





### **ANNUAL PROJECT REPORT 2012**

# UNDP Tajikistan Energy and Environment Programme "Support to Sustainable Transport Management in Dushanbe" (SSTMD) project



**Project ID:** 00070334

**Duration:** 2010 - 2014

Component (CPAP): Outcome 6

Total Project Budget: 1,170,000.00 USD

Total Expenses for 2012: 181,627.00 USD

Implementing Partners/Responsible parties:

Khukumat of Dushanbe, UNDP E&E Programme

## Acronyms and abbreviations

APR	Annual project Report	
AWP	Annual Work Plan	
CEP	Committee on Environment Protection	
CIS	Commonwealth of Independent States	
CPAP	UNDP Country Programme Action Plan	
CTA	Chief Technical Advisor	
EBRD	European Bank for Reconstruction and Development	
GEF	Global Environment Facility	
GHG	Greenhouse gases	
MDG	Millennium Development Goals	
NEX	National Execution Modality	
NAP	National Action Plan	
NGO	Non-Governmental Organization	
PIR	Project Implementation Review	
PM	Project Manager	
PT	Public Transport	
PRSP	Poverty Reduction Strategy Paper	
PSC	Project Steering and Coordination Committee	
SPEEL	State Program for Environmental Education and Learning	
TJS	Tajik Somoni (currency)	
TOR	Terms of Reference	
TTU	Tajik Technical University	
UNDAF	UN Development Assistance Framework	
UNDP CO	United Nations Development Programme Country Office	

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#### I. EXECUTIVE SUMMARY

2012, for the GEF/UNDP "Support to Sustainable Transport Management in Dushanbe" project, being implemented under Energy & Environment Programme umbrella, has been considered as the halfway to achieving the project development goals.

The key project achievements for the reporting period cover several aspects, including:

<u>Policy dialogue/Networking:</u> The project has succeeded in establishment of good coordination and partnership with involved state agencies as well as with local NGOs and academic/scientific institutions and ensured their clear understanding of necessity to reforming the public transport management system. Currently, the general tendencies to improve the public transport operation within Dushanbe city, being implemented by the city administration, can be observed to the moment. A number of measures are being carried out to improve the condition of city roads with the focus to ensure their passing ability for public transport modes. The introduction of segregated lanes for public transport modes (buses and trolleybuses) along major city streets has been incorporated into City architecture plans via active participation and recommendations provided by project High-level Working Group member (National Consultant on public transport corridors).

Within 2012, the project has considerably contributed into capacity building and awareness raising of involved national stakeholders via a number of study tours and learning sessions on effective public transport management.

<u>Environment</u>: Within the Transport project it became possible to obtain the most updated data on Dushanbe public transport operation, since there was a significant gap in data collection for the transport sector (the latest official study was conducted in 2000). The project plans to ensure the sustainability of further transport related data collection by involved national agencies, aiming at development of a database to assess the GHG emissions calculation at the national level. To do so, the project has developed a GEF methodology-based GHG emissions calculation tracking tool which determined the level of GHG emissions from passenger transport sector in Dushanbe city (at baseline 2011) at an estimated **160,000 tons CO<sub>2</sub> per year**. It is expected that by the project completion the level of GHG emissions in Dushanbe city will be appreciably reduced upon implementation of demonstration projects.

#### Context

The UNDP in Tajikistan works to contribute towards environmental sustainability through promotion of income-generating end-user applications of renewable energy sources, ensuring sustainable natural resource management, reducing greenhouse gas emissions through enhancing public transport management, climate risk management as well as educating and involving diverse national and local stakeholders in addressing environmental issues within the country.

In order to adjoin global efforts in mitigating Climate Change and its adverse impacts and to assist Tajikistan in reducing its GHG emissions, the E&E Programme has initiated, and the Dushanbe city Administration by its special Order #375 dated June 24, 2010 has signed the "Support to Sustainable Transport Management in Dushanbe" project (2010-2014) with the UNDP Tajikistan.

