc.); needs-based activities; and technology verification, product development, and testing facility support are offered.

91. To ensure coherence and to achieve the highest impact potential of GCIP interventions along the start-up to scale-up journey of a cleantech enterprises, detailed eligibility criteria are defined for the above-mentioned types of support in the framework of the GCIP Global. These are related to the proof of concept requirements; level of technology readiness (TRL); business and market readiness levels (BRL/MRL); market potential; proof of evidence of business growth; environmental and social impact potential; and effectiveness of environmental and social risk mitigation measures, among others. The criteria also include adequate definitions of start-ups and SMEs, as well as they are in line with the GEF-7 Programming Directions.

Outcome 1.1: GCIP is adapted to the Namibian context and early-stage cleantech innovations are accelerated

92. Early stage cleantech innovations with high impact potential will receive business acceleration support for increased market and investment readiness. To facilitate this, the project will benefit from the available GCIP package of tools and guidelines that elaborate on the approach and methodology on how to promote cleantech innovation and entrepreneurship in developing and emerging economy countries, as well as provide practical guidance for operation and management of the accelerator at a national level, among others.

Output 1.1.1 GCIP methodologies, tools, training systems, guidebooks for cleantech innovation and entrepreneurship accelerator are adapted for Namibia

93. The GCIP guidebooks (for Accelerator, Advanced Accelerator, and Post-Accelerator), that were developed under the GCIP Global, are 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 Namibia 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 the EIFN and appropriate training will be provided on their adaptation and use by an international consultancy company (ICC). The GCIP guidebooks will be reviewed and adapted for the EIFN to reflect the context of Namibia?s CIEE (i.e. the GCIP Namibia guidebooks will be developed), including for example

market conditions, policy environment, development priorities, technology focus, and local examples. The guidebooks will also entail references to the project selection criteria for the accelerator that might reflect specific priorities and focus, including on land degradation, informal settlements and peri-urban areas. In addition, the GCIP Namibia Accelerator, Advanced Accelerator, and Post-Accelerator training curricula and delivery format will be customized to meet national needs. The GCIP Namibia guidebooks will be finalized in consultation with the government, business and civil society organizations, and other relevant stakeholders in the CIEE.

Output 1.1.2 Pool of 20 cleantech innovation and entrepreneurship experts (trainers, mentors, judges) is trained and certified to support the Namibia Accelerator (with at least 40% women trainers, mentors, judges)

94. Developing a pool of CIEE experts to act as mentors, coaches and judges is critical to the effectiveness of accelerators in providing the right support to the participating teams. This is because the delivery of the accelerator curriculum and the effectiveness of facilitated connections and networks will to a large extent depend on the capacity of trainers, mentors, and judges. In order to ensure coherence of approach, a CIEE expert training system will be developed by UNIDO. Similar to the accelerator guidebooks, the training system will be reviewed by the EIFN and adapted to the national context, ensuring that the training materials accurately reflect market, business, policy and investment climate. The community of trained and certified experts is expected to positively influence the cleantech innovation initiatives at national level, and will contribute to the strengthening of the CIEE in general. The cleantech innovation and entrepreneurship expert training and certification system will be reviewed by the EIFN and will be adapted for the GCIP Namibia with the view to addressing specific national needs and ensuring synergies with other existing training and certification systems. A total of 20 experts (trainers, mentors, judges) will be trained and certified with at least 40% being women.

Output 1.1.3 Three cycles of the annual competition-based Namibia Accelerator are conducted (at least 50 enterprises with at least 40% women-led and at least 25 enterprises with a strong focus on LD will be supported)

95. Three annual national competition based cleantech innovation and entrepreneurship accelerators will be conducted, based on the guidebooks and tools developed under output 1.1.1. Selection criteria specific for LD will be applied ensuring that at least 25 innovations will be focused on the LD focal area, of which at least 15 will be focused purely on land degradation and further 10 will have significant co-benefits in the land degradation focal area. Accelerators will be guided by a general timeline recommended by UNIDO that aims to leverage the ongoing cycles across GCIP Global and allows Namibia to align with some GCIP Global activities where possible (online webinars, participation at the global forum, etc.). Through the accelerator, cleantech innovations with high-impact potential will be identified and invited to receive intensive business and entrepreneurship mentoring and coaching to accelerate their growth as businesses. A special focus will be given to support at least 25 enterprises which focus on agriculture, land restoration and sustainable land management. The project will source participants from all parts of the country.

96. An international consulting company (ICC) will support the PEE in establishing and conducting the first cycle of the Namibia Pre-Accelerator, Accelerator, Advanced Accelerator, and Post-Accelerator.

The assistance will be phased out in the second and third cycles, as it is expected that the relevant national institutions will be capacitated and skilled to be fully independent in the next years. It is expected that each GCIP Namibia Accelerator cycle will receive around 40 to 80 applications, with higher numbers of entrants expected in the later cycles. From these entrants, around 10-15 semi-finalists and 3-6 finalists will be selected to receive support each year, 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. As explained in Table 1, the GCIP Namibia 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 Namibia 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, in particular with the aim to a) improve their businesss kills and investor pitch, b) connect them to potential business partners, financiers, and investors, c) maximize the expected net climate benefits of their solutions.

97. Throughout all cycles of the GCIP Namibia Accelerator, special attention will be paid to gender mainstreaming activities, as outlined in the Draft Gender Mainstreaming Action Plan in the Gender Analysis report (Annex J). These include: (i) recruitment of women trainers, mentors, judges; (ii) efforts to ensure that women and men are given equal opportunity to 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.

98. There will be an annual GCIP Namibia Forum conducted with appropriate guidance provided by the GCIP Global on its successful execution and integration with the annual GCIP Global Forum, including themes and private sector participation. There will be grants disbursed to selected enterprises in the framework of the GCIP Namibia Forum.

99. As specified under Component 3, The GCIP Namibia enterprises will be expected to periodically provide relevant impact data to EIFN for validation and consolidation. The enterprise impact data will then be used to develop and publish a GCIP Namibia 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.). This will benefit the GCIP Namibia enterprises by providing increased credibility and visibility. The impact data will also be shared with the GCIP Global for consolidation on the programme level. What is more, as mentioned in the section on Core Indicators, it is also foreseen that some entrepreneurs supported under the GCIP Namibia will be selected to participate in a demonstration of their cleantech, in that their impact measurement (including the measurement of GHG emissions and land degradation reduction potential) will be in addition verified externally by selected government and other institutional and industry partners. Their role will be to independently ensure that the calculation of GHG emission reductions, land degradation reductions and other impacts, follows proven industry approaches and delivers viable results. More specifically, it is foreseen that in a controlled setting, the selected cleantech supported in the framework of the GCIP Namibia Accelerator could undergo a trial run of a predefined period, where indicators such as for example energy consumption could be tracked and subsequently compared to their corresponding dynamic baseline

metrics to showcase achieved GHG emission reductions and to possibly revise the GHG emission reduction targets. The same will also apply to the relevant land degradation impact indicators.

100. Throughout its entire implementation period and across different Components GCIP Namibia will provide business coaching, mentoring and investment facilitation services in the framework of the Accelerator, Advanced Accelerator, and Post-Accelerator. In addition, cross-country networking and business growth opportunities will be offered through the GCIP Global.

Table 2: Outcome 1.1 Activities and responsibilities.

Activity	Detail	Responsibility	GCIP Namibia Budget (USD)
Output 1.1.1			
1.1.1a	to review the GCIP guidebooks for Accelerator, Advanced Accelerator and Post-Accelerator; to share suggestions for improvement of the GCIP guidebooks (feedback loop)	EIFN	1000
1.1.1b	to adapt the GCIP guidebooks to reflect the context of Namibia?s CIEE, including market conditions, policy environment, development priorities, technology focus, local examples, etc. (i.e. to develop the GCIP Namibia guidebooks); to organize information and consultation sessions with relevant CIEE stakeholders; to disseminate the GCIP Namibia guidebooks among relevant CIEE stakeholders	EIFN	1500
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) GCIP guidebooks for Accelerator, Advanced Accelerator, and Post-Accelerator, including e.g., proposed schedules; eligibility requirements and selection criteria for the participants; competition rules; training curricula and handbooks for applicants, experts (mentors, trainers, judges), and EIRs; 2) tools for a) assessment of needs of Namibian entrepreneurs (applicants, participants, and alumni), b) planning and monitoring of key Namibian events; 3) the developed (including the identification of interested corporate partners) and piloted the Global Innovation Challenge as part of the GCIP Global Accelerator (as from 2024).			
Output 1.1.2			
1.1.2a	to get acquainted with the GCIP cleantech innovation and entrepreneurship expert training and certification system; to share suggestions for its improvement (feedback loop)	EIFN	5367

1.1.2b	to adapt the GCIP cleantech innovation and entrepreneurship expert training and certification system to national circumstances (i.e. to develop the GCIP Namibia cleantech innovation and entrepreneurship expert training and certification system), and to operationalize the training and certification system	EIFN	1500
1.1.2c	to provide training and certification to at least 20 experts (trainers and mentors) with at least 40% being women as well as to conduct the evaluation of experts and to support their accreditation	EIFN	1,500
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) the GCIP cleantech innovation and entrepreneurship expert training and certification system for the experts (trainers, mentors, judges), including training curricula/materials, guidance on the training delivery methods, and certification requirements; 2) an assessment framework for evaluation of experts (trainers, mentors, judge s), as well as to facilitate the expert accreditation at global institutions/initiatives; 3) continuous improvement of the GCIP cleantech innovation and entrepreneurship expert training and certification system, based on recommendations provided by Namibian experts (trainers, mentors, judges)			
Output 1.1.3			
1.1.3a	to deliver the GCIP Namibia Pre-accelerator as a 7 day (4 virtual/ 3 in person) programme for at least 40 participants, around 6-8 weeks before the Accelerator application deadline	EIFN	7500
1.1.3b	To deliver 3 annual cycles of the GCIP Namibia Accelerator (each year for around 15-20 semi-finalists and 3-6 finalists selected from a pool of at least 40 applicants), including the 4-day National Academy	EIFN with support from an international consultancy agency	32200
1.1.3c	To organize the annual GCIP Namibia Forum (3 in total)	EIFN	24000

Outcome 1.2 Start-ups and SMEs are supported through advanced and gender-responsive business growth and investment facilitation services

101. This outcome will support selected alumni to further develop their innovations to reach a commercial success. Thereby, a cost-effective path to directly support and monitor growth of alumni enterprises will be pursued while removing the overemphasis on the competition aspect of the accelerator, and allow entrepreneurs to focus on individual milestones and improvements. The Advanced Accelerator and Post-Accelerator services are expected to result in market ready businesses that can attract commercial investment. Additionally, the GCIP Namibia will undertake a comprehensive set of activities to develop a financial mechanism tailored to the needs of cleantech start-ups/SMEs. GCIP Namibia will engage with relevant stakeholders to define and develop the financial mechanism that would increase probability and effectiveness of securing investments in innovative cleantech with high replication and scaling up potential.

Output 1.2.1 Targeted business growth support services are provided to selected cleantech enterprises (up to 15 enterprises with at least 40% women-led) towards commercialization

102. Advanced and post-acceleration support will be tailored to the specific alumni?s needs for progressing into the next phase of business growth and in overcoming product related market barriers. This may include technology verification, prototyping and product development, piloting, legal and administrative support, IT services, tax registration, protection of intellectual property (IP), product life cycle assessment, environmental and social risks assessment, additional mentoring and courses on cleantech entrepreneurship, etc.

103. The GCIP Namibia Accelerator alumni will be eligible for the GCIP Namibia Advanced 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 Namibia guidebook for the Advanced Accelerator (Output 1.1.1). It is foreseen that after the second cycle of the GCIP Namibia Accelerator, the Advanced Accelerator support will be offered to a minimum of 5 enterprises. After the third cycle of the GCIP Namibia Accelerator, the Advanced Accelerator services will be provided to a minimum of 8 entrepreneurs. More specifically, a series of trainings (in form of webinars) will be organized that will cover 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 (3-4virtual 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.

104. In addition to trainings, selected enterprises will also receive needs-based support in accessing additional sources of finance, market entry, identifying networking opportunities, dealing with technical and administrative issues, accessing IT services, and tax registration, as well as they will be provided with specialized mentoring and courses on cleantech, entrepreneurship, and innovation. The project will leverage on the facilities and expertise already available in Namibia.
Moreover, for selected Accelerator alumni with high impact potential (minimum 3 enterprises), there will be technology verification, product development, and testing facility support provided. This may encompass 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 Namibia will also provide support in overcoming product related market entry barriers, including protection of intellectual property and product life cycle assessments.

Output 1.2.2 Enterprises (15 enterprises with at least 40% women-led) are connected to financing opportunities and provided with tipping-point investment facilitation support

105. Mobilizing investment for cleantech products and services is a lengthy and iterative process. Therefore, selected enterprises with high replication and scaling up potential will benefit from tipping-point investment facilitation support. The project will support the establishment of a robust network of financial institutions, funds and investors to raise awareness and sensitize various stakeholders on the opportunities and risks associated with cleantech products and market trends.

106. Efforts will be made to actively engage financing institutions and investors to increase investor confidence in cleantech innovations by creating dialogues and providing training sessions as well as short, interactive webinars. Examples of alumni may be presented to demonstrate success stories, including possible returns on investments.

107. Taking advantage of various investment and promotion opportunities in Namibia, direct support for the GCIP Namibia 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 1 event 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 Accelerator alumni as appropriate.

108. 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. EIFN will establish a robust network with national financial institutions and funds to raise the awareness of financiers representing them, as well as to train them and sensitize 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, 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).

109.There will be trainings (as half-day events) conducted for local financial experts. The goal of this activity is also to facilitate cross-fertilization between GCIP and the Private Financing Advisory Network (PFAN), in that current PFAN advisors might support the training of financial experts by GCIP on the one hand, and the financial experts trained by GCIP, after provided with project sourcing and investment facilitation skills and tools, may be invited to join PFAN as new advisors. Moreover, PFAN will collaborate with GCIP also under the GCIP Global, in that it will launch open calls for GCIP alumni applications.

What is more, in order to encourage the participation of seed funding providers from the national, regional and global stages in the GCIP Namibia 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 Namibia.

Output 1.2.3 Mentoring and partnership support is provided to cleantech enterprises (up to 10, with at least 40% of women-led) for regional market expansion in collaboration with the global GCIP network

110. Many cleantech innovations have potential for replication in other developing countries. Based on requests received from GCIP alumni enterprises, international mentors will be identified by the PEE through the network of mentors on the GCIP web platform to facilitate building of connections and networks for expansion into new country markets. Through the web platform, enterprises will also be given peer networking opportunities with GCIP enterprises globally, as well as other cleantech. As a result, the enterprises will be able to explore opportunities for technology collaboration, product co-development, joint venture for market expansion, among others, in a business-to-business to context.

111. Since GCIP is also represented in South Africa (GEF ID 10456) and Lesotho (approved as a GCF readiness project) a special link for collaboration is to be made between the three beneficiary countries. For this a regional collaboration an advisory group will be set up, which shall consist of PMU members, mentors and PEE representatives to exchange region specific best practices and knowledge. Next to best practices, this group shall further explore opportunities for regional collaboration together with the GCF, to potentially develop a more comprehensive regional programme funded by GCF in the future. What is more, PFAN, of the executing entities of GCIP Global is very active in the Southern Africa region, with 31 projects supported to date. The proposed project will hence also benefit from the regional experience of PFAN to ensure adequate financing opportunities for beneficiaries. Under the GCIP Global there will be an annual GCIP Global Forum organized as an integral part of efforts to ensure connectivity between CIEEs. The GCIP Global 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 Global 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 Global Forum will not be a stand-alone event, but it will be organized on the margins of highly visible global gatherings, such as forexample the UNFCCC COP, Cleantech Group forums, etc.

Output 1.2.4 Innovative early-stage financing mechanism is designed to deploy innovative cleantech solutions to mitigate climate change and combat land degradation in informal settlements and peri-urban areas (up to 10 enterprises, with at least 40% women-led)

112. Early-stage and impact investment funds will be needed to support start-ups and SMEs during and after acceleration. The aim is to identify the critical funding gaps within the early-stage start-up journey and where necessary, design and implement a sustainable funding mechanism. Depending on local needs, GEF financing support will be provided to leverage finance for the gaps identified. The GCIP Namibia will undertake comprehensive consultations with various representatives of relevant public institutions as well as with representatives of venture capital investors and other relevant stakeholders in order to first conceptualize (incl. validation of the design) and then establish/institutionalize a financing mechanism (i.e. an early-stage development fund) through which seed funding will be disbursed to innovative cleantech enterprises (start-ups and SMEs) supported by GCIP Namibia.

