



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 Turkey		
Country(ies):	Turkey	GEF Project ID: ¹	5505
GEF Agency(ies):	UNIDO (select) (select)	GEF Agency Project ID:	130124
Other Executing Partner(s):	Ministry of Science, Industry and Technology (MoSIT), TUBITAK in cooperation with the Ministry of Environment and Urbanization, Ministry of Energy and Natural Resources, Ministry of Development, KOSGEB and TTGV.	Submission Date: Resubmission Date:	07/26/2013 08/20/2013
GEF Focal Area (s):	Climate Change	Project Duration (Months)	36
Name of parent program (if applicable):		Agency Fee (\$):	94,050

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	990,000	2,950,000
Total Project Cost				990,000	2,950,000

B. PROJECT FRAMEWORK

Project Objectives: Promotion of clean energy technology innovations and innovative clean energy technology entrepreneurship in SMEs in Turkey through a 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 identify, coach and support clean energy technology innovators during and beyond the Cleantech competition and accelerator programme.	1.1 Two annual national Cleantech competitions organized; 1.2 Two associated accelerator programmes organized, including post competition support; 1.3 Successful clean energy technology innovators participated in regional and global networking activities.	GEFTF	680,000	1,900,000

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.

2. Strengthening of policy and regulatory framework for the development of a supportive local innovation ecosystem.	TA	Policies and institutional framework strengthened to promote Cleantech innovations in SMEs and support the local innovation ecosystem.	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.	GEFTF	75,000	150,000
3. Institutional capacity building for the organization of the competition and accelerator programme.	TA	National institutional capacity for mentoring and training programmes as part of the competition and accelerator programme.	3.1 Capacity of the host institution, TUBITAK, 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, South-South cooperation; 3.3 Initiation for the establishment of a Clean Energy Technology Development Platform conducted.		125,000	350,000
4. Monitoring and Evaluation.	TA	Adequate monitoring and evaluation facilitating smooth and successful project implementation.	4.1 Regular monitoring exercises conducted, PIRs and tracking tools prepared; 4.2 Mid-term and final project evaluation conducted.	GEFTF	20,000	50,000
Subtotal					900,000	2,450,000
Project Management Cost ³				GEFTF	90,000	500,000
Total Project Cost					990,000	2,950,000

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	MoSIT ⁴	In-kind	610,000
National Government	KOSGEB	In-kind	600,000
National Government	Ministry of Energy & Natural Resources	In-kind	400,000
Private Sector	Industries to be identified ⁵	In-kind	700,000
National Government	TUBITAK	Grant	200,000
GEF Agency	UNIDO	Grant	50,000
GEF Agency	UNIDO	In-kind	50,000
National Government	Ministry of Environment & Urbanization	In-kind	250,000
Foundation	TTGV	In-kind	90,000
Total Cofinancing			2,950,000

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
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				0	0	0

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	120,000	180,000	300,000
National/Local Consultants	272,500	250,000	522,500

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).

⁴ MoSIT’s in-kind co-financing will be contributed by TUBITAK as a related institution of the MoSIT.

⁵ Relevant industries, such as SME clusters, will be identified and commitments obtained during the inception phase. Contributions from these industries will take the form of participation and sponsorship to be mobilized during project implementation.

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 GEFTF, LDCF/SCCF and co-financing; 5) global environmental benefits (GEFTF, 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), successfully implemented the ‘Greening the COP17’ project. One of the four components of the project focused on the design and implementation of the first South Africa Clean Technology Competition (2011 SA Cleantech) for green entrepreneurs and small and medium-size enterprises (SMEs) with innovative ideas and concepts in the areas of energy efficiency, renewable energy and green building practices; the competition was a great success.

Building on this success and 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. This 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 the field of clean technologies.

For 2013, around 10 countries, including Malaysia, India, Armenia, South Africa, Turkey, Pakistan, Brazil, Thailand and the Russian Federation have been identified to work together with UNIDO in developing 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 February 2013, the GEF Operational Focal Point of Turkey endorsed the Project Identification Form (PIF) of the GEF UNIDO Cleantech Programme for SMEs in Turkey with a GEF grant of US\$990,000.

1. Global environmental problems, root causes and barriers:

Climate change poses a defining challenge to mankind and clean energy technologies and the business sector have been identified as the engine of and the main factor in both climate change mitigation and adaptation. New innovative clean energy technologies and businesses are urgently needed in industrialized as well as in developing and emerging economy countries. In emerging economy countries such as Turkey, innovators and inventors are plenty; however, they are facing many barriers, much more than their peers in the industrialized world, to turn their technological innovations into viable businesses. These barriers include:

- Knowledge and methodologies are in need of improvement;
- An enabling policy and regulatory environment requires development;
- The need to develop adequate institutional capacity; and
- The need to improve awareness and hence participation and support by all stakeholders and the public.

The impact of these barriers is magnified when applied to SMEs in Turkey who are disproportionately affected by the abovementioned barriers. With 3.22 million SMEs operating in Turkey (99% of all companies), constituting almost 80% of total employment and 27.3% of Turkey’s GDP, the removal or mitigation of these barriers is essential to stimulate the development of an enabling innovation ecosystem in Turkey and aid climate change mitigation and adaptation.

