TERMINAL EVALUATION: PROJECT "REDUCING GHG EMISSIONS FROM TRANSPORT IN RUSSIA'S MEDIUM-SIZED CITIES"

GEF Project ID: 4008
UNDP PIMS ID: 4304
Atlas Project ID: 80462
Award ID: 63176

REPORT

Submitted by

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ACRONYMS AND ABBREVIATIONS

AWP	Annual work plan
BAU	Business-as-usual
CNG	Compressed Natural Gas
CO	Country office
EV	Electric vehicle
GEF	Global Environment Facility
GFEI	Global Fuel Economy Initiative
GHG	Greenhouse Gases
HEV	Hybrid electric vehicle
IEA	International Energy Agency
ITMS	Integrated traffic management scheme
LEV	Low-Emission Vehicle
MoED	Ministry of Economic Development
MoI	Ministry of Internal Affairs
MoIT	Ministry of Industry and Trade
MoE	Ministry of Energy
MoNRE	Ministry of National Resources and Environment
MoRD	Ministry of Regional Development
MoT	Ministry of Transport
MTE	Mid-Term Evaluation
MTR	Mid-Term Evaluation Report
NIM	National implementation modality
NGOs	Non-Government Organizations
NMV	Non-motorized vehicles
PDD	Project design document
PIF	Project Identification Form

PHEV	Plug-in hybrid electric vehicle
PIR	Project Implementation Report
PMU	Project Management Unit
PPR	Project Progress Report
PRF	Project Results Framework, previously called Logical Framework
ProDoc	UNDP Project Document
PSC	Project Steering Committee
QPR	Quarterly Progress Report
Roshydromet	Russian Federal Service for Hydrometeorology and Environmental Monitoring
RUR	Russian Rubles
SUT	Sustainable urban transport
T-MoT	Ministry of Transport in the Republic of Tatarstan
ToR	Terms of Reference
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
USD	United State Dollar

EXECUTIVE SUMMARY

Project information table

Project title:	Reducing GHG Emissions from Road Transport in Russia's Medium-sized Cities		
UNDP Project ID (PIMS #)	4304	PIF Approval Date:	06-05-2010
GEF Project ID (PMIS #)	4008	CEP Endorsement Date:	09-Aug-2012
ATLAS Business Unit, Award # Proj. ID:	63176	Project Document (ProDoc) Signature Date (date project began):	25-Sep-2012
Country:	(RUS) Russian Federation	Date project manager hired:	1-Mar-2013
Region:	Europe and Central Asia	Inception Workshop date:	29-Mar-2013
Focal Area:	Climate Change- Mitigation	Terminal Evaluation completion date:	21-March-2018
GEF Focal Area Strategic Objective:	CC 5: promoting sustainable innovative systems for urban transport with a particular emphasis on "non-technology" options, such as planning, traffic management and modal shift to low-GHG intensive transport modes	Planned project closing date:	08-Sep-2015
Trust Fund [indicate GEF TF, LDCF, SCCF, NPIF]:	TF	If revised, proposed op. closing date:	31-Dec-2017
Executing Agency / Implementing Partner	Ministry of Transport of the Russian Federation		
Other execution partners:			
Project Financing	at CEO endorsement (US$)	at Terminal Evaluation (US$)*	
[1] GEF financing:	5,400,000	5,400,000	
[2] UNDP contribution:			
[3] Government:	8,600,000	8,600,000	
[4] Other partners:	149,536,000	293,140,278	
[5] Total co-financing [2+3+4]	158,136,000	301,740,278	
PROJECT TOTAL COSTS [1+5]	163,536,000	307,140,278	

Project description

The project objective, as stated in the Project Document (§89, p. 34), is to "*reduce greenhouse gas (GHG) emissions from the transport sector in Russia by facilitating the development of sustainable urban transport (SUT) pilot projects in Kaliningrad and Kazan cities, and the formulation of supportive policies, regulations and institutional arrangements that will facilitate replication of SUT projects in other medium-sized cities in Russia".* The project GHG emissions reduction target is 59.23 ktonnes CO2.

The project strategy is (1) to support legal changes promoting low-emission vehicles (LEV) and (2) implementing pilot projects. The pilots are implemented in two cities (Kaliningrad and Kazan), as a way to demonstrating "the process of designing, planning, engineering, financing, constructing, operating and maintaining feasible and applicable sustainable urban transport (SUT) systems (ProDoc, §76), which could be subsequently replicated in other medium-size cities.

TE Ratings & Achievement Summary Table

Project evaluation results are summarized in the rating table below.

Rating Project Performance		
Criteria	**Comments**	
]**Monitoring and Evaluation:** Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall quality of M&E	(rate 6 pt. scale)	MS
M&E design at project start up	(rate 6 pt. scale)	MS
M&E Plan Implementation	(rate 6 pt. scale)	MS
IA & EA Execution: Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Implementation/Execution	(rate 6 pt. scale)	S
Implementing Agency Execution	(rate 6 pt. scale)	S
Executing Agency Execution	(rate 6 pt. scale)	HS
Outcomes Highly Satisfactory (HS), Satisfactory (S) Moderately Satisfactory (MS), Moderately Unsatisfactory (MU), Unsatisfactory (U), Highly Unsatisfactory (HU)		
Overall Quality of Project Outcomes	(rate 6 pt. scale)	S
Relevance: relevant (R) or not relevant (NR)	(rate 2pt. scale)	R
Effectiveness	(rate 6 pt. scale)	MS
Efficiency	(rate 6 pt. scale)	S
Sustainability: Likely (L); Moderately Likely (ML); Moderately Unlikely (MU); Unlikely (U).		
Overall likelihood of risks to Sustainability:	(rate 4pt. scale)	L
Financial resources	(rate 4pt. scale)	L
Socio-economic	(rate 4pt. scale)	L
Institutional framework and governance	(rate 4pt. scale)	L
Environmental	(rate 4pt. scale)	L
Impact: Significant (S), Minimal (M), Negligible (N)		
Environmental Status Improvement	(rate 3 pt. scale)	S
Environmental Stress Reduction	(rate 3 pt. scale)	S
Progress towards stress/status change	(rate 3 pt. scale)	S
Catalytic Role: Significant (S), Minimal (M), Negligible (N)		

Knowledge Transfer	(rate 3 pt. scale)	S
Expansion of Demonstration Projects	(rate 3 pt. scale)	S
Capacity Building and Training	(rate 3 pt. scale)	S
Scaling Up	(rate 3 pt. scale)	S
Overall Project results	(rate 6 pt. scale)	MS

1. INTRODUCTION

1.1. Purpose of the TE and objectives

The TE is expected to measure the effectiveness and efficiency of project activities in relation to its stated objectives and to capture lessons learned from the project activities. The purpose of the TE is

- To promote accountability and transparency, and to assess and disclose the extent of
- project accomplishments.
- To synthesize lessons that can help to improve the selection, design and implementation of future GEF financed UNDP activities.
- To provide feedback on issues that are recurrent across the UNDP portfolio and need
- attention, and on improvements regarding previously identified issues.
- To contribute to the overall assessment of results in achieving GEF strategic objectives aimed at global environmental benefit.
- To gauge the extent of project convergence with other UN and UNDP priorities, including harmonization with other UN Development Assistance Framework.

The TE report should provide an opinion on

- Whether the project objectives were achieved;
- What were the project's impacts?
- How sustainable are the project results?
- And How the adaptive management and monitoring functioned during the project.

The evaluation is to be undertaken in line with the evaluation policy of UNDP, and the UNDP/GEF evaluation guidance.

1.2. Scope and methodology

In accordance with the Terms of Reference, its scope includes:

- Project strategy (including project design and its results framework).
- Project progress towards results, including assessment of project performance, based against expectations set out in the indicators of the Project Results Framework (PRF), and identifying remaining barriers and project's strengths.
- Project implementation and adaptive management, including management arrangements, work planning, project extension, finance and co-finance, monitoring and evaluation systems, stakeholder engagement, reporting, and communications.

- Sustainability of the project results and adequacy of risk management; assessment of financial, socio-economic, institutional and environmental risks to sustainability.

- Conclusions and recommendations.

This evaluation covers the project's activities since the PIF approval date (6 May 2010), and more in detail since the project official start was on 25 September 2012, until December 2017. Five main stages can be identified within the project's itinerary as formulated in the mid-term report (MTR):

- The project formulation stage, starting with the PIF and concluded on 25 September, 2012 with the signature of the Project Document by the Deputy Minister of Transport of the Russian Federation and the Head of UNDP in Russia.

- The inception phase, including the appointment of the project manager (1 March 2013) and other members of the project team, the inception workshop (29 March 2013) and the approval of the inception report by the first project steering committee (PSC) on 1 April 2013.

- The strategic phase, which was expected to provide the relevant transport studies and plans necessary for the subsequent implementation of concrete policies and pilots. This strategic phase was expected to be completed by year 3 (end 2015).

- The implementation phase (the actual preparation and implementation of pilot projects) primarily Component 2 and 3.

- The replication phase (Component 4), which started in 2015 and finished at the end of the project, though replication related activities in the 3 participiting cities will continue after the project ends.

The evaluation is undertaken in line with the evaluation policy of UNDP, considering the UNDP/GEF Terminal Evaluation guidance (UNDP, 2012 and GEF, 2017). The findings of the evaluation are structured around the major performance criteria considered for the Terminal Evaluation.

In accordance with the Evaluation Consultant Code of Conduct and the evaluators' experience, several methodological principles are applied, such as (i) triangulation and validation of information: different sources were systematically searched for contrasting and validating the information received; (ii) anonymity and confidentiality of individual informants, (iii) integrity, disclosing the full set of relevant information, and (iv) sensitiveness in the relations with stakeholders. The evaluation has been conducted following the ToR shown in Annex 1.

The TE tasks have been organized around the TE mission, defining 3 key stages- pre-mission, mission,

Table 1: Main activities during the TE

Pre-mission tasks	Mission Tasks	Post-mission Tasks
Desk review of project docs Prep meetings to discuss project	Interviews with project stakeholders Site visits to project activities in Kazan and Kaliningrad	Phone interviews and e-mails Assessment of additional reports TE Report Write-up

Pre-mission tasks. These activities serve to get a first overview of the project contents and operations and to identify the various professionals involved in its development. This is based on desk review of the project

documents and phone calls with the key project staff. The main outcomes of this stage are the preparation of the evaluation matrix, the questionnaires for the interviews and the mission plan, including the identification of local stakeholders to interview, the site visit plans, etc.

Mission tasks. Mission tasks started with a kick-off meeting with project officers and ended with a wrap-up meeting with them, presenting the results of the mission and discussing the path until TE completion. The main objective of the mission was to complete the factual information and resolve any questions that could not be answered during the site visits.

Post-mission tasks. Post mission actions are directed towards the completion and submission of the final TE report. It is usually necessary to complete the information gaps identified at the previous stages, and to review some additional documents and undertake additional phone interviews.

The evaluation methodology primarily three instruments with a view to facilitating an understanding of the views and contributions of the different stakeholders involved in the project, the framework conditions for their activities and the relationships with other actors. Typically, the quantitative information is presented in prepared reports, and the while interviews largely gather qualitative information and anecdotal evidence to support the claims made by the project stakeholders in the project documentation.

***Documentation Review**:* The documents reviewed by the evaluator are listed in Annex 6.

Face-to-face semi-structured interviews: These interviews were conducted during the missions in Moscow, Kaliningrad and Kazan and included the main project's stakeholders, the persons involved in the project's implementation and management and the local technical experts. The interview list is in Annex 5.

Site Visit to See Demonstration Activities: Along with meeting key stakeholders in Kazan and Kaliningrad the evaluators also toured the city to witness specific results produced by the project such as parking areas, low emission buses, public transport control centers, etc.

Phone/skype interviews. Phone interviews were held with international consultants and with those stakeholders who were unable to meet the evaluators during the field mission. Although keeping the same semi-structured approach of the face-to-face interviews, the questions were generally more specific, due to the time constraints associated with a phone/skype interview.

1.3. Structure of the TE report

This report follows the structure established in Annex 1 of Terminal Evaluation Terms of Reference, with an

- Executive Summary,
- Project description and background context.
- Evaluation Findings
- Conclusions and recommendations.

The annexes gather together the relevant background information for this report: ToR, List of Project Activities, mission itinerary, list of persons interviewed, list of documents reviewed, and co-financing table, etc.

2. PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT

2.1. Development context

The project document (ProDoc) already stated the emergence of an increasingly favorable context in Russia for the implementation of sustainable urban transport policies. This favorable context has accompanied the project in the last two years, and continues being one of its main strengths.

From an environmental perspective, Russia made further steps forward towards the reduction of its GHG emissions and was a member of the Kyoto Protocol and is a member of the Paris Agreement which is due to enter force in 2020. Transport is considered as a key contributor within its climate change mitigation action plan approved on 2 April 2014.

The socioeconomic conditions were more favorable for the project's objectives at the beginning of the project. The Russian economy has been hard hit by economic sanctions and a low oil price since the project was started. While there is a growing demographic that supports the environment and sustainable urban transport policies and measures, it is a fact that often environmental measures take a back seat to other priorities during economic downturns. However, the project has evolved within a favorable policy framework, and public governments at all levels (local, regional and federal) have made resources available to improve urban transport infrastructure and services; evidence of the latter includes the federal plan for the renewal of the urban public transport fleet and the ongoing investment plans in Kazan (linked to Universiada 2013, and to the 16th FINA World Championships in 2015 and the 2018 FIFA World Cup) and Kaliningrad (2018 FIFA World Cup). The two key cities for project demonstration activities are Kazan and Kalningrad.

Kazan is located in the Republic of Tatarstan, one of the most economically developed regions of Russia. The republic is located in the center of a large industrial region of the Russian Federation, at the intersection of the most important highways connecting the east and west, and north and south of the country. At the end of 2005, a special economic zone of the industrial-production type "Alabuga" was created, today it has 42 resident companies. Residents of the SEZ "Alabuga" are provided with tax benefits and in particular, they receive an exemption from transport tax for ten years from the date of the registration of the vehicle.

Kazan was a good choice because the Republic itself is very economically efficient, has a reputation for innovation and has sufficient financial potential to support the Project and ensure the co-financing of its components. In fact, according to documents received by the evaluation team, the city of Kazan will have invested more than $100 million in projects that were promoted by this project. Currently at project end investments already made by the city amounted to $ 20,068,390.

To date, the economy of Kaliningrad is based on industry, services, and the tourism business, as well as trade because of its port, special history, and location in Central Europe. In the Kaliningrad region there are resorts of national importance, national parks, tourist routes. People come here to rest and improve their health. Therefore, the recreational economy began to develop, providing services for the comfortable accommodation of tourists. Given its special geographical location and rich European history, the local government is exposed to advanced methods of urban infrastructure development, including transport planning. A large number of foreign enterprises establish their factories on the territory of the Kaliningrad region, since it close to European markets and there is a special economic zone which reduces import/export duties on goods.

Figure 1: Map of the Russian Federation showing the two pilot cities Kazan and Kaliningrad and also the original 5 cities that expressed interest in participating in SUT replication projects as part of Component 4 (dashed outline).

The active involvement and leadership of the federal MoT is a major asset for the implementation of sustainable urban transport policies, particularly at the initial stages of the process. Although in many countries, including the Russian Federation, the national government has quite limited competencies in urban transport, it can play a crucial role in encouraging cities to move away from business as usual (BAU) practice, to embrace the principles of sustainable urban mobility and to implement innovative, disruptive measures. For this, fluid cooperation channels have to be created with the regional and local layers of government.

Under a multi-level governance framework, the capacity of influence of the federal government mainly relies on establishing appropriate strategies, regulations, guidelines and incentives for the other layers of governance. This has been the approach of the federal MoT during the preparation of the project and at its implementation: in 2008, the MoT prepared a long-term national transport strategy for 2030, and since 2010 a number of activities were initiated to implement the strategy; at that time, some local governments (particularly in Moscow) were already undertaking some measures to reverse the deterioration of urban mobility conditions. This approach has continued during the implementation of the project, with the MoT developing draft regulations and guidelines on key subjects such as traffic management, urban parking, integrated urban transport plans, or support low-emission vehicles (LEV).

The project is fully aligned with the UNDP strategy to promote SUT in the Europe and Central Asia region, and keeps many similarities to the other UNDP projects undertaken in the same period in Serbia, Slovakia, Georgia, Kazakhstan and Tajikistan, among others. In this case, the project puts an accent on fuel efficiency

and vehicle technology, going beyond the emphasis given in GEF-4 strategic objective CC5 to "non-technology" options, such as planning, traffic management, and modal shift to low-GHG intensive transport modes". However, these options are also considered in the project. In conclusion, the project is well adjusted to its context and builds upon an emerging interest of the federal MoT in urban transport; an interest that should grow through the project completion to compensate the lack of tradition of federal action , and the past low priority and lack of federal resources for urban transport.

2.2. Problems that the project sought to address

The ProDoc identifies two key problems as major threats for urban mobility in Russian cities

1) increasing private car ownership and

2) neglected public transport systems.

At the time of the preparation of the ProDoc, both were considered as difficult to address. It is worth noting that the ProDoc analysis of threats and barriers focuses on LEVs, without paying much attention to public transport conditions.

Another topic identified as a threat is traffic congestion. The reading of this section of the ProDoc is puzzling, as it seems to take for granted that traffic improvement is an objective aligned with the principles of sustainable mobility. In fact, the opposite has proven to be truth in many cities: traffic congestion should not be alleviated by increasing the space dedicated to cars, but through a combination of measures providing alternative mobility modes and discouraging car use. The two sources of congestion identified in ProDoc are aligned with a traditional traffic engineering perspective; from a sustainable mobility perspective, the cause of congestion would be identified as "excessive use of cars" and not as it is made in the ProDoc: (1) unsupervised parking reducing available road space and (2) lack of synchronized lighting; the ProDoc strategy aims at facilitating car traffic flows, without taking into consideration the well-known induced-demand effect, which will result in even more cars on the streets.

Three key barriers are targeted by the ProDoc:

1. the lack of LEV options for Russian consumers;
2. the lack of attractive public transit services in most medium-sized cities,
3. and the lack of transport sector data available to transport policymakers,
4. so that they can serve as a factual basis to justify actions based on the principles of sustainable urban transport (SUT).

All these barriers are further expanded in the ProDoc including questions such as lack of integrated policy and planning for SUT; lack of information, methodologies and capacities to design and implement integrated SUT policies; lack of incentives for passengers to travel on less carbon intensive modes, and lack of awareness among policy-makers and the public. These are barriers largely shared with many countries in Europe and other regions.

2.3. Project objective

The project document states the global objective of the project in the following way: "to facilitate GHG reductions through the use of efficient transport modes of lower carbon intensity and increased fuel efficiency of a modernized bus fleet". This objective is further developed to include the project pilot cities and the replication of SUT projects in other cities as the basis for direct GHG emission reductions.

The detailed sources of GHG emission reductions are not mentioned in this part of the document. They are useful, however, to understand how the project intends to achieve its objective, and are calculated in Annex II of the ProDoc. The basic sources of GHG emissions reduction are coming from (1) significant penetration of LEVs in the Russian market (20,000 vehicles PHEV or EV per year); (2) successful implementation of key pilots in Kazan, particularly a new ATMS providing 15% saving in fuel consumption due to relieved congestion, and 1,000 vehicles making use of the new Park and Ride; (3) savings in Kaliningrad, mainly due to the reduction in trip distance to all modes using the new bridge, and to modal change, mainly due to an increase in the share of trolleys (from 6.4% in the baseline to 14.6% at the end of the project). Surprisingly, none of these figures is included in the ProDoc as an indicator in the project objective section of the PRF. This disconnect between the project objective and the relevant indicators to be monitored is a basis for problems during project implementation as shown in the Findings section.

2.4. Project outcomes

The ProDoc strategy to reduce GHG emissions aims at replicating in other Russian cities successful SUT policies and actions previously tested in the two pilot cities. Project implementation is seen as a tiered process including (1) an adequate legal (federal) framework; (2) comprehensive, long-term transport plans in the two pilot cities; (3) successful pilots (mainly PT corridors encouraging modal shift from cars), and (4) dissemination activities reaching other Russian cities. The project should be seen as a flexible instrument to explore many opportunities for emission reduction, and to make the most of each of them. In fact, this is the way it has been implemented. This is formalized in the four outcomes are defined for the project:

- Outcome 1: Approved and enforced supportive federal policies, regulations, and institutional arrangements to increase the use of low emission vehicles and development of SUT projects in Russia.
- Outcome 2: Increased use of low carbon modes of transport and improved urban mobility in Kazan.
- Outcome 3: Increased use of low carbon modes of transport and improved urban mobility in Kaliningrad.
- Outcome 4: Successful pilots on SUT projects and low emission vehicles replicated in pilot cities and other medium-sized cities in Russia.

The project approach combines therefore two complementary strategies: on the one hand, the reform of the existing legal and regulatory framework at the federal level, in order to accelerate market penetration of low-emission vehicles; on the other hand, the implementation of pilot SUT actions in Kazan and Kaliningrad, as a way to demonstrate the potential of these actions, and to encourage their replication in both cities and in other medium-size cities in Russia.