113.The financial mechanism conceptualization and establishment/institutionalization process will involve considerations and decisions related to the role of public-private partnerships (PPPs), long-term

sustainability and ownership of the mechanism, mobilization of the first replenishment for the fund, selection/eligibility criteria for enterprises supported through the financial mechanism, financial instruments applied in its framework (loan, equity, grants, blended finance, possible cooperation with green bond issuers, etc.), maximum disbursement amount per enterprise, thematic focus (e.g. on agriculture, mini-grids, etc.), and others.

Table 3: Outcome 1.2 Activities and responsibilities.

Activity	Detail	Responsibility	GCIP Namibia Budget (USD)
Output 1.2.1			
1.2.1a	to identify (8-10) Accelerator participants (alumni) that would benefit from the Advanced Accelerator support to tackle specific operational, financial, and strategic issues; and to facilitate this support	EIFN	1000
1.2.1b	to conduct 3 cycles of the GCIP Namibia Advanced Accelerator focused on advanced business growth and commercialization support, investment readiness, market readiness, and technology readiness (based on the GCIP Namibia guidebooks developed under Output 1.1.1) to benefit 5-10 GCIP Accelerator graduates annually	EIFN	66000
1.2.1c	to provide needs-based support to the Namibia Post-Accelerator enterprises (10-13) in accessing additional sources of finance, market entry, identifying networking opportunities, dealing with technical and administrative issues, accessing IT services, and tax registration, etc.	EIFN	10000
1.2.1d	to provide technology verification, product development and testing facility support to enterprises with high impact potential (minimum 5 enterprises, up to 12)	EIFN	14250
In light of the fact that the project is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) a series of trainings/webinars (in the framework of the Namibia Advanced and Post-Accelerator) on (a) corporate partnerships and government relationships (3-4 virtual training modules of 1-2 hours each); (b) international market entry, mergers and acquisitions, and exit strategy (3-4 virtual training modules of 1-2 hours each); (c) challenges specific for selected industry sectors (3-4 virtual training modules of 1-2 hours each); 2) a report on best practices for acceleration based on state-of-the art international knowledge.			
Output 1.2.2			
1.2.2a	to organize national investment facilitation events (Investor Connect) for the GCIP Namibia alumni (at least 1 event after each cycle)	EIFN	
1.2.2b	to establish a robust network with 6-10 national financial institutions and funds, and to manage related communication and outreach activities, including awareness raising 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)	EIFN	5525

1.2.2c	to support PFAN or a similar entity engaged in training, in providing 3-5 workshops for local financial experts	EIFN	5525
1.2.2d	to attend 3-5 suitable events in order to encourage the participation of seed funding providers from the national, regional and global stages and to leverage on the experience and knowledge of other GCIP countries	EIFN	2900
1.2.2e	to support selected enterprises scale up through PFAN support	EIFN	3025
Output 1.2.3			
1.2.3a	to encourage participation of 3-5 Namibia Cleantech Accelerator alumni for other international Accelerators and financing opportunities and to support them with their application	EIFN	2333
1.2.3b	to nominate and support the participation of a group (at least 2 people) representing Namibia at the GCIP Global Forum	EIFN	2333
1.2.3c	To set-up a regional collaboration advisory group and hold at least 2 meetings per year	EIFN	24000
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) cross-border networking and matchmaking opportunities facilitation for start-ups/SMEs supported by the GCIP Namibia with internationally recognized mentors, GCIP alumni enterprises, corporations, investors, and governments; 2) Namibian enterprises will be able to showcase their cleantech innovations at high-level national and international events (including GCIP Global Forum and other major international events); 3) to organize the Global Forum;			
Output 1.2.4			
1.2.4a	to identify a Fund Manager; to conceptualise, design or adapt a financial mechanism with the purpose of improving access to financial resources (operated by a Fund Manager in the form of an early-stage development fund providing pre-seed and seed funding; or disbursement of grants) that would enable de-risking and leveraging of public and private investment, including the process of application for the pre-seed/seed financing or grants	EIFN	10250
1.2.4b	to operationalize the financial mechanism designed under 1.2.4 (an early-stage development fund providing pre-seed and seed funding; or disbursement of grants from the GCIP Namibia 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 2025)	EIFN	142250

Component 2 Cleantech innovation and entrepreneurship ecosystems (CIEE) strengthening and connectivity

114. The policy framework and institutional capacity are integral parts of the 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 key CIEE stakeholders in Namibia to engage in cleantech acceleration and commercialization. Further, the GCIP Namibia will assist the government in improving national policies and regulations that are conducive to cleantech innovation and commercialization. The GCIP Global will make available a series of tools (Global Cleantech Innocation Policy Strategy Framework; cleantech innovation capacity building framework) for CIEE strengthening and connectivity. In addition, other policy best practices and roadmaps identified by the GCIP can also be taken as reference for the GCIP Namibia to improve the local ecosystem and enable a more active adoption of cleantech in key sectors.

Outcome 2.1 The CIEE in Namibia is strengthened and interconnected

115. The policy framework and institutional capacity are integral parts of the ?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 project closure. Through this project it is attempted to build capacity in the PEE and other key national institutions in Namibia. Further, policy makers will be assisted to design suitable national policies and regulations that create an enabling business environment for cleantech innovation and commercialization. This will be an iterative process where relevant analyses and dialogue are conducted as well as recommendations made.

116. Since this project is closely linked to the GCIP Global Child Project, it will use the frameworks that are being developed under this project to guide the work of this output. This includes GCIP Global frameworks, guidelines and tools which will be reviewed and adapted nationally. The EIFN, which was identified as the national executing entity of this project, will be responsible to subcontract an international consultancy company (ICC) to perform the activities relating to policy analysis, recommendations and gap reporting. These will include recommendations for enhancing capacity of national institutions to support cleantech innovation and entrepreneurship, a framework for CIEE mapping and analysis, strategies for facilitating meaningful interaction and collaboration among ecosystem players, and training material. Policy frameworks (including translatable policy recommendations and strategies) will be built based on research and analysis of countries with comparable socio-economic conditions to those in Namibia.

Output 2.1.1 Gender-responsive CIEE analysis is conducted (market conditions, policy environment, development priorities), including mapping of supply of and demand for cleantech solutions and their prioritization in accordance with national strategies and action plans

117. An assessment will be conducted to analyze the strengths and weaknesses of the CIEE in Namibia. This will be instrumental in identifying the capacity building needs and optimal set of interventions nationally. The further aim will be to ensure that national ecosystem players are supported to understand and contribute in their roles as part of the ecosystem, and will have the capacity to continue promoting national cleantech innovations and enterprises towards commercialization beyond the project. This project will give a special focus on supporting innovations which contribute Namibia's LDN targets under the UNCCD as well as Namibia's NDCs. A CIEE assessment will be conducted by an ICC in close consultation with the EIFN to analyse the strengths and weaknesses of the Namibia CIEE. This will be instrumental in identifying the capacity building needs and optimal set of national interventions. This assessment will apply a gender responsive approach to identify specific needs of women for training. The further aim will be to ensure that national ecosystem players are supported to understand and contribute to their roles as part of the ecosystem in an inclusive manner and will have the capacity to continue promoting national cleantech innovations and enterprises towards commercialization beyond the project. This output will also serve as a structured stakeholder consultation and engagement process at the start of project implementation.

118. The CIEE assessment will be updated at least once during the project period as a means to measure impact achieved through project activities on Namibia?s CIEE. This should be done towards the third year of project implementation period in order to allow time for changes to take effect and be able to measure some degree of actual impact. This update should be done by the PEE. In addition, 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, 2 engagement workshops (kick-off and a follow-up) will be organized to train up to 10 national facilitators (>40% women) to act as agents of change and support the implementation of both strategies. The workshops will be convened and organised by the PEE.

119. 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. The capacity building events will encompass, among others, on-the-job training, as well as workshops on knowledge management, technology benchmarking, and coordination mechanisms. 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.

120. The universities in Namibia are a potential source of cleantech innovations. Therefore, under the GCIP Namibia there will be at least one cycle of the Entrepreneurship Train-the-Trainer Programme on cleantech entrepreneurship and innovation organized for university professors and teachers. As a result, they will be well equipped to promote cleantech entrepreneurship among their students and to encourage them to engage in innovative activities, to form teams, and subsequently to apply for the GCIP Namibia support. Also, the professors and teachers will be engaged in the development of case studies and co-hosting of student outreach events, as well as in the promotion of the establishment of entrepreneurship centres within universities.

Output 2.1.2 Cleantech innovation and entrepreneurship policies, regulations and recommendations are submitted for adoption to policy makers (gender-responsive)

121. Policy remains a key determinant that influences the cleantech market and investment behavior. Through the project, multi-stakeholder policy dialogues will be facilitated to prompt discussion and collaboration among policy makers and other CIEE actors, and to guide them to create a conducive environment for commercialization of cleantech solutions. The conclusions of the dialogues will be captured as policy briefs and presented to relevant ministries and agencies. The EIFN will be responsible to engage a suitable institution (i.e an ICC) or group of experts to perform the activities under this output. The government will be assisted in reviewing the existing policies and regulations relating to the promotion and support of cleantech, innovation and entrepreneurship as well as a gap analysis report on policy requirements will be prepared.

122. Subsequently, stakeholder consultations will be carried out to validate and complement the findings and to support the adoption of the proposed policy by relevant policy makers. It is of utmost importance that recommendations and suggestions to improve policies and regulations take gender perspectives into account and are formulated in a gender-responsive manner. This is of relevance, particularly for the agriculture sector where many women are involved, most of them work informally which puts them in a vulnerable position. Therefore, NGOs and CSOs involved in the promotion of women rights and gender equality should be consulted as well to ensure the national cleantech innovation policies are gender-responsive. Any policies that are inhibiting innovation will also be identified as part of the assessment and recommendations on how to improve them will be provided. The policy analysis document and 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. A roadmap will be developed including a long-term strategy for the adoption of the recommendations. Public and government agencies that take care of addressing the needs of the rural population should also be consulted and engaged to provide support for the effective inclusion of minorities, vulnerable groups and local communities.

Output 2.1.3 Linkages, collaboration, and synergies across CIEEs are promoted

123. At a national level, investor forums and awards event will be organized to encourage linkages, collaboration and synergies across the CIEE. UNIDO?s annual GCIP Forum will also be an integral part of ecosystem connectivity and will be an opportunity for the project representatives and top performing companies to be connected with potential partners, customers, technology scouts and investors from around the world. This provides alumni enterprises in Namibia with exposure to the global community, and the opportunity to forge new partnerships for co-innovations and joint ventures.

124. The GCIP Forum is further a culmination of innovation showcasing and investment matching among national counterpart institutions, and will continue to be an important annual milestone for networking, advocacy, and knowledge exchange among cleantech innovation ecosystem players. In addition to international connections (in particular through the GCIP), national and regional (sub-national) level partnerships will be promoted and developed between national leading institutions,

agencies and universities. This will be promoted by means of the GCIP Namibia Forum to be held every year after the Acceleration process is finished. Synergies will be secured between the project and other ongoing initiatives related to the CIEE.

Table 4: Output 2.1: Activities and Responsibilities

Activity	Detail	Responsibility	GCIP Namibia Budget (USD)
Output 2.1.1			
2.1.1a	to conduct analysis of Namibia CIEE, including policy framework (encompassing consultations with relevant CIEE stakeholders)	EIFN with support from ICC	36000
2.1.1b	to develop relevant tools for CIEE strengthening and connectivity, including a stakeholder engagement strategy and a cleantech innovation cluster strategy (in consultation with relevant CIEE stakeholders); as well as to conduct 2 engagement workshops (kick-off and follow-up) to train up to 10 national facilitators	EIFN with support from ICC	25000
2.1.1c	to conduct 1-3 capacity building events (based on the cleantech innovation capacity building framework developed for the GCIP, if available) for selected CIEE stakeholders (40 in total), including national institutions, industry associations, and business platforms on how to support cleantech innovations	EIFN	16750
2.1.1d	to deliver at least 1 cycle of the Entrepreneurship Train-the-Trainer Programme, based on GCIP Guidelines	EIFN	55000
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) a workshop on cleantech innovation policy and strategy for a cohort of all national PEE representatives; 2) the Global Cleantech Innovation Ecosystem Benchmark which will enable comparisons of the Namibia CIEE with other countries CIEEs; 3) a cleantech innovation capacity building framework.			
Output 2.1.2			
2.1.2a	to review existing policy and regulations relating to the promotion of cleantech, innovation, and entrepreneurship (gap report), and to develop a gender-responsive localisation document and develop recommendations (10-20) to improve cleantech innovation and entrepreneurship policy	EIFN with support from ICC	30000
2.1.2b	Conduct 2 stakeholders engagement workshops to discuss and validate the gap analysis report and the policy recommendations; to prepare and consult (with relevant national CIEE stakeholders) a roadmap guiding a long-term implementation of the policy recommendations	EIFN	43800
Output 2.1.3			
2.1.3a	Promotion of cooperation and collaboration activities to facilitate the dissemination of knowledge products during the Forums (estimated at creating 1-3 collaborations)	EIFN	48760

Component 3 Knowledge management and project coordination

125. The activities under Component 3 are aimed at ensuring that the achievements of the GCIP Namibia are captured and communicated globally, as well as that the GCIP Namibia and other GCIP country projects are implemented in a coherent and coordinated way. To this purpose, EIFN is expected to collaborate with the GCIP Global through the global PEEs (PFAN, NGIN, CTG, UNIDO), as well as to contribute to information gathering, knowledge sharing, and dissemination efforts with a focus on addressing gender-specific impact and needs. Also, tools will be shared by GCIP Global to facilitate coherence in project approach across countries, including Namibia.

Outcome 3.1 Project outcomes enhanced through use of guidelines, knowledge management, as well as communication and advocacy

Output 3.1.1: Guidelines for project management teams are adapted and implemented

126. To maintain coherence of the GCIP approach across multiple countries, gender sensitive 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 the EIFN, 2) a sustainability and exit strategy framework (to be developed in the first year of project implementation, and subsequently shared with the EIFN for review and adaptation, i.e. for development of the GCIP Namibia sustainability and exit strategy). 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 Namibia 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 the EIFN) will be organized to offer a platform for training and exchange of experiences/insights related to the implementation of the GCIP internal guidelines. The development of

the GCIP Namibia sustainability & exit strategy will ensure effective and efficient transfer of project ownership and achievements, as well as its fully independent continuation.

Output 3.1.2 Knowledge management, communication and advocacy strategies of GCIP are adapted and applied

127. The experience so far has shown that an exchange of learnings 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: (i) promoting visibility of GCIP and communicating its impacts achieved at national and global levels; (ii) increasing awareness of the catalytic role of cleantech in addressing climate change and environmental issues; (iii) showcasing cleantech innovations from the GCIP alumni and enhancing their visibility and credibility and (iv) addressing gender considerations. This will be a continuous process whereby takeaways from one of the child projects feeds into the others so that constant improvement and finetuning can be ensured.

128. The above-mentioned GCIP knowledge management, communication and advocacy strategy will be made available to the EIFN in order for it to review it and adapt it the country context, including gender-related aspects, for operationalization as appropriate. As a result, the GCIP Namibia knowledge management, communication, and advocacy strategy will be developed ensuring inclusivity and relevance to gender dynamics in the country.

129. The communication strategy will include the development of awareness raising and marketing material, for the public, for entrepreneurs and for officials, with a special emphasis on the needs of women and youth. This will include briefing sessions, press releases, social media activity, attendance at events, etc. The PEE (and/or their subcontractors) are expected 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, supported by relevant partners and stakeholders representing diverse gender perspectives such as women associations. These activities will furthermore be supported by partners, including local entrepreneurs, celebrities, Accelerator cycles alumni, relevant service providers (e.g., patent attorneys, accountants), university departments and societies (e.g., agriculture and agroforestry, energy, informal settlements) organizations that are in frequent contact with cleantech entrepreneurs (e.g., trade groups, entrepreneur groups), and investors (e.g., venture capital funds, angel networks), etc.

Output 3.1.3 National web platform is operated as part of the GCIP global web platform to maintain local and global community and network

130. A national web platform will be developed as a tool for four key functions. Firstly, it will serve to facilitate internal GCIP management and operations, as for example guidelines, tools and other knowledge products will be disseminated through the web platform. Secondly, it will be a tool for execution of annual accelerators to be used from the beginning of the accelerator cycle (call of applications and receipt of applications), and during the accelerator (webinars, submission of assignments etc.). Thirdly, the web platform will enable maintenance of GCIP community at the

national level. All alumni enterprises, as well as certified mentors and coaches will be invited to join the online network.

