

## Annual Project Progress Report

<b>Project title:</b>	<b>Sustainable Cities in Turkmenistan: Integrated Green Urban Development in Ashgabat and Avaza</b>
<b>Award ID:</b>	<b>00081872</b>
<b>Project ID:</b>	<b>00091000</b>
<b>Implementing partner:</b>	<b>Ministry of Agriculture and Environment Protection of Turkmenistan</b>
<b>Period covered in this report:</b>	<b>01.01.2019 – 31.12. 2019</b>
<b>Date of last Annual Report:</b>	
<b>Date of the last Project Board meeting:</b>	<b>17 January 2019</b>
<b>Date of last Quality Assurance and rating:</b>	

### 1. Project Performance

a) Please state the expected Output of the Project, set indicators and corresponding CP Outcome (as per project document/AWP):

**Project Output 1:**

Sustainable urban development in Ashgabat.

**Output indicators:**

- 1.1 Reduction by 3 percent (180 million passenger-km per year) of private car travels via increased use of alternative modes and carpooling
- 1.2 Reduction of electricity consumption from public outdoor lighting by 1.5 million kWh per year in Ashgabat and 8 million kWh per year in whole Turkmenistan, compared with baseline
- 1.3 Reduction in landfill waste from Ashgabat and Avaza relative to baseline from recycling and waste reduction programs. Increase in recycling volume by 10 percent and increase in use of secondary raw materials by 25%.

**Output targets:**

- 1.1. Energy-efficient street lighting implemented in Ashgabat and technical justification prepared
- 1.2. Sustainable urban transport solutions in Ashgabat developed and applied
- 1.3. City plans for sustainable development is developed and approved
- 1.4. Volumes of waste is reduced and recycling increases in Ashgabat

b) Were the indicators and output achieved?    Yes             No             Partially

c) If no or partially, please explain why?

1) For Output 1.1., More than 27,000 LED lamps and 28,000 LED luminaires were installed across Ashgabat using public funds following commitment to cooperate with the Project from the city authorities on LED lighting upgrade.

2) For output 2.2, 2.3 and 2.4 The Project has suffered from a late actual project start: the activities began in July 2018 instead of December 2017 due to a change in the implementing partner. The downgrade of the original sponsor of the Project Document (Ministry of Environment) to the status of a committee within the Ministry of Agriculture has resulted in difficulties in project activities implementation. Also, there was a re-organization of other key national partner – the Ministry of Transport become an Agency. The project is planning to resume political dialogue on transport and waste management issues in 2020. The project team has also prepared a plan to compensate for lack of cooperation of the two aforementioned actors by

increasing its dialogue with the Ministry of Energy (to focus more on stimulating a transition to smart grid-related infrastructure investments.

**Project Output 2:**

Sustainable Tourism Infrastructure and Management Practices in Avaza.

**Output indicators:**

2.1 Improved capacities and enabling conditions in Avaza for integrated low-carbon and climate-resilient tourism development

2.2 Reduced GHG emissions and other negative environmental impact through interventions involving tourism facilities and infrastructure in Avaza.

**Output targets:**

2.1 Practice on reducing energy consumption, water use, and waste implemented by hotels in Avaza

2.2 Demonstration and replication of solar-powered public lighting

2.3 Optimally efficient surface transportation implemented in Avaza

2.4 Managerial and technical capacity of planners, officials, and facility managers in Avaza enhanced via training.

b) Were the indicators and output achieved?    Yes             NoX            Partially

c) If no or partially, please explain why?

1) Regarding 2.1, 2.2 and 2.3: The hotel complex initially selected for the audit rejected the Project's offer for a free audit. The Project is now focusing on liaising with another hotel complex owned by another stakeholder (Ministry of Energy) that is more committed to Project Document objectives (a transition to smart grid)

2) Regarding 2.4: On 6 November 2019 Project held seminar-training on "Possibility of reduction of energy consumption at hotels of National Touristic Zone "Avaza"" for related specialists of government organizations and hotel representatives

**Project Output 3:**

State policy at Municipal and National levels.

