

Annual (end-year) Report AWP Programme/Project Progress Report

UNDAF Pillar: Pillar 1: Sustainable Economic Growth and Risk Reduction

UNDAF Outcome:

Outcome 1: Favorable legal and regulatory environment are designed for small-scale off-grid renewable energy investments in rural areas, and modalities for stakeholder training to comply with and implement the new standards and regulations are in place by 2018.

Outcome 2: Greater awareness among rural populations about the benefits and qualities of renewable energy for household and productive uses, as well as awareness among RET enterprises about the availability of SFM and business support created by 2017.

Outcome 3: By 2020, replicable business model for wider scale-up across other developing countries by adopting an integrated approach to addressing demand and supply-side barriers is created.

Outcome 4: By 2017 Business incubation programme commenced to support greater entrepreneurship in RET investment.

Expected Project Output(s):

Component 1: Strengthened Regulatory and Legal Framework based on National Standards

Output 1.1 Improved and new standards are in place for domestic cook-stoves and solar lighting products

Output 1.2 New regulations for enforcement of standards in place

Output 1.3 Stakeholders have been trained in implementation and adherence to the new standards and regulations

Component 2: Rural Public Awareness Campaign on Renewable Energy Technologies

Output 2.1 Public awareness campaign to end-users for small-scale RETs designed and implemented through national and regional media

Output 2.2 Showcasing of specific RETs introduced through technology roadshows by hired RET enterprises

Output 2.3 Awareness campaign to RET-enterprises for SFM and business incubation services designed and implemented

Component 3: Sustainable Financial Mechanism (SFM) for RETs for rural households

Output 3.1 Risk capital for Financial Service Providers established.

Output 3.1.1 Pre-Investment Technical Assistance

Output 3.1.2 Risk Capital Grants

Output 3.2 Credit Risk Guarantees Fund established

Output 3.3 Technical assistance provided for FSPs to deploy SFM for RETs

Output 3.4 Knowledge management and dissemination provided

Component 4: Business Incubator to Promote Greater Entrepreneurship for Investment in RETs

Output 4.1: Business incubation support programme initiated at MoWIE

Output 4.1.1 Linking activities with the Entrepreneurship Development Programme

Output 4.2 Basic business advisory support granted to RET enterprises

Output 4.3 Capable innovators enrolled for advanced business mentoring and advisory service

Output 4.4 Monitoring of RET enterprises development established

Programme/Project: Promoting Sustainable Rural Energy Technologies (RETs) for Household and Productive Uses

Reporting Period [EFY]: 2008/2009

Implementing Partner: Ministry of Water Irrigation and Electricity

UN Agency: UNDP

Planned Activities	Output Indicators and Annual Targets	Cumulative annual results achieved current fiscal year per target/indicator	Target Met ⁴	Expenditure reported ⁵
AWP Output 1. Favorable legal and regulatory environment created for small-scale off-grid renewable energy investments in rural areas and stakeholders are trained to comply and implement the new standards and regulations.	New regulations for enforcement of standards are in place	Draft standards developed on biomass stoves (cooking and Injera baking stoves) and solar energy technologies (from 15Wp to 200Wp)	3	USD 4,865.18
AWP Output 2. Greater awareness created among rural populations about the benefits and qualities of renewable energy for household and productive uses		Field level assessment conducted in two regions (Benishanguel Gumuz and Gambella) for the preparation of technology roadshow; Messages on the benefits and access of RETs to rural public broadcasted using national media, in seven different languages; Guiding manual on the standard requirements during the establishment of RET enterprises prepared Three rounds of awareness creation to relevant stakeholders conducted on the overall objectives of the project and the need for technology standards	3	USD 9,730.35
AWP Output 3 By the end of project, more than	Volume of investment mobilised by FSPs	A credit risk guarantee fund account opened at DBE and an amount of \$	1	USD 1,400,000.00