131. Also, a profile and impact potential of each supported cleantech solution will be showcased on the web platform. Therefore, it will serve as a gateway for potential investors and customers to collect information on alumni enterprises. Fourthly, the national web platform will be linked to the global web platform to connect Namibia to the broader GCIP community globally.

Table 5: Outcome 3.1: Activities and Responsibilites

Activity	Detail	Responsibility	GCIP Namibia Budget (USD)
Output 3.1.1			
3.1.1a	to review and adapt gender sensitive GCIP guidelines to develop the Namibia technical Operational Guidelines for the project management teams.	EIFN	4500
3.1.1b	to develop the Sustainability and Exit strategy framework for Namibia, including measures to promote women's empowerment.	EIFN	21000
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) UNIDO will organize annual meetings for national PEE representatives (including DEEC/MEDD) to provide a platform for training and exchange of experiences/insights.			
Output 3.1.2			
3.1.2a	to review and adapt the gender sensitive knowledge management, communication, and advocacy strategy framework, i.e., to develop the Namibia knowledge management, communication, and advocacy strategy	EIFN	1667
3.1.2b	to materialize the communication strategy by developing and disseminating 80-150 items including: policy briefs, impact reports, brochures, webinars and products specifically promoting gender equality and the empowerment of women, and to disseminate this knowledge through briefing sessions, press releases, social media presence and advertising, etc.	EIFN	1667
3.1.2c	to seek 10-20 partnerships that would support implementation of the gender sensitive GCIP Namibia knowledge management, communication, and advocacy strategy (e.g. women associations, local entrepreneurs, celebrities, GCIP alumni, relevant service providers, university departments and societies, organizations that are in frequent contact with cleantech entrepreneurs, investors, etc.)	EIFN	1667

In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) UNIDO will develop a knowledge management, communication, and advocacy strategy framework.			
Output 3.1.3			
3.1.3a	to develop and maintain a GCIP Namibia web-platform	EIFN	19000
3.1.3b	to launch the GCIP Namibia alumni network (incl. 30-50 participants) and create a special section on the GCIP Namibia web platform to maintain it	EIFN	3000
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1) UNIDO will launch the GCIP web platform and will support the Namibian PEE on its use/linking			

Outcome 3.2 Impacts and progress of the project are tracked and reported

Output 3.2.1 Environmental and social impacts of project are estimated, tracked and reported

132. The GCIP methodology for impact assessment was developed as part of the GCIP and will be taken as reference by the GCIP Namibia to develop an adapted methodology for local application that will include a calculation methodology development for land degradation core indicators. This work will be supported by the University of Namibia, as specified in the co-financing letter. 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, both at a national and global level. The methodology will enable assessment of social, economic, and environmental impacts. It will account for global environmental benefits (GEBs) such as land under improved management practices, land restored, carbon emissions reductions, in addition to energy saved, increased renewable energy capacity installed, number of green jobs created (entrepreneurs/SMEs) and investment leveraged. The national PEE and the PMU will receive an online training on the GCIP methodology for impact assessment from UNIDO and, subsequently, the PEE will train (online or in person) all GCIP Namibia Cleantech Accelerator semi-finalists.

133. Dedicated resources will be assigned to track and monitor the business growth, social and environmental impact of the alumni enterprises in Namibia. Accelerated enterprises will be expected to periodically provide relevant impact data to the PEE for validation, recording and consolidation. The

enterprise impact data will then be used to develop and publish an 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.). This will benefit the Namibian enterprises by providing increased credibility and visibility. The impact data will also be shared with the GCIP for consolidation on the programme level, if needed.

Output 3.2.2 Project progress monitoring and reporting as per UNIDO and GEF guidelines including development and monitoring of the Gender Mainstreaming Action Plan, the Environmental and Social Management Plan and Stakeholder Engagement Plan is ensured

134. 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 with other relevant stakeholders as well as the final project evaluation. A detailed monitoring plan for tracking and reporting of project time-bound milestones will be prepared by the EIFN (in conformity with UNIDO reporting procedures) and project partners at the beginning of project implementation and periodically updated. In order to mainstream the environmental and gender dimensions, a detailed environmental and social management plan was formulated during the PPG as well as a draft gender mainstreaming strategy and action plan was prepared which will be completed during project execution and serve as a basis for the project?s contribution to enhancing gender equality and women?s empowerment (GEEW).

135. Efforts will be made to ensure that voices of both women and men are considered when discussions are held. As necessary, gender-disaggregated focus group meetings will be organized so that both men and women can lead, shape, participate in, contribute to and benefit from the project through mutual knowledge sharing. The operationalization of the gender mainstreaming action plan will be monitored and evaluated according to relevant indicators.

Output 3.2.3 Independent external mid-term review and terminal evaluation are conducted

136. A gender-responsive external mid-term review will be conducted halfway through the project implementation period. An independent final evaluation will be performed six months prior to the project closure. The final evaluation will focus on assessing the achieved impact and sustainability of results, including project?s contribution to capacity development and GEBs. The final evaluation will also provide recommendations for follow-up activities.

Activity	Detail	Responsibility	GCIP Namibia Budget (USD)
Output 3.2.1			
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 (3 trainings)	EIFN	6083

3.2.1b	to develop a local Namibia methodology for impact assessment based on the 3.2.1a including land degradation and climate change mitigation indicators	EIFN	6083
3.2.1c	to provide 2 trainings on the Namibia methodology for impact assessment developed in 3.2.1b to the Namibia Cleantech Accelerator semi-finalists (50 in total)	EIFN	1750
3.2.1d	to validate and consolidate the Namibia enterprise impact data, and to develop and publish 3 Namibia impact reports	EIFN	6083
In light of the fact that the GCIP Namibia is linked to the GCIP, it will have access to a number of services provided under GCIP Global Child Project. These are: 1)UNIDO will provide the GCIP M&E framework.			
Output 3.2.2			
3.2.2a	to prepare the GCIP Namibia M&E plan and regular (every six months) progress reports (6)	EIFN	18000
Output 3.2.3			
3.2.3a	to conduct an external mid-term review (1) toward mid-implementation period (i.e., after approx. 1,5 years of commencement date) and to conduct an external terminal evaluation (1) three months prior to project closure	EIFN	15000

Please see the attached Annex E for the full budget details.

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

137. The projects? multi-sectoral approach catalyzes investments in technologies that help reverse global trends, specifically climate change and land degradation. By promoting clean access to energy, sustainable water management, sustainable agriculture, reforestation and restoration of forest and agricultural land) this project will help combat desertification and deforestation and help reduce GHG emissions. The project will focus on providing frugal, innovative solutions to climate change mitigation and land degradation, inevitably showing the interlinkages between both areas. GCIP Namibia will seek to support innovations that have the potential for contributions to GEBs ? notably promoting technologies for sustainable energy breakthroughs for cleantech innovation (GEF Objective CC-1-4) and reducing pressures on natural resources from competing land uses and increase resilience in the wider landscape (GEF Objective LD-1-4).

This project is a multi-focal area project and is aligned with the following focal areas:

138. Land Degradation: This project supports the **GEF 7 Objective (LD-1-4)**, by building capabilities and harnessing capital and expertise to facilitate investments in innovation and technology, directed at the lives of informal settlement dwellers, ultimately contributing to sustainable land management practices (SLM). This project will seek to address the drivers of land degradation such as deforestation and decreased productivity of agricultural land.

139. Affordable, innovative technologies will help to maximize global benefits for the environment by reducing pressure on soils and forests and also address the issues of biodiversity, climate change, and local livelihoods. Furthermore, by improving the living conditions of affected populations and enhancing ecosystems services, the project is considered to not only improve health and ensure food, energy and water security to local populations, but also to reduce degraded agricultural land grasslands and restore drylands. By providing the technical assistance required to bring bankable projects to investment, this project seeks to create an enabling environment for affordable, frugal innovation, ultimately leading to better land use management practices. A list of preliminary technology areas, that have been identified as beneficial for SLM by the UNCCD, will be given priority in the development of selection criteria as part of Output 1.1.1.

a) water management technologies including the use of sustainable irrigation systems, water harvesting, and drainage to promote efficient use and protection of water resources from pollution and over-exploitation.

b) reducing deforestation through land use planning and reforestation in order to add to the emission reduction potential of GHGs. Measures can protect soil quality and preserve soil carbon stocks and biodiversity.

c) agroforestry measures have the potential to control soil erosion and improve productivity, as well as water retention and reduce nutrient losses. Agroforestry also has the potential to conserve soil fertility and functioning, while providing socio-economic benefits to land users through income generation opportunities and increased resilience to climate change.

140. By supporting at least 15 entrepreneurs in commercializing and scaling-up their innovations that contribute towards core indicators 3.1, 3.2 and 4.3, this project is fully aligned with the goal of the GEF7 Land Degradation Focal Area to utilize GEF resources for implementing the United Nations Convention to Combat Desertification and its new long term (2018-2030) strategy, which contributes to enhancing ecosystem services. The project will also contribute towards the implementation of the UNCCD concept of Land Degradation Neutrality (LDN) in urban and peri-urban areas by contributing to a state whereby the amount and quality of land resources necessary to support ecosystem function and services remain stable or increase. The provision of support by GEF to activities addressing drivers of water insecurity is explicitly mentioned in the GEF7 Programming Directions for the Land Degradation Focal Area Strategy. Furthermore, by including selection criteria that will focus on water management, reforestation and agroforestry, the project will improve the livelihoods and decrease the vulnerability of communities and smallholder farmers living in the informal settlement areas. The project is fully aligned with the GEF?s mandate to invest in global environmental benefits from production landscapes and relates directly to the GEF?s role as a financial mechanism of the UNCCD.

141. The project is fully aligned with the GEF LD Focal Area strategy in GEF 7 to promote private sector engagement. The project is building up on private sector financed innovations and will be further harnessing private capital and expertise to finance investments in sustainable land management technologies and innovations. Furthermore, the project through the Ministry of Environment and Forestry, the Environmental Investment Fund and through private sector co-financing will provide technical assistance for smallholders.

142**. Climate Change Mitigation:** This project is also firmly aligned with the GEF Climate Change Focal Area in its focus on innovation and technology transfer for sustainable energy breakthroughs in line with the GEF 7 Objective CCM-1-4 that aims to support developing countries in making transformational shifts towards low emission and climate-resilient development pathways. This project directly supports that aim by enhancing the support for cleantech SMEs and start-ups, helping them to commercialize and scale up, and ultimately to contribute to a low emission development pathway nationally and potentially globally.

143. The project supports innovation and transfer of technology at early-stage development while focusing on innovations delivering sustainable energy solutions that control, reduce or prevent GHG emissions. In particular, since this project seeks to address challenges specific to informal settlements, more attention will be given to frugal innovations, that can have a positive impact on the lives of informal settlement dwellers. The specific technologies supported will depend on the project selection criteria for the accelerator as defined by the key national stakeholders in consideration of Namibia?s energy, climate change and land use priorities, but will be aligned with the GEF 7 programming direction priorities.

144. Specifically, this project will work with the private sector and identify locally grown cleantech innovations, support the development of marketable business models and facilitate financing for commercialization whilst at the same time strengthening the national ecosystem for innovation to foster an enabling environment for start-ups and SMEs towards investment in technology innovation. This is in line with the guidance from the UNFCCC COP23 which encouraged the GEF to further enhance engagement with the private sector and invited the GEF to support countries in piloting priority technology projects to foster innovation and investment.

145. This project in Namibia will adopt an interdisciplinary holistic approach by engaging several stakeholders such as start-ups, SMEs, ministries and government institutions (especially settlement upgrade initiatives), academia and research centres, business associations, financing institutions, foundations, venture capitalists, etc. This project will also 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.

146. Therefore, GCIP is a transversal intervention that supports all priorities of GEF 7?s Land Degradation and Climate Change focal area. The project provides much needed and best available catalytic technical assistance to cleantech SMEs and start-ups, so that they commercialize and scale-up globally and, as a result enable the creation of new industries and green jobs. Also, the project will promote synergies with other GEF Programmes to leverage more impacts.

147. UNIDO has been supporting cleantech companies in their development via GCIP since 2011. By doing so, UNIDO has uniquely fostered an ecosystem approach that supports cleantech innovations through the provision of catered tools and methodologies that enhance the productivity and competitiveness of start-ups and SMEs while promoting the establishment of a supportive policy and regulatory framework. By the end of 2017, GCIP accelerated over 865 start-ups and SMEs in 8 countries.

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

148. The request for GEF incremental funding builds up on a solid baseline of activities funded by public and private sector entities active in the project area in the fields of integrated management of land and water resources; sustainable land and forest management; and erosion control/sediment management. This project will build on the experience of the GCIP which has shown in the past 10+ years that that transformational transition to a climate positive path requires alternative technological solutions in the market. The need for alternative cleantech products and solutions in the market also present opportunities for the creation of new industries and business models, which can lead to a sustainable, low-carbon development path.

149. In this transition, the agility of SMEs affords them a comparative advantage to respond to the emerging opportunities with innovative business models and solutions. In addition, the climate and land management policies of Namibia, as well as its emerging focus on SME development, provide an opportune context to promote the private sector engagement in development and commercialization of cleantech solutions and businesses.

150. In this context, UNIDO has pioneered a new development intervention model to address environmental challenges through private sector engagement. GCIP as a flagship programme contributes to a new paradigm for a climate neutral economy, hinging on investable and market-ready business models, and engages directly with technology-based start-ups and SMEs. GCIP unlocks transformative changes in frontier markets through two main lines of intervention: 1) direct support to emerging start-ups and SMEs offering cleantech innovations (in the areas of climate change mitigation and land degradation), and 2) development of cleantech innovation and entrepreneurship ecosystems. The objective is to alleviate market and policy imperfections that prevent the emergence, deployment and scale-up of cleantech solutions in the long term. The ultimate mission of GCIP in Namibia is to contribute to climate change mitigation and sustainable land management as well as deliver other social and economic co-benefits, including job creation, gender mainstreaming, and economic growth. Notably, the GCIP interventions are designed to be sustainable, in that all necessary tools are provided to the national stakeholders, such as training materials and start-up acceleration guidelines. Suitable actors and entities are trained to further deliver acceleration services after the GCIP intervention finishes.

151. Without the GEF funding the implementation of best practices in selected landscapes and productive land will further degrade (especially though increasing soil erosion, soil fertility loss, soil organic carbon loss and pressure through competing land uses). Forest cover will continue to decrease due to the expansion of unsustainable agricultural and grazing practices, as well as agricultural land will continue to dry out, agricultural productivity will decrease and ecosystem services will continue to decline with increased vulnerability of rural livelihoods to climate variability and change. Resources will not be mobilized for the acceleration and support of local innovations.

152. With the GEF funding it is expected that through the innovations supported by this project, landscapes can be restored and can accommodate a suite of land uses including protected reserves, ecological corridors, regenerated forests, well-managed plantations and agroforestry systems (or other

agricultural systems that make use of on-farm trees). They can support livelihoods in the long term as well as biodiversity, supply clean water, reduce erosion, provide biomass fuel and produce forest products. Trees in agricultural landscapes can enhance soil fertility, conserve soil moisture and boost food production. Forests and trees can also mitigate climate change by sequestering carbon; on a large scale, restoration could reduce the concentration of carbon dioxide in the atmosphere. Since this project is focusing on both land degradation and climate change mitigation, the opportunities are often cross-sectoral, as for example restoration can help people weather the impacts of climate change, helping adapt to global warming by ensuring water supplies or reducing the impacts of catastrophic storms.

153. The private sector is key to the creation and expansion of the market for cleantech products and services, achieving GEBs, generating jobs, and supporting economic growth. In Namibia, a clear government prioritization is given to promote innovations and start-ups/SMEs and to put the necessary policies and strategies in place. However, significant barriers still exist for cleantech enterprises, leading to their very low success rate. In essence, the CIEE in Namibia is still weak, and if the GEF funding is not provided, it is very likely that cleantech innovations will not be adequately developed in Namibia in the near future.

154. This will result in many unrealized opportunities in reducing GHG emissions as well as land degradation, in strengthening partnerships with the private sector keen on investing in cleantech, in commercialization of cleantech enterprises, and ultimately in missed momentum for green economic growth and jobs.