**Output indicators:**

3.1 Spreading of experience and increasing the volume of first two components of the project on nationwide level via spreading of information, capacity building of establishments and managers as well as adopting state policy and legal normative acts.

**Output targets:**

3.1 National policy developed and adopted in support of integrated and scaled-up "green" urban development practices.

3.2 National incentives and standards adopted for fuel efficiency of imported cars.

b) Were the indicators and output achieved?    Yes             Nox            Partially

c) If no or partially, please explain why?

Regarding 3.1 and 3.2: The Project has faced stiff resistance from the initially well-subscribed stakeholders (mayoral office of Ashgabat and the then Ministry of Transport) to pilot any initiatives proposed in the Project Document. The Project Team is now working successfully with the Ministry of Energy on piloting street lighting projects. The Project is therefore planing to invest available resources to develop national policies in assisting the Ministry of Energy in its ongoing renewable energy and smart grid development work.

## **2. Progress Reporting**

### **a) Please summarize the main achievements during the project cycle:**

#### **Project Output 1:**

1. Conducted the 1st Meeting of Project Board with participation on project stakeholders. Annual Work Plan for 2019 was reviewed and approved.
2. Ecological monitoring and evaluation specialist, energy efficiency specialist, specialist on management of hotels in Avaza and innovations and waste management specialist were selected.
3. Meetings were conducted between UNDP and Ministry of Agriculture and Environment Protection of Turkmenistan, Ministry of Energy, Ministry of Construction and Architecture, "Turkmen Motor Transport" Agency, Ashgabat and Turkmenbashi Municipalities, Union of Entrepreneurs and Industrialists in which cooperation on implementation of project activities were discussed.
4. Draft MoU between UNDP and Ministry of Energy, draft MoU between UNDP and Ministry of Construction and Architecture, draft MoU between UNDP and "Turkmen Motor Transport" Agency were prepared and sent to MFA of Turkmenistan.
5. Four missions of project International Consultant/ Senior Technical Adviser were organized to Turkmenistan during which there were meetings and discussions with project National Coordinator, UNDP office, project specialists and national experts on realization of project components.
6. Assisted in holding events regarding 5th June – World Environment Day
7. Laboratory equipment on monitoring the conditions of air pollution for Ecological Control Service and provincial administration laboratories of MAEP was procured.
8. Educational training on new equipment on monitoring the conditions of air pollution was held by the representatives of supplier company for specialists of Ecological Control Service of MAEP and provincial administration laboratories.
9. Tender was held and agreement was concluded on laboratory equipment on monitoring the conditions of water contamination for Ecological Control Service and provincial administration laboratories of MAEP.
10. Laboratory inventories and chemical utensils for Ecological Control Service and provincial administration laboratories of MAEP.
11. Special containers for plastic waste were purchased (at first stage they were located at hotels in Ashgabat and later after the receiving consent they will be placed at the territories of universities and schools of the city)
12. Project specialists took part and delivered presentation at round table on "Development of renewable energies in Turkmenistan-dialogue with international partners" which was organized by MFA, Ministry of Energy and IRENA on 1 August 2019.
13. Project specialists participated and delivered presentation at international scientific-production conference on "Innovative technologies on energy efficiency: Science, education, production" which was organized by State Institute of Energy of Turkmenistan in Mary on 5 September 2019.
14. Project specialists attended and made presentation at international scientific conference on "Main directions of energy industry of Turkmenistan" which was organized by Ministry of Energy and Chamber of Commerce and Industry on 12 September.
15. Project specialists took part and delivered presentations at round table on "International Cooperation and Sustainable Cities" which was organized by MFA on 26 October 2019.
16. Project specialists jointly with Ecological Society of Turkmenistan held events at secondary school N136 on planting green trees on 31 October – World Sustainable Cities Day.
17. Seminar on "Issues of energy efficiency and energy savings in sustainable cities" was organized and held on national level on 31 October 2019.
18. Preparation of concept on development of renewable sources of energy was started jointly with State Institute of Energy of Turkmenistan.
19. Data gathering on development of regulatory and technical documentation on energy efficiency and energy savings was realized.
20. Development of regulatory and technical documentation on energy efficiency and energy saving has started in accordance with prepared Terms of Reference.
21. International consultant on energy audit of street lightening and introduction of "smart" systems of street energy lighting has been hired.
22. Tender was held on procurement of equipment for conducting energy audit of street lightening systems.
23. First mission of international consultant on energy audit of street lightening systems and designing of smart network was held during which meetings and discussions of issues on street lightening was conducted with specialists of subdivisions of Ministry of Energy of Turkmenistan and national experts.