<p>290,000 low-income households and micro-enterprises (1,500,000 beneficiaries) will have sustainable access to clean energy through micro-finance. It is envisaged that CleanStart, in partnership with the UNDP-implemented, GEF-financed project, will create a replicable business model for wider scale-up across other developing countries by adopting an integrated approach to addressing demand and supply-side barriers.</p>	<p>participating in the project. Credit Risk Guarantees Fund established under DBE to the FSPs for sustainable RET enterprises and service providers.</p>	<p>1.4 million transferred to this account that will serve commercial banks and MFIs Guarantee Fund administration manual developed and validated</p>		
<p>AWP Output 4. At least 120 small-scale enterprises and manufacturers are successfully producing and profitably selling RETs both for household consumption and for productive uses.</p>	<p>Number of enterprises that launch micro-businesses to sell either small-scale solar technologies or improved cook-stoves (or both) 120 enterprises launch micro-businesses to sell either small-scale solar technologies or improved cook-stoves (or both) with at least a 25% success rate (i.e. still in business and profitable after 12 months).</p>	<p>Provide support to the enterprises Entrepreneurship Skills Development training conducted in six places for enterprises comprised from nine regions An award package for the business development support prepared and submitted for approval</p>	<p>2</p>	<p>USD 4,865.18</p>
<p>Project Management</p>		<p>Securing project office Procurement of necessary office equipment Conducting project inception workshop</p>	<p>1</p>	<p>USD 19,460.71</p>

Narrative Report

Project Background

Promoting Sustainable Rural Energy Technologies (RETs) for Household and Productive Uses project complements the Ethiopian Energy Policy, the Ethiopian Climate Resilient Green Economy Strategy, the Initial National Communication of Ethiopia to the UNFCCC and the Sustainable Energy for All (SE4All) initiative. The project aims to reduce Ethiopia's energy-related CO₂ emissions by approximately 2 million tonnes CO₂e by promoting renewable energy and low greenhouse gas (GHG)-producing technologies as a substitute for fossil fuels and non-sustainable biomass utilization in the country, with a focus on rural household appliances for cooking, lighting heating and productive uses. The activities proposed in the project are designed to remove barriers that hamper the wide-scale use of off-grid renewable energy technologies in households and productive uses in rural areas of Ethiopia, where extending the grid is simply not feasible in the short-run and where the ability to pay for larger-scale solutions is often limited.

The project consists of four components and will be implemented over a period of five years.

Component 1: Strengthened Regulatory and Legal Framework based on National Standards

Component 2: Rural Public Awareness Campaign on Renewable Energy Technologies

Component 3: Sustainable Financial Mechanism (SFM) for RETs for rural households

Component 4: Business Incubator to Promote Greater Entrepreneurship for Investment in RETs

This UNDP and MoWIE - implemented, GEF-financed project will seek to implement a more private sector-driven and market-based approach towards promoting renewable energy technologies in rural communities in Ethiopia. The four components consists of a combination of de-risking instruments (Component 1) and market-enabling activities (Component 2 and Component 4) that will combine together with a financial support mechanism (Component 3) to help transform the market for off-grid renewable energy technologies in rural communities.

The project budget consists of USD 4,091,781 of GEF grant funding, USD 900,000 from UNDP, USD 980,000 co-financing from UNCDF CleanStart global programme, and co-financing from the Government of Ethiopia (MoWIE, MoFED, FeMSEDA/EDP) of USD 35,179,954 as well as further co-financing from the Development Bank of Ethiopia with a loan of USD 20 million, HIVOS, SNV, ABPP (in-kind) USD 6,185,945 and RET Enterprises (in-kind and cash) USD 5,800,000.

Approximately 800,000 additional households (4 million people) will benefit from the project by being enabled to invest in approximately 200,000 small-scale solar PV products (about 2.5 MWp total capacity) and approximately 600,000 improved cook-stoves; where by as long as the benefit with respect to the Project goals outstands, all types of RETs are included in the implementation of all the project components.