155. As discussed in the baseline section, start-ups and SMEs with breakthrough cleantech innovations in Namibia have a low success rate due to lack of key skills and capacities to transform their innovations into viable, scalable, and fast-growing businesses. Furthermore, the CIEE in Namibia is not fully conducive and initiatives to support the entrepreneurs remain disjointed and uncoordinated. This project has been designed to learn from GCIP projects supported under GEF 5 & 6, to create opportunities for greater impact through providing well designed and proven commercialization support and investment facilitation services to expand opportunities for market growth. This project is designed to provide catalytic and effective interventions that galvanize private sector interest and investments in the cleantech innovation and entrepreneurship space and also strengthen the national CIEE and connect it at the global level. These interventions create a critical mass of interest in the cleantech sector, drive the transformation of cleantech markets and result in more cleantech start-ups and SMEs contributing to climate change mitigation, land degradation neutrality, and low-emission development.

156. The project will: a) adapt and institutionalize methodologies, guidelines, tools and training systems for the accelerator, advanced accelerator, and post-accelerator support and for mentors, judges, and trainers to be trained and certified in Namibia. This will ensure that the country will continue to run the accelerators long after the GEF project has ended; b) provide post-acceleration support and investment facilitation services so that cleantech innovators from Namibia will be able to commercialize their innovation and mobilize funding for scaling-up; c) ensure the uptake of frugal innovations into informal settlements through close cooperation between government and private sector; d) support the design and establishment of early-stage financing mechanism; e) support development of policy and regulations on entrepreneurship and cleantech innovation at national level;

f) enable participation of entrepreneurs in global events and networks such as for example investor networks; g) create bigger market opportunities for cleantech innovators to expand their businesses and hence increase their success rates and result in greater GHG emission mitigation as well as increased protection of land and soil.

157. Furthermore, through the link to the GCIP Global project, Namibia?s CIEE will benefit from cross-border connectivity and synergies with ecosystems of other GCIP partner countries, leading to new market opportunities for Namibian cleantech start-ups and SMEs to expand their businesses. One of the many incremental services that the GCIP Global provides is access to global investors. As an estimate, evidence from GCIP under GEF 5& 6 shows that some GCIP alumni were able to mobilize considerable global funding. Episome Biotech (2017 semi-finalist) from Turkey raised EUR 1.7million in investment through 3 rounds from Diffusion Capital Partners based in The Netherlands. Seyisco (Turkey) in turn raised USD 100,000.

158. The GEF funding of 1 million USD is estimated to catalyze co-financing of 5 million USD from both public and private sectors which are interested in promoting solutions for low carbon, circular economy and sustainable development that contribute to GHG emission reductions and sustainable land use practices. The project activities are regarded as opportunities for growth for start-ups and SMEs in the country. The GEF resources will be used to bring best practices and international expertise to Namibia. The project will support at least 50 entrepreneurs. In addition, through national ecosystem strengthening activities, the project will create a basis for enhancing awareness and visibility of business and investment opportunities in the cleantech sector, thereby prompting further interest and financial flows. In addition, the project will work with already existing funds, institutions and programmes, as mentioned in the baseline section, and develop targeted capacity building activities to which also experiences from other GEF projects will be brought in. By holding outreach and capacity building events in different locations, the project will enhance outreach of its activities throughout the country, while also being inclusive and engaging women and youth.

159. Namibia is requesting 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 land degradation neutrality) 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.

160. If GEF funding is not provided, it is very likely that innovative cleantech solutions will not be adequately developed in Namibia. Barriers for entrepreneurs lacking business skills will remain and supporting mechanisms to fully commercialize their products and services will not be developed. This will result in many unrealized opportunities for achieving GEBs, strengthening partnerships with the private sector keen on investing in cleantech, commercialisation of cleantech enterprises, and ultimately in a missed chance for green economic growth and jobs. Through the acceleration of innovations that target the productivity of agricultural lands as well as the restoration of productive and forest lands, this project is fully aligned with the national targets on land degradation neutrality under UNCCD.

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

161. 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, improved land management and restored land (agricultural and forest) areas. 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.

162. The project will play an important role in enhancing access to clean energy, sustainable agriculture and livelihood improvement in the selected areas in Namibia?s urban and peri-urban areas. It will also contribute to water and food security & sustainable livelihoods and creating new jobs in rural areas. Land degradation related GEBs such as areas with improved land management practices which will be achieved through the implementation of this project, will be identified and quantified on the basis of the innovations marketed and their uptake in the selected areas. As described in detail in paragraphs above, the estimation of avoided direct and indirect GHG emissions in this project is based on a review of GHG reductions that were achieved by GCIP alumni under GEF 5 & 6 as captured in the GEF IEO report. These reductions are based on three pillars of information i) a survey of 14 GCIP alumni, ii) a sample of projected avoided emissions of alumni, iii) an assessment of GHG reduction by GCIP alumni through the Mission Innovation Framework for Assessing Avoided Emissions.

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

163. 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 10 USD/tCO2e avoided is targeted (corresponding to an overall cost per ton at programme level of USD38-76/tCO2e). A target for the minimum projected potential of avoided GHG emissions per enterprise is between 1,800 to 3,600 tCO2e by 2030. The provided target range will enable the project 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.). Throughout the initial accelerator selection process and the early training on impact calculation, each entrepreneur will determine a baseline scenario for their technology.

164. To put this minimum target approach in context, a review of previous GCIP alumni GHG reductions was carried out. The review, based on three sources of information, shows that the proposed avoided emission target is plausible and quite conservative. It also demonstrates a likely variety of emission reductions due to the different country contexts and kinds of technology innovations. The review also shows that where an innovation has real market potential, the avoided GHG emissions are significant and that GCIP has experience in successfully identifying and accelerating such innovations. Firstly, a survey carried out by UNIDO of 14 of its GCIP alumni companies showed that these

companies had already generated 600,000 tCO2esavings by 2017 and projected to generate over 4.8 million tons of GHG emission savings by 2020 (or 340,000 tCO2e/year per company). Secondly, the Independent Evaluation Office (IEO) report of 8 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 but not reported 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. 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 milliontCO2e/year.

165. 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 due to reduced risk perceptions; as well as long-term emission reductions due to behavioral change of several CIEE stakeholders. 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.

166. A ten-year horizon was selected for estimating the GHG emission savings. However, assessing 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 GCIP assumed in the past abatement costs (for GEF funding) of between 0.68 USD/ton CO2e in Turkey to 29.77 USD/ton 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.

167. 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.). 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.

168. This target-based approach for the estimation of GHG emission reductions is applied across all 10 child projects under the GCIP Framework (GEF ID: 10408). The approach is also shared among the other independent stand-alone projects, such as GCIP Namibia, which will be linked to the global flamework to keep consistency. A GCIP methodology for the calculation and monitoring of GHG reduction potential is currently being developed by the GCIP Global (GEF ID: 10461) and 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. This target-based approach for the estimation of GHG emission reductions will be applied to this project. A GCIP methodology for the calculation and monitoring of GHG reduction potential will be developed by the GCIP Global in the first year of the project implementation, as well as it will be shared with the PMU in Namibia.

169. This project will be unique in its approach compared to other projects under the same programme, since it will take a cross-cutting approach to reducing GHG emissions and improving land use practices.

ii. Estimation of GEBs for GCIP Namibia (GEF ID 10989)

170. **Land Degradation:** The proposed project will generate a range of national and local benefits in the land degradation focal area. The project will support the achievement of commitments made under UNCCD, CBD, UNFCCC, as well as NDCs, by promoting the achievement of improved practices for land management and across degraded forest land and productive land that are important to meet commitments under these conventions. The project?s global environmental benefits will include: (i) improved ecosystem stability and productivity, by adopting sustainable land management practices, and subsequent protection of degraded ecosystems for enhancing their structural and functional stability, while improving the livelihood of local communities; (ii) restoration of forest and productive lands; and (iii) conservation of existing forests that could benefit biodiversity and watershed functions and ameliorate climate impacts. This proposed project will measure the above mentioned global environmental benefits with the following indicators: i) 3.1. area of degraded agricultural land restored, ii) 3.2. area of forest and forest land restored, iii) 4.3. area of landscapes under sustainable land management in production systems.

171. According to the UNCCD land degradation in arid, semi-arid, and dry sub-humid areas is a reduction or loss of the biological or economic productivity and integrity of rainfed cropland, irrigated cropland, or range, pasture, forest, and woodlands resulting from land uses or from a process or combination of processes, including processes arising from human activities and habitation patterns, such as (i) soil erosion caused by wind and/or water; (ii) deterioration of the physical, chemical, biological, or economic properties of soil; and (iii) long-term loss of natural vegetation? (UNCCD 1994, Article 1).

172. This project will support 2 different types of innovations:

a) innovations with significant CCM mitigation potential (at least 20)

b) innovations with significant LD mitigation potential (at least 20)

Type a) are innovations that significantly contribute towards core indicator 6 (reducing GHG emissions).

173. Type b) are innovations that will contribute to core indicators 3.1, 3.2 and 4.3 by offering a technological or business model innovation that will address issues related to unsustainable land management practices, deforestation and unsustainable use of water. As part of Output 3.2.1, a comprehensive methodology for calculating the core land degradation related indicators will be developed. An outline of the proposed methodology can be found below.

174. A list of previously selected GCIP beneficiaries will serve as a basis for an outline on the calculation methodology. Previous GCIP project have accelerated technological innovations in the fields of efficient water irrigation as well as agricultural business intelligence for smallholder farmers among others. GEMS in Morocco has proven to help save up to 50% of water due to a water efficiency solution for the agriculture and irrigation sector through a nano-irrigation system that significantly reduces water consumption, and also reduces operational and labour costs related to the daily management of irrigation, fertilizers and treatment, while ensuring an increase in productivity. More than 100,000 farmers in Turkey have used a platform called Tarla.io, which was supported by GCIP in 2016, offering online services informing users about the climate risks on their fields, checking historical data gathered from many data silos (weather forecasts, meteorological stations and radars) on subject field and providing hyperlocal statistics and derived insights. Precipitation, temperature, hail, thunderstorm distribution and probabilities are used for determining the operations, plant health, credit and insurance risks.

175. The average farm size of a smallholder farmer in Namibia is 3 hectares. Based on the experience from previous GCIP enterprises (i.e GEMS, tarla.io and mysmartfarm) in the agricultural sector, it can be expected that this project will directly support up to 3,300 farmers located in informal settlements and peri-urban areas. A total of 6,000 hectars are thus expected to be restored and 4,000 are expected to be under improved land management practices under the core indicators mentioned above, amounting to at least 670 hectars per supported enterprise that is directly attributable to LD (category b). The methodology developed as part of Output 3.2.1 will be closely linked to the impact criteria of the UNCCD land degradation neutrality initiative and specifically contribute to the following objectives:

-maintaining or improving the sustainable delivery of ecosystem services

-increasing the resilience of land and the populations dependent on it

-seeking synergies with other social, economic, and environmental objective

176. **Climate Change Mitigation:** The three cycles of Namibia accelerator are expected to support at least 20 enterprises with significant CCM potential. Based on the GHG calculation methodology outlined above as part of the GCIP Framework (GEF ID 10408) it can be expected that as a result the

avoided direct GHG emissions over a ten-year horizon can be estimated at between 45,000 and 90,000 tCO2e of direct GHG emission savings and 225,000 and 450,000 tCO2e of indirect GHG emission saving. The lower range has been used as input to the GEF corporate core GHG indicator target (indicator 6) as a conservative estimation. To facilitate the achievement of GEBs, there will be awareness raising and promotional activities during the call for applications to the Namibia 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.

177. As a key focus of GCIP is to identify and support cleantech innovations with high impact potential, this benchmark will guide the accelerator to take into account the GEB potential as a key criterion in accepting applications into the accelerator. Through the initial selection process and the early training on impact calculation, each enterprise will determine its baseline scenario for its technology. By delivering the training and mentoring in the main accelerator, advanced and post accelerators described in the ?Alternative Scenario?, enterprises are supported to commercialize and sell innovative cleantech products. Methodology for accounting of areas under improved management practices and areas restored:

178. To facilitate the achievement of GEBs, there will be awareness raising and promotional activities during the call for applications to the Namibia Accelerators, and the applicants will also be supported in calculating the GHG emission reduction potential of their innovations. Additional training on GHG monitoring and calculation will be provided to all semi-finalists. In addition to the substantial CO2 emissions mitigation, it is expected that other environmental co-benefits will result from this project. These are likely to include a reduction in air pollutants (e.g., NOx, SOx, PM and CO) and improved water quality. Examples from previous GCIP alumni include: waste-to-energy technology which diverts waste from landfill; a hot water (geyser) sleeve that helps households to conserve, reuse and improve water heating; a solar veranda that not only provides solar heat but also collects rain water so reducing need for water; a recyclable roof tile; biodegradable sanitary pads; and an artificial wetland providing a natural, sustainable way to improve water quality in poor communities.

g) Innovation, sustainability and potential for scaling up

Innovation:

179. The project is unique in its multi-tiered and multi-stakeholder approach to fostering the market expansion of innovative cleantech start-ups and SMEs in the areas of land degradation and climate change mitigation. In comparison with other incubator or accelerator programmes, this project does not only focus on enterprises, but also on strengthening the entire CIEE by building capacity in national institutions, developing policy roadmaps, creating strong linkages between the most relevant ecosystem players, and by raising awareness of the society at large. The project support also focuses on additional advanced accelerator and post-accelerator support, which is an innovative approach based on the stated needs of alumni.

180. Importantly, the project also 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, it enables achievement of not only environmental, but also

socio-economic benefits, in that it for example promotes gender equality and women?s empowerment. Being included under the umbrella of the GCIP Framework, this project will link the national CIEE at global level to create market opportunities for start-ups and SMEs to enable them to grow their businesses beyond the national boundaries, promoting the sharing of experiences and policy best practices to foster learning. This global 78connectivity, and the related opportunities it provides, is innovative and not being enabled by any similar projects or initiatives.

Sustainability:

181. The GCIP Namibia is designed with the view to ensuring self-sufficiency and long-term sustainability of the acceleration and coordination mechanisms established in its framework supporting innovations in both land degradation and climate change mitigation through: 1) Enhancing the capacity of the EIFN to provide the Pre-Accelerator, Accelerator, Advanced Accelerator, and Post-Accelerator services in a self-reliant manner. More specifically, while the EIFN is strongly supported in several activities by the global PEEs in the first year, the assistance is gradually phased out in the subsequent years, so as the EIFN is expected to run all activities and coordinate with relevant stakeholders fully autonomously by the end of the project; 2) Building capacity of local experts (trainers, mentors, judges), so that they are able to offer their services on market terms (independently from GCIP Namibia) to entrepreneurs not supported by the project; 3) Linking 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 Namibia; 4) Providing several tools that can be referred to and used by different CIEE stakeholders beyond the lifetime of GCIP Namibia, such as guidebooks, systems, tools, guidelines, website, etc.; 5) Guiding entrepreneurs to incorporate sustainability considerations in their business models, such as meeting the needs of the present generation without compromising the ability of the future generations to meet their own needs; as well as ensuring business resilience to external shocks and stable growth potential (through a thorough analysis of the demand, competition, etc.); 6) Facilitating early-stage investment, and thus enabling the entrepreneurs to bridge the valley of death in their scale-up journey, which in turns mitigates risks for future investors and increases chances for further rounds of finance, including commercial lending; 7) Creating the GCIP Namibia 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; 8) Working closely together with other GCIP partner countries, especially GCIP South Africa and Lesotho and thus enabling GCIP Namibia to be well established on a regional scale and to be part of a global and recognized brand that is expected to last in the future.

182. A GCIP Namibia sustainability and exit strategy will be developed based on a framework delivered by the GCIP Global, and it will among others include specific considerations related to a formal project closure process (based on targets achieved by the GCIP Namibia) and long-term sustainability of the achieved results. The impact pathways of the project are carefully selected to address key barriers and galvanize continued actions by ecosystem players so as to achieve

transformative impact in terms of GHG emissions reductions, land degradation neutrality and job and wealth creation in Namibia. The mainstreaming of affordable cleantech innovations that will continue beyond this project will ultimately result in the decoupling of economic growth from GHG emissions and land degradation.

183. The sustainability of this project is also ensured by involving public and private sector institutions and by building their 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, trainers, judges, and mentors will create a critical mass of experts with sound business and technical skills in different regions of the country. This knowledge can be easily transferred to create a virtuous cycle of enhancing the CIEE to identify and support innovations.

Scaling Up:

184. The project is implemented with close links to GCIP Global. Thanks to that, the project bears a considerable potential for local and regional networking and expansion as well as sectoral expansion through a possible shift of focus on cleantech in new areas. What is more, the stakeholders involved in the project are enabled to form international partnerships and to enter foreign markets.