24. Consultations and selection of site for conducting of pilot project on street lightening and receiving consent in a proper procedure were held.
25. The work of project technical advisor on regulatory aspects of sustainable development, gender and social issues has started.
26. Project plan on social, gender and ecological issues has been developed.
27. The work of national consultant on SDG, and on data gathering and studying best practices on preparation of reviews and recommendations on improvement of ecological and statistic reporting has ended.
28. The work on reviewing the state statistic reporting in production waste management has ended and report has been prepared with the recommendations of national consultant (within the framework of first stage of improvement of ecological and statistical reporting).
29. The work on reviewing of state statistical reporting on air is continuing (within the first stage of improvement of ecological and statistical reporting).
30. Prepared the works for assisting in introduction of new developments on improvement of e-ticket passenger system and updating the map for passengers.
31. Program on holding public information campaign on sustainable transport is developed.
32. Report on project initial phase was prepared and sent to GEF.
33. Annual report on project implementation (PIR) was prepared and sent to Regional Office of UNDP.
34. Project conception for GEF on sustainable management of land and water resources and ecosystems was prepared. Re-viewing (in accordance with recommendations from UNDP-GEF) of project concept for GEF on sustainable management of land and water resources and ecosystems are underway.
35. Preparatory works on development of imlementation Plan of Paris Agreement on Climate is conducted.
36. Gathering data and analyzed of current condition of Turkmenistan on waste management.
37. Terms of Reference for national consulatant on determination of siutation and development of regulatory and technical documentation on waste management is prepared.
38. Draft basis for development of Program/Strategy on waste management in Turkmenistan is prepared.

#### **Project Output 2:**

1. Assisted in publication of wall and table calendars, organizers on ecological and development of sustainable cities subjects which were prepared by MAEP.
2. Supported MAEP in organization and holding of ecological events dedicated to Caspi Day.
3. Terms of Reference was prepared and project specialist on sustainable development of Avaza and innovations was selected.
4. Seminar on "Possibilities in reducing the energy consumption in hotels of national tourist zone of "Avaza"" was organized and held.
5. Within the framework of mission of the international consultant/ senior technical advisor of the project there was trip to Turkmenbashi and NTZ "Avaza" for holding meetings and discussions on project component implementation in Turkmenbashi municipality and in one of hotels complexes.
6. International consultant on integrated energy audit of buildings was selected (for one of the hotel complexes in Avaza).
7. Gathered the data for holding analysis of current situation on present practices of usage of "green" standards in hotels of Avaza.
8. Analyzed the methodology used in international practices on holding comprehensive energy audit.
9. Analyzed the international practice on green construction.
10. Program is developed on holding public information campaign on application of "green practices" in hotels of Avaza.
11. Criteria for selection of hotels for holding energy audit is prepared.
12. Plan activities for holding energy audit in hotel is prepared.
13. Equipment specification and procurement plant of equipment for holding energy audit in hotel is prepared.
14. Hotel selection for holding comprehensive technical audit on energy and water consumption is conducted.
15. Studied "Alemgoshar" entertainment park on possible application of project activities in the territory of the park.