2.5. Expected results

Following the four outcomes defined by ProDoc, three main results are expected from the project:

- Curbing current trends of increasing absolute and relative GHG emissions from the transport sector. Based on the 2010 Russian Emissions Submissions, the ProDoc considers that a business as usual (BAU) approach to urban transport in Russia would result in a steady increase in CO2 emissions from the road transport sector of 116 million tonnes of 2009 to over 210 million tonnes by 2030.

- Supporting the achievement of GEF-4 strategic objective CC 5: promoting sustainable innovative systems for urban transport with a particular emphasis on "non-technological" options, such as planning, traffic management and modal shift to low-GHG intensive transport modes.

- Enhancing sustainability aspects through other key activities such as awareness programmes on specific topics, and targeted research, including research on specific fuel consumption and GHG emissions data in Russia.

2.6. Project implementation arrangements

As established in the ProDoc, UNDP is acting as the implementing agency for this project, and the Ministry of Transport of the Russian Federation is executing the project, as national implementing partner, according to UNDP's national implementation modality (NIM).

It was expected that this project would complement another project, the GEF/UNEP global project "Stabilizing GHG Emissions from Road Transport through Doubling of Global Vehicle Fuel Economy by 2050 the Global Fuel Economy Initiative" (GFEI). GFEI was jointly launched in 2009 by UNEP, the International Energy Agency (IEA), the International Transport Forum (ITF) and other transport stakeholders. The GFEI is now active in 20 countries, but Russia is not participating in the initiative. Therefore, the collaborative arrangements between the UNDP/GEF project and UNEP GFEI foreseen in the ProDoc have been more limited. However, UNEP participated in the second meeting of the Project Steering Committee (PSC), and the project sponsored a joint UNDP/UNEP “International Conference on Improving Fuel Economy and Reduction of Emissions from Road Transport in Russia” organized in June 2014.[1]

A Project Steering Committee (PSC) is responsible for making management decisions. It is chaired by the National Project Director (NPD), appointed by the Ministry of Transport. The composition of the PSC was slightly modified at the inception workshop, compared to the proposal made at the ProDoc, and was approved by the NPD, as established in the PSC regulation, including full members and observers. Full members included representatives from UNDP, the federal government (MoT, MoNRE, MoE, Ministry of Internal Affairs, Ministry of Economic Development), Kazan and its region(T-MoTR, Kazan Municipal Transport Committee), Kaliningrad and its region (KG-MoT, Kaliningrad city administration), and the Eurasian Economic Commission. Observers included the project management unit (PMU), UNEP, the Olympic Games transport directorate, Liotech, and a variety of universities, institutes and transport research centers (

Table 4).

The ProDoc (§118) stated the challenge to effectively manage activities taking place in different cities. It suggested a project management unit (PMU) based in Moscow, with a project manager (PM) and a part-time senior technical advisor, as well as one locally-based manager for each pilot city. At the inception workshop, this structure was slightly modified, including a deputy project manager, and suppressing the international senior technical advisor (CTA) and the component managers for Kazan and Kaliningrad; this made the

[1] http://www.proecotrans.ru/en/press-center/news/618/

provision of office space for the project in each city unnecessary. The ProDoc also included one financial and one administrative assistant.

The first PSC decided to put in place three working groups, dealing respectively with low-emission vehicles, urban transport planning and monitoring techniques. There full names are as follows:

- WG 1, on legal and technical assistance to the development of low-emission and non-motorized urban transit modes, with 17 initial members.
- WG 2, on urban transport planning, with 23 initial members.
- WG 3, on development of monitoring techniques for GHG emissions, transport traffic and passenger flows, with 15 initial members.

Three experts are serving all the working groups, and nine experts are participating in two groups. In accordance with the information provided by the PMU and some of the experts, the three groups are met regularly, but did not keep written records (minutes, attendance…) of their activities.

2.7. Project timing and milestones

The ProDoc does not include a table of milestones. However, the project timing and some milestones can be deducted from some deadlines established in the PRF for some indicators. They are summarized in the table below. The first digit in the milestone numbering refers to the project component associated to the milestone.

Table 2: List of Milestones, from the MTR

#	Milestone	Year for completion
1.1	Report on policy options for increasing the use of LEV	2
2.1	One authority responsible for planning and management of urban transport and one environmental cell of experts established in Kazan	3
2.2	Integrated traffic management schemes (ITMS) approved in Kazan	3
3.1	Integrated traffic management schemes (ITMS) approved in Kaliningrad	3
3.2	One bankable feasibility study for a pilot SUT corridor in Kaliningrad	3
1.2	Legal and regulatory framework promoting LEV adopted by the government	4
3.3	Detailed engineering designs and implementation plans for SUT corridor in Kaliningrad	4
1.3	One national strategy/roadmap for LEVs submitted to the government	5
1.4	System for collection of data on fuel consumption and urban vehicle fleets	5
3.4	One operational pilot SUT for Kaliningrad	5
4.1	Center of Excellence for SUT development in Kazan or Kaliningrad	5
4.2	Five SUT replication plans	5
4.3	One curriculum or advance training course on SUT	5

Table 3: Actual project timing

Date	Project event
08/06/2010	GEF project approval date
09/08/2012	CEO endorsement date

25/09/2012	Project signature by UNDP CO and MoT
24/12/2012	Appointment NPD
01/03/2013	Appointment/Contract start PM
01/04/2013	Appointment/Contract start Deputy P
29/03/2013	Project inception workshop
01/04/2013	First PSC
20/06/2013	Revised PRF
06/12/2013	Second PSC
03/12/2014	Third PSC
20/05/2015	Fourth PSC
24/11/2015	Fifth PSC
11/2015 thru 3/2016	Mid-Term Evaluation
07/07/2016	Sixth PSC
24/11/2016	Seventh PSC
05/10/2017	Eighth PSC
11/2017 – 03/2018	Terminal Evaluation
03/31/2018	Project termination

The key project dates are summarized in

Table **3**. The only facts worth mentioning are the initial delay for launching the project (5 months).

2.8. Main stakeholders

The table below summarizes the stakeholders involved in the project and their participation at the inception workshop (IW) and at the PSC meetings. PSC Membership is indicated in column M: "M" meaning full member and "O" observer, as established within the PSC regulation approved in April 2013. Five categories of stakeholders can be identified in the project: national government, local and regional government in the two pilot cities, technical institutions and other stakeholders (mainly from the private sector).

Table 4: List of stakeholders participating in the project

Name	Initials	Category	IW	M/O
Federal Ministry of Transport	MoT	Federal gov.	X	M
Ministry of Natural Resources and Environment	MoNRE	Federal gov.		M
Ministry of Energy	MoE	Federal gov.		M
Ministry of Industry and Trade	MoIT	Federal gov.		M
Ministry of Internal Affairs	MoI	Federal gov.		M
Ministry of Economic Development	MoED	Federal gov.		
Federal Tax Service		Federal gov.		
Russian Energy Agency		Federal gov.	X	
Transport Committee of Kazan		Kazan city	X	M
Ministry of Transport and Roads. Rep. Tatarstan	T-MoT	Kazan region		M
Kaliningrad Reg- Ministry of Infrastr. Devlpmnt.	KG-MoID	Kaliningrad region		M
Kaliningrad City Administration		Kaliningrad city		M

Name	Initials	Category	IW	M/O
Research center integrated transport problems		Technical-National	X	
Moscow State Automobile and Road University	MADI	Technical-National	X	O
R&D Institute of Automotive Transport	NIIAT	Technical-National	X	O
Peterburg NIPIgrad			X	
Institute of transport management, tourism and intern. business, State University of Management		Technical-National	X	O
Central R&D institute of urban planning		Technical-National	X	
National Research University. Higher School of Economics		Technical-National	X	
St. Petersburg urban planning R&D institute		Technical-National	X	O
EKAT- Kaliningrad environmental Centre		Technical-Local	X	
Moscow innovation development center		Technical-National	X	
I. Kant Baltic Federal University, Kaliningrad		Technical-Local		O
Federal service for hydrometeorology and environmental monitoring	RosHy-droMet	Technical-National		O
Laboratoriya Gradoplanirovaniya		Private consultant		
Institute of Regional Development and Transport		Private consultant		
Transportnaya Integratsia Group		Private		
Price Waterhouse Coopers		Private		
Green Car Technological Platform/ NAMI		Private		
Liotech		Private	X	O
Renault Russia		Private	X	
UNICOM group		Private	X	
ENSTO OY Finnish Electrotechnical concern		Private		O
Gazprom		Private		
VK Regionkonsult		Private		
Moscow Automobile and Road Construct. Univ.		Technical-National		
DOSAAF Society		Private		
Olympic Games Transport Directorate		Other	X	O
Eurasian Economic Commission		Other		M
UNEP	UNEP	Other		O

Table 5: List of PSC Members for the key stakeholder organizations participating in the project

No.	Name, Surname	Position, Name of Organisation
Members		
1.	Nikolai Asaul	Deputy Minister of Transport of the Russian Federation, National Project Director

2.	Vladimir Lugovenko	Deputy Director of the Department of State Policy in Road and Urban Passenger Transportation of the Ministry of Transport of the Russian Federation, Deputy National Project Director
3.	Natalia Olofinskaya	Head of United Nations Development Programme Office in Russia
4.	Oleg Ponaryin	Deputy Head of Supervision of the Main Traffic Safety Department of the Russian Ministry of the Interior
5.	Vladimir Kotlyarenko	Head of Technical Policy Division of the Department of State Policy for Road and Urban Transport of the Ministry of transport of the Russian Federation
6.	Marina Kudinkina	Head of the Division of Transport Strategy Implementation and Development of Transport Services Export, Department of Development Programs of the Ministry of Transport of Russia
7.	Vladimir Maksimov	Head of the Department of Ecology and Nature Use of the Department of State Regulation of Fees, Infrastructural Reforms and Energy Efficiency, the Ministry of Economic Development of the Russian Federation
8.	Nikolai Rulin	Deputy Head of the Division for protection of the ozone layer and climate, Department for State Policy and Regulation of Water Resources and Hydrometeorology, Ministry of Natural Resources and Ecology of the Russian Federation.
9.	Dmitri Melnikov	Expert of the Department of Energy Saving and Energy Efficiency, Ministry of Energy of the Russian Federation
10.	Airat Usmanov	Deputy Minister of Transport and Roads of the Republic of Tatarstan
11.	Agaev Nadir Alish ogli	Deputy Minister, Head of the Department of Environment and Environmental Supervision, Ministry of Natural Resources and Ecology of the Kaliningrad Region
12.	Vladimir Jovtun	Head of the Department of the Transport System Development and Road Activities of the Ministry of Infrastructure Development of the Kaliningrad Region
13.	Alexey Sidorov	Head of the Transportation and logistics department, Ministry of transport and roads, Republic of Tatarstan
14.	Aydar Abdulkhakov	Chairman of the Transport Committee of the Executive Committee of the Kazan municipal council
15.	Sergey Melnikov	Deputy Head of the Administration of the city district 'City of Kaliningrad', Chairman of the Municipal Economy Committee
16.	Alexei Dvoinykh	General Director of Federal State Budgetary Institution "Road Transport Agency"
17.	Veronica Ginzburg	Leading researcher at the Institute of global climate and ecology at the Federal agency for hydrometeorology and environmental monitoring (Rosgidromet)
Observers		
18.	John O'Brien	Regional UNDP/GEF coordinator, UNDP regional centre in Bratislava (Slovak Republic)
19.	Elisa Monica Dumitrescu	The representative of the Department of technologies, industry and economy at the United Nations Environment Programme (UNEP)
20.	Alexander Solodky	Head of the Transport Systems Chair, Saint Petersburg State University of Architecture and Civil Engineering
21.	Igor Titov	Director of the public corporation "Research and development institute of automobile transport"
22.	Vadim Donchenko	Head of research, R&D institute of automotive transport
23.	Denis Gorbatyuk	Director, Government and regional relations, LIOTECH Li-Ion technologies

24.	Inna Shevchenko	Deputy director, Government and regional relations, LIOTECH Li-Ion technologies
25.	Sergey Koryagin	Director, Institute of transport and service, Immanuel Kant Baltic federal university, Kaliningrad
26.	Yury Trofimenko	Head, Technospheric safety department; Director, Institute of energy and environmental problems, Moscow state automobile and road technical university (MADI)
27.	Yelizaveta Bednyakova	Associate professor, Department of transport management, Institute of transport management, tourism and international business, State university of management
28.	Tatiana Sporova	Head of Direction - Charging Systems for the Electric Cars, Ensto OY Group, Finland (Russian office)

The key stakeholders remain those identified in the ProDoc: the Federal MoT, other federal ministries with competences in transport, vehicles, the environment and taxation; the MoT of the Republic of Tatarstan, the municipality of Kazan, through its transport committee, the city administration of Kaliningrad and the Ministry of Infrastructure Development of the region of Kaliningrad. The rest of stakeholders roughly refer to a variety of institutes and universities dealing with transport issues at the national level, many of which have provided technical expertise to the project as national consultants, a few local institutes in Kazan and Kaliningrad.

3. FINDINGS

3.1. Project Design and Formulation

Overall, the project design is adequate as it is based on a review of the institutional, political and technical context. The ProDoc identified opportunities available for action at two levels, the federal (MoT) and the local (two pilot cities) using a top-down and bottom-up approach. Typically, three categories are considered in transport mitigation actions: "improve" (mainly technological actions providing less emissions per km travelled within each transport mode), "shift" (actions encouraging modal change, mainly from private cars towards low-carbon modes), and "avoid" (actions discouraging or making travel unnecessary or less desirable). The project design is considering the first and second categories, selecting:

- A top-down "improve" strategy, based on the penetration of low emission vehicles, based on changes in federal laws and regulations (component #1).
- A bottom-up "shift" strategy, based on the implementation of pilot SUT actions in two cities and their replication in other mid-size Russian cities (components #2, 3 and 4).

Much of the criticism for the project design that was identified at the MTR stage is still valid and persisted until the end of the project. Both strategies are valid to attain sustained GHG reductions, although they are very different in nature and scope. This means than in each case the technical and legal expertise required is quite different, as also are the key stakeholders to be mobilized. Whereas in the first case, it would be expected intensive interaction with the different federal ministries with competencies in the field (not only transport, but also, taxation, industry or environment) and with manufacturers of LEVs, in the second case the involvement of the variety of stakeholders usually involved in decision-making at the local level is expected to be crucial to achieve successful implementation.

From the technical side, whereas the first strategy mainly requires the engagement of specialists in car manufacturing and emissions, in the second case, the technical expertise required mainly refers to public transport planning, traffic management and street design. The management of one project with two components of such a different nature can recognized as a major challenge for the PMU.

The strategy for Outcome 1 mainly consists in the provision of technical advice by the project, through the mobilization of specialized public institutes in the country, and as a basis for the discussion among the various ministries and agencies involved in the topic. The interest and the role of the industry (car manufacturers) seems not to have been checked properly at the project design stage. This is a major risk for the implementation of actions under this outcome. Furthermore, in other industrialized countries, and particularly in the neighboring EU, strategies to promote market penetration of LEVs are closely related to strategies to support national manufacturers, and with a research and innovation policy providing incentives for those manufacturers to develop new vehicles within a certain timeframe. As these components were not developed within the ProDoc, they may have caused difficulties for the achievement of outcome #1. Last, but not least, there is not much justification for the target of 20,000 new EVs by the end of the project. This is a significant weakness, as this target accounts for the bulk of the expected CO2 emissions reduction of the project: some 48 ktonnes CO2/year, or 81% of the 59,23 ktonnes CO2 reduction expected by the end of the project.

The Low Emission Vehicle concept is not precisely defined in the ProDoc, and the scope of activities related to it varies in the project reports. The inception report considers that LEV actions refer only to electric vehicles (EV) and only to cars. However later in the project the LEV concept includes emissions estimates and documents also include hybrid cars (sometimes referring to plug-in hybrid vehicles, PHEV, sometimes to all hybrid cars), conventional cars with internal combustion engines (ICE) providing lower specific emissions than the current average vehicles, and vehicles used for public transport. Furthermore, new activities such as eco-driving have been added during project implementation. This is not necessarily negative, but rather demonstrates how the scope of included project activities increased over time.

The SUT components (pilots in Kazan and Kaliningrad, and subsequent dissemination and replication proejcts) are approached from a holistic perspective, based on pilot corridors in which actions at various levels (traffic management, public transport improvement, and biking and walking facilitation) could be implemented together, providing a consistent and attractive set of incentives for people to change to sustainable transport modes. The project design rightly identified the infrastructure opportunities in both cities for implementing the actions within the project life-time: in the case of Kazan, linked to Universiada 2013 and, in the case of Kaliningrad, mainly linked to the construction of a new bridge, which would be a part of the pilot corridor. The inclusion of both cities to host games within the 2018 FIFA World Cup added further attractive to the choice of both cities, as this could facilitate the adoption of additional measures (mainly related to walking and public transport).

However, the project design did not take into account the risks associated to delays in the approval and launching of the project itself: by the time the project had been signed (September 2012), most of the actions for Universiada 2013 in Kazan were already in progress, giving no chance for the project to influence them from a SUT perspective; as for Kaliningrad, the bridge had been designed and was under construction, without any lanes reserved lanes for public transport.

The risks and assumptions at the basis of the project design clearly identified the risks of lack of financial/investment commitment from the two pilot cities, the lack of replication and the reluctance of citizens to change their transport mode choices. A basic assumption seemed to be that the pilot actions identified in ProDoc would be implemented. The fact is that these pilots can no longer be included in the project, as they were implemented before the project started its activities in the city (paid parking in Kazan) or have become unfeasible (PT corridor in Kaliningrad) due to some decisions taken before the project started in September 2012. Therefore, implementation started without clear pilots for both cities, and the ProDoc provided no guidance on how to identify new pilots, i.e. a "Plan B".

Also, the diversity of individual activities listed in the ProDoc provides a high level of project complexity which presented a challenge for the PMU to have enough diverse expertise in order to steer the project through the different implementation tasks. In this regard the original PRF developed for the project was only moderately useful as some of the indicators could not be monitored by the project as discussed below and in section 3.11.

3.2. The Project Results Framework (PRF)

The PRF in the project document is specific in terms of the expected actions of the project. These actions are generally included within the PRF under the category of "indicators", with a target that refers to the actual implementation of each particular action. The PRF includes:

- 5 indicators referring to the project objective "reduction of the growth of GHG emissions from the transport sector in the medium-sized cities in Russia".
- 5 indicators within outcome 1, "approved and enforced supportive federal policies, regulations, institutional arrangements to increase the use of LEVs and development of SUT projects in Russia".
- 6 indicators within outcome 2, "increased use of low carbon modes of transport and improved urban mobility in Kazan".
- 6 indicators within outcome 3, "increased use of low carbon modes of transport and improved urban mobility in Kaliningrad".
- 6 indicators within outcome 4, "successful pilots on SUT projects and low emissions vehicles replicated in pilot cities and other medium-sized cities in Russia".

The PRF was revised at the inception workshop, in order to update it to the new context, two years after the preparation of the Project Identification Form (PIF). Taking the revised PRF in the 2017 PIR (Annex 3) as the current one, we can identify the following main differences compared to the project document in Table 6.

Table 6: History of Changes in the Project Results Framework (LogFrame) of the Project

Changed Indicator	Initial version	Amended version	Reason for the change
Project goal	Changed wording: *Tonnes of CO_2 emissions reduction resulting from the increase of public transport share in passenger transportation and increased use of low-emission vehicle technology*	Tonnes of CO_2 emissions reduction resulting from the development of sustainable urban transit systems and increased use of low-emission vehicle technology	The task is to increase the urban transport share in passenger transportaion is very narrow and does not reflect the essense of the project. The project activities are aimed at setting-up and development of the urban transport systems.
Outcome 1.1	MinTrans suggests to rename the indicator as '*National strategy-or roadmap for market penetration of low-emission vehicles'*	National strategy-or roadmap for market penetration of low-emission vehicles	Decree by Russian Government № 767-r dated May 13, 2013 *On draft regulations for the use of gaseous motor fuels including natural gas as motor fuel*
Outcome 1.2	One system for the collection of fuel consumption and operational information and data of urban vehicle fleets for pilot cities of Kazan and Kaliningrad	A model data exchange policy on vehicle fleets structure and composition (by fuel types, eco class, vehicle category, etc.) between the Traffic Police and municipal authorities	There is no document for the Russian cities to contain data on the composition of the city vehicle fleet broken down by the type of fuel, emission class, vehicle category, etc., which is going to be a real tool for data acquisition on fuel consumption and performance parameters of the urban vehicle fleets
Outcome 2.1	5 employees of UTCC trained in adaptively managing public	5 employees of Transport Committee of Kazan Municipality trained in	All activities related to ITS and city transport authority were removed by instruction of

Changed Indicator	Initial version	Amended version	Reason for the change
	transit vehicles and traffic flows throughout Kazan	adaptively managing public transit vehicles and traffic flows throughout Kazan	MinDorTrans of Tatarstan and Transport Committee of Kazan municipality due to their uselessness (formal letter № 324 dated May 14, 2013)
Outcome 2.2	One fully functional administrative body in the Tatarstan government that is responsible for planning and management or urban transport in Kazan	One fully functional authority that is responsible for planning and management of urban transport in Kazan by Year 3	
Outcome 2.5	3 completed park-and-ride facilities and/or corridors with parking restrictions with 10 km of pedestrian and cyclist corridors routes	10 km of pedestrian and cyclist corridors routes, and 3 streets with parking restrictions	More than 3 park-and-ride facilities already operational in Kazan
Outcome 2.6	Number of low-emission vehicles in use in Kazan	12 low-emission vehicles in use in Kazan (EV and PHEV technology) and a network of charging stations by Year 5	
Outcome 3.1	Comprehensive transport scheme (CTS) and ITS based on modern planning practices and traffic modeling	Integrated Traffic Management Scheme (for road transport) and new public transit scheme for Kaliningrad based on sustainable urban transit (SUT) principles	
Outcome 3.2	Bankable feasibility study and plans for pilot SUT corridor in Kaliningrad	Bankable feasibility study for pilot SUT corridor in Kaliningrad	
Outcome 4.3	A strengthened Center of Excellence for SUT development is established in Kazan under the MinDorTrans of Tatarstan	A Center of Excellence for SUT development in Russia	Amendments were driven by the absence of co-funding of the activity and no demand for such a unit from the pilot cities. The plan was to set up a Center of Excellence for SUT at universities and R&D institutes and with their input.
Outcome 4.6	No activities in place to develop curricula on SUT and SUT best practices for students	Another target metric added: *Number of SUT professional training curricula*	A letter from the president of Immanuel Kant Baltic federal university (Kaliningrad)

Post MTR there were recommendations to further update the PRF but the PMU in discussion with UNDP staff made hardly any changes.