185. The private sector will play an instrumental role in driving and sustaining cleantech innovation in sustainable land management, agriculture, renewable energy, energy efficiency, circular economy, etc. by providing finance and expertise. The public sector, in its attempt to improve the livelihoods of populations in underserviced peri-urban informal settlements, is expected to facilitate and support the project efforts. The project approach is premised on mobilizing economic interest by stakeholders who will sustain the interventions of beyond the life of the project.

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[4] FACT-SHEET-6-2018-Informal-settlements.pdf (nust.na)

[5] https://www.raison.com.na/sites/default/files/Informal-Settlements-in-Namibia-Book-Web.pdf

[6] Nationally Determined Contributions Registry | UNFCCC

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[8] Namibia-2014-2024-eng.pdf (unccd.int)

[9] Exploring the SME sector | Namibia Economist

[10] https://www.npc.gov.na/wp-content/uploads/2021/11/NDP5.pdf

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[13] https://www.bon.com.na/CMSTemplates/Bon/Files/bon.com.na/09/09041404-a055-4dfe-911e-e93984ea4851.pdf

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[17] Nationally Determined Contributions Registry | UNFCCC

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[20] https://www.ohchr.org/Documents/Issues/Housing/sub-nationalgovernments/201114_Response_Namibia2.pdf

[21] Vision 2030 (embnamibia.at)

[22] https://mit.gov.na/documents/41692/88507/MSME+policy+final.pdf/2094d938-c397-0813-e997-91d95a84c6da?t=1603782832841&download=true#:~:text=The%20goal%20of%20the%20MSME,and%20improved%20en%2D%20trepreneurial%20skills

[23] NAM-STI-POLICY.pdf (ncrst.na)

[24] https://ced.nust.na/

[25] Accelerator Labs | United Nations Development Programme (undp.org)

[26] Start-Up Namibia: improving the country?s start-up ecosystem (giz.de)

1b. Project Map and Coordinates

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

186. The project will include the entire country territory of Namibia. 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 and activities will be conducted in the current capital city of Windhoek. 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 with any other country?s territory.

1c. Child Project?

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

Not applicable.

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

187. UNIDO is the implementing agency of the project and, as such, it is accountable to GEF and other funding sources to be provided by the public and private sector. Inclusive stakeholder consultations, that took place during the project design period (e.g., see Annex L - Evidence of Stakeholder Engagements), 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 Namibia project. A Stakeholder Engagement Plan (SEP) was developed (Annex I) 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.

188. An overview of the stakeholders as well as their foreseen roles in the project is included below. All the stakeholders will be consulted during project execution by the relevant national executing entity, or whoever this appoints. The exact modality and timeline of engagement as well as the best way of disseminating information will be identified during project implementation.

Stakeholder	Current role in the country	Envisaged role in the GCIP Namibia
MEFT (Ministry of Environment, Forestry and Tourism)	The MEFT develops and implements the policy defined by the Head of State in terms of environmental monitoring, the fight against pollution and the protection of nature, fauna and flora.	The MEFT will be a PSC member.
EIFN (Environmental Investment Fund of Namibia)	EIFN promotes the sustainable economic development of Namibia through investment in and promotion of activities and projects that protect and maintain the natural and environmental resources of the country.	The EIFN is nominated as the PEE, and chair of the PSC. The EIFN will host the PMU.

UNIDO (United Nations Industrial Development Organisation)	UNIDO is a UN specialised agency that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.	UNIDO, as a GEF Agency, is responsible for the implementation of the project, which entails oversight of project execution to ensure that the project is carried out in accordance with agreed standards and requirements. UNIDO will also be in the PSC.
Ministry of Industrialisation and Trade (MIT)	MIT is responsible for promoting growth and development of the economy through the formulation and implementation of appropriate policies to attract investment, increase trade, develop and expand the country?s industrial base.	Potential PSC member.
Ministry of Mines and Energy (Renewable Energy/Solar Revolving Fund)	The MME formulates policies and legislations that effectively regulate activities in mining and energy sectors; generate knowledge and information on resources, and provide services to stimulate investment for sustainable economic development and benefit to all Namibians.	Potential PSC member. Potential support for beneficiaries through the Solar Revolving Fund.
Ministry of Urban and Rural Development (MURD)	The MURD coordinates and spearheads the decentralization process. The Directorate for Decentralisation Coordination of the Ministry is entrusted with the effective coordination and management of the process.	Potential PSC member.
National Planning Commission (NPC)	The NPC plans, prioritises and directs national development through effective coordination, monitoring and evaluation by providing advisory services to achieve sustainable socio-economic development.	Potential PSC member.

Ministry of Agriculture, Water and Land Reform (MAWLR)	The MAWLR develops, manages and utilizes Agriculture, Water and Forestry resources and promotes an efficient and sustainable socio-economic development for a prosperous Namibia.	Potential PSC member.
Ministry of Gender Equality, Poverty Eradication and Social Welfare (MGPESW)	The MGPESW creates and promotes sustainable socio-economic development opportunities for the attainment of gender equality and well-being of children. This Ministry is further required to ensure gender equality and equitable socio-economic development of women and men and the wellbeing of children.	Potential PSC member.
Universities in several cities throughout the country: ? UNAM ? Namibia University of Science and Technology ? Centre for Enterprise Development ? Namibia Energy Institute ? National Training Authority	Higher education institutions. Some of them have incubators and programmes focusing on innovation and clean technologies.	They would be engaged in the ?Train-the-Trainers? and capacity building activities and events by hosting some of those in their premises to allow for a wider geographical footprint of the project and engagement of neighbouring stakeholders, mostly the youth and women.

Civil Society / NGOs ? Development Workshop Namibia ? Shack Dwellers Federation of Namibia ? Housing Action Group of Namibia ? Namibia Chamber of the Environment ? Namibia Nature Foundation ? Community Conservation Fund of Namibia ? Cheetah Conservation Fund of Namibia	CSO/NGOs are a key piece of the local CIEE since they have access to local communities and rural areas.	CSO/NGOs are key stakeholders that should be approached during consultative processes to be undertaken during project execution. These types of organisations ease the connection with local communities or women communities and also have an understanding of the most common barriers and needs they face; thus, they could provide key insights to ensure that the project appropriately mainstreams and addresses both gender and vulnerable population needs.
Private sector / Investors	N.A.	The private sector will provide the financial resources required to support innovative technology into a product and market entry through the investors connect events that would be organized during implementation. Local banks would also be approached to assess the possibility of providing financing for start-ups and SMEs.

Please provide the Stakeholder Engagement Plan or equivalent assessment.

189. The Ministry of Environment, Forestry and Tourism (MEFT) has approached UNIDO with the request to deploy this project after consulting internally with relevant stakeholders from the private and public sectors as well as civil society organizations. A more detailed record of stakeholder consultations can be found in the Annex L Evidence of Stakeholder Consultations.

A full stakeholder engagement plan can found in Annex I.

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;

Member of Advisory Body; Contractor;

Co-financier;

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

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

190. 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.

191. Fostering 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.

192. 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.

193. 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 have the potential to play a critical role in contributing to the SDGs. 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.

194. A guiding principle of this 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 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. at all stages of project implementation.

195. Main findings of the gender analysis report which was undertaken as part of the PPG phase include:

- Widespread land degradation threatens food production, water availability, biodiversity and energy security. When land is degraded and usable land becomes scarce, women are uniquely and differentially affected due to their substantial role in agriculture and food production, their reliance on forests, their greater vulnerability to poverty, and their typically weaker legal protections and social status. Women constitute the bulk of people who rely on land in many of the regions of Namibia most affected by desertification, land degradation and drought. Nearly 80% of employed women report agriculture as their primary livelihood. Women are on the frontline struggle to salvage the large area of agricultural land already affected by soil degradation (52%).

- Food availability fluctuations also impact women?s role in food production and intra-family food distribution, with women often reducing their nutritional intake and that of their children, with dire health consequences. A recent survey by the Namibia Statistics Agency reiterates that the current disparities between men and women being affected by differently by climate change in the agricultural sector specifically. Women represent the largest proportion of subsistence farming households in the country. However, women are also said to have limited access to capital, productive land, knowledge and services and these factors differently decrease resilience and adaptive capacities of women.

- Livestock production is male dominated, while crop production is dominated by women who plant, weed and harvest while men are responsible for mending fences and tilling land. This is because of a cultural history among communities whereby men own and control livestock, agricultural equipment and household tools, crop produce and movable assets. Men in Namibia also make major decisions at household level. They make decisions regarding the allocation of resources required for responding to climate-change risks.

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 40% women beneficiaries).

196. UNIDO?s Guide on Gender Mainstreaming in Energy and Climate Change Projects will serve as a framework for the project implementation, as to ensure that both UNIDO and GEF requirements are fulfilled. A summary of some suggested entry points for gender mainstreaming is found below. A full list and further details are provided in the Gender Analysis Report (Annex J).

197. Women?s empowerment at all stages of the project cycle, the following recommendations are made:

? Mechanisms to ensure gender balanced representation and participation in project activities and decision-making process shall be established along with the gender-specific targets or indicators that track gender results and impact. To the greatest possible extent, a gender balanced recruitment of project personnel and gender balanced representation in project committees (e.g. the project steering committee) shall be ensured.

? UNIDO shall encourage the Namibia Project stakeholders and national experts to receive gender training (e.g., UN Women ?I know gender? courses). When relevant, project staff will have gender related tasks incorporated in their job descriptions.

? A gender expert shall be contracted by the project to assist and train the management team.

? Gender equality is key to the development of a CIEE, and therefore it shall be addressed in relevant institutional strengthening activities.

? Potential for improving gender equality shall be one of the criteria considered for selecting the Accelerator participants.

? Consideration shall be given to establishing a special award for women entrepreneurs and/or an award that promotes gender equality.

? All required efforts shall be made by the Namibia Project to attract women and to give equal opportunities for men and women to join its planned training activities, both at management and technical levels, and as entrepreneurs and experts (mentors, trainer, judges), and encourage them to participate in all relevant project activities, including decision-making activities. Women-only training courses shall be considered.

? Gender equality shall be an important component of all training activities. It is also recommended that a gender expert reviews training material and adds specific courses if needed. Specific gender training material shall be developed for investors.

? Indicators measuring the progress and impact of the project implementation (full list of indicators to be found in Annex A Project Results Framework) are sex-disaggregated and include gender focused indicators.

? A Gender Mainstreaming Strategy and Action Plan (a draft is available in the Annex J gender analysis report, and will be approved during the first PSC meeting of the project) shall be subject to regular monitoring and evaluation

Supporting Youth

198. In addition to gender dimensions, this project will support youth entrepreneurship and employment. As cleantech is a relatively new industry sector worldwide,- and at nascent stages in many countries, the entry barrier for youths is low compared to other more established markets where lack of experience may prove to be a (both actual and perceived) disadvantage. Defining the product market, sales tactics, financing options for commercialization etc. for cleantech businesses are not transferrable from other industries and therefore experience in other sectors may not necessarily be an added value. This means that youth entrepreneurs are on a level playing field with more experienced entrepreneurs. Through the training and mentoring curriculum offered within this project, youth entrepreneurs may further advance necessary business skills specific to the cleantech sector in order to strengthen their competitive advantage.

199. Youths are more likely to be interested in mission/impact driven business models, as opposed to profit driven business models. This means that the goals of this project might be attractive to youths that seek to establish businesses. For example, in GCIP Pakistan the average age of innovators was between 25 and35 years and in GCIP South Africa 33% of the semi-finalists over five years have been younger than 35 years old.

200. It is important to engage youths in the cleantech sector, as they experience environmental problems differently compared to older generations. As many cleantech solutions are developed based on personal experiences as well as depending on behavioral and lifestyle aspects, fully engaging the youth is important for ensuring comprehensiveness of approach to tackling the environmental problems. To promote application from early-stage R&D cleantech innovators, GCIP engages with universities, students and youth associations such as the SD7YC. What is more, many youth entrepreneurs are showcased in GCIP communications materials, and the public is exposed to success stories of young entrepreneurs. Seeing peers as entrepreneurs may indirectly influence other youths to also consider embarking on entrepreneurship

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; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

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

Yes
4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

201. The private sector is key to the creation and expansion of market of cleantech products and services, achievement of GEBs, generation of jobs and 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 the stakeholder interaction. In order to shift markets towards a sustainable economy there is a need for full engagement in mobilising the private sector to leverage innovation, knowledge transfer, investment and market access. In this context, it also needs to be noted that the widespread adoption and utilization of innovative cleantech has significant potential to address the serious environmental problems and risks faced globally. Cleantech innovations can fuel the next industrial revolution that will shape tomorrow?s global economy, environment, and job market. The private sector engagement is key for the success of this project and was confirmed in stakeholder consultations in the PPG phase. The project foresees several areas of interaction with the private sector, as described below.

202. 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 advanced accelerator and post-accelerator, as described before. Under the GCIP Global there will be an annual GCIP Global Forum organized as an integral part of efforts to ensure connectivity between CIEEs. The GCIP Global Forum will bring selected participants of national GCIPs 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 Global 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 Global 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, Global LDN Forum, Cleantech Group forums, etc.

203. The SMEs/start-ups are supposed to play a vital role in catalysing breakthrough cleantech innovations. SMEs/start-ups are well positioned to participate in future cleantech markets. They are instrumental (but often underrecognized) in furthering growth, innovation, and development. Coupled with a growing cleantech sector, they can help build prosperity in low- and middle-income countries. It is estimated that SMEs make up over 90% of cleantech entrepreneurial endeavours in most countries. Nevertheless, failure rates are high, capital requirements are a barrier, reliance on government policy is a risk, and the technical and commercial capacity required of cleantech SMEs can be a challenge. Despite opportunities for SMEs in cleantech markets, many businesses still fail. While there are no definitive statistics on cleantech SMEs failure rates, they can be estimated as comparable to those in the ICT and biotech sectors (80-90% failure rates).

204. Next to working closely with start-ups/SMEs, there will be corporate partnerships formed to connect the project 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. In addition, as part of the GCIP

Framework, the national PEEs might receive membership in the Network for Global Innovation for the duration of the project. This will provide them with access to international best practices and with opportunities to build cross-border connections with partners in additional countries, including private sector stakeholders. In the case of Namibia, a special focus will be given to private sector stakeholders from the agricultural sector such as the Namibian Agricultural Trade Forum (ATF), which is the association of the leading stakeholders in the Namibian agricultural sector, including producers and processor organisations along the entire agricultural value chain and marketing boards. Through close consultations during the project implementation phase, the ATF can serve as a source of information on technology demand as well as joint venture opportunities. Furthermore the list of industry associations listed in the table above are expected to further inform the project approach specifically applied to the Namibian context and to the areas of land degradation and climate change mitigation.

205. The project will also partner with corporations that seek to identify and invest in innovative cleantech. More specifically, the Global Innovation Challenge will connect selected corporations ? looking for concrete demand-driven solutions ? with GCIP entrepreneurs. Moreover, the private sector is a key source of co-financing, thus the project will work together with financing institutions, venture capitalists, and angel investors that seek to invest in cleantech solutions. More specifically, Investor Connect events, National Forums and Global Forums will be organized to connect potential financiers (public, private, national, regional, global) with entrepreneurs and to facilitate investments. What is more, the project will provide pre-seed and seed financing to selected SMEs and start-ups (disbursed in the framework of the financing mechanism to be designed, validated, and operationalized), which will have a leverage effect, i.e. additional private finance will be crowded in and de-risked.

206. The project will also cooperate with industry and business associations and the to leverage their know-how, capital and interest in cleantech innovations, as well as to build their capacity. In addition, industry experts will be engaged as mentors, trainers, and judges to support the accelerator.

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):

Identified Risks	Risk rating	Mitigation Measures
Lack of commitment shown by entrepreneurs to take part in the post-competition support and/or Alumni Network	Low	Based on the high growth rate of start-ups/SMEs in the country, it can be concluded that there is a high level of commitment shown by entrepreneurs to progress and move their businesses to a marketable proposition.

Lack of interest and involvement by government/institutional partners to improve existing ecosystem	Low	Namibia stipulated in numerous strategies on sustainable development initiatives to demonstrate a clear interest of governmental institutions to promote climate change mitigation and sustainable land management practices in core sectors of critical importance.
Incentive and financial support are insufficient	Medium	Due to the COVID-19 crisis, the financial support might be slightly hampered as a result of economic restrictions and less active international economic cooperation.
Climate change	Low	In order to mitigate any potential climate change risks to project activity sites, the project will include criteria related to such risks, and if a risk is identified, develop a mitigation strategy before implementation begins.
Lack of absorptive capacity by the national counterpart	Low	The project is in line with national policies and will thus be executed in close coordination with respective ministries and key stakeholders.
Lack of effective coordination between various project partners	Low	The Project Steering Committee (PSC) will ensure effective coordination and collaboration among project partners and key stakeholders.
Low success rate of new innovative cleantech businesses	Medium	Linkages to other financing schemes for clean energy technology promotion and innovation programmes will be established as early as possible. The establishment of the financing mechanism will be of the high priority.
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 Report was prepared and conclusions resulting from it were incorporated into the project design. Specific gender risks include low participation of women in project related activities and a lack of interest/resistance by stakeholders to promote GEEW.