#### **Project Output 3:**

1. Consultations with national partners on practical realization of project activities are held.
2. Analysed the necessity of development of several regulatory acts on energy efficiency, waste management, construction, "green" standards.

3. In the course of the international conference on «Innovative technologies on energy efficiency: Science, education and production» there were recommendations on mutual cooperation on application of technologies on energy efficiency and development of renewable energy sources between project and State Energy Institute of Turkmenistan
4. Meeting was conducted with specialists of «Turkmendovletslama» designing institute to discuss reviewing and revising the Construction Norms of Turkmenistan on energy efficiency and «green» standards.
5. Analysed current regulatory basis on construction of CIS countries for further preparation of recommendations on updating the present regulatory and technical documentation on energy efficiency and energy savings of Turkmenistan.

### 3. Project Risks and Issues

The project Risk Log is maintained throughout the project implementation to capture potential risks to the project and associated measures to mitigate risk. The Project Manager shall maintain and update the Risk Log and ensure that risks are identified, communicated and managed effectively.

A number of potential risks are listed below.

Description of risk	Type and category	Risk management actions	Current situation
Failure of co-financing	Financial	<p>The Project has already secured commitment of Ashgabat city authorities on co-investment into street lighting retrofits. The Project currently seeking engagement of the government on the transport and waste recycling issues and has identified a hotel whose energy and water tariffs are several orders higher than the subsidized average, which means that there are enormous incentives to replicate the investments to be made by the Project in the hotel in question.</p> <p>The Project is also engaging the EBRD in the region to understand whether the bank can lend to willing municipalities or national ministries (e.g. to the Ministry of Energy that owns several street lighting systems and other energy consuming assets across the country).</p>	
Project activities aren't viewed as a top-priority by the government	Political	<p>Feasibility studies for smart grid upgrades in municipal utilities and the national grid monopoly will articulate benefits of the scale-up activities to boosting export revenue (via increased electricity sales) and will seek solutions with a relatively acceptable pay-back period.</p>	
Data and information risk	Regulatory	<p>The Project has ensured that no sensitive data is requested by the transport monitors and that a replacement city (such as Turkmenbashi, which includes Avaza in its city limits) is identified early on to carry out the required transport optimization activities. However, the Project team has observed that neither these precautions nor additional pressure applied by the heads of the UNDP and UN offices is able to make transport sustainability a key priority for the city authorities. Congestion in the city is absent and fuel costs are near zero for the city bus company, which makes it difficult to obtain any commitments from the city to consider the matter. In case this attitude doesn't change, the Project will in the current environment replace this component with more activities on the smart grid issue with city water utility company where the Project is planning to do energy audits of selected facilities in H1 2020.</p>	

Hiring of project staff and international energy auditors are delayed.	Operational	The energy auditor has been selected and will be requested to produce deliverables on his assignment as soon as the equipment for the energy audits is available (to be procured by the project by QII, 2020).	
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**4. Lessons learned and follow-up steps (if applicable)**

a) Please provide the lessons learned and further steps after the project's closure.

N/A.

**5. Transfer of Assets or other related matter**

a) Please state on any past or future transfer of assets made within the project cycle (Attach list of equipment, cooperation frameworks with beneficiaries, etc.)

N/A

**7. Financial management**

Budget item	Total approved in 2019 (in USD)	Expenses + commitments	Budget utilization in % to planned
Component 1	792,533	608,133	76,73
Component 2	369,720	219,308	59,31
Component 3	109,830	46,714	42,53
Component 4	16,880	9,847	58,33
Project management	65,520	59,688	91,09
Total delivery in 2019	1,334,483	943,690	70,71%
In % to total project budget	22,18%	15,68%	

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Date: *January 2020*

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Date: