Independent Terminal Evaluation

GEF UNIDO Cleantech Programme for SMEs in Armenia

UNIDO Project No.: 120344
GEF Project No.: 5145

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

UNIDO INDEPENDENT EVALUATION DIVISION

Independent Terminal Evaluation

GEF UNIDO Cleantech Programme for SMEs in Armenia

UNIDO Project No.: 120344
GEF Project No.: 5145

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

Vienna, April 2017

Distr. GENERAL
ODG/EVQ/IEV/16/R.16

April 2017

Original: English

This evaluation was managed
by the responsible
UNIDO Project Manager
with quality assurance by the
Independent Evaluation Division

The evaluation team engaged to undertake the terminal evaluation of the UNIDO GEF project “GEF UNIDO Cleantech Program for SMEs in Armenia” would like to acknowledge and thank all partners and counterparts in Armenia who spared their time during the field mission and contributed to the evaluation.

Special thanks are due to the Project Manager (Mr. Mark Draeck) and Consultant (Olga Gordiievska) at UNIDO Headquarters, Head of UNIDO Operations in Armenia (Ms. Anahit Simonyan) as well as the project coordinator (Mr. Frunzik Voskanyan) and his team in Armenia for their precious time, support and the facilitation of the logistics during the evaluation mission conducted in Armenia from 21 to 25 March 2016.

TABLE OF CONTENTS

ABBREVIATIONS AND ACRONYMS

Accronym/Abbreviation	Meaning
CEO	Chief Executive Officer
EIF	Enterprise Incubator Foundation
GCIP	Global Cleantech Innovation Program
GEF	Global Environment Facility
GIZ	Gesellschaft für Internationale Zusammenarbeit
HQ	Head Quarters
IBRD	International Bank for Reconstruction and Development
IFC	International Finance Corporation
KPI	Key Performance Indicator
M&E	Monitoring and Evaluation
NPC	National Project Coordinator
OFP	Operational Focal Point
OVI	Objectively Verifiable Indicators
PCB	Printed Circuit Boards
PIR	Project Implementation Review
PMU	Project Management Unit
POP	Persistent Organic Pollutant
PPG	Project Preparation Grant
PSC	Project Steering Committee
PSRC	Public Services Regulatory Commission
R2E2	Renewable Resources and Energy Efficiency
ROtI	Review of Outcomes to Impact
SHPP	Small Hydro Power Plant
SMART	Specific, Measurable, Achievable, Relevant and Time-bound
SME	Small and Medium Enterprise
SMEDNC	SME Development National Center
TE	Terminal Evaluation
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention for Climate Change
UNIDO	United Nations Industrial Development Organization
USA	United States of America

GLOSSARY OF EVALUATION-RELATED TERMS

Term	Definition
Baseline	The situation, prior to an intervention, against which progress can be assessed.
Effect	Intended or unintended change due directly or indirectly to an intervention.
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved.
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted to results.
Impact	Positive and negative, intended and non-intended, directly and indirectly, long term effects produced by a development intervention.
Indicator	Quantitative or qualitative factors that provide a means to measure the changes caused by an intervention.
Lessons learned	Generalizations based on evaluation experiences that abstract from the specific circumstances to broader situations.
Logframe (logical framework approach)	Management tool used to facilitate the planning, implementation and evaluation of an intervention. It involves identifying strategic elements (activities, outputs, outcome, impact) and their causal relationships, indicators, and assumptions that may affect success or failure. Based on RBM (results based management) principles.
Outcome	The likely or achieved (short-term and/or medium-term) effects of an intervention's outputs.
Outputs	The products, capital goods and services which result from an intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.
Relevance	The extent to which the objectives of an intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donor's policies.
Risks	Factors, normally outside the scope of an intervention, which may affect the achievement of an intervention's objectives.
Sustainability	The continuation of benefits from an intervention, after the development assistance has been completed.
Target groups	The specific individuals or organizations for whose benefit an intervention is undertaken.

MAP OF ARMENIA

EXECUTIVE SUMMARY

Evaluation background and methodology

The Terminal Evaluation covers the implementation of the "GEF UNIDO Cleantech Program for SMEs in Armenia" in the period from May 2013 to April 2016. The project was implemented by UNIDO in partnership with Enterprise Incubator Foundation (EIF) of Armenia. The Terminal Evaluation was carried out to: a) assess project performance (relevance, effectiveness, and efficiency); b) verify prospects for development impact and sustainability; c) draw lessons and develop recommendations for UNIDO and GEF for similar projects and activities in the Armenia and on a global scale.

The Terminal Evaluation was carried out in accordance with UNIDO's Evaluation Policy and the methodology comprised the following elements; a) reviewing of project documentation and initial discussion with UNIDO HQ staff; b) analysis of the project design and elaboration of evaluation methodology; c) a one-week mission to Armenia and meeting with stakeholders; d) follow-up exchanges with the UNIDO HQ staff.

Summary of the main evaluation findings

A. Project design

The project was developed as a part of a global initiative, known as the Global Cleantech Innovation Program (GCIP), to promote environment-friendly clean technologies in SMEs of Armenia. The project document includes the standard project results framework adopted by each country participating in the GCIP. It highlights the partnership with ministries but no participatory meetings were held to identify the key stakeholders from the private sector such as relevant industry associations, sector federations, service providers, venture capitalists, etc., to ensure their commitment. The intervention logic and the causal links from activities to outputs are not presented coherently and there is no clear and consistent understanding of the project's impact pathways. The project document refers to possible linkage with several other initiatives by international organizations but no activities are proposed to create partnership and synergizing with such parallel activities. The project documents identified a few risks that might prevent the project objectives from being achieved, and risk mitigation measures were elaborated.

B. Relevance

The project is relevant to national energy security and climate change mitigation issues in Armenia. It envisaged to support activities linked to the Sustainable Development Program and the 2nd National Communication to UNFCCC. The project objectives, outputs and outcomes are relevant to the different target groups such as national industrial associations of SMEs, potential Cleantech startups, and the institutional stakeholders at the national level. The project is aligned with GEF's focal area strategy under climate change mitigation as it aims to promote demonstration, deployment, and transfer of innovative low-carbon technologies. The project is also aligned with GEF-5 modality 3 which supports the goals of countries like Armenia who are seeking to grow their domestic private sector by encouraging SMEs to expand in green and clean technologies. Finally, the project is in line with UNIDO's mandate, objectives and outcomes.

C. Effectiveness

The project was successful in mobilizing many organizations for the promotion of clean technology innovation by conducting Cleantech business competition and accelerators. It was

also effective in organizing extensive advocacy and outreach activities, thanks mainly to the close interaction with many universities and R&D centers in order to help them build their capacities to support startups and nurture innovative Cleantech ecosystem. It also convinced one of the universities about the importance creating entrepreneurship center and prototyping. International expertise was mobilized through professionals from Cleantech Open to provide guidance for organizing innovative business idea generation and entrepreneurship training for deserving startups. However, the project did not contribute enough to the building the capacity of national industrial associations of SMEs to host Cleantech programs, partly due to the lack of or limitation of interaction with the private sector stakeholders and due to the low-level ownership of project partners. Also, the project did not initiate much activities to contribute effectively to the strengthening the policy and institutional framework needed for scaling up Cleantech innovations in selected SME sectors. This includes extending financial assistance to the winning Cleantech startups so that they can convert their business ideas into commercial products and services for wide-scale dissemination in and outside Armenia.

D. Efficiency

The financial statements are not broken down in to components and activities, thus making it difficult to assess the cost-effectiveness in the implementation of the activities. Based on the budget and expenditure data shared with the evaluation team, the project appears to have achieved partial success in producing the outputs cost-effectively. Limited activities were undertaken to create an enabling policy and regulatory environment needed for accelerating Cleantech innovations and entrepreneurship in Armenia, as reflected by the drastic reduction of the budget for this component by about half. Similarly, the unused budget for the outcome 1 reflects the limited success of the project in building national capacity for clean technology and development of a supportive local entrepreneurial ecosystem. Only a fraction of the pledged co-financing materialized, thus limiting the scope for supporting the successful SMEs in converting their business ideas into concrete products and services. Finally, the project has not explored any avenues for creating synergy with similar initiatives by other national or international agencies to achieve some of the outputs and outcomes more cost-effectively.

E. Sustainability of project outcomes

The key project stakeholders are all appreciative of the results achieved by the project but have not yet figured out how to sustain the project initiatives. Having witnessed the dynamism created by the project for the generation of innovative business ideas through the Cleantech startups/SMEs acceleration programs, the project partner is interested to mobilize resources for continuing Cleantech competition. Since the SME sector is important to the national economy, and several ministries as well as government-backed agencies such as SMEDNC and EIF have the mandate to promote SME development in Armenia, the sociopolitical risks to the sustainability of project outcomes do not seem high. However, this situation could have been avoided at the end of the project to some extent if the project had also concentrated on the creation of enabling policy and regulatory environment to promote Cleantech innovations through increased access of SMEs to financing and technologies. Finally, the project outcomes are likely to be more sustainable if the focus of Cleantech innovation is not only limited to the small domestic market but geared towards the much wider market offered by the rest of the world.

F. Monitoring and evaluation system

To ensure successful and quality implementation of the project, the project design referred to a detailed M&E plan to be prepared by UNIDO in collaboration with project partners at the

beginning of project implementation. This M&E plan was expected to serve as a tool for a systematic and documented tracking and reporting the project's time-bound milestones and achievements. However, such an M&E system was not adopted during the project execution, because of which there was no systematic mechanism adopted to track the project's progress towards its objectives. It is, however, noted that the project management coordinated and used an adaptive management approach in the day to day operations and activities of the project.

G. Processes affecting achievements of project results

To ensure successful and quality implementation of the project, the project design had considered the capacity of the executing institutions and counterparts but had not resorted to any consultation process, thus leaving out the role of the private sector which normally plays an important role with regards to creating and supporting local entrepreneurial ecosystem. UNIDO's role in providing direct executive assistance left too little responsibility to the national stakeholders.

Rating of project performance

Overall, the project is rated "moderately satisfactory". Table 1 provides a summary of the ratings of the different evaluation criteria.

Table 1. Summary of Evaluation ratings

Criterion	Overall rating
Attainment of project objectives and results (overall rating)	***Moderately satisfactory***
a. Design	Moderately satisfactory
b. Effectiveness	Moderately satisfactory
c. Relevance	Highly satisfactory
d. Efficiency	Moderately satisfactory
Sustainability of project outcomes (overall rating)	***Moderately likely***
a. Financial risks	Moderately likely
b. Sociopolitical risks	Moderately likely
c. Institutional framework and governance risks	Moderately likely
d. Environmental risks	Highly likely
Monitoring and evaluation (overall rating) *sub-criteria below*	***Moderately unsatisfactory***
a. M&E Design	Moderately satisfactory
b. M&E Plan implementation (use of adaptive management)	Moderately unsatisfactory
c. Budget and Funding for M&E activities	Moderately satisfactory
d. Project management	Moderately satisfactory
UNIDO specific rating	***Moderately satisfactory***
a. Quality at entry / Preparation and readiness	Moderately satisfactory
b. Implementation approach	Moderately satisfactory
c. UNIDO Supervision and backstopping	Moderately satisfactory
OVERALL RATING	**Moderately satisfactory**

Summary of recommendations and lessons learned

The following is an overview of the recommendations of the Terminal Evaluation for the Government of Armenia (the detailed recommendations are presented in Chapter 4.2):

Recommendation #1	The Government of Armenia, through the concerned ministries, should explore the possibility of adopting the institutional framework for scaling up Cleantech innovations across Armenia. Possibilities should be explored to create synergy with the existing institutional set-ups and programs.
Recommendation #2	The Ministry of Education and Science should be sensitized about the need to allocate specific budget for creating sustainable entrepreneurship centers and prototyping labs to prepare the students to become entrepreneurs who can create jobs instead of looking for employment opportunities when they leave the academic arena.
Recommendation #3	The Enterprise Incubator Foundation (EIF) should explore synergetic collaboration with industrial associations of SMEs. Chambers of Commerce and Industry as well as international programs aimed at SME development and promotion through innovation.
Recommendation #4	Government of Armenia along with the executing partner from the private sector should explore the possibility of receiving support from the large Armenian diaspora running successful businesses in leading industrialized countries for technical know-how and finances needed to scale up the project's initiatives.
Recommendation #5	Government of Armenia should develop yardsticks to measure the direct and indirect economic, social and environmental benefits from the adoption of strengthened policy framework aimed at scaling up Cleantech innovation in Armenia.

The detailed lessons learned from this evaluation are elaborated in Chapter 4.3. Taking these lessons into consideration, following are some recommendations for UNIDO to consider in other new or on-going Cleantech projects:

Recommendation #6	Since project resources and timeframe are limited, UNIDO should avoid overstretching the implementation capacities and ensure adequate engagement of the national counterparts and their capacity building so that they can accompany the Cleantech startups beyond the national competition and generate results that serve as showcase for scaling up.
Recommendation #7	UNIDO should strike a fine balance between engaging enough and giving enough responsibility to the national stakeholders so that they assume full ownership.
Recommendation #8	UNIDO should ensure systematic reporting through the development of good M&E procedure and implementation plan that guarantee achievement of the intended outputs and outcomes within the given budget and time frame.

A lesson that can be learned is that all future projects aiming to achieve long-term goals should contribute to long-term processes than being perceived as favoring stand-alone interventions. Both UNIDO and the Government of Armenia should target expectations that are realistic than projecting very high economic, social and environmental achievements by the end of the project.

I. EVALUATION OBJECTIVES, METHODOLOGY AND PROCESS

1.1. Information on the terminal evaluation

1. The "GEF UNIDO Cleantech Program for SMEs in Armenia" project is part of the global UNIDO initiative with support from the Global Environment Facility (GEF) to promote innovative clean technology as a means to trigger and support sustainable and competitive entrepreneurship in selected SME sectors in Armenia. The project was implemented by UNIDO from May 2013 to April 2016 in partnership with the Enterprise Incubator Foundation (EIF).

2. In accordance with the UNIDO Evaluation Policy as well as the GEF Monitoring and Evaluation Policy, the project document specifies that a terminal evaluation (TE) needs to be conducted upon project completion. Hence, to conduct the TE, UNIDO engaged an evaluation team composed of one international consultant (Brahmanand Mohanty) acting as the team leader and one national evaluation consultant (Hakob Hakobyan). The TE was conducted just before the completion of the project, during March and April 2016.

1.2. Objectives and scope of the terminal evaluation

3. Following the Terms of Reference (ToRs), the TE should provide an analysis of the attainment of the project's objectives and the corresponding technical components. The scope of TE includes re-examination of the relevance of the objectives and other elements of project design according to the following project evaluation parameters: project design, relevance, effectiveness, efficiency, assessment of risks to sustainability of project outcomes, assessment of monitoring and evaluation systems, monitoring of long-term changes, assessment of processes affecting achievement of project outcomes, project coordination and management, and assessment of gender mainstreaming.

4. Through its assessments, the TE should enable the Government, the national GEF Operational Focal Point (OFP), counterparts, the GEF, UNIDO and other stakeholders and donors to

   - Verify prospects for development impact and sustainability, providing an analysis of the attainment of global environmental objectives, project objectives, delivery and completion of project outputs/activities, outcomes/impacts based on indicators, and management of risks;
   - Re-examine the relevance of the objective and other elements of project design according to the project evaluation parameters mentioned in paragraph 3;
   - Enhance project relevance, effectiveness, efficiency and sustainability by proposing a set of recommendations with a view to future activities.

5. The key question to be addressed by the TE is whether the project has successfully promoted an innovation ecosystem, driven by incentives, to assist in the design, deployment and scaling up of innovative clean and efficient technologies and processes across small businesses in Armenia, and whether it has achieved its expected outcomes, namely:

   - National capacity built to support Cleantech startups and a vibrant and sustainable Cleantech ecosystem fostered through partnerships and collaborations;

- Coordination mechanism promoted to support Cleantech innovations and competitiveness of SMEs, and business models designed to deliver global environmental benefits; and
- Policy, institutional framework and partnerships strengthened for scaling up Cleantech innovations across Armenia.

1.3. Methodology

6. The TE was conducted in accordance with the UNIDO and GEF guidelines, using a participatory approach whereby the key project stakeholders were kept informed and regularly consulted throughout the evaluation.
7. Different methods were used to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on various sources, as necessary.
8. Desk studies and literature reviews included:
    - The original project document, annual plan of activities, relevant correspondences (output reports, progress reports and final reports were not available for consultation by the TE team)
    - Agenda and minutes of project steering committee meetings
    - Project implementation reports (2 of them prepared for the FY2013 and FY2014)
    - Other materials produced by the project (reports and brochures, strategy paper, profiles of the successful start-ups and SMEs in the national competition)
    - Literature available in the public domain on global Cleantech programs such as the Global Cleantech Innovation Index reports prepared by the World Wide Fund for Nature (WWF)
9. The validity of the theory of change was examined through specific questions in interviews.
10. Counterfactual information: In those cases where baseline information for relevant indicators was not available, a proxy-baseline was established using secondary information.
11. Interviews were held with:
    - Project manager and technical staff including personnel and management at UNIDO HQ and the Head of UNIDO Operations in Armenia.
    - Project partners and stakeholders, including among others, government counterparts, project stakeholders and partners who had pledged co-financing as shown in the corresponding sections of the project document.
    - Intended users of the project outputs and other stakeholders involved in the project; opinions were also sought from representatives of donor agencies and other stakeholders
    - Members of the project steering committee and various national and sub-regional authorities dealing with project activities, including GEF focal point in Armenia
12. Direct on-site observation was made on the results achieved, including interviews of actual and potential beneficiaries of improved technologies and shared expertise. Visits

were made to laboratories and manufacturing facilities of selected Cleantech startup winners.

13. Information was triangulated for higher reliability of findings.

1.4. Challenges and limitations

14. Prior to the evaluation, only a limited number of project documents was made available for desk review. As a result, the TE team was unable to get a full overview of the extent of involvement of project key stakeholders in the project execution, activities undertaken as well as the outputs achieved in chronological order.

15. However, despite the limited reports and documents produced by the project, the TE team managed to get an overall understanding of the manner the project was executed thanks to the close interaction with the National Project Coordinator during the evaluation mission and the back-up support provided by the UNEP HQ. Further, the meetings and interviews held with the project partners and beneficiaries allowed to have a good appreciation of the project's outputs and the outcomes.

II. COUNTRY AND PROJECT BACKGROUND

2.1. Country background

2.1.1 An overview of the economy, the environment and institutional development

16. Armenia is a landlocked mountainous country with a total area of 29,743 square kilometers and a population of approximately 3 million. Armenia is located between Europe and Asia in South Caucasus region surrounded by Georgia, Azerbaijan, Iran and Turkey. After independence in 1991, Armenia has made considerable progress and the economy has undergone a profound transformation. The Government of Armenia introduced comprehensive reforms, which included the adoption of a macro-economic stability model based on strict fiscal discipline, low inflation and minimum deficits. Economic growth, reforms, as well as inflows of capital and remittances have created a market-oriented environment.

17. However, despite significant progress in macro-economic and structural reforms, the country faced development challenges, economic risks, governance problems, and constraints on regional and global integration. Also, the global financial crisis in its turn impacted significantly the market of the country. After a period of double digit economic growth of 12% between 2001 and 2007, the country was harshly hit by the global crisis in the last quarter of 2008. As a result, GDP dropped by 14.1% in 2009[1]. The effect of the financial crisis on the poverty was dramatic. The poverty rate increased from 27.6% in 2008 to 32% in 2013. After 2009, the macroeconomic situation has greatly improved, and the economy was set on the path of recovery. It gradually picked up from 2.1% in 2010 and 4.6% in 2011 to 7.2% in 2012, driven mainly by the mining sector, agro-industries and remittances from abroad. After growing by 7.2% in 2012, Armenia's economic growth slowed to 3.3% in 2013, 3.5 per cent in 2014 and 2.1% in 2015[2].

18. Adopting a policy of sustainable economic development and defining main priority directions, the Government of Armenia focused on implementing targeted social and income policies, modernizing the country's administration system including the increase of the efficiency of the public governance and provision of the advanced growth of the resources package at the disposal of the country. The current Government has announced an ambitious reform program, which includes among its key priorities fighting corruption and the shadow economy, promoting economic competition and improving the investment climate. Implementing business environment reforms over the past years, Armenia has achieved a remarkable turnaround in its investment climate. In 2014–2015, Armenia improved its ranking by four to 45th position out of 189 economies in the Doing Business rating. However, this has not yet translated into substantial increases in business activity. Fostering entrepreneurship and stimulating the growth of small and medium-sized enterprises (MSMEs) continue to be among the major development challenges[3].

---

[1] *UNDP Armenia "Article About Armenia" http://www.am.undp.org/content/armenia/en/home/countryinfo/#The socio-economic situation*
[2] *World Bank Annual Report, Armenia 2015*
[3] *World Bank's 2015 Doing Business report*

2.1.2 Sector-relevant National Policies and Strategies

19. In the national policy of sustainable economic development, which assumes harmonized growth for each branch of the economy, the Government of Armenia prioritizes energy efficiency as a means of increasing the country's energy security, economic competitiveness and reducing the negative impact on the environment. The basis for long-term energy policy in Armenia is the Strategy for Development of the Energy Sector, which defines ways of creating a safe, efficient and sustainable energy sector in Armenia. National Energy Security Concept adopted in 2013 outlines the government strategies for achieving energy security and identifies the promotion, development and investment in renewable energy technologies. The Government's renewable energy strategy is driven by the overarching goals of improving energy security, ensuring tariff affordability, and maximizing the use of Armenia's indigenous energy resources[4]. The Government's Development Strategy for 2012-2025 specifically calls for the development of indigenous renewable energy resources and addresses the following issues:

    - Contribution to sustainable economic development of Armenia and energy security, including the classification of imported and local energy reserves.
    - Maximum utilization of renewable and nontraditional sources of energy.
    - Promoting energy saving.
    - Environment-friendly energy supply in line with the international commitments of Armenia.

20. In the context of sustainable economic growth, the development of small and medium enterprise (SME) sector is also intended to ensure country's economic growth stability, imparting an innovative focus and flexibility to the economy. In this regard, the SME sector with its features and capabilities is the cornerstone, which has a significant impact on the country's economic development and provides the tangible socio-economic result, as well as balanced regional development. Acknowledging the crucial role of the SME sector in country's economic development, - creating new job places, raising the living standards, forming of the middle-class society and provision of the social and political stability, the Government of Armenia is taking consistent steps towards state support and development of the SME sector. The SME development strategy goal over the next three years (2016-2018) is to ensure a competitive environment for small and medium business activity, through promotion of enterprise development and dissemination of knowledge in entrepreneurship, access to finance, simplifying the tax system and improving the mechanisms for dialogue with the private sector, as well as through promotion of innovation and sustainable development.[5]

2.2. Sector-specific issues of concern to the project

21. Government has made consistent efforts to create a legal, regulatory and institutional environment which provides the development of domestic energy resources that have

[4] *Armenian (SREP), Investment Plan, Ministry of Energy and Natural Resources, 2014*
[5] *The Strategy for Small and Medium Entrepreneurship Development for 2016-2018, Government of Armenia*

helped to improve Armenia's security of energy supply. Energy security is a central concern of the Armenian Development Strategy and National Security Strategy, which emphasize the importance of renewable energy and energy efficiency. The Government's commitment to promotion of energy efficiency is mainly reflected in the Law on Renewable Energy and Energy Efficiency (2005) and the National Program on Renewable Energy and Energy Efficiency (2007). The Law lays out the principles of the government's policy and governance structure supporting energy efficiency:

- Effective use of local energy reserves and alternative sources of energy and application of economic and legal mechanisms for that purpose.
- Ensure the energy independence and security of Armenia.
- Create new industries and organize new services, implement targeted national programs and apply new technologies in order to promote the development of renewable energy and energy saving.
- Promote energy-efficient and energy-saving technologies.
- Reduce environmental impacts.

22. The National Program on Renewable Energy and Energy Efficiency identifies the sectors with the largest energy efficiency potential and provides an outline of technical measures/solutions to be taken to realize the identified technically viable potential. The National Program also assesses the potential of renewable energy and measures for achieving potential energy savings. Specifically, the National Program on energy saving and renewable energy has the following objectives[6]:

- Plan the development of energy resources of the country in parallel to the advancement of energy saving and renewable energy.
- Align state policy on development of fuel-energy resources with the development of the economy to guarantee the sustainable development of the country through introduction of regulatory reforms and increase of public participation.
- Direct the finance and credit policy of the country to energy saving and renewable energy development, providing equal affordability conditions for the capital investments.
- Establish and maintain an active market structure through introduction and explanation of energy efficiency benefits, providing an effective choice mechanism for market participants.
- Organize, promote and provide equal accessibility of modern technologies for all members of society (companies).

23. In 2007, the Public Services Regulatory Commission (PSRC) set renewable energy feed-in tariffs for small hydropower plants (SHPPs), wind, and biomass to stimulate private investment. The feed-in tariff regime guarantees the purchase of all the power generated by renewable energy plants for 15 years. More recently, Government took steps to streamline the process of developing renewable energy projects, including

[6] *Improving Energy Efficiency in Buildings Project, UNDP Armenia*

relaxing tax obligations for some investments. The Government of Armenia also approved national action plans in the spheres of energy and nature protection.

24. The Second National Environmental Action Program approved in 2008 covers both environmental media (land, bio resources, water, air, underground resources, hazardous waste and substances) and cross-media issues (environmental economics, environmental legislation, institutional issues, environmental monitoring, environmental compliance and enforcement, environmental impacts assessment, international cooperation, environmental education, public awareness, environmental research and development). It also refers to cross-sectoral issues in the energy, industry, transport, agriculture, and health sectors[7].

25. In 2010, National Energy Efficiency Action Plan of Armenia was developed with the aim to contribute to the formulation of the future energy policy of Armenia and to define concrete steps for its implementation. One of the main aims of the national policy in the energy sector is defined to improve energy efficiency and to further develop the use of renewable energy sources.

26. Thus, adopted strategies, national programs and action plans in energy and environment sectors, as well as government's continuous efforts to improve legal and regulatory framework and to strengthen the SME sector are aimed to maximize the potential of small businesses in the context of economic and social development, promote innovative solutions in energy efficiency and ensure environmental sustainability. Second generation energy reforms in Armenia, focused on the use of safe, clean and affordable heating and renewable energy generation, promote several initiatives and projects to improve water and energy management practices (e.g. efficient lighting, space and water heating, use of biogas and solar energy, water waste), and to help the country better respond to climate change challenges.

27. One of such initiatives is the GEF funded Cleantech Program for SMEs in Armenia, which is contributing to above mentioned policies and strategies, building national capacity for clean technologies as well as developing a supportive local entrepreneurial ecosystem to foster emerging and commercially viable clean technology startups for supporting green industrial growth in Armenia. Giving significance to the contribution of small businesses to the promotion of job creation and overall economic development of Armenia, UNIDO has developed this project, emphasizing the promotion of innovations in clean technologies.

28. The various national policies, strategies and programs, secondary legislations and regulatory frameworks as well as international treaties related to the implementation of energy efficiency policies developed and adopted by the Government of Armenia are summarized in Figure 1.

[7] *Climate Change Information Center of Armenia, http://www.nature-ic.am/strategic-papers/*

Figure 1. Energy efficiency policies, strategies and regulations adopted in Armenia[8]

2.3. Project summary

2.3.1 Rationale

29. The project is part of a global initiative launched by UNIDO to promote innovative environment-friendly technologies in SMEs. SMEs are considered as priority for job creation and the overall development of Armenian economy. Based on the Law on "State support of small and medium entrepreneurship", SME Development National Center (SMEDNC) was created as the main institution for implementing state policy towards SME development.

30. The project is aligned with the National Policies and the GEF focal area priorities as it was part of a global initiative. The project adopted an inter-disciplinary approach involving SMEs, national ministries, academia, industry associations, state governments, partner agencies to promote innovative technologies in selected energy intensive SME clusters across the country.

31. Armenia faces certain barriers to the successful promotion of the national innovation and acceleration program. These include:

- Lack of information about technology options, best practices, and benchmarks within enterprises; the linkage between research institutes and industry remains weak,
- Lack of trained experts for mentoring entrepreneurs,
- Lack of an enabling policy and regulatory environment,
- Lack of adequate institutional capacity, and

[8] *Source: 2nd National Energy Efficiency Action Plan (1st draft), June 2015*

- Lack of awareness and hence the lack of participation and support by all stakeholders and the public.

2.3.2 Objectives

32. The project was formulated to remove some of the above barriers through strategic interventions with key performance indicators (KPIs). It focused on promoting clean technologies through a participatory and competitive process, encouraging the local private sector to increase investment in four categories of clean technologies (energy efficiency, renewable energy, waste to energy, and water efficiency).

33. The project aims at strengthening the policy and institutional framework, and building national capacity to promote innovations in clean energy technologies in selected SME clusters. It would promote innovative startups and entrepreneurship in SMEs identified at the national /state level through a participatory and competitive process. The project will also mobilize investment and develop national capacity of the SME sector in Armenia to promote clean low-carbon technologies, addressing Armenia's energy supply and energy security issues and leading to significant reduction of GHG emissions.

34. The wider use of clean energy technologies is expected to help develop clean energy and green enterprises, leading to the creation of jobs using local resources and benefiting banks and construction firms. Indigenous development of technologies will reduce the cost of equipment for SMEs, and an increased use of clean technology will improve resource efficiency, and contribute to the reduction of GHG emissions and health risks, particularly for women and children.

2.3.3 Components

35. The project had three distinct components, namely:

    - Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem: The CleanTech Open, UNIDO and other partners in the field will join hands in designing the program in Armenia, keeping in view local conditions and needs. Partners, experts and stakeholders, especially drawn from the national/state industrial associations will be trained on best practices for managing the Cleantech platform through mentor program, intensive training programs and public-private partnership forums.
    - Promoting coordination mechanism to support clean technology innovations and competitiveness of SMEs, and designing business models that can deliver global environmental benefits: A national level coordination mechanism will be established to promote clean technology innovation and entrepreneurship among SMEs. Annual Cleantech business competition and accelerator will be established across selected sector categories, and extensive advocacy and outreach activities will be undertaken in Yerevan and expanded to all ten provinces.
    - Strengthening policy and institutional framework and partnerships for scaling up Cleantech innovations across Armenia: Enabling policy and regulatory environment will be created, and regional stakeholder's meetings/consultations will be held and partnerships will be developed with leading institutions, agencies and universities.

36. The project's overall results framework is presented in Table 2.

Table 2. Project results framework

Components	Outputs	Outcomes
C1: Capacity building of national industrial associations to host Cleantech program	1.1: National industrial associations of SMEs involved in capacity building initiatives 1.2: Up to 150 mentors identified and trained 1.3: Intensive Cleantech Open Academy held in Yerevan for seed stage Cleantech investors utilizing best practices from other regions 1.4: Public-private partnership forums held regionally	O1: National capacity for clean technologies built and a supportive local entrepreneurial ecosystem developed
C2. Mobilization of SME associations and national agencies to promote clean technology innovations and establishment of a coordinating platform	2.1: A national level coordinating mechanism established to promote clean technology innovations and entrepreneurship among SMEs 2.2: Annual Cleantech business competition and accelerators established across selected Cleantech sectors in Yerevan and expanded to other regions 2.3: Extensive advocacy and outreach activities organized in Yerevan and expanded to other regions	O2: Coordination mechanism to support Cleantech innovations and competitiveness of SMEs promoted, and business models that can deliver global environmental benefits designed
C3. Strengthening of policy and institutional framework for scaling up Cleantech innovations in selected SME sectors	3.1: Enabling policy and regulatory environment created 3.2: Regional stakeholder's meetings and partnerships developed with leading institutions, agencies and universities across the country	O3: Policy, institutional frameworks and partnerships for scaling up Cleantech innovations across Armenia strengthened

2.3.4 Target areas/groups

37. The project targets a broad range of stakeholders. Components 1 and 2 are focused on partner agencies (EIF and SMEDNC), industrial associations, SME associations, academia and autonomous research centers, both at the national and regional levels, mainly to raise their awareness and change their mindset around the scope for developing and nourishing innovative clean technologies in Armenia. Through these stakeholders, the project targets the local SMEs which, through participatory and competitive process, can design, develop and scale up innovative clean and efficient technologies and processes in Armenia.

38. Component 3 is focused on involving national ministries and local governments so that they can strengthen policy and institutional framework for scaling up Cleantech innovations in selected SME sectors.

2.3.5 Milestones in project design and implementation

39. Table 3 presents the milestones and key dates in project design and implementation. Due to the absence of regular reporting, it was difficult to establish a calendar of events. The table if prepared from information available from various sources, including the project's Facebook (which is no longer available) and information available in the public media.

Table 3. Milestones and key dates in project implementation

Milestone	Date
Project CEO Endorsement / Approval date	7 March 2013
Project implementation start	17 May 2013
First Steering Committee meeting	3 October 2013
Initial public announcement of GCIP-Armenia at the ArmTech Congress	October 2013
Second Steering Committee meeting	19 February 2014
Global Cleantech Training Workshop in Vienna	12-15 March 2014
CleanTech Open Webinar for Country Coordinators	1 April – 15 May 2014
Cleantech Armenia National Academy	3-5 July 2014
Weekly webinars, workshops and business clinics for entrepreneurs	July -September 2014
Cleantech National Business Ideas Competition award event	23-24 October 2014
Participation of Cleantech national winner in the Cleantech Open Global Forum, Silicon Valley, USA	12 November 2014
Third Steering Committee meeting	3 February 2015
Global Cleantech Training Workshop in Vienna	12-15 March 2015
Cleantech Open Webinar for Country Coordinators	April - May 2015
Pilot "Innovative Business Ideas Generation and Entrepreneurship" training for young people in Gyumri	March-May 2015
GCIP entrepreneurship training at Yerevan State University	April-May 2015
Training of GCIP-Armenia mentors and judges	4 June 2015
Cleantech Armenia National Academy	5-7 June 2015
Screening and judging of Cleantech applicants	22-23 June 2015
Weekly webinars, workshops and business clinics for entrepreneurs	July-August 2015
Cleantech National Business Ideas Competition award event	12-13 October 2015
Participation of Cleantech national winner in the Cleantech Open Global Forum, San Francisco, USA	19-26 November 2015
Six-week Innovation Business Ideas Generation and entrepreneurship training for students in two universities	February-April 2016
Project concluding event in Yerevan	13 April 2016

2.3.6 Implementation arrangements and project partners

40. Following the approval of the project by GEF Chief Executive Officer (CEO) in March 2013, the project officially started in May 2013 for a period of 36 months. After the launching of the project, a decision was made by the government to replace SME Development National Center (SMEDNC) by Enterprise Incubator Foundation (EIF) as the latter was considered as a more suitable implementing partner for the project. As an

implementing agency of GEF, UNIDO directly executed the project in collaboration with EIF and other local partners.

41. A Project Steering Committee (PSC) formed to provide strategic guidance for project implementation consisted of UNIDO staff, representatives from the key institutional partners in Armenia, namely the Ministry of Economy, Ministry of Nature Protection, Ministry of Energy and Natural Resources, Ministry of Agriculture, SMEDNC and EIF.

42. A Project Management Unit (PMU) was created to act as the Secretariat of the PSC, and to be responsible for the day-to-day management, monitoring and evaluation of project activities as in the agreed project work plan. The PMU was managed by a National Project Coordinator (NPC) engaged by UNIDO.

2.3.7 Project costs and co-financing

43. The total project budget as reported in the project document amounts to US$3,146,946 (see Table 4). The project was approved by the GEF with a financial contribution of US$ 547,946 and the remaining amount represented co-financing from UNIDO (US$100,000, with 50% grant and 50% in-kind contribution) and the SME Development National Center of Armenia or SMEDNC (US$2,500,000 in grant) which was identified as the national execution agency to provide technical assistance and overall logistical support for the project. However, the co-financing pledged by SMEDNC did not materialize as SMEDNC was replaced by EIF as UNIDO's project partner after the starting of the project. On the other hand, there was a lower level of co-financing extended by EIF to the project.

Table 4. Project budget and financing plan

Project Budget			
Project Outcomes	*GEF ($)*	*Co-financing ($)*	*Total ($)*
1. Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem	212,264	1,160,636	1,372,900
2. Promoting coordinating mechanism to support clean technology innovations and competitiveness of SMEs, and design business models that deliver global environmental benefits	155,000	670,000	825,000
3. Strengthening policy, institutional framework and partnerships for scaling up Cleantech innovations across Armenia	105,869	483,000	588,869
Monitoring and evaluation	25,000	50,000	75,000
Project Management	49,813	236,364	287,177
TOTAL	*547,946*	*2,600,000*	*3,147,946*
Financing Plan			
	Project Preparation ($)	*Project ($)*	*Total ($)*
GEF Financing		547,946	547,946
Co-financing: - UNIDO (Implementing Agency) - SMEDNC (Local Government)	50,000	(in kind) 50,000 2,500,000	100,000 2,500,000
TOTAL	*50,000*	*3,097,946*	*3,147,946*

2.3.8 Positioning of the UNIDO project

44. UNIDO has a history of cooperation with Armenia. The project document had foreseen creation of linkage with UNIDO's ongoing programs as well as coordination with other related projects and initiatives to create synergies and avoid overlapping. These included:

    - Learning from the experience gained by UNIDO in supporting SME development in developing countries and from the implementation of South Africa's Cleantech program, and thanks to the synergy with UNIDO's other relevant departments (such as the Business, Investment and Technology Services Branch (BIT), Trade Capacity-Building Branch, Agri-Business Development Branch and Industry Policy and Private Sector Branch, Green Industry Platform) as well as UNIDO's ongoing project on sustainable management of Printed Circuit Boards (PCBs) and other Persistent Organic Pollutants (POPs) waste in Armenia;
    - Benefitting from the experience and expertise gained under the CleanTech Open program promoting innovations in small businesses in the United States of America (USA);
    - Linking up with ongoing GEF/International Bank for Reconstruction and Development (IBRD) initiative in renewable energy and energy efficiency in Armenia, GEF/United Nations Development Programme (UNDP) project to improve energy efficiency in buildings, United Nations Environment Programme's (UNEP) initiative to provide support to SME development in Armenia, Gesellschaft für Internationale Zusammenarbeit (GIZ) led initiative in the framework of the "Local/Regional Economic Development with SME focus", International Finance Corporation's (IFC) "Armenia Sustainable Energy Finance Project" and "Europe and Central Asia Resource Efficiency program", etc.

45. The project document also mentions about aligning its specific focus with the initiatives of the Armenia Renewable Resources and Energy Efficiency (R2E2) Fund supported by GEF/World Bank to undertake activities aimed at introducing innovative clean technologies in target sectors. R2E2 Fund develops feasibility studies and offers preferential financing through a revolving fund to attract investors in this sector.

III. PROJECT ASSESSMENT

3.1. Project design

46. As far as the project design is concerned, the project has been developed as a part of a global initiative, known as the Global Cleantech Innovation Programme or GCIP, launched by UNIDO in partnership with GEF to promote environment-friendly energy technologies in SMEs. The typical GCIP approach to help build an innovation and entrepreneurship ecosystem is depicted in Figure 2. The GCIP aims to build an innovation and entrepreneurship ecosystem in the participating countries by assisting in the development of the institutional capacity of local implementing partners, typically government agencies focused on SME development, clean technology and innovation. By nurturing emerging Cleantech startups and supporting the local entrepreneurial ecosystem and policy framework, the program delivers both environmental benefits and economic vitality to the developing countries.

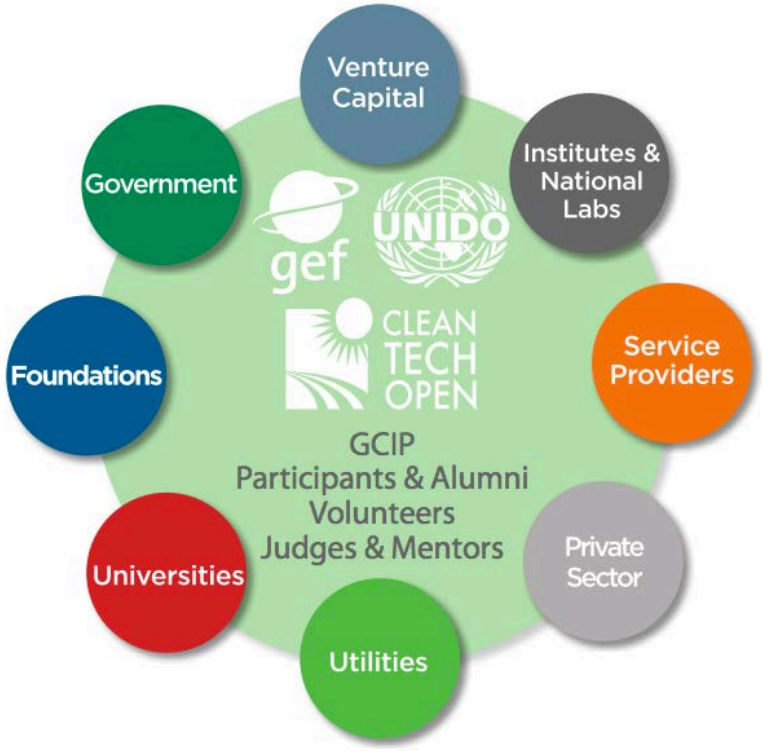

Figure 2. GCIP approach to help build an innovation and entrepreneurship ecosystem (source: UNIDO brochure - Fostering Clean Technology Innovation, 2015)

47. For the countries benefitting from GCIP, a similar program structure is pursued: Each country receives funding from the GEF matched by co-financing (including in-kind) from in-country public- and private-sector partners. The program is led by a local executing partner in each country, supported by local stakeholders and advisors. Selected startups in each country participate in a rigorous, competitive national acceleration program that trains, mentors, promotes, and connects them to potential investors, customers and partners. The winning startup teams from each country are given a chance to participate in the Cleantech Open Global Forum in Silicon Valley, California for recognition, awards and connections to potential partners, customers and investors from around the world.

48. The project in Armenia follows the same template that is used by UNIDO for other countries of the GCIP network, Hence, the project document was developed by UNIDO using its own resources without requesting any Project Preparation Grant (PPG) from GEF. And the project document includes the standard project results framework that is adopted by each country participating in the GCIP.

49. The single objective of the project is stated as the promotion of clean technology innovations and entrepreneurship in selected SME sectors in Armenia. However, there does not appear to be any clear and consistent understanding of the project impact pathways. The intervention logic and the causal links from activities to outputs are not presented coherently in the project document and the project results framework. Outputs are stated but activities that would ensure the outputs are not explicitly presented. Further, in the absence of any description of activities to be undertaken, it is unclear how the project can justify such high level of co-financing, particularly for building national capacity.

50. The results framework identified several assumptions and risks at the objectives, outcomes and outputs levels. Some of these assumptions can be influenced by the project or by UNIDO and would thus, under the Review of Outcomes to Impact (ROtI) methodology, be classified as impact drivers.

51. The promotion of clean technology innovations and entrepreneurship in selected SME sectors in Armenia appears rather to be an immediate outcome of the project whereas one of the indicators to verify the achievement of objectives (tons of emissions avoided) is more likely to be one of the primary impacts of the project (significant reduction of GHG emissions).