Climate Change Risks

207. Namibia is one of the most vulnerable countries to climate change due to its geographical location, economic structure, and lifestyle. The effects of climate change are increasing the risk and burden on economic sectors that are highly dependent on nature, causing drought and degradation of soil and agricultural land, for example due to the invasion of bush species. The total annual rainfall is projected to decrease across the country, which might result in the increasing expansion of the hyper-arid zone into the arid south, and the loss of land suitable for rain-fed agriculture and livestock grazing.

208. Climate warming is adversely affecting water resources through intensive evaporation. High solar radiation, low humidity, and high temperature lead to very high evaporation rates which vary between 3,800 mm per annum in the south to 2,600 mm per annum in the north. Over most of the country, potential evaporation has been at least five times greater than average rainfall, which is further increased by rising temperatures due to global warming. Since the 1960s, increased mean, maximum and minimum temperatures have been observed, with a more rapid increase in nighttime. Warming in Namibia has been higher than the global average. There have been significant increases in the frequency of days with maximum temperatures above 25?C and 35?C, with decreases in the frequency of days with minimum temperatures below 5?C.

209. This has adverse effects on livestock, agriculture, infrastructure, construction industry, and human health, which are largely dependent on nature and climate. About 70% of Namibia?s area is livestock production land and it is at risk of desertification and degradation.[1] In addition to climate change, desertification and land degradation is exacerbated by human factors such as pasture capacity overload, wasteful use of land in farming, mining and infrastructure sectors, use of outdated technology, creation of many informal roads and unplanned urban expansion. According to desertification assessments conducted, in some areas (Ondangwa) stocking density exceeds carrying capacity by over 40%. Soil degradation is considered an increasing problem, caused by erosion from wind and water, and associated with declining fertility and loss of organic matter. However, soil health is not systematically monitored throughout Namibia. Impoverished soils and cases of soil compaction have been identified in northern Namibia due to dryland cropping over many years with limited nutrient inputs or soil fertility management under subsistence agriculture and through unsuitable tillage methods.

210. Extreme droughts and heavy rainfalls, increase in livestock loss and decline in livelihoods are expected to especially adversely affect small-holder farmers and people living in informal settlements in peri-urban areas. The improper use of arable land is one key factor influencing the increase of desertification and damage to soil fertility and moisture, which is a precious resource formed over thousands of years. Inappropriate drought aid (particularly the expansion of poorly planned permanent water points and fodder subsidies) contributed to overstocking, especially during drought periods when it was warranted to reduce livestock numbers in order to relieve pressure on the land.

211. Researchers say that 49% of degradation is caused by human activity and 51% by natural factors. Future climate projections indicate the likely increase of intensity of droughts and heavy rainfalls. What is

more, the phenomenon of bush encroachment is particularly prevalent in the central and eastern parts of Otjozondjupa and Omaheke where intensive commercial cattle farming predominates ? and where the density of plants varies between 2,500 and 10,000 bushes per hectare, and hence is considered ?encroached?. Bush encroachment is believed to be a result of a number of complex interacting factors such as overgrazing and reduced browsing in favor of cattle production, exclusion of veld fires, and climatic and soil moisture conditions caused by prolonged droughts. Overall, it is estimated that around 26 million hectares of land are affected.

212. Deforestation poses a serious threat to habitats, reducing capacity for carbon sequestration, as well as hydrological and nutrient cycling functions. It is most prevalent in the North and North Central regions and is largely due to unsustainable uses of trees to build houses and provide fuel, clearing of land for dry-land cropping, and unsuitable fire management. It is estimated that wood is the primary energy source for at least 60% of Namibia?s population. Several studies reveal that for example in the Zambezi Region, 96% of all households use wood for fuel and 80% of all dwellings are made from wood.

Observed and projected temperature changes

213. Very high rates of historical warming are reported in Namibia?s Fourth National Communication to the UNFCCC. Between 1901 and 2016 average temperatures rose by 1.4?C. As would be expected, this rise has been associated with a decline in frost days and an increase in hot summer days. Research has suggested that temperature trends can vary locally, influenced by altitude and by biome (i.e. the type of land cover).

Precipitation trends

214. Unlike temperature, there are no obvious trends in precipitation during the reference period. However, the majority of models predict that Namibia will become drier, that rainfall variability will likely increase, and that extreme events such as droughts and floods are likely to become more frequent and intense. With regards to precipitation, mid-century, and end-century projections respectively show, with low confidence, a 7% and 14%, reduction from the baseline period. While most zones will have increasing strong rainfall events, the hyper-arid zone will either have the smallest increase or experience decreases. In terms of the amount of rain falling within extremely heavy events, the zones will experience an increase of 15% but this will be reduced to increases of 3% by 3?C.

Water Resources

215. Namibia [2] relies on dams, ephemeral rivers and aquifers for its water supply. These water resources are supplemented to a limited extent by unconventional sources such as reclaimed water and desalination. The absence of perennial rivers in Namibia?s interior means that the country is reliant on rainfall as its natural water source. The semi-arid climate over most of the country coupled with high evaporation rates make the country one with a net water deficit (mean annual rainfall minus potential evaporation). The drivers of climate risks and vulnerabilities in the water sector are well known, namely i) Escalating financial/economic costs of supplying adequate water to agriculture (mainly crop irrigation), mining/industry, commerce, and an expanding, urbanizing population; ii) Increasing concentrations of pollution which threaten the quality of diminishing water supplies; iii) Increasing water scarcity and

competition with neighboring countries for available water; iv) Environmental damage resulting from the unsustainable removal of water from underground aquifers; v) Increasing water demand and water pollution by irrigation schemes. Temperature increases will lead to an increase in evapotranspiration in Namibia placing considerable strain on water by reducing soil water, groundwater and surface water availability. Global temperature increases of 1.5?C and 2?C will result in 10-14% more evaporation in the country, with further increases of up to 20% by 3?C.

Health

216. Climate change is one of causes of infant and adult mortality. The following are the observed/projected climate change risk and vulnerabilities in the health sector: i) Higher rainfall in areas that were previously not used to receive these amounts will increase populations of disease-carrying insects in these areas; ii) Flood incidences, whose frequency is increasing, are usually accompanied by outbreaks of water-borne diseases and infections, such as cholera and diarrhea; iii) Higher temperatures are likely to increase mortality among the elderly, infants and others whose health is already poor, and also increase the incidences of disease epidemics that are linked to high temperature; iv) Drought decreases the nutritional status and the availability of clean water. Reduced safe water provision and secure nutrition would increase the rate of respiratory and gastrointestinal infections and other water-borne diseases.

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 cleantech innovation for large-scale deployment and green job creation ? Implement national cleantech innovation competition-based accelerators	? Participation at events due to heat stress/flooding ? Cleantech supported increase the likelihood of adverse effects that exacerbate climate risk ? Failure of businesses supported	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-on-one meetings also possible. ? To safeguard against climate change risks the screening of cleantech 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 entrepreneur to propose suitable adaptation or management measures. ? GIZ?s Climate Expert Tool[1][1] could be used as a tool by entrepreneurs. Once selected, the cleantech will continue to be reviewed against local climate risks.
? 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	? New categories of cleantech might be introduced to address some of the prevailing climate risks. ? Connectivity of ecosystems and greater opportunities for scaling-up of innovations will be facilitated across different countries through GCIP Global. ? Awareness of PMUs to assess climate risk on an annual basis will be raised. ? Impact tracking and monitoring of climate risk profile will be conducted 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 actors that can lead and guide policy and business decisions in the cleantech space	? Human and political resources and stakeholder attention diverted to disaster and resilience measures	Low	? Visibility, credibility and understanding of identified solutions by the local political community will be enhanced through the stakeholder engagement plan and communications plan. ? Policy roadmaps that anticipate the effects of possible climate risk factors will be developed. ? Through GCIP Global knowledge and experience sharing will be facilitated on how to anticipate and mitigate the risks identified.
? Develop, scale up and deploy cleantech innovations	? Floods and droughts endangering cleantech development, deployment and scale-up	Low	? Thanks to availability of domestic Early Warning Systems, cleantech entrepreneurs will be able to avoid severe risks to the development, deployment and scale-up of their products and services.

COVID-19 Risk Analysis

Risk	Rating	Mitigation
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	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	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.

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 information on them will be shared with the Namibian 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-innovato rs-take-covid-19.
New business opportunities to build back better for business continuity and economic recovery post-COVID-19	High	By design, this project 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 acceleration curriculum so that the entrepreneurs are fully informed of the market and policy trends.

[1] Namibia-2014-2024-eng.pdf (unccd.int)

[2] ASSAR_Namibia_global_warming.pdf (uct.ac.za)

[3] https://www.climate-expert.org/en/home/

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.

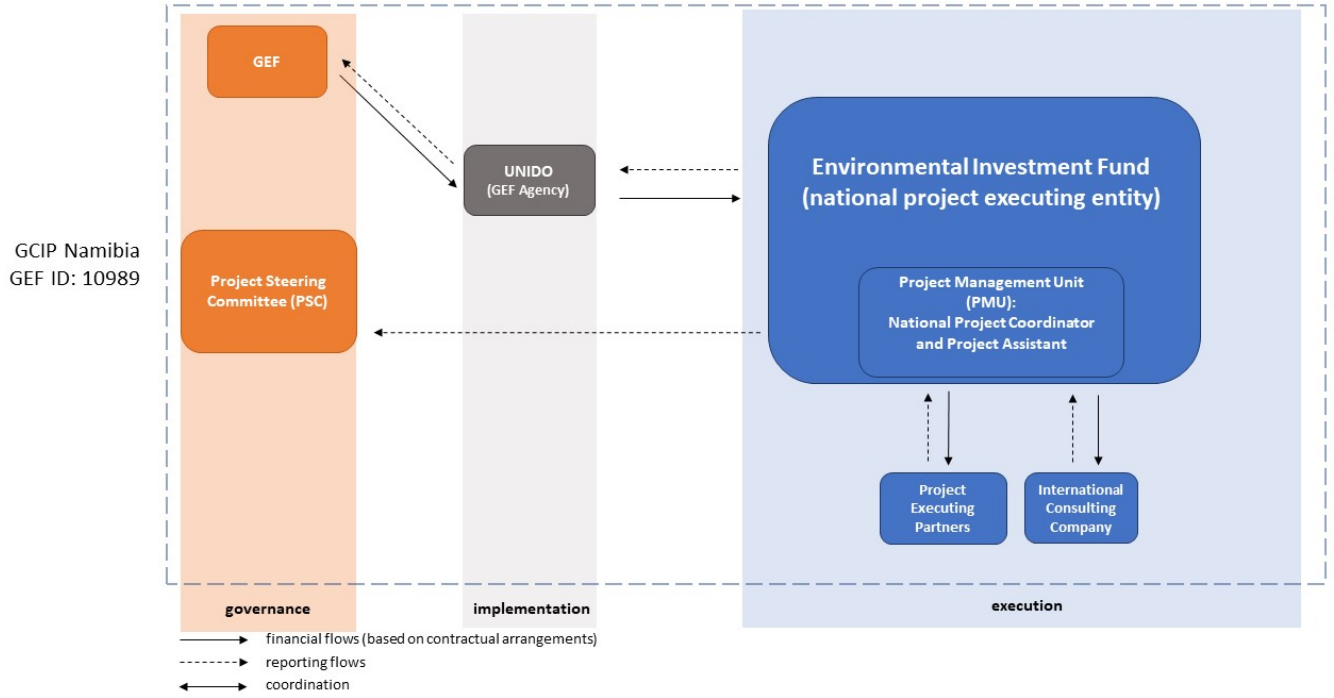

Figure 5: Project implementation arrangement

217. This project will be implemented by UNIDO. The Environmental Investment Fund of Namibia (EIFN) was selected as the national PEE by the GEF OFP. This was further confirmed by a HACT assessment. The implementation function lies with the designated UNIDO Project Manager in UNIDO?s Climate Technology and Innovation Division in the Department of Energy. UNIDO will not be supporting any executing functions. This project will be implemented in close links with the approved GEF program entitled ?Global Cleantech Innovation Programme (GCIP) to Accelerate the Uptake and Investments in Innovative Cleantech Solutions? GEF ID 10408. This means that the Namibia project may benefit from the guidelines, tools and methodologies developed from programme 10408.

218. The UNIDO Project Manager is responsible for designing the execution arrangement with the national PEE including the terms of reference and schedule of payments. The UNIDO Project Manager manages the sub-contract and releases the payment tranches when satisfactory delivery is achieved by the PEE according to the execution agreement.

Execution

219. The national PEE will designate internally, or recruit directly, project management personnel to form the Project Management Unit (PMU). The PMU will consist of the National Project Technical Expert and Coordinator (NPTEC) and a National Project Administration Assistant (NPAA). The PMU will be responsible for the day-to-day management of project execution according to the agreed workplan. The PMU will also coordinate all project activities being carried out by project national experts and partners[1].

220. In addition, the national PEE will sub-contract qualified service providers for the execution of certain additional activities. An open and competitive process will be used to select service providers. What is more, the PEE will be executing a number of activities with the support of an ICC as described in the project activities and the project budget.

In terms of reporting, the national PEE is responsible for providing the following reports with the support of the PMU:

? Half-yearly progress and financial reports

? Half-yearly workplan tracking, updates and budgeting

? Annual progress reports

? Periodic thematic reports (as and when required by UNIDO)

? Technical reports (as prepared by engaged experts/sub-consultants)

? Project publications (as prepared by engaged experts/sub-consultants)

221. The PEE provides all related information to the evaluation experts for any mid-term review and final evaluations. Project management will be funded in part by the GEF budget as well as in-kind funding and co-financing from the project counterparts. During the implementation period of the project, UNIDO will provide the PMU with the necessary management and monitoring support. Amendments to the project scope will be undertaken in line with the criteria and procedures established in the GEF/C.39/Inf.

Project Steering Committee

222. To ensure proper oversight and government and institutional ownership of the Project, a Project Steering Committee (PSC) will be established under the Chairmanship of the GEF Focal Point. Representatives from institutions involved in the different project components will be members of the PSC. The PSC is set up to provide advisory inputs for the project. The PSC will meet twice per year to review the project implementation and execution progress and confirm the workplan for the subsequent year. Any changes/amendments proposed to the project and/or 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 the PSC Chairperson(s) and UNIDO.

223. The national PEE forms the secretariat of and reports to the PSC on the progress of the project. The national PEE is not a voting member of the PSC.

Transfer of assets:

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

Legal Context:

225. ?The Government of the Republic of Namibia 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 on 22 March 1990.?

Coordination with other relevant GEF-financed projects and other initiatives:

226. The project will benefit from robust linkages with GCIP Global, as well as several methodologies, guidelines, tools for acceleration, and training systems. These will be developed and harmonized at the global level and the project will focus on adapting these to the national circumstances. Furthermore the PEE will receive appropriate training on the adaptation of guidelines and tools by a ICC, further benefiting knowledge management and allowing for the collection of lessons learned. Experiences in applying the tools and systems across other national projects will be used to improve them.

227. Through GCIP Global, national cleantech start-ups and SMEs will be supported to expand their businesses to other countries. In addition, investment facilitation services will be provided to national enterprises so that they can be linked to investors (impact, venture, angels, and commercial) in EU and globally. Furthermore, GCIP Global will provide support in establishing market enabling frameworks to promote investments in cleantech.

228. GCIP Global will also provide methodologies for training of national institutions and guide the development of policies on cleantech innovation and entrepreneurship. By linking policy makers, institutions, financiers and entrepreneurs across countries, GCIP Global will facilitate knowledge exchange and documentation of best- practices as well as peer-to-peer networking and learning. What is more, GCIP Global will develop programme guidelines as well as a global web platform, communications and advocacy materials, and methodologies for impact tracking and monitoring and evaluation. The project will also seek to collaborate with the UNFCCC Climate Technology Centre Network (CTCN) and the Private Financing and Advisory Network (PFAN) which are initiatives co-hosted by UNIDO that are specialized in technology transfer and investment facilitation.

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[1] Following the assessment and the approval of the PEE, collaboration between UNIDO and PEE will be based on the Project Execution Agreement (the ?Agreement?). The Agreement defines the respective responsibilities of the PEE, including but not limited to activities, deliverables, financial, personnel, procurement and asset management components, as well as the reporting schedule and format. The Agreement also includes UNIDO?s privileges and immunities, disbursement conditions, monitoring and evaluation requirements, as well as record keeping and audit standards

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.

-National Development Plan

- National Action Programme (NAP) under UNCCD
- National Biodiversity Strategies and Action Plan
- National Communications (NC) under UNFCCC
- National Action Programme to Combat Desertification
- Nationally Determined Contributions (NDC)
- Harambee Prosperity Plan II
- Vision 2030
- National Climate Change Strategy & Action Plan 2013-2020
- National Renewable Energy Policy (2005-2020)
- National Waste Management Regulations (2011)
- National Agriculture Policy (2015)
- National Forest Policy
- National Housing Policy
- National Policy on Micro, Small and Medium Enterprises in Namibia (2016-2021)
- National Science, Technology and Innovation Policy (NSTIP) (2020-2030)
- National Action Plan (NAP3)
- National Drought Policy and Strategy (1997)
- NAPCOD (1994-2005)
- Country Pilot Partnership Programme (2007- 2012)

Climate Change Mitigation:

229. Particularly, this project is in line with the goals set within Namibia?s Development Plan and Vision 2030 which seeks to achieve a high level of sustainable and inclusive growth, focusing on the preservation of the environment and the promotion of a green economy as well as on mobilizing financing and creating

green jobs. It further builds on the need to reduce the degradation of national resources, while reinforcing institutional capacities and technologies as to improve the awareness on environmental safeguarding. Furthermore, the strategy seeks to increase the integration of renewable energy into the national energy mix, as to lower the dependency on fossil fuel for power generation and on energy imports. Equally, the framework underlines the need to promote energy efficiency initiatives in commercial buildings. Aligned with the Vision 2030, this project will support the identification, upscale and commercialization of innovations that will contribute towards the increased integration of renewable energy and energy efficiency appliances in Namibia.

230. This project is also well aligned with the principles of the National Policy on SMEs in Namibia. Equally, it is in line with National Renewable Energy Policy that seeks to build energy security of the country, assure sustainability of the energy sector development and create the basis for enhanced deployment of renewables like solar and wind energy, biomass, liquid or gaseous, thermo energy, fuel cells, and others, as well as to strengthen the policies on energy supply in the future.

231. Through the Vision 2030, Namibia seeks to promote employment, develop entrepreneurial skills, and improve the competitiveness of SMEs. This project will support the related policy measures, by assisting cleantech innovation start-ups and SMEs in their commercialization and scale-up as to reach market maturity.

Land Degradation:

232. LD has been recognized as a major challenge in Namibia before and after independence. The Nature Conservation Ordinance of 1975 (replaced by the Nature Conservation Amendment Act of 1996) was one of the major laws used in Namibia to prevent various forms of land degradation before independence. Namibia launched the Green Plan in 1992 as a national framework for achieving sustainable development. The plan addressed desertification and land degradation and it identified actions to be taken by government, civil society organizations, the private sector and individuals to ensure sustainable development in Namibia. Today, the Green Plan of 1992 is used as the founding document for the EIFN, which was launched in 2012 with the aim of supporting and promoting investments in Namibia?s environmental and natural resources. The NAP3 is one of the latest national strategic documents being used to guide actions that will help prevent land degradation. The national LDN report of 2015 supports the NAP3 and provides specific LDN related targets to make Namibia land degradation neutral by 2030. The UNCCD supported LDN assessment of 2015 and current LDN programmes as well as the GIZ supported LDN pilot project have all supported the implementation of the NAP3 and the progress towards the achievement of LDN in Namibia.

233. The project is consistent with Namibia's NAP3, since it seeks to address the main drivers of land degradation and desertification that are identified by the action plan such as poverty, unsustainable use of water resources, inadequate capacity, weak financing mechanisms for sustainable land management etc. By supporting entrepreneurs that focus on innovations targeting land degradation, this project not only seeks to provide additional jobs, but also improve the unsustainable use of water resources in the agriculture sector specifically. What is more, the financing mechanism under Output 1.2.4 is expected to attract financing for sustainable land management and land restoration.

234. The project also well complements the National Agriculture Policy in its approach to support innovative technologies to combat diverse issues in the agriculture and livestock farming sector. Further, this project will support the implementation of Namibia? NDCs which aim at conditionally reducing GHG emissions in energy, construction, transport, agriculture, industry and waste.

235. The project?s focus on innovative cleantech and supporting SMEs and start-ups is line with, and complements, many of the national priorities of Namibia as well as those of UNIDO. The project will also invest in the establishment of comprehensive policy frameworks and in the creation of an extensive network of cleantech entrepreneurs.

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.

236. Knowledge management and exchange at the global level is a key strength of the GCIP Framework design. UNIDO has been facilitating information and knowledge exchange among GCIP PMUs and GCIP supported entrepreneurs across borders since 2013, and this dimension has proven to be of benefit to all stakeholders. The premise of this project is built upon stakeholder consultations and the conclusions and recommendations from the previous terminal evaluations and ongoing experiences of the GEF5/6GCIP projects as well as the findings and recommendations of the GEF IEO independent thematic evaluation of GCIP (such as in particular: more focus on investor outreach and connecting with investor networks, improved cross-country coordination and system to ensure coherence and quality, advanced business-support for SMEs post GCIP acceleration, an increased focus on policy strengthening and regulatory frameworks to foster cleantech innovation, knowledge exchange between national executing agencies and government counterparts, improved monitoring and evaluation of impact).

237. A key tool for knowledge management will be the online web platform, used primarily by the PEE to collect data associated with the accelerator. This will naturally create a community of the participating enterprises, trainers, judges, and mentors, and foster continuous exchanges in the GCIP community as well as enable archiving of all project deliverables. The web platform will also serve as a depository and dissemination tool for all knowledge products generated and collected through the project. All knowledge management material will be gender responsive. For instance, gender responsive training and advocacy material will not perpetuate gender stereotypes through presenting women only in their traditional roles.

238. The project will also benefit from and contribute to the GCIP-wide knowledge management efforts. Under GCIP Global a ?knowledge management, communication and it as appropriate. In particular, the following key elements of knowledge management are relevant: overview of existing lessons and best practice that inform the project design and activities; plans to learn from relevant projects, programs, initiatives & evaluations; processes to capture, assess and document info, lessons, best practice & expertise generated during project execution/implementation; tools and methods for knowledge exchange, learning & collaboration, including knowledge platforms and websites; knowledge products to be published and shared with stakeholders; how knowledge and learning will contribute to overall programme impact and sustainability; thought leadership strategy for cleantech enterprise development and investing (publication of opinion pieces, policy briefs etc.); content strategy for social media platforms to raise visibility of the

project?s impacts and knowledge projects. In addition, project key stakeholders in Namibia will be invited to benefit from all GCIP-wide knowledge management and exchange activities and initiatives. Through GCIP-wide trainings, workshops, roundtables and knowledge products, each partner country, including Namibia, will have opportunities to learn as well as share lessons and experiences.

Plans to learn from relevant projects in Namibia:

239. As described within the section on baseline projects, lessons learned will be incorporated from successfully completed and ongoing projects. This project in Namibia will interact with various stakeholders and projects, including start-up/SME support initiatives such as accelerators/incubator programs (Land Accelerator, Start-up Namibia, UNDP Accelerator Labs initiative), financial and non-financial institutions, local start-ups/SMEs to better understand the needs and leverage the potential of cleantech in Namibia.

240. This project will build on experiences learnt through the recently ongoing UNIDO project ?promoting sustainable bush-processing value chains in Namibia?, especially how strengthening important sources of food and income through reducing land degradation can improve the livelihoods of the local population.Lessons can also be learnt from the ongoing GIZ project ?Business Scouts for Development 2021-2023? on how to best utilise synergies within networks, and to assess needs of businesses and cooperation partners.

Proposed processes to capture, assess and document information, lessons, best practice & expertise generated during implementation:

241. Knowledge capture, assessment and documenting will be a continuous effort during project implementation. Through the various monitoring and reporting exercises, bi-annually and annually i.e. progress reports, PIRs, MTR and TE, the lessons learned, best examples, recommendations, etc. will be recorded. Best practice processes and examples are to be shared through annual meetings of the country PMUs with UNIDO and the global PEEs.

Proposed tools and methods for knowledge exchange, learning & collaboration:

242. This project will be assigned a section on the global GCIP web platform, where country-specific project information, press releases, relevant news articles, social media posts, relevant studies and alumni profiles will be made available and maintained by the PMU throughout the project?s lifetime and beyond. This will also allow for UNIDO and the country PMU to track alumni progress as well as for alumni to share experiences and continuously foster their network. The establishment of the National and Global Alumni Networks will be a key mechanism for knowledge sharing in this project.

243. Knowledge sharing will be conducted through trainings, workshops, roundtable discussions, printed materials and through the GCIP web platform at global and national levels. The combined set of outreach activities will ensure recognition of and support for this project.

244. GCIP guidebooks and methodologies will be adapted for Namibia. This includes training and certification of cleantech experts, supported through the development of methodologies, tools and training

materials. They will guide the operation and management of the acceleration, advanced acceleration and post-acceleration in Namibia, and will include proposed schedules; eligibility requirements and selection criteria for the participants; competition rules; training curricula and handbooks for applicants, experts (mentors, trainers and judges).

245. Moreover, at the global programme level, monitoring and evaluation frameworks, knowledge management, communication and advocacy strategy frameworks and well as impact calculation methodologies will be developed and shared, as a blueprint for the development of country-specific strategies.

246. Knowledge sharing and learning are key aspects of this project. From training the trainers, to providing support to cleantech innovators, throughout the pre-accelerator, accelerator, advanced accelerator and post accelerator, as well as through providing technology verification and product development support services to ease the potential market entry of cleantech products ? this project?s impact is dependent on successful knowledge sharing and learning that will be provided to its beneficiaries.

247. The knowledge and learning will contribute to the overall impact and sustainability in the following ways: a) the dissemination of relevant documents, e.g. operational guidelines, guidebooks for impact determination, and frameworks, the PMU is empowered to strengthen their project management capabilities; b) through the web platform and the adoption of international best practice communications and sustainability strategies, the community at national levels, e.g. investors, enterprises, alumni, and experts, will be maintained locally; the continued connectivity in-country and across borders broadens market entry and financing opportunities for cleantech; c) by providing a knowledge depository for the general public (all relevant knowledge, communication, and advocacy materials will be available on the website), the brand, lessons and successes encourage further innovation in cleantech and enhance consumer awareness.

248. The communications strategy will include the development of awareness raising and marketing materials for a wider public, entrepreneurs, investors, and government officials. They will include briefing sessions, press releases, social media activity, attendance at events, etc. The table below provides a general overview of deliverables relevant for knowledge management.

Overview of deliverables relevant for knowledge management:

Deliverable	**Timeline**
A pool of experts (trainers, mentors, judges) created.	Intensive focus for year 1-2 of project implementation/execution with regular updates after every six months.

The knowledge management, communication, and advocacy strategy framework reviewed and adapted to Namibia; including regular online trainings that are gender sensitive and actively seek participation from women.	Integrated throughout the project, with intensive focus in the second quarter of every implementation 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 Namibia knowledge management, communication, and advocacy strategy.	Intensive focus for year 1-2 of project implementation/execution with regular updates after every six months.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

249. 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.

250. According to the M&E policy of the GEF and UNIDO, follow-up studies such as 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.

251. 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.

252. There will be a GCIP M&E framework provided by the GCIP Global, based on which EIFN will prepare a GCIP Namibia M&E plan, including timebound milestones and deliverables. EIFN will also draft progress review reports every six months. EIFN will also regularly collaborate on the preparation of the annual PIRs. There will be an external mid-term review of the project conducted half way through project implementation. The ESSPP considerations, as well as gender dimensions and baseline for gender related targets (in line with the Gender Analysis Report, Gender Mainstreaming Action Plan, Stakeholder Engagement Plan, and Environmental and Social Management Plan) will be appropriately captured in the

GCIP Namibia M&E plan, in the progress review reports, as well as in the collection and assessment of relevant data.

253. The GCIP methodology for impact assessment will be developed by the GCIP Global and shared with the Namibia 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, land restored, additional renewable capacity installed, job creation, gender mainstreaming, and investment leveraged. The data will be gender-disaggregated and gender-sensitive, and youth participation will also be recorded.

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

M&E Activity	Timeframe	GEF Budget (USD)	UNIDO in-kind co-financing (USD)	EIFN in-kind co-financing (USD)	Responsible Parties
M&E plan	first 3 months after implementation start	2,000	10,000	10,000	EIFN
Periodic progress reports	6-monthly	6,000	10,000	10,000	EIFN
Mid-term review	at 1.5 years	8,000	10,000	20,000	External evaluator, submission to UNIDO
Independent terminal evaluation	started six months prior to the expected completion date of the project	24,000	10,000	20,000	External evaluator, submission to UNIDO
	Total	40,000	40,000	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)?

254. 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 Namibia. The GCIP Namibia, 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. The project is expected to create 40-50 new jobs. 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. It is noteworthy to underline that so far around 84% of start-ups and SMEs, that have completed the GCIP acceleration program globally, have remained in business for minimum of five years. Finally, the increased use of cleantech innovations supported by the GCIP Namibia will also result in GHG emission reductions, restored land and improved land management practices.

255. The GCIP Namibia 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 Namibia will provide opportunities for international business scale-up and exchange of knowledge.

The project is expected to benefit 315 women and 585 men.

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	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.

Please see Annex K Environmental and Social Management Plan (ESMP).

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
Annex E Namibia Budget - 061223	**CEO Endorsement ESS**	
Terms of Reference of the National Project Technical Expert and Coordinator - Namibia	**CEO Endorsement ESS**	
ToR Project Assitant	**CEO Endorsement ESS**	
10989_Annex K_ESMP_GCIP Namibia	**CEO Endorsement ESS**	
10989_ES_Screening_Template_GCIP_Namibia-Corrected	**Project PIF ESS**	
ES_Screening_Template_UNIDO_GCIP_Namibia	**Project PIF 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/Indicator[1]	Base-line	Target (for the entire project duration)	Means of Verification	Assumptions
Objective Promote the acceleration of high-impact clean technology innovation for large-scale deployment and green job creation	USD mln investment leveraged	0	4	Project progress reports Project evaluation reports Project impact reports	Continuous support from the Government of Namibia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs and investors
	number of enterprises with economic gains (sales, savings) (gender-disaggregated)	0	30-45 (at least 40% women-led)		
	number of additional jobs created or retained (gender-disaggregated)	0	40-50 (at least 40% women)		
	number of enterprises with an increase in exports (gender-disaggregated)	0	5-10		
	number of SMEs with increased inclusion in value chains (gender-disaggregated)	0	10-15		
	CO2eq emissions reduced (tons) directly and indirectly	0	at least 45,000 (directly) and at least 225,000 (indirectly)		
		0	6000		
	Area (hectars) of landscape under improved practices	0	4000		
	MW added generation capacity	0	n/a[2][2]		
	cumulative improved energy efficiency	0			
	number of new technologies adopted	0	15		

	Number of technologies adopted mainly benefiting women	0	2		
Component 1 Transforming early-stage innovative cleantech solutions into commercial enterprises					
Outcome 1.1 Early-stage cleantech innovations are accelerated					
Output 1.1.1 The GCIP guidebooks are adapted for the GCIP Namibia	number of suggestions for improvement of the GCIP guidebooks	0	5-10	Project progress reports Attendance records from consultation meetings Meeting minutes	Continuous support from the Government of Namibia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	number of GCIP Namibia guidebooks for Accelerator, Advanced Accelerator, and Post-Accelerator	0	3 (1 for Accelerator, 1 for Advanced Accelerator, 1 for Post-Accelerator)		
	number of consultation sessions on GCIP Namibia guidebooks with relevant CIEE stakeholders	0	2 (at least 40% women)		
	number of stakeholders with whom the GCIP Namibia guidebooks shared	0	185 (at least 40% women)		
	number of assessment reports on the landscape and capacities of potential GCIP Namibia applicants and experts	0	2 (1 on applicants and 1 on experts)		
	number on annual calendars of all planned GCIP Namibia events	0	3		
	number of corporate partners with interest to participate in the National Innovation Challenge identified	0	3-7		