Although Tajikistan is not the largest GHG emitter in Central Asia, however Dushanbe city, the capital of Tajikistan has been facing very fast air-quality worsening and growing of CO2 emissions due to rapid expansion in the use of private motor vehicles, alongside deterioration in public transport caused by rising personal incomes, growing migrant population, a lack of regulatory enforcement and virtually no investment in the city's public transport system. It is estimated that 87 percents of the total air emissions are associated with mobile sources in the city of Dushanbe, the largest and most densely populated city in the country, with a population of around 1 million.

Apart from the problems this causes to the efficient functioning of the city, the current uncontrolled situation is leading to expansion of environmental impacts, in terms of air quality and greenhouse gases (GHG).

#### Project objective:

The GEF/UNDP project aims to reduce local and GHG emissions while improving access to and the quality of public transport services for all residents of Dushanbe. It is expected that upon project completion, the share of sustainable public transport modes will increase from the current 8% to 28% leading to significant reduction in GHG emissions from the city's transport sector.

To achieve these ambitious targets, the project will develop and help Dushanbe city Government to implement an integrated policy framework that includes:

- a) Enhancing vehicle efficiency and setting appropriate fuel quality standards
- b) Improving the service quality of public transport, in particular trolleybuses
- c) Increasing opportunities for non-motorized modes such as walking and biking
- d) Developing integrated land-use/transport plans to reduce demand for travel
- e) Enhancing municipal institutional transformation and governance structure to embrace sustainable transport.

The key implementing partner is the Dushanbe city Administration (Khukumat) of the Republic of Tajikistan, and the Department for Environmental Protection of Khukumat is the main coordinating agency for the project. The project activities involve a wide range of stakeholders, including the Ministry of Transport of the Republic of Tajikistan, the SUE "Trolleybus", the Department of Architecture and City planning, the Department of Traffic Police (SAI) of Dushanbe city, the Department of Traffic Police (SAI) of the Republic of Tajikistan, "Dushanbenakliyethadamotrason" (the public transport dispatching department of the Dushanbe city", the Tajik Technical University, the Tajikistandard of the Republic of Tajikistan, the Hydrometeorology department, the Giprotrans Institute, the Design Institute, the Department of construction, reconstruction and rehabilitation of Dushanbe roads and bridges within Dushanbe Municipality, a number of ecological NGOs, the Public Fund "Civil Internet Policy Initiative" and others. The project beneficiaries will be the citizens and quests of Dushanbe city.

#### II. PERFORMANCE REVIEW

#### **Progress review**

#### 1. Overall progress towards the CPAP outcome and output(s)

With regard to CPAP Outcomes and Outputs, the project has achieved certain results via conduction of a comprehensive review of transport related legislation and development of clear recommendations for enforcement of a number of national ecological programmes and strategies, which currently have the declarative nature. It is suggested that developed recommendations will be incorporated into governmental plans for 2013 to ensure the improvement of transport management system and reduce the GHG emissions both on Dushanbe city and on the whole country levels.

Since the project has considerably progressed in enhancing close collaboration with the national partners and ensured their clear understanding of necessity to reforming the public transport management system - there are good chances to achieving its main development goals.

However, there are still some risks which can negatively affect the timely project implementation. The most critical risk is weak political will and unreadiness or even opposition to implement the proposed reforms related to introduction of new fuel and vehicle efficiency standards (legislation part), since this can affect the personal interests of some involved (within transport sector) parties.

#### 2. Capacity development

Within 2012, the SSTMD project has contributed into capacity building and awareness raising of involved national stakeholders via a number of study tours and learning sessions on effective public transport management.

Particularly, the participation of high level officials (Deputy Mayor of Dushanbe city, Head of Tax committee of Dushanbe city and Head of Traffic Police of Dushanbe city) during international conference on best parking policies & strategies (conducted in Almaty, 28-30 November, 2012) has resulted into including the development of parking strategy for Dushanbe city into Municipality's priority plans/activities for 2013. This activity will also provide for making appropriate amendments into existing legislation.