Description of results

Project Component 1: Strengthened regulatory and legal framework based on national standards

In order to achieve the project's overall objective, the project office gave emphasis on one of the project key components, **Strengthened regulatory and legal framework based on national standards**. Under this component, the project planned to facilitate the development of new standards on Injera baking stove within the reporting period. For this, the project office collaborated with the Ethiopian Standards Agency and developed a ToR. However, due to the need for finalizing the standard under development for cooking stoves and preparation of new standard for solar energy technologies from 15Wp to 200Wp, the ToR revised to include both cooking stoves and solar energy technologies for the specified watt range. Based on the ToR, the agency established a technical committee following its procedures for the biomass stoves and for the specified solar energy technologies within the specified watt peak.

Accordingly, the draft standards for both the biomass stoves and solar energy technologies for the specified watt ranges developed and they are ready for public comment and consultation before approval by the National Council of Standards.

Project Component 2: Rural Public Awareness Campaign on Renewable Energy Technologies

In the reporting period, the project planned to conduct pilot technology roadshows and for this the project organized and conducted field level assessment of potential areas and RET enterprises for technology roadshow activity in two regions (Benishanguel-Gumuz and Gambella regions). A team of experts comprised of MoWIE and MoEFCC staff planned to travel to Gambella and Benishanguel Gumuz regions for a rapid assessment of potential areas and RET enterprises. However, the team managed to do the assessment in Gambella region only following the instability in different places.

In Gambella region, the team conducted discussion with relevant stakeholders and identified two woredas, Gambella Zuria and Godere woredas for the technology roadshow. However, the team agreed to request and receive an official letter for the selection of the two woredas from the regional energy bureau. Accordingly, the regional energy bureau identified two different woredas namely Lare and Pugnwudo woredas, and sent an official letter to MoWIE. In terms of the potential RET enterprises which can effectively participate in the promotion activities, the team managed to find out some RET enterprises working under the SLM project whose performance need to be assessed for the task.

In the case of Benishanguel-Gumuz region, since the team couldn't travel they decided to virtually guide the regional energy bureau to do the assessment and report to the team in a similar manner following the same procedure that the team used in Gambella region. For this purpose, the team sent checklist and relevant documents to guide the regional energy bureaus. Accordingly, the regional energy bureau identified Assosa

and Mao'o Komo woredas for the technology roadshow. The regional energy bureau also noted that there are RET enterprises that can participate in the roadshow, however, need further assessment in order to select the relatively better ones in a transparent way.

The recruitment of a promotional company for the technology roadshow completed within the reporting period. Though the plan was to conduct pilot technology roadshows in the two regions in the reporting period, it is postponed following instability in many parts of the country.

As a replacement of the pilot technology roadshow planned to be conducted in the reporting period, discussion conducted among the project office, MoWIE AETDPD and UNDP to move and use the budget for public awareness campaign through broadcasting messages on the benefits and access of RETs using radios. Based on this, with the purpose of raising the awareness of rural communities on the benefits and use of RETs, key messages which were already submitted to the national media broadcasted using national media, in seven different languages throughout the country.

In this reporting period, the project facilitated and supported the preparation of a guiding manual for setting a standard to be followed in organizing RET enterprises. The objective of the manual is to list out the basic requirements for a new enterprise to be organized in various works or activities of the RET sector and operate in the country. The manual will be distributed in all regions to encourage establishment of micro and small enterprises in the RET sector following uniform standard throughout the country. For the preparation of the manual a terms of reference developed and a committee comprised of MoWIE and MoEFCC staff established. Currently, 80% of the manual preparation completed and a draft document produced. This manual preparation work was initiated in collaboration with MoWIE Micro and Small Enterprises Mainstreaming Unit.

Project Component 3: Sustainable Financial Mechanism (SFM) for RETs for rural households

Credit risk guarantee fund established at DBE: A credit risk guarantee fund account opened at DBE and an amount of \$ 1.4 million transferred to this account that will serve as a credit risk guarantee fund for commercial banks and MFIs which will be involved in the process.

