



REQUEST FOR MSP APPROVAL (1-STEP PROCEDURE)

TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT IDENTIFICATION

Project Title:	GEF UNIDO Cleantech Programme for SMEs in South Africa		
Country(ies):	South Africa	GEF Project ID: ¹	5515
GEF Agency(ies):	UNIDO (select) (select)	GEF Agency Project ID:	130129
Other Executing Partner(s):	Technology Innovation Agency, Department of Trade and Industry, in collaboration with CSIR, DEA, DST, NBI, Innovation Hub	Submission Date: Resubmission Date:	08/5/2013 08/21/2013
GEF Focal Area (s):	Climate Change	Project Duration (Months)	36
Name of parent program (if applicable):		Agency Fee (\$):	189,050

A. FOCAL AREA STRATEGY FRAMEWORK²:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Co-financing (\$)
CCM-1 (select)	Outcome 1.2: Enabling policy environment and mechanisms created for technology transfer Indicator 1.2: Extent to which policies and mechanisms are adopted for technology transfer (score 1 to 5)	Output 1.2: National Strategies for the deployment and commercialization of innovative low-carbon technologies adopted	GEFTF	1,990,000	6,000,000
Total Project Cost				1,990,000	6,000,000

B. PROJECT FRAMEWORK

Project Objectives: Promotion of clean energy technology innovations and innovative clean energy technology entrepreneurship in South Africa through Clean Energy Technology Innovation Competition and Entrepreneurship Accelerator Programme

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
1. Establishment of a Cleantech innovation ecosystem involving a platform to organize the Cleantech competition and associated accelerator programme.	TA	A coordinating mechanism/platform established at the national level to promote clean energy technology innovations and entrepreneurship; clean energy technology innovators identified, coached and supported during and beyond the Cleantech competition.	1.1 Three annual national Cleantech competitions organized; 1.2 Three associated accelerator programmes organized, including post competition support; 1.3 Successful clean energy technology innovators participated in regional and global networking activities.	GEFTF	1,460,000	4,190,000
2. Strengthening of policy and regulatory framework for the	TA	Policies and institutional framework strengthened	2.1 Necessary policies and	GEFTF	120,000	240,000

¹ Project ID number will be assigned by GEFSEC.

² Refer to the reference attached on the [Focal Area Results Framework](#) when filling up the table in item A.

development of a supportive local innovation ecosystem.		to promote Cleantech innovations in SMEs and support the local innovation ecosystem.	regulations required for the Cleantech competition and ecosystem identified and developed; such as eligibility, intellectual property right protection, sponsorship agreements, etc.;			
3. Institutional capacity building for the organization of the competition and acceleration programme.	TA	National institutional capacity built for mentoring and training programmes as part of the competition and accelerator programme.	3.1 Capacity of the host institution, TIA, strengthened for the organization of the competition and accelerator programme during and after the project; wide platform with all stakeholders of the project established, methodologies and programmes for the competition and accelerator agreed upon, various panels established and trained, mentors recruited and trained etc.; 3.2 Experience shared with other countries and possibility to replicate the programme in the SADC region (14 additional countries).		200,000	480,000
4. Monitoring and Evaluation.	TA	Adequate monitoring and evaluation mechanisms are in place, facilitating smooth and successful project implementation and sound impact.	4.1 Regular monitoring exercises conducted, PIRs prepared, tracking tools according to GEF requirements prepared. 4.2 Mid-term and final project evaluation conducted.	GEFTF	30,000	90,000
Subtotal					1,810,000	5,000,000
Project Management Cost ³				(select)	180,000	1,000,000
Total Project Cost					1,990,000	6,000,000

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

C. CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
National Government	The dti	In-kind	1,000,000
National Government	TIA	Grant	320,000
National Government	TIA	In-kind	4,000,000
Others	Industries, other stakeholders, sponsors - funds, etc. to be mobilized during project implementation	In-kind	540,000
GEF Agency	UNIDO	Grant	70,000
GEF Agency	UNIDO	In-kind	70,000
Total Cofinancing			6,000,000

D. GEF/LDCF/SCCF/NPIF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/Global	Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources						

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table

² Please indicate fees related to this project.

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	180,000	320,000	500,000
National/Local Consultants	240,000	550,000	790,000

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

PART II: PROJECT JUSTIFICATION

A. PROJECT OVERVIEW

A.1 Project Description: Briefly describe the project, including; 1) the global environmental problems, root causes and barriers that need to be addressed; 2) the baseline scenario and any associated baseline projects; 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project; 4) incremental cost reasoning and expected contributions from the baseline, the GEF TF, LDCF/SCCF and co-financing; 5) global environmental benefits (GEF TF, NPIF) and adaptation benefits (LDCF/SCCF); 6) innovativeness, sustainability and potential for scaling up.

In 2011, the Government of South Africa, with the support of the Global Environmental Facility (GEF) and the United Nations Industrial Development Organization (UNIDO), succeeded in the development and implementation of the ‘Greening the COP17’ project. One of the four components of the project focused on the design and implementation of the first South Africa Clean Technology Competition (2011 SA Cleantech) for green entrepreneurs and small and medium-size enterprises (SMEs) with innovative ideas and concepts in the areas of energy efficiency, renewable energy and green building practices. The competition was coordinated by the Department of Trade and Industry (the dti) through the National Cleaner Production Centre of South Africa (NCPC-SA), in cooperation with the Department of Environmental Affairs (DEA), the Council for Scientific and Industrial Research (CSIR), the Technology Innovation Agency (TIA), etc. The competition was a great success, identifying 24 semi-finalist companies for support, attracting over 300 high-ranking guests to the competition gala final and raising the awareness of clean technology amongst SMEs and the public at large.

The relevance of the initiative was officially recognized at the Award Gala Dinner held in December 2011 by the Honorable Minister of Trade and Industry, the Honorable Ministers of Energy, the Honorable Minister of Science and Technology, and the Premier of the KwaZulu-Natal Province, as well as the UNIDO Director General and the GEF CEO. All announced their interest in this initiative and their commitment to ensuring that the Cleantech Programme becomes a sustainable legacy project.

Building on this success, and on the lessons learned, the GEF and UNIDO have agreed to develop a global flagship programme to promote Cleantech innovations and Cleantech entrepreneurs around the world, which is in line with the GEF Council’s Revised Strategy for Enhancing Engagement with the Private Sector, Modality 3, namely “SME Competition Pilot: Encouraging Entrepreneurs and Innovators,” which provides support to entrepreneurs and innovators seeking to establish commercial ventures in clean technologies.

For 2013, around 10 countries, including Malaysia, India, Armenia, Turkey, Pakistan, Brazil, Thailand and the Russian Federation have been identified to work together with UNIDO to develop this type of project to seek GEF funding. The flagship programme has the potential to create an extensive network of clean energy entrepreneurs originating from countries participating in this global programme.

In South Africa, although the 2011 competition was a great success, the fact that the project was developed and implemented within a very short period of time and the project budget for the competition component was limited, there are still challenges to be addressed to ensure the sustainability of the Cleantech programme, in particular those related to institutional capacity building and follow-up support after the competition. Therefore, UNIDO, through an extensive stakeholder consultation process, has developed a new and more comprehensive project to address these challenges and ensure the sustainability of the Cleantech programme in order to accelerate the uptake of Clean Energy Technology Innovation in Small and Medium Enterprises in South Africa. Among the various stakeholders engaged in the project development process, the TIA has been selected as the host of the programme based on the alignment of the project objective with TIA’s mandate, and the dti as the Chairman of the National Project Steering Committee to ensure the alignment of the project with dti’s Green Industries initiative.

1. Global environmental problems, root causes and barriers:

Climate change (CC) poses a defining challenge to mankind but clean energy technology and the business sector have been identified as the engine and the main tool in the fight against climate change. New innovative clean energy technologies and businesses, however, are urgently needed. In emerging economies, such as South Africa, innovators and inventors are plenty; and yet they are facing many barriers, much more than their peers in the industrialized world, to turn their technological innovations into viable business ventures.