Output 1.1.2. Pool of cleantech innovation and entrepreneurship experts (trainers, mentors, judges) is trained and certified to support the GCIP Namibia Accelerator	number of suggestions for improvement of the GCIP cleantech innovation and entrepreneurship expert training and certification system	0	5-10	Attendance records from trainings Project progress reports	
	number of GCIP Namibia cleantech innovation and entrepreneurship expert training and certification systems	0	3 (1 for trainers, 1 for mentors, 1 for judges)		
	number of trainings provided to experts	0	3 (1 for trainers, 1 for mentors, 1 for judges)		
	number of participants per one expert training	0	10 (50 % CCM focus and 50% LD focus)		
	share of women in expert training	0	at least 40%		
	share of women experts that attended the UN ?I-know-gender? training		at least 40%		
	number of experts evaluated	0	30 (gender balance)		
	number of experts accredited	0	15-30 (gender balance)		
Output 1.1.3 Three cycles of the annual competition-based GCIP Namibia Accelerator are conducted	number of GCIP Namibia Pre-Accelerator cycles conducted	0	3	Project progress reports	
	number of GCIP Namibia Pre-Accelerator participants	0	90 (at least 40% women)		
	number of GCIP Namibia Accelerator cycles conducted	0	3		
	number of GCIP Namibia Accelerator applicants	0	100 (at least 40% women)		
	number of GCIP Namibia Accelerator semi-finalists	0	45-50 (50% LD and 50% CCM focus)		
	number of GCIP Namibia Accelerator finalists	0	9-18 (50% LD and 50% CCM focus)		

	share of women among semi-finalists and finalists	0	at least 40%		
	number of GCIP National Academies conducted	0	3		
	number of GCIP Namibia Forums conducted	0	3-5		
	share of women entrepreneurs participating in the GCIP Namibia Pre-Accelerator and Accelerator	0	at least 40%		
	number of targeted gender-responsive outreach activities promoting the GCIP Namibia Pre-Accelerator, Accelerator, GCIP National Academy, and GCIP Namibia Forum	0	5-10		
Outcome 1.2 Start-ups and SMEs are supported through advanced and gender-responsive business growth and investment facilitation services					
Output 1.2.1 Targeted business growth support services are provided to selected cleantech enterprises towards commercialization	number of enterprises provided with Advanced Accelerator support (gender-disaggregated)	0	5-10 (at least 40% women-led)	Project progress reports Meeting attendance records Meeting minutes	Continuous support from the Government of Namibia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs and investors
	number of GCIP Namibia Post-Accelerator cycles conducted	0	3		
	number of enterprises participating in the GCIP Namibia Post-Accelerator (gender-disaggregated)	0	10-15 (at least 40% women-led)		
	number of GCIP Namibia Post-Accelerator enterprises provided with needs-based support (gender-disaggregated)	0	5-10		

	number of enterprises provided with technology verification, product development and testing facility support (gender-disaggregated)	0	5-10 (at least 40% women-led)		
	share of women entrepreneurs participating in the GCIP Namibia Post-Accelerator	0	at least 40%		
	number of targeted support activities for products/services that promote gender equality and women?s empowerment	0	3-5		
Output 1.2.2 Enterprises are connected to financing opportunities and provided with tipping-point investment facilitation support	number of Investor Connect events organized	0	3-6		
	number of financial institutions and funds with which contacts established	0	10-15		
	number of awareness raising events for investor community	0	3-7		
	number of investors (representatives of commercial banks, investment funds, public/private companies, as well as individuals, etc.) participating in the awareness raising events	0	15-35		
	share of women or gender lens investors participating in the awareness raising events	0	at least 40%		
	number of trainings for local financial experts	0	3-5		
	share of women financial experts participating in the trainings	0	at least 40%		

	number of events organized/attended to encourage seed funding providers to participate in the GCIP Namibia	0	3-5		
	number of trainings on gender-lens investment or gender sensitization for investors	0	3-5		
	number of financial mechanisms designed (for investment de-risking and leveraging)	0	1		
Output 1.2.3 Mentoring and partnership support is provided to cleantech enterprises for global market expansion	number of GCIP Namibia alumni nominated for support by the GCIP Global Accelerator	0	5-10		
	share of women entrepreneurs nominated for support by the GCIP Global Accelerator	0	50%		
Output 1.2.4 Investment is mobilized to deploy innovative cleantech solutions across various sectors	number of enterprises provided with funds through the financial mechanism operationalized under Activity 1.2.4a	0	10-15		
	share of women-led enterprises receiving funds through the financial mechanism operationalized under Activity 1.2.4a	0	50%		
Component 2 Cleantech innovation and entrepreneurship ecosystem (CIEE) strengthening and connectivity					
Outcome 2.1 The CIEE in Namibia is strengthened and interconnected					
Output 2.1.1 Institutional capacity building of the CIEE actors is conducted	number of analyses of Namibia?s CIEE	0	1	Project progress reports	Continuous support from the Government
	number of tools for CIEE strengthening and connectivity	0	2		

	number of stakeholder engagement strategies and cleantech innovation cluster strategies	0	2 (1 engagement strategy and 1 cleantech innovation cluster strategy)	Meeting attendance records Meeting minutes	of Namibia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	number of engagement workshops organized	0	2		
	number of facilitators trained	0	10		
	share of women participants trained as facilitators	0	at least 40%		
	number of capacity building events for selected stakeholders	0	1-3		
	number of participants in the stakeholder capacity building events	0	20-50		
	share of women participants in the stakeholder capacity building events	0	at least 40%		
	number of stakeholders that completed the ?I-know-gender? training and the gender lens investing online training	0	30-90		
	number of the Entrepreneurship Train-the-Trainer Programme cycles	0	1-2		
	number of university professors and teachers trained	0	5-10		
	share of women among the university professors and teachers trained	0	40%		

Output 2.1.2 Cleantech innovation and entrepreneurship policies, regulations and recommendations are developed	number of gender-responsive gap analysis reports on policy and regulations relating to the promotion of cleantech, innovation, and entrepreneurship in Namibia	0	1	Project progress reports Meeting attendance records Meeting minutes	
	number of recommendations for the cleantech, innovation, and entrepreneurship policy	0	40-50		
	number of stakeholder engagement workshops	0	2		
	number of participants in the stakeholder engagement workshops	0	20-40		
	share of women participants in the stakeholder engagement workshops	0	at least 40%		
	number of roadmaps guiding implementation of the policy recommendations	0	1		
	number of policy clauses promoting gender equality	0	5		
Output 2.1.3 Linkages, collaboration, and synergies across CIEEs are promoted	number of cooperation agreements signed to promote linkages, collaboration, and synergies across CIEEs	0	5-10	Project progress reports	
	Number of agreements with women?s organizations	0	3		
Component 3 Programme coordination and coherence					
Outcome 3.1 Efficiency and sustainability of the GCIP Namibia is ensured through programme coordination and coherence with other GCIP country projects					

Output 3.1.1 The GCIP internal guidelines for project management teams are adapted and implemented by the GCIP Namibia	number of gender sensitive tools/books including operational guidelines for the PMU	0	1	Project progress reports Meeting attendance records Meeting minutes	Continuous support from the Government of Namibia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	number of sustainability and exit strategies	0	1		
	Number of gender mainstreaming strategy and action plans	0	1		
Output 3.1.2 Programme-level *knowledge management, communication and advocacy strategy* is adapted and implemented by the GCIP Namibia	number of gender sensitive GCIP Namibia knowledge management, communication, and advocacy strategies	0	1		
	Number of communication products promoting GEEW	0	50		
	number briefing sessions, press releases, social media posts and adverts	0	250-350		
	number of memorandums of understanding (MoUs)/cooperation agreements signed	0	20-30		
Output 3.1.3 The GCIP Namibia web platform is operated to maintain the GCIP community	number of GCIP Namibia web platforms	0	1		
	number of GCIP Namibia alumni networks and associated web platforms	0	1		
	number of members in the GCIP Namibia alumni network	0	90-105		
	share of members of the GCIP Namibia alumni network that are women	0	at least 40%		
Outcome 3.2 Impacts and progress of the GCIP Namibia are tracked and reported					

Output 3.2.1 The GCIP methodology for impact assessment is adapted and applied	number of trainings on the GCIP methodology for impact assessment	0	?2	Project progress reports Training attendance records	Continuous support from the Government of Namibia and national partner institutions Commitment by CIEE stakeholders Interest by cleantech entrepreneurs
	number of participants in trainings on the GCIP methodology for impact assessment	0	50		
	share of women participants in trainings on the GCIP methodology for impact assessment	0	at least 40%		
	number of GCIP Namibia impact reports	0	3		
Output 3.2.2 Project activities are tracked and reported based on the GCIP monitoring and evaluation (M&E) framework, and a mid-term review is conducted	number of GCIP Namibia monitoring and evaluation (M&E) plans incl. M&E of the gender mainstreaming strategy and action plan	0	1		
	number of project progress reports	0	6		
	number of external mid-term review reports	0	1		
Output 3.2.3 External terminal evaluation is conducted	number of external terminal evaluations	0	1		

[1] Sex-disaggregated wherever possible.

[2] The targets will be set after the first cycle of the GCIP Namibia Accelerator, based on the review of the number and quality of applications featuring renewable energy and energy efficiency technologies.

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 clean tech 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.
	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.
	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.

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/LDCF/SCCF Amount ($)*		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Stakeholder engagement activities during PPG (consultations, workshops, steering committee)	*15,000*	*15,000*	

Analysis of baseline and ongoing/planned initiatives Collection of baseline data on relevant sectors/technologies	10,000	10,000	
Selection of project executing entity/ies through UNIDO procurement process - HACT assessment of the project execution agency/ies - TOR for contractual arrangements with executing entity/ies	10,000	5,044	4,956
CEO endorsement request submitted to GEF Sec, with full document package including - environmental and social management plan (ESMP) - gender assessment - co-financing letters	15,000	15,000	
Total	50,000	45,044	4,956

ANNEX D: Project Map(s) and Coordinates

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

The geo-coordinates and location for Windhoek is as following:

-22° 33' 33.88" S, 17° 04' 59.63" E

GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. These IDs are available on the GeoNames? geographical database containing millions of placenames and allowing to freely record new ones. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as:https://coordinates-converter.com Please see the Geocoding User Guide by clicking here.

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
Namibia -	-22.96	18.49		

ANNEX E: Project Budget Table

Please attach a project budget table.

Annex E is also available as an attachment.

Please be informed that Component 3.2 encompasses M&E activities. M&E activities were not indicated as a separate component, therefore the total cost for Component 3.2 in table B, USD 65,000 matches with the sum of Annex E columns 3.2 USD 25,000 and M&E USD 40,000.

summary

YEARS 1-3											
Expenditure Category	**Detailed Description (Activity)**	***Outcome 1.1***	***Outcome 1.2***	***Outcome 2.1***	***Outcome 3.1***	***Outcome 3.2***	***Sub-Total***	***M&E***	***PMC***	**Total (US Deq.)**	**Responsible Entity (*UNIDO's subcontract to executing entities)**
Revolving funds/ Seed funds / Equity	to operationalize the financial mechanism designed under Activity 1.2.4a (Activity 1.2.4b)		130,000								EIFN
Contractual services	to review the GCIP guidebooks and to share suggestions for their improvement (Activity 1.1.1a)	1,000					**1,000**			**1,000**	EIFN

	to adapt, consult, and disseminate the GCIP guidebooks (Activity 1.1.1b)	1,500					**1,500**			**1,500**	EIFN
	to adapt and operationalize the GCIP expert training and certification system (Activity 1.1.2b)	1,500					**1,500**			**1,500**	EIFN
	to provide training and certification to experts, as well as to conduct their evaluation (Activity 1.1.2c)	1,500					**1,500**			**1,500**	EIFN
	to deliver the GCIP Namibia Pre-Accelerator (Activity 1.1.3a)	7,500					**7,500**			**7,500**	EIFN
	to deliver the GCIP Namibia Accelerator (Activity 1.1.3b)	32,200					**32,200**			**32,200**	EIFN, ICC
	to organize the annual GCIP Namibia Forum (Activity 1.1.3c)	21,000					**21,000**			**21,000**	EIFN
		3,000					**3,000**			**3,000**	ICC

	to identify participants for the Advanced Accelerator and to facilitate support (Activity 1.2.1a)		1,000				**1,000**			**1,000**	EIFN
	to conduct the GCIP Namibia Advanced - Accelerator (Activity 1.2.1b)		66,000				**66,000**			**66,000**	EIFN
	to conduct the Namibia Post-Accelerator (Activity 1.2.1c)		10,000				**10,000**			**10,000**	EIFN
	to organize the Investor event (Activity 1.2.2a)		36,000				**36,000**			**36,000**	EIFN
	to set-up a regional advisory group and hold 2 meetings per year (Activity 1.2.3c)		24,000				**24,000**			**24,000**	EIFN
	to conduct and consult an analysis of Namibia's CIEE (Activity 2.1.1a)			36,000			**36,000**			**36,000**	ICC

	to develop tools for CIEE strengthening and connectivity, as well as to train facilitators (Activity 2.1.1b)			25,000			**25,000**			**25,000**	EIFN
	to deliver the Entrepreneurship Train-the-Trainer Programme (Activity 2.1.1d)			55,000			**55,000**			**55,000**	EIFN
	to review existing relevant policy and regulations and to develop a gap analysis report (Activity 2.1.2a)			30,000			**30,000**			**30,000**	ICC
	to develop and consult policy recommendations, and to prepare a roadmap (Activity 2.1.2b)			43,800			**43,800**			**43,800**	ICC
	to promote international cooperation and to facilitate its formalization (Activity 2.1.3a)			48,760			**48,760**			**48,760**	EIFN

	to review and adapt GCIP internal guidelines for project management teams (Activity 3.1.1a)				2,000		**2,000**			**2,000**	EIFN
	to develop the Sustainability & Exit Strategy (Activity 3.1.1b)				21,000		**21,000**			**21,000**	EIFN
	to create and maintain a section for the GCIP Namibia on the global GCIP web platform (Activity 3.1.3a)				19,000		**19,000**			**19,000**	EIFN
	to conduct the external mid-term review (Activity 3.2.2a)							8,000		**8,000**	UNIDO
	to conduct the external terminal evaluation (Activity 3.2.3a)							24,000		**24,000**	UNIDO
	sub-total	**69,200**	**267,000**	**238,560**	**42,000**	**-**	**616,760**	**32,000**		**648,760**	EIFN, ICC, UNIDO

International consultants		financial consultant(s) (Activities 1.1.3b, 1.2.2a, 1.2.2b, 1.2.2c, 1.2.2e, 1.2.4a)	6,500	12,500				**19,000**			**19,000**	EIFN
		technical/business consultant(s) (Activities 1.1.3b, 1.2.1c, 1.2.1d)	6,500	3,000				**9,500**			**9,500**	EIFN
		sub-total	**13,000**	**15,500**	**-**	**-**	**-**	**28,500**	**-**		**28,500**	EIFN
National staff and consultants	**Short-term consultants**	technical/business consultant(s) (Activities 1.1.1b, 1.1.2a, 1.1.2b, 1.1.2c, 1.1.3b, 1.2.3a 1.2.3b, 1.2.1c, 1.2.1d, 2.1.1c, 3.1.3b)	15,000	15,500	14,000	6,000		**50,500**			**50,500**	EIFN
		financial consultant(s) (Activities 1.1.3b, 1.2.1c, 1.2.2a, 1.2.2b, 1.2.2c, 1.2.2e, 1.2.4a, 1.2.4b, 2.1.1c)	1,000	14,000	12,500			**27,500**			**27,500**	EIFN

		environmental and social consultant(s) (Activities 1.1.1b, 1.1.3b, 1.2.1c, 3.2.1a, 3.2.1b, 3.2.1d)	6,700	5,000			25,000	**36,700**			**36,700**	EIFN
		gender consultant (Activities 1.1.1b, 1.1.3b, 1.1.3c, 1.2.2c)	6,100	3,000				**9,100**			**9,100**	EIFN
		policy expert(s) (Activity 2.1.2b)			8,000			**8,000**			**8,000**	EIFN
	PMU staff*	Project Coordinator (M&E plan & reporting)							6,000	56,100	**62,100**	EIFN
		Project Management Assistant (M&E plan & reporting)							2,000	18,900	**20,900**	EIFN
		sub-total	28,800	37,500	34,500	6,000	25,000	131,800	8,000	75,000	**214,800**	EIFN
Travel to meetings, project sites, workshops, etc.										**6,000**	6,000	EIFN
Office (supplies, rent, equipment, etc.)										-		EIFN

grand total	111,000	320,000	273,060	48,000	25,000	777,060	40,000	81,000	898,060	EIFN, ICC, UNIDO

Entity	YEARS 1 - 3
EIFN	792,060
ICC	74,000
UNIDO	32,000
Total	898,060

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).