2. Baseline scenario and associated baseline projects:

Turkey has for many years taken the necessary steps to promote, facilitate and finance the transfer of, or access to, environmentally sound technologies. There is recognition that Turkish industry needs to ensure the efficient use of

energy in order to hold pace with the rapid growth process that is currently underway; the current transition to clean production processes will mean that an increase in efficiency will soon become compulsory in many sectors. To this end, the Scientific and Technological Research Council of Turkey (TUBITAK) was established in 1963, and in 2011, the Government adopted a new national science, technology and innovation strategy framework for 2011-2016 that focuses, inter-alia, on stimulating the transformation of research results into products and services, and invigorating the role of SMEs within the national innovation system. For the period from 2000 to 2010, government expenditures for science, technology and innovation were stable, while similar investment by the industrial and business sectors grew and those from higher education institutions declined. Total public expenditure on innovation and technology programmes was at US\$877 million in 2000 and increased to US\$1,175 million in 2008 (World Bank).

The Ministry of Science, Industry and Technology (MoSIT) has been promoting the transformation of industrial production to become environmentally friendly, resource efficient and sustainable; this will also enhance the industries' competitiveness. MoSIT, as a member of the National Climate Change Coordination Council, is the coordinating authority of the agenda item "development and transfer of technologies" in UNFCCC negotiations. MoSIT's mandate also includes the preparation of national strategies and policies in the industrial sector. In relation to the competitiveness and development of the industrial sector, sustainable development, green growth, energy efficiency, renewable energy and eco-efficiency are some of the policy issues that the ministry works on.

MoSIT coordinates:

- the Technology Needs Assessments (TNA) Study which is specific to the industrial sector;
- the establishment of the Eco-efficiency Centre in Turkey;
- the preparation, implementation, and monitoring and evaluation of Turkey's Industry Strategy 2011-2014 (Towards the European Union) and sectoral strategies such as the Automotive, Machinery, Chemical, Iron-Steel and Non Iron, Textile, Ceramic and Electric and Electronic, as well as the National Recycling Strategy.

MoSIT also supervises the following related corporations:

- Small and Medium Enterprises Development Organization (KOSGEB);
- the Scientific and Technological Research Council of Turkey (TÜBİTAK);
- Turkish Patent Institute;
- Turkish Standards Institute;
- the Turkish Academy of Sciences.

Many direct support programmes to promote innovation and technology development have been developed by various ministries in recent years; for instance, by MoSIT, the Ministry of Economy and the Ministry of Development. TUBITAK also has several matching grant schemes; KOSGEB implements programmes to support innovation and R&D in SMEs and the Technology Development Foundation of Turkey (TTGV) has established its own Green Fund. On the legislative front, a law on technology development zones was adopted in 2001, and in 2011 43 techno parks were established.

Despite these various attempts to stimulate innovation, the uptake of start-ups in innovative technologies has been moderate. The organization of the national Cleantech competition and accelerator programmes, on the other hand, has shown itself to be a very effective tool in promoting such an increased focus on clean technologies and innovations. However, in order for the competition and accelerator programme to have a sustainable impact on climate change mitigation, the aforementioned barriers must first be dealt with.

Building on the existing national efforts to promote innovative clean energy technologies, the following baseline projects are currently operating in Turkey:

Technology and Innovation Grant Programmes Directorate (TEYDEB) was established within TUBITAK to fund technology development and innovation activities in Turkish companies mainly by means of non-reimbursable grants. TEYDEB has designed and implemented several grant programmes since 1995, the most notable of which are the university-industry collaboration grant programme in 2011, the research technology development and

innovation projects in priority areas grant programme in 2012, the multi-stage entrepreneurship support programme also in 2012, and the technology transfer grant programme. The multi-stage entrepreneurship support programme has a very similar structure to that of this proposed GEF Cleantech project. From 1995 to 2011, TUBITAK provided grants to 8,371 projects, 70% of which went to SMEs and 30% to larger industry. In 2011, the total grant value provided by TUBITAK was US\$167 million.

The on-going GEF/UNDP/UNIDO project on industrial energy efficiency improvement has a total GEF grant of US\$6 million and promotes energy efficiency in the Turkish industrial sector. There is also a GEF/UNDP project on building energy efficiency with a GEF grant of US\$4 million which similarly promotes energy efficiency, but in the building sector.

The Technology Development Foundation of Turkey (TTGV) has also launched their own Green Fund which has a budget of US\$4 million in order to provide matching funding for projects that promote green industries in Turkey.

The World Bank project on energy efficiency financing for SMEs in Turkey was recently approved (March 2013) and has a total budget of US\$300 million. This project focuses primarily on the expansion of commercial bank lending for SMEs investing in energy efficiency in Turkey through the removal of financial and policy barriers.

The Clean Technology Fund (CTF) Investment Plan is supported by the International Finance Corporation (IFC), the European Bank for Reconstruction and Development (EBRD) and the World Bank to support the low-carbon objectives of Turkey's 9th Development Plan (2007-2013) and includes a component on the 'efficient use of energy and other sources of energy.'

Loan schemes to the total value of €300 million with the European Investment Bank (EIB) also provide support for small and medium-sized investments in environment and energy with the Industrial Development Bank of Turkey (TSKB) and the Development Bank of Turkey (TKB).

During the implementation phase of the proposed project, efforts will be made to explore the possibility of using other funding resources, such as the Turkey Sustainable Energy Finance Facility (TURSEFF) from the EBRD. Various funding schemes available for climate change projects under the cooperation programme between Turkey and the USA will also be explored for potential investment support for the finalists to turn their technology innovations into commercial ventures.

Considering the large number of baseline projects, 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. The proposed 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 Turkey. 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 Turkey 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 Turkey'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 Turkey 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 of development and deployment of clean energy technologies, and providing pre-selected candidates and applicants for them; and (iii) global networking the most promising start-ups of Turkey with mentors and potential business partners abroad. The project is expected to accelerate the establishment of innovative clean energy technology

SMEs in Turkey. It is expected that 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 Turkey.

The project will adopt an inter-disciplinary approach involving SME clusters, national ministries, academia, industrial associations, financing institutions, foundations, venture capitalists, utilities etc, within Turkey and abroad in order 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 assist in enhancing the productivity of SMEs and at the same time, mitigate climate change. It is proposed that the selected institutions under the project will become an integral part of the Climate Technology Centres Network (CTCN) currently being established by UNIDO, UNEP and other partners, and will become the connecting node between similar climate technology centres in developing and emerging economy 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 CEO AR. The project will also assist Turkey in strengthening the necessary policy and regulatory frameworks and building institutional and entrepreneurial capacity, thus accelerating the uptake of clean energy technology innovations. In order to achieve this the project will mobilize available related expertise from Turkey and share relevant experience, knowledge and methodologies from other countries, such as the United States of America, Germany, Austria, Japan, Australia, etc. Specifically, the Cleantech Open of the USA that manages the largest Cleantech accelerator and network in the world has agreed to provide international expertise to participants and organizers and invite the Turkey Cleantech programme to join its network.

The experience and methodologies gained by UNIDO during 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.

The approach taken by the proposed Cleantech project will build upon these experiences, as well as the Green Industry initiative, and go a step further by focusing on innovative SMEs through an eco-system approach that will involve identifying start ups, nurturing, mentoring and incentivizing technological innovations to promote clean energy technologies and systems in selected SME clusters.

To ensure the sustainability of the project, efforts have been made during the project development phase and will also be made during the implementation phase to align the Cleantech programme and the selection of the appropriate host institution, with other baseline projects. Through an intensive consultation process during the project development phase, TUBITAK has been selected as the host of the Cleantech programme for SMEs in Turkey.

The proposed project description:

The project, in addition to creating an enabling policy environment and institutional capacity, will also assist Turkey in the establishment of a supportive innovation ecosystem through the organization of two annual competitions with associated accelerator programmes. These will firstly be organized in a few industry-intensive regions and then gradually be 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 Turkey 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 200 entrants. From these entrants, around 40 semi-finalists will be selected, depending on the individual circumstances of each competition. These semi-finalists will then receive support through the accelerator programme as described hereunder. From these 40, 10 finalists will be selected to receive further support as part of the accelerator programme. Winners and runner-ups will then 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 after having received

support from their respective 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: Two annual national Cleantech competitions organized.*

Soon after the above activities on policy and capacity building have been initiated during the inception phase, the project will help to organize the first competition and associated accelerator 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 purposes. For the first year, the Cleantech competition and accelerator programme will focus on areas with the highest concentration of Cleantech start-ups, for example, Istanbul, Ankara, and Izmir, and will cover a limited number of technology categories. Over the following years, the competition will be expanded to other parts of the country and will cover a broader range of technology categories. For the first year the following clean energy technology categories can be considered to start with:

- Energy Efficiency
- Renewable Energy
- Waste to Energy
- Water Efficiency

As mentioned, additional categories can be added as the project expands that match the Cleantech Open’s competition categories in other countries (e.g. transportation, green building, energy distribution & storage, information & communication technologies, etc.). 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 rather 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 competition by promoting women entrepreneurs. The project will strive to create a specific prize category for the 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, 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 in March and at the end of November.

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

The support accelerator programmes are provided for entrants that have progressed to the semi-final stage of the competition and aim to improve their business plans and to look for business partnerships, potential financiers or investors. Support will be provided through mentor programmes, business clinics, practice judging, and other special topic seminars; these are short courses, from half a day to maximum three days. The mentors and trainers can be drawn from industry, universities, and professional institutions, including business leaders from Turkey and abroad.

The post competition support programme for winners, runners-up, finalists and semi-finalists will focus on the provision of networking opportunities, technical and administrative support, financial access, IT services, tax registration, etc.

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

This output will assist winners and runners-up, as well as other finalists, to participate in regional and global events. For example, the annual Cleantech Open Global Forum, organized in Silicon Valley every November by the Cleantech Open has extensive global and regional networking activities including regional mixers and an international startup exhibition. There will also be opportunities for the winners from the Turkey programme to compete against winners from other countries in the annual Global Finals.

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, sponsorships 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 developed or improved upon. These 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 accelerator programme.

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

The project will share the competition methodologies with and strengthen the capacity of the host institution, TUBITAK, as well as with other stakeholders. TUBITAK is expected to have three staff members receive on-the-job training from international consultants and local specialists during the project. The three staff members are tentatively planned to be a National Project Manager, a Technical and Training Advisor, and one Project Administrative Assistant.

Communication and advocacy strategies will also be developed and carried out; a website will be set up for communication purposes and online tools will be developed for collecting contestant entries. It is expected that TUBITAK, with the support of other institutions, will continue the organization of the competitions and acceleration programmes after project completion.

A cooperation platform in the form of a partnership agreement will be developed and signed by all project partners

to define their contribution to the organization of the competition, and their roles and responsibilities. An advisory committee will also be established, and will assume the role of the National Project Steering Committee during the project's life. Trainers and mentors for various categories and purposes will be recruited and trained to be acquainted with the competition's methodologies, rules, and criteria.

The mentor program aims to maximize each semi-finalist's chance of winning the Cleantech competition, in turn raising their investment capital and 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 start-up experience. Often, generalist mentors are successful 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 start-ups.

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

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

- *Output 3.2: Experience shared with other countries, South-South cooperation.*

Turkey is the first country in the region, and one of the few newly emerging economies worldwide that will implement this type of project. It is foreseen that it will share its experience with other countries within the region and at other events coordinated by UNIDO, the GEF and the Cleantech Open, e.g. the two-day Cleantech Open Organizer's Congress. This will promote South-South cooperation and it is expected that countries in the region will develop and implement similar Cleantech programmes for SMEs. For instance, the project can consider organizing regional workshops or seminars to share its experiences with other countries of the region and explore the possibility for an expansion of the accelerator programme to other countries, if possible in the last year of the project.

- *Output 3.3: Initiation for the establishment of Clean Energy Technology Development Platform developed.*

The project will assist Turkey to assess the conditions, possibilities and the need for the establishment of the Clean Energy Technology Development Platform. The policy framework and the institutional capacity strengthened by this Cleantech project can be used as the base for the Platform, and the Platform, in addition to other activities, can continue to implement the Cleantech programme for SMEs in the future. If necessary and feasible, the project will develop a new project proposal to either establish a new platform or strengthen an existing institution for funding consideration under GEF6, or other potential donors, in addition to the contribution from the government. The Marmara Research Centre of TUBITAK in Gebze, next to Istanbul with its Energy Institute and Technological Park, is one of the potential candidates for the future Clean Energy Technology Development Platform.

4. Incremental cost reasoning and co-financing:

The GEF project is required to assist Turkey in removing the aforementioned barriers so that the country can successfully implement the Cleantech competition and accelerator programmes during the project period and after project completion. The project will 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 Turkey 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. The Cleantech programme will aim to bridge the gap between innovation and the market, and innovators and potential national and international investors. Consequently, many opportunities to reduce GHG emissions, and other environmental degradations and to

improve resource efficiency would be realized. Furthermore, the experience from Turkey will be shared with other developing and industrializing countries in the region, helping them to reduce GHG emissions if they implement similar projects.

The new project will share methodologies, experience and knowledge from other countries to help Turkey to: (i) identify clean energy technology innovators who will be coached and supported during and beyond the competition, to become Cleantech entrepreneurs; (ii) create an enabling environment for promotion of Cleantech innovation in SMEs by enhanced policy and regulatory frameworks and institutional capacity; (iii) ensure the existence of an adequate monitoring and evaluation mechanism to facilitate smooth and successful project implementation and sound impact. GEF funding is therefore being requested to ensure the achievement of the above outcomes, provide technical assistance for removing the barriers that constrain the uptake of and investment in clean energy technology innovations in Turkey and to 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 Turkey. In addition, the creation of the global Cleantech Network will increase the impact of the programme with spinover effects being created for Turkey 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 Turkey will also 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 a 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.

The total co-financing of the project has been estimated to be equivalent to US\$2.95 million and will be contributed by the partners listed below. However, as the country has several baseline projects and other support programmes promoting clean technology development, deployment and innovation, and efforts will be made to closely align this Cleantech programme with the existing support programmes, it is expected that many support programmes will provide additional support to the semi-finalists and finalists of the Cleantech programme.

The Ministry of Science, Industry and Technology (MoSIT)'s will contribute equivalent to US\$610,000 for supporting start-ups that will be selected from the Cleantech programme and staff time to provide strategic, advisory and mentoring functions.

TUBITAK will provide US\$200,000 in cash for the three years of project implementation to cover local expenditures, such as 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. It is expected that *TUBITAK* will consider using its various funding schemes to support innovations that will be selected from each of the competitions to receive further support beyond the Cleantech competition. Office space will also be provided by *TUBITAK* for the project office, utilities, and local transport and adequate staff will be assigned to work with the project and provide venues and facilities for events. Additionally, they will continue to finance the Cleantech Programme for SMEs in Turkey after project completion.

KOSGEB will contribute in-kind an equivalent of US\$600,000 from the technological innovation support programme for SMEs to support start-ups selected from the Cleantech programme. *KOSGEB*'s expertise in the

promotion and incubation of identified clean energy technology innovations, as well as staff time, will also be provided for strategic, advisory and mentoring functions.

Industries to be identified will contribute in-kind an equivalent of US\$700,000 for supporting start-ups that will be selected through expected sponsorships, and their expertise for mentors, evaluators, and judges. 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.

UNIDO will contribute US\$50,000 in cash (from DO funds managed by PTC) and US\$50,000 in-kind to the project in order to cover the travel costs of its staff, international consultants and staff-time, in addition to the US\$20,000 already provided during the development phase 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\$50,000 is expected to be easily reached – and even exceeded – based on staff time from the mentioned Branches.

The project can also explore the possibilities of using other funding resources, such as the Turkey Sustainable Energy Finance Facility (TURSEFF) from the European Bank for Reconstruction and Development, and the various funding schemes for climate change under the cooperation programme between Turkey and the USA for possible investment support for the finalists to turn their technologies into viable commercial ventures.

5. Global environmental benefits (GEFTF, NPIF) and adaptation benefits (LDCE/SCCF):

The project will result in global environmental benefits, including an improvement in resource efficiency and a reduction of waste and GHG emissions. 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 GHG emissions. Following the top-down approach of the GEF Manual on calculating GHG emissions reductions of projects under the Climate Change Focal Area, the reduction potential has been calculated based on the GHG emissions data from the Turkish Statistical Institute for the energy sector and industrial processes sectors for the period from 1990 to 2011. The GHG emissions from the Turkish energy and industrial processes in 2011 were at 357 MtCO₂ equivalent. The emissions from these two sectors have grown by 124% from 1990 to 2011, with an average growth rate of 4.39% per annum. It is assumed that over the period of 2011-2025, a slightly smaller annual growth of 4% in the GHG emissions will occur as these two sectors will become slightly more efficient over time. In this *business-as-usual scenario*, emissions from these two sectors will be reduced by 146 MtCO₂ for the period from 2013 to 2023.

In the *alternative scenario*, it is assumed that this project will result in increased implementation of climate change mitigation measures, and the deployment of new energy efficiency (EE) and renewable energy (RE) technologies will contribute to a reduction in the accumulated emissions by 0.5% to 1% of this accumulated amount of 146 MtCO₂, i.e. from 730,000 to 1,460,000 tCO₂ for the period 2013 to 2023. The proposed GEF contribution to the project is US\$990,000; this would work out to a unit abatement cost (UAC) from US\$0.68 per tCO₂ to US\$1.36 per tCO₂.

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 start-ups. 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 clean technology innovations, the Green Industries initiative and the Green Fund, TEYNEB's grant programme, 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 to become Cleantech entrepreneurs and establish mechanisms for technology transfer. Post-competition

support and mentoring is considered a key component of the project.

To ensure the sustainability of the Cleantech programme and the potential for scaling up, TUBITAK, with its institutional mandates and extensive experience in promoting technology development and innovation, has been chosen, through an intensive consultation process with all stakeholders, as the host institute of the Cleantech initiative. The project will make a special effort to align itself with other baseline projects; for example, the selection criteria of many baseline projects will be considered in the design of the selection and evaluation criteria of the Cleantech programme so that suitable competition semi-finalists and finalists will be considered for further support from these existing projects. With this close alignment with other baseline projects and the strengthened institutional capacity and enabling policy environment, the Cleantech programme will be successfully and adeptly continued after project completion.

The close links to industry via the mentorship and sponsorship programmes and the wide platform created by the project will also support the sustainability and scaling up of this initiative.

Furthermore, the project will explore the possibility for replication of the Cleantech programme in the surrounding region. The scaling up and sustainability potential of the initiative will also be guaranteed by the exposure that the selected Turkey 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 the 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 the private sector. Other key stakeholders involved in the execution of the project and their envisaged roles are presented in the following table:

	Stakeholder and Mandate	Envisaged role in the project
Executing Agency	Scientific and Technological Research Council of Turkey (TUBITAK)	TUBITAK will be the lead executing agency of the proposed project, and its capacity will be strengthened to conduct the competition and acceleration programmes during and after the project. TUBITAK will form the project management team and will also be a member of the PSC.
Project Steering Committee Members	Ministry of Science, Industry and Technology (MoSIT) The Ministry is responsible for the development of science, industry and technologies.	MoSIT will act as the Chairman of the Project Steering Committee (PSC), and will participate in every component of the project, appointing suitable officers to attend various panels of the competition.
	Small and Medium Enterprises Development Organization (KOSGEB)	KOSGEB will be a key project partner, a member of the PSC and will work closely with TUBITAK to implement the project in its support of SMEs.
	Ministry of Energy and Natural Resources The Ministry's mission is to formulate policies and legal frameworks, as well as setting the direction for the energy industry in line with national development goals.	The Ministry will be a member of the PSC that will participate in the policy component and will also appoint suitable officers to attend various panels of the competition.
	Ministry of Environment and Urbanization The Ministry's responsibilities are natural resources management, conservation and management of environment and urbanization.	The Ministry will be a member of the PSC that will participate in the policy component and will also appoint suitable officers to attend various panels of the competition.
	Ministry of Development The Ministry is responsible for setting up	The Ministry will be a member of the PSC and will appoint suitable officers to attend

	national development policies via Development Plans and coordinating implementation.	various panels of the competition. The Ministry will develop the policy and regulatory frameworks for the competition and support programmes.
	Technology Development Foundation of Turkey (TTGV)	TTGV will be a member of the PSC and will appoint suitable officers to attend various panels of the competition.
Additional Stakeholders	Gender Dimensions	Relevant women entrepreneurs, associations and gender focal points will be invited to participate in project implementation; for example, whether the project will have adequately addressed gender issues and mainstreaming.
	Civil Society Organizations (CSOs)	Relevant CSOs will be invited to participate during project implementation.
	Indigenous Communities	Efforts will be made to involve the indigenous peoples of Turkey during the implementation of the project; for example, they will participate in awareness raising activities.
	Universities	The project will also aim to work closely with Turkish universities to encourage participation and increase awareness among university students.

The project will have a Project Steering Committee, chaired by MoSIT, to provide strategic guidance, and supervise project implementation. A Project Management Unit (PMU) will also be established and hosted at TUBITAK; the PMU will be responsible for the daily management of the project.

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 (LDCE/SCCF):

The project act as a catalyst for increased innovations in clean energy technologies, as well as more Cleantech enterprises being established, in particular the SMEs, thus creating more jobs and generating more income at the local and national levels. The clean technologies deployed will contribute to the reduction of 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 project can also improve energy access for people living in rural areas. For instance, the lives of local communities, especially for women and children in remote areas, could also be improved if the annual competitions focus on the promotion of clean innovation technologies in rural areas, including renewable technologies such as solar energy, biomass-based energy, and micro and mini hydropower.

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

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 few 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 the three regional industry centers; Ankara, Istanbul and Izmir. Effective support will be provided to entrants and a user-friendly entry form will be prepared. Various forms of 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 in project implementation.
Lack of absorptive capacity by the national counterpart.	Low	Management and staff of TUBITAK will be exposed as early as possible to the experiences and lessons learned from other countries, with experience from other competitions in the country also being reviewed. Proper selection of the project staff will be conducted.
Lack of effective coordination between various project partners.	Low	A proper coordination will be sought through the Project Steering Committee (PSC) and ad-hoc working groups will be established if necessary.
Incentives and the financial support system are insufficient.	Low	Linkages to other financing schemes for clean energy technology promotion and innovations programmes will be established as early as possible. Intensive outreach programmes to potential sponsors and investors will be carried out and the clear benefits for and responsibilities of sponsors will be determined as early as possible. The exposure of winners, runner ups and finalists to regional global investors and partners will be considered a priority.
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 been considered a priority throughout the project design process. The PMU will be embedded within the management unit of TUBITAK and the National Project Manager is also the future Cleantech Programme Manager. He/she will act as the local consultant on clean energy technologies promotion and innovation. Strong coordination with other on-going and upcoming GEF projects under the Climate Change focal area will also save costs, create synergies and avoid any potential overlaps. The project will be implemented under the overall global GEF UNIDO programme, which will allow close cooperation and a sharing of experiences and documents with other countries that will help to minimize costs and create a greater impact.

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 as mentioned in A.1., project implementation will also be closely coordinated with other GEF projects under the Climate Change Focal Areas in Turkey.

The implementation of this project will be closely coordinated with other related projects and initiatives in order to create synergies and avoid overlaps. The Project Steering Committee will facilitate the coordination, in addition to its function to provide strategic guidance to the project implementation process. Working groups and other coordination mechanisms will be further considered during project implementation.

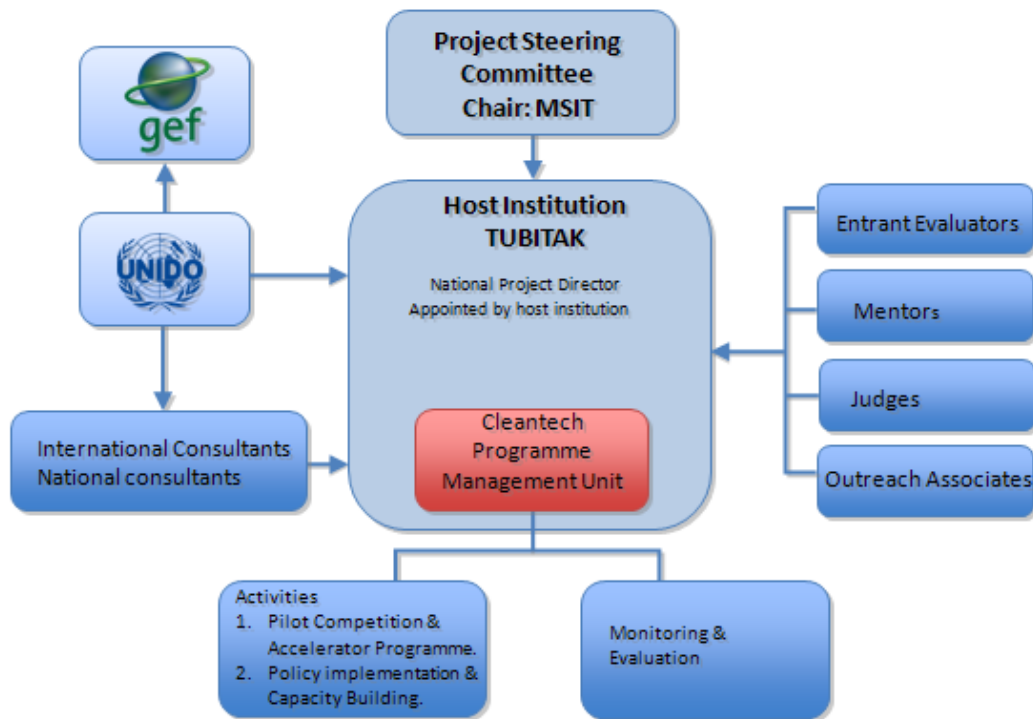
The project will be closely coordinated with other relevant UNIDO projects, for example, projects on HCFC phase out, the disposal of unwanted ODS under the Montreal Protocol, other GEF projects in Turkey managed by UNIDO under other Focal Areas, as well as with GEF projects managed by other GEF agencies, i.e. Energy Efficiency in Buildings (GEF Sec ID. 4942) and Market Transformation of Energy Efficient Appliances (GEF Sec ID. 3565). There will also be close coordination, where relevant, with other UNIDO branches, specifically the Business, Investment and Technology Services Branch (BIT), the Montreal Protocol Branch (MPB), and the Environmental Management Branch (EMB) 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 monitoring of the achievements of the expected outcomes. Execution of the project on the ground will be the responsibility of the PMU and TUBITAK; the PMU, under the supervision of the UNIDO Project Manager and in close consultation with TUBITAK, will be responsible for the daily management of the project execution.

A Project Steering Committee will be established under the Chairmanship of MoSIT. Its members are: MoSIT, TUBITAK, KOSGEB, MENR, MEU, MoD, TTGV, and UNIDO, and representatives from other institutions involved in the different project components will be invited to attend PSC meeting in an observer capacity when necessary. 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 and the 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 plus in-kind funding and co-financing by TUBITAK. 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.

TUBITAK 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 is designed to support the National Climate Change Action Plan (NCCAP) that was finalized in Turkish in July 2011 after undergoing a round of stakeholder reviews and consultations, prior to being adopted by the Government. Mitigation actions being considered under this project are covered under the NCCAP sectoral plans for energy, transport and building sectors among others. Moreover, one of the recommendations of the NCCAP points to the need to develop an “Energy NAMA” (Nationally Appropriate Mitigation Action), carbon assessment methodology and demonstration activities. The Energy NAMA project is a follow-up initiative to the NCCAP project and will look more specifically into clean energy technologies which is clearly in line with the objectives of the proposed Cleantech project.

The Second National Communication of Turkey is also being finalized and will soon be submitted to the UNFCCC. The First Communication was submitted to the UNFCCC Secretariat in July 2007, and stated that “the fundamental strategy is to encourage the participation of private/foreign investors and regional business

partnership” to achieve sustainable development. It also called for the need to “minimize energy-related GHG through measures aimed at: improving energy efficiency and encouraging conservation measures, increasing the share of renewable energy sources in its energy supply, and allowing for fuel switching from high carbon to low carbon fuels.”

The proposed project’s outputs are also in line with the National Energy Efficiency Strategy for Turkey (2004) that aims to define measures and a roadmap for the improvement of energy efficiency in the industrial, residential, transport and municipal sectors. The Strategy’s focus on supporting policy and institutional frameworks and improving the legislative environment is similarly consistent with Component 2, Output 2.1 of the proposed project.

The Regulation on Increasing Efficiency in Energy Resources and Energy, issued by the Ministry of Energy and Natural Resources in October 2008, is tailored toward the removal of the various barriers confronting investment in energy efficiency. For instance, the small size of investing companies, the high transaction costs, a lack of awareness and lack of an incentive structure are listed as constraining investment in energy efficiency projects. The proposed project’s work on strengthening existing policies and legislation concerning clean technologies is closely in line with this regulation and complements it well.

The project will also complement the National Science, Technology and Innovation Strategy 2011-2016 that aims to increase outputs from the existing Turkish research capacity and whose vision is, “to contribute to new knowledge and develop innovative technologies to improve the quality of life by transforming the former into products, processes, and services for the benefit of the country and humanity.” The strategic areas of the Strategy that are closely linked with the project’s focus include: (i) strengthening the role of SMEs within the National Innovation Strategy (NIS); and (ii) stimulating the transformation of research results into commercial products and services. As TUBITAK was closely involved in the design and launch of the Strategy, it is expected that the project will easily incorporate the lessons learned from its development.

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 Turkey in creating an enabling policy and regulatory environment and building up adequate institutional capacity to organize national competitions on clean technology innovations and implement acceleration 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:

This project is in line with Outcome 1 of the current UN Development Assistance Framework (UNDAF) between the UN System and Turkey, and is fully consistent with the strategic considerations of UNIDO: the 5th Session of the UNIDO-Turkey Bilateral Consultation in November 2008 decided to focus the cooperation on, inter-alia, energy.

UNIDO, with technical input from the Cleantech Open, has already supported South Africa in the successful organization of the 2011 South Africa Cleantech competition, and was entrusted by GEF to develop a global flagship programme on Cleantech Programme for SMES as mentioned above.

UNIDO has also been working for more than 20 years on supporting SME development in developing and emerging economy countries, and will contribute US\$50,000 in cash and US\$50,000 in-kind to the project. UNIDO’s mandate is, inter-alia, to promote technology transfer, and technological development and deployment in developing and emerging economy countries. One of the current three thematic priorities of the UNIDO programme is sustainable energy and environment. 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 dependency 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.

In addition to experts at UNIDO Headquarters in Vienna, UNIDO has a regional centre in Ankara that is responsible for supporting UNIDO projects and activities in Turkey. Furthermore, UNIDO has several project offices in Ankara and other locations in Turkey for the implementation of a large portfolio of technical assistance between UNIDO and Turkey. UNIDO's Centres such as National Cleaner Production Centre (NCPC) and their networks will be closely involved in key activities of the project. This Cleantech project will also be closely coordinated with the other relevant projects of UNIDO in Turkey, 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.

C. DESCRIBE THE BUDGETED M & E PLAN:

Under this Cleantech project in Turkey, 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 the actual implementation.

The M&E procedure will consist of project inception, project progress report, PIRs, a project final report and tracking tools following GEF requirements. A 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 on 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 etc.

The National Project Manager will be responsible for continuous monitoring of project activities implementation, and performance. The UNIDO project manager will be responsible for tracking overall project milestones and progress towards the attainment of the set project outputs and will also be responsible for narrative reporting to the GEF. The GEF OFP will be engaged in the M&E activities, such as regularly receiving all project progress reports, and providing inputs and comments, etc.

US\$20,000 from the GEF and co-financing equivalent to US\$50,000 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 one month prior to the completion of the project.

In addition, part of the UNIDO's contribution of US\$50,000 to project implementation will be used by the UNIDO project manager and the UNIDO Regional Office in Ankara for monitoring of project implementation.

Following is the table summarizing the key M&E activities of the 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	7,000	20,000	20,000	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	8,000	10,000	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)	8,000	22,000	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 Turkey agrees to apply to the present project, mutatis mutandis, the provisions of the Revised Standard Technical Assistance Agreement concluded between the United Nations and the Specialized Agencies and the Government on 21 October 1965.”

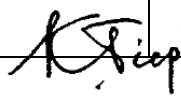
PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

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)
Prof. Dr. Lutfi Akca	GEF Operational Focal Point	MINISTRY OF FORESTRY AND WATER AFFAIRS	02/08/2013

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 PTC UNIDO GEF Focal Point		08/20/2013	Khac Tiep Nguyen, Energy and Climate Change Branch, UNIDO	+43-1-26026-3086	k.nguyen@unido.org



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 Turkey.	<p>Number of SMEs to pursue innovations in clean technologies; Successful Cleantech (CT) programmes organized after project completion;</p> <p>Additional investment in 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>Turkey 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 Turkey, and thus, resulting investment is zero;</p> <p>The CT national platform has not yet been established;</p> <p>In the BAU scenario, emissions would be reduced by 146 Mt CO₂ for the period 2013-23.</p>	<p>Number of clean technologies start-ups increased by 15%;</p> <p>SMEs are trained and connected with funding partners and investors;</p> <p>At least 300 SMEs as members of the national platform;</p> <p>The project aims to reduce this figure by 0.5-1%</p>	<p>Project progress reports; mid-term and final project evaluation reports; the GEF Tracking Tools.</p> <p>Database and records maintained by TUBITAK during and after project completion.</p>	
Outcomes					
1. A coordinating mechanism/platform established at the national level to identify, coach and support clean energy technology innovators.	<p>Number of innovative businesses created/accredited as a result of the CT competition;</p> <p>Number of prizes for innovators with great impact on women entrepreneurial development and job creation.</p>	<p>As of yet, no projects have taken a CT approach in Turkey, and thus, resulting businesses are at zero;</p> <p>As of yet, no projects have taken a CT approach in Turkey, and thus no prizes have been issued.</p>	<p>Establishment of a platform to coordinate these newly accredited innovative businesses;</p> <p>2 prizes per competition with the option to increase based on individual circumstances.</p>	<p>Project progress reports; mid-term and final project evaluation reports.</p> <p>Feedback from participating and non-participating enterprises and other stakeholders through survey and interview.</p>	<p>Continuous support from government and national agencies; Sufficient commitment and participation by the experts, mentors.</p>

Result	Indicators	Baseline	Target	Means of Verification	Assumption and Risks
2. 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.	A score between 0 and 4 will be given to assess these policies; baseline is currently zero.	A score between 0 and 4 will be given to assess these policies; target is 4.	Project progress reports; mid-term and final project evaluation reports.	Continuous support and participation by industry, TUBITAK and other partners.
3. National institutional capacity built for the mentoring and training programmes as part of the competition and acceleration programme	Number of human and financial resources of TUBITAK with built capacity; Wide platform of all stakeholders operationalized.	The CT project has not yet started building CT-relevant capacity at TUBITAK; No such stakeholder platform exists yet.	Trained TUBITAK 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, TUBITAK and other partners.
Outputs					
1.1 Two annual national Cleantech competitions organized;	Number of entries, number of semi-finalists and finalists etc.	Since the CT competitions have not yet been organized, the baseline is zero;	100 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 Two associated accelerator programmes organized, including post competition support;	Boot camps, training workshops, mentoring sessions organized; Increased disbursement rate from baseline funding programmes;	Since the CT competitions have not yet been organized, the baseline is zero; The current disbursement rate will be defined in the inception phase;	6 boot camps, training workshops, mentoring sessions organized; Improve disbursement rate by 15%;		
1.3 Participation in regional and global networking activities.	Regional workshops or training courses organized.	Since the CT competitions have not yet been organized, the baseline is zero.	15 regional workshops or training courses organized (target of 10% women participants) over the three years of the programme.		
2.1 Necessary policies and regulations required for the	Number of new policies and regulations developed to create a conducive policy	The current policy framework needs to be adapted to the CT	Related policies, regulations amended, or new ones developed;	Project progress reports; mid-term and final project	Continuous support from the government;

Result	Indicators	Baseline	Target	Means of Verification	Assumption and Risks
Cleantech competition and ecosystem identified and developed.	environment for CT implementation; Policy makers to receive trainings on policy development.	programme; Policy makers have not received training on the CT relevant policies.	20 policy makers receive training on policy development (target of 10% women participants).	evaluation reports.	Continuous support and participation by relevant stakeholders.
3.1 Capacity of host institution, TUBITAK, strengthened and wide platform for all stakeholders established;	TUBITAK staff trained to be able to organize the competition and the accelerator programme; Number of partners involved in the platform; number of mentors recruited and trained;	Currently, no TUBITAK staff have received such training; There is currently no such platform in Turkey, and no mentors have been recruited for the CT competition;	8 TUBITAK staff receive training on competition organization (target of 10% women participants); 15 partners involved in platform and at least 10 mentors recruited and trained annually;	Project progress reports; mid-term and final project evaluation reports.	Continuous support from the government; Continuous support and participation by relevant stakeholders.
3.2 Experience shared with other countries;	Number of regional workshops or training courses organized;	As of now, no such regional workshops have been organized;	2 regional workshops organized		
3.3 Initiation for the establishment of a Clean Energy Technology Development Platform conducted.	Assessment report on conditions, possibilities and needs for the establishment of the Platform.	No such assessment report exists.	Completed assessment report.		

ANNEX B: TIMELINE OF PROJECT OUTPUTS

Outputs	2013		2014				2015				2016	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Comp 1: Establishment of a Cleantech innovation ecosystem involving a platform to organize the Cleantech competition and associated accelerator programme.												
1.1 Two annual national Cleantech competitions organized;												
1.2 Two associated accelerator programmes organized, including post competition support;												
1.3 Successful clean energy technology innovators participated in regional and global networking activities.												
Comp 2: Policy implementation and institutional capacity building for the development of a supportive local innovation ecosystem.												
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 accelerator programme.												
3.1 Capacity of host institution, TUBITAK, strengthened and wide platform for all stakeholders established;												
3.2 Experience shared with other countries.												
3.3 Initiation for the establishment of a Clean Energy Technology Development Platform conducted.												
Comp 4: Monitoring and Evaluation												
4.1 Regular monitoring exercises conducted, PIRs and tracking tools prepared.												
4.2. Mid-term and final project evaluation conducted.												



⁶ 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