In South Africa, despite the opportunities in the low-carbon technology sector and the success of the 2011 Cleantech Competition and recent efforts in 2012, a number of key challenges have been identified that negatively affect the growth of this sector. This project aims to prioritize these issues in order to firstly create a conducive environment that will allow for the long-term growth of the low-carbon technology innovation sector in South Africa and secondly to ensure the creation of new employment opportunities and increase South African competitiveness in alternative and innovative energy solutions. The foremost barriers to the development of the sector are mainly due to the following factors:

1. Lack of an enabling regulatory environment limits the opportunities for entrepreneurs to advance in their research and innovation activities, and challenges their ability to showcase and strengthen the innovation that is happening in the country. Furthermore, a lack of adequate institutional capacity to provide private businesses with the necessary information on the relevant policies is an additional constraint. There is therefore, a need for an assessment of existing national policies and an identification of potential existing regulatory gaps according to the needs of the market. Supportive by-laws that provide clear direction and incentives for promoting low-carbon technology innovations in line with national policy objectives need to be established. There is, in addition, a need to strengthen the capacity of government officials so as to be in a position to effectively support the development of small-to-medium scale renewable energy projects through, among others, effective institutional support.
2. Limited Access to Finance still remains a major challenge facing the South African market. There seems to be a mismatch between what the Government and other financing institutions are currently offering and the needs of the innovators. From the entrepreneurs' perspective there is no clarity on what the incentive programmes offered by the Government and other Development Finance Institutions are and the majority of small and medium enterprises are anyway discouraged in applying due to the stringent qualifying criteria compared to the scale at which small manufacturers operate. The trade-off between the time spent in trying to access the financial market and the time actually needed to research and develop the technology innovations does not leave much space for bureaucratic (even if needed) procedures. The low-carbon innovation industry suffers from a lack of interaction between the innovators of small and medium enterprises and the potential investors.
3. Shortage of entrepreneurial skills (strategic business planning) is an important constraint in the competitiveness and growth of the sector. Apart from generic training on strategic business planning, small and medium enterprises entering the green innovation market lack specific communication abilities which negatively impact the chances of the SMEs succeeding with potential investors. The shortage of skills is closely linked with the limited access to finance. Thus, there is a need to develop capacity for private sector players to be able to identify, develop and implement business plans and streamline business models as well as to access and benefit from financial opportunities offered by the Government and other private institutions.
4. Research and development is needed to support product innovation in a growing industry; South Africa, being in an emerging economy, has positioned itself well in terms of efforts put into research and development activities. However, there is a widespread lack of coordination amongst sectoral players on market intelligence research; this information is necessary for the local industry's markets in order to have accurate and confident decision-making in determining market opportunities and penetration strategies. This market intelligence is also necessary and vital if companies also intend to penetrate a foreign market.

5. Lack of Public Awareness around low-carbon innovation technology in South Africa reduces the growth potential of the sector as well as the access to investment opportunities for small and medium enterprises. There is a need to strengthen and refine the information available on clean technology innovation. Under this project, the introduction of initiatives that facilitate the interaction between market actors and market enablers will be introduced and promoted.

The project will contribute, through its activities and continual engagements with the National Government, the private sector and other relevant stakeholders, to mitigating the above barriers in a holistic manner, promoting the development and deployment of clean energy technology innovations. It will also create a platform capable of linking South African entrepreneurs with investors, business, and commercial partners, potentially resulting in the commercialization of new products, manufacturers, services and ultimately job creation, all of which will stimulate economic growth in South Africa.

2. Baseline scenario and associated baseline projects:

In South Africa there have been many programmes and funds for the promotion of technology innovation, and Green Industry startups, and many innovation competitions and award schemes relating to climate change. Following are the custodians of the major programmes, funds, and schemes:

Technology Innovation Agency's (TIA) support mechanism consists of: (i) industry matching fund; (ii) start-up/equity fund; (iii) technology development fund; (iv) youth development fund; and (v) idea development fund, as well as non-financial support, such as business advisory & support services, human capital development support, and engineering services.

The dti Green Industries initiative supports the move toward a lower carbon economy.

CSIR's Enterprise Creation for Development Unit (ECDU) uses science and technology solutions to address underdevelopment in South Africa. It has been operating for the last 18 years with the current staff of 35, which will be expanded to 120 over the next 5 years. For the fiscal year 2010/2011, it helped to create 13 new enterprises with a stipend of R4.47 million transferred to the 460 project beneficiaries.

Climate Innovation Centre (CIC) & the Innovation Hub: CICs support innovation by offering a full suite of financing and capacity building services to technologists, entrepreneurs, and SMEs that includes access to facilities, technical assistance, finance and information as well as creating an enabling ecosystem.

The Department of Environmental Affairs (DEA) is managing the Green Fund to support the transition toward a low carbon green economy.

Institute of Innovators and Inventors (III) is a non-profit organization providing various services to inventors and innovators.

In addition to the above baseline projects, the 2011 and 2012 competitions under the Greening the COP17 project as described above have created some achievements and bases upon which the new project will further develop, such as: the database of related institutions, awareness, review of related policies, some staff trained, a group of concerned institutions established, potential sponsors approached, cleantech website, etc.

Considering the large number of baseline projects operating in South Africa, and the legacy of the 2011 Cleantech competitions, the proposed project will build and improve upon this experience by placing a stronger emphasis on ensuring the sustainability and replicability potential of the Cleantech competition and the Cleantech Ecosystem approach beyond the project's lifetime. In the current baseline situation, no Cleantech competitions are in operation and there is a general lack of coordination between existing funding schemes. While the 2011 Cleantech competition was only one component of a larger project, the proposed project will operate across three years, building capacity within government, the TIA, and entrepreneurs, and expanding the geographical reach of the competition. This approach will ensure that the Cleantech competitions can continue beyond the life span of the project, thus having a larger impact on climate change in South Africa. In addition, the proposed project will take a coordinating approach,

supplying the existing funding schemes discussed above with a process methodology and a platform through which they can optimize their funding procedures. Thus, the proposed project will aim to catalyze more efficient investment by improving the disbursement rate of the existing baseline projects.

3. GEF project alternative scenario:

GEF Project Alternative Scenario

The proposed alternative scenario would be the implementation of the GEF UNIDO Cleantech Programme for SMEs in South Africa. The project is part of the UNIDO/GEF global initiative that seeks to promote innovative environment friendly clean energy technologies in small businesses and SMEs – see brochure in Annex C. The project is in line with the National Policies of South Africa and the GEF focal area priorities. Clean energy technologies developed and promoted as a result of the innovation competition and the accelerator programme will lead to reductions in overall national GHG emissions, and will contribute to South Africa's sustainable green growth thereby addressing a global issue of climate change and national issues of energy security, employment creation and competitiveness of SMEs etc.

Project Approach

The project will primarily aim to promote an innovation ecosystem in South Africa by: (i) assisting the identification and early stage nurturing of the most promising innovative local clean energy technologies; (ii) coordinating various existing and planned national programmes, funds, competitions etc. relating to the promotion and development of clean energy technologies, and providing pre-selected candidates and applicants for them; and (iii) global networking the most promising start-ups of South Africa with mentors and potential business partners abroad. The project is expected to accelerate the establishment of innovative clean energy technology SMEs in South Africa. The project, with a relatively small GEF grant, can act as an effective catalyst to boost more vigorous implementation of the larger baseline projects and programmes, as described above and in the co-financing section hereunder. This role will also involve the provision of a methodology and coordination process to optimize and expand upon the support provided by existing programmes in South Africa.

The project will adopt an inter-disciplinary approach involving SME clusters, national ministries, academia, industrial associations, financing institutions, foundations, venture capitals, utilities etc. within South Africa and abroad to promote innovative technologies in selected energy intensive SME clusters across the country. The project will closely coordinate with other similar international efforts, as it is critical to share and document best practices and knowledge that can help in enhancing productivity in SMEs and at the same time mitigate climate change. It is proposed that the selected institutions under the project will cooperate closely with the Climate Technology Centres Network (CTCN) being established by UNIDO, UNEP and other partners, in order to coordinate with similar climate technology centres in developing countries.

Moreover, the project will also link up with UNIDO's Green Industry initiative to promote sustainable industrial growth as described in various paragraphs of this document.

The project will assist South Africa in strengthening the necessary policy and regulatory frameworks and build institutional and entrepreneurial capacity, accelerating the uptake of clean energy technology innovations. In order to achieve its objectives, the project will mobilize available related expertise from South Africa and share experience, knowledge and methodologies from other countries, such as the United States of America, Germany, Austria, Japan, etc. In particular, the Cleantech Open of the United States of America, which manages the largest Cleantech accelerator and network in the world, has agreed to provide international expertise and invite the South Africa Cleantech programme to join this network.