52. Best practice in project design requires objectively verifiable indicators (OVIs) to be SMART (i.e. specific, measurable, achievable, relevant and time-bound). In this sense, the outputs that the project has set to achieve cannot be considered as SMART. Practically none of the indicators set is specific and measurable. How can the “number of SME associations and national agencies involvement” ensure the establishment of “a national level coordinating mechanism to promote clean technology innovation and entrepreneurship amongst SMEs”? Similarly, how can one measure the tons of GHG emissions avoided by undertaking activities that fulfil the outputs 2.1, 2.2 and 2.3? Also, the number of policies in place or the number of existing policies strengthened is not necessarily an appropriate indicator of the enabling policy and regulatory environment. The time frame set is not always realistic. For example, the schedule of activities shows that 150 mentors will be identified and trained during the first three quarters of the first year of project implementation.

53. The project document does not refer to any participatory approach or consultation meetings being held at the project development stage to identify potential stakeholders and beneficiaries and ensure their commitment. This can be seen by the fact that the partners identified for project implementation were all from the government organizations (Ministries and agencies created by the Ministries, namely SMEDNC and EIF) whereas the potential partners from relevant industry association and sector federations as well as academic institutions were not named. An initiative that is aimed at creating an innovation ecosystem for promoting clean and efficient technologies and processes across small businesses would undoubtedly require active involvement of representatives from the private sector, such as relevant industry associations, sector federations, service providers as well as venture capitalists. In the absence of any

consultation with the relevant stakeholders, it is generally difficult to motivate and ensure their commitment during the implementation of the project.

54. As mentioned in paragraph 44, the project document refers to possible linkage with several other initiatives (UNEP, UNDP, JICA, UK DFID, IFC, etc.) but no project activities provide the scope for creating partnership and synergizing with such parallel initiatives. Also, there is no cooperation explored in the project implementation activities with UNIDO's Green Industry Initiative which has outlined policy frameworks.

55. Some changes in the project design were discussed and adopted in the Project Steering Committee meetings but there was no revised project results framework made to reflect such changes. For example, the 2nd PSC meeting recommended the creation of the Cleantech Armenia Council and the allocation of budget for Gyumri Techno Centre Cleantech laboratory.

56. The project design identified a few risks that might prevent the project objectives from being achieved. None of the risks was rated as "high", and risk mitigation measures were elaborated. Insufficient incentives and financial support system were considered as one of the low risks, and the solution contemplated was to ensure availability of financing resources such as revolving credit lines with private and public sector banks. Also, increased access of SMEs to financing and technologies appear as indicators of the outcome related to the strengthened policy and institutional framework for scaling up innovations. However, no bank / financial institution was considered as stakeholder of the project, and no mechanism was put in place to ensure availability of financing.

The overall rating for project design is "moderately satisfactory".

3.2. Relevance

3.2.1 Relevance to national development and environmental priorities

57. The project document has highlighted the project's relevance to national energy security and climate change mitigation issues. The project is envisaged to support activities linked to the Sustainable Development Program (2008) and the 2nd National Communication to the United Nations Framework Convention for Climate Change (UNFCCC). Further, the project would support various national initiatives, including national programs and laws, such as the National Program on Energy Saving and Renewable Energy (2007) that recognizes energy efficiency and renewable energy as the key to ensure energy security and availability.

58. The project objectives, outcomes and outputs are relevant to different target groups. Mentor program, intensive training seminars including Cleantech open academy and public-private partnership forums are aimed at capacity building of the national industrial associations of SMEs. Annual Cleantech business competition and accelerator program and advocacy as well as outreach activities at the national level are meant to support the potential Cleantech start-ups. Finally, the project aims at creating enabling policy and regulatory environment that are of high relevance to the project's institutional stakeholders at the national level.

59. The project continues to remain relevant because the SME sector is important for Armenia. Cleantech will effectively address the energy dependence and environmental challenges faced by the country.

3.2.2 Alignment with GEF focal areas and strategic priorities

60. The project is aligned with GEF's focal area strategy under climate change mitigation. It aims to promote demonstration, deployment, and transfer of innovative low carbon technologies. The project also considers transforming the market for energy efficiency in buildings and industry, and investment in renewable energy technologies.

61. The project is also aligned with GEF-5 modality 3 which supports the goals of countries who are seeking to grow their domestic private sector by specifically encouraging SMEs to expand in green and clean technologies to secure national competitiveness in a global 21st century economy.

3.2.3 Alignment with UNIDO's mandates and objectives

62. Finally, the project is in line with UNIDO's mandate, objectives and outcomes. The project forms part of a global initiative launched by UNIDO in partnership with GEF to promote innovative environment-friendly energy technologies in SMEs.

The overall rating for project relevance is "highly satisfactory".

3.3. Effectiveness

63. The effectiveness of any project is mainly gauged by assessing the outputs and outcomes that the project could achieve. The following sections provide an overall assessment of outputs leading to specific outcomes.

64. The task of evaluating the project's effectiveness has been quite tedious for two reasons: some of the indicators to assess the outputs or outcomes are not clear or precise to derive a meaningful conclusion. Secondly, though the PMU has visibly undertaken many activities and interacted with various stakeholders to create awareness and the ecosystem needed for promoting Cleantech, the documentation of the activities has been rather limited and poor. Further, the task is made even more onerous because of the inconsistencies found between the very few documents that were produced by the project. For example, work plans presented for years 2014 and 2015 were descriptive in nature and did not include any clear timeline and budget for their implementation. Also, the minutes of the PSC were rather sketchy and did not provide a clear understanding of how the project activities had resulted in quantifiable outputs. The reporting in the PIRs refer to indicators which are not linked to outputs (e.g. how do the public-private partnership forums held regionally result in the number of shortlisted SMEs connected with funding and partnership opportunities?). Ultimately, in the absence of any systematic documentation, the project tends to devalue its achievements due to poor visibility of its real achievements, both quantitative and qualitative.

3.3.1 Outcome 1: Capacity building of national industrial association to host Cleantech program

65. The overview of the status of outputs aimed at achieving the Outcome 1 at the end of the project is presented in Table 5 along with an overall assessment of the achievements of the key elements.

Table 5. Summary of the project's success in producing outputs under Outcome 1

Outcome 1: Capacity building of national industrial association to host Cleantech program		
Outputs	**Indicators**	**Comments**
1.1 National industrial associations of SMEs involved in capacity building initiatives	Number of staff specifically trained to be able to organize the competition and the acceleration program	The competition and the acceleration program were organized by the project team. The project's head office is located at the newly opened Gyumri Technology Center, operated by EIF. No staff from EIF was specifically trained though the EIF Director was present during the Award ceremonies of national competitions
	Number of local partners trained	No local partner was trained though meetings were held with EIF's staff members to discuss the Cleantech project's details and to ease understanding of the essence of the project and accelerator program. The project collaborated with universities, R&D centers, youth associations and promoted the GCIP for SMEs in Armenia. Following the training organized in Yerevan State University, the university management agreed to establish a Cleantech-focused Entrepreneurship center at the university along with a Cleantech prototyping lab.
1.2 Mentor program – Up to 150 mentors identified and trained	Number of mentors trained	2 mentors were trained in 2014 and 20 mentors were trained in 2015 by Cleantech Open experts
1.3 Training program – Intensive Cleantech Open Academy held in Yerevan for seed stage Cleantech investors utilizing best practices from other regions	Number of semi-finalist companies supported by Cleantech program	60 semi-finalist teams (30 in 2014 and 30 more in 2015, including 5 teams from the university training) were supported
	Number of shortlisted SMEs connected with funding and partnership opportunities	4 startups who participated in the 2014 national competition participated in the 2014 GCIP and won EUR 400,000 to establish a Cleantech training center and lab in Gyumri
	Number of SME entrepreneurs invests in innovations	The 2014 national winner team won the EIF's matching grant competition and used the USD 50,000 to start the production line
1.4 Public-private partnership forums held regionally	Number of support institutions involved in the Cleantech program	Around 30 supporting institutions were involved in the Cleantech program

66. As shown in Table 5, the project had little success in involving its institutional partner EIF in capacity building initiative. The project office was housed in the Gyumri Technology Center operated by EIF. While meetings were held by the project team with EIF staff at the Gyumri Technology Center, no staff from EIF was deputed to get on-the-job training during the organization of Cleantech events which were mostly held in Yerevan, involving startups and mentors from Yerevan. The project team did not interact with any industrial associations of SMEs other than EIF. However, the project was successful in interacting with universities and their R&D centers and helping them build their capacities to support startups and nurture innovative Cleantech ecosystem.

67. It is difficult to ascertain the exact number of mentors that the project could identify and train during the execution of the project. In the first year, two mentors took the lead in training the semi-finalists. In fact, Cleantech Open was hired by the project to provide support to the PMU in terms of building the capacity of the mentors but their focus was

more on providing guidance to the PMU except for holding some webinars targeted towards mentors.

68. As reported by the Cleantech Open, intensive training was provided to the semi-finalists during the Cleantech Open Academy. This seems to have been effective with a combination of international and national experts conducting the training for the selected Cleantech teams. In some documents, there is reference to the support being provided to 60 semi-finalist teams over 2 years (2014 and 2015). It appears however that some of the semi-finalists dropped out from the program, because of which one specific document reports the number of semifinalist startups and SMEs as 24 and 19, for the years 2014 and 2015, respectively. This document is interesting because it also highlights the specific areas and provides an abstract of the focus of innovation of each startup team (see Figure 3). Both the years, energy efficiency dominated the numbers of startup teams, followed by renewable energy.

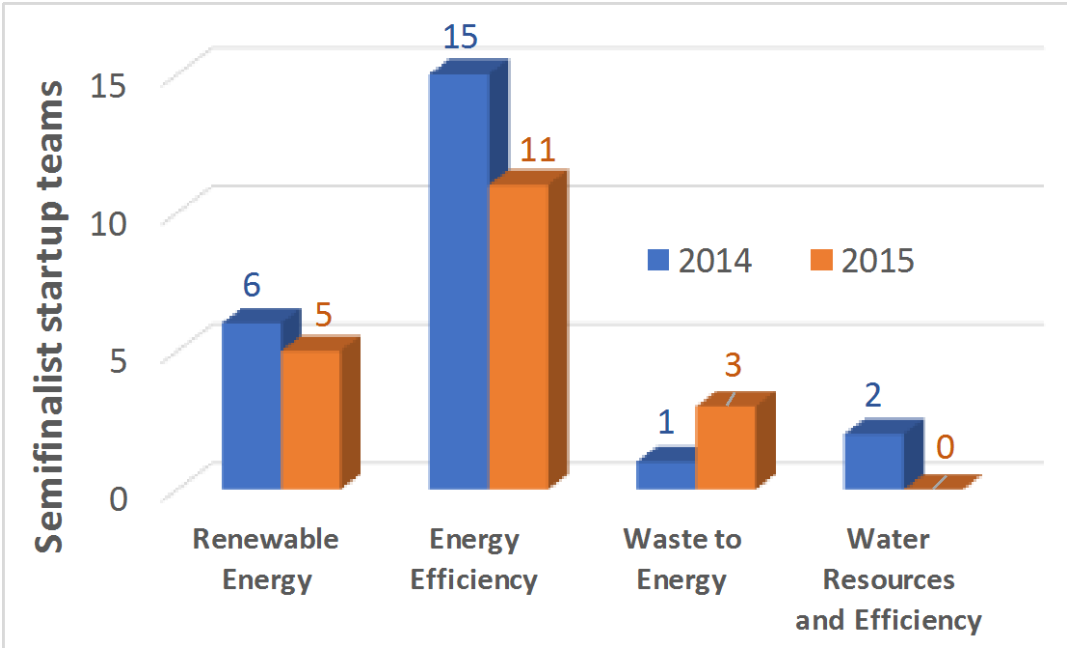

Figure 3. Categorization of semifinalist startup teams participating in national competition

69. Thanks to the mentoring from the project, 4 startup teams who participated in the national competition also participated in 2014 GCIP and could win EUR 400,000 to establish a Cleantech training center and lab in Gyumri. Also, the winning team of 2014 national competition could avail EIF's matching grant of US$ 50,000 to purchase the necessary equipment and start the production line. Such concrete results inspire more SMEs to take part in future competition as they see the prospect of leveraging financial means to establish themselves.

70. The PIR refers to the involvement of as many as 30 supporting institutions in the Cleantech program though no details of the forums were shared with the evaluation team. Most the supporting institutions are academic institutions and research labs and R&D centers. There is however no mention of the project identifying and interacting with entities that are associated with the promotion of SMEs, particularly from the private sector.

3.3.2 Outcome 2: Stakeholders involved in promoting clean technology innovations mobilized and a coordinating platform at the national level established

71. The overview of the status of outputs aimed at achieving the Outcome 2 at the end of the project is presented in Table 6 along with an overall assessment of the achievements of the key elements.

Table 6. Summary of the project's success in producing outputs under Outcome 2

Outcome 2: SMEs associations and national agencies involved in promoting clean technology innovation mobilized and a coordinating platform at the national level established		
Outputs	**Indicators**	**Comments**
2.1 A national level coordinating mechanism established to promote clean technology innovation and entrepreneurship amongst SMEs	Number of SMEs associations and national agencies involved	The coordination mechanism mostly involved ministries and agencies created and supported by the government. The participation of the private sector players, especially SME-related organizations, is practically inexistent.
2.2 Annual Cleantech business competition and accelerator established across selected Cleantech sectors	Number of entries, number of semifinalists and finalists, etc.	During the two years of national competitions held, there were 109 entries, 43 semifinalists and 15 finalists
	Number of successful women entrepreneurs engaged and trained	4 groups of successful women entrepreneurs were engaged and trained to participate in the national competition
2.3 Extensive advocacy and outreach activities organized at the national level and willing participants identified for participation in the Cleantech platform	Number of activities identified in the pilot phase	Apart from the activities undertaken in relation with the Cleantech national competition, the project team had close interaction with many universities and R&D centers; as many as 5 winning teams from universities were included in the national competition held in 2015.
	Tons of GHG emissions avoided	This indicator seems more like a long-term impact and not something that can be achieved during the short duration of the project.

72. The project intended to establish the national platform that would provide the coordinating mechanism to promote clean technology innovation but it was not formally done, as reported in the PIRs for 2014 and 2015. Apart from the PSC meetings which consisted of representatives from ministries and government agencies promoting SMEs, notably SMEDNC and EIF, the project did not establish any national platform, especially with the involvement of actors from the private sector, including those supporting SME development in Armenia.

73. The project successfully conducted 2 cycles of Cleantech business competition in 2014 and 2015, with participation of international experts provided by Cleantech Open, and national experts representing the academia and business sector. The program also encouraged the participation of women, either as entrepreneurs or as mentor / mentor assistants. In fact, out of the 30 semi-finalists in 2015, as many as 4 women startup teams were constituted of women and one of these teams was selected as national winner in the women's category.

74. The project organized extensive advocacy and outreach activities for various stakeholders. The project has made strong impacts in 5 universities where it was able to provide entrepreneurship related training to 300 interested students, 25 of whom went on to form 5 teams participating in the national Cleantech competition. It is encouraging

to see some of the past trainees took the lead to create the ecosystem for startup activities at the graduate level. One of the universities has moved further to set up an entrepreneurship center and prototyping lab to support the ecosystem necessary for innovation by the students.

3.3.3 Outcome 3: Policy and institutional framework strengthened for scaling up Cleantech innovations in selected SME sectors

75. The overview of the status of outputs aimed at achieving the Outcome 3 at the end of the project is presented in Table 7 along with an overall assessment of the achievements of the key elements.

Table 7. Summary of the project's success in producing outputs under Outcome 3

Outcome 3: Policy and institutional framework strengthened for scaling up Cleantech innovations in selected SME sectors		
Outputs	**Indicators**	**Comments**
3.1 Enabling policy and regulatory environment created	Number of new effective policies in place for promoting Cleantech innovations	No new policy was adopted for promoting Cleantech innovations
	Number of existing policies strengthened for increased access to SMEs to financing and technologies	No existing policy was strengthened for increased access to SMEs to financing and technologies
3.2. Regional stakeholder meetings held and partnerships developed with leading institutions, agencies and universities across the country	Number of regional stakeholder meetings held and partnerships developed	More than 15 regional stakeholder meetings held and partnerships developed

76. The project team has not made much headway in creating policy and regulatory environment for the promotion of innovative Cleantech business in Armenia. More than 15 regional stakeholder's meetings were claimed to have been organized by the project though details of these meetings were not shared with the evaluation team.

77. The project document referred to several other initiatives to support SME development in Armenia and the intention to collaborate with such initiatives and create synergies to enhance the impacts. However, there does not appear to be any efforts made by the project team to collaborate with other agencies aiming for the same objectives. Some of the ministries playing the role of project partners and participating in the PSC meetings are also engaged in developing programs aimed at the development of clean technology and green economy. For example, the Ministry of Energy has been working to develop a National Energy Efficiency Action Plan (NEEAP). The Ministry has also created Renewable Resources and Energy Efficiency (R2E2) Fund with the support of the World Bank to facilitate investments in renewable energy and energy efficiency in Armenia by providing an array of comprehensive assistance to project developers, investors, banks, condominiums, researchers, etc. R2E2 serves as think tank for the government to develop policy and regulations. However, the project has not made any attempt to create synergy with R2E2 which has been in existence since November 2005.

78. Interviews conducted with senior officials from the ministries that are the key stakeholders of the project conclude that they appreciate the contribution of the project and intend to continue to support the project's initiatives in future. However, they have

not adopted any specific policy for this purpose. For example, the startups interviewed during the terminal evaluation lamented the limitation of funds to take their concepts or ideas forward. Apart from the matching grant support from EIF to the 2014 winner, there is no other support extended by the project's institutional partners.

79. To sum up, the project was instrumental in establishing innovative Cleantech business ideas competition, mentoring and selecting the most promising startups for provision of further support. However, financial support extended by the project to the winning startups was deemed inadequate. The project supported women entrepreneurs by selecting and training them, though the financial support from the project was considered as limited and symbolic. The project was also very effective in training and mentoring students from universities to become entrepreneurs, and convinced the administration of one of the universities of the importance to create entrepreneurship center and prototyping lab.

80. The project's outcomes seem in line with the original project objectives, particularly considering the limited budget and the low-level of ownership from key institutions and partners. The outcome 2 has been largely achieved. The key project partners recognize the potential for innovation through startups and are inclined to sustain the initiative though they could have played a more proactive role during the project execution.

81. Majority of the mentors handpicked by the project came from the private sector, and they appreciate the potential of clean technology innovation and are willing to provide additional support to the most promising and deserving Cleantech startups.

82. All stakeholders consulted during the evaluation recognize the contribution of the project in creating the ecosystem for Cleantech development in Armenia. However, it is too early to judge the quality of the outputs because barring 4 enterprises, others still lacked the financial resources needed to test and transform their ideas and concepts into reality.

83. Some of the projects are still at a nascent stage and have not been tested yet to judge their merits; nevertheless, many mentors and coaches foresee the scope for recruiting the best minds among the startups and allocating greater financial means to support their initiatives.

84. So, the foundation seems to have been led, but without proper nurturing by the key stakeholders through suitable policies and incentives, the ideas generated by the startups so far may not easily become reality in the future.

The overall rating for project effectiveness is "moderately satisfactory".

3.4. Efficiency

3.4.1 Cost effectiveness

85. Lump-sum amounts were allocated for the project components in the project document; in April 2013, a detailed plan was developed to justify the way the budget would be allocated based on activities or outputs over the 3 years. Since the first work plan was presented and approved by the PSC in February 2014, very little fund was engaged in the first year of the project. However, in the absence of any detailed expenditure reports on yearly basis, it is difficult to assess the cost-effectiveness in the implementation of the activities systematically over the period of project execution.

86. The project has achieved partial success in producing the outputs cost-effectively though there was a reallocation of project's planned grant amount for achieving the three key outcomes. According to the initial plan, the allocations for the outcomes 1, 2 and 3 were 39%, 28% and 19%, respectively. However, the actual budget allocated to outcomes 1 and 2 saw an upward trend (44% and 33%, respectively) whereas that allocated for outcome 3 was reduced drastically to only 10%, which is about half of the initial grant. So, it is not surprising that activities undertaken for the project component 3 to strengthen policy, institutional framework and partnership were rather few.

87. By the time the project ended, 82% of the budget had been spent. As much as 17% of the actual budget allocated to achieve outcome 1 remained unspent, and this is reflected in the project's limited success in building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem.

3.4.2 Timeliness

88. The project document included a calendar of activities to achieve the expected outcomes. It also suggested M&E plan which would consist of quarterly reporting in order to track and review project activities.

89. No rigorous M&E process was adopted. Following the delay in starting the project, the first annual work plan was presented to the PSC only in February 2014 but neither any calendar of activities was developed nor any M&E procedure adopted to keep track of it.

3.4.3 Contribution from the donor, UNIDO and Government/counterpart

90. While the input from donor (grant) and UNIDO was tracked, no systematic mechanism was adopted to track the support received from government / counterpart. The co-financing established at the end of the project appears more of a justification of the initial co-financing commitment by the project.

3.4.4 Coordination with other UNIDO and donor projects and synergetic effects

91. The project document refers to several initiatives in support of SME development in Armenia. But during the project execution, there is no trace of coordination and synergy with UNIDO's Green Industry Initiative and other SME-targeted projects by donors such as the World Bank, UNDP, JIC, UK DFID, IFC, etc. As foreseen in the project document, the project was assisted by CleanTech Open during the 2 years of national competition and the national winners were given a forum to present their innovation and meet with potential funders.

92. SMEDNC was initially identified as the main UNIDO partner for the project. SMEDNC has a vision to provide "entrepreneurial opportunities for all" and a mission to "Inform, inspire, and empower Armenian SMEs to create self-sustaining businesses that contribute to both individual economic stability and the Armenian economy as a whole." Hence SMEDNC appears to be the government agency that could have played an important role in the attainment of component 3. i.e. strengthening policy, institutional framework for scaling up Cleantech innovation across Armenia. It is ironical that the project was unable to establish much synergy with or mobilize support from SMEDNC which was represented in the PSC and attended the various Cleantech events organized by the project.

The overall rating for project efficiency is "moderately satisfactory".