Another high level officials group (consisting of Chief Architect of Dushanbe city, Deputy Head of State Traffic Police under the Ministry of Interior Affairs of the Republic of Tajikistan, Director of SUE "Trolleybus, Head of Environmental Department within Dushanbe city Municipality) had an excellent opportunity to get introduced to international experience in Bus Rapid Transit system and the most advanced methods of public transport management via conducted study tour to Guangzhou and Beijing (8-14 July, 2012). The training course conducted by ITDP China (Institute for Transportation and Development Policy), one of the world leaders in the field of public transport management, has allowed ensuring better understanding of the transportation system abroad and consideration of possibility to replicate the best practices in home country. This study tour has been appreciated by the governmental counterparts and resulted in a renewed commitment towards project objectives.

The capacity building component has also covered the training sessions on land-use/transport modelling which became absolutely new issue for national transport related agencies. The project has been considering the possibility to introduce a new course on land-use/transport modelling in one of the state universities, since participants has expressed huge interest in developing a package of training materials, which could be taught to senior students. In addition to this, the project has received the land-use/transport modelling software, which will help the transport agencies to develop the first transport model for Dushanbe city to ensure operational developments as well as long-term planning measures relating to traffic, transport management issues, road development, and zoning.

#### 3. Impact on direct and indirect beneficiaries.

The project activities upon their complete implementation will directly affect the entire population of Dushanbe city, which are about 1 million people. The whole country is suggested to be affected indirectly, since the proposed transport legislation reforms will be conducted on national level, and pilot demonstrations can be replicated in other big cities of the country.

#### 4. Project results and impact summary

In 2012 the project has achieved most of targeted objectives with the exception of those activities where the project faced the lack of required technical consultancy. As such this resulted in delays with implementation of appropriate project activities, since prolonged hiring and procurement processes has led to late appointment of project experts which have been selected only upon double or even triple advertising/tendering processes.

A summary of progress towards targets for 2012 is provided in the table below:

Details of the impact and results of activities can be found in the Detailed Project Activities Review section of this report.

	2012 Project Results Summary						
Output		Target	Accomplishment				
	Support to Sustainable Transport Management in Dushanbe (SSTMD)						
1	Lower emissions from vehicles in Dushanbe, with safety and health quality in mind	The Standards of Fuel Quality and Vehicle efficiency based on existing international standards reviewed	The review/assessment of existing local fuel quality and vehicle efficiency standards has been conducted and developed recommendation for these standards harmonization with international ones will be included into Action Plan on public transport management system improvement for 2013.				
2	Use of public transport, particularly trolleybuses increased.	Assessment of fare system and priced parking for cars completed	The assessment of fare collection system and priced parking for cars has been conducted, however the additional work on optimization of existing public transport routes will be needed to develop costed proposals for introduction of simplified fare collection/and priced parking systems in Dushanbe city. This activity will cover the first half of 2013.				
		The pilot dispatch center to manage the public transport sector schedules (especially trolley-bus operation) is established or recommenced (if any available)	This activity will be shifted to 2013, since the project failed to hire suitable international consultant due to limited pool of required consultancy.				
3	Integrated land use and urban transport planning at the metropolitan level	Applicable land-use transportation model identified to characterize travel demand and land -use interactions in Dushanbe and the model is tested	The proposed by the international consultant on transport/ land-use modelling Visual-tm software has been submitted to the project; however its suitability for Dushanbe terms is subject of evaluation by the mid-term project review and revision consultant.				

4	Increased use of non-motorized modes, including bicycles	Pilot bicycle lane with length of 5 km is demonstrated and tested in Dushanbe to increase use of non-motorized modes, including bicycles	The first (pilot) bicycle lane of 5 km length has been successfully piloted and demonstrated in Dushanbe city, ensuring the wider use of non-motorized transport modes by the capital population. The key achievement is that the project has strived for adoption of Special Decision by the Chairman of Dushanbe city, according to which starting from September 1, 2011 - the construction of bicycle lanes will be a requirement for all companies engaged in the construction of new roads or reconstruction of old ones. This means that sustainability of further bicycle lanes construction will be ensured in future.
5	Institutional transformation of government, businesses and general public to embrace sustainable transport	The capacity of public transport sector employees/representatives is strengthened via conduction of trainings, round tables and Study tours to promote and improve the quality of public transport services	

#### Implementation Strategy Review

#### 1. Participatory/Consultative Processes

The project has established good partnership with the donor community over the reporting period. Specifically, the project has closely collaborated with ADB HQ team on possibility to introduction of BRT system in Dushanbe city. ADB has been very interested to showcase Dushanbe city as the BRT demonstration model and consider the possibility of grant allocation to the Government for BRT introduction in the nearest future.

Within the ADB mission (conducted in early January 2013) it became clear that notwithstanding the fact that the project has laid the information ground for introduction of BRT system in the capital (via conducted study tour to China and distribution of BRT training materials to all project stakeholders), further capacity building activities will be needed for broader official circles (including economic sector high level representatives) to raise their awareness on BRT system. Based on this, ADB has expressed their readiness to organize a number of BRT study tours to enhance the SSTMD project capacity building component within 2013-2014 years. This issue shall be the subject of further discussion and results will be reported accordingly.

The project has also succeeded in establishing good partnership with EBRD public transport project resulted in preliminary agreement to coordinate and exchange information on both projects to jointly enforce the appropriate crossing activities.

#### 2. National ownership

Regular meetings and working discussion with governmental counterparts and stakeholders have created the sense of national ownership within the SSTMD project related activities. Specifically, the project, having involved the key players in public transport sector, has initiated the process of aggregation of all problematic issues and suggested possible solutions in PT sector (by representatives of involved agencies) via collection of various data and reporting on existing situation in the systems of general public transport management, fare collection and priced parking, trolleybus operation, reforming transport legislation, fuel standards, non-motorized vehicles development and many other related areas.

In fact, the project has promoted the process of involved stakeholders' self-capacity strengthening who are suggested to be the first direct project beneficiaries. Indeed, the project has laid the solid platform for national public transport development since proposed legislation reforms (on country level) will include all recommendations developed by national stakeholders (with the support of international consultancy) to improve the public transport management system.

#### 3. Sustainability

The sustainability of the project has been ensured via achieved understanding of necessity to reforming the public transport management system by involved state agencies.

Specifically, the project within the awareness raising component has ensured the sustainability of introduction of segregated lanes for public transport modes (buses and trolleybuses) along major city streets via their incorporation into Dushanbe city architecture plans. This activity will allow to reduction of transport related emissions while enhancing Dushanbe population access to good quality public transport services.

Within the Transport project it became possible to obtain the most updated data on Dushanbe public transport operation, since there was a significant gap in data collection for the transport sector (the latest official study was conducted in 2000). The project plans to ensure the sustainability of further transport related data collection by involved national agencies, aiming at development of a database to assess the GHG emissions calculation at the national level. To do so, the project has developed a GEF methodology-based GHG emissions calculation tracking tool which determined the level of GHG emissions from passenger transport sector in Dushanbe city

(at baseline 2011) at an estimated 160,000 tons CO<sub>2</sub> per year. It is expected that by the project completion the level of GHG emissions in Dushanbe city will be appreciably reduced upon implementation of demonstration projects.

#### III. DETAILED PROJECT ACTIVITIES REVIEW

2012, marked with the change of Project Manager, has started with revision of project related activities to achieve the set up targets.

# Outcome 1: Lower emissions from vehicles in Dushanbe, with safety and health quality in mind

The GEF guidance-based Model for calculation and assessment of GHG emissions in Dushanbe city has been developed and demonstrated within the second mission by the International Consultant on GHG emissions calculation, Mr. D. Holubovski. The training on use of developed Model was conducted on September 25, 2012. The final report with baseline assessment of GHG emissions from Transport sector in Dushanbe has been submitted.

The Legal Expert to identify gaps in national transport sector legislation as well as to conduct the Study on harmonization of local fuel and vehicle efficiency standards has been hired. The draft report identifying the gaps in national transport sector legislation together with recommendations on further harmonization of existing national fuel and vehicle efficiency standards has been developed. The working group discussion (with project stakeholders) is expected to be conducted by the end of February 2013 to confirm the necessity of proposed reforms in public transport sector with further submission to the Dushanbe Municipality for review. Based on this WG discussion the project will be able to develop draft "Action Plan to improve the public transport management system" and reflect all suggested recommendations into spearate section within the Law "On Transport" of the Republic of Tajikistan to be drafted by the project legal expert.

In the course of regular meeting with involved stakeholders the project came to know that technical specifications for safe installation and use of natural gas and LPG cylinders in vehicles have been adopted in the country even in 2007. The special Decision by the Government of the Republic of Tajikistan (#4 as of April 20, 2012) was issued to promote the use of LPG and natural gas, according to which LPG or natural gas cylinders should be installed in all state (service) vehicles out of state budget (ministerial or state agencies funds).

Besides, under this outcome the project has made a decision to withdraw the activity associated with filters testing, since even in case of positive results of such testing, the project would not be able to ensure the sustainability of this activity (impossibility of mass production of tested filters, impossibility to force the drivers to installing such filters and also check every old vehicle on their availability, etc.).

#### Outcome 2: Increased use of public transport, particularly trolleybuses.

This outcome covers a number of activities, including: a) introduction of pilot bus lanes; b) introduction of Single Dispatcher Controller Center; c) assessment of fare collection and priced parking in Dushanbe city; etc.

a) To ensure this activity - the project has hired the National Consultant on public transport corridors who has conducted the Feasibility Study on introduction of segregated bus lanes and bicycle lanes in Dushanbe city. As a part of this assignment, the Consultant has conducted the review of infrastructural projects within Dushanbe city and developed recommendation for introduction of pilot bus lanes. The recommended transport corridors (with detailed cost estimations) have been discussed and agreed with Dushanbe Municipality and immediate road marking will be ensured within the first half of 2013.

- b) To enable this activity the project has organized the Study tour with training component to China for key persons of involved agencies to ensure their clear understanding on Dispatcher centers operation abroad. As a result, the project was able to identify and agree with Dushanbe Municipality the proper place to introduce the Single Dispatcher Control center in Dushanbe city and responsible agency to operationalize this center (this will be SCE "Dushanbenakliyothadamotrason"). The project has also agreed the trolleybus route (along the central part of the capital) to be piloted in 2013, meaning that all trolleybuses within this route will be equipped with GPS navigators and all bus stops will be equipped with real time information boards to be managed by this Dispatcher Controller Centre.
- c) To make assessment of fare collection and priced parking in Dushanbe city, the project has contracted the international consultant. It turned out that these two issues (fare collection and priced parking) addressed by this project are of fundamental importance to reversing the decline in public transport, easing traffic congestion and improving the environment of Dushanbe city. Upon conducted mission to Dushanbe, the consultant has submitted report with initial vision on possible solutions on both issues; however the collection of additional data will be required to develop practical and adapted recommendations to introduce the systems of unified fare collection and also priced parking in the capital. This activity will be resumed in 2013.

#### Outcome 3: Integrated land use and urban transport planning at the metropolitan level

Under this outcome the project has contracted an international consultant on land-use and transport modelling who has delivered a 6-day training on theory of land-use/transport modelling.

This training session became absolutely new issue for national transport related agencies and project has been considering the possibility to introduce a new course on land-use/transport modelling in one of the state universities, since participants has expressed huge interest in developing a package of training materials, which could be taught to senior students. In addition to this, the project has received the land-use/transport modelling software, which will help the transport agencies to develop the first transport model for Dushanbe city to ensure operational developments as well as long-term planning measures relating to traffic, transport management issues, road development, and zoning.

#### Outcome 4: Increased use of non-motorized modes, including bicycles

Under this outcome, the project has successfully demonstrated and piloted the first bicycle lane of 5 km length in Dushanbe city, thus ensuring the wider use of non-motorized transport modes by the capital population. Besides, five parking slots for 10 bicycles each have been installed in Dushanbe city. The Feasibility Study with economic estimations for a Bicycle assembly shop has been submitted.

# Outcome 5: Institutional transformation of government, businesses and general public to embrace sustainable transport

Under this outcome the project has succeeded in strengthening the capacity of the high level working group members via conduction of a BRT study tour which allowed them to get clear understanding on:

• design, operations and cost structure of the study city's (Guangzhou and Beijing) transport systems, with special attention paid to BRT and non-motorized components;

- potential challenges in implementation of all relevant components and the way the study city managed to overcome them, including an explicit discussion of how Dushanbe's situation may be similar or different;
- Clarity on financing and partial cost recovery through fares, taxes, parking fees, etc.;
- Clarity on management structure for transit companies;

The project has also contributed into capacity building and awareness raising of involved national stakeholders via organization of a trip to Almaty city (November 2012) to ensure their participation in international I seminar on parking policy and effective public transport management. Particularly, the participation of high level officials (Deputy Mayor of Dushanbe Municipality, Head of Tax Committee of Dushanbe city and Head of Traffic Police of Dushanbe city) has resulted into including the development of parking strategy for Dushanbe city into priority plans/activities for 2013 (this should also provide for making appropriate amendments into existing legislation).

The project resumed strengthening the capacity of project involved stakeholders via conduction of various trainings. Particularly, the training on land-use/transport modelling and the training on GHG emissions calculation have been ensured within August-September 2012, thus promoting the project related activities and strengthening the partner relations with the project stakeholders. including the Dushanbe city administration, the Ministry of Transport, the Department of architecture and city planning, the Department of Traffic Police (SAI) of Dushanbe city, the Department of Traffic Police (SAI) of the Republic of Tajikistan, "Dushanbenakliyethadamotrason" (the public transport dispatching department of the Dushanbe city", the Tajik Technical University, the Tajikistandard of the Republic of Tajikistan, the Hydrometeorology department, the Giprotrans Institute, the Design Institute, the Department of construction, reconstruction and rehabilitation of Dushanbe roads and bridges, the trolleybuses and bicycles assembling shop in Dushanbe city, a number of ecological NGOs, the Public Fund "Civil Internet Policy Initiative" and others.

#### IV. IMPLEMENTATION CHALLENGES

The greatest challenge for the project in 2012 became the lack of required high quality technical consultancy and insufficient budget allocations for such expertise.

#### V. LESSONS LEARNT AND NEXT STEPS

#### 5.1. Lessons learnt

The main lesson learnt for the project became the fact that insufficient technical experience of the project CTA has resulted in fragmentation of the different studies which have been carried out independently of each other in terms of scope, assumptions and data collection, which has undermined the project. To address this issue the project is planning to conduct the Mid-term project Review and Revision to confirm the raised issue, and based on MTRR report recommendations – to hire a new CTA.

#### VI. FINANCIAL STATUS AND UTILIZATION

This section includes the following:

- 1) A 'financial status report' covering all funding donated to the project (core and non-core resources); include reference to all donor contributions. The purpose is to ensure that donors can identify, at a glance, how much of their contribution was expended during for the project as a whole, and the year in question.
- 2) A 'financial utilization report', which presents project disbursements vis-à-vis the project latest budget for the year. This summary is presented by a) ATLAS Activity and b) by donor.

#### **Financial status**

DONORS	ACTIVITY (as in ATLAS)	BUDGET [year]	EXPENDITURES*	BALANCE	DELIVERY RATE (%)	REMARKS*
Name of Donor	Activity 1: [Activity Description]					
	Activity 2: [Activity Description]					
	Activity 3: [Activity Description]					
	Activity 4: [Activity Description]					
	Activity 5: [Activity Description]					
GMS[insert %, see donor agreement]						
Subtotal [Name of Donor]						
Name of Donor	Activity 1: [Activity Description]					
	Activity 3: [Activity Description]					
	Activity 5: [Activity Description]					
GMS[insert %, see donor agreement]						
Subtotal [Name of Donor]						
Name of Donor	Activity 1: [Activity Description]					
	Activity 2: [Activity Description]					
	Activity 4: [Activity Description]					
GMS[insert %, see donor agreement]						
Subtotal [Name of Donor]						
TOTAL						

<sup>\*</sup>Remarks provided in the last column of this table should pertain to any notable aspects of utilization/delivery % vis-à-vis the relevant donor(s).

#### **ANNEXES**

<sup>&</sup>lt;sup>1</sup> Please note that the term "Committed" refers to funding which has been obligated by signed agreement, but not necessarily released by the donor. "Received" refers to funding which has already been committed and released by the donor.