Guarantee Fund administration manual developed and validated: A manual for the administration of the credit risk guarantee fund developed by consultants and two validation workshops conducted, the first one involving various stakeholders particularly from the commercial banks and MFIs. After incorporating the inputs and comments from the first validation workshop, the second validation meeting conducted at UNDP Ethiopia country office involving the UNDP Country Director and staff, MoWIE AETDPD Director, DBE, UNCDF and the project office. The consultants presented their work and took the comments and suggestions given by the participants to finalize the operational manual and submit it.

Project Component 4: Business Incubation to Promote Greater Entrepreneurship for Investment in RETs

Entrepreneurship Training Workshop conducted for selected RET enterprises: Six days' entrepreneurship skills development training provided to 172 members of RET enterprises (113 males and 59 females) from the nine regional states. The participants were selected by the regional energy bureaus taking into consideration of the criteria sent by Entrepreneurship Development Center (EDC). The training was given by EDC in two rounds, from December 05-10, 2016 for Afar, Amhara, Oromia, Tigray and SNNP regions; and from December 12-17, 2016 for Benishanguel-Gumuz, Gambella, Harari and Somali regions.

Table 1 Number of participants in the Entrepreneurship Training Workshop by region disaggregated by gender

Region	Male	Female	Total
Oromia at Adama	35	6	41
Benishanguel-Gumuz and Gambella at Assosa	17	3	20

Amhara at Bahir Dar	24	12	36
Afar and Tigray at Mekelle	8	19	27
SNNP at Hawassa	11	13	24
Harari and Somali at Harar	18	6	24
	113	59	172

In the training, the project office prepared a brief orientation session for the participants in all the six training areas. In the orientation session, the participants given basic information on the general objective of the project, the benefits they can harness from the project and the basic requirements expected from RET enterprises to utilize the opportunities the project brings to them.

Business development support program established: A draft award package prepared by a local consultant and circulated to the project core team members comprised of relevant institutions for feedback. Following the feedback from the core team members, a half day meeting arranged to validate, finalize and approve the award package document at the core team level. After conducting discussion on the draft document, an agreement was reached among the core team members to approve the award package document and pass it for approval by MoWIE, MoEFCC and UNDP.

Project Management

Organizing project inception workshop: The project office organized a project launch/ inception workshop for two days from October 31, 2016 to November 01, 2016 in Addis Ababa. Relevant federal line ministries, regional energy and environment bureaus, and different development partners have attended the inception workshop.

Setting up the project office: The Ministry of Water, Irrigation and Electricity through the Alternative Energy Technology Development and Promotion Directorate (AETDPD) set up a project office for the project manager and the upcoming project staff (Monitoring and Evaluation Officer, and Finance and Administration Officer).

Recruiting project staff: In the reporting period UNDP recruited project manager and the project manager started his work on September 14, 2016. The project office also requested UNDP to recruit one Project Finance and Administration Officer who will follows up and oversee the financial procedures in all the implementing partners and report to the project office and UNDP.

Procurement of Office equipment: The procurement of office equipment required for the day to day operations in the implementation of the project activities completed in the reporting period. Moreover, for the procurement of one vehicle to the project office and eight motor bikes for the emerging regions, discussion conducted with MoFECC to cover the tax from other programs of the AETDPD.

National project steering committee meeting: Since its inception the project planned to conduct six national project steering committee meetings on monthly basis and managed to conduct five meetings. As a result of clash of many activities and other priorities of committee members, only one meeting couldn't happen. The steering committee meetings helped to get up-to-date progress of each participating parties and accelerate the implementation of project activities.

Financial overview

The project allocated an advance of **USD 1,250,806.00** for the four project components and project management to be utilized within the reporting period. Accordingly, the project utilized **USD 1,454,071.42** within the reporting period. The delivery per outputs against the work plan is shown below in the table.

Table 2. Delivery per outputs against work plan

Outputs	Allocated advance (USD)	Delivery amount (USD)	Remark
Favorable legal and regulatory environment created for small-scale off-grid renewable energy investments in rural areas and stakeholders are trained to comply and implement the new standards and regulations.	38,700.00	4,865.18	
Greater awareness created among rural populations about the benefits and qualities of renewable energy for household and productive uses	54,300.00	9,730.35	
By the end of project, more than 290,000 low-income households and micro-enterprises (1,500,000 beneficiaries) will have sustainable access to clean energy through micro-finance. It is envisaged that CleanStart, in partnership with the UNDP-implemented, GEF-financed project, will create a replicable business model for wider scale-up across other developing countries by adopting an integrated approach to addressing demand and supply-side barriers.	903,850.00	1,415,150.00	
At least 120 small-scale enterprises and manufacturers are successfully producing and profitably selling RETs both for household consumption and for productive uses.	211,450.00	4,865.18	
Project Management	42,506.00	19,460.71	
Total	1,250,806.00	1,454,071.42	

Implementation challenges and good practices (including coordination and management)

Implementation Challenges

The project office discussed with MoWIE AETDPD to transfer one monitoring and evaluation officer, and one regional energy bureaus focal person contact the Rural Electrification Fund Project. However, the staff are not interested to be engaged in the works of the project directly and fully. Instead they wanted to give a technical support whenever they can as they give priority to REF projects.

Good practices

As the nature of the project requires the active involvement of all implementing parties, establishing good partnership is vital for effective coordination and management of the project implementation. In the reporting period, good partnership established not only with the major implementing parties but also relevant stakeholders that can contribute to the successful implementation of project activities. Therefore, the

activities planned to be implemented in the reporting period were successfully accomplished following the good coordination and management at all levels.

Project sustainability strategy implementation

In order to make the implementation of the project activities sustainable, almost all the project activities are being implemented using the existing government system and, with the direct and full involvement of government experts and officials. Most of the activities that are being implemented have national level relevance and impact, so that all relevant stakeholders are highly engaged in the process.

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Lessons learned Activity description: Lessons learned are based on practices that are beyond the pilot stage, i.e. after the first internal or external review or evaluation and are either being scaled up or discontinued. Lessons can be either positive or negative; evidence for the success of a practice is valuable as is evidence for the shortcomings and both types of lessons are valuable knowledge. Lessons learned should have both qualitative and quantitative evidence of impact through either internal monitoring or evaluation measures or through formal evaluation. Identification will place priority on those that have one or two major thematic lessons that are relevant as learning and knowledge sharing tools. Lessons should have implications for a broader audience, i.e. the lesson is applicable beyond the original context.

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Innovation (optional) Activity description: Innovations are those practices that are generally still in a pilot project stage and have not been scaled up, nor formally evaluated for their impact. They however are assessed with some qualitative and quantitative measures to be successful in reaching targets and making an impact. An innovative practice is not an early stage implementation of a well-proven and tested practice unless there has been some adaptation or contextual element that adds value to existing guidelines and knowledge.’

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Recommended Actions/improvements/revisions for next AWP including justification	Time Frame	Responsible body
Starting to conduct the technology roadshows from the selected pilot regions	March 2017	UNDP, the project office and MoWIE

Report prepared by: Yared Shumete Report certified by: _____

Name/Designation: Project Manager Name/Designation: _____

Date: January 17, 2017 Date: _____

Evidences

https://www.dropbox.com/sh/bh0hjs7fbx26s36/AABrpQ1vK0g9FJnT9fhYoz_ia?dl=0

Evidences for results under

Project component 1:

- Draft standards on biomass stoves (cooking and Injera baking stoves) and solar energy technologies (from 15Wp to 200Wp) developed

Project component 2:

- Field trip report on the field level assessment of potential areas and RET enterprises for the planned technology roadshow
- Draft manual on the standards required for a RET enterprises to be established

Project component 3:

- The guarantee fund amounting Birr 35,000,000.00 transferred to DBE
- The operational manual prepared to administer the guarantee fund

Project component 4:

- Compiled reports on the provision of Entrepreneurship Training Workshop (ETW) to Rural Energy Technology Enterprises
- A draft award package document approved by the project core team

Project Management:

- The minutes of the inception workshop
- Some photos of the inception workshop