3.5. Sustainability of project outcomes

3.5.1 Financial risks

93. The project has explored ways to sustain the outcomes through various channels. The European Union has been identified as one of the sources of funding to take forward the project's initiatives. It is understood that EIF has submitted a proposal to the European Commission to avail a grant of 1.88 million EUR for establishing a Green and Cleantech Hub in Gyumri. However, the details are not known as EIF did not share any details with the evaluation team.

94. Though EIF was not very actively involved in the execution of the various activities associated with the national Cleantech competition, it has shown interest to mobilize resources to support the continuation of the project for conducting one more cycle of national Cleantech competition and UNIDO has also decided to contribute to this initiative by mobilizing a part of the unutilized funds from the project.

95. Several ministries were associated with the project, but no attempt was made to mobilize funding systematically to sustain Cleantech innovation by adopting suitable policy and institutional framework. As mentioned earlier, the Ministry of Energy supports the R2E2 Fund which could have been a good channel to support innovation in the domains of energy efficiency and renewable energy which are under the direct mandate of the R2E2 Fund.

96. Universities are interested in creating and sustaining entrepreneurship centers and prototyping labs but lack the necessary funds. During the PSC meeting held in February 2015, this specific issue was raised and there was a proposal to sign a memorandum of cooperation with the Ministry of Education and Science of Armenia which would ease the penetration of the program into universities. However, no follow-up action has been taken to convert this proposal into reality.

97. During discussions held with private sector representatives who participated as mentors or judges during the national Cleantech competition, they showed keen interest to support the successful startups at a later stage but were not keen to get involved in activities that are clearly in the realm of the government and the public sector.

The rating for financial risks is "moderately likely".

3.5.2 Sociopolitical risks

98. The SME sector is considered as important to the national economy, especially for a country like Armenia with a small population and limited access to natural resources. Hence there is support at the political level from the various ministries represented in the PSC. However, the problem seems to be more of a lack of ownership. For example, the Ministry of Economy which has a mandate to support SME development in Armenia has not played any active role in the project to support the sustainability of Cleantech startups. The story is the same for the Ministry of Energy as well.

99. As already mentioned, SMEDNC has a clear mandate and the financial means to support and sustain the project initiatives but has not shown any inclination to be actively involved in the project apart from the promise to get in contact with the Cleantech competition winners after the project's closure.

The rating for sociopolitical risks is "moderately likely".

3.5.3 Institutional framework and governance risks

100. One of the drawbacks of the project is its inability to contribute much to strengthening policy, institutional framework and partnerships for scaling up Cleantech innovations. To be fair to the project, a policy recommendation paper has been prepared at the time of the project closure but it appears to be too little and too late in terms of being specific regarding the legal frameworks, policies and governance structures and processes needed to create and sustain the ecosystem for Cleantech innovation.

101. The requisite systems for accountability and transparency are yet to be formulated, though it should not be an issue to acquire / mobilize the required technical know-how from within the country or from outside the country as Armenia has a very large diaspora running successful businesses in leading industrialized countries.

The rating for institutional framework and governance risks is "moderately likely".

3.5.4 Environmental risks

102. There is in principle no environmental risk that may jeopardize the sustainability of project outcome if Armenia is firmly motivated to reduce its dependence on imported energy and reducing the impact on the local and global environment.

103. However, being a small country with limited population base, the chance of succeeding in this endeavor is limited if the focus is only to target the domestic market. It is therefore important to identify innovations that are not only applicable in Armenia but have scope for a huge market in other parts of the world as well. For example, the winner of the 2014 Cleantech competition offers a new generation of substance which has the unique capacity to absorb and maintain humidity, providing an excellent opportunity to agronomists to decrease the cost of agricultural products, particularly in all the water-starved areas of the world.

104. The project proponents seem to have understood this well and have set the goal of learning from the experience of Israel which, like Armenia is a tiny country that has been hugely successful in supporting Cleantech startups that have an international presence.

The rating for environmental risks is "highly likely".

The overall rating for sustainability of outcomes is "moderately likely".

3.6. Assessment of monitoring and evaluation (M&E) systems

3.6.1 M&E design

105. In the project design, an M&E plan is proposed to ensure successful and quality implementation of the project. However, it was not very concrete and not fully budgeted. It proposed the design of M&E plan to ensure that the outputs and outcomes are SMART (Specific, Measurable, Achievable, Relevant and Timely). It described the problem to be addressed and identified reviews and evaluations that were to be undertaken. It also proposed the organizational set-up and budget for conducting M&E.

106. The project document specifies that a detailed M&E plan will be prepared by UNIDO in collaboration with project partners at the beginning of project implementation. This

M&E plan would serve as tool for tracking and reporting the project's time-bound milestones and accomplishments.

The rating for M&E design is "moderately satisfactory".

3.6.2 M&E implementation

107. The M&E system was however not adopted, and there was no systematic mechanism put in place to track the progress towards project objectives. This is noted by the absence of structured reporting of the project's accomplishments during the PSC meetings.

108. In the absence of any M&E system and systematic reporting mechanism (no quarterly or annual report or no project final report), it is difficult to check if the annual reports were complete and accurate, to improve the performance and to adopt to changing needs, or to ensure that data would continue to be collected and used after the project ends. This deficiency is reflected in the way the PIRs are reported for the years 2014 and 2015.

109. Work plans were presented and approved during the PSC meetings. However, the work plan was purely descriptive in nature, without any reference to the time of execution and the budget to be mobilized to carry out the tasks. Moreover, there is no evidence of the reporting and performance reviews taking place regularly during the project implementation for keeping activities on track.

110. Project management pursued, however, a practical adaptive management approach on the operations (albeit not documented).

The rating for M&E implementation is "moderately unsatisfactory".

3.6.3 Budgeting and funding for M&E activities

111. Apart from the budget for evaluation, no other budget was allocated in the project for supporting M&E activities, with the understanding that the national project coordinator would be responsible for the day-to-day activities as well as continuous monitoring of project execution and tracking progress towards milestones.

112. The M&E was budgeted only to conduct mid-term and final evaluation, with the idea of carrying out the evaluation by employing national evaluation experts. Hence the evaluation was not adequately funded for being conducted by an international evaluation expert.

The rating for budgeting and funding for M&E activities is "moderately satisfactory".

The overall rating for M&E is "Moderately unsatisfactory".

3.7. Monitoring of long-term changes

113. The project has not contributed to the establishment of long-term monitoring system which is important to ensure the progress from the project outcome to the expected impacts in a much longer time frame. There is a vague mention of the GHG reduction targets but this has not been considered during the project implementation.

114. At the end of the project, discussions are held about establishing a suitable institutional structure to sustain the project initiatives but its financing seems yet to be ascertained. In the long run, internal resources need to be mobilized within Armenia instead of looking for donor funding as this will also demonstrate the strong ownership by the country.

3.8. Assessment of processes affecting achievement of project results

3.8.1 Preparation and readiness

115. The project was designed following the model adopted by UNIDO in several other countries. The project objectives and components were clear, practicable and feasible within the project time frame. Counterpart resources were committed but no detailed allocations were made. The project document had foreseen adequate project management to achieve the designed outputs and outcomes.

116. Capacities of executing institutions and counterparts were taken into consideration in the project document but apparently not with sufficient care. This necessitated the change of partner which led to considerable delays in the starting of project activities. The project had foreseen the partnership arrangements for project execution, but the exact roles and responsibilities were not negotiated prior to the project approval.

3.8.2 Country ownership/drivenness

117. The project concept is well aligned with the sectoral and development priorities and plans of Armenia, and the project outcomes are undoubtedly contributing to national development priorities and plans. Relevant country counterparts have been involved in the project to some extent. The GEF OFP endorsed the project design and took part in the PSC meetings.

118. However, the project counterpart has partially fulfilled the co-financing commitment to the project. The national Cleantech finalists interviewed by the evaluation team lament about not having access to adequate resources to take their ideas forward and the co-financing from the project proponents could have been very useful in this context.

119. Finally, there has not been any move so far by the government to approve policy or regulatory frameworks in line with the project's objectives.

3.8.3 Stakeholder involvement and consultation

120. The project has attempted to involve all relevant stakeholders through regular information sharing and consultation. It has also undertaken suitable outreach and public awareness campaigns.

121. Government stakeholders took part in the PSC meetings. Academic institutions and private sector players were actively engaged in all the major events organized by the project, such as business idea competitions, mentoring, mock testing, judging, etc. The project team has tried its best to consult with and make use of the skills of the different key actors and stakeholders to the extent possible.

122. However, the project has not made adequate efforts to establish links with other similar programs initiated by other donors to create greater synergy and enhance the visibility of the project's contribution to the immediate beneficiaries and the country.

3.8.4 Financial planning

123. In the absence of a suitable M&E mechanism in place, it is not clear to what extent the project had financial controls, including reporting and planning needed for the management to make informed decision.

124. There is no documentary evidence of due diligence in the management of funds and financial audits. The pledged co-financing materialized partially but was not kept track of in a systematic manner. Breakdown of actual final project costs by outcomes was made available along with a rough estimation of co-financing but without much details.

125. Figure 4 shows the budget prepared in April 2013 versus the expenditures incurred during the 3 years of project execution, based on information available from UNIDO's Open Data Platform. As one can note, the allocated budget was the highest during the first year, gradually decreasing over the next 2 years. But the expenditure trend was just the opposite, with the lowest in the first year, gradually increasing to have the highest expenditure in the last year of project execution, mostly for the organization of the national business ideas competition. Around 18% of the project budget remained unutilized by the time the project ended in April 2016.

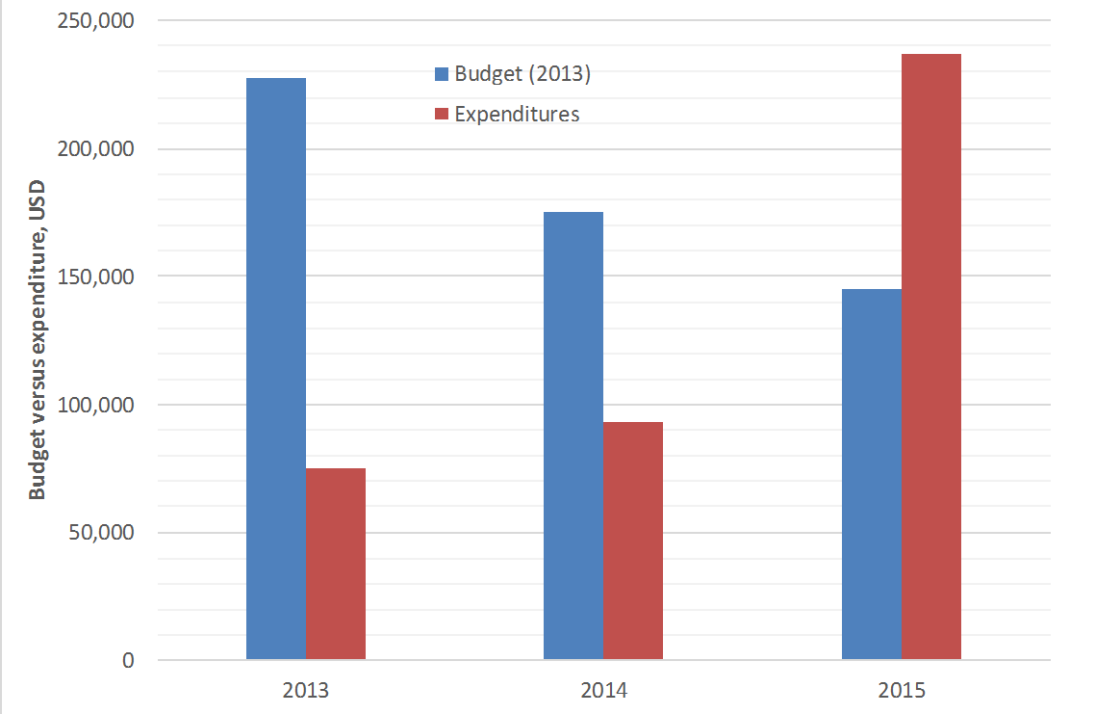

Figure 4. Budget prepared in 2013 versus actual expenditure from 2013 to 2015

3.8.5 UNIDO's supervision and backstopping

126. UNIDO staff provided support to the project mostly based in the HQ. The Head of UNIDO Operations in Armenia also provided active support to the project and contributed to its enhanced visibility among the various stakeholders. Thanks to the regular exchanges with the national project coordinator, UNIDO HQ staff were mostly aware of the problems faced by the project but did not always assess the gravity of the issues.

127. UNIDO provided the right staffing levels, continuity, skill mix to this medium-sized GEF project. UNIDO HQ staff were also present during the major events of the project as well

as during 2 of the 3 PSC meetings held in Yerevan. They provided regular advice to the project team, approved the requested modifications from the PMO in time and restructured the activities as and when needed. Some of the deficits that are noteworthy are the absence of detailed work plan on a calendar, and the corresponding budget and expertise to be mobilized and the absence of mechanism to motivate involvement of project partner.

128. The poor documentation of the project achievements from the activities undertaken are reflected to some extent in the PIRs. The progress to data presented in the PIRs are not always very precise and at times inconsistent with the expected outputs and the indicators used to assess the achievements. The project has submitted 2 PIRs and the PIR of the second year does not match well with the contents of the PIR of the first year.

3.8.6 Effect of co-financing on project outcomes and sustainability

129. At the time of CEO endorsement, the key counterpart agency made the commitment to co-finance the project. However, there was no clarity in the project document regarding the manner the co-financing will be used to ensure the quality of the outputs.

130. The difference between the expected co-financing and the actual co-financing estimated by the UNIDO staff is perhaps mainly due to the lack of clarity and precision as to how the co-financing was to be engaged to enhance the project outputs and outcomes. Considering the feedbacks received from the Cleantech finalists, the expected co-financing could have been useful in transforming some of the innovative ideas generated during the national competition into reality, particularly through the provision of funds for testing, prototyping, market studies, etc.

3.8.7 Effect of delays on project outcomes and sustainability

131. The initial delay in starting the project was mainly because of the decision from the Armenian side to change the project partner. Because of this, no tangible progress was made in the project during 2013. However, the project managed to catch up quite a bit and successfully concluded 2 rounds of national Cleantech competitions and ensured the participation of the winners in the Cleantech Open events in the USA.

132. So, while the delays have not affected much the project outcomes quantitatively, the project has not been able make much headway in strengthening policy and institutional framework. The policy component is crucial to create the ecosystem needed by the Cleantech startups to innovate and get access to the capital needed for achieving an economy of scale.

3.8.8 Implementation and execution approach

133. The implementation and execution approach is very much like that adopted by UNIDO in all standard GEF funded projects. The project was managed by UNIDO HQ staff from Vienna with a project management team in Armenia. Though the project management team was housed in the premises of the project key partners, the implementation arrangement did not provide much scope for promoting local ownership and capacity.

134. Hence the approach adopted involved certain level of risk because of the lack of ownership and inadequate capacity transfer during the execution of the project.

3.8.9 Environmental and social safeguards

135. The project design did not envisage any environmental risks during the project execution.

136. Social risks included the lack of interest by public and industry, and the lack of interest by mentors. The project document had foreseen certain mitigation measures during the project design. And as reported in PIRs, actions were taken to mitigate such risks quite effectively.

3.9. Project coordination and management

3.9.1 National management and coordination mechanisms

137. The national management and coordination was entrusted to the PMU led by a national project coordinator and hired staff. However, no staff was deputed or involved by EIF, the main project partner, to support the PMU. Work space was provided by EIF for the PMU operation but EIF did not take part in providing technical assistance, monitoring and reviewing of project performance or fully contributing the co-financing, etc.

138. The project activities were implemented according to the yearly work plan proposed to the PSC at the beginning of the year. However, there was no systematic reporting mechanism in place with clear milestones of outputs. The national project coordinator took the main lead for the execution of activities with project staff hired to fulfill specific needs. The dynamism and networking skills of the project coordinator helped to reach out to the relevant partners and stakeholders, inviting their participation or providing them the necessary assistance needed for succeeding in the national Cleantech startup competition.

3.9.2 UNIDO HQ-based management and coordination mechanisms

139. The UNIDO staff based at the HQ was in regular touch with the national project team and provided support as and when necessary. However, no systematic monitoring and evaluation mechanism as well as reporting procedure was adopted. This is reflected by the very poor documentation of the project's activities and achievements. No final project report was prepared for the project. Moreover, the absence of any work plan linking to the project time line and the budget suggests that the financial management was not rigorous. There are no records of the tracking of the co-financing during the project execution.

140. The various missions conducted by the UNIDO staff to Armenia suggest UNIDO's presence and visibility during all the key events held during project execution and the timely guidance provided to ensure the project's progress.

3.10. Gender mainstreaming

141. The project document emphasized the close involvement of women entrepreneurs in the program so that they could benefit from the increased job prospects. It also supported women entrepreneurs' engagement through its Cleantech accelerator program, intensive training seminars and partnerships developed with leading universities and stakeholders of the country.

142. One of the two key staff of UNIDO HQ managing the project is a woman and several women were recruited as PMU staff or project consultants.

143. The project promoted the participation of women-led teams in the Cleantech national business ideas competition. To encourage greater participation of women in the national competition, a special award was reserved for the best female team and the best female participant. Apart from the participants, there were also efforts made to engages women as mentors and mentor assistants.

144. It is difficult to assess the socioeconomic benefits delivered by the project, taking gender dimensions into account. This is because of the limited funding available to provide the right opportunity for the Cleantech winners to scale up their innovation within the short span of project implementation.

IV. CONCLUSIONS, RECOMMENDATIONS AND LESSONS LEARNED

4.1. Conclusions

145. The project aims to promote innovative environment-friendly clean technologies in SMES in Armenia. Specifically, the project addresses the barriers to the successful promotion of the national innovation and acceleration program by strengthening the policy and institutional framework, and building national capacity to promote innovations in clean technologies in selected SME clusters.

146. The project is very timely, given Armenia's lack of fossil fuel reserves and the concern for climate change mitigation as priority for policy action. Moreover, the SME sector is considered as a priority for job creation and overall development of Armenian economy. The GEF UNIDO Cleantech program for SMEs in Armenia is an example of initiatives to build national capacity and strengthen policy and institutional framework for scaling up Cleantech innovations in Armenia.

147. The project has successfully conducted two rounds of national business ideas competition (acceleration program) for Cleantech startups and SMEs, providing intensive training and high-quality mentoring to the qualified startup teams so that they could develop and present suitable business models. The project has also contributed to training youth between 18 and 30 years who are interested in developing innovative business ideas and establishing their startups. Such training sessions were designed to assist in business idea generation, innovation, team building, business model canvas and Cleantech themes including renewable energy, energy efficiency, waste to energy and water resources. Thanks to the efforts made by the project, the management of Yerevan State university agreed to establish a Cleantech-focused Entrepreneurship center along with a Cleantech prototyping lab.

148. The project has achieved partial success in the outcome 1 that was aimed at building the capacity of national industrial association to host Cleantech program. The key partner of the project played a very minor role of hosting the PMU but did not actively participate in the implementation of the Cleantech program. The project has enhanced the capacity of the two groups of mentors (those specialized in specific areas of Cleantech solutions and those specialized in business development such as marketing, finance, business model development, customer development, etc.) on how to provide effective mentorship for startups and SMEs that are in different phases of development. The project took the lead in closely interacting with many universities and R&D centers, and organizing Intensive Cleantech Open Academy with support from international experts from the USA. However, the project made limited headway in connecting the qualified SMEs with funding and partnership opportunities.

149. The project failed to make significant progress in creating an enabling policy and regulatory environment which is crucial for the scaling up of the project initiatives. The project also did not explore the possibility of collaborating with similar initiatives of national and international organizations targeted towards SME development in Armenia. Though the project had plans to promote crowdfunding through campaigns, this did not materialize. The project's plan to sign a Memorandum of Understanding with the Ministry of Education and Science to ease the creation and sustaining of entrepreneurship centers and prototyping labs in universities was not executed.

150. The key institutional stakeholders of the project were supportive of the project initiatives and activities but have not adopted specific policies in support of winning

startups who were on the lookout for access to finance for developing prototypes and transforming their concepts into products.

SWOT analysis

151. The key strengths, weaknesses of the project are outlined along with the opportunities and threats in the future.

152. Strengths: The project came at a very opportune time for Armenia where there is an appreciation for the SME innovation in the domain of low-carbon technologies to address employment, energy security and climate change issues. Being part of a global initiative launched by UNIDO, the project is logically conceived and the components are mutually reinforcing. Thanks to the experience gained in other projects and the mobilization of international expertise through Cleantech Open, the technical quality of some of the project outputs is high. The dynamic networking role played by the well-qualified National Project Coordinator (NPC) with the able support of the UNIDO staff at the HQ has enhanced the project's visibility among many stakeholders from the academia and the private sector. The project's institutional partners see the value and relevance of the project and the beneficiaries appreciate the support received through the project.

153. Weakness: The project has not managed to contribute to some of the components effectively, mainly due to the lack of ownership of the Armenian counterpart. Though the project's focus is the SME sector, partners outside the government arena were not included during project preparation. The confusion regarding the selection of a suitable project partner led to delayed start of the project activities. During the project execution, UNIDO took the lead in the project implementation through an active project team under the guidance of an efficient NPC and an experienced Head of UNIDO operations in Armenia. This has led to a widespread perception that it is a UNIDO project, resulting in the passive role played by the project partner as well as the institutional counterparts. The lack of active involvement of the project partner was not conducive for building the local capacity to host Cleantech program. The project team has not achieved much in the delivery of Component 3, possibly due to the lack of time and limited human resources. The monitoring and reporting is insufficient, hence does not fully capture the outcomes; and the financial planning and reporting has also been inadequate.

154. Opportunities: The project is the first of its kind in Armenia and has created a lot of interest and enthusiasm among the startups and SMEs, mentors and judges, academic and R&D institutions, students, etc. Hence there is much scope for consolidating and expanding the outcomes of the project. Though EIF did not play a very proactive role of partner during the execution of the project, it recognizes the potential role it can play in incubating Cleantech businesses just like the role it has played in promoting the Information Technology sector in Armenia. EIF is reaching out to other potential donors to sustain the project's initiatives. The interest shown by some international organizations is likely to pave the way for new funding that is crucial for investment in promising Cleantech startups and SMEs.

155. Threats: The main threat to the sustainability and replication of the results achieved is the weak policy and institutional framework for scaling up Cleantech innovations. This issue cannot be resolved if the government agencies represented in the PSC do not showcase greater ownership and commitment. Lack of interest among the ministries closely associated with the development of SMEs and low-carbon solutions to link the

project initiatives with some of their on-going projects and programs may be a major threat to sustainability. Government agencies alone cannot continue the processes initiated by the project without greater involvement of the private sector, be it for organizing competitions and acceleration programs or for supporting the Cleantech startups and SMEs with funding and partnership opportunities.

Overall assessment ratings

156. The summary of the evaluation criteria, assessment and ratings is presented in Table 8. The TE's overall assessment is that the project performance can be rated as "moderately satisfactory" based on the assessment criteria.

Table 8. Summary of the Evaluation criteria, assessment and ratings

Criterion	Summary comments	Ref.	Rating*
Attainment of project objectives and results			***MS***
Design	Project design is like that adopted by each country participating in the GCIP. No participatory meetings were held to identify key stakeholders from the private sector. The intervention logic and the causal links from activities to outputs are not presented coherently. Reference is made to possible linkage with several other initiatives and project risks are identified.	3.1	MS
Effectiveness	The project was successful in mobilizing many organizations for the promotion of Cleantech innovation. It was also effective in organizing extensive advocacy and outreach activities. The project did not contribute enough to build the capacity of national industrial association and to the strengthening of policy and institutional framework.	3.3	MS
Relevance	The project is relevant as it aims at creating jobs and addressing national energy security and climate change mitigation issues. It is aligned with GEF's focal strategy under climate change mitigation and GEF-5 modality 3 which supports the growth of domestic private sector. The project is in line with UNIDO's mandate, objectives and outcomes.	3.2	HS
Efficiency	The financial statements are not broken down to components and activities, making it difficult to assess the cost-effectiveness in the implementation of activities. The project has achieved partial success in achieving some outputs cost-effectively. Limited activities were undertaken to create an enabling policy and regulatory environment, and to build national capacity for clean technology and development of a supportive local entrepreneurial ecosystem.	3.4	MS
Sustainability of project outcomes			***ML***
Financial risks	The key project stakeholders appreciate the results achieved by the project but have not yet figured out how to sustain the project's initiatives. The ministries have not yet adopted policy to Cleantech innovation. EIF has shown interest to mobilize resources to continue the national Cleantech competition.	3.5.1	ML
Sociopolitical risks	Several ministries already have mandate to support and nurture Cleantech startups and SMEs but have not demonstrated their ownership during the execution of the project. SMEDNC was created with the financial means to support and sustain the project initiatives.	3.5.2	ML

Institutional framework and governance risks	The Government of Armenia already has an institutional framework for SME development in the country. One of the drawbacks of the project was its inability to contribute much to the strengthening of policy, institutional framework and partnerships for scaling up Cleantech innovation. But with the appreciation and interest shown by these partners, there is likelihood of adopting the policy recommendations of the project, thus moving from the outcomes to the ultimate impact of the project.	3.5.3	ML
Environmental risks	There is no environmental risk that may jeopardize the sustainability of the project as Armenia is firmly motivated to reduce its dependence on imported fossil energy and abate the impact on the local and global environment.	3.5.4	HL
Monitoring and evaluation			***MU***
M&E Design	The project document mentions that a detailed monitoring plan will be prepared by UNIDO in collaboration with project partners at the beginning of project implementation and then periodically updated. It was not concrete and fully budgeted.	3.6.1	MS
M&E Plan Implementation	No M&E system was adopted at the beginning of the project and no systematic mechanism was put in place to track progress towards project's objectives. Only narrative descriptions are provided in the PIRs on the activities performed, showing that it was done to prepare the PIRs, rather than providing information feeding into the project management.	3.6.2	MU
Budgeting and Funding for M&E activities	Apart from the budget for evaluation, no other budget was allocated in the project for supporting M&E activities.	3.6.3	MS
Project management	The project was formally executed by the PMU created by UNIDO, led by a dynamic NPC with great networking skill and supported by a well-connected Head of UNIDO's Operations in Armenia. The project management structure was not clear regarding the role the partners were expected to play in accordance with their institutional mandate. Moreover, there was no participation of representatives from the private sector. This defeated the very purpose of the project to build national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem.	3.9	MU
UNIDO specific ratings			***MS***
Quality at entry / Preparation and readiness	The project design followed the same model adopted by UNIDO in several other countries. Counterpart resources were committed but no detailed allocations were made. Capacities of executing institutions and counterparts were considered but not with sufficient care and leaving out the private sector.	3.8.1	MS
Implementation approach	The project was managed by UNIDO HQ staff along with a project management team in Armenia, formed of hired staff and consultants. The implementation mechanism did not provide much space for promoting local ownership and capacity.	3.8.8	MS
UNIDO Supervision and backstopping	Staff from UNIDO HQ supervised the overall project implementation, and had regular exchanges with the NPC who reported the progress made by the project. They travelled to Armenia to participate in all major events and were also present during 2 out of 3 PSC meetings. However, no systematic M&E plan was adopted, making it difficult to track and review execution of project activities and actual	3.8.5	MS

	accomplishments, and adjust and update project strategy and implementation plan. This is also reflected by the differences between the budget and the expenditures and the limited activities undertaken to strengthen the policy and institutional frameworks and partnerships.		
Overall Rating			**MS**

*** Ratings:**

HS = Highly Satisfactory; S = Satisfactory; MS = Moderately Satisfactory;
MU = Moderately unsatisfactory; U = Unsatisfactory; HU = Highly Unsatisfactory
L = Likely; ML = Moderately Likely; MU = Moderately Unlikely; U = Unlikely

4.2. Recommendations

157. The following is a presentation of the recommendations from the evaluation findings:

Recommendation #1	The ministries concerned with the policy and institutional framework for scaling up Cleantech innovations across Armenia should map ongoing sector policies and identify windows of opportunity to engage and promote business models for Cleantech startup and SME development, promotion of low-carbon technologies and reduction of GHG emissions. They should explore the possibility of creating synergy between the project's objectives with their existing institutional set-ups and programs (e.g. SMEDNC, R2E2) so that the project's intended impacts can be achieved. Responsibility: Government of Armenia (concerned ministries)
Recommendation #2	The project has demonstrated the relevance of mobilizing and mentoring students from universities and research institutes to become Cleantech startups. However, there is budget constraint at the universities to create and sustain entrepreneurship centers and prototyping labs. The Ministry of Education and Science should be sensitized about the need to allocate specific budget for such purposes since such programs prepare the students to become entrepreneurs, creating job instead of looking for employment opportunities as they leave the academic arena. Responsibility: Government of Armenia
Recommendation #3	The main expertise of the Enterprise Incubator Foundation (EIF) is in the development of information and communication technology sector in Armenia. As EIF has limited mandate and experience in the Cleantech domain, EIF should consider collaboration with industrial associations of SMEs, Chambers of Commerce and Industry as well international programs aimed at Cleantech startup development and promotion through innovation (e.g. the EU co-financed and GIZ-implemented project on "Support to SME Development in Armenia" or SMEDA). Responsibility: Enterprise Incubator Foundation (EIF)
Recommendation #4	Most startups and SMEs need seed funds from Cleantech investors for prototyping, fine-tuning to meet the market needs, production and scaling up their operations. As the government agencies have limitations to funds, the large Armenian diaspora running successful businesses in leading industrialized countries should be tapped to mobilize the required technical know-how and finances from within Armenia or from outside the country. Responsibility: Government of Armenia and EIF
Recommendation #5	Government should develop yardsticks to measure the direct and indirect energy savings and GHG emissions, and the overall socio-economic impacts such as the number of jobs created, improving working environment, increased

	income, contribution to gender mainstreaming, etc. to quantify the ultimate impacts of strengthened policy framework for promoting Cleantech startups and SMEs. Responsibility: Government of Armenia

4.3. Lessons learned

158. The following is a summary of the main lessons that have been learned from the project's successes as well as challenges:

Lesson #1	This was the first medium-sized project aimed at promoting innovation through clean technologies in Armenia. The new concepts and approaches learned through UNIDO's GCIP experience should have been tested and refined with a smaller group of startups and within a limited geographic location. This will have avoided overstretching the implementation capacities and ensured mobilization of enough resources within the limited time to adequately engage, build capacity, accompany the startups beyond the national competition and generate results that will have served as showcase for scaling up in the future. Application: UNIDO
Lesson #2	The project is widely perceived as UNIDO's rather than that of the government of Armenia. The lack of national capacity and policy framework justified UNIDO's role in providing direct executing assistance. However, it is important to strike a fine balance between engaging enough to ensure that the activities are implemented well within the given time frame and leaving enough responsibility to the national stakeholders to assume full ownership. In such cases, the best compromise is to adopt a transition strategy that allows to build / strengthen the capacity at the beginning with a gradual handover of responsibility during the project life through a so-called "learning by doing" approach. Application: UNIDO and the concerned institutional partner(s) in Armenia
Lesson #3	Supporting clean technology innovations and competitiveness among SMEs is a long-term process and cannot be achieved within the short project time frame. It requires creation of awareness among the different stakeholders, good understanding of the complex concepts and approaches by the startups and SMEs, sufficient capacity to develop a supportive local entrepreneurial ecosystem and adoption of right policy framework for scaling up Cleantech innovation. Projects aiming to achieve the above goals should aim at contributing to more long-term processes than be perceived as favoring stand-alone interventions. Moreover, expectations as to what can be achieved through the project should be realistic than to project very high economic, social and environmental benefits by the end of the project. Application: UNIDO and concerned institutional partner(s) in Armenia
Lesson #4	When UNIDO is acting as implementing agency and providing execution assistance including financial management, strict fiduciary controls and reporting are important in order to adhere to GEF requirements. In such cases, it is crucial to develop good M&E procedure and implementation plan to ensure achievement of the intended outputs and outcomes within the given budget and time frame. Moreover, indicators set for the assessment of the results, both quantitative and qualitative, should be objectively verifiable and must be commensurate with the project's resources and timeframe. Application: UNIDO

ANNEXES

Annex.1. Evaluation TOR

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

DRAFT

TERMS OF REFERENCE

Independent terminal evaluation of the UNIDO project:

Cleantech Programme for SMEs - Armenia

UNIDO SAP ID: 120344
GEF ID: 5145

NOVEMBER 2015

CONTENTS

I. Project background and overview

1. Project factsheet

Project Title	**GEF UNIDO Cleantech Programme for SMEs in Armenia**
UNIDO project No. and/or SAP ID	**SAP ID: 120344**
GEF project ID	**5145**
Region	**Europe and Central Asia**
Country(ies)	**Armenia**
GEF focal area(s) **and operational programme**	**Climate Change**
GEF implementing agency(ies)	**UNIDO**
GEF executing partner(s)	**Ministry of Nature Protection; Ministry of Energy and Natural Resources; Ministry of Agriculture; SME Development National Center of Armenia (SMEDNC); Enterprise Incubator Foundation (EIF)**
Project size (FSP, MSP, EA)	**MSP**
Project CEO endorsement / Approval date	**07 March 2013**
Project implementation start date (First PAD issuance date)	**01 May 2013**
Expected implementation end date (indicated in CEO endorsement/Approval document)	**30 April 2016**
Revised expected implementation end date (if applicable)	
Actual implementation end date	**30 April 2016**
GEF project grant (excluding PPG, in USD)	**547,946**
GEF PPG (if applicable, in USD)	
UNIDO co-financing (in USD)	**100,000 (cash+In-kind)**
Total co-financing at CEO endorsement (in USD)	**2,600,000 (cash+In-kind)**
Materialized co-financing at project completion (in USD)	
Total project cost (excluding PPG and agency support cost, in USD; i.e., GEF project grant + total co-financing at CEO endorsement)	**3,147,946**
Mid-term review date	
Planned terminal evaluation date	**March-April 2016**

(Source: Project document)[1]

[1] Project information data throughout these TOR are to be verified during the inception phase.

3

2. Project background and context

Armenia is in Southwestern Asia, between Turkey and Azerbaijan. It has a population of around 3.05 million, with only around one-fourth of the population above 54 years of age and a negative population growth rate of -0.15% (2015 estimate). Literacy rate of population is high at 99.7%. However, almost one-third of the population lives below the poverty line (2013).

Armenia has a GDP of around USD 10.9 billion (official exchange rate, 2014) and a GDP real growth rate of 3.4% (2014), which has been contracting since 2012 (7.1%; 2013: 3.5%). Services constitute the highest contribution to the GDP with 46.6% (2014), followed by industry with 31.5% and the smallest contribution by agriculture with 21.9%. 44% of the labour force is engaged in services, almost 40% in agriculture and less than 20% in industry.

Agricultural products are fruit (especially grapes), vegetables and livestock. Industries are in the following sectors: diamond processing, metal-cutting machine tools, forging and pressing machines, electric motors, knitted wear, hosiery, shoes, silk fabric, chemicals, trucks, instruments, microelectronics, jewelry, software, food processing, brandy and mining. Growth rate of industrial production is 2.7% (2014).

Export commodities are pig iron, unwrought copper, non-ferrous metals, gold, diamonds, mineral products, foodstuffs and energy. Main export partners are Russia (20.3%), China (11.3%) and Germany (10.4%), followed by Canada, US, Bulgaria and Iran. Armenia imports natural gas, petroleum, tobacco products, foodstuffs, diamonds, pharmaceuticals and cars, mainly from Russia (24.9%), China (9.5%), Germany (6.4%), followed by Turkey, Iran, Ukraine, and Italy.

Current environmental issues in Armenia are soil pollution from toxic chemicals such as DDT; pollution of Hrazdan (Razdan) and Aras Rivers; the draining of Sevana Lich (Lake Sevan); and restart of Metsamor nuclear power plant in spite of its location in a seismically active zone. It is party to various international environmental agreements, such as Air Pollution, Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Environmental Modification, Hazardous Wastes, Law of the Sea, Ozone Layer Protection and Wetlands.

Armenia's economy on the whole and also the technologies used in the industrial sector are characterized by high energy intensity and consumption. This situation is on account of low energy efficiency in energy intensive industrial sectors due to the worn-out outdated production facilities and limited use of energy saving technologies and processes, as well as the absence of the necessary monitoring and control of the use of energy carriers.

Owing to the significance of small and medium-size enterprises (SMEs) generally, and to Armenia's economy specifically. The promotion of innovations in SMEs through scaling up of clean energy technologies is important to Armenia.
The project aimed primarily at promoting an innovation ecosystem, driven by incentives, to assist in the design, deployment and scaling up innovative clean and efficient technologies and processes across small businesses in the country. It aimed to adopt an inter-disciplinary approach involving SMEs, national ministries, academia, industrial associations, state governments, partner agencies such as SME Development National Centre (SMEDNC) and autonomous research centres in the country and abroad to promote innovative technologies in selected energy intensive SME clusters across the country. The cleantech approach and methodologies adopted focused on innovative SMEs through an eco-system approach that would involve identifying start-ups, nurturing, mentoring and incentivizing technological innovations to promote clean energy technologies and systems in selected SME clusters.

The project is funded through a GEF grant, amounting to USD 547,946, a UNIDO contribution of USD 50,000 (cash) and USD 50,000 (in-kind); and the counterpart's co-financing of USD 2,500,000 (cash and in-kind); which amount to a total project budget of USD 3,147,946.

Project implementation started in May 2013 and implementation is expected to end in April 2016. Actual implementation end date is 30 April 2016.

Project Monitoring and Evaluation according to the GEF and UNIDO policies are foreseen in the project document, as well as a terminal evaluation (TE). The TE is scheduled to take place from March to April 2016.

3. Project objective and structure

The primary objective of the project was to promote an innovation ecosystem, driven by incentives, to assist in the design, deployment and scaling up innovative clean and efficient technologies and processes across small businesses in Armenia. The project is a part of a global initiative launched by UNIDO to promote innovative environmentally friendly energy technologies in SMEs. The project encompasses 3 main components:

Project Component 1 (PC-1): Building the national capacity to support cleantech startups and fostering a vibrant and sustainable cleantech ecosystem through partnerships and collaboration
This component is based on the experience gained under the successful cleantech business competition and accelerator pilot programme carried out in South Africa (SA) in 2011 as part of the Greening of COP17 project that was funded by the GEF. In Armenia, it was planned to initiate a business competition / programme for SMEs; facilitate mentoring to link up to up-to-date clean technologies in the field of renewable energy and energy efficiency, waste to energy and water efficiency; and set up a more complete accelerator for selected SME sectors, as well as start-ups.

Project Component 2 (PC-2): Promoting coordination mechanism to support clean technology innovations and competitiveness of SMEs, and design business models that can deliver global environmental benefits
This component foresees a national level coordinating mechanism established to promote clean technology innovations and entrepreneurship amongst SMEs and start-ups; annual cleantech business competition and accelerator established across selected sector categories and expanded from Yerevan; as well as extensive advocacy and outreach activities in Yerevan in 2013-14 expanding to all ten provinces in 2014-15.

Project Component 3 (PC-3): Strengthening policy, institutional framework and partnerships for scaling up cleantech innovations across Armenia
This component foresees the creation of enabling policy and regulatory environment, as well as regional stakeholder meetings/consultations held and partnerships developed with leading institutions, agencies and universities across the country.

4. Project implementation and execution arrangements

UNIDO: is the Implementing Agency for the project.

SME Development National Center of Armenia (SMEDNC): is the national execution agency in the project focusing on cleantech programme and would not only provide technical assistance and overall logistical support for the project management unit, but also provide in-kind/cash inputs for the project activities.

Relevant Ministries and National Institutions: Ministry of Nature Protection; Ministry of Energy and Natural Resources; Ministry of Agriculture.

Relevant industry associations and sector federations: Outreach to and involvement of target sectors and industries.

Academic institutions: Knowledge accumulation and dissemination management.

Project Steering Committee (PSC): to be chaired by the SMEDNC to provide strategic guidance, and supervise the project implementation.

Project Management Unit (PMU): to be established and hosted at UNIDO national office in Yerevan. The Unit would be responsible for the daily management of the project.

5. Budget information

As envisioned at the time of CEO Endorsement/Approval, the project is funded through a GEF grant, amounting to USD 547,946, a UNIDO co-financing contribution of USD 100,000 (50,000 cash + 50,000 in-kind); and the counterparts' total co-financing of USD 2,500,000 (cash), which amount to total project budget of USD 3,147,946.

Financing plan summary for the project (in USD):

	Project Preparation	***Project***	***Total***
GEF financing		547,946	547,946
Co-financing (Cash and In-kind)	50,000	2,550,000	2,600,000
Total	**50,000**	**3,097,946**	**3,147,946**

(Source: CEO endorsement document)

Project budget:

Project outcomes	**GEF ($)**	**Co-Financing ($)**	**Total ($)**
1. Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem	212,264	1,160,636	**1,372,900**
2. Promoting coordinating mechanism to support clean technology innovations and competitiveness of SMEs, and design business models that can deliver global environmental benefits	155,000	670,000	**825,000**
3. Strengthening policy, institutional framework and partnerships for scaling up cleantech innovations across Armenia	105,869	483,000	**588,869**
Monitoring and Evaluation	25,000	50,000	**75,000**
Project Management	49,813	236,364	**286,177**
Total	**547,946**	**2,600,000**	**3,147,946**

(Source: CEO endorsement document)

Expected co-financing source breakdown is as follows:

Name of Co-financier (source)	Classification	Type	Project
UNIDO	IA	Cash	50,000
		In-kind	50,000
SME Development National Centre of Armenia (SMEDNC)	Local Government	Cash	2,500,000
Total Co-Financing			**2,600,000**

(Source: CEO endorsement document

UNIDO GEF-grant disbursement breakdown:

Item	EXECUTED BUDGET in 2013	EXECUTED BUDGET in 2014	EXECUTED BUDGET in 2015	Total Expenditure (2013-present) (16 Oct. 2015)
Contractual Services	60,000.00	1,406.20	84,734.06	**146,140.26**
Equipment	966.94	2,272.06	0.00	**3,239.00**
Internat. Cons/Staff		8,369.99	370.00	**8,739.99**
Local Travel	5,962.15	14,545.45	3,598.27	**24,105.87**
Nat. Consult./Staff	2,190.26	39,149.45	13,078.57	**54,418.28**
Other Direct Costs	3,329.55	4,858.52	39,219.95	**47,408.02**
Staff Travel	70.77	-70.77	6,805.50	**6,805.50**
Train/Fellowsh/Study		20,573.62	30,380.25	**50,953.87**
Total	**72,519.67**	**91,104.52**	**178,186.60**	**341,810.79**

(Source: SAP database, 16 October 2015)

II. Scope and purpose of the evaluation

The terminal evaluation (TE) will cover the whole duration of the project from its starting date in May 2013 to the estimated completion date in April 2016. It will assess project performance against the evaluation criteria: relevance, effectiveness, efficiency, sustainability and impact.

From the knowledge management perspective, the TE has an additional purpose of drawing lessons and developing recommendations for UNIDO and the GEF that may help improving the selection, enhancing the design and implementation of similar future projects and activities in the country and on a global scale upon project completion. The TE report should include examples of good practices for other projects in the focal area, country, or region.

The TE should provide an analysis of the attainment of the project objective(s) and the corresponding technical components. Through its assessments, the TE should enable the Government, the national GEF Operational Focal Point (OFP), counterparts, the GEF, UNIDO and other stakeholders and donors to verify prospects for development impact and promoting sustainability, providing an analysis of the attainment of global environmental objectives, project objectives, delivery and completion of project outputs/activities, and outcomes/impacts based on indicators, and management of risks. The assessment includes re-examination of the relevance of the objectives and other elements of project design according to the project evaluation parameters defined in chapter VI.

The key question of the TE is whether the project has successfully promoted an innovation ecosystem, driven by incentives, to assist in the design, deployment and scaling up of innovative clean and efficient technologies and processes across small businesses in Armenia and has achieved its expected outcomes.

III. Evaluation approach and methodology

The TE will be conducted in accordance with the UNIDO Evaluation Policy[2], the UNIDO Guidelines for the Technical Cooperation Programme and Project Cycle[3], the GEF Guidelines for GEF Agencies in Conducting Terminal Evaluations[4], the GEF Monitoring and Evaluation Policy[5] and the GEF Minimum Fiduciary Standards for GEF Implementing and Executing Agencies[6].

It will be carried out as an independent in-depth evaluation using a participatory approach whereby all key parties associated with the project are kept informed and regularly consulted throughout the evaluation. The evaluation team leader will liaise with the UNIDO Office for Independent Evaluation (ODG/EVA) on the conduct of the evaluation and methodological issues.

The evaluation team (ET) will be required to use different methods to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources, as necessary: desk studies and literature review, statistical analysis, individual interviews, focus group meetings, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings. The specific mixed methodological approach will be described in the inception report.

---

[2] UNIDO. (2015). Director General's Bulletin: Evaluation Policy (UNIDO/DGB/(M).98/Rev.1)

[3] UNIDO. (2006). Director-General's Administrative Instruction No. 17/Rev.1: Guidelines for the Technical Cooperation Programme and Project Cycle (DGAI.17/Rev.1, 24 August 2006)

[4] GEF. (2008). Guidelines for GEF Agencies in Conducting Terminal Evaluations (Evaluation Office, Evaluation Document No. 3, 2008)

[5] GEF. (2010) The GEF Monitoring and Evaluation Policy (Evaluation Office, November 2010)

[6] GEF. (2011). GEF Minimum Fiduciary Standards: Separation of Implementation and Execution Functions in GEF Partner Agencies (GEF/C.41/06/Rev.01, 3 November 2011, prepared by the Trustee)

The evaluation team will develop interview guidelines. Field interviews can take place either in the form of focus-group discussions or one-to-one consultations.

The methodology will be based on the following:

1. A desk review of project documents, including, but not limited to:

   (a) The original project document, monitoring reports (such as progress and financial reports to UNIDO and UNIDO-GEF annual Project Implementation Reports (PIRs)), mid-term review report, output reports (case studies, action plans, sub-regional strategies, etc.), back-to-office mission report(s), end-of-contract report(s) and relevant correspondence.

   (b) If applicable, notes from the meetings of committees involved in the project (e.g. approval and steering committees).

   (c) Other project-related material produced by the project.

2. The evaluation team will use available models of (or reconstruct if necessary) theory of change for the different types of intervention (enabling, capacity, investment, demonstration). The validity of the theory of change will be examined through specific questions in interviews and possibly through a survey of stakeholders.

3. Counterfactual information: In those cases where baseline information for relevant indicators is not available, the evaluation team will aim at establishing a proxy-baseline through recall and secondary information.

4. Interviews with project management and technical support including staff and management at UNIDO HQ and in the field and – if necessary - staff associated with the project's financial administration and procurement.

5. Interviews with project partners and stakeholders, including, among others, government counterparts, GEF OFP, project stakeholders, and co-financing partners as shown in the corresponding sections of the project documents.

6. On-site observation of results achieved by demonstration projects, including interviews of actual and potential beneficiaries of improved technologies.

7. Interviews and telephone interviews with intended users for the project outputs and other stakeholders involved in the project. The evaluation team shall determine whether to seek additional information and opinions from representatives of any donor agency(ies) or other organizations.

8. Interviews with the relevant UNIDO Field Office and the project's management members and the various national and sub-regional authorities dealing with project activities as necessary. If deemed necessary, the evaluation team shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.

9. Other interviews, surveys or document reviews as deemed necessary by the evaluation team and/or UNIDO, ODG/EVA.

10. The inception report will provide details on the methodology used by the evaluation team and include an evaluation matrix.

IV. Evaluation team composition

The evaluation team will be composed of one international evaluation consultant acting as the team leader and one national evaluation consultant.

The evaluation team is required to provide information relevant for follow-up studies, including terminal evaluation verification on request to the GEF partnership up to three years after completion of the terminal evaluation.

Both consultants will be contracted by UNIDO. The tasks of each team member are specified in the job descriptions annexed to these terms of reference.

Members of the evaluation team must not have been directly involved in the design and/or implementation of the projects/programme under evaluation.

The UNIDO project manager and the project team in Armenia will support the evaluation team. The UNIDO GEF Coordinator and the GEF OFP will be briefed on the evaluation and provide support to its conduct. GEF OFP will, where applicable and feasible, also be briefed and debriefed at the start and end of the evaluation mission.

V. Time schedule and deliverables

The evaluation is scheduled to take place from 1 March 2016 to 30 April 2016. The evaluation mission is planned for 14 to 18 March 2015. At the end of the field mission, there will be a presentation of the preliminary findings for all stakeholders involved in this project/programme in Armenia.

After the evaluation mission, the evaluation team leader will come to UNIDO HQ for debriefing and presentation of the preliminary findings of the terminal evaluation. The draft TE report will be submitted 4 to 6 weeks after the end of the mission. The draft TE report is to be shared with the UNIDO PM, ODG/EVA, the UNIDO GEF Coordinator and the GEF OFP and other relevant stakeholders for receipt of comments. The evaluation team leader is expected to revise the draft TE report based on the comments received, edit the language and form and submit the final version of the TE report in accordance with UNIDO ODG/EVA standards.

VI. Project evaluation parameters

The evaluation team will rate the projects. The **ratings for the parameters described in the following sub-chapters A to J will be presented in the form of a table** with each of the categories rated separately and with **brief justifications for the rating** based on the findings of the main analysis. An overall rating for the project should also be given.

A. Design

The evaluation will examine the extent to which:

- The project's design is adequate to address the problems at hand;
- A participatory project identification process was instrumental in selecting problem areas and national counterparts;
- The project has a clear thematically focused development objective, the attainment of which can be determined by a set of verifiable indicators;
- The project was formulated based on the logical framework (project results framework) approach;
- Was there a need to reformulate the project design and the project results framework given changes in the country and operational context?
- The project was formulated with the participation of national counterparts, stakeholders and/or target beneficiaries through a participatory and broad public consultation approach;
- Relevant country representatives (from government, industries, gender groups, and civil society), including the GEF OFP, have been appropriately involved and were participating in the identification of critical problem areas and the development of technical cooperation strategies;
- All GEF-4 and GEF-5 projects have incorporated relevant environmental and social risk considerations into the project design.

B. Relevance

The evaluation will examine the extent to which the project is relevant to the:

- National development and environmental priorities and strategies of the Government and the population, and regional and international agreements. See possible evaluation questions under "Country ownership/drivenness" below.
- Target groups: relevance of the project's objectives, outcomes and outputs to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity building and training, etc.).
- GEF's focal areas/operational programme strategies: In retrospect, were the project's outcomes consistent with the GEF focal area(s)/operational program strategies? Ascertain the likely nature and significance of the contribution of the project outcomes to the wider portfolio of GEF's Focal area, Climate Change (GEF-5).
- UNIDO's thematic priorities: Were they in line with UNIDO's mandate, objectives and outcomes defined in the Programme and Budget and core competencies?
- Does the project remain relevant taking into account the changing environment?

C. Effectiveness

- The evaluation will assess the objectives and final results at the end of the project – what outputs and outcomes has the project achieved so far (both qualitative and quantitative results)?
- The evaluation will assess to what extent results at various levels, including outcomes, have been achieved. In detail, the following issues will be assessed: To what extent have the expected outputs, outcomes and long-term objectives been achieved or are likely to be achieved? Has the project generated any results that could lead to changes of the assisted institutions? Have there been any unplanned effects?
- Are the project outcomes commensurate with the original or modified project objectives? If the original or modified expected results are merely outputs/inputs, the evaluators should assess if there were any real outcomes of the project and, if there were, determine whether these are commensurate with realistic expectations from the project.
- How do the stakeholders perceive the quality of outputs? Were the targeted beneficiary groups actually reached?
- Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these (see also below "monitoring of long term changes"). Wherever possible, evaluators should indicate how findings on impacts will be reported in future.
- Describe any catalytic or replication effects: the evaluation will describe any catalytic or replication effect both within and outside the project. If no effects are identified, the evaluation will describe the catalytic or replication actions that the project carried out. No ratings are requested for the project's catalytic role.

D. Efficiency

The extent to which:

- The project cost was effective? Was the project using the most cost-efficient options?
- Has the project produced results (outputs and outcomes) within the expected time frame? Was project implementation delayed, and, if it was, did that affect cost effectiveness or results? Wherever possible, the evaluator should also compare the costs incurred and the time taken to achieve outcomes with that for similar projects. Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Are the disbursements and project expenditures in line with budgets?
- Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet the requirements? Was the quality of UNIDO inputs and services as planned and timely?

- Was there coordination with other UNIDO and donors' projects, and did possible synergy effects happen?

E. Assessment of risks to sustainability of project outcomes

Sustainability is understood as the likelihood of continued benefits after the GEF project ends. Assessment of sustainability of outcomes will be given special attention but also technical, financial and organization sustainability will be reviewed. This assessment should explain how the risks to project outcomes will affect continuation of benefits after the GEF project ends. It will include both exogenous and endogenous risks. The following four dimensions or aspects of risks to sustainability will be addressed:

- **Financial risks**. Are there any financial risks that may jeopardize sustainability of project outcomes? What is the likelihood of financial and economic resources not being available once GEF assistance ends? (Such resources can be from multiple sources, such as the public and private sectors or income-generating activities; these can also include trends that indicate the likelihood that, in future, there will be adequate financial resources for sustaining project outcomes.) Was the project successful in identifying and leveraging co-financing?
- **Sociopolitical risks**. Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership (including ownership by governments and other key stakeholders) will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?
- **Institutional framework and governance risks.** Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? Are requisite systems for accountability and transparency and required technical know-how in place?
- **Environmental risks.** Are there any environmental risks that may jeopardize sustainability of project outcomes? Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to have adverse environmental impacts, which, in turn, might affect sustainability of project benefits? The evaluation should assess whether certain activities will pose a threat to the sustainability of the project outcomes.

F. Assessment of monitoring and evaluation (M&E) systems

- **M&E design.** Did the project include an M&E plan in the project design? Did it have an M&E plan to monitor results and track progress towards achieving project objectives? The evaluation will assess whether the project met the minimum requirements for the application of the Project M&E plan (see annex 3).
- **M&E plan implementation.** The evaluation should verify that an M&E system was in place and facilitated timely tracking of progress toward project objectives by collecting information on chosen indicators continually throughout the project implementation period; annual project reports were complete and accurate, with well-justified ratings; the information provided by the M&E system was used during the project to improve performance and to adapt to changing needs; and the project had an M&E system in place with proper training for parties responsible for M&E activities to ensure that data will continue to be collected and used after project closure. Was monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impacts? Are there any annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance reviews take place regularly?
- **Budgeting and Funding for M&E activities.** In addition to incorporating information on funding for M&E while assessing M&E design, the evaluators will determine

whether M&E was sufficiently budgeted for at the project planning stage and whether M&E was adequately funded and in a timely manner during implementation.

G. Monitoring of long-term changes

The M&E of long-term changes is often incorporated in GEF-supported projects as a separate component and may include determination of environmental baselines; specification of indicators; and provisioning of equipment and capacity building for data gathering, analysis, and use. This section of the evaluation report will describe project actions and accomplishments towards establishing a long-term monitoring system. The evaluation will address the following questions:

a. Did the project contribute to the establishment of a long-term monitoring system? If it did not, should the project have included such a component?
b. What were the accomplishments and shortcomings in establishment of this system?
c. Is the system sustainable — that is, is it embedded in a proper institutional structure and does it have financing? How likely is it that this system continues operating upon project completion?
d. Is the information generated by this system being used as originally intended?

H. Assessment of processes affecting achievement of project results

Among other factors, when relevant, the evaluation will consider a number of issues affecting project implementation and attainment of project results. The assessment of these issues can be integrated into the analyses of project design, relevance, effectiveness, efficiency, sustainability and management as the evaluators deem them appropriate (it is not necessary, however it is possible to have a separate chapter on these aspects in the evaluation report). The evaluation will consider, but need not be limited to, the following issues that may have affected project implementation and achievement of project results:

a. **Preparation and readiness / Quality at entry.** Were the project's objectives and components clear, practicable, and feasible within its time frame? Were counterpart resources (funding, staff, and facilities), and adequate project management arrangements in place at project entry? Were the capacities of executing institution and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project approval?

b. **Country ownership/drivenness.** Was the project concept in line with the sectoral and development priorities and plans of the country—or of participating countries, in the case of multi-country projects? Are project outcomes contributing to national development priorities and plans? Were relevant country representatives from government and civil society involved in the project? Was the GEF OFP involved in the project design and implementation? Did the recipient government maintain its financial commitment to the project? Has the government—or governments in the case of multi-country projects—approved policies or regulatory frameworks in line with the project's objectives?

c. **Stakeholder involvement and consultation.** Did the project involve the relevant stakeholders through continuous information sharing and consultation? Did the project implement appropriate outreach and public awareness campaigns? Were the relevant vulnerable groups and powerful supporters and opponents of the processes involved in a participatory and consultative manner? Which stakeholders were involved in the project (e.g., NGOs, private sector, other UN Agencies) and what were their immediate tasks? Did the project consult with and make use of the skills, experience, and knowledge of the appropriate government entities, nongovernmental organizations, community groups, private sector entities, local governments, and academic institutions in the design, implementation, and evaluation of project activities? Were perspectives of those who would be affected by project decisions, those who could

13

affect the outcomes, and those who could contribute information or other resources to the process taken into account while taking decisions?

d. **Financial planning.** Did the project have appropriate financial controls, including reporting and planning, that allowed management to make informed decisions regarding the budget and allowed for timely flow of funds? Was there due diligence in the management of funds and financial audits? Did promised co-financing materialize? Specifically, the evaluation should also include a breakdown of final actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing.

e. **UNIDO's supervision and backstopping.** Did UNIDO staff identify problems in a timely fashion and accurately estimate their seriousness? Did UNIDO staff provide quality support and advice to the project, approve modifications in time, and restructure the project when needed? Did UNIDO provide the right staffing levels, continuity, skill mix, and frequency of field visits for the project?

f. **Co-financing and project outcomes and sustainability.** Did the project manage to mobilize the co-financing amount expected at the time of CEO Endorsement? If there was a difference in the level of expected co-financing and the co-financing actually mobilized, what were the reasons for the variance? Did the extent of materialization of co-financing affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?

g. **Delays and project outcomes and sustainability.** If there were delays in project implementation and completion, what were the reasons? Did the delays affect project outcomes and/or sustainability, and, if so, in what ways and through what causal linkages?

h. **Implementation and execution approach.** Is the implementation and execution approach chosen different from other implementation approaches applied by UNIDO and other agencies? Does the approach comply with the principles of the Paris Declaration? Is the implementation and execution approach in line with the GEF Minimum Fiduciary Standards: Separation of Implementation and Execution Functions in GEF Partner Agencies (GEF/C.41/06/Rev.01) and the relevant UNIDO regulations (DGAI.20 and Procurement Manual)? Does the approach promote local ownership and capacity building? Does the approach involve significant risks? In cases where Execution was done by third parties, i.e. Executing Partners, based on a contractual arrangement with UNIDO was this done in accordance with the contractual arrangement concluded with UNIDO in an effective and efficient manner?

i. **Environmental and Social Safeguards.** If a GEF-4 or GEF-5 project, has the project incorporated relevant environmental and social risk considerations into the project design? What impact did these risks have on the achievement of project results?

The evaluation team will rate the project performance as required by the GEF. The ratings will be given to the following criteria: Project Design, Relevance, Effectiveness, Efficiency, Sustainability, Monitoring and Evaluation, and UNIDO related issues as specified in Annex 2. The ratings will be presented in a table with each of the categories rated separately and with brief justifications for the rating based on the findings of the main analysis. An overall rating for the project should also be given. The rating system to be applied is specified in the same annex. As per the GEF's requirements, the report should also provide information on project identification, time frame, actual expenditures, and co-financing in the format in annex 5, which is modeled after the GEF's project identification form (PIF).

I. Project coordination and management

The extent to which:

- The national management and overall coordination mechanisms have been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities (e.g. providing strategic

support, monitoring and reviewing performance, allocating funds, providing technical support, following up agreed/corrective actions)?

- The UNIDO HQ-based management, coordination, monitoring, quality control and technical inputs have been efficient, timely and effective (e.g. problems identified timely and accurately; quality support provided timely and effectively; right staffing levels, continuity, skill mix and frequency of field visits)?

J. Assessment of gender mainstreaming

The evaluation will consider, but need not be limited to, the following issues that may have affected gender mainstreaming in the project:

- Did the project/programme design adequately consider the gender dimensions in its interventions? If so, how?
- Was a gender analysis included in a baseline study or needs assessment (if any)?
- How gender-balanced was the composition of the project management team, the Steering Committee, experts and consultants and the beneficiaries?
- Have women and men benefited equally from the project's interventions? Do the results affect women and men differently? If so, why and how? How are the results likely to affect gender relations (e.g., division of labour, decision-making authority)?
- To what extent were socioeconomic benefits delivered by the project at the national and local levels, taking gender dimensions into account?

VII. Reporting

Inception report

These terms of reference (TOR) provide some information on the evaluation methodology, but this should not be regarded as exhaustive. After reviewing the project documentation and initial interviews with the project manager, the International Evaluation Consultant will prepare, in collaboration with the national consultant, a short inception report that will operationalize the TOR relating to the evaluation questions and provide information on what type of and how the evidence will be collected (methodology). It will be discussed with and approved by the responsible UNIDO Evaluation Officer in the UNIDO Office for Independent Evaluation. The inception report will focus on the following elements: preliminary project theory model(s); elaboration of evaluation methodology, including quantitative and qualitative approaches through an evaluation framework ("evaluation matrix"); division of work between the international evaluation consultant and national evaluation consultant; mission plan, including places to be visited, people to be interviewed and possible surveys to be conducted and a debriefing and reporting timetable[7].

Evaluation report format and review procedures

The draft report will be delivered to UNIDO Office for Independent Evaluation (the suggested report outline is in annex 1) and circulated to UNIDO staff, the GEF OFP, and national stakeholders associated with the project for factual validation and comments. Any comments or responses, or feedback on any errors of fact to the draft report provided by the stakeholders will be sent to UNIDO, ODG/EVA for collation and onward transmission to the project evaluation team who will be advised of any necessary revisions. On the basis of this feedback, and taking into consideration the comments received, the evaluation team will prepare the final version of the terminal evaluation report.

[7] The UNIDO Office for Independent Evaluation will provide the evaluation team with a Guide on how to prepare an evaluation inception report.

The evaluation team will present its preliminary findings to the local stakeholders at the end of the field visit and take into account their feed-back in preparing the evaluation report. A presentation of preliminary findings will take place at UNIDO HQ after the field mission.

The TE report should be brief, to the point and easy to understand. It must explain the purpose of the evaluation, exactly what was evaluated, and the methods used. The report must highlight any methodological limitations, identify key concerns and present evidence-based findings, consequent conclusions, recommendations and lessons. The report should provide information on when the evaluation took place, the places visited, who was involved and be presented in a way that makes the information accessible and comprehensible. The report should include an executive summary that encapsulates the essence of the information contained in the report to facilitate dissemination and distillation of lessons.

Findings, conclusions and recommendations should be presented in a complete, logical and balanced manner. The evaluation report shall be written in English and follow the outline given in annex 1.

Evaluation work plan

The "Evaluation Work Plan" includes the following main products:

1. Desk review, briefing by project manager and development of methodology: Following the receipt of all relevant documents, and consultation with the Project Manager about the documentation, including reaching an agreement on the methodology, the desk review could be completed.

2. Inception report: At the time of departure to the field mission, all the received material has been reviewed and consolidated into the Inception report.

3. Field mission: The principal responsibility for managing this evaluation lies with UNIDO. It will be responsible for liaising with the project team to set up the stakeholder interviews, arrange the field missions and coordinate with the Government of Armenia. At the end of the field mission, there will be a presentation of preliminary findings to the key stakeholders in Armenia.

4. Preliminary findings from the field mission: Following the field mission, the main findings, conclusions and recommendations would be prepared and presented in the field and at UNIDO Headquarters.

5. A draft TE report will be forwarded electronically to the UNIDO Office for Independent Evaluation and circulated to main stakeholders.

6. Final terminal evaluation report will incorporate comments received.

Evaluation phases	**Deliverables**
Desk review	Development of methodology approach and evaluation tools
Briefing with UNIDO Office for Independent Evaluation, Project Managers and other key stakeholder at HQ	Interview notes, detailed evaluation schedule and list of stakeholders to interview during field mission
Data analysis	Inception evaluation report
Field mission Present preliminary findings and recommendations to key stakeholders in the field	Presentation of main findings to key stakeholders in the field.

Debriefing at UNIDO HQ	Present preliminary findings and recommendations to the stakeholders at UNIDO HQ Additional interviews and analysis
Analysis of the data collected	Draft terminal evaluation report
Circulation of the draft report to UNIDO/relevant stakeholders and revision	Final terminal evaluation report

VIII. Quality assurance

All UNIDO evaluations are subject to quality assessments by the UNIDO Office for Independent Evaluation. Quality assurance and control is exercised in different ways throughout the evaluation process (briefing of consultants on methodology and process by the UNIDO/ ODG/EVA, providing inputs regarding findings, lessons learned and recommendations from other UNIDO evaluations, review of inception report and evaluation report by UNIDO/ ODG/EVA). The quality of the evaluation report will be assessed and rated against the criteria set forth in the Checklist on evaluation report quality, attached as Annex 4. The applied evaluation quality assessment criteria are used as a tool to provide structured feedback. UNIDO/ ODG/EVA should ensure that the evaluation report is useful for UNIDO in terms of organizational learning (recommendations and lessons learned) and is compliant with UNIDO's evaluation policy and these terms of reference. The draft and final evaluation report are reviewed by the UNIDO Office for Independent Evaluation, which will submit the final report to the GEF Evaluation Office and circulate it within UNIDO together with a management response sheet.

Annex 1 - Outline of an in-depth project evaluation report

Executive summary

- Must provide a synopsis of the storyline which includes the main evaluation findings and recommendations
- Must present strengths and weaknesses of the project
- Must be self-explanatory and should be maximum 3-4 pages in length

I. Evaluation objectives, methodology and process

- Information on the evaluation: why, when, by whom, etc.
- Scope and objectives of the evaluation, main questions to be addressed
- Information sources and availability of information
- Methodological remarks, limitations encountered and validity of the findings

I. Country and project background

- Brief country context: an overview of the economy, the environment, institutional development, demographic and other data of relevance to the project
- Sector-specific issues of concern to the project[8] and important developments during the project implementation period
- Project summary:
  - Fact sheet of the project: including project objectives and structure, donors and counterparts, project timing and duration, project costs and co-financing
  - Brief description including history and previous cooperation
  - Project implementation arrangements and implementation modalities, institutions involved, major changes to project implementation
  - Positioning of the UNIDO project (other initiatives of Government, other donors, private sector, etc.)
  - Counterpart organization(s)

I. Project assessment

This is the key chapter of the report and should address all evaluation criteria and questions outlined in the TOR (see section VI - Project evaluation parameters). Assessment must be based on factual evidence collected and analyzed from different sources. The evaluators' assessment can be split into the following sections:

A. Design
B. Relevance (report on the relevance of project towards countries and beneficiaries)
C. Effectiveness (the extent to which the development intervention's objectives and deliverables were achieved, or are expected to be achieved, taking into account their relative importance)
D. Efficiency (report on the overall cost-benefit of the project and partner countries' contribution to the achievement of project objectives)
E. Sustainability of project outcomes (report on the risks and vulnerability of the project, considering the likely effects of sociopolitical and institutional changes in partner countries, and its impact on continuation of benefits after the GEF project ends, specifically the financial, sociopolitical, institutional framework and governance, and environmental risks)
F. Assessment of monitoring and evaluation systems (report on M&E design, M&E plan implementation, and budgeting and funding for M&E activities)
G. Monitoring of long-term changes
H. Assessment of processes affecting achievement of project results (report on preparation and readiness / quality at entry, country ownership, stakeholder involvement, financial planning, UNIDO support, co-financing and project outcomes and sustainability, delays of project outcomes and sustainability, and implementation approach)

[8] Explicit and implicit assumptions in the logical framework of the project can provide insights into key-issues of concern (e.g., relevant legislation, enforcement capacities, government initiatives)

I. Project coordination and management (report project management conditions and achievements, and partner countries commitment)
J. Gender mainstreaming

At the end of this chapter, an overall project achievement rating should be developed as required in annex 2. The overall rating table required by the GEF should be presented here.

IV. Conclusions, recommendations and lessons learned

This chapter can be divided into three sections:

A. Conclusions

This section should include a storyline of the main evaluation conclusions related to the project's achievements and shortfalls. It is important to avoid providing a summary based on each and every evaluation criterion. The main conclusions should be cross-referenced to relevant sections of the evaluation report.

B. Recommendations

This section should be succinct and contain few key recommendations. They should be:

- Based on evaluation findings
- Realistic and feasible within a project context
- Indicating institution(s) responsible for implementation (addressed to a specific officer, group or entity who can act on it) and have a proposed timeline for implementation if possible
- Commensurate with the available capacities of project team and partners
- Taking resource requirements into account.

Recommendations should be structured by addressees:

- UNIDO
- Government and/or counterpart organizations
- Donor

C. Lessons learned

- Lessons learned must be of wider applicability beyond the evaluated project but must be based on findings and conclusions of the evaluation
- For each lesson, the context from which they are derived should be briefly stated

Annexes should include the evaluation TOR, list of interviewees, documents reviewed, a summary of project identification and financial data, including an updated table of expenditures to date, and other detailed quantitative information. Dissident views or management responses to the evaluation findings may later be appended in an annex.

Annex 2 - Overall rating table

Criterion	Evaluator's summary comments	Evaluator's rating
Attainment of project objectives and results (overall rating), sub criteria (below)		
Design		
Effectiveness		
Relevance		
Efficiency		
Sustainability of project outcomes (overall rating), sub criteria (below)		
Financial risks		
Sociopolitical risks		
Institutional framework and governance risks		
Environmental risks		
Monitoring and evaluation (overall rating), sub criteria (below)		
M&E Design		
M&E Plan implementation (use for adaptive management)		
Budgeting and Funding for M&E activities		
Project management		
UNIDO specific ratings		
Quality at entry / Preparation and readiness		
Implementation approach		
UNIDO Supervision and backstopping		
Overall rating		

RATING OF PROJECT OBJECTIVES AND RESULTS

- Highly satisfactory (HS): The project had no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Satisfactory (S): The project had minor shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately satisfactory (MS): The project had moderate shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Moderately unsatisfactory (MU): The project had significant shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Unsatisfactory (U) The project had major shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.
- Highly unsatisfactory (HU): The project had severe shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency.

Please note: Relevance and effectiveness will be considered as critical criteria. The overall rating of the project for achievement of objectives and results **may not be higher** than the lowest rating on either of these two criteria. Thus, to have an overall satisfactory rating for outcomes a project must have at least satisfactory ratings on both relevance and effectiveness.

RATINGS ON SUSTAINABILITY

Sustainability will be understood as the probability of continued long-term outcomes and impacts after the GEF project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits beyond project completion. Some of these factors might be outcomes of the project, i.e. stronger institutional capacities, legal frameworks, socio-economic incentives /or public awareness. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes.

Rating system for sustainability sub-criteria
On each of the dimensions of sustainability of the project outcomes will be rated as follows.

- Likely (L): There are no risks affecting this dimension of sustainability.
- Moderately likely (ML). There are moderate risks that affect this dimension of sustainability.
- Moderately unlikely (MU): There are significant risks that affect this dimension of sustainability.
- Unlikely (U): There are severe risks that affect this dimension of sustainability.

All the risk dimensions of sustainability are critical. Therefore, overall rating for sustainability will not be higher than the rating of the dimension with lowest ratings. For example, if a project has an Unlikely rating in either of the dimensions then its overall rating cannot be higher than Unlikely, regardless of whether higher ratings in other dimensions of sustainability produce a higher average.

RATINGS OF PROJECT M&E

Monitoring is a continuing function that uses systematic collection of data on specified indicators to provide management and the main stakeholders of an ongoing project with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds. Evaluation is the systematic and objective assessment of an on-going or completed project, its design, implementation and results. Project evaluation may involve the definition of appropriate standards, the examination of performance against those standards, and an assessment of actual and expected results.

The Project M&E system will be rated on M&E design, M&E plan implementation and budgeting and funding for M&E activities as follows:

- Highly satisfactory (HS): There were no shortcomings in the project M&E system.
- Satisfactory(S): There were minor shortcomings in the project M&E system.
- Moderately satisfactory (MS): There were moderate shortcomings in the project M&E system.
- Moderately unsatisfactory (MU): There were significant shortcomings in the project M&E system.
- Unsatisfactory (U): There were major shortcomings in the project M&E system.
- Highly unsatisfactory (HU): The Project had no M&E system.

M&E plan implementation will be considered a critical parameter for the overall assessment of the M&E system. The overall rating for the M&E systems will not be higher than the rating on M&E plan implementation.

All other ratings will be on the GEF six-point scale:

HS	= Highly satisfactory	Excellent
S	= Satisfactory	Well above average
MS	= Moderately satisfactory	Average
MU	= Moderately unsatisfactory	Below average
U	= Unsatisfactory	Poor
HU	= Highly unsatisfactory	Very poor (appalling)

Annex 3 - GEF Minimum requirements for M&E[9]

Minimum requirement 1: Project design of M&E

All projects will include a concrete and fully budgeted M&E plan by the time of work program entry for full-sized projects (FSP) and CEO approval for medium-sized projects (MSP). This M&E plan will contain as a minimum:

- SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management;
- SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, indicators identified at the corporate level;
- Baseline for the project, with a description of the problem to be addressed, with indicator data, or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation;
- Identification of reviews and evaluations that will be undertaken, such as mid-term reviews or evaluations of activities; and
- Organizational set-up and budgets for monitoring and evaluation.

Minimum requirement 2: Application of project M&E

Project monitoring and supervision will include implementation of the M&E plan, comprising:

- SMART indicators for implementation are actively used, or if not, a reasonable explanation is provided;
- SMART indicators for results are actively used, or if not, a reasonable explanation is provided;
- The baseline for the project is fully established and data compiled to review progress reviews, and evaluations are undertaken as planned; and
- The organizational set-up for M&E is operational and budgets are spent as planned.

[9] http://www.thegef.org/gef/sites/thegef.org/files/documents/ME_Policy_2010.pdf

Annex 4 - Checklist on terminal evaluation report quality

Independent terminal evaluation of UNIDO-GEF project:

PROJECT TITLE:

PROJECT NO:

CHECKLIST ON EVALUATION REPORT QUALITY

Report quality criteria	UNIDO Office for Independent Evaluation: Assessment notes	Rating
A. The terminal evaluation report presented an assessment of all relevant outcomes and achievement of project objectives in the context of the focal area program indicators if applicable.		
B. The terminal evaluation report was consistent, the evidence presented was complete and convincing, and the ratings were well substantiated.		
C. The terminal evaluation report presented a sound assessment of sustainability of outcomes.		
D. The lessons and recommendations listed in the terminal evaluation report are supported by the evidence presented and are relevant to the GEF portfolio and future projects.		
E. The terminal evaluation report included the actual project costs (totals, per activity, and per source) and actual co-financing used.		
F. The terminal evaluation report included an assessment of the quality of the M&E plan at entry, the operation of the M&E system used during implementation, and the extent M&E was sufficiently budgeted for during preparation and properly funded during implementation.		

Rating system for quality of evaluation reports
A number rating 1-6 is used for each criterion: Highly satisfactory = 6, Satisfactory = 5, Moderately satisfactory = 4, Moderately unsatisfactory = 3, Unsatisfactory = 2, Highly unsatisfactory = 1, and unable to assess = 0.

Annex 5 – Required project identification and financial data

The evaluation report should provide information on project identification, time frame, actual expenditures, and co-financing in the following format, which is modeled after the project identification form (PIF).

I. Dates

Milestone	Expected date	Actual date
Project CEO endorsement/approval date		
Project implementation start date (PAD issuance date)		
Original expected implementation end date (indicated in CEO endorsement/approval document)		
Revised expected implementation end date (if any)		
Terminal evaluation completion		
Planned tracking tool date		

II. Project framework

Project component	Activity type	GEF financing (in USD)		Co-financing (in USD)	
		Approved	Actual	Promised	Actual
1.					
2.					
3.					
4.					
5.					
6. Project management					
Total (in USD)					

Activity types are:

a) Experts, researches hired
b) technical assistance, Workshop, Meetings or experts consultation scientific and technical analysis, experts researches hired
c) Promised co-financing refers to the amount indicated on endorsement/approval.

III. Co-financing

Source of co-financing (name of specific co-financiers)	**Type of co-financier** (e.g. government, GEF ageny(ies), Bilateral and aid agency (ies), multilateral agency(ies), private sector, NGO/CSOs, other)	**Type of co-financing**	**Project preparation – CEO endorsement/ approval stage** (in USD)		**Project implementation stage** (in USD)		**Total** (in USD)	
			Expected	Actual	Expected	Actual	Expected	Actual
	…							
Total co-financing (in USD)								

Expected amounts are those submitted by the GEF agencies in the original project appraisal document. Co-financing types are grant, soft loan, hard loan, guarantee, in kind, or cash.

Annex 6 – Job descriptions

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	International evaluation consultant
Main Duty Station and Location:	Home-based
Missions:	Missions to Vienna, Austria and Armenia
Start of Contract (EOD):	March 1, 2016
End of Contract (COB):	April 30, 2016
Number of Working Days:	24 working days spread over 2 months

1. ORGANIZATIONAL CONTEXT

The UNIDO Office for Independent Evaluation (ODG/EVA) is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. ODG/EVA is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

2. PROJECT CONTEXT

Armenia's economy on the whole and also the technologies used in the industrial sector are characterized by high energy intensity and consumption. This situation is on account of low energy efficiency in energy intensive industrial sectors due to the worn-out outdated production facilities and limited use of energy saving technologies and processes, as well as the absence of the necessary monitoring and control of the use of energy carriers.

The project aimed primarily at promoting an innovation ecosystem, driven by incentives, to assist in the design, deployment and scaling up innovative clean and efficient technologies and processes across small businesses in the country. It aimed to adopt an inter-disciplinary approach involving SMEs, national ministries, academia, industrial associations, state governments, partner agencies such as SME Development National Centre (SMEDNC) and autonomous research centres in the country and abroad to promote innovative technologies in selected energy intensive SME clusters across the country. The cleantech approach and methodologies adopted under the project were to build on the Green Industry initiative of UNIDO with a focus on innovative SMEs through an eco-system approach that would involve identifying start-ups, nurturing, mentoring and incentivizing technological innovations to promote clean energy technologies and systems in selected SME clusters.

Detailed background information of the project can be found the terms of reference (TOR) for the terminal evaluation.

3. DUTIES AND RESPONSIBILITIES

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
1. Review project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); determine key data to collect in the field and adjust the key data collection instrument of 3A accordingly (if needed); Assess the adequacy of legislative and regulatory framework relevant to the project's activities and analyze other background info.	• Adjust table of evaluation questions, depending on country specific context; • Draft list of stakeholders to interview during the field missions; • Brief assessment of the adequacy of the country's legislative and regulatory framework.	4 days	Home-based
2. Briefing with the UNIDO Office for Independent Evaluation, project managers and other key stakeholders at UNIDO HQ. Preparation of the Inception Report	• Detailed evaluation schedule with tentative mission agenda (incl. list of stakeholders to interview and site visits); mission planning; • Division of evaluation tasks with the National Consultant. • Inception Report	3 days	Vienna, Austria
3. Conduct field mission to Armenia in **March 2016**[10]**.**	• Conduct meetings with relevant project stakeholders, beneficiaries, the GEF Operational Focal Point (OFP),etc. for the collection of data and clarifications; • Agreement with the National Consultant on the structure and content of the evaluation report and the distribution of writing tasks; • Evaluation presentation of the evaluation's initial findings prepared, draft conclusions and recommendations to stakeholders in the country, including the GEF OFP, at the end of the mission.	7 days (including travel time)	Armenia
4. Present overall findings and recommendations to the stakeholders at UNIDO HQ	• After field mission(s): Presentation slides, feedback from stakeholders obtained and discussed	2 days	Vienna, Austria

[10] The exact mission dates will be decided in agreement with the Consultant, UNIDO HQ, and the country counterparts.

MAIN DUTIES	Concrete/ Measurable Outputs to be achieved	Working Days	Location
5. Prepare the evaluation report according to the TOR; Coordinate the inputs from the National Consultant and combine with her/his own inputs into the draft evaluation report. Share the evaluation report with UNIDO HQ and national stakeholders for feedback and comments.	• Draft evaluation report.	5 days	Home-based
6. Revise the draft project evaluation report based on comments from UNIDO Office for Independent Evaluation and stakeholders and edit the language and form of the final version according to UNIDO standards.	• Final evaluation report.	3 days	Home-based
	TOTAL	**24 days**	

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education:

Advanced degree in environment, energy, engineering, development studies or related areas

Technical and functional experience:

- Minimum of 10 years' experience in environmental/energy project management and/or evaluation (of development projects)
- Knowledge about GEF operational programs and strategies and about relevant GEF policies such as those on project life cycle, M&E, incremental costs, and fiduciary standards
- Experience in the evaluation of GEF projects and knowledge of UNIDO activities an asset
- Knowledge about multilateral technical cooperation and the UN, international development priorities and frameworks
- Working experience in developing countries

Languages:

Fluency in written and spoken English is required. Knowledge of a local language would be an asset.

Reporting and deliverables

1) At the beginning of the assignment the Consultant will submit a concise Inception Report that will outline the general methodology and presents a concept Table of Contents;

2) The country assignment will have the following deliverables:
   - Presentation of initial findings of the mission to key national stakeholders;
   - Draft report;
   - Final report, comprising of executive summary, findings regarding design, implementation and results, conclusions and recommendations.

3) Debriefing at UNIDO HQ:

- Presentation and discussion of findings;
- Concise summary and comparative analysis of the main results of the evaluation report.

All reports and related documents must be in English and presented in electronic format.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Office for Independent Evaluation.

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

TERMS OF REFERENCE FOR PERSONNEL UNDER INDIVIDUAL SERVICE AGREEMENT (ISA)

Title:	National evaluation consultant
Main Duty Station and Location:	Home-based
Mission/s to:	Travel to potential sites within Armenia
Start of Contract:	1 March 2016
End of Contract:	30 April 2016
Number of Working Days:	21 days spread over 2 months

ORGANIZATIONAL CONTEXT

The UNIDO Office for Independent Evaluation is responsible for the independent evaluation function of UNIDO. It supports learning, continuous improvement and accountability, and provides factual information about result and practices that feed into the programmatic and strategic decision-making processes. Evaluation is an assessment, as systematic and impartial as possible, of a programme, a project or a theme. Independent evaluations provide evidence-based information that is credible, reliable and useful, enabling the timely incorporation of findings, recommendations and lessons learned into the decision-making processes at organization-wide, programme and project level. The UNIDO Office for Independent Evaluation is guided by the UNIDO Evaluation Policy, which is aligned to the norms and standards for evaluation in the UN system.

PROJECT CONTEXT

The national evaluation consultant will evaluate the projects according to the terms of reference (TOR) under the leadership of the team leader (international evaluation consultant). S/he will perform the following tasks:

MAIN DUTIES	**Concrete/measurable outputs to be achieved**	**Expected duration**	**Location**
Review and analyze project documentation and relevant country background information (national policies and strategies, UN strategies and general economic data); in cooperation with the Team Leader: determine key data to collect in the field and prepare key instruments in both English/French and local language (questionnaires, logic models) to collect these data through interviews and/or surveys during and prior to the field missions; Coordinate and lead interviews/ surveys in local language and assist	• List of detailed evaluation questions to be clarified; questionnaires/interview guide; logic models; list of key data to collect, draft list of stakeholders to interview during the field missions • Drafting and presentation of brief assessment of the adequacy of the country's legislative and regulatory framework in the context of the project.	4 days	Home-based

30

MAIN DUTIES	Concrete/measurable outputs to be achieved	Expected duration	Location
the team leader with translation where necessary; Analyze and assess the adequacy of legislative and regulatory framework, specifically in the context of the project's objectives and targets; provide analysis and advice to the team leader on existing and appropriate policies for input to the team leader.			
Review all project outputs/ publications/feedback; Briefing with the evaluation team leader, UNIDO project managers and other key stakeholders. Coordinate the evaluation mission agenda, ensuring and setting up the required meetings with project partners and government counterparts, and organize and lead site visits, in close cooperation with the Project Management Unit. Assist and provide detailed analysis and inputs to the team leader in the preparation of the inception report.	• Interview notes, detailed evaluation schedule and list of stakeholders to interview during the field missions. • Division of evaluation tasks with the Team Leader. • Inception Report.	4 days	Home-based (telephone interviews)
Coordinate and conduct the field mission with the team leader in cooperation with the Project Management Unit, where required; Consult with the team leader on the structure and content of the evaluation report and the distribution of writing tasks.	• Presentations of the evaluation's initial findings, draft conclusions and recommendations to stakeholders in the country at the end of the mission. • Agreement with the Team Leader on the structure and content of the evaluation report and the distribution of writing tasks.	5 days (including travel days)	Armenia
Prepare inputs and analysis to the evaluation report according to TOR and as agreed with the Team Leader.	Draft evaluation report prepared.	5 days	Home-based
Revise the draft project evaluation report based on comments from UNIDO Office for Independent Evaluation and stakeholders and edit the language and form of the final version according to UNIDO standards.	Final evaluation report prepared.	3 days	Home-based
TOTAL		**21 days**	

REQUIRED COMPETENCIES

Core values:
1. Integrity
2. Professionalism
3. Respect for diversity

Core competencies:
1. Results orientation and accountability
2. Planning and organizing
3. Communication and trust
4. Team orientation
5. Client orientation
6. Organizational development and innovation

Managerial competencies (as applicable):
1. Strategy and direction
2. Managing people and performance
3. Judgement and decision making
4. Conflict resolution

MINIMUM ORGANIZATIONAL REQUIREMENTS

Education: Advanced university degree in environmental science, engineering or other relevant discipline like developmental studies with a specialization in industrial energy efficiency and/or climate change.

Technical and functional experience:
- A minimum of five years professional experience
- Evaluation experience at the international level involving technical cooperation in developing countries is desirable.
- Exposure to the needs, conditions and problems in developing countries.
- Familiarity with the institutional context of the project is desirable.

Languages: Fluency in written and spoken English and Armenian is required.

Absence of conflict of interest:

According to UNIDO rules, the consultant must not have been involved in the design and/or implementation, supervision and coordination of and/or have benefited from the programme/project (or theme) under evaluation. The consultant will be requested to sign a declaration that none of the above situations exists and that the consultants will not seek assignments with the manager/s in charge of the project before the completion of her/his contract with the UNIDO Office for Independent Evaluation.

Annex 7 – Project results framework

Results	Indicators	Means of Verification	Assumptions and Risks
Objective			
Promotion of clean technology innovations and entrepreneurship in selected SME sectors in Armenia	Tons of GHG emissions avoided. Number of participant SMEs taking part in the cleantech programme.	Project progress reports; mid-term and final project evaluation reports.	Continuous government support and commitment. Lack of commitment from entrepreneurs in the SME sector to participate in the competition.
Outcomes			
1. Capacity building of national industrial association to host cleantech programme.	National Cleantech Programme hosted by national associations. Behavioral changes of SME entrepreneurs towards innovations. Support institutions involvement in the cleantech programme.	Project progress reports; mid-term and final project evaluation reports. Financial institution's reports on scale of investments in innovator SMEs.	Sufficient commitment and participation by the experts.
2. SMEs associations and national agencies involved in promoting clean technology innovations mobilized and a coordinating platform at the national level established.	Number of SMEs as members of the national platform. Number of innovative businesses created. Tons of GHG emissions avoided.	Project progress reports; mid-term and final project evaluation reports.	Continuous government support and participation.
3. Policy and institutional framework strenthened for scaling up cleantech innovations in selected SME sectors.	Number of new or improved policies and guidelines prepared to incentivize innovations in SMEs. Strengthening of existing policies enabling SMEs increased access to financing and technologies.	Project progress reports; mid-term and final project evaluation reports.	Continuous support and participation by relevant Ministries and National Institutions.
Outputs			

1.1. National Industrial Associations of SMEs involved in capacity building initiatives;	Number of SMEDNC staff trained to be able to organize the competition and the acceleration programme.	Project progress reports; mid-term and final project evaluation reports.	Continuous support from the government.
1.2. Mentor Programme - Up to 150 mentors identified and trained;	Number of local partners trained. Number of mentors trained;	Monitoring and Project progress reports; mid-term and final project evaluation reports.	Continuous participation of the local partners like SMEDNC.
1.3. Training Programme - Intensive Cleantech Open Academy held in Yerevan for seed stage cleantech investors utilizing best practices from other regions.	Number of semi-finalist companies supported by Cleantech programme. Number of shortlisted SMEs connected with funding and partnership opportunities.	Monitoring and Project progress reports; mid-term and final project evaluation reports.	Continued support from the trained mentors to participate in the programme.
1.4. Public Private Partnership Forums held regionally.	Number of SME entrepreneurs invests in innovations. Number of support institutions involved in the cleantech programme.	Project progress reports; mid-term and final project evaluation reports. Monitoring and Project progress reports; mid-term and final project evaluation reports.	Committed participation of entrepreneurs. Continuous support from SMEs, Government, National Institutions and other national agencies.

2.1. A national level coordinating mechanism established to promote clean technology innovations and entrepreneurship amongst SMEs;	Number of SMEs associations and national agencies involved. Number of entries, number of semi-finalists and finalists, etc.	Monitoring and Project progress reports; mid-term and final project evaluation reports.	Continuous support from government and national agencies.
2.2. Annual cleantech business competition and accelerator established across selected cleantech sectors (launch Q3 2013).	Number of successful women entrepreneurs engaged and trained.	Monitoring and Project progress reports; mid-term and final project evaluation reports.	Continuous government support and committed participation of entrepreneurs.
2.3. Extensive advocacy and outreach activities organized at the national level and willing participants identified for participation in the cleantech platform (Q2 2013).	Number of activities identified in the pilot phase. Tons of GHG emissions avoided.	Monitoring and Project progress reports; mid-term and final project evaluation reports.	Continuous support and participation by government and entrepreneurs.
3.1. Enabling policy and regulatory environment created. 3.2. Regional stakeholder meetings held and partnerships developed with leading institutions, agencies and universities across the country.	Number of new effective policies in place for promoting cleantech innovations. Number of existing policies strengthened for increased access of SMEs to financing and technologies. Number of regional stakeholder meetings held and partnerships developed.	Project progress reports; mid-term and final project evaluation reports. Project progress reports; mid-term and final project evaluation reports.	Continuous support from government. Continuous support and participation by relevant stakeholders.

Annex.2. List of interviewees

Date	Name	Position	Organization	Stakeholder
21/03/2016	Anahit Simonyan	Head of UNIDO Operations in Armenia	UNIDO	Project Implementer
21/03/2016	Frunzik Voskanyan	Project Coordinator	UNIDO	Project Implementer
21/03/2016	Marina Mikhitaryan	Innovation Lab Lead	UNDP	Institutional
21/03/2016	Emil Tarasyan	Deputy Minister	Ministry of Economy	
21/03/2016	Ruben Gevorgyan	Head of Department of Technological Development	Ministry of Economy	Institutional
21/03/2016	Khachik Hakobyan	Deputy Minister	Ministry of Nature Protection	Institutional
21/03/2016	Hayk Badalyan	Head of Renewable Energy and Energy Efficiency	Ministry of Energy and Natural Resources	Institutional
22/03/2016	Grisha Hovhannisyan	Director, Environment Project Implementation Unit	Ministry of Nature Protection	GEF Focal Point
22/03/2016	Samvel Baloyan	Deputy Director, Environment Project Implementation Unit	Ministry of Nature Protection	GEF Focal Point
22/03/2016	Hrayr Aramyan	Business Development Manager	Gyumri Technology Center	Partner
22/03/2016	Sahakyan Khachik	Founder	Greentech	Startup
22/03/2016	Georg Petrosyan	Founder	Greentech	Startup
23/03/2016	Marine Petrosyan	Procurement Specialist	R2E2 Fund	Startup
23/03/2016	Levon Galstyan	Vice President and Deputy CEO	TSD	Mentor, Jury and Evaluator
23/03/2016	Ruben Markosyan	Vice-rector on students, alumni and public affairs	Yerevan State University	Academic
24/03/2016	Agassy Manoukian	Assistant Professor, College of Business and Economics	American University of Armenia	Mentor and Trainer
24/03/2016	Vahe Odabashian	Freelance Consultant, renewable Energy	American University of Armenia	Mentor and Trainer
24/03/2016	Sergey Tantushyan	Deputy CEO	Institute for Development of Armenia (IDeA)	Mentor
24/03/2016	Tigran Jrbashyan	Partner, Development, Management Advisory	Ameria Group	Jury
24/03/2016	Mikhayil Martirosyan	Director	Techno Eco	Startup
24/03/2016	Bagrat Yengibaryan	Director	Enterprise Incubator Foundation	Partner
25/03/2016	Ruben Vardanyan	Director	Solvar Systems, State Engineering University of Armenia	Startup
25/03/2016	Vardan Dallakyan	Engineer	Solvar Systems, State Engineering University of Armenia	Startup
25/03/2016	Gagik Ayvazyan	Expert	Black Solar	Startup
25/03/2016	Ashot Baghdasaryan	Director	Eco Technology	Startup
25/03/2016	Karen Gevorgyan	Deputy Director	SMEDNC	Initial partner
25/03/2016	Hayk Harutyunyan	Deputy Minister	Ministry of Energy and Natural Resources	Institutional

Annex.3. Documents reviewed

Document Title	Author	Date
Project document		
GEF UNIDO Cleantech Programme for SMEs in Armenia: Project Document for CEO Endorsement/Approval	UNIDO	September 2012
The Global Cleantech Programme for SMEs: Fostering clean technology innovation	GEF, UNIDO, Cleantech Open	2015
The Global Cleantech Innovation Programme for SMEs in Armenia	GCIP Armenia	2015
Cleantech Armenia 2014-2015: National Competition Semi-finalist Startups and SMEs (Short Profiles)	GCIP Armenia	
The Global Cleantech Innovation Programme for SMEs: Fostering Clean Technology Innovation (Project Brochure)	GCIP Armenia	2015
UNIDO Global Cleantech Innovation Programme for SMEs in Armenia: Cleantech Accelerator at Gyumri Technology Center	Frunzik Voskanyan	January 2015
GEF UNIDO Cleantech Programme for SMEs: 2014 Plan of Activities	GCIP Armenia	-
GEF UNIDO Cleantech Programme for SMEs: 2015 Plan of Activities	GCIP Armenia	-
Minutes of the Project Steering Committee (October 2013)	GCIP Armenia	October 2013
Minutes of the Project Steering Committee (February 2014)	GCIP Armenia	February 2014
Minutes of the Project Steering Committee (February 2015)	GCIP Armenia	February 2015
UNIDO annual Project Implementation Report (PIR) (1 July 2013 – 30 June 2014)	UNIDO HQ	-
UNIDO annual Project Implementation Report (PIR) (1 July 2014 – 30 June 2015)	UNIDO HQ	-
Israel Mission Report, Feb 7 – 13, 2016	Frunzik Voskanyan	February 2016
Other documents		
The Global Cleantech Innovation Index 2014: Nurturing tomorrow's transformative enterprises	WWF and Cleantech Group	2014

Annex.4. A summary of project identification and financial data

Project Factsheet

Project Title	**GEF UNIDO Cleantech Programme for SMEs in Armenia**
UNIDO project No. and/or SAP ID	**SAP ID: 120344**
GEF project ID	**5145**
Region	**Europe and Central Asia**
Country(ies)	**Armenia**
GEF focal area(s) **and operational programme**	**Climate Change**
GEF implementing agency(ies)	**UNIDO**
GEF executing partner(s)	**Ministry of Nature Protection; Ministry of Energy and Natural Resources; Ministry of Agriculture; SME Development National Center of Armenia (SMEDNC); Enterprise Incubator Foundation (EIF)**
Project size (FSP, MSP, EA)	**MSP**
Project CEO endorsement / Approval date	**07 March 2013**
Project implementation start date (First PAD issuance date)	**01 May 2013**
Expected implementation end date (indicated in CEO endorsement/Approval document)	**30 April 2016**
Actual implementation end date	**30 April 2016**
GEF project grant (excluding PPG, in USD)	**547,946**
GEF PPG (if applicable, in USD)	**None**
UNIDO co-financing (in USD)	**100,000 (cash+In-kind)**
Total co-financing at CEO endorsement (in USD)	**2,600,000 (cash+In-kind)**
Materialized co-financing at project completion (in USD)	
Total project cost (excluding PPG and agency support cost, in USD; i.e., GEF project grant + total co-financing at CEO endorsement)	**3,147,946**
Mid-term review date	**None**
Terminal evaluation date	**March 2016**

Project budget

Project components	GEF financing	Confirmed co-financing	Total
Component 1: Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem	212,264	1,160,636	1,372,900
Component 2: Promoting coordination mechanism to support clean technology innovations and	155,000	670,000	825,000

competitiveness of SMEs, and design business models that can deliver global environmental benefits			
Component 3: Strengthening policy, institutional framework and partnerships for scaling up Cleantech innovations across Armenia	105,869	483,000	588,869
Component 4: Monitoring and Evaluation Management	25,000	50,000	75,000
Project Management Cost	49,813	236,364	286,177
Total Project cost	547,946	2,600,000	3,147,946

Confirmed co-financing for the project budget

Financing	Classification	Cash (USD)	In-kind (USD)	Total (USD)
GEF financing		547,946		547,946
Co-financing				
UNIDO	Implementing agency	50,000	50,000	100,000
SMEDNC, EIF	National partners		2,500,000	2,500,000
Total co-financing				2,600,000
Total financing				3,147,946

Based on the information available by the UNIDO HQ, the following table provides the details of the GEF funds engaged at the time of project closure.

Actual expenditure versus the planned budget

Project Component	GEF Grant, $			
	Planned Grant Amount	Actual Grant Amount Spent	Remaining Fund	Actual Budget
1. Building national capacity for clean technologies and the development of a supportive local entrepreneurial ecosystem	212,264	198,055.21	40,676.12	238,731.33
2. Promoting coordination mechanism to support clean technology innovations and competitiveness of SMEs, and design business models that can deliver global environmental benefits	155,000	172,180.45	8,579.91	180,760.36
3. Strengthening policy, institutional framework and partnerships for scaling up Cleantech innovations across Armenia	105,869	51,890.69	1,691.94	53,582.63
4. Monitoring and Evaluation Management	25,000	16,578.14	8,421.86	25,000.00
5. Project Management Costs	49,813	8,815.17	41,056.51	49,871.68
TOTAL	547,946	447,519.66	100,426.34	547,946.00

As can be seen in the above table, 82% of the GEF grant had already been engaged by the project. The co-financing materialized during project execution, as reported by UNIDO HQ staff is summarized in the following table.

Co-financing organization	Type	Amount -USD
Enterprise Incubator Foundation	Office Rent	10,000
Enterprise Incubator Foundation	Armtech -GCIP Final event lunch	2,000
Enterprise Incubator Foundation	Armtech Show case space for GCIP startups	1,000
Enterprise Incubator Foundation	Second Phase development grant to a GCIP Startup	50,000
Enterprise Incubator Foundation	Prototyping Lab for Gyumri Technology Center and Cleantech Startup Accelerator	500,000
European Union	EU grant to GCIP acceleration program's 3 startups for establsihing a Green Center in Gyumri	400,000
Total		**963,000**

Annex.5. Summary evaluation framework

159. Following the ToR, the evaluation issues and questions are presented in the form of a matrix along with indicators, data collection/analysis method and sources of information.

Evaluation framework

Issues/Questions	Indicators	Data collection/ analysis method	Sources of information
A. Project Design			
A.1. Is the project's design adequate to address the problem at hand?	Barriers identified and activities proposed to overcome the barriers	Review of project document	Project Results Framework, country energy status review
A.2. Was a participatory project identification process adopted in selecting problem areas and national counterparts?	Problem areas selected and national counterparts identified	Review of project document	UN HQ and project stakeholders
A.3. Has the project a clear thematically focused development objectives, the attainment of which can be determined by a set of verifiable indicators?	Development objectives	Review of project document	Project document, national energy policies
A.4. Was the project formulated based on the project results framework approach?	Project strategy and objectively verifiable indicators	Review of project document	Project results framework
A.5. Was the project formulated with the participation of national counterpart and/or target beneficiaries?	Project outputs and objectively verifiable indicators	Review of project document	Project document, Project stakeholders
A.6. Were relevant country representatives (from government, industries and civil society) appropriately involved and participating in the identification of critical problem areas and the development of technical cooperation strategies?	Involvement of the relevant country representatives in the project	Review of project document	Project document
A.7. Has the project incorporated relevant environmental and social risk considerations into the project design	Risk indicators	Review of project document	Project document
B. Project Relevance			
B.1. Is it relevant to national development and environmental priorities and strategies of the Government and the population, and regional and international agreements?	National priorities and strategies, and international agreement for technology transfer for climate change	Review of project document	Project document, International agreement documents
B.2. Are the project's objectives, outcomes and outputs relevant to the different target groups of the interventions (e.g. companies, civil society, beneficiaries of capacity building and training, etc.)?	Role and involvement of the different target groups in the project	Review of project document, interview of stakeholders	Project document
B.3. Were the project's outcomes consistent with the focal areas/operational program strategies of GEF 5	Evidence of value added in the GEF climate change focal areas	Review of project document	Project document, GEF strategic documents
B.4. Were UNIDO's thematic priorities in line with UNIDO's mandate, objectives and outcomes defined in the Program & Budget and core competencies?	Objectives and outcomes in line with UNIDO's thematic priorities	Review of project document	UNIDO policy documents
B.5. Is the project still relevant considering the changing environment?	Amendments made in the project design	Review of project document, interview of stakeholders	Project management documents, and UNIDO project team
C. Project Effectiveness			
C.1. What outputs and outcomes have been	Project's outputs and	Project	Project progress

Issues/Questions	Indicators	Data collection/ analysis method	Sources of information
achieved so far?	outcomes	document review	reports (PIRs) and PMU
C.2. To what extent results at various levels, including outcomes, have been achieved so far?	Project's outputs and the rate of achievement of objectives	Project document review	Project progress reports (PIRs) and PMU
C.3. Are the project outcomes commensurate with the original or modified project objectives?	Project's output and the rate of achievement of objectives	Project document review	Project progress and available information
C.4. How do the stakeholders perceive the quality of outputs? Were the targeted beneficiary groups reached?	Stakeholders' involvement and feedback to the project	Interview	Interview of stakeholders
C.5. Identify actual and/or potential longer-term impacts or at least indicate the steps taken to assess these.	Evidence of changes felt by beneficiaries	Project document review, interview PMU and project implementing agencies	Project M&E document, project beneficiaries
C.6. Describe any catalytic or replication effects, both within and outside the project.	Evidence of changes felt by beneficiaries	Project document review, interview PMU and project implementing agencies	Project M&E document, project beneficiaries
D. Efficiency			
D.1. Was the project cost effective? Was the project using the least cost option?	The percentage of budget engaged and the outputs achieved	Review of financial document, sub-contracts signed, interview with the PMU	Project document, PMU, stakeholders
D.2. Has the project produced results (outputs and outcomes) within the expected time frame? Are the project's activities in line with the schedule of activities as defined by the project team and annual work plans? Are the disbursements and project expenditures in line with budgets?	Actual status versus planned activities; status of the project against the work plan; expenditures versus the status of activities	Review of Project document and financial statements, interview with PMU and main executing agency	Project progress and progress reports, project M&E document, Work plan, project stakeholders
D.3. Have the inputs from the donor, UNIDO and Government/counterpart been provided as planned, and were they adequate to meet requirements? Was the quality of UNIDO inputs and services as planned and timely?	Available resources (cash and in-kind); actual versus planned co-financing; timely intervention and support from UNIDO	Review of financial documents; sub-contracts and MoUs, interview with PMU	Project document; PMU and relevant stakeholders
D.4. Was there coordination with other UNIDO and other donors' projects, and did possible synergy effects happen?	Evidence of interaction with other UNIDO and other donors' projects	Review of Project document; meeting with PMU	Project document: PMU
E. Assessment of sustainability of project outcomes			
E.1. Financial risks: Are there any financial risks that may jeopardize sustainability of project outcomes? What is the likelihood of financial and economic resources not being available once GEF assistance ends? Was the project successful in identifying and	Evidence of financial sustainability strategy; Evidence of commitments to continue project initiatives	Review of Project document; discussion with stakeholders	Project document; interview of government and private representatives

Issues/Questions	Indicators	Data collection/ analysis method	Sources of information
leveraging co-financing?	Level of co-financing achieved compared to that committed		
E.2. Socio-political risks: Are there any social or political risks that may jeopardize sustainability of project outcomes? What is the risk that the level of stakeholder ownership will be insufficient to allow for the project outcomes/benefits to be sustained? Do the various key stakeholders see that it is in their interest that project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the project's long-term objectives?	Evidence of social or political risks Evidence of risks due to insufficient awareness/ participation/ ownership of stakeholders Evidence of initiatives taken by stakeholders to mitigate risks	Review of Project document; discussion with key stakeholders	Project document; government representatives; PMU
E.3. Institutional framework and governance risks: Do the legal frameworks, policies, and governance structures and processes within which the project operates pose risks that may jeopardize sustainability of project benefits? Are requisite systems for accountability and transparency, and required technical know-how, in place?	Evidence of the risks associated with the institutional framework within which the project operates Assessment of measures taken to strengthen policy	Review of Project document; discussion with key stakeholders	Project document; government representatives; PMU
E.4. Environmental risks Are there any environmental risks that may jeopardize sustainability of project outcomes? Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher-level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Will certain activities pose a threat to the sustainability of the project outcomes?	Assessment of the precautions taken to avoid environmental risks	Review of Project document; discussion with PMU and lead executing agency	Project document; PMU and lead executing agency
F. Assessment of monitoring and evaluation systems			
F.1. M&E design: Did the project have an M&E plan to monitor results and track progress towards achieving project objectives? Did the project meet the minimum requirements for the application of the Project M&E plan?	Project results framework, including SMART indicators Mechanism to receive feedback to make informed decision	Review of Project document	Project progress reports; Project M&E plan
F.2. M&E plan implementation: Did the M&E system facilitate timely tracking of progress toward project objectives? Were monitoring and self-evaluation carried out effectively, based on indicators for outputs, outcomes and impacts? Are there any annual work plans? Was any steering or advisory mechanism put in place? Did reporting and performance reviews take place regularly?	Evidence of the M&E system to keep track of the progress towards objectives Existence of the relevant M&E system to achieve the project objectives Evidence of the annual work plan and the tracking and reporting mechanism	Review of Project document; interview with PSC members	Project progress reports: M&E stakeholders
F3. Was the M&E sufficiently budgeted and adequately funded and in a timely manner	Evidence of funds allocated and	Review of Project document	Financial reports

Issues/Questions	Indicators	Data collection/ analysis method	Sources of information
during implementation.	disbursed for M&E activities		
G. Monitoring of long term changes			
G.1. Did this project contribute to the establishment of a long-term monitoring system? If it did not, should the project have included such a component?	Evidence of any long-term monitoring system in place	Review of Project document and interview with PMU	Project document; PMU
H. Assessment of processes affecting achievement of project results			
H.1. Preparation and readiness / Quality at entry		Review of Project document and interview with relevant stakeholders	Project document; stakeholders
H.2. Country ownership/drivenness			
H.3. Stakeholder involvement			
H.4. Financial planning			
H.5. UNIDO's supervision and backstopping			
H.6. Co-financing and project outcomes and sustainability			
H.7. Delays and project outcomes and sustainability			
H.8. Implementation approach			
I. Project coordination and management			
I.1. Have the management and overall coordination mechanisms been efficient and effective? Did each partner have assigned roles and responsibilities from the beginning? Did each partner fulfil its role and responsibilities?	Assessment of the project outcomes; evaluation of the role and contribution of each project partner	Review of Project document	Project document, including project progress reports; stakeholders
I.2. Have the UNIDO HQ and Field Office based management, coordination, monitoring, quality control and technical inputs been efficient, timely and effective?	Projects outputs as per work plan	Review of Project document	Project document
J. Assessment of gender mainstreaming			
J.1. Did the project design adequately consider the gender dimensions in its interventions?	Gender analysis in the project document	Review of Project document	Project document
J.2. Was a gender analysis included in a baseline study or needs assessment?	Gender analysis in the project document	Review of Project document	Project document
J.3. How gender-balanced was the composition of the project management team, the steering committee, experts and consultants and the beneficiaries?	Gender analysis in the project document	Interview with relevant parties	PMU
J.4. To what extent were socioeconomic benefits delivered by the project, including consideration of gender dimensions?	Gender analysis in the project document	Interview with relevant parties	Progress reports, PMU