The experience and methodologies UNIDO has gained from the organization of the South Africa 2011 Cleantech competition and from the implementation of various innovative enterprise award schemes, for example the scheme for Innovative and Successful Enterprises in Africa, will also be used. This will allow the national counterparts to gain the necessary capacity to replicate the initiative independently in the future and potentially expand its scope.

Among others, two major changes have been made compared to the 2011 competition: (i) the change in the host institute; and (ii) more focus on the alignment of the Cleantech programme with other baseline projects. In 2011 the competition was housed at the NCPC while the new project will be hosted by the TIA. Measures to ensure the alignment with ongoing projects are to consider aligning the selection and evaluation criteria of the Cleantech programme with those of the baseline projects, and to involve the staff of the baseline projects as early as possible in all stages of the competition. These changes are necessary to address the challenges explained above and to ensure the sustainability and scaling up of the Cleantech programme in the future.

Project Description:

The project, in addition to creating an enabling policy environment and institutional capacity, will also assist South Africa in the establishment of a supportive innovation ecosystem through the organization of three annual competitions with associated accelerator programmes. These will firstly be organized in a few industry-intensive regions and then gradually expanded to other regions, dispersing the results and consolidating the newly developed national platform for innovative SMEs. These frameworks and newly built capacity will help South Africa to continue to organize the competition in the future and expand its scope and geographical coverage.

It is expected that each competition will have around 100 to 300 entrants, with high numbers of entrants expected in the later competitions. From these entrants, around 40-50 semi-finalists will be selected and will receive support through the accelerator programme as described hereunder. About 10-15 finalists will then be selected to receive further support as part of the accelerator programme. From these finalists, winners and runners-up will be selected. The selection of winners, runners-up, and finalists will be made by various judge panels based on their evaluation of the business plans or pitches submitted by the finalists and semi-finalists receiving support from trainers or mentors. The numbers of entrants, semi-finalists, finalists, winners and runners-up will vary from year to year, depending on the number of technology categories to be covered, maturity of the organization team, price categories, etc.

The project has three substantive components:

Component 1: Establishment of a Cleantech innovation ecosystem involving a platform to organize the Cleantech competition and associated accelerator programme.

- Output 1.1: Three annual national Cleantech competitions organized.

The project will help to organize the first competition and support programme in order to use and test the new policy and regulatory framework, to provide further on-the-job training and to achieve the end results of the project for advocacy. In 2013, the Cleantech competition and accelerator programme will focus nationally but most activities and support will be focused on areas with the highest concentration of Cleantech startups; for example, Gauteng, KwaZulu-Natal, Eastern Cape and the Western Cape. Over the following years, activities will be launched in the remaining provinces. To begin with, the clean energy technology categories will be: Energy Efficiency, Renewable Energy, Waste to Energy, and Water Efficiency.

As the program expands, additional categories can be added that match the Cleantech Open's competition categories in other countries (transportation or green building, for example). Although there may be value in adding an additional category to recognize a specific industrial subsector or need in a region, care will be taken when adding new categories to maximize impact under the project. There is much benefit in standardizing categories, as it would enable the judging, benchmarking and the sharing of mentors. A specific need to stimulate innovations in a specific area might be best served not by a new category but by a new prize that would extend across all categories and applicants, or within a given category. For instance, special consideration will be made to mainstream gender aspects into the Cleantech Open by promoting women entrepreneurs. The project would strive to create a specific prize category for best women contestant/entries, or specific criteria will be formulated to promote jobs for women or create more opportunities for women entrepreneurs etc. The opportunity for additional prizes will be defined after further research with local partners and stakeholders, but currently four prizes have

been defined beyond the main competition awards.

Prize	Description
Category	Overall winner in one of the four competition categories.
Sustainability	Finalist with the most effective integration of sustainability into their business model and operations.
Technology prize	Semifinalist team with the technology that offers the greatest potential to recycle, reuse and reduce.
University prize	Most promising entry in the competition developed from a university-based team (students, researchers or faculty) linked with enterprises.

Other prize categories for consideration could be connected to the recently launched SE4ALL initiative, or could highlight the best use of information and communications technology or best support for Climate Change adaptation. To be in line with the global programme timeline, the annual competition will be launched by March and will conclude at the end of November each year.

- *Output 1.2: Three associated accelerator programmes organized, including post competition support.*

The accelerator programme is designed to support entrepreneurs that have progressed to the semi-final stage of the contest to improve their business pitch and connect them to potential business partners, financiers or investors. Support will be provided through the mentor programme, business clinics, mock judging, and other special topic seminars. These are short courses, from a half-day to a maximum of 3 days. The mentors and trainers can be drawn from industry, universities, and professional institutions, including business leaders from South Africa and abroad. A post competition support programme for winners, runners-up, finalists and semi-finalists will focus on the provision of networking opportunities, technical and administrative support, IT services, tax registration and access to finance. The aim is to provide essential services and contacts that will help alumni companies to prosper.

- *Output 1.3: Successful clean energy technology innovators participated in regional and global networking activities.*

The project will assist winners and runner-up teams, as well as other finalists, to participate in regional and global events, such as the annual Cleantech Open Global Forum organized in Silicon Valley every November by the Cleantech Open. There will also be opportunities for the winners of the South Africa programme to compete against winners from other countries in the annual Cleantech Open Global Finals. Winners may also participate in many events organized by the UNIDO Investment and Technologies Promotion Offices around the world, which could include the annual Green Innovation Expo in Tokyo every November.

Outreach activities will begin in 2013 to raise the profile of the competition and accelerator programme and the potential for clean technologies to benefit SMEs and society as a whole. Activities will include briefing sessions, press releases, social media activity and advertising; the mix of these activities will vary in line with the local conditions. For example, the 2011 South Africa Cleantech Competition used radio advertising to target a more diverse range of entrepreneurs and innovators. Outreach activities will also be supported by local entrepreneurs, celebrities or earlier participants in similar programs or competitions. These outreach partnerships include service providers (e.g. patent attorneys, accountants etc.), university departments and societies, including engineering, entrepreneurship and energy clubs, and organizations that are in frequent contact with entrepreneurs across numerous Cleantech sectors (e.g. trade groups, entrepreneurship groups, inventor clubs etc.). Investors (venture capitalist funds, angel networks etc.) are an additional source of potential applicants due to their large networks and aligned

interests. Angel networks are made up of angel investors, defined as individuals that provide capital to start-up businesses, that pool research and investment capital in order to achieve a broader scope. Importantly, outreach provides not only an opportunity to find potential competition and accelerator participants but a means to increase awareness of clean technologies, climate change and the role of entrepreneurs.

Component 2: Strengthening of policy and regulatory framework for the development of a supportive local innovation ecosystem.

- *Output 2.1: Necessary policies and regulations required for the Cleantech competition and ecosystem identified and developed; such as eligibility, intellectual property right protection, sponsorship agreements etc.*

The project will assist in reviewing the policies and regulations relating to the promotion of clean energy technologies and innovation promotion in order to identify those that need to be strengthened or newly developed. The related policies and regulations can be those promoting clean energy technologies of the competition categories (Energy efficiency, Renewable energy, Green building, Smart grid, Green grid & energy storage, Transportation, and Waste to Energy), as well as those governing the protection of intellectual property rights or agreements on sponsorships, roles, responsibilities, and rights of different stakeholders (competition organizer and entrants, sponsors, mentors, judges, etc.).

Component 3. Institutional capacity building for the organization of the competition and acceleration programme.

- *Output 3.1: Capacity of the host institution, TIA, strengthened and wide platform with all stakeholders of the project established.*

The project will strengthen the capacity of TIA and other national stakeholders with regard to the organization and implementation of the Cleantech programme. Three new positions will be created within the TIA to be fully dedicated to the implementation of this project and they will receive on-the-job training by international consultants and local specialists to ensure the sustainability of the initiative after project completion. The three positions are National Project Manager (NPM), Technical and Training Advisor, and Project Administrative Assistant (PAA).

The existing website will be revised in order to accommodate updated information and online tools will be developed for collecting contestant entries. It is expected that TIA, with the support of other institutions, will continue fostering and promoting clean energy technology innovations and accelerator programmes in South Africa after the project completion.

Partnership agreements will be developed and signed by all the project partners to define their contribution to the organization and the implementation of the initiative, and their roles and responsibilities. An advisory committee will be established, which will also assume the role of the National Project Committee during the project life. Trainers and mentors for various categories and purposes will be recruited, trained and made acquainted with the programme methodologies, rules, and criteria.

The mentor program aims to maximize every semi-finalist's chances of winning the Cleantech contest, of raising investment capital and of achieving sustainable commercial success. The mentoring program normally consists of generalist mentoring and specialist mentoring:

Generalist Mentors - A generalist mentor is the general coach, guide and advisor for the team, typically with extensive Cleantech or startup experience. Often, generalist mentors are serial entrepreneurs and active investors who can become trusted advisors to and investors in the company once the competition has concluded. Mentors are unable to join or invest in a mentee company during the competition cycle.

Specialist Mentors - A specialist mentor is an expert in a key functional discipline such as finance, marketing, engineering or law. They act as on-call subject matter experts and may be from both large corporations and startups.

Various panels will also be established and trained, for example the evaluators panel and judges panel. The project will also assist participants in approaching and negotiating with potential sponsors, etc.

Special attention will be made to address gender issues, such as: (i) recruitment of women trainers, mentors, judges; (ii) specific training and mentoring to promote women innovators, entrepreneurs, start-ups; and (iii) design of specific prizes and follow-up support programmes for innovative start-ups which will have great impacts on women entrepreneurial development and job creation, etc.

- *Output 3.2: Experience shared with other countries and possibility to replicate the programme in the SADC region (14 additional countries).*

South Africa is the first country in the SADC, and one of the few developing countries, that will conduct this type of project. Therefore, experience will be shared with other countries via organization of regional workshops or participating in events organized by the SADC, UNIDO, the GEF and Cleantech Open, e.g. the two-day Cleantech Open Organizer's Congress and the annual Cleantech Open Global Forum in Silicon Valley.

At least two regional workshops or seminars will be organized by the project to share its experience with other countries within the SADC and also to consult with other SADC countries and the SADC Secretariat to explore the possibility of replicating the accelerator programme in these countries, if possible in the last year of the project.

4. Incremental cost reasoning and co-financing:

Incremental cost reasoning:

In 2011, the investment from the GEF in this initiative was US\$250,000 as part of the larger MSP "Greening the COP17" project, and the development of the project and the implementation of the competition were altogether less than one year. In the original project there were only 2 expected outcomes; the establishment of a platform for promoting low carbon technologies in SMEs and the increased recognition of the role of clean technology innovations in SMEs for enhancing competitiveness and economic development.

The new project takes stock of the legacy created during COP17 and by incorporating the lessons learned aims to: (i) establish a Cleantech innovation ecosystem; (ii) create an enabling environment for promotion of Cleantech innovation in SMEs by enhanced policy and regulatory frameworks and enhanced institutional capacity; and (iii) ensure the existence of an adequate monitoring and evaluation mechanism to facilitate a smooth and successful project implementation and sound impact. The project will also be closely aligned with the baseline projects and it is expected that it will significantly support their ongoing implementation, providing an innovation ecosystem that supports and fosters coordination between the various existing funding programmes in South Africa to optimize disbursement. In the absence of the proposed project, such programmes would continue to operate at a low rate of disbursement, lacking coordination and methodology that this project will provide. GEF funding is therefore being requested to ensure the achievement of the above outcomes, provide technical assistance for the removal of barriers that constrain the uptake of and investment in clean energy technology innovations in South Africa and support related industry outreach activities.

The project will strengthen capacities and promote the creation of a market for clean energy technology innovations across the country and among small and medium businesses, accelerating the transition to a greener economy in South Africa. The project aims to provide a focused approach in promoting innovation in clean energy technologies with a special focus on Energy Efficiency, Renewable Energy, Waste to Energy and Water Efficiency. This will build on lessons learnt during the implementation of the 2011 and 2012 South Africa Cleantech Programme as well as from similar initiatives like the Cleantech Open program in the USA, and the Eco-Business Partnership Programme in Austria. In addition, the creation of the global Cleantech Network will increase the impact of the programme with spinover effects being created for South Africa and the nationally developed technological innovations. The proposed GEF project will have an emphasis on promoting innovation and moving clean energy technologies forward in the energy and climate change mitigation agenda.

The focus of the project on the promotion of commercially viable clean energy technology innovations in South Africa will have lasting positive effects on the global environment as new low-carbon solutions represent the key driver for sustainable socio-economic development, simultaneously avoiding or reducing pollutant emissions through the optimum use of natural resources and energy. As a result, the promotion of clean energy technology innovations will allow a balance to be struck between growing economic activity and its global environmental impact.

The project aims to link up with UNIDO's Green Industry Platform, a global initiative to promote sustainable industrial growth. UNIDO believes that a consensus on the concept of a Green Economy can only be reached if developing countries are provided with concrete opportunities to participate in the global markets for environmental goods and services and if opportunities for sustainable development are created for them in the international system for green economy. To that end, UNIDO has launched a global initiative on Green Industry at Rio+20, which outlines policy frameworks, instruments and concrete examples of good practice measures and programmes that would support green industries and the greening of the existing industries in developing countries and economies in transition.

In case of no support from the GEF to assist South Africa in removing the above-mentioned barriers, it is very likely that such Cleantech Accelerator Programmes would no longer be implemented in the country in the coming years. Consequently, many opportunities to reduce GHG emissions, strengthen partnerships with the private sector interested in investing in clean energy technologies and provide support to entrepreneurs and innovators seeking to establish commercial ventures in clean energy technologies would go unrealized in South Africa and also in the other SADC countries. Indeed, under this project it has been planned that the experience of South Africa will be shared with other developing countries and that replication potential in SADC Region could be investigated.

Co-financing:

The total co-financing to the project is equivalent to US\$6 million and contributed by the following partners:

The Department of Trade and Industry will contribute in-kind an equivalent of US\$1 million for supporting start-ups which will be selected from the Cleantech programme in order to promote the Department's Green Industry initiative, as well as staff time to provide strategic, advisory and mentoring functions. The dti is very committed to facilitating the uptake of green industry in South Africa with particular focus on the commercialization of viable clean energy technologies and skills for the benefit of South African economic competitiveness. Hence, the dti strongly supports the Cleantech programme and through the Green Industry Unit and the National Cleaner Production Centre will ensure a smooth transition of know-how and experience gained from the organization of the 2011 and 2012 competitions to the new host agency, TIA. It will also provide strategic coordination with the DST in order to ensure a timely and sustainable incorporation of the project's activities in the national structures beyond project completion.

TIA will provide equivalent to US\$320,000 in cash for the three year project implementation to cover local expenditures, such as local costs for the organization of awareness raising events, training workshops and seminars for competition entrants, semi-finalists, finalists, costs for the organization of sessions for mentoring, entrant screening/evaluation, semi-finalists and finalists judging, etc. TIA will also contribute in-kind equivalent to US\$4 million from its various funding schemes to support innovations stemming from participants in the Cleantech competition, beyond the scope of the competition. TIA will provide office space for the project office, utilities, and local transport and will assign adequate staff to work with the project. It will also provide venues and facilities for events and continue to finance the Cleantech Programme for SMEs in South Africa after project completion.

The Institute of Innovators and Inventors, the Innovation Hub, DEA, DST, and other stakeholders will provide their expertise for the promotion and incubation of identified clean energy technology innovations. In addition, private sector involvement and funds will be mobilized during the project's implementation in order to sponsor Cleantech activities and enlarge the networking opportunities of the entrepreneurs involved in the programme. Co-financing possibilities from other UNIDO projects related

to the promotion of clean energy technologies, such as the HCFC phase out project, will also be explored. All these are estimated to be equivalent to US\$540,000 in-kind contribution.

UNIDO will contribute US\$70,000 in cash (from DO funds managed by PTC) and US\$70,000 in-kind to the project to cover the travel costs of its staff, international consultants and staff-time, in addition to the US\$20,000 already provided for the development of the project. The use of staff time from other than ECC UNIDO Branches will be considered as in-kind contribution from UNIDO to the GEF project; especially under Component 3, Output 3.2 (Experience shared with other countries) involvement of other UNIDO branches where specific expertise is anticipated, most notably from the Montreal Protocol Branch and the Environmental Management Branch. The mentioned amount of US\$70,000 is expected to be easily reached – and even exceeded – based on staff time from the mentioned Branches.

5. Estimation of Global Environmental Benefits:

The long-term life cycle of the clean technology innovations introduced in the market and the strengthened and enlarged low-carbon culture advocated, will be reflected in GHG emissions reductions. The reduction achieved through the implementation of this project will be measured and quantified on the basis of the innovations marketed and their uptake. Given the nature of the project, the low-carbon products that will be introduced in the market and the high potential for replication of the project's activities, GHG reductions can be achieved beyond the project life and scope.

In assessment of South Africa's low carbon growth path and given the specific focus of the project on promoting innovations in clean energy technologies, a ten year horizon has been selected for estimating the **indirect** savings of GHGs. Following the top-down approach of the GEF Manual on calculating GHG emission reductions of projects under the Climate Change Focal Area, the reduction potential has been calculated based on the estimates of CO₂ emissions from the energy sector in South Africa's National Communication to the UNFCCC. It is estimated that emissions to the tune of 163 million tons of CO₂ equivalent will be reduced in the energy sector over a 10-year period under the Alternative Policy Scenario (APS) as opposed to the Business as Usual (BAU) scenario. Given the cross-sectoral impact of the innovative clean energy technologies, on a conservative estimate, the project can contribute to 0.5% to 1% of the savings estimated in the energy sector. Thus the total **indirect** savings from the project will be in the range from 815,000 to 1,630,000 tons. The proposed GEF contribution to the project is US\$1.99 million; this would work out to a unit abatement cost (UAC) of between US\$1.22 per ton and US\$2.44 per ton of CO₂.

6. Innovativeness, sustainability and potential for scaling up:

The project in itself is very innovative in the identification of the most promising innovators and nurturing them to become Cleantech startups. The project will primarily aim at promoting an innovation ecosystem approach driven by incentives, to assist in the design of a policy and institutional framework at the national level for promoting innovations in clean technologies in small businesses and SMEs in the country. It is expected that the Cleantech innovations, due to the strict screening and intense mentoring process, will become preferred candidates for many ongoing and planned programmes and funds for technology innovation, the Green Industries initiative and Green Fund, etc. as mentioned in the associated baseline projects above.

The catalytic approach adopted to support clean development mechanisms/technology in support of a transition to a low carbon green economy includes a wide range of activities that will ensure the empowerment of the innovators in order to become Cleantech entrepreneurs and establish mechanisms for technology transfer. Post-competition support and mentoring will be a key component of the project, as these were identified as two aspects with scope for improvement after the 2011 experience.

Challenges were experienced in 2011 with regard to the capacity available within the chosen host institution. In order to mitigate this challenge going forward, ensure sustainability and respect the institutional mandates, it has been decided that the TIA is the most suitable institution to house the Cleantech Initiative. Indeed, the programme's objectives fit perfectly with TIA's mandate and the Agency has developed a large expertise over the years in the promotion of technological innovation that

will be made available to the programme during its implementation and beyond. TIA's Executive Committee has already validated this decision by granting full support to the initiative and its sustainability in the future.

In addition, the dti and the DST have signed a bilateral agreement for interdepartmental coordination. The Cleantech programme provides a link between the two departments: the one department supporting the identification of the most promising innovations in the field of clean energy and the other facilitating their deployment in the South African economy within its scope of promoting the uptake of green industry.

National ownership of the project is ensured as national stakeholders are fully committed to making this project a success and utilizing Cleantech as a tool to identifying the most promising innovations in clean energy and fostering mechanisms for skills and technology transfer. There are many initiatives and incentives aiming to support the transition to a green economy in South Africa but at times the lack of information, low quality projects presented and a lack of an integrated/harmonized and coordinated approach reduces the chances for uptake and benefit maximization. The Cleantech Programme will create a platform that can be used by national stakeholders to provide their support and deploy their resources in a more harmonized manner, toward high quality low carbon technologies and green entrepreneurs, avoiding a duplication of efforts.

Furthermore the project will explore the possibility for replication of the programme in the SADC Region. Scaling up and sustainability of the initiative will also be guaranteed by the exposure that the selected South African entrepreneurs will gain through their participation in the global Cleantech Network.

A.2 Stakeholders: Identify key stakeholders (including civil society organizations, indigenous people, gender groups, and others as relevant) and describe how they will be engaged in project and/or its preparation:

UNIDO is the implementing agency of the project, and is accountable to the GEF grant, and other funding resources to be provided by the Government and private sector. The other key stakeholders involved in the execution of the project and their envisaged roles are presented in the following table. New stakeholders and their roles may be added during project implementation.

	Stakeholders and mandate:	Envisaged role in the project:
Executing Agency	Technology Innovation Agency (TIA): The TIA's core business objective is to support the development and commercialization of competitive technology-based services and products.	The TIA will be the host institution of the Cleantech programme in South Africa, the lead executing agency, and will be responsible for the appointment of the National Project Director. It is also a member of the Project Steering Committee (PSC).
Project Steering Committee Members	Department of Trade and Industry (dti): The dti's vision is of a South Africa that has a vibrant economy, characterized by growth, employment and equity, built on the full potential of all citizens.	The dti will be the Chair of the PSC and will participate in the policy component.
	Department of Science and Technology (DST): The aim of the DST is to realize the full potential of science and technology in the social and economic development of human resources, research and innovation.	The DST will be a member of the PSC and participate in the policy component

	Department of Environmental Affairs (DEA): The DEA fulfils its mandate through formulating, coordinating and monitoring the implementation of national environmental policies, programmes and legislation.	The DEA will be a member of the PSC and participate in the policy component. As the GEF Focal Point of South Africa, the DEA will monitor the implementation of this project.
	The National Business Initiative (NBI): The NBI is a voluntary group of leading national and multi-national companies working together toward sustainable growth and development in South Africa.	The NBI is a PSC member representing the business sector. It will assist the project in approaching leading companies and successful entrepreneurs for sponsorship, mentoring and business partners.
Additional Stakeholders	The Council for Scientific and Industrial Research (CSIR): The CSIR in South Africa is one of the leading scientific and technology research, development and implementation organizations in Africa.	The CSIR will assist in the implementation of the project. It can also provide facilities and venues for various training programmes, if necessary.
	National Cleaner Production Center of South Africa (NCPC-SA): The NCPC-SA is a co-operation program between South Africa and UNIDO with financial assistance from the DTI, CSIR and the Governments of Austria and Switzerland and aims to enhance the competitiveness and productive capacity of the national industry, focusing on SMEs through Cleaner Production techniques.	The NCPC-SA will be a key stakeholder in the project. It will transfer the knowledge, documents and information that were gained and produced during the 2011 Cleantech competition. It will also assist the training, mentoring, evaluation services, and outreach to the industries through its networks.
	Eskom: Eskom will continue to focus on improving and strengthening its core business of electricity generation, transmission, trading and distribution.	Following on from their involvement in the 2011 South Africa Cleantech competition, Eskom executives and researchers will be mentors and judges throughout the competition. Event space will be provided at Eskom offices for regional activities.
	Gender Dimensions:	Relevant women entrepreneurs, associations and gender focal points will be invited to participate in project implementation as described in the relevant paragraphs above; for example, whether the project will have adequately addressed gender issues and gender mainstreaming.
	Indigenous people and communities of South Africa:	The indigenous peoples of South Africa will be involved in the implementation process of the project through their roles as service providers, entrepreneurs, industry participants, end-users, and community representatives.
	Civil Society Organizations (CSOs):	Relevant CSOs will be invited to participate during project implementation.
	Universities:	The project will also closely cooperate with South African universities, in particular the Stellenbosch University, to encourage participation and increase awareness among university students.

	Other Partners include: the IH/CIC, III, Institute of Directors of South Africa (IoDSA); Southern African Alternative Energy Association (SAAEA); Sustainable Energy Society of Southern Africa (SESSA); The Small Enterprise Development Agency (SEDA)	
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The project will have a Project Steering Committee, which will be chaired by the dti to provide strategic guidance and supervise project implementation to ensure the full cooperation and effective coordination among the many partners of this project. A Project Management Unit (PMU) will be established and hosted at TIA. The Unit will be responsible for the daily management of the project implementation and will interact with the National Project Director appointed by TIA.

A.3 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

The project will act as a catalyst for increased innovations in clean energy technologies, and the establishment of more Cleantech enterprises, in particular the SMEs, thus creating more jobs and generating more income at the local and national levels. The clean technologies deployed will contribute to the reduction of waste and emissions, and to the improvement of resource efficiency, resulting in environmental improvements, and reducing health risks, in particular for women and children. The competition and acceleration programme will bridge the gap between innovation and the market, and innovators and potential investors, both national and international.

Special attention will be given to address gender issues as described above; the project will contribute to the promotion of women entrepreneurial development and job creation for women in South Africa.

A.4 Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks:

The main risks and proposed mitigation measures are:

Risk:	Rating:	Mitigation:
Lack of interest by the public and industry in the competition, resulting in limited competition entries, or entries with low quality, especially in the first years.	Medium	Proper communication programmes will be prepared and implemented with adequate resources allocated to ensure effective and widespread communication of the competition. Regional workshops will be carried out in at least four provinces, namely: Gauteng, KwaZulu-Natal, Eastern Cape and the Western Cape. Effective support will be provided to entrants. User-friendly entry forms will be prepared and various forms for collecting entries will be designed and implemented, including on-line tools.
Lack of interest by mentors and voluntary trainers.	Low	Mentors and voluntary trainers will be identified through a properly prepared process and their roles, responsibilities and benefits will be determined and made widely known at an early stage of project implementation.
Lack of absorptive capacity by the national counterpart.	Low	Management and staff of TIA will be exposed as early as possible to the experiences of other countries and proper selection of the project staff will be conducted. Experience from other competitions in the country will be reviewed.

Lack of effective coordination between various project partners.	Low	A proper coordination will be sought through the Project Steering Committee and ad-hoc working groups will be established if necessary.
Incentive and financial support system are insufficient.	Low	Linkages to other financing schemes for clean energy technology promotion and innovation programmes will be established as early as possible. Intensive reach-out programmes to potential sponsors and investors will be carried out and the clear benefits and responsibilities of sponsors will be determined as early as possible. Exposure of winners, runner ups and finalists to regional global investors and partners will be ensured.
Climate Change Risks	None	There is no climate change risk foreseen for the achievement of the project's objectives.

A.5 Explain how cost-effectiveness is reflected in the project design:

Cost-effectiveness has received a high level of attention during project design. The Project Management Unit will be embedded within the management unit of TIA and the National Project Manager is also the future Cleantech programme Manager, and he/she will also act as the local consultant on clean energy technologies promotion and innovation consultant. Strong coordination with other on-going and coming GEF projects under the Climate Change focal area will also save the costs, create synergies and avoid an overlap. The project will be implemented under the overall global GEF UNIDO programme, which will allow close cooperation and sharing experience with other countries that will help to save the costs and create greater impacts.

A.6 Outline the coordination with other relevant GEF financed initiatives [not mentioned in A.1]:

In addition to coordination with Cleantech projects in other countries under the global GEF UNIDO Cleantech programme and other concerned programmes and funds mentioned in A.1, project implementation will also be closely coordinated with other GEF projects under the Climate Change Focal Areas in South Africa. For example, with the industrial energy efficiency project that is currently being jointly developed by UNIDO, the Department of Energy, and the SA-NCPC, and with other GEF Climate Change projects managed by the UNDP, UNEP and the World Bank. These include the International Bank for Reconstruction and Development (IBRD) project, "Renewable Energy Market Transformation (REMT)," with a GEF grant of US\$6 million, the "Sustainable Public Transport and Sport: a 2010 Opportunity" project implemented by the UNDP with a GEF grant of US\$10.99 million and the UNDP project (GEF grant of US\$6 million), "Market Transformation through Energy Efficiency Standards and Labeling of Appliances in South Africa." The proposed project will also coordinate closely, where relevant, with other UNIDO branches, specifically the Business, Investment and Technology Services Branch (BIT) in the area of entrepreneurship development.

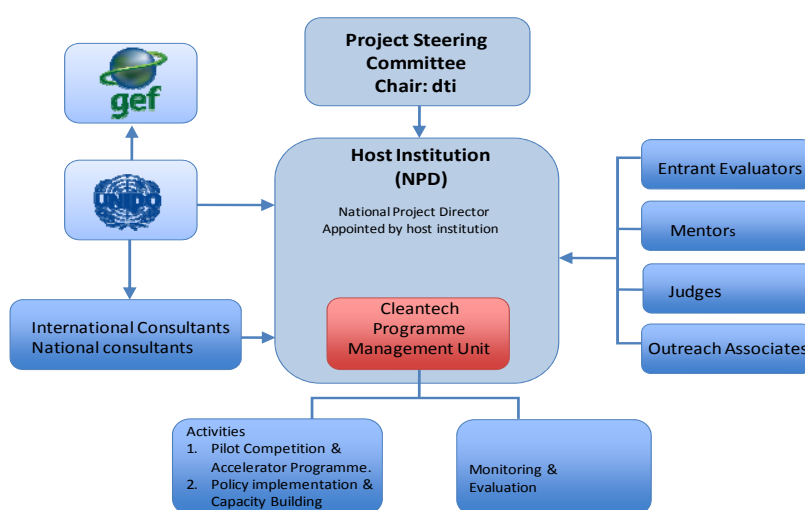
A.7 Describe the institutional arrangement for project implementation:

UNIDO is the only GEF Implementing Agency involved in this project and thus no specific arrangement with other GEF Agencies is required. As the GEF Implementing Agency, UNIDO holds the ultimate responsibility for the timely implementation of the project, the delivery of the planned outputs and the achievement of the expected outcomes. Execution of the project on the ground will be the responsibility of the PMU and TIA. The PMU, under the supervision of the UNIDO Project Manager and in close consultation with TIA, is responsible for the daily management of the project execution.

A Project Steering Committee will be established under the Chairmanship of the dti. Its members are: the dti, DST, TIA, DEA, NBI, and UNIDO. Representatives from institutions involved in the different

project components, such as the CSIR, IH/CIC, III, Eskom, SESSA, SEDA, SAAEA, IoDSA etc., will be represented in an observer capacity. The PMU will act as the Secretariat of the PSC and will consist of the National Project Manager (NPM) and the Technical and Training Advisor, both assisted by a Project Administrative Assistant (PAA). Operating as an entity, the PMU will be responsible for the day-to-day management, monitoring and evaluation of project activities as in the agreed project work plan. The PMU will coordinate all project activities being carried out by project national experts and partners; advisory working groups will be established when necessary. The PSC will provide strategic guidance according to national imperatives and market needs.

An Organigram of the management of the project implementation can be seen below:



The PMU will be funded in part by the GEF budget as well as in-kind funding and co-financing from TIA. During the implementation period of the project, UNIDO will provide the PMU with the necessary management and monitoring support. The PMU will continue the organization of the Cleantech programme after project completion.

TIA will appoint one of its senior managers to act as the National Project Director (NPD), to be the direct counterpart of UNIDO in guiding and supervising the project implementation.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAs, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, etc.:

The project aims to raise awareness and change mindsets about clean technology, while simultaneously creating opportunities for SMEs and entrepreneurs to find solutions for some of the most critical environmental and economic issues in South Africa. The Clean Technology innovation sector is an attractive sector to capitalize on the available opportunities and grow its contribution to both employment and economic growth, namely stimulate the green industry and economy in the country. This is to be achieved within the **National Industry Policy Framework (NIPF)** and as prescribed by the up-scaled

Industrial Policy Action Plan (IPAP) 2012/13 - 2014/15 released by the dti in April 2012, representing the fourth annual iteration of the first IPAP launched in the 2007/08 financial year.

The Government of South Africa has taken several steps towards promoting clean energy technologies over the years. The *Renewable Energy White Paper 2003* specifically addressed the potential for renewable energy in South Africa and established a target for renewable energy deployment. The draft **Revised White Paper on Renewable Energy Policy - 2010** for South Africa provides for an integrated renewable energy supply for the country, contributing a minimum of 27% of the national energy demand by 2030, concurrently providing: i) increased access to energy services; ii) increased employment; iii) maximum use of natural resources; iv) a reduction in greenhouse gas emissions and water use; and v) economic growth.

South Africa's 2nd National Communication (2011) highlights the importance of the energy sector, energy efficiency and technology transfer for the mitigation strategies of the South African government. The document notes that a lack of project finance and adequate human resources are key constraints to the adoption of clean technologies, thus stressing the need for an enabling environment to be developed through the following measures; i) sound policy; ii) adequate human resources; iii) affordable technologies; and iv) development of the supporting infrastructure required for innovative technologies. The proposed project's efforts to create just such an enabling environment and to support and develop clean technologies in South Africa is clearly in line with the strategies outlined by the 2nd National Communication.

Similar objectives are outlined in South Africa's Technology Needs Assessment (TNA, 2007) that highlights not only the importance of mitigation but also of adaptation. The TNA lists a number of sectors with a high potential for climate change mitigation and adaptation, including waste management, renewable and energy efficient electricity sources, and water resources, while also highlighting the cross-cutting importance of financing mechanisms for widespread adoption. These priority sectors correspond closely with the technology sectors selected by the proposed project for the Cleantech competition, indicating that the project will support the objectives of the TNA. Furthermore, the DST, as the mandated agency to manage the TNA in relation to climate change and a member of the proposed project's PSC, will help ensure that the proposed project remains in line with the TNA throughout project implementation.

The **Integrated Energy Plan (IEP)** is being developed and the target is to finalize it by the end of 2012. The **Integrated Resource Plan 2010 (IRP2)** was promulgated on 6 May 2011 and is a subset of the Integrated Energy Plan – a National Electricity Plan - that will be continuously revised and updated as necessitated by changing circumstances. The IRP2 forecasts renewable energy sources that are expected to produce 9% of South Africa's electricity mix by 2030. This allocation, which is equivalent to about 42% of the country's *new build capacity* that will be brought on line between 2010 and 2030, is a manifestation of the South African government's determination to pursue a green growth path going forward. In addition, South Africa presently has in place a target of 10,000 GWh of renewable energy contribution to the final energy consumption by 2013. It is projected that through the 3725 MW that will be generated from renewable energy sources and which is required to ensure continued uninterrupted supply of electricity, this 2013 renewable target will be reached, if not surpassed.

Pursuing this initiative also has the potential to contribute toward the stated green jobs target under the **New Growth Path** as well as toward the achievement of the '**Green Economy Accord**' that the Government of South Africa, business representatives and organized labor have signed in November 2011. The Accord is one of the most comprehensive social partnerships on "green" economy development in the world - geared to create 300,000 jobs within the next 10 years. South Africa's three labor federations, whose combined membership accounts for more than two million workers, also signed the accord. These are the Congress of South African Trade Unions (Cosatu), the Federation of Unions of South Africa (Fedusa), and the National Council of Trade Unions (Nactu). The ten ministers actively involved in the development of the agreement include the Ministers of Environmental Affairs, Transport, Trade and Industry and Labor. The agreement was signed ahead of the 17th Conference of the Parties

(COP 17) to the UN Framework Convention on Climate Change, held in Durban from 28 November to 10 December 2011.

The **National Energy Efficiency Strategy (NEES)** was issued in 2005, revised in 2008, and the newly revised version (2nd review) has been submitted to the Cabinet in November 2012.

During COP17 in Durban, the Government of South Africa launched the **National Energy Efficiency Campaign**. All the awareness raising activities planned and implemented under this project will be harmonized with the National Campaign.

Therefore, this project, by seeking to interact with policy makers, small and medium entrepreneurs and with the intention to catalyze greater private and public sector investments into clean energy technology innovation in the country, is in line with South Africa's policy positions towards the creation of a low-carbon economy. It will further work on the replication of this initiative throughout the region and elsewhere.

In addition, the United Nations has declared 2012 as the **International Year of Sustainable Energy for All**. This project will therefore ensure that South Africa is in line with the objectives of this global campaign.

B.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities:

The objective of the project is fully consistent with the goal of the Climate Change Mitigation Focal Area, which supports developing countries and economies in transition toward a low-carbon development path, and in particular with Objective 1 of the GEF Climate Change Mitigation Framework, namely "Promote the demonstration, deployment, and transfer of innovative low-carbon technologies."

The project will assist South Africa in creating an enabling policy and regulatory environment and building up adequate institutional capacity to organize national competitions on clean technology innovations and implement accelerator programmes for clean technology SME start-ups during the project life and beyond. This is in line with Modality 3 of the November 2011 Revised Strategy for Enhancing Engagement with the Private Sector, namely "SME Competition Pilot: Encouraging Entrepreneurs and Innovators," which provides support to entrepreneurs and innovators seeking to establish commercial ventures in clean technologies.

B.3 The GEF Agency's program (reflected in documents such as UNDAF, CAS, etc.) and Agencies comparative advantage for implementing this project:

UNIDO, with technical input from the Cleantech Open, has already supported South Africa in successfully organizing the 2011 South Africa Cleantech competition. With the experience gained and its more than 20 years of experience in supporting SME development in developing countries, UNIDO has committed itself to the development, together with the GEF, of the new flagship global programme in promoting Cleantech for SMEs.

UNIDO's mandate is, inter-alia, to promote technology transfer, technology development and deployment in developing countries. One of the current three thematic priorities of UNIDO programme is sustainable energy and environment. At the Rio+20 Event, UNIDO launched the Green Industry Platform.

UNIDO's Energy Strategy aims at helping developing countries and countries in transition to achieve the following objectives:

- Increase the competitiveness of their industries by reducing the dependence on fossil fuels;
- Reduce their impact on climate change by decreasing the carbon emissions of their industries and by promoting renewable energy technologies;
- Increase the viability of their enterprises, particularly in rural areas, by augmenting the use of locally available renewable energy sources.

This Cleantech project will also be closely coordinated with the other relevant projects of UNIDO in South Africa, in particular with those relating to the Montreal Protocol Branch and the Environmental Management Branch. For example, consultations with the Montreal Protocol Branch have shown a broad scope for collaboration in the HCFC Phase-out management plan with a budget of US\$6.5 million and with the SA-NCPC.

In addition to experts at UNIDO Headquarters in Vienna, UNIDO also has a regional office in Pretoria, which is responsible for supporting UNIDO projects and activities in Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. UNIDO's Centres such as National Cleaner Production Centre (NCPC) and Investment and Technology Promotion Centre (ITPO) and their networks will be closely involved in key activities of the project.

UNIDO will contribute US\$70,000 in cash and US\$70,000 in-kind to the project.

C. DESCRIBE THE BUDGETED M&E PLAN:

Under the proposed Cleantech project in South Africa, the project monitoring and evaluation (M&E) will be conducted in accordance with established UNIDO and GEF procedures: "according to the Monitoring and Evaluation policy of the GEF and UNIDO, follow-up studies like Country Portfolio Evaluations and Thematic Evaluations can be initiated and conducted. All project partners and contractors are obliged to (i) make available studies, reports and other documentation related to the project and (ii) facilitate interviews with staff involved in the project activities."

The overall objective of the monitoring and evaluation is to provide visibility of the progress being made in the implementation of the project by observing and reviewing project activities. The evaluation team reports and verifies the actual progress against the work plan approved by the Project Steering Committee. Thus M&E enables the project manager to take corrective measures in case there are significant deviations between the forecasted work plan and actual implementation.

The M&E procedure will consist of project inception, project progress report, PIRs and a project final report. detailed monitoring plan for tracking and reporting on project time-bound milestones and accomplishments will be prepared by UNIDO in collaboration with the PMU and project partners at the beginning of project implementation and then periodically updated. The terminal evaluation report will be submitted to the ODG/EVA, and thus will also fall under their responsibility.

By making reference to the impact and performance indicators defined in the Project Results Framework, the monitoring plan will track, report on and review project activities and accomplishments in relation to the energy savings achieved and GHGs emission reductions generated as a result of the project. In addition, it will assess the overall socio-economic impacts, including those to gender and community, of the project activities to include wide scale adoption of innovative technologies, better working environments at SMEs and an increase in income levels and opportunities for entrepreneurs and workers.

The National Project Manager will be responsible for continuous monitoring of project activities implementation, performance and track progress towards milestones. The UNIDO project manager will be responsible for tracking overall project milestones and progress towards the attainment of the set project outputs and will be also responsible for narrative reporting to the GEF.

US\$30,000 from the GEF and co-financing equivalent to US\$90,000 have been foreseen for the M&E activities. From the GEF grant, US\$8,000 has been reserved for the final independent evaluation; this evaluation will be conducted 3 months prior to the completion of the project.

In addition, part of the UNIDO's contribution of US\$70,000 to project implementation will be used by the UNIDO project manager and the UNIDO Regional Office in Pretoria for monitoring of the project implementation.

Following is the table summarizing key M&E activities with GEF budget:

M&E Activity Categories	Feeds Into	Time Frame	GEF Budget (USD)	UNIDO (USD)	Co-Financing (In-kind USD)	Responsible Parties
Measurement GEF Tracking Tool specific indicators	Project management	Continuous	10,000	30,000	50,000	PMU
Monitoring of project impact indicators (as per LogFrame)	Project management;	Continuous				
Periodic Progress Reports	Project management; PSC Meeting Annual GEF PIR	semi-annually				
Midterm review/evaluation	Project management; PSC	At project mid-term	5,000	15,000	20,000	UNIDO PM and PMU
Independent terminal evaluation	Terminal Evaluation Review (TER) conducted by UNIDO ODG/EVA	Project completion (at least one month prior to the end of the project and no later than six months after project completion)	15,000	25,000	20,000	Independent evaluator for submission to UNIDO PM

D. LEGAL CONTEXT:


The following legal context will apply to the project: “The Government of the Republic of South Africa 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 3 October 1994.”

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

- A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):** (Please attach the [Operational Focal Point endorsement letter\(s\)](#) with this template. For SGP, use this [OFP endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Zaheer Fakir	GEF Operational Focal Point, Acting Deputy Director-General, Department of Environmental Affairs (DEA)	DEPARTMENT OF ENVIRONMENTAL AFFAIRS (DEA)	04/30/2013

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for project identification and preparation.					
Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Mr. Philippe Scholtès, Officer in Charge, Programme Development and Technical Cooperation Division (PTC) UNIDO GEF Focal Point		08/21/2013	Khac-Tiep Nguyen, Energy and Climate Change Branch, UNIDO	+43-1-26026-3086	k.nguyen@unido.org

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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).

Result	Indicators	Baseline	Target	Means of Verification	Assumption and Risks
Objective					
Promotion of clean energy technology innovations and entrepreneurship in SMEs in South Africa.	<p>Number of SMEs to pursue innovations in clean technologies; Successful Cleantech (CT) programmes organized after project completion;</p> <p>Additional investment into clean technology innovations due to increased interest in the CT programme;</p> <p>Number of SMEs as members of the national platform;</p> <p>Tons of GHG emissions directly and indirectly avoided.</p>	<p>SA has a large SME sector, however, the coordination of current funding schemes for innovative clean technologies is lacking;</p> <p>As of yet, no projects have taken a CT approach in South Africa, and thus resulting investment is zero;</p> <p>70 SMEs as members of platform for CT 2011 and 2012;</p> <p>In the BAU scenario, it is estimated that emissions would be reduced by 163 million tons of CO₂ equivalent in the energy sector over a 10-year period.</p>	<p>Number of clean technologies start-ups/SME increased by 15%.</p> <p>Investment in clean technology increased by 15%;</p> <p>Minimum 450 SMEs participating in CT are trained and connected with funding partners and investors;</p> <p>The indirect savings of the project are in the range of 815,000 to 1,630,000 tons of CO₂ equivalent.</p>	<p>Project progress reports; mid-term and final project evaluation reports; the GEF Tracking Tools.</p> <p>Database and records maintained by TIA during and after project completion.</p>	
Outcomes					
A coordinating mechanism/platform established at the national level to promote clean energy technology innovations	<p>Number of innovative businesses created/accredited;</p> <p>Number of prizes for</p>	<p>There is currently no such platform existing in South Africa;</p> <p>As of yet, no projects have</p>	<p>Establishment of a platform to coordinate these newly accredited innovative businesses;</p> <p>1 prize per competition with the</p>	<p>Project progress reports; mid-term and final project evaluation reports.</p> <p>Feedback from</p>	<p>Continuous support from government and national agencies; Sufficient commitment and participation by the</p>

Result	Indicators	Baseline	Target	Means of Verification	Assumption and Risks
and entrepreneurship in SMEs.	innovators with great impact on women entrepreneurial development and job creation.	taken a CT approach, and thus no such prizes have been issued.	option to increase based on individual circumstances.	participating and non-participating enterprises and other stakeholders through survey and interview.	experts, mentors.
Policies and institutional framework strengthened to promote Cleantech innovations in SMEs and support the local innovation ecosystem.	Extent to which these policies and regulations are amended or implemented.	The current institutional framework is not yet adapted to the larger scope and requirements of the proposed CT programme;	A score between 0 and 4 will be given to assess these policies; target is	Project progress reports; mid-term and final project evaluation reports.	Continuous support and participation by industry, TIA and other partners.
National institutional capacity built for mentoring and training programmes as part of the competition and accelerator programme.	Number of human and financial resources of TIA with built capacity; Wide platform of all stakeholders operationalized.	The CT project has not yet started building CT-relevant capacity at TIA; No such platform has been established as of yet.	Trained TIA staff are able to assist in the CT mentoring and training programmes; Platform established.	Project progress reports; mid-term and final project evaluation reports.	Continuous support and participation by industry, TIA and other partners.
Outputs					
1.1 Three annual national Cleantech (CT) competitions organized;	Number of entries, number of semi-finalists and finalists etc.	The 2011 CT competition had 42 entries, 23 semi-finalists, 8 finalists, 2 runners-up and 2 winners;	100-300 entrants per competition (target of 10% women participants);	Monitoring and Project progress reports; mid-term and final project evaluation reports.	Continuous support from government and national agencies; Commitment from project partners and committed participation of entrepreneurs.
1.2 Three associated accelerator programmes organized, including post competition support;	Number of boot camps, training workshops, & mentoring sessions organized; Improvement of disbursement rate of existing funding programmes;	The 2011 CT competition had 1 bootcamp, 6 trainings workshops and 7 mentoring sessions; The current disbursement rate of existing programmes is to be defined in the inception phase;	10 boot camps, training workshops, & mentoring sessions organized over the 3 years of the programme; Improvement of disbursement rate by 10-15%		
1.3 Participation in regional and global	Number of participants of regional and global	No participants of the 2011 CT competition were able	15 selected entrepreneurs participating in regional or		

Result	Indicators	Baseline	Target	Means of Verification	Assumption and Risks
networking activities.	networking activities.	to participate in regional or global networking events.	global networking events (target of 10% women) over the three years of the programme.		
2.1 Necessary policies and regulations required for the Cleantech competition and ecosystem identified and developed.	<p>Number of new policies and regulations developed to create a conducive policy environment for CT implementation;</p> <p>Number of policy makers to receive training on policy development.</p>	<p>The time constraints of the 2011 CT project, did not allow for long-term alterations to the policy environment;</p> <p>4 policy makers received training in 2011 CT due to time constraints.</p>	<p>Conducive policy environment for CT implementation created;</p> <p>30 policy makers to receive training on policy development (target of 10% women participants).</p>	Project progress reports; mid-term and final project evaluation reports.	<p>Continuous support from the government;</p> <p>Continuous support and participation by relevant stakeholders.</p>
3.1 Capacity of the host institution, TIA, strengthened and wide platform with all stakeholders of the project established;	<p>Number of TIA staff trained to be able to organize the competition and the accelerator programme;</p> <p>Number of partners involved in the platform; number of mentors recruited and trained;</p>	<p>2 staff members of the NCPC, the executing agency in 2011, received training;</p> <p>6 partners were involved in the platform created in 2011.</p>	<p>12 TIA staff trained to be able to organize the competition and the accelerator programme (target of 10% women participants);</p> <p>15 partners involved in the platform; at least 10 mentors recruited and trained;</p>	Project progress reports; mid-term and final project evaluation reports.	<p>Continuous support from the government;</p> <p>Continuous support and participation by relevant stakeholders.</p>
3.2 Experience shared with other countries.	Number of regional workshops and training courses organized.	No CT regional workshop was organized in the 2011 CT competition	2 regional workshops or training courses organized;		

ANNEX B: TIMELINE OF THE OUTPUTS

Outputs	2013		2014				2015				2016	
Comp 1: Establishment of a Cleantech innovation ecosystem involving a platform to organize the Cleantech competition and associated accelerator programme.	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1.1 Three annual national Cleantech competitions organized;												
1.2 Three associated accelerator programmes organized, including post competition support;												
1.3 Participation in regional and global networking activities.												
Comp 2: Strengthening of policy and regulatory framework for the development of a supportive local innovation ecosystem.	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
2.1 Necessary policies and regulations required for the Cleantech competition and ecosystem identified and developed;												
Comp 3: Institutional capacity building for the organization of the competition and acceleration programme.	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
3.1 Capacity of host institution, TIA, strengthened and wide platform for all stakeholders established;												
3.2 Experience shared with other countries.												
Comp 4: Monitoring and Evaluation.	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
4.1 Regular monitoring exercises conducted, PIRs prepared, tracking tools according to GEF requirement prepared.												
4.2 Mid-term and final project evaluation conducted.												



⁴ The digital version of the Global Brochure is on the GEF website:
https://www.thegef.org/gef/sites/thegef.org/files/publication/GEF-UNIDO_GlobalCleantech.pdf