3.3. Project Implementation and Adaptive Management

Adaptive management in the UNDP/GEF context has a very specific meaning and it is worthwhile repeating it here. Adaptive management is defined as the project's ability to adapt to changes to the project design (project objective, outcomes, or outputs) during implementation resulting from: (a) original objectives that were not sufficiently articulated; (b) exogenous conditions that changed, due to which a change in objectives was needed; (c) the project's restructuring because the original objectives were overambitious; or (d) the project's restructuring because of a lack of progress.

The project experienced several cases where adaptive management led to changes in the project design (Components and Activities) but not in the overall Objective of the project. The three main instances were:

1. Modifications of Outcome 1 activities and movement of funds to Outcome 4
2. Changes in Outcome 3 because of the withdrawal of funds for the SUT corridor in Kaliningrad
3. Redesign of Outcome 4 to implement new pilot SUT activities in additional cities

The MTR made recommendations for several changes to the PRF and better monitoring of the project results. The main impetus to modify Outcome 1 to the project came in relation to the *indicator* for Objective 1 named "Increase in sales of low emission vehicles" which deemed to be inappropriate by the MTR review. However, this indicator stayed in the PRF as explained in the next section.

The other key instance of adaptive management was after the withdrawal letter for co-financing of the SUT corridor in Kaliningrad was received by the project. As explained in the PIR:

> *In its adaptive strategy for Kaliningrad, the Project did not use the targeted investment solution that would be hard to replicate in other cities, focusing instead on qualitative change of the urban transport management system. The city and Project jointly worked out all the strategy documents on transport planning that the city administration adopted for implementation by the city.*

The final major situation where adaptive management was employed had to do with an increase in the activities of Component 4. As explained in more detail in the Results section, the project moved funds from Components 1, 2, and 3 to Component 4 and ran a call for proposals to select 5 new cities to implement SUT activities.

3.4. Feedback from M&E Activities used for Adaptive Management

As mentioned also in the MTR, official project reporting mainly consists of annual PIRs and PSC minutes. Annual PIRs provide a detailed and good description of the project status, and often include a "satisfactory" rate from the stakeholders involved in the PIR process. There are also several stand-alone reports which provide descriptions of different project activities in the 5 pilot/replication cities and outputs from Component 1.

During the mid-term evaluation the project management could see that a number of project indicators were not fully indicative of the project impact and had not been formulated properly or were difficult to monitor. The MTR suggested revising the PRF indicators, and the PMU supported this proposal as noted in the response to the MTR:

> *It is recommended to focus studies under component #1 on the problems of reliable urban transport data collection, as established in the PRF; data on urban mobility in Russia is scarce, and could be*

much improved, taking as a basis the pilot and replicating cities, and lessons could be learnt from similar data systems in other countries. It is recommended to define a set of mobility indicators, to provide technical guidelines about data collection for these indicators, and to collect the information for the cities involved in the project (and ideally other interested cities in Russia).

On the other hand, this data collection would provide a good basis for monitoring of the pilots, and of future actions in cities willing to replicate them, allowing for estimates of GHG emissions associated to project actions actually implemented.

Management Response:

The project team partly agrees with the recommendation. The comment regarding quality of urban mobility data will be addressed through Workplan Activity 1.1.3 "Development of methodological recommendations on holding regular surveys of urban transit system" which was confirmed as relevant by MTR with the comment that this could be presented as (1) a way to establish a MRV system (urban mobility observatory) on urban transport and (2) as a support for replication (component 4). This activity includes identification of mobility indicators which would be reliable, sufficient and allowing for data compatibility.

However, the project should not be assigned with the task of actual collection of such data, as it lays beyond project financial capacity, mandate and timeframe. The data will be collected by the cities for ITMS and other relevant pilot SUT developments, and through the implementation of the project's SUT pilots, and should become a sufficient basis for the project to estimate GHG emission reductions associated with the project direct and indirect impact.

The project will consider the MTR's idea for the project to develop draft federal regulations requesting the cities to provide key transport statistics related to urban mobility, to MOT. The "EMTA barometer" (www.emta.com) could be used for guidance on key indicators to collect, allowing for benchmarking with many cities in Europe.

Additional MTR Recommendation regarding Monitoring:

The [Project Results Framework] has to be revised, including more quantitative indicators based on outcomes. This revision should be done once the pilot actions have been decided, so that these actions can be properly monitored within the PRF. The current indicators in the PRF are related to very general outputs, with no clear link to the project objective of GHG emissions reductions, and do not provide an adequate framework for monitoring progress towards results at this final stage.

Management Response:

[International] CTA will be hired to take care of the PRF revision in consultation with the PMU and key technical experts.

In hindsight the two key management responses quoted above ultimately led to insufficient results for the project. The PMU proposed changes to the PRF and specifically Objective 1 which were not accepted by UNDP. An International CTA was not hired until April 2017, according to the Deputy PM this was because it was difficult to find a suitable applicant even though the position was advertised in 2016.

Delegating the data collection to the cities was also not the best way to ensure quality data as the project struggled to estimate the final GHG impact and relied very much on an international consultant modeling the GHG impact at the end of 2017. This consultant was also critical of the monitoring of data necessary to estimate the GHG reductions in his report and needed to use some general data and factors supplied from other sources than the project.

Reviewing the PIR from 2016 which was made post-MTR, the project management writes in the M&E section:

> *By March 2016, most of the recommendations listed in the MTR report were met. It was related to the new pilot cities selection, employment of the task manager on replication of successful demonstration projects, revision of project work plan and budget revision in order to transfer money for the replication. The exception is the recommendation concerning the employment of the international CTA, because it is very difficult to find the appropriate candidate.*
>
> *The Logical Framework of the Project was not changed since the beginning of the project, there were editorial changes after the Inception period. The evaluator recommended an audit, but did not specify what exactly it is necessary to revise. The Project does not experience difficulties in reporting on agreed indicators and reports on them in the present PIR. Monitoring and Evaluation Plan of the Project is respected.*

There was no mention of the situation again in the 2017 PIR; however, in the Final Project report from December 2017:

> *The MTE report suggested revising the logframe indicators, and the Project supported this proposal. In particular, the Project suggested not taking into account the number of EVs used in the pilot cities because the Project had only been able to have an indirect effect on promoting EV use at the federal level. However, the changes were not approved by the UNDP/GEF. One of the key adaptive management rules stipulates that the objective, outcomes and key logframe indicators, first of all the GHG emission reduction targets, may not be changed. However, the exact definition of "key" indicators is not always obvious, as was learned by this Project with the EV sales target indicators in pilot cities. Also, several indicators may have been erroneous by mechanical error and as such, the Project Team believes that when indicators are not accurately measuring Outcomes, they should be able to modified during Project implementation.*

It seems that the MTR recommendations were acted on too late and by the time the project made an earnest effort to modify the monitoring indicators in the PRF for Objective 1 it was rejected by UNDP/GEF staff for formal reasons. However, it is unusual for recommendations to be denied if they could actually help the project perform better. The evaluators sympathize with this outcome, as indeed it was clearly recommended during the MTR to modify the EV sales indicator, among others.

3.5. Monitoring and Evaluation: design at entry and implementation

As discussed earlier and highlighted in the MTR, the monitoring indicators in the ProDoc, particularly for Objective 1, did not provide a good relationship between the project's environmental impact and progress with the project's activities. For example, "Number of financing institutions committed to financing SUT". To translate an indicator like this into GHG reductions or environmental impact is simply not possible using causal relationships. A better alternative could have been "Number of SUT initiatives committed for funding by financing institutions". At least one could the analyze the potential impact the committed SUT initiatives might have. But even that version is not the best formulation of a project indicator for Objective 1.

There is plenty of project reporting that discussed the suitability of the original monitoring indicators and targets for the project and the majority of it points out the short-comings so there is not a real need to repeat it here or go through each indicator individually. It is also notable that the Inception Report suggested many changes to the PRF As discussed in the previous section most stakeholders were aware of the problems later in the project with the PRF and M&E, therefore the M&E design at project start up is rated as ***Moderately Satisfactorily.***

It is believed, and the evidence shows, that the PMU did a diligent job at collecting the stipulated information in the PRF and M&E plan. However, there were signs that the PMU did not go beyond this and really question the quality or rationale of some the M&E indicators until the MTR. Once that took place there was a considerable delay in making any changes because of the desire to have guidance from an International CTA. In addition, the GHG reduction assessment that was performed during the end of 2015 was also questionable methodologically and later not used by the PMU to continue to estimate the project performance. As mentioned in the previous section there were some questionable decisions taken that later resulted in the project not being able to provide the necessary information required to justify all the direct GHG emissions reductions that the project could have claimed. Therefore, the M&E Plan Implementation is rated as ***Moderately Satisfactory.*** Because some of the fundamental issues with the M&E Indicators were never fixed and this ultimately caused problems for the PMU to quantify the environmental impact project the generated the Overall Quality of the M&E is rated as ***Moderately Satisfactory***.

3.6. Partnership Arrangements

The engagement of stakeholders is mainly done through participation as full members or observers at the PSC (meeting thus far once or twice a year), and through the working groups, which have hold meetings as needed, typically every two months. The profile of stakeholders mobilized in the PSC and at the WGs is basically the same:

- Key government stakeholders from the federal government and from the local and regional governments of the pilot cities.
- Technical experts, mainly from public institutes and key universities.
- A few private stakeholders.

There is little record-keeping of the WG meetings as noted in the MTR. It seems that some of the recommendations from the MTR were taken to heart regarding the inclusion of more local stakeholders. While still dominated by technical experts and member various city administrations (which makes perfect sense) the project also reached out to the local cycling clubs/associations in both pilot cities to not only receive input and ideas but also to have them act as another lobby group for the project goals in the cities. The evaluators met with representatives of the cycling clubs in both cities and both were extremely passionate and enthusiastic about the project and transforming their city into a bicycle friendly city. It was good strategy because bicycling enthusiasts represent a diverse mix of the population and these clubs contain many professionals of all types, which adds legitimacy to their efforts when they lobby the city administrations.

As previously mentioned, the Ministry of Transport has been a strong partner even at the local/regional level and in Kazan in particular the project did a good job of involving the regional office to support the project. The other stakeholder outreach the project did was to engage civil servants from other cities that were

interested in the results in Kazan and Kaliningrad. People from both pilot cities mentioned how many curious phone calls and visits they received from civil servants from other cities in Russia. Some tours were even organized by the project. There is always some competition going on between cities in every country and intentionally or not the project tapped into this through its demonstration projects and stakeholder outreach.

3.7. UNDP and Implementing Agency Partner implementation and coordination

One thing that was repeated by many people that the evaluators met was the high quality and reliability of the Project Management staff, and in particular the Project Manager and Deputy Project Manager. The PM was described as someone with an extremely high level of technical knowledge about SUT which gave him legitimacy among the other peers and stakeholders in the project. Likewise, the Deputy PM received many compliments from the stakeholders in the project as someone who could do a good job of convincing decision makers and marketing the project and its program. The general consensus, and the impression given to the evaluators, was that the PMU staff were highly driven and professional. It is to their credit that the project accomplished many of its activities in the original 5 year time-frame, as not many GEF projects manage that without requesting extensions.

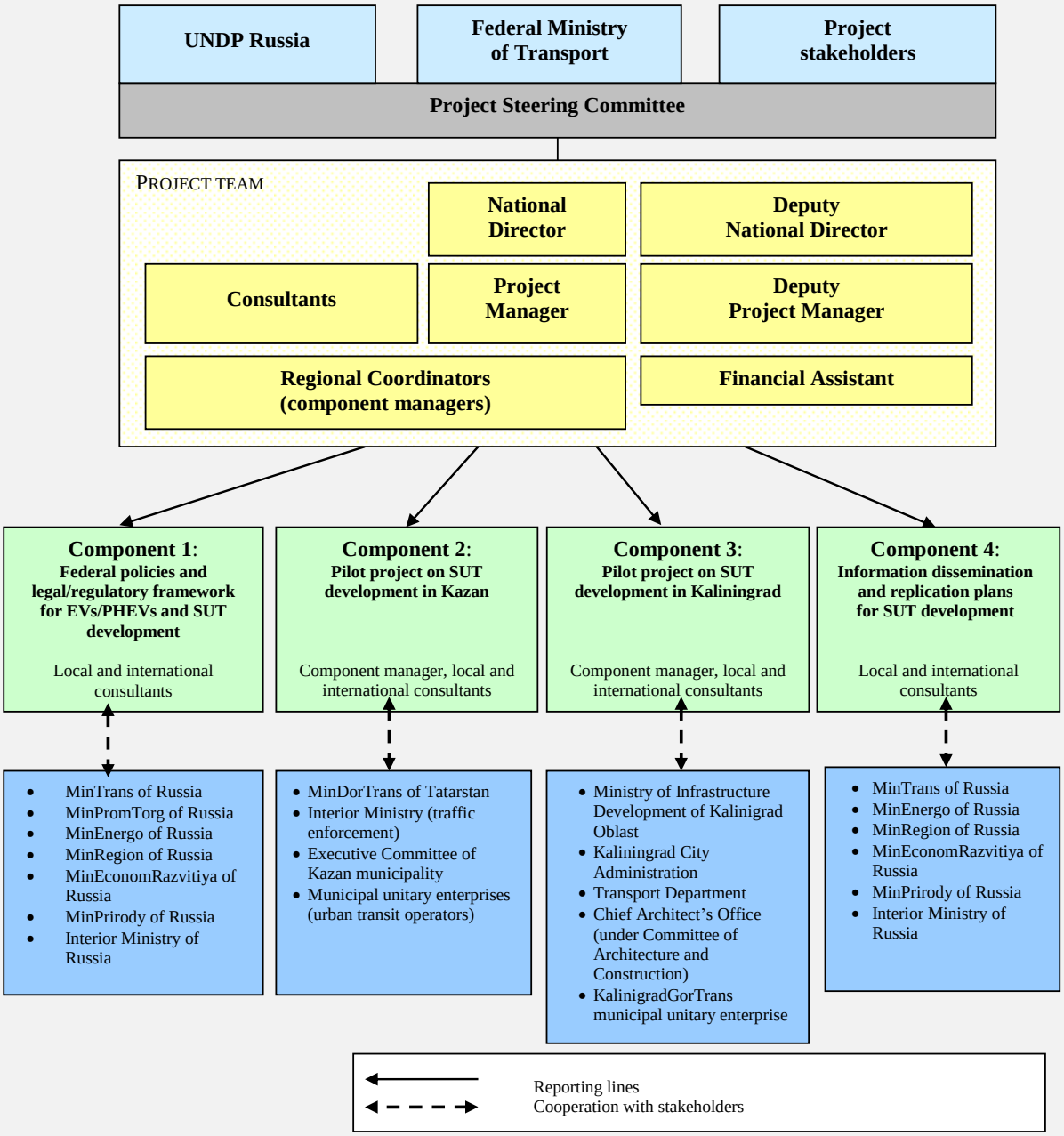

Figure 2: Overview of the Project Organization Structure after the Inception Workshop and Report.

The PMU had a very good reputation in the organizations that they interacted with. While there might have been some questions raised during the MTR in these evaluators' opinion it was a well-functioning team with complimentary personalities, skillsets, and roles. Five years is not a trivial length of time to work closely together so it was good that both the Deputy PM and PM, who both have different but strong personalities, were able to make it work and push many of the project participants to deliver.

The PMU team did many things correctly, but it is the task of the TE to highlight some of the key problems. As repeated many times, it was a clear misjudgment by the project management to not find an international CTA from the beginning of the project. At the time they had a rationale for not doing so, but during the TE it was clear that all parties realized this was a critical mistake and that the CTA which was finally hired, while being a qualified individual, could produce only minor input and impact on the project results when he joined the project in 2017.

Related to the above, there has been criticism that the project did not hire enough international consultants for "cross-fertilization" and instead focused primarily on Russian experts. Its true that the project overwhelmingly used Russian technical experts, but its difficult to state that this was the wrong decision (with exception of the CTA). The reason being that it was much more critical to have a firm understanding of the Russian context and how to create change and interventions in the Russian institutions. Likewise, Russian researchers are not isolated these days as in Soviet times and most have excellent access to Western research, colleagues in other countries, and knowledge/education from abroad in relation to SUT. So with the key exception noted, this criticism does not have much merit other than to state that a GEF project being international in nature, should include as many international experts as possible. These evaluators do not agree with such a characterization and oversimplification.

Another problematic management/implementation issue relates to the hiring of a dedicated team member for Component 4 and the high turnover in the position during the last 2 years of the project. The first person who was hired, Elena Timofeeva, who worked from Jan to December 2015 eventually resigned on her own accord because she did not believe she was the right fit for the job, or perhaps was not enjoying it; but in any case there was very little progress on component 4 in the year 2015. The second person hired in 2016 to develop Component 4, initially had some early successes and during his employment the project obtained five Letters of Intent from the City Governments of the 5 new replication cities (Penza, Irkutsk, Krasnoyarsk, Rostov-on-the-Don, and Tyumen) to work with the project.

Later in September 2016 the city of Tyumen withdrew and the Penza tender participation was cancelled by the MoT (more detail is provided in the Results section). During the interview the Component 4 manager, Mr. Dmitry Beschetny claimed that he had brought evidence to UNDP management's attention about possible conflicts of interest related to the tenders for some of the new pilot cities and later was dismissed because of it. However, according to other UNDP staff this was not the case and he was not dismissed, rather his contract was not renewed due to poor performance.

This resulted in the Deputy Project Manager, Rimma Filippova, taking over the tasks in Component 4 until the end of the project, which was not an optimal situation. Regarding Mr. Beschetny's claims, these were discussed with UNDP staff during the TE and it appears that UNDP followed internal procedures in the matter. The Regional Office staff (Mr. Andrey Pogrebnyak) were involved and Mr. Pobregnyak's assessment was that there was no wrong-doing and that any potential conflict of interest was solved by the replacement of one of the members of the Rostov-om-Don selection committee by the MoT. The Penza tender was eventually cancelled along with the city's participation, but not due to Mr. Beschetny's claims. He was not dismissed as claimed, but rather his contract was not renewed. Evidence was shown during the TE by UNDP to the Evaluators supporting these conclusions (emails etc.).

It is obvious that the project did its best to recover momentum and push the progress in Component 4 in 2017. While the distraction was removed by the non-renewal of his contract, the project was now operating short-handed during the final year. This also highlights the strong work capacity of the remaining members of the PMU in that they worked together to share the additional work load, but it was not an ideal situation for the project during the final year.

In regards to coordination, it appears to have been very high given the large number of "moving parts" in this project. The PMU did an outstanding job coordinating the project assignments with consultants, receiving MoT approvals, and reacting quickly to stakeholder needs. One constructive criticism that was given the project by a consultant tasked with reviewing project work, Mr. Michail Yakimov, was that there were a large amount of reports and studies produced, but very few people could really understand all of the interconnections. It was very complex but at the same time very segmented between the Components. In his

opinion, several of the studies were not leveraging previous or related work. He believed more effort should have been spent cross-fertilizing the activities and outputs in the different components. A similar sentiment was given during the MTR and it has some validity. However the same person praised the project's efforts at bringing together rival institutions and felt that by the end of the project decision-makers were much better informed.

Generally speaking the performance of the Implementing Agency and PMU was very strong, even during the difficult situations that arose in project from time to time. Because of this fact, and the overwhelmingly positive reputation the project management team enjoyed among the stakeholders it provides a strong case for rating the Management and Implementation of the Implementing Agency as Satisfactory**.** However, the TE guidelines specify that if there were some short comings that the rating should be ***Moderately Satisfactory,*** and as explained above there were some PMU situations or decisions which created short-comings in the project implementation.

According to Irina Bredneva, Programme Associate at UNDP Russia, one of the challenges that the project faced was that it had to adhere not only the UNDP NIM rules and procedures, complex as they are, but also 100% to procedural rules and norms of the MoT. Sometimes this created delays, for example with contracting the pilot cities and the replication activities. Otherwise the cooperation with the MoT was characterized as excellent by both parties and the PM had constant access to decision-makers in the MoT if he needed to discuss any problems. In fact it was stated when the Deputy Minister of Transport Mr. Nikolai Asaul became involved in the project the MoT even took a more active role in the project, and trying to help with pushing through the project results.

When it was clear that the project needed make changes after the MTR and to re-align its resources and budget the MoT gave its full support to these changes. Another example of the active role of the MoT was the decision to not allow the Cities for Component 4 to run the tenders for the sub-contracting for the project sponsored activities, but rather to run them according MoT and NIMA procedures.

Because of the high level of ownership and participation the Executing Agency Execution is rated as ***Highly Satisfactory.*** Overall the quality of the Project Implementation is rated as ***Satisfactory***.

3.8. Finance and co-finance

At the end of 2017, the project had spent 95.3% of its budget, or USD 5,146,884. The project has a 3 month extension until the UNDP offices in Moscow closes March 31, 2018. The initial budget established in the project document was revised at the inception workshop, as a result of the approval of the project work plan; the differences between the original and the current budget (multiannual work plan) are summarized in

YEAR	PRODOC BUDGET	Disbursements until Dec. 31, 2017	DIFFERENCE (%)
2013	1,069,197	573,783	-46%
2014	1,143,797	839,790	-27%

2015	1,218,597	1,160,658	-5%
2016	1,083,397	1,102,020	2%
2017	885,012	1,470,631	66%
2018	N/A	253,116	N/A
TOTAL	**5,400,000**	**5,400,000**	**0%**

Table 7 and Figure 3. As the project activities started in 2013, there is no relevant expenditure during 2012, although the project formally started on 25 September 2012.

Table 7: Budget distribution by year

YEAR	PRODOC BUDGET	Disbursements until Dec. 31, 2017	DIFFERENCE (%)
2013	1,069,197	573,783	-46%
2014	1,143,797	839,790	-27%
2015	1,218,597	1,160,658	-5%
2016	1,083,397	1,102,020	2%
2017	885,012	1,470,631	66%
2018	N/A	253,116	N/A
TOTAL	**5,400,000**	**5,400,000**	**0%**

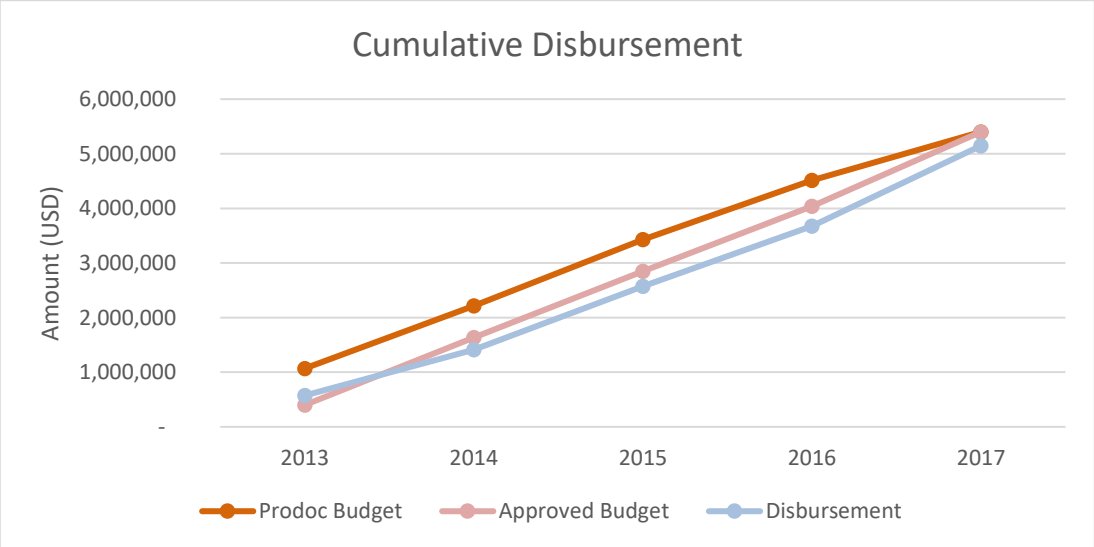

Figure 3: Budget distribution during project life

Changes in the project budget, made during the inception workshop and approved at the first PSC, have moved resources from the first year (2013) to the other years and particularly to the last one (2017). After the MTR some of the budget from Component 1 was allocated to Component 4.

The distribution of resources among the four components of the project is presented in Table 8. The revision of the initial budget did not result in any change in the relative weight of some components within the budget.

Table 8: Budget distribution among components

OUTCOME	TOTAL BUDGET	Expenditures until 31/12/2016	2017 Budget	Total	Difference with Budget
Comp. #1	1,064,200	769,355	266,738	1,036,093	-28,107
Comp. #2	1,648,600	1,153,343	252,998	1,406,341	-242,259
Comp. #3	1,615,700	1,082,190	271,735	1,353,925	-261,775
Comp. #4	571,500	306,652	804,694	1,111,346	539,846
PMU	500,000	364,713	127,583	492,295	-7,705
Total	**5,400,000**	**3,676,252**	**1,723,748**	**5,400,000**	

Later after the MTR in July 2016 the project decided to re-allocate USD 540,000 from the other Component budgets to Component 4 to support greater development of replication activities in new pilot cities. During the 2017 budget funds needed to be taken from Component 3 and redistributed to Components 1 & 2 due to a strengthening of the ruble against the dollar. The end result is that Components 2 & 3 contributed the most funds to new Component 4 activities as shown in the table.

Table 9 summarizes the distribution of the resources among the main budgetary lines. During the project implementation, several new items have been added to the ProDoc budget. The main differences are the low involvement of international consultants in the project compared to the ProDoc , replaced by local and individual consultants. Consultancy services (including also most of the contractual services under item 72100) account for 65% of the total project budget.

Table 9: Budget distribution along main ATLAS items

	ATLAS ID.	ProDoc Budget	Budget thru 2017
71200	Int. consultants	**609,500**	**119,131**
71300	Local consultants	**1,873,720**	**330,953**
71400	Individual consultants	**---**	**481,194**
71600	Travel	**390,000**	**68,540**
72100	Contractual services	**2,026,400**	**3,547,723**
72200	Equipment	**20,000**	**242,505**
72400	Communications	**25,000**	**29,547**
72500	Office supplies	**62,500**	**186,010**
73100	Rental, utilities…	**---**	**13,970**
74100	Evaluation, Audit	**105,000**	**67,773**
74200	Printing costs	**63,000**	**119,131**
74500	Miscellaneous	**161,941**	**159,489**
75700	Workshops	**69,015**	**52,057**

Co-financing figures are presented in Table 10. Total co-financing in the ProDoc (USD 158,136,000) is significantly higher than foreseen in the GEF Project Identification Form (PIF) (USD 35,200,00). Co-financing is running significantly below the estimates in ProDoc, particularly in Kazan and, to a lesser extent, in Kaliningrad. As for the private co-financer Liotech never delivered co-financing to the project. The high fluctuation in the rate of change between the Ruble and US dollar is shown in Figure 4. This instability had

initial benefits as many of the project costs were in Rubles and thus funding could be stretched., but later the full effects created an economic downturn which caused larger problems for the projects, especially in regards to city budgets and the cancellation of co-financing from Kaliningrad for the SUT corridor.

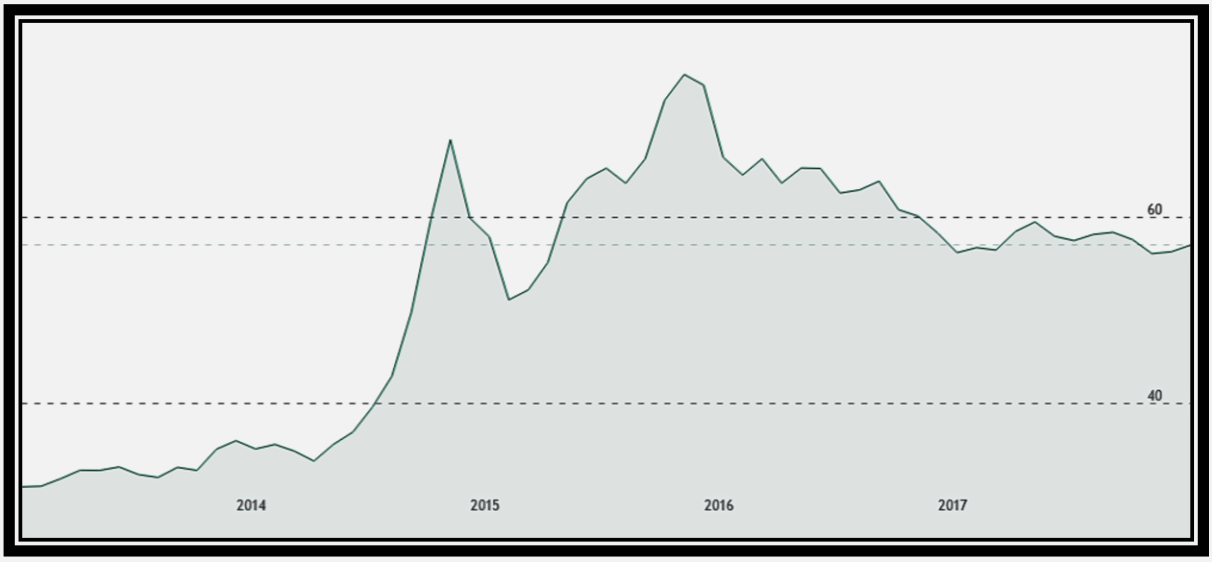

Figure 4: Ruble to the USD during the project period. 2014 is the start of an economic crisis in Russia and the Ruble devalued by more than 100% against the USD.

Table 10: Realization of co-financing for the project

CO-FINANCER	PRODOC (USD)	2017 Co-finance	2017 Additional Resources
Ministry of Transport	8,600,000	$8,600,000	
City of Kazan	113,000,000	$105,545,945	
Kaliningrad City	34,656,000	$187,594,333	
Liotech	1,880,000		
TOTAL	**158,136,000**	**301,740,278**	**919,673**

The MoT's contributions mainly refer to subsidies to the procurement of new public transport vehicles in both cities and support for research on parking policies. In the case of Kaliningrad, the bulk of its original contribution comes from the construction of the new bridge, which should have been a part of the pilot public transport corridor; however, as this pilot corridor has been abandoned (as the bridge design does not include place for a reserved public transport lane) and is no longer an element of the project, this contribution should be removed. Liotech declined to provide their co-financing for the project and was declared bankrupt in January 2016.

Annex 4 shows the complete list of the project co-finance received for each Component. Now that the project is finished it is possible to review the co-financing and additional resources provide by each city.

Table 11 through 15 show the project financing and co-financing for each SUT component in each city.

Table 11: List of Co-financing for Kazan projects for Component 2.

Currency rate: 57 rub: $1	**Project**	**Kazan City**		**Project**	**Kazan City**
Activity	**USD**	**USD**	**Activity**	**USD**	**USD**

ITMS Kazan	$210 539	$228 084	Road signs 2017		$175 449
Municipal street parkings 2015		$639 863	Road repairment 2017		$293 000
Municipal street parkings 2016		$222 820	Automated traffic management system 2017		$1 208 844
Road signs 2015		$175 449	*2018-2020 parkings*		$114 042
Road signs 2016		$175 449	*2018-2020 new tram line*		$61 407 172
New trams and trolleys		$8 954 218	*2018-2020 local small plans*		$1 960 643
Traffic lights		$1 772 036	*2018-2020 one-way streets*		$968 128
Automated traffic management system		$1 140 419	*2018-2020 new adoptive systems of traffic management*		$11 579 638
Safety constructions		$228 084	*2018-2020 extra parkings*		$1 754 491
Road repairment		$875 491	*2018-2020 road signs*		$43 862
Road marking		$2 740 514	*2018-2020 technical parts of road management*		$7 649 579
Parkings		$56 144	Route plan	$235 102	$210 539
New traffic lights 2017		$561 437	Parking elements	$175 449	$96 497
Safety constructions 2017		$293 000	Bike-infrastructure	$15 862	$21 054
TOTAL FOR KAZAN:				**$636 952**	**$105 545 945**

Table 12: List of Co-financing for Kaliningrad projects for Component 3.

Currency rate: 57 rub: $1	Project	Kaliningrad		Project	Kaliningrad
Activity	**USD**	**USD**	**Activity**	**USD**	**USD**
ITMS for Kaliningrad	$122 814	$263 174	*2018-2035 Road expansion 6*		*$2 694 020*
2015 New buses		$5 351 196	*2018-2035 Road expansion 7*		*$217 206*
2015 Road reconstruction		$701 796	*2018-2035 Road expansion 8*		*$165 975*
2015 Round-about		$701 602	*2018-2035 Adoptive road control 1*		*$163 694*
2016 New busses		$2 089 725	*2018-2035 Adoptive road control 2*		*$526 347*
2016 Road reconstruction		$979 662	*2018-2035 Adoptive road control 3*		*$315 808*
2017 Plans		$1 442 191	*2018-2035 Adoptive road control 4*		*$368 443*
2018-2035 Road reconstruction and renovating		*$11 053 291*	*2018-2035 Payed parking lots*		*$12 979 722*
2018-2035 Independent bus lanes 1		*$750 045*	2016 New part of Master-plan	$43 862	$173 168
2018-2035 Independent bus lanes 2		*$627 406*	2016 Road reconstruction		$7 277 597
2018-2035 Independent bus lanes 3		*$75 794*	2016 Bridge construction		$25 776 553
2018-2035 Independent bus lanes 4		*$447 746*	2016 New roads on the island		$1 785 605
2018-2035 Independent bus lanes 5		*$684 427*	2017 New roads		$963 805
2018-2035 Independent bus lanes 6		*$284 227*	2017 New bridge		$76 281 104
2018-2035 Independent bus lanes 7		*$479 151*	2017 Bridge reconstruction		$16 255 777
2018-2035 Independent bus lanes 8		*$345 108*	2017 New road		$4 992 136
2018-2035 Road expansion 1		*$1 555 180*	2018-2019 Road reconstruction 1		$1 240 646
2018-2035 Road expansion 2		*$376 514*	2018-2019 Road reconstruction 2		$4 220 705
2018-2035 Road expansion 3		*$177 554*	2018-2019 Road reconstruction 3		$1 789 543
2018-2035 Road expansion 4		*$184 046*	2018-2019 Road reconstruction 4		$618 910
2018-2035 Road expansion 5		*$217 732*			
TOTAL FOR KALININGRAD:				**$166 677**	**$187 594 333**

Table 13: List of Co-financing for Rostov-on-Dom projects for Component 4.

Currency rate: 57 rub: $1	**Project**	**Rostov**		**Project**	**Rostov**
Activity	**USD**	**USD**	**Activity**	**USD**	**USD**
ITMS Rostov On Don	$157 904	$171 940	New pedestrian zone 1		$142 286
Road reconstruction 1		$9 558 465	New pedestrian zone 2		$107 084
Road reconstruction 2 + traffic signs		$14 979 841	New pedestrian zone 3		$96 525
2016 Traffic signs		$1 240 549	2016 New trams		$9 211 076
2017 Traffic signs		$603 954	2017 New trams		$7 512 101
Pedestrian crosses		$2 179 077	*2017-2018 New trams in plans*		$38 598 794
Automated traffic light control renovation		$1 011 331	New route plan of Rostov On Don	$ 3 860	$88 567
TOTAL FOR ROSTOV ON DON:				**$161 764**	**$85 501 588**

Table 14: List of Co-financing for Krasnoyarsk projects for Component 4.

Currency rate: 57 rub: $1	**Project**	**Krasnoyarsk**
	USD	**USD**
ITMS Krasnoyarsk	$263 174	$263 174
Traffic lights		$128 078
New road turns		$7 709 407
Automatic traffic control		$107 024
Pedestrian crosses		$57 898
TOTAL FOR KRASNOYARSK:	**$263 174**	**$8 265 581**

Table 15: List of Co-financing for Irkutsk projects for Component 4.

Currency rate: 57 rub: $1	**Project**	**Irkutsk**
	USD	**USD**
Bike-infrastructure in Irkutsk	$263 174	$359 671
Road infrastructure renovation		$315 808
Traffic lights		$182 467
New road markings		$1 082 521
Road signs		$19 299
Pedestrian crosses		$731 623
Elevated pedestrian crossing		$368 443
TOTAL FOR IRKUTSK:	**$263 174**	**$3 059 832**

The overall comparative table, which reflects the ratio of the capital employed by the city administration to each dollar invested by the Project is shown below.

Table 16 :Total co-financing and Ratio of Co-financing per $1 project funding

	UNDP Component Funding	**Co-Finance**	**Co-Financing Ratio**
Component 2: Kazan	1,406,341	$105,545,945	$75
Component 3: Kaliningrad	1,353,925	$187,594,333	$139
Component 4: Rostov on Don, Krasnoyarsk, Irkutsk	1,111,346	$96,827,001	$87
Total	3,871,612	$389,967,278	$101

These are strong co-financing results for every city and project Component. There remains the question regarding whether or not the original co-financing for the bridge should be included in the amount for Kaliningrad. As pointed out in the MTR, the bridge was part of the original corridor that was canceled, and changes to the bridge design removed the public transports lanes which was to be a component of the SUT corridor. Even that co-financing is removed the project stills shows a strong result leveraging additional funding. GEF guidance suggests that co-financing ratio should be 6:1 or greater.

The primary project contribution for each city is the ITMS (except for Irkutsk) which really represents the main incremental cost that catalyzes further infrastructure investments related to SUT planning the flows from the ITMS exercise. Of course there are other expenditures in each Component but the ITMS is the core catalytic investment for the environmental outcomes associated for those cities.

3.9. Management of the Project Funds

The PMU did a professional job preparing project budgets and the UNDP staff have experience managing many projects so it was little surprise that the project accounts were managed quite well and actually very frugally by the PMU. The system and UNDP procedures include strong financial controls on how the project funding should be dispersed. As shown in Figure 3 the project stayed slightly under-budget for most of its time and there may be some funding left over by the end of the project that needs to be returned to the GEF. There were no reported irregularities regarding the project accounts.

3.10. Project Results

3.10.1. Overall Results

Each Component and the main Outcome are discussed in detail in the following sections and the justification for each rating is provided. Overall the project is rated as **Moderately Satisfactory** in accordance with the UNDP/GEF definition that "there were moderate shortcomings" in the project. These shortcomings are discussed in more detail in the following sections. Table 17 lists the five indicators for the Project Objective that the Project should monitor and report during its lifetime. The Evaluators have listed the PRF target values and the reported values achieved by the project.

Table 17: PRF Indicators for the Project Objective Reduction of the growth of GHG emissions from the transport sector in the medium-sized cities in Russia

Description of Indicator	**Baseline Level**	**Target level at end of project**	**Status at Project End**
1. Tonnes of CO2 emissions reductions resulting from transport modal switches to public transport services development of sustainable urban transit systems and increased use of low emission vehicle technology	0 ktonnes CO2	592.300 tonnes CO2eq direct reductions over 10-years after completion of Project	The target value **Partially Achieved** Direct GHG Reductions of 359,550 tonnes CO2eq claimed by the project over 10 years.
2. Number of firm plans from stakeholders for the implementation of improved public transport services in the pilot cities	No plans for improving public transport services	Prepare 3 firm plans for replicating pilot projects of sustainable urban transport services in Kazan and Kaliningrad or in other Russian cities	The target value **Over Achieved** Kazan and Kaliningrad plus three replication plans implemented for Krasnoyarsk, Irkutsk, Rostov-on-the-Don.
3. Number of financing institutions committed to financing SUT	No financing institutions committed to financing demo SUT	1 financing institution committed to financing demo SUT in Kaliningrad or Kazan by Year 2	The target value **Partially Achieved** Attempts to launch a leasing subsidy mechanism failed due to the lack of long-term co-financing commitment from the city budget. Further attempts to ensure financial commitments in any of the pilot cities were in vain as there were not positive trends in the investment climate nation-wide. However, the project provided a feasibility study and an engineering design for a SUT pilot introducing a rail-bus line connecting Kaliningrad city center with the city satellites. In 2017, the 3 rail-bus routes were financed and commissioned by the Russian Railways (RZD) according to the project plans. While not a financial institution

Description of Indicator	**Baseline Level**	**Target level at end of project**	**Status at Project End**
4. Percent increase in public transit ridership	0% increase on passenger trips on public transit in pilot cities due to preferred choice of private cars	33% increase in passenger intensity on public transit in pilot cities by Year 5	The target value **Unknown** The Project has difficulties with reporting % increase in public transit ridership, as the baseline data (that is, before the route network optimisation) is fragmented.
5. Increase in sales of low emission vehicles (EV)	Negligible sales of low emission vehicles (EV) in the automotive market in Russia	150 low emission automobiles (EV) sold and used a) in pilot cities and b) throughout Russia by Year 5	The target value **Fully Achieved** There was a clarification to have the EV as the primary option for the low emission vehicle under this indicator, it was suggested to go back to reporting on LEV including hybrids. Level at 30 June, 2017: 920 EVs throughout Russia and in pilots cities (as of January 1, 2017, according to Autostat), and 13,142 hybrids.
The project Objective is rated as **Moderately Satisfactory**			

The project partially achieved the GHG objectives in Indicator 1 for the project is discussed in more detail in Section 3.10.6.5. The second indicator regarding firm plans for SUT activities in pilot cities was Over Achieved by the project as the original target called for 3 such plans and the project has delivered 5 if Irkutsk is included. While the Irkutsk project activities focus on bicycle infrastructure for the city it does so in the context of improving multi-modal transport for an area of the city.

Indicator 3 is a great example of a poorly devised indicator and it is not understood how such an indicator for the overall project Objective stayed unimproved and unchanged through the entire project. It would have been better to focus on the number of financed SUT plans instead of the number of institutions. Likewise, the indicator is not specific whether it could/should be private institutions, state owned institution, or both. The interpretation from the project staff is that should have been a private banking institution and efforts to engage such companies failed in large part due to the financial crisis Russia endured starting in 2014.

Indicator 4 is an example of the project designer assuming that the project would get access to suitable data to construct a valid baseline scenario. This was not the case and the project cannot state with accurate data that it increased the public transport usage in either of the pilot cities. It was also a poorly formulated indicator because it assumes that the causal link exists between the project work and ***any*** public ridership increase in the pilot cities. Some alternative reporting was discussed by the project during the 2017 PIR such as “Percent Increase in Passengers per km”, which measures the efficiency of the Public Transport System. At the time of writing such statistics have not been presented.

Indicator 5 was also achieved and the target also changed during the course of the project. Originally it was only interested in EVs in the pilot cities of Kazan and Kaliningrad. Later it was changed to include all of Russia but it is another example of poorly formulated indicator target as it does not state if it is 150 EVs in each city, and in Russia (i.e. 450 EVs in total) or 150 for all of Russia, Kazan, and Kaliningrad. In 2015 shortly after the project begin there were 145 EVs in Russia and if hybrids were included the project made this target without

doing anything. On the other hand the targets in Kazan and Kaliningrad were only partially achieved as noted in the next sections.

Lastly, the PMUs final RUST report is lacking some key evaluations of the project's overall environmental impacts, mainstreaming, and sustainability. It only lists some individual environmental benefit projections for new pilot cities while dedicating an appendix to discussing the future of autonomous vehicles by the CTA, a topic barely addressed by the project. In the opinion of the evaluators' it should do a better job summarizing the project impacts and results in a clear way.

3.10.2. Component 1: Approved and enforced supportive federal policies, regulations, institutional arrangements to increase the use of low emission vehicles and development of SUT projects in Russia

Component 1 originally had 2 major objectives in mind, and that was to support regulations that would promote LEV market penetration and regulations that would promote SUT projects in Russia. Table 18 below shows the PRF indicators agreed for the project. The last column shows the status at project end.

Because the project had strong ownership from the Ministry of Transport over the course of the project the MoT developed a "fast track" program for project legislation. One consultant, Gleb Evgheniv, was working with the MoT and was dedicated to this project. According to Mr. Evgheniv, this is one of the reasons the project managed to get so many legislative proposals through the MoT and out to other institutions. The draft legislation would leave the MoT for comment from the other Ministries (Ministry of Industry, Ministry of Finance, Ministry of Environment etc.) and if Prime Minister issued a special decree for some of the legislation it could be reviewed in 4 months instead of the 10+ months. After which the legislation would then move to the Duma (Russian Parliament) for committee review and two hearings before it could be passed. Annex 7 lists the main draft legislative activities as part of Component 1 and the subsequent policy initiatives and the current status at project closing.

Much effort was put toward the drafting of Eco-labeling legislation (Activity 4 in Annex 7) but unfortunately this legislation has been stuck in the Duma since beginning of 2017. This activity represented large component of the effort to promote LEV vehicles in Russia after the project finished. It may still be passed in some form in the future, and according to Mr. Evgheniv part of the reason for the delay is that is being held up due to wrangling between the Ministries. For example, any fuel tax related to eco-labeling would be in the domain of the Ministry of Natural Resources and while an existing fuel consumption tax supports the budget of the Ministry of Transport. In his view the eco-labelling legislation would finish legal review and move forward in late 2018.

Table 18: PRF Indicators for Outcome 1: Approved and enforced supportive federal policies, regulations, institutional arrangements to increase the use of low emission vehicles and development of SUT projects in Russia

Description of Indicator	Baseline Level	Target level at end of project	Status at Project End
1. National strategy or "roadmap"• for market penetration of low emission vehicles	Only pilot plans such as Decree No N 488-PP by the Moscow government that has had little or no success in demonstrating low emission vehicles in Moscow	One national strategy or "roadmap"• for market penetration of low emission vehicles drafted, agreed with all relevant sectoral authorities and ***submitted*** to the Government	The target value **Fully Achieved**

Description of Indicator	Baseline Level	Target level at end of project	Status at Project End
2. System for collection and analysis of fuel consumption and operational information and data of urban vehicle fleets (ATP)	No collection of fuel consumption and operational information and data of urban vehicle fleets in any Russian cities	A model data exchange ***policy*** on vehicle fleets structure and composition (by fuel types, eco class, vehicle category, etc.) between the Traffic Police and municipal authorities	The target value **Partially Achieved**
3. Incentive policy options for promoting increased use of low emission vehicles in pilot cities	No policies or activities to promote the increased use of low emission vehicles in pilot cities	Report on policy options for increasing the use of low emission vehicles completed in Year 2	The target value **Fully Achieved**
4. Legal and regulatory framework for improved auto fuel economy has been adopted by the MoT and relevant authorities	No legal or regulatory framework in place for promoting low emission vehicles	*Proposed* legal and regulatory framework enabling access to low emission vehicles drafted and adopted by relevant governmental authorities. Requirements to improve fuel efficiency of traditional cars developed by the end of Year 4.	The target value **Partially Achieved**
5. Results-based changes to policies for modernizing city vehicle fleets and developing SUT projects based on information and data collected from pilot cities	MoT has no policies linked to the modernization of urban vehicle fleets or developing SUT projects	5 policy changes made by MoT on modernizing urban vehicle fleets and developing SUT projects (based on information collected from pilot cities) completed by Year 5.	The target value **Fully Achieved**
The rating of Outcome 1 can be described as: Highly Satisfactory			

Table 19: Eco-labelling categories proposed for Russia by the project

Class of vehicles	CO_2 emissions, g/km
A	from 0 to 50
B	from 51 to 95
C	from 96 to 120
D	from 121 to 140
E	from 141 to 175
F	from 176 to 220
G	more 221

It sounds relatively straightforward to produce and implement an "eco-labelling" system for automobiles and road transport; but in fact, in a country such as Russia with a huge body of existing legislation it is no minor task. Annex 8 provides an overview of the steps that the project considered necessary in order to fully implement such an initiative.

As one can see, it was a major undertaking and required the input and cooperation of several ministries and agencies. While the eco-labelling legislation has not been passed by the end of the of the project, there are many signs that elements of it will be implemented in a piece-meal manner to accomplish the same goals.

For example, due to hindrances within the Eurasian Custom Union to eco-labeling adoption, the the Ministry of Transport implemented a serious of practical steps towards implementation of eco-labeling principles in Russia. To promote the use of LEVs, the Ministry of Transport drafted the federal law "On the Management of Road Traffic" (submitted to the State Duma of the Russian Federation), which, among other things, gives the authorities of the Russian Federation a right to introduce entry restrictions for vehicles with low emission standards (under 4) in particular areas of the municipality, while also giving benefits for using LEVs to promote a wider use of LEVs. The federal law will enable introduction of restrictions on vehicles based on their emission standards and to prevent the entry of environmentally unfriendly vehicles, and it was adopted in December 2017, with the mentioned restriction coming into effect in July 2018.

A related success story produced by the project is an amendment to the Traffic Code which introduces traffic signage marking entry restrictions for vehicles with a low emissions standard, while also providing priority lanes for EVs. On 12 July 2017, in its Resolution No. 832 the Government approved and introduced new vehicle classes and concepts (electric vehicle, hybrid vehicle, traffic island, etc.) and the new road signs for these, e.g. "Area with Restrictions on Emission Class of Motor Vehicles", "Area with Restrictions on Emission Class of Heavy Duty Vehicles", "Filling Station with Electric Vehicle Charging Equipment", and "Vehicle Emission Class". This solves the issue of designating locations of charging stations and LEV parking places. It also creates the regulatory framework which helps Russian Federation institutions to ensure the introduction of restrictions on the entry of low emission class vehicles (e.g. under Class 4) into particular areas of municipalities. These changes will promote a wider use of LEVs in the future. The RF Ministry of Transport has also in the past years introduced significant changes in the policy framework related to bicycle traffic. In addition, amendments to the Traffic Rules and the Administrative Offences Code allows the introduction of fines for the parking of internal combustion engine vehicles in places designated for electric vehicles.

Overall, the project has done much for the development of the legal framework and institutional arrangements enabling the implementation of the government policy in the area of sustainable urban transport planning and low emission vehicles use. In another example in 2013 and 2014, the Project worked closely with the Ministry of Economy and Development to develop the Comprehensive Plan for Low-emission Vehicle (LEV) Production and Use. Approved on 22 October 2014 by the Deputy Prime Minister, the Plan clearly promoted the development and approval of a number of regulatory acts, which will enable implementation of all the measures for the development and operation of LEVs in Russia. For example, on 1 November 2016, RF Government Resolution No. 890, dated 27 August 2015, came into effect that obliged new filling stations to build EV charging bases on their premises, and from 1 November 2016 the state must keep statistics on all filling stations with charging bases for electric vehicles on their premises.

In February 2014, the Government also adopted several amendments to legislation that made the conditions of importing and customs clearing of electric vehicles better: the duties, tariff rates and cost of customs clearing reduced from 17% to 0% for electric vehicles, and from 15% to 5% for light duty trucks up to 5 tons. This customs duty reduction was designed to encourage the use of low-emission vehicle in the Eurasian Economic Union and to create conditions for the creation of an electric vehicle market. While such an effort started before the project, it signaled that the ideas the project were promoting had support in the Government.

At the present time, EV owners in several Russian cities (Moscow, St.-Petersburg, Kazan, Kaliningrad, Sochi, etc.) have been granted the right to park their vehicles on park-and-ride facilities and municipal parking lots. Moreover, electric vehicles can be parked free of charge in the paid parking area if the owner receives a

proper parking permit. In several regions (e.g., Moscow Oblast), vehicles equipped exclusively with an electric motor are exempted from the transport tax. The Kaliningrad Oblast has been contemplating similar steps with the project supporting the idea.

In addition, the Russian Government is considering programs for EV development in the Russian Federation until 2025. EV development support measures have been reflected in the *Strategy for Automotive Industry Development until 2025*. This strategy document proposes using both monetary measures to support demand for electric vehicles (use of various easy-term loan schemes and soft leasing schemes, exemption of EVs from transport tax), and non-monetary measures (right to use bus lanes free of charge, free parking within designated parking areas, soft tariffs on the use of toll ways). Furthermore, the plan is to grant electric vehicles using toll ways the same rights that taxis have there, and to create a special road sign "Parking Place for Private Vehicles with Electric Motors." For large cities, it is proposed to issue a regulation at the government level that establishes a "mandatory share of electric vehicles" to be used in public transport, and to work out proposals on equipping shopping center parking lots and city parking lots with charging stations. At least half of public transport in the Russian Federation must belong to the low-emission class by 2020.

Therefore several LEV/EV initiatives were supported by the project even though they have not totally born fruit by the end of the project lifetime. It's clear that the project strongly promoted policies to increase LEVs in Russia and that the project has had an impact that is only starting to be felt. But it was also believed by people involved in the project that some of the early Federal policies from 2014 were not due to the project and had more influence on the current market for EVs. In 2015, the number of electric vehicles in the Russian Federation was only 145. Then, according to the AVTOSTAT analytic agency, there were 647 electric vehicles in Russia as at 01 January, 2016. According to the AVTOSTAT analytic agency, there were 920 electric vehicles in Russia as at 1 January, 2017 and a doubling of electric vehicles by the end of 2017 to 1800.[2]

The project needed to collect data or get access to data on transport activities in order to drive the different ITMS models and environmental impact models. It was envisioned that the second activity in Component 1 would produce the "System for collection and analysis of fuel consumption and operational information and data of urban vehicle fleets" by creating a policy basis for data collection and information sharing. The draft policy and guidelines were developed successfully by the project but they have not been fully adopted and implemented yet. It is envisioned that when adopted there be in a place a system for estimating GHG emissions from urban and public transport traffic at the municipal level in Russia.

The other major element in Component 1 relates to promotion of SUT practices and policies throughout mid-sized Russian cities. Based on successful piloting of ITMS by the project in Kazan and Kaliningrad, and along with the numerous workshops, training, and draft policy measures, the potential greatest impact from the project is the *Decree of the Government of the Russian Federation of December 29, 2017 No. 443-FZ "On the organization of traffic in the Russian Federation"* that cities with a population greater than 10,000 must implement an ITMS. The law does not give a deadline or penalties for non-compliance but it does state that the ITMS study should be made for 15 years and reviewed every 5 years. It also gives local authorities the right to restrict vehicles by "ecological class" (among other categories). However, the eco-labeling system is not yet in place to register private vehicles by environmental class so that e.g. "E" class vehicles and worse could be banned from certain roads and districts.

[2] *https://www.autostat.ru/news/33405/*

In any case, this directive alone does validate much of the combined efforts of the project and in the evaluators' view makes Component 1 successful as it confirms the sustainability of the project goals in regards to implanting SUT concepts into a new generation of Russian city planners. Therefore, this component of the project is viewed as having a high long-term impact compared to its goals.

In the evaluators' view Component 1 should receive a ***Highly Satisfactory*** Rating as the long-term policy benefits from the project are many and the foundation is in place and clearly on the path to adoption.

3.10.3. Component 2: Increased use of low carbon modes of transport and improved urban mobility in Kazan

Most of activities and expenditures for Component 2 relate to

- SUT training and educational programs;
- support for the development of an ITMS for Kazan;
- support for the development of a centralized public traffic information management center;
- development of bicycle lanes throughout the city;
- development of a park and ride facility;
- and the Increasing of LEVs in Kazan.

Despite having several short-comings and challenges pointed out during the MTR Component 2 managed to deliver the major outcomes by the end of the project. It was pointed out at meetings in the local Ministry of Transport for Kazan Oblast and at the city Department of City Planning that the project and ITMS had a major impact on the development of the Oblast and City Master Plans for transport and development. Likewise, the success in Kazan was followed closely by other city administrators and it, along with Kaliningrad, served as demonstrator cities for ITMS implementation.

The main elements of the ITMS that the project supported were 1) a development of a system for paid parking in the city; 2) new priorities for LEVs in the public transport fleet; 3) pedestrian and cycling infrastructure; 4) intelligent multi-modal public transport design; and 5) road planning through 2030.

The project constructed almost 5 kilometers of bicycle routes in the city and another 21 kilometers are planned. The evaluators met with the local bicycle club who were very enthusiastic about the project and the cities plans for making Kazan even more bicycle friendly. A local planning and architecture firm had developed a large master plan for cycle routes throughout the city and this plan was being used by the city administration when developing their official plans. During the meeting with Timur Kadyrov, Deputy Chief Architect of Kazan, it was noticeable that many of the participants in the Kazan City Planning Department charged with developing the master plan were relatively young; and represent a new generation of Russian civil servant that have post-Soviet mentalities and are enthusiastic about outside ideas. They want to see a city that caters to pedestrians and bicyclists instead of only automobiles. It is a remarkable change in priorities in Russia and this project was timely in that it both supported these efforts but also found a receptive audience.

Table 20: PRF Indicators for Outcome 2: Increased use of low carbon modes of transport and improved urban mobility in Kazan

Description of Indicator	Baseline Level	Target level at end of project	Status at Project End
1. Number of trained staff of the Kazan Transport Committee who are adaptively managing public transport vehicles and traffic throughout Kazan	Zero trained staff of the Kazan Transport Committee for adaptive management of public transit vehicles and traffic for corridors	5 staff of the Kazan Transport Committee trained in adaptively managing public transit vehicles and traffic flows throughout Kazan by Year 5	The target value: **Over Achieved** 10 employees of the Kazan Transport Committee, 20 employees of subordinate to the Kazan Transport Committee organizations trained in the principles of adaptive management of traffic flows.
2. An established and operational urban transport planning and management cell	No authority for the planning and management of the urban transport in Kazan	One fully functional authority that is responsible for planning and management of urban transport in Kazan by Year 3	The target value: **Fully Achieved** The Traffic Planning and Management Department on the basis of the Kazan Civil Engineering Institute (Kazangrazhdanproyekt) was established.
3. An environmental monitoring cell/group of experts to monitor transport conditions, transport-related GHG emissions and environmental quality	No environmental monitoring cell exists in Kazan to monitor transport conditions, transport-related GHG emissions and environmental quality	One environmental monitoring cell/group of experts is established within Kazan to monitor transport conditions, transport-related GHG emissions and environmental quality by Year 3	The target value: **Fully Achieved** The monitoring group was established as part of the Single Information Traffic Management Centre.
4. An integrated Traffic Management Scheme (ITMS) and updated master plan for Kazan beyond 2013 approved by Kazan Administration	No ITMS in Kazan	An integrated Traffic Management Scheme (ITMS) and updated master plan for Kazan beyond 2013 approved by Kazan Administration by Year 3	The target value: **Fully Achieved** The Administration of Kazan is incorporating ITMS suggestions in the Master Plan.
5. Pilot projects for parking policy implenentation and infrastructure development that is user-friendly to pedestrians and cyclists	Parking plans exist with all proposed lots located in the downtown area of Kazan with no planned improvements for pedestrians and cyclists	10 km of pedestrian and cyclist routs, as well as 3 streets with parking restrictions by Year 4	The target value: **Fully Achieved** With respect to parking restrictions, the target indicator was reached in 2015. 4.8 km of bike lanes put into operation in and construction of new bike routes (21 km) designed by the project will take place in 2018 as verified during the TE.
6. Number of low emission vehicles in use in Kazan.	No low emission vehicles (on improved EV and PHEV technology) n use in Kazan.	12 low emission vehicles in use in Kazan based (on improved EV and PHEV technology) and a ***network* of charging stations by Year 5**	The target value: **Partially Achieved** 13 EVs are in operation in Kazan. 1560 low emission vehicles on PHEV technology in use in Tatarstan Republic. First charging station for electric cars has been launched.

Description of Indicator	Baseline Level	Target level at end of project	Status at Project End
The rating of the Component 2 can be described as: Highly Satisfactory			

One component activity for community of practice and capacity building was the series of SUT design courses made for a "summer school" around a case-study called "Kompressorniy" (the local name of the location in Kazan). This was a design study, involving several teams, for the development of a multi-model transport hub for the city. By all accounts this program was considered a big success and the course material is being re-used for future courses. In addition the project trained personnel at the Kazan Transport Committee who are actively managing public transport vehicles in the principles of adaptive management of traffic flows.

We were taken on a tour of the city's new paid parking spaces and while such things are common in many countries, Kazan was only the second city to implement paid street parking in Russia. It was a modern system and enforcement was done using an automated system that scanned license plates while the enforcement agent drove on the street. It was also noted that several drivers were trying to cheat enforcement by hiding their license plate partially or removing it altogether. Apparently, the city could not currently fine them for such actions because it was a different jurisdiction and laws that would deal with such acts.[3] According to the city official the majority of people paid for the parking as required.

[3] However, in a twist of the escalating creativity in the battle between parking violator and city officials, flagrant violators that removed their license plate could in fact be reported as a suspicious security risk to the local police (who could involve an anti-terrorism unit) and risked having their car searched and impounded.

Figure 5: Parking spaces in the center of Kazan along with bicycle lanes proposed by the project.

The city invested in new public transport vehicles during the project lifetime: 108 new buses, 23 trams, and 37 trolleys. There are also 13 EV's in operation in Kazan along with 1 charging station, with plans for more. We visited the city's public transport dispatch and control center where public transport was being monitored in real-time. The system was designed and developed as an outcome of the ITMS and one the project recommendations was the development of this joint management center for the public transport. This in turn improved the reliability of the transport and statistics showed an improved regularity of the schedules. An environmental monitoring group was also established as part of the Traffic Management Centre.

The co-financing commitments for this component amounted to approx. $105 million USD, which means the project leveraged $165 USD for every USD $1 that it spent on this component, which is a strong result by any measure. Considering the fact that this component was behind during the MTR it is a testament to the good management and persistence of the team that all the components were completed on time. Because of the successful completion of the component's goals and its high level of impact on the city of Kazan and its decision-makers, Component 2 is evaluated as being ***Highly Satisfactory***.

3.10.4. Component 3: Increased use of low carbon modes of transport and improved urban mobility in Kaliningrad

Most of activities and expenditures for Component 3 relate to

- SUT training and educational programs
- support for the development of an ITMS for Kaliningrad
- development of feasibility study and engineering plans for two new modern SUT solutions for the city
- development of demonstration projects related to a SUT corridor
- monitoring system for transport related GHG emissions for the SUT corridor and city
- support for the development of a centralized public traffic information management center
- increasing the number of LEV's in Kaliningrad

The Kaliningrad component had several early successes due to the Project Manager's familiarity with the city administration and his ability to engage stakeholder interest in the region. Later some of the planned activities that the city had agreed to do for the project were impacted by the economic difficulties Russia faced in circa 2014-2015 due to sanctions, a low oil price, and subsequent devaluation of the ruble, etc. Because of the economic turmoil the City Budget was reduced between 2017-2019 and the agreed co-financing for the project could not be supported. Thus, the original plan for a SUT pilot corridor as envisioned in the ProDoc could not be fully funded:

Measures to increase efficiency along selected SUT corridors would include organized parking, integrated traffic management, dedicated lanes for public transit vehicles, and the integration of urban and transit planning. A holistically planned SUT system would include space requirements related to land-use planning, physical integration of main bus rapid transit routes and feeder routes with the urban transport network, organized parking lots near bus stations, user-friendly transfer points including safe pedestrian walkways between bus stops, economic incentives for commercial development near main transit routes and transfer stations, sustained financial viability of the integrated SUT system, enhanced public outreach and fostering the formation of public-private partnerships;

The delivery of this output [3.4] would require detailed engineering designs and implementation plans from Output 3.3 and the execution of the contracts for the overpass, road improvements and bus stops, installation of the trolley system, and synchronized lighting, and the development of information for the public on the SUT system with regards to bus schedules, routings, connections to other bus routes as well as the installation of signs along the SUT corridor (Years 4 and 5). GEF assistance will be used to assist the Office of the Chief Architect in the management oversight of the construction of the SUT corridor and to ensure implementation is on time, budget and meets international standards for quality.

Since the previously envisioned SUT corridor was canceled some elements and budget of that activity were re-directed to other opportunities in the city, and one can argue this was good case of adaptive management by the project team. Some Component 3 funding was also moved to support replication activities in Component 4.

As part of the Kaliningrad ITMS recommendations, the city phased out the majority of the privately run mini-buses (approximately 250 mashutkas) and replaced them with a larger modern and low-emissions class bus fleet while rationalizing the routes. This improved safety, reduced emissions, and gave a better public transport experience for the locals. We visited the largest company operating bus routes in the city (Kaliningrad GorTrans) and we were given a demonstration of their pilot automated system for counting passengers entering and exiting the buses. This system is used for optimizing bus routes. According to the former project focal point in Kaliningrad, Sergei Melnikov, it was no minor task to take over the routes claimed by the mini-buses (sometimes referred to as the “mashutka-mafia”). Eventually these small companies were pushed out and a better system was installed.

Another recommendation from the project during the development of the ITMS and SUT Corridor was a new train line[4] connection into Kaliningrad center from the suburbs. This new line cut the commute from 1 hour (with traffic) to about 15 minutes. The train was literally packed with commuters when the evaluation team took it, and everyone had to stand during the journey during the morning rush hour, a signal of how much it was needed by the citizens.

[4] http://www.eurasia.uitp.org/kaliningrad-opened-ground-metro-line

Figure 6: The new Kaliningrad commuter train line at the station.

The project and ITMS also proposed 9 connection hubs for transfer from regional to urban public transport, and this was doubled to 18 hubs. These hubs will provide stations for the regional buses and transfer the passengers onto a more efficient urban public transport network.

Table 21: PRF Indicators for Outcome 3

Description of Indicator	**Baseline Level**	**Target level at end of project**	**Status at Project End**
Integrated Traffic Management Scheme (for road transport) and new public transit scheme for Kaliningrad based on sustainable urban transit (SUT) principles	Integrated Traffic Management scheme is developed but not approved. There are insufficient funds to allow the CTS to be developed with modern planning practices and traffic modeling	· A completed CTS and ITS developed with modern planning practices and traffic modeling by Year 3	The target value: **Fully Achieved** ITMS developed for Kaliningrad.
Bankable feasibility study for pilot SUT corridor in Kaliningrad	Feasibility studies and plans that are unable to attract sufficient funding for constructing a modern SUT corridor	One bankable feasibility study for a pilot SUT corridor in Kaliningrad by Year 3	The target value: **Fully Achieved** The feasibility studies for pilot SUT lines in Kaliningrad prepared in previous periods will not be implemented due to the city's budget limitations. However, one plan was financed by the by the Russian Railways who commissioned 3 rail-bus routes in 2017.

Description of Indicator	**Baseline Level**	**Target level at end of project**	**Status at Project End**
Detailed engineering designs and implementation plans for the pilot SUT	No engineering designs and implementation plans for SUT corridor	·Detailed engineering designs and implementation plans for SUT corridor by Year 4	The target value: **Fully Achieved** The pilot SUT project planned in the Project Document will not be implemented due to failure of the city to fulfil co-financing commitments. As confirmed in the official correspondence from the city, the Kaliningrad budget for the years 2017-2019 is being drawn in the context of shrinking revenues of the city, therefore it is impossible to find the means to procure new trolleybuses with off-line running mode.]
An operational SUT pilot corridor	No operational pilot SUT corridor	One operational pilot SUT for Kaliningrad by Year 5	The target value: **Partially Achieved** Demo 1: The city decided not to implement the pilot SUT line between the Yantarny sports centre and the city centre Demo 2: 3 rail-bus routes commissioned by the Russian Railways based on the feasibility study and engineering design developed by the Project Demo 3: Development of the concept and implementation of the pilot project on ICT computer-aided payment system for passenger transport in Kaliningrad postponed till 2018 at the city's decision. The city is committed to 100% financing of the pilot Demo 4: Operational Traffic and Transit Management Center will manage all the services of the city's traffic complex, ensure timely adoption of measures to control the situation in the streets, and ensure priority passage for the urban transport.
Monitoring system for GHG emissions for pilot SUT corridor	No monitoring of transport-related GHG emissions for the city	Indicator changed by project to: GHG Monitoring system for the pilot city	The target value: **Fully Achieved** The system for monitoring GHG emissions from road transport in Kaliningrad created on the basis of the Bezopasnyi Gorod (Safe City) state budgetary institution was put into operation.
Number of low emission vehicles in use in Kaliningrad	No low emission vehicles (improved EV and PHEV technology)in use in Kaliningrad	6 low emission vehicles in use in Kaliningrad (based on improved EV and PHEV technology) and a ***network of charging stations*** by Year 5	The target value: **Fully Achieved** 3 EVs, 10 hybrids and 3 charging stations.
The rating of Component 3 can be described as: Satisfactory			

Another accomplishment in Kaliningrad, besides the ITMS development, was the establishment of the Traffic and Transit Management Center that manages all the services of the city's traffic complex. The Project established the Traffic and Transit Management Centre jointly with the city, assisted with purchasing the software and hardware package for traffic and transit management, and with training the centre staff. The Centre manages regular passenger and freight transit by road transport, urban ground electric transport on municipal routes, and manages road traffic by means of computerised systems.

We visited this facility during the trip to Kaliningrad and observed all the city's buses and other public transport bring tracked in real-time. A group of analysts could see each vehicle send messages to drivers that were behind schedule or for any other reason. They were also in the process of implementing to an app based payment system through Yandex, i.e. one could find the best route to take with the Yandex app and have your ticket paid and validated through the app. Eventually it would work with different modes of public transport.

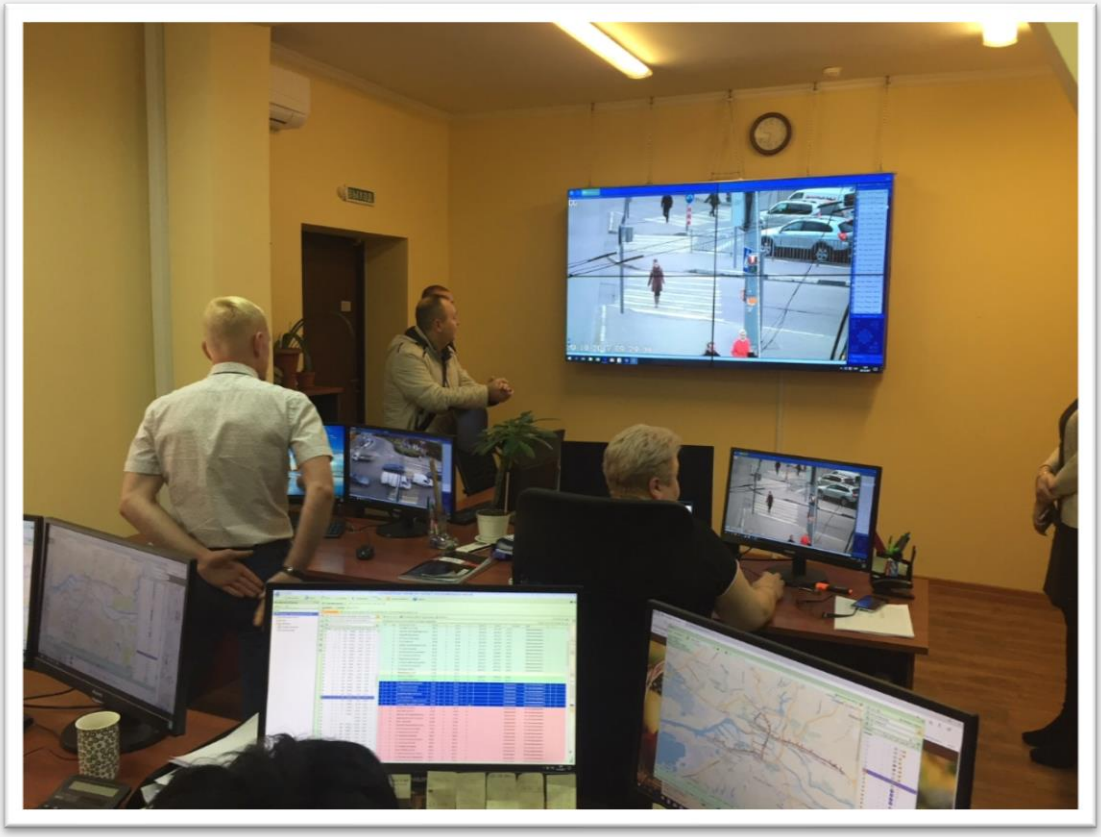

Figure 7: Photo from the Kaliningrad Traffic and Transit Management Centre showing the road intersection monitoring capability on the large screen.

One driver for the improvement of the city transport is the upcoming FIFA Worldcup being hosted by Russia in 2018. Kaliningrad is one of the host cities and all along many of the improvements as suggested by the project and ITMS are being made with the Worldcup in mind. The city needs to cope with a large influx of tourists and football fans due to its location as the closest Russian host city to Western Europe. Therefore, the project initiatives to make the city more accessible by bicycle and improve the public transportation are timely.

In Kaliningrad, the Project also carried out a pilot unprecedented in Russia: the city implemented a climate-based city-planning policy and established a precedent where the city's master plan became "greener" in

that is was prepared to minimise GHG emissions. A chapter for the Kaliningrad master plan was developed by the project which covered the decisions which influenced GHG emission and difference scenarios. The proposed scenario assumes an increase in the share of public transport to ensure the mobility of the population. According to project estimates, even if the master plan is met 40% of the plan is implemented this could mean GHG reductions of 3.9 million tonnes of CO2 by 2035.

In regards to low emission vehicles, besides modernizing the city's bus fleet, the project was also instrumental in getting 3 pilot EV charging stations (Figure 8) installed in Kaliningrad by the electricity grid operator Rossetti which is potential basis for a city-wide network of charging stations. While there were not many EVs in Kaliningrad during the project period (< 5) it is hoped that the access to public charging stations will incentivize more people to purchase EVs. The PMU had hoped for a greater market penetration of EVs in Kaliningrad but at least there is some foundation for more vehicles on the road.

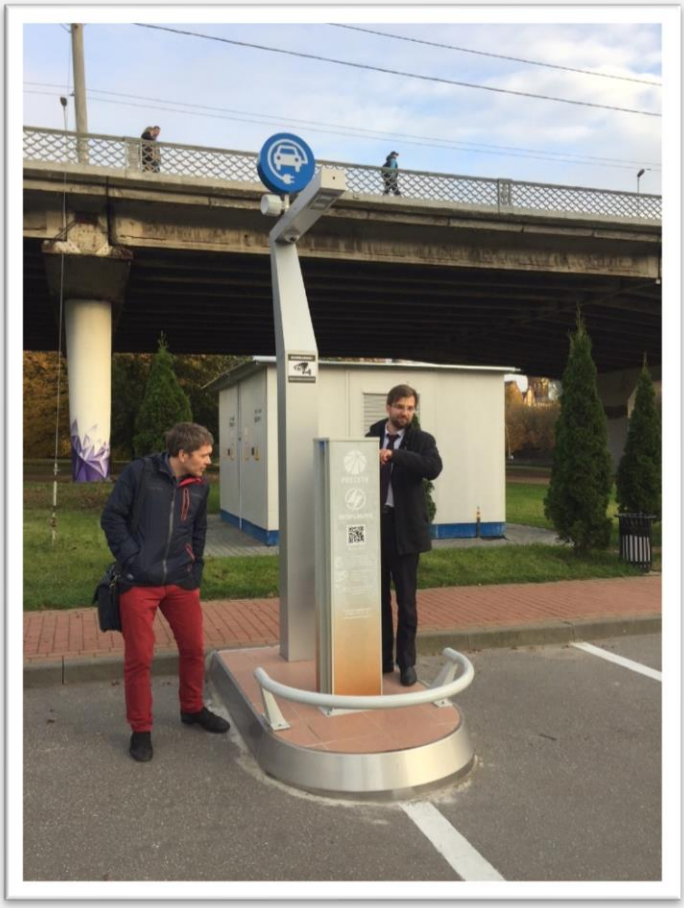

Figure 8: Photo of one of the Kaliningrad EV charging stations.

As mentioned earlier, this component suffered a major setback when the co-financing for the SUT corridor was withdrawn by the city. Despite that, the project did manage to have an large impact with the city administrations and the ITMS and Master Plan contributed to long-term positive results, therefore, Component 2 is evaluated as being **Satisfactory**.

3.10.5. Component 4: Successful pilots on SUT projects and low emission vehicles replicated in pilot cities and other medium-sized cities in Russia

This component is focused on replication activities and was the component that received the most recommendations during the mid-term review due to the limited work that had been done on the activities. At the time of the MTE there was not a dedicated manager for this component and the scope of the activities for this component were initially more limited, as planned in the ProDoc. One of the recommendations from the MTE was the hiring of a dedicated manager for Component 4.

Stimulated by the RTA, the Project Steering Committee in November 2015 endorsed the decision to reallocate financial resources to Outcome 4 for the replication of the successful SUT pilots in other cities. The MTR also suggested *that alternative work should be found to compensate the lack of achievement of the initial GHG reduction target of 480 kt CO2 in 10 years associated with 20,000 additional LEVs, mainly in Component 4.* The National Implementing Partner provided essential institutional support in implementing this key decision for the project. A call for proposals was made by the MoT and project, and 5 pilot cities were pre-selected in February 2016 for replication and expressed commitments to co-finance replication pilots. Again, this is a good example of adaptive management by the project team.

So the major activities for Component 4 were related to:

1. Establishment of a SUT center of competence and education
2. Dissemination activities to showcase the project experiences to a larger audience in Russia
3. SUT replication activities in new mid-size cities

The project made arrangements for a "Department of Sustainable Urban Transport" to be jointly by the Moscow State Automobile & Road Technical University (MADI), and the Scientific and Research Institute of Motor Transport (NIIAT). An Agreement between the MADI, NIIAT and Project on joint implementation of the mentioned activities was signed in February 2017.

According to the project the main purpose of the Department activities is to improve the educational process through the development of practice-oriented relations of MADI, Project and NIIAT. To accomplish that they will:

1. Organize and conduct lectures in innovative forms related to scientific and practical problems/issues of sustainable urban transport with the involvement of Russian and international leading experts in respective fields;

2. Develop scientific research activities of the Department with the involvement of students, postgraduates, teachers, and academics;

3. Provide and perform educational, research and real working practices aimed to enhance the professional orientation of the students.

The Department held three scientific workshops on sustainable urban transport with the Project's support.[5]

Table 22: PRF Indicators for Outcome 4

[5] https://www.niiat.ru/news/919/

Description of Indicator	**Baseline Level**	**Target level at end of project**	**Status at Project End**
Information on SUT projects and low emission vehicle demonstrations in Kazan and Kaliningrad	No information on SUT projects or low emission vehicle demonstrations in Kazan and Kaliningrad	Reports and workshop proceedings on SUT pilot projects and low emission vehicle demonstrations in Kazan and Kaliningrad by Year 5	The target value: **Fully Achieved** Information on SUT projects and low emission vehicle demonstrations in Kazan and Kaliningrad is uploaded to the web-sites of the Project and UNDP Russia, and to the websites of regional mass media.
Workshops and other media to disseminate SUT and low emission vehicle demonstrations in Kazan and Kaliningrad	No dissemination activities on any SUT activities	5 workshops conducted to disseminate SUT and low emission vehicle demonstrations in Kazan and Kaliningrad by Year 5	The target value: **Fully Achieved** Dissemination of information about SUT Projects and LEV demonstration in Kazan and Kaliningrad continues. The following activities carried out by the project: Four workshops, three round tables, a biking congress and a summer school.
A Center of Excellence for SUT development in Russia	Plans for establishing a Center of Excellence for SUT development in one of the piiot cities	A strengthened Center of Excellence for SUT development is established in Kazan/Kaliningrad by Year 5	The target value: **Fully Achieved** The Department of sustainable urban transport established jointly by the Moscow State Automobile & Road Technical University (MADI), and the Scientific and Research Institute of Motor Transport (NIIAT). The Agreement between the MADI, NIIAT and Project on joint implementation of the mentioned activities was signed on 27.02.2017. The Department held three scientific workshops on sustainable urban transport with the Project's support. https://www.niiat.ru/news/919/ The audience of each workshop included more than 150 people including representatives of federal and regional authorities, the scientific and expert institutes, postgraduates and students. The programme of the international scientific lectures is based on international and Russian best knowledges. The course also is providing opportunities for all participants to take part in interactive discussions and case study presentations. Thus, information about SUT is being disseminated on a regular basis. Moreover, it will be disseminated after the Project implementation too.
Number of awareness raising activities (i.e. marketing campaigns,	No advertisements on low-emission vehicles sales in Russia	5 television spots, 5 magazine ads and a SUT webpage on the benefits of low emission vehicles and	The target value: **Fully Achieved** During the reporting period, the Project held several large-scale international events. These

Description of Indicator	Baseline Level	Target level at end of project	Status at Project End
etc.) for low emission vehicles and SUT projects		SUT projects on the environment and health that have raised public awareness on their benefits to health and environment are completed by Year 5	include the II International Cycling Congress in Moscow on 14 - 15 April 2017; International Summer School "Transforming the public transport and communication space of the city. The transport hub "Compressorniy" organized in Kazan in August 22-26, 2016; the 5 round tables and seminars.] Project activities and trainings helped raise awareness of the issues of SUT, low emission vehicles, urban environment and climate change among government authorities, profit and non-government organizations, community-based associations and society as a whole. The Project continued to support promotion of five short videos related to eco-driving, greater use of public transport, cycling and walking and sustainable transport systems. The videos were massively posted in major social media to raise awareness of city residents in Russia about the benefits of low-carbon vehicles, sustainable urban transit system and alternative transport modes in urban environment. Also, the Project takes pride in its achievements to engage Russian cities in the European Mobility Week (16-22 September) and the Global Day without Cars (22 September). In 2014, the Project became an official Russian national coordinator of the European Mobility Week. Thanks to the Project's efforts, the list of Russian cities officially participating in the Week and the World Day without Cars grew from two cities in 2013 to 58 in 2016. In 2017, the Project expects the participation of more than 70 cities. The Project helps promote healthy lifestyle, involve new groups of population and organizations into cycling and hiking and promote the use of public transport instead of private vehicles.
Number of SUT replication plans using Kazan and Kaliningrad pilot projects as a basis.	No replication plans for SUT for any cities in Russia	5 SUT replication projects proposed based on modules from lessons learned from the Kazan and Kaliningrad pilot SUT projects by Year 5	The target value: **Partially Achieved** Four SUT replication plans are being implemented (1 in Krasnoyarsk, 2 in Irkutsk, 1 in Rostov-on-the-Don).
Number of SUT professional training curricula	No advanced training courses in Russia for municipal staff on urban transit systems and best practices.	1 formal curriculum or advanced training course on SUT	The target value: **Fully Achieved** One syllabus for the subject matter "Sustainable Urban Transport Systems" developed.

Description of Indicator	Baseline Level	Target level at end of project	Status at Project End
	Federal state educational standards for higher vocational education for specialists and engineers in traffic management are lacking any disciplines that teach students SUT best solutions and practices	1 SUT methodology training set as part of training course on Transport Technology (bachelor degree) for Road Transport Management engineers	
The rating of Component 4 can be described as: Satisfactory			

The Project also developed the following proposals to improve the education of city officials:

a) Drafts laws and regulations establishing a standard additional curriculum in SUT planning and road traffic management for managers and staff members of municipal and city administrations, and proposals on amendments in the existing laws and regulations required to introduce the curriculum;

and (b) Drafts laws and regulations establishing a list of professions and positions of staff members directly involved in the organisation of road traffic, and their pre-requisite professional competences and skills.

The project did the normal package of online dissemination through a project website, accounts on Facebook, Vkontakte, Twitter, Odnoklassniki, and youtube videos promoting:

- Advantages of urban public transport;
- Cycling;
- Eco-driving;
- Low-carbon transport;
- Sustainable urban transport

Reviewing the website[6] one sees periodic updates and it is used to disseminate project reports and other information to the media. It is an above average website for UNDP projects and the team did a good job with the design. Its not known how much traffic it received but it is a good platform for viewing the results even after the project finishes. The videos on youtube were posted in major social media to raise awareness in Russia about the benefits of low-carbon vehicles (16,971 views), eco-driving (13,462 views), sustainable urban transit system (111,066 views) and alternative transport modes in urban environment and cycling (6,636 number of views). For a country of 144 million people these statistics are probably considered below average but a focused effort was made to engage the media and population in a topic that is difficult to make trendy, and by according to several people interviewed the project accomplished that goal.

[6] http://www.proecotrans.ru

Other promotional events include the International Cycling Congress in Moscow on 14 - 15 April 2017, the International Summer School organized in Kazan in August 22-26, 2016, and 5 round tables and seminars in Moscow, Kazan, and Kaliningrad. The project also engaged Russian cities in the European Mobility Week (16-22 September) and the Global "Day without Cars" (22 September). In 2014, the Project became an official Russian national coordinator of the European Mobility Week. Due to the Project's efforts, the list of Russian cities officially participating in the Week and the World Day without Cars grew from two cities in 2013 to 58. A comprehensive list of the events organized by the project is given in Annex 9.

The largest effort and budget for Component 4 was put into the replication of SUT ideas for new cities in Russia. Following the MTR, a dedicated person was hired to plan and coordinate these activities. With the MoT taking the lead the project had an open call for proposals from Russian mid-size cities to participate in the project at the beginning of 2016. The call received proposals from 34 cities in Russia which is a strong result, approximately more than half the mid-size cities in Russia (out of 60) applied.

Five cities were eventually selected for pilots and further negotiations: Irkutsk, Rostov-on-Dom, Penza, Krasnoyarsk, and Tyumen. After the Project Steering Committee in July 2016, it was decided to change the initial agreement implementation procedure (which proposed splitting the financing and the works between the Project and the city), the agreements were adjusted and underwent additional approvals; the approval process of the contents and format of the joint work with the pilot cities was completed in September 2016.

Agreements with the administrations of new Project pilot cities (Penza, Irkutsk, Krasnoyarsk, Rostov-on-the-Don) were signed in Q3 2016. As a result of the changes in the agreement with the MoT and the project, Tyumen officially withdrew its application. The primary objection that Tyumen officials had related to who would control and run the tenders for the SUT contractors. In the revised agreement the MoT and the NIM would run the tenders and select the winners instead of the City Administration.

Additionally, during the procurement process for Penza demos it was discovered that one tender participant had a conflict of interest. Upon additional consultations with the UNDP management and after the Project Steering Committee's meeting held on 24.11.2016 the tender was cancelled.[7]

At this point it is worth noting that the management for Component 4 had a high turnover and lacked continuity. In a period of 2 years two managers were hired and then let go by the project. The first resigned at the beginning of 2016 and the second did not have his contract extended in the Spring of 2017. This resulted in the Deputy Project Manager taking over the tasks in Component 4 until the end of the project. It also caused many distractions for the UNDP staff that were discussed in the Management Section. The end result is that there was definitely a "sub-optimal" situation to not have a dedicated manager for Component 4 during the final year of the project. It is speculative whether more could have been achieved by the project if this had not been the case, but it is the evaluators' opinion that it would be highly likely that the results for Component 4 would have been similar as there was not any time left to include new cities into the replication program.

In any case, out of five replication pilots originally planned, three pilot cities had SUT projects implemented:

[7] During interviews the Evaluators have heard slightly different versions as to why the Penza tender was canceled. This version is taken verbatim from the 2017 PIR, page 32. The Tender for Rostov-on-Dom was also flagged for having a conflict of interest by the manager of Component 4 at that time. However, after an internal review by UNDP and changes in the selection committee for Rostov it was deemed that no conflict of interest was present.

1. Krasnoyarsk: “Development and implementation of an Integrated Traffic Management Scheme (Sustainable Urban Transport Plan) for Krasnoyarsk for 2017-2032 with Account for the 29th Winter Universiade in 2019”
2. Rostov-on-Don: “Development of an Integrated Traffic Management Scheme (Sustainable Urban Transport Plan) for Rostov-on-the-Don for 2017-2032”:
3. Irkutsk: “Justification for the creation of bicycle infrastructure in the multimodal corridor on the Barrikad street in Irkutsk”.

For Krasnoyarsk and Rostov a comprehensive analysis of the traffic situation in both cities was performed, comprehensive surveys of transport and pedestrian flows implemented, and a full analysis of technical traffic planning facilities and available parking spaces were conducted. In the course of the works, Project contractors (Scientific and Research institute of motor transport (NIIAT) and Don State Technical University) designed comprehensive traffic simulation transport models using PTV VISION VISUM and AIMSUN software packages. Based on the traffic survey data, the simulation transport models were calibrated to cover three estimated periods: morning, daytime and evening. Moreover, forward-looking models for 2032 are under development to forecast the traffic situation. The ITMSs interventions will fall into the following main components:

- Activities to improve traffic conditions;
- Shaping a single urban parking space;
- Development of high speed public transport;
- Proposals for developing ATCS and ITS services before 2032;
- Creating relaxed traffic areas and streamlining speed rates;
- Developing a freight transport system including intercepting parking lots;
- Proposals for developing pedestrian traffic and recreation areas;
- Developing cycling infrastructure;
- Outcomes of the recommended and maximum implementation scenarios by 2032.

As part of the final activities in the project, some estimates of the future GHG reductions due to these ITMS recommendations were made.

For Irkutsk, during the reporting period the contractor NIIAT has undertaken the following:

- Comprehensive analysis of the traffic situation on the Barrikad street in Irkutsk;
- Comprehensive surveys of transport and cycling flows, analysing the road network with respect to the possibility of construction of bicycle lanes;
- Full analysis of technical cycling planning facilities and available space;
- Development of the detailed transport model of the multimodal corridor on the Barrikad street in Irkutsk;
- Forecasting of demand for transportation using bicycles and vehicle – bicycle tradeoffs;
- Design of cycling infrastructure facilities, ensuring their connectivity to the facilities of other means of transportation;
- Development of feasibility studies and technical documentation.

As part of the Terminal Evaluation phone/skype interviews were held with city officials, but as no public works had started it was not deemed necessary to visit the cities during the evaluation. According to everyone interviewed the project was credited with providing excellent assistance and in the case of the ITMS development, an excellent planning tool for the city’s transport infrastructure.

Evaluating Component 4 is more difficult than the others because much of the concrete results and public works will not be implemented until after the project finishes. Even the GHG reductions calculated by the project for Component 4 were small in relation to the post-MTR goal of finding alternative work to compensate for the lack of achievement of the initial GHG reduction targets associated with LEVs. On the other hand the project produced a wide and strong awareness raising campaign in the general population and public administrations.

It's also difficult to fault the project management for the cities of Tyumen and Penza leaving the project. Tyumen withdrew and Penza was cancelled for the right reasons. It most likely would have been worse if Penza had been allowed to continue to participate. The rationale given for not looking for additional cities was simply that there was not enough time left before the end of the project to run another tender[8], select the cities, finalize the contracts, and start the program. This is logical and if the project had been given a 1 or 2 year extension, as many GEF projects have received, then it is possible that additional cities could have joined Component 4 and it would have had more accomplishments to showcase by the end of the project. The main long-term positive outcomes from Component 4 relate to the Sustainability of the project results, which is seen to be highly likely by the evaluators as discussed in Section 3.14. Overall Component 4 is evaluated as **Satisfactory**.

3.10.6. Assessment of the Project GHG Reductions

The project management hired an external expert at the end of 2017 to revise the project estimates for GHG reductions. The work was finalized in the Spring of 2018 in part because of the inadequate monitoring which was an issue also discussed in detail in the MTR, and the need to redo the calculations using better assumptions. In the view of the evaluators the expert did a good job using conservative assumptions and correct methodologies. The expert reviewed the project activities and monitoring, and had the following statement:

> *The activities [in Table 23] were assessed to be generally in compliance with GEF criteria for direct impacts: (a) activity implemented during project lifetime; (b) activity funded with GEF or co-financing resources; (c) activity tracked through project logframe and M&E system. However, the reservations highlighted in the author's 2016 report about a number of the activities missing from the project M&E system still hold: key project actions that lead to measurable direct GHG impacts should have had corresponding indicators in the logframe and be tracked through M&E system. This would have enabled more accurate assessment of the resultant GHG impact based on actual observed data (rather than estimated). Collection of appropriate factual data to estimate impact of actions implemented by the project – and the need to have respective indicators and targets in the logframe – has also been raised as an important issue by the mid-term evaluation.*

So one can surmise that some of the recommendations for modifying the PRF and baseline data collection activities were not prioritized enough by project management after the MTR or that project partners did not follow through with the data collection in the pilot cities. The main issue is the lack of baseline data for e.g. public transport usage to support some the calculation of the GHG reduction activities and the lack of a monitoring of traffic flows to estimate the redistribution of passenger traffic between various means of transportation due to measures developed by the Project for Kazan and Kaliningrad. Nevertheless, it is useful to compare the final project GHG reduction estimates with the targets in the ProDoc.

[8] According to PMU UNDP procedures required a new tender to be done instead of selecting new cities from the pool of 34 original applicants.

Table 23: Project activities generating direct (including secondary) GHG impact

Activities	Immediate result	GHG impact
Component 1 – supportive policies for low-emission vehicles (LEV) in Russia *(direct secondary impact)*		
1.4, 1.5 Roadmap for LEV promotion in Russia	Increased market penetration of LEVs in passenger vehicle fleet	Reduction in GHG emissions from road vehicles through decreased carbon intensity of fuel
Component 2 – pilot actions in Kazan		
2.5.2 Construction of bike lanes in Kazan	Modal shift from motor vehicle usage to biking	Reduction in GHG emissions from road vehicles through decreased consumption of fuel
2.2.2, 2.4.1 Introduction of paid parking in downtown Kazan	Reduction in total distance driven by private cars	Reduction in GHG emissions from road vehicles through decreased consumption of fuel
2.4.2 Construction of a park-and-ride facility on Vakhitova street in Kazan	Reduction in total distance driven by private cars	Reduction in GHG emissions from road vehicles through decreased consumption of fuel
Component 3 - pilot actions in Kaliningrad		
3.2.4 Construction of bike lanes in Kaliningrad	Modal shift of motor vehicle usage to biking	Reduction in GHG emissions from road vehicles through decreased consumption of fuel
3.2.4 Introduction of paid parking in downtown Kaliningrad	Reduction in total distance driven by motor vehicles	Reduction in GHG emissions from road vehicles through decreased consumption of fuel
3.2.3 Replacement of old buses (EURO-II and older) with more efficient ones (EURO-V) in Kaliningrad	Improved fuel efficiency of public transit fleet	Reduction in GHG emissions from public transit fleets through decreased consumption of diesel fuel
3.2.3 Optimization of public transit route network	Reduction in total distance driven by public transit buses	Reduction in GHG emissions from public transit fleets through decreased consumption of fuel
3.4.1 Introduction of a rail-bus service	Modal shift from private cars and buses	Reduction in GHG emissions from road vehicles through decreased consumption of fuel
Component 4 –pilot actions replication in other cities across Russia		
4.4.1.3 Replacement of old small-capacity public transit rolling stock with new large-capacity buses	Improved operational and fuel efficiency of public transit fleet	Reduction in GHG emissions from public transit fleets through decreased consumption of diesel fuel

This comparison is shown in

Table 24 in the right-most column and along with the estimates done by the GHG expert, Dzmitry Halubouski. In the report, he re-calculated the original ProDoc estimates using more accurate assumptions and factors in the TEEMP transport model. That is shown in the second column from the right. Next to it are the estimates from the project results on an annual basis and over 10 years. The original ProDoc estimates (right-most column) were not shown in his report and have been added here; however, the ProDoc did not report GHG emissions for individual activities, only for Components.

Table 24: Summary of project direct (including secondary) GHG impact

Activity	Status of activity as of project end	Direct (incl. secondary) GHG impact estimate, tCO_2		Direct (incl. secondary) GHG impact estimate *based on prodoc baseline assumptions,* tCO_2	Original Prodoc (incl. secondary) predicted GHG impact, tCO_2
		Annual	**10 years**	**10 years**	**10 years**
Component 1 – LEV supporting policies (direct secondary GHG impacts)					
Component & Activity #'s		***Total***	***86,300***	***139,700***	***480,000***
1.4, 1.5 LEV roadmap	Government action plan of Oct 2014; follow-on government resolutions	8,630	**86,300**	139,700	480,000
Component 2 – Kazan pilots					
		Total	***52,900***	***72,810***	***90,000***
2.5.2 Bike lanes	4.8 km of bike lanes constructed	20	**200**	230	
2.2.2, 2.4.1 Parking pricing	1,915 priced parking spaces introduced	5,210	**52,100**	71,900	
2.4.2 Park-and-ride	150-lot Park & Ride constructed	60	**600**	680	
Component 3 – Kaliningrad pilots					
		Total	***145,250***	***203,860***	***23,450***
3.2.4 Bike lanes	19.4 km of bike lanes constructed	100	**1000**	1,110	
3.2.4 Parking pricing	4,196 priced parking lots introduced	7,400	**74,000**	99,500	
3.2.3 Public transit fleet renewal	145 new EURO-V buses procured and operating	5,590	**55,900**	83,800	
3.2.3 Public transit route optimization	Daily bus mileage reduced by 8,000km, daily trolleybus mileage increased by 490km	2,470	**12,350**	16,550	
3.4.1 Introduction of rail-bus service	3 rail-bus routes (average 10.8 km) commissioned	200	**2,000**	2,900	
Component 4 – Rostov replication pilots					

Activity	**Status of activity as of project end**	**Direct (incl. secondary) GHG impact estimate, tCO_2**		**Direct (incl. secondary) GHG impact estimate *based on prodoc baseline assumptions,* tCO_2**	**Original Prodoc (incl. secondary) predicted GHG impact, tCO_2**
		Annual	**10 years**	**10 years**	**10 years**
		Total	***75,100***	*82,200*	***N/A***
4.4.1.3 Renewal of public transit rolling stock with higher-capacity buses	110 new EURO-V large-capacity buses introduced to replace 300 EURO-III mini-buses	7,510	**75,100**	82,200	
Project TOTAL Direct GHG Reductions		37,190	***359,550***	***498,570***	***702,500***
Consequential/ Indirect GHG Reductions Estimates over 10 years			**546,480 to 1.6 million**	**N/A**	**667,500 to 1.6 million**

As shown above, the biggest differences between the original ProDoc estimates and the revised project estimates for GHG reductions relate to components 1, 3 and 4.[9] This is of course partly due to changes in those component activities after the project started. What is perhaps surprising is the correspondingly large impact and GHG benefits produced from relatively straightforward parking improvement activities in Components 2 and 3. This certainly validates the focus on parking activities by the ITMS recommendations and the project, but it is probably not as exciting to the public, and possibly policy-makers, as introducing additional modern/hi-tech electric vehicles to the rolling stock, but it makes it no less valid in terms of the environment.

In the GHG report the consequential (indirect) GHG reductions are also estimated for the project. In the evaluators's view these emission reductions are possibly underestimated due to being too conservative. Simply because in that report and in the ProDoc both authors assume that 10% of the mid-size cities in Russia (6 out of 60) will introduce an ITMS and SUT measures. However, 3 new cities are already participating in Component 4, and we have already pointed out that the *Decree of the Government of the Russian Federation of December 29, 2017 No. 443-FZ "On the organization of traffic in the Russian Federation"* stipulates that cities over 10,000 should implement an ITMS in the near future.

The project and project results in Kazan and Kaliningrad influenced the development of this Decree, and it is highly likely that more than 6 cities will move forward with SUT policies and projects over the coming 10 years. So there exists a clear causal link between this Decree and the project and a strong likelihood that

[9] Note that in the ProDoc the author published GHG reduction estimates over 20 years and these have been shortened to 10 years for inclusion in the table.

more than 10% of the mid-size cities in Russia will implement SUT measures in the next 10 years. This is speculation, and the requirements for satisfactory ratings include BOTH direct and consequential/indirect emission targets, i.e. a good performance in one category does not necessarily offset a poorer performance in the other.

Returning to the GHG estimates, the evaluators accepts the arguments presented in the GHG report for reducing the original ProDoc baseline estimates with better factors based on data collection and new information. Therefore in trying to evaluate the critical (from a GEF perspective) project incremental impact on GHG emissions, we are forced to balance between an under-performance on the direct project emission reduction targets and a likely over-performance of the consequential project emission targets. To add to the difficulty in rating this Outcome it is clear that the project missed opportunities to claim more emission reductions due to an underperformance in M&E activities.

The estimated difference in direct emission reductions versus the revised target is approximately a shortfall of 30% over 10 years. While the evaluators believes that the project practiced good adaptive management in juggling budgets and activities to make-up for the loss in LEV performance in Components 1 and 3, the *verifiable* direct GHG reduction results are not high enough to warrant a rating of Satisfactory. Therefore, the evaluators must rate Objective 1 as ***Moderately Satisfactory.***

3.11. Project Relevance

Project Relevance is defined by the GEF as "The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, global priorities and partners' and donors' policies.". This project is ***Very Relevant*** for Russia and this is supported by the high degree of ownership which the Ministry of Transport has given this project, along with other institutions at the national and regional level. One anecdote from the our interviews illustrates the project's relevance. During the interview with Elena Dyatlova, Minister of Infrastructure Development of the Kaliningrad Region, we were told that in the late 90's, "Russians wanted factories and jobs as close to the city center as possible, then we wanted shopping malls in the center, and eventually in recent years the population started wanting the factories to relocate and we wanted a better city environment for our families, so any public official today has to be concerned about the environment, especially in a region like Kaliningrad, where most of the population can travel to Western Europe and see clean cities with bicycle lanes and good public transport. They come back and want the same things here. So for us there is no going back, we have to plan for a more sustainable infrastructure and better environment in our region."

3.12. Country Ownership

As mentioned in the previous section, and in many of the project documents, the ownership and participation in this project by the Russian Government through the Ministry of Transport in particular, was very strong. Annex 7 gives a list of the draft legislation that was produced by the project and aligned with the priorities of the Russian Government. In most cases this legislation was passed into law or regulations. This fact alone substantiates that the project had strong country ownership, but also the co-financing received by the project, even during difficult economic times in Russia, shows that the project priorities were aligned with the priorities of the federal and regional government. The only exception being the withdrawal of the co-financing the SUT corridor in Kaliningrad. However, the motivation for that withdrawal had everything to do with the financial crisis Russia was undergoing.

3.13. Effectiveness and Efficiency

UNDP TE Guidelines define *effectiveness* as the "extent to which the development intervention's objectives were achieved, or are expected to be achieved." The GEF TE Guidelines define effectiveness as "the extent to which the project's actual outcomes commensurate with the expected outcomes". The UNDP guidelines also alludes to ranking the outcomes and objectives according to importance, but provides no guidance or methodology for a weighting of the importance of the outcomes. Therefore, this TE is applying the definitions above to mean that *Effectiveness relates to how many and what kind of the targets in the PRF did the project achieve at project end?*

Table 25: List of Project Achievements in relation to Project Results Framework Targets at Project Ending

	HS	S	MS	MU	U	HU	
PRF Item	**Over Achieved**	**Fully Achieved**	**Partially Achieved**		**Not Achieved**	**Unknown**	**Total Targets**
Objectives	1	1	2			1	**5**
Outcome 1		3	2				**5**
Outcome 2	1	4	1				**6**
Outcome 3		4	1				**5**
Outcome 4		5	1				**6**
Total	**2**	**17**	**7**			**1**	**27**

The project fully achieved 19 of its 27 targets while 8 were partially achieved or unknown due to lack of baseline information; meaning that 74% of the targets could be documented as fully achieved which is an admirable result. As mentioned previously there is no UNDP/GEF guidance given on a weighting of the outcomes, and the project PMU or PSC never made a formal ranking of the Objectives and Outcomes. Therefore, no attempt has been made during the TE to weight them as it would be entirely a subjective exercise and the importance of each outcome could differ widely depending on the stakeholder.

Effectiveness in the UNDP/GEF context also relates to risk management for the project. In regards to risk management the project carried out a formal risk management procedure during the Implementation Workshop. The project risk matrix in the ProDoc was updated during the Inception Workshop and is shown in Table 26. The risk matrix focuses on some macro issues outside the project control (i.e. financial, political) but mostly targets risks that the project can influence and provides a list of actions the project can take to mitigate some of the risks. Project risks were often discussed during the PSC meetings and actions were documented in the minutes to overcome some of the challenges. Some of the risks did turn out to be real and impacted the project despite best efforts from the team, e.g. withdrawal of co-financing by Kaliningrad and Liotech (which also impacted the Russian EV technology partnership envisioned by the project). The project team cannot be held responsible for the overall economic crisis Russia suffered and the impacts this had on the project. Overall the risk management is seen to be satisfactory by the project though it might have benefited the project to highlight the risks related to monitoring of the factors needed to quantify the environmental/GHG results from the outset of the project.

Table 26: Overview of major project risks as listed from the Inception Report.

Risk category	Risk description	Rating	Method of mitigation (response)
Financial	No co-funding from the partners who confirmed their participation in the preparation phase	M	Preliminary negotiations with co-funding parties to reconfirm financing obligations were conducted; non-financial incentives for the project co-funding partners are provided for, including activities for replication and promotion of their good practice. At the same time, the Project Team and MinTrans of Russia are working on alternative funding sources and legal mechanisms of influence on the partners.
Organizational	Not enough investment and federal support for SUT systems in Kazan and Kaliningrad	M	There is good cooperation with the pilot cities' authorities under the project that will make it possible to bring SUT pilots to the international level and show their advantage in reduction of the energy intensity and GHG emissions. This is in particular a better positioning of the companies who plan and make policies in the area of urban transport, assistance in the integrated transport planning to the international level and support of SUT projects before their launch.
	Partnerships with priviate transport companies to use them as pilots for EV and HV demonstration do not materialize	M/L	The project rests on a solid partnership with administrations of the pilot regions and professional communities in Russia. The positive experience obtained by project partners in the demo regions will clearly display the mutual benefit potential to other transportation companies.
Political	Key representatives from federal authorities are not fully engaged in the project and do not intend to implement its strategy. Continuous staff rotaion at federal and regional levels. As a result the project strategy replication fails.	L	MinTrans of Russia finds the project very important, and assumes obligations to maximize its success across all initiatives planned both at the policy formulation and demo events stages. The established PSC includes representatives from interested federal agencies to support the project at all levels. The project goals and are in line with the federal environmental policy in the transport area, and were explained in the first PSC meeting and in the meeting between the Project Team members and high-level federal and regional officials. The project managerial staff has good links with regional authorities and other stakeholders that ensures succession in networking and contacts.
	Resistance of the population to switch to lower-GHG emission cars	M	There is a big awareness-raising campaign for the population under the project with the aim of changing behaviors and motivating people for a wider use of public transport and switching to eco-friendly vehicles. There is a visible change of consumer preference towards more fuel-efficient cars during the present economic downturn.
Regulatory	Recommended best practices and regulatory changes for the transport sector are either not approved or not effectively implemented	M	PSC is made up of representatives of key federal and regional authorities. The PSC sessions held twice a year will become a good control for the project delivery, coordination of opinions and exchange of comments and suggestions. That will ensure relevance of recommended practice and responsibility for their implementation as well as simplify approval procedures. As for efficient implementation, the project seminars will be mandatory for participation by regulatory authorities staff.

Risk category	Risk description	Rating	Method of mitigation (response)
Strategic	Strategic SUT development planning in Kazan and Kalinigrad are not implemented to the full extend	M	The project will contribute to a banking feasibility study process to attract funds for SUT development. The feasibility study will describe all SUT benefits and is an economically viable document for financial institutions to allocate the funds required. The Project Team will remain in close contact with co-investing companies to coordinate the advanced project plans in demo cities and adjust construction and commissioning deadlines of the project. Negotiations with potential project partners are to be conducted in parallel. Adjustments of the project deliverables and activities in line with the current situation will be done during the midrange project estimates.
Total risk assessment :		L/M	

Returning to the project components and outcomes shown Table 25 the aggregate rating for the Project's effectiveness is ***Moderately Satisfactory***. The goals of the project were higher than the achieved results at the time of the project's conclusion, even though the project accomplished much of what it set out to do and had an overall positive impact on transport management and the environment in in Russia and the Pilot cities. This is aligned with the UNDP/GEF guidance "there were moderate shortcomings" in the effectiveness.

In regards to *efficiency*, the evaluation questions relate to

- Was the project implemented efficiently, in-line with international and national norms s standards?
- Was the project support provided in an efficient way?
- How efficient are the partnerships and arrangements for the project?
- Did the project efficiently utilize local capacity in implementation?
- What is the abatement cost for the long-term GHG reductions?

There is no doubt that local capacity was utilized efficiently for the bulk of the project work, and as shown in Table 4 and Table 5, there were many institutions involved at all levels of government and academia in all phases of the project. The project initially reached out to many stakeholders and experts to define SUT in the international and Russian context. Afterwards the project moved forward with the recommendations delivered many outcomes from the activities shown in Annex 2. A great example of efficiency by the PMU was the consultant/advisor working within the MoT who was responsible for managing many of the legal and regulatory recommendations for the project. Due to this arrangement the project was able to develop a "fast-track" approach for many of the legislative proposals shown in Annex 7. Another example was the engagement of the Cycling Union of The Republic of Tatarstan to lobby for the inclusion of bike lanes into the Kazan city Master Plan, as they engaged an architect firm to help them develop a proposal, parts of which were included in the new Kazan City Master Plan by the Department of Urban Planning. So the evaluators find the utilization of local capacity to have been excellent and there are too many examples to list here.

The efficiency in relation to the abatement cost for reducing direct GHG emissions of 359,550 tons of CO2e is straightforward. With the GEF incremental financing of $5.4 million USD the cost for reducing 1 ton of CO2e

is approx. $15. If one also includes the consequential/indirect emission reductions for the lower estimate of 546,480 tons of CO2e then cost is approximately $6 per ton of CO2e. Both of these prices are within the normal range of prices for 1 ton of CO2e in more established emissions trading schemes such as the EU ETS and WCI California ETS.

The evaluators can also state from experience that transport projects by their very nature have higher abatement costs than alternative energy or land-use GHG reduction projects. This is due in part to the more difficult baseline and monitoring requirements for the diffuse number of small GHG sources over the lifetime of the project. The efficiency is evaluated as ***Satisfactory*** due to the excellent mobilization of resources in Russia and the large amount of partnerships the project managed effectively.

3.14. Sustainability

As highlighted in the MTR, the project's sustainability relies in the successful adoption of strategic documents for Components 1 thru 3 by the key stakeholders as well replication activities in Component 4:

1) The government roadmap on LEV,
2) ITMS implementation and measures in Kazan and Kaliningrad, and
3) Replication activities and new pilot cities for SUT measures

After the MTR the project risks were re-evaluated and the major risk identified had to do with the risk of lack of policies to support LEV penetration in the market (eco-labeling, etc.). Other identified risks related to possible lack of ITMS measures being implemented and this effecting replication activities in Component 4. As we can see in hindsight some the risks were real and required real changes for the project.

For example, the eco-labeling initiative has not yet succeeded for Component 1 and it was more difficult for the project to announce that it had any impact on LEV market gains in Russia. However, the ITMS systems were implemented in Kazan and Kaliningrad which led to new pilot cities joining component 4. Overall the project's sustainable impact is long-term due to the laws that were passed, the numerous trainings that were conducted, and the competence networks which were created by the project in Russia.

The risks to the long-term positive impacts are deemed to be small and the Sustainability of the project results is ***Likely***.

The main carriers of sustainability for the project can be summarized as

- *Educational* -- the establishment of a SUT body of knowledge and community of practice in Russia
- *Legislative* – the project introduced key long-term SUT laws and regulations
- *Demonstration Projects* – the ITMS and pilot SUT projects in the 5 project cities

The educational and capacity building of this project were consistently rated very high by most interviewed, and the number and diversity of courses that the project developed, promoted, and carried out shows the large effort put toward capacity building and building professional networks in academia and city administrations.

As discussed, Component 1 produced a large body of draft and approved legislation relating to all aspects of SUT. Some of these will have a lasting impact that far outlives the projects. The list of legislation is provided in Annex 7.

The finished and ongoing demonstration projects in the 3 new pilot cities will provide excellent examples and case studies for SUT activities in Russia. Kazan and Kaliningrad have pulled large elements of the project recommendations into their respective master plans for city and transport development. Both cities are almost prepared for the FIFA World Cup and want to showcase their best sides as a part of a modern Russia. Therefore it is likely that other cities with aspirations of improvement will look to these examples when they develop their own transport plans and ITMS in accordance with Russian legislation.

3.15. Financial risks to sustainability

The main financial risks seem minor. The primary risk voiced during discussions would be related to the continued long-term funding of the SUT Competence Center the "Department of Sustainable Urban Transport" jointly established by the Moscow State Automobile & Road Technical University (MADI), and the Scientific and Research Institute of Motor Transport (NIIAT). According to interviews with staff from both institutions the project revived much of the research activity and made the institutions relevant again. In the case of NIIAT, they will have less state funding to draw upon than MADI and need to find new projects for funding. This financial risk to sustainability is very difficult to quantify but it nonetheless exists. Other aspects of the project's sustainability have funding established for e.g. the pilot projects in component 4. The primary risk really relates to Russia's longer term macro-economic situation. If the country slips into recession again then of course public works suffer. Generally speaking this risk is viewed as being low.

3.16. Socio-economic risks to sustainability

Environmental protection has been receiving more support in Russia during the last years with the President Putin even announcing that 2017 was the Year of Ecology for Russia. As was mentioned previously, attitudes have been changing in Russia and the younger generation in particular care more about the environment and the city environment than previous generations. While environmental protection costs money, and Russia is still recovering from sanctions and economic hardship, it also has a positive economic outlook for the near term and it is a low probability that the environmental movement and the benefits of SUT planning will be at risk in Russia. In addition the MoT will maintain ownership of project outcomes after the project and because of major initiatives such as Russia – China transportation corridors, GLONASS development and integration into transport systems, etc it is clear that modern transport development will continue to be a priority in Russia. The highly lauded (and entertaining) 2018 World Cup showed the world that Russia can successfully develop the infrastructure to manage the millions of tourists who traveled to the game and to host such a large international sporting event in so many cities. In the USA, journalists were extremely complimentary and many have called it the best World Cup ever. The project assisted with the World Cup infrastructure preparations in the two project cities, and this is a solid legacy as both cities (and Russia) continue developing tourism on the back of the World Cup success.

3.17. Institutional framework and governance risks to sustainability

Some of the institutional risks identified in the MTR still exist. Transport governance is still fragmented within many local administrations, and the key jurisdiction of traffic management is usually held by the traffic police,

outside the realm of the municipality or even the regional government. On the other hand, what is sometimes viewed as an unwieldy structure to foreign eyes manages to function and provide suitable outcomes according to Russian norms. A humerous example would be the aforementioned unrepentant Kazan parking cheater being reported to an anti-terrorism unit of the police for removing his license plate. There will always be a "Russian way" of solving these institutional inefficiencies and in the long-term, the key element that will provide success against institutional and governance risk is the educational component and network of SUT experts in different institutions that have been created by the project in Russia. Its also most important to mention that the project helped establish many of the legal frameworks and policies that SUT practices can now operate within and it is unlikely that these will be relaxed in the near future, more than likely they will be strengthened in accordance to ongoing national priorities for better transport management. For example, as mentioned previously, one of the spin-off initiatives from this project is the ongoing MoT "Safe and Quality Roads" project which includes elements of SUT and ITMS that were promoted by the project and is currently operating in 38 regions around Russia.[10]

3.18. Environmental risks to sustainability

No environmental risks have been identified during the TE.

3.19. Catalytic Role and Impact

The primary catalytic role of the project is through the demonstration projects in Kazan and Kaliningrad and a capturing of the lessons learned from these projects for dissemination to a wider audience through the project networks (SUT community of practice) and marketing to the general population. The project also supported over 40 educational and thematic events (seminars, conferences, round tables) during its lifetime. There were also 9 theoretical and practical international trainings organized in Kazan and Kaliningrad in partnership with The International Association of Public Transport (UITP):

- Service Quality Management in Public Transportation, 2015;
- Security Management and Risk Assessment in Public Transport, 2015;
- Organization of Public Transport During Large Events, 2016;
- Public Transport Maintenance and Asset Management, 2016.
- Procurement and Commissioning of Buses, Including the Bus Operation Planning, 2015;
- Urban Transport Pricing, 2015;
- Financing and Funding of Public Transport, 2016;
- Regulation and Contracting of Public Transport Services, 2016;
- Public Transport Fundamentals with focus on Organizing Authorities, 2015.

However, one of the strongest examples of catalytic role produced by the project is produced by a more recent project started by the MoT called “Safe and High Quality Roads”[11]. There are several goals related to road safety but one of the clearly builds on the ITMS concepts produced by the project:

> *Elimination of the congestion of the urban cluster road networks including by switching the transportation of goods to other modes of transport, passenger transportation to public transport, and to optimize traffic flows.*

There are currently 38 regions participating in the project and implementing traffic management and road reconstruction plans as shown in Figure 9. Based on the above discussion the Catalytic Role is rated as **Satisfactory.**

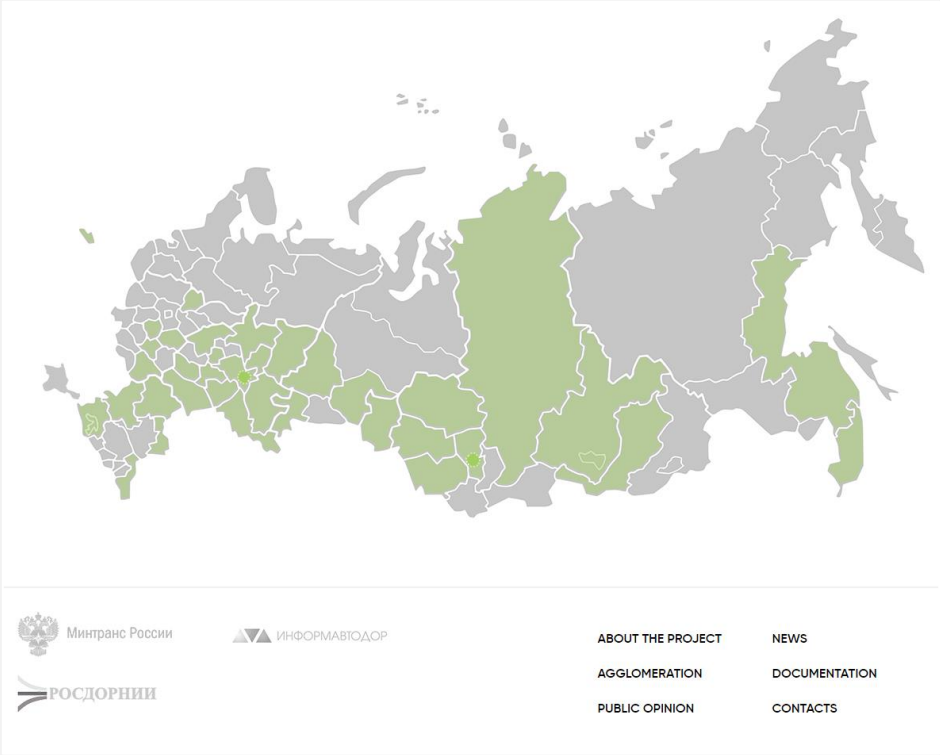

Figure 9: Map from the website showing the 38 regions participating in Safe and High Quality Roads project. Note the Ministry of Transport logo.

In regards to the environmental impact beyond the GHG reductions of the project it was not quantified sufficiently to cover all the activities of the project, however it is known that improvements in vehicle emissions class and reductions in road traffic in urban areas have many environmental benefits related to reductions in noise, particulates, SOx, NOx, etc. In addition, the bicycle lanes and better public transportation management improved the urban environment for the citizens. Generally speaking the positive environmental impact of the project is strong and as the ITMS legislation discussed in Section 3.10.2 takes effect in more cities in Russia the positive environmental impact will only grow. Therefore, the Impact on Environmental Impact is rated as **Satisfactory.**

[11] http://www.bkdrf.ru/

4. CONCLUSIONS, RECOMMENDATIONS AND LESSONS

4.1. Conclusions and Evaluation Ratings Summary

The project produced many activities and capacity building efforts within many institutions that deal with public transport and transport regulation in Russia. The project had many positive impacts and activities as noted, and helped prepare the cities of Kazan and Kaliningrad for the FIFA World Cup this summer. However, during the terminal evaluation it became obvious that the project suffered from a few key issues that started with the project design of the M&E and propagated through the project implementation due to a few key poor decisions:

- Poor initial formulation of some of the key objective monitoring indicators and the data required to estimate them in the ProDoc, and later their acceptance in the Inception Report.
- Initial decision to not hire an International CTA at the beginning of the project to assist with, among other things, better formulation of the indicators, estimation methodologies, and project data collection for M&E e.g. GHG reduction reporting, passenger increase in public transport, etc.
- After the MTR, the decision to rely on city departments for certain data collection required to estimate GHG reductions and to rely on the CTA (who was not available) to reformulate/improve the PRF indicators.
- After the MTR, the project focused on implementation, but less on the data collection and reporting required to verify the environmental results. It appears that no one was dedicated to this M&E task in the team, rather it was outsourced and part of individual task done by external consultants. This it made more difficult to aggregate project results into GHG reduction benefits and report them.
- A one and half year delay in hiring the CTA after the MTR which resulted in his ability to only help the project in 2017, and thus have a limited impact on the project outcomes.
- Related to the last point, the late hiring of the GHG Expert at the end of 2017 to help the project calculate the GHG impact resulted in the project missing opportunities to quantify its total impact.

A key problem for the project was the difficulty to switch from the methods needed for *ex ante* GHG reduction estimations to methods required for *ex post* estimation. It seems that specialists in the project team were very focused on using COPERT4 and TEEMP models as part of the ITMS development in each city. These models allow for scenario planning and development of future projections (*ex ante* emission reductions) and such work typically involves many assumptions and default factors. If one wants to use these models and methods for *ex post* assessments it is important to plan for the collection of the correct factors and local statistics to drive an accurate *ex post* estimate of GHG reductions.[12] Sometimes this is not possible or practical, and therefore the project should have planned to use an alternative method or model for estimating the project results. This was ultimately done but at the end of 2017, far too late to collect any missing or required data. The project would have received much needed guidance from the CTA or GHG Expert if they had been hired during 2016 or earlier.

[12] Which is effectively what was done on a limited number of activities, and then the annual GHG reduction results were then multiplied for future years.

Another fundamental issue is the over-complexity of the original project design. Due to the GEF mandate this project design focuses simultaneously on top-down approaches (Federal legislation) and bottom-up approaches (demonstration projects). In addition the project adds many parallel Federal legislative and demonstration activities that are sometimes of very different character: ITMS, parking, LEV and EV market penetration, new SUT financing, car traffic management market penetration, public transport route optimization, modal shifts, pedestrian and bicycle lane development, etc. Instead of taking a more limited and focused approach that chose the demonstration activities that provide the largest capacity-building and GHG benefits, e.g. only ITMS, parking, and LEV/EVs; the project design takes a "shotgun" approach that considerably complicates the work in the hope that all possible city priorities are served and that something will stick and eventually self-replicate.

A valid counter argument would be that SUT/ITMS planning requires a holistic approach and that the plethora of SUT activities is really a desire to demonstrate this new integrated approach. While this may be true, the end result is that the project really needed more full-time staff, more time, and a larger budget to properly implement everything. The complexity ultimately impacted the M&E needs and priorities of the project. In the evaluators' opinion the project had too many "moving parts" for a PMU team of 3-4 people to properly undertake, regardless of how excellent they perform. This general criticism was also mentioned in the MTR and suggestions were made to hire additional staff. In hindsight, the project had budget space to do so, but for various reasons the hiring of additional staff amounted to too little, too late.

As noted, the project practiced some good examples of adaptive management and overcame many challenges during the life of the project. But ultimately the project results were negatively impacted by 4 key issues:

- Short-comings in the M&E as mentioned previously and further discussed below.
- Negative impacts of the Russian financial crisis on project components, in particular the withdrawal of support and co-financing by Kaliningrad for the proposed SUT corridor.
- Lower than anticipated measurable impact on EV market penetration due to project activities/measures.
- Limited time to execute SUT replication activities in new pilot cities due to Component 4 being revised to include a larger budget and role while still starting after the mid-term of the project, and no opportunity for extension of the project end date.

The GEF project ratings are not an average but rather focused on whether there were short-comings and if so, were the short-comings minor, moderate, or severe. This creates a rating scheme whereby many positive outcomes can seem outweighed by some key short-comings. That is the case here with this project. The project's overall rating is ***Moderately Satisfactory***, which is a reflection the 4 issues discussed above, not because the project will not have a strong long-term impact in Russia.

The project's real legacy and sustainability lies with the legislative, education, and demonstration activities in the 5 cities that participated in the project. It is clear that the project can claim the success for now making ITMS mandatory for almost all cities in Russia, and also for providing better public transport management concepts in Russia. The success in these areas is because the PMU has successfully leveraged the support provided to the project by its key institutional partner, the Ministry of Transport. It is clear that the long-term impact on Russian cities and GHG emissions will be certainly much greater than what the project can claim

credit for today. Even conservative estimates project indirect/GHG emission reductions in line with the original project goals in the ProDoc.

Even though the UNDP office in Russia is closing in 2018, the key stakeholders of the project, particularly in the MoT and city administrations, should be care-takers for the continued results and ambitions of the project and its impact will live on.

4.2. Final Recommendations and Lessons

Though it is often stated, it needs to be repeated here: Project reporting is not the same thing as project monitoring. The project produced most of the necessary reports to UNDP management but often the indicators and components are described as "on track" or "satisfactory" in the PIRs, etc. This refers more to the project activity *implementation* and does not necessarily reflect *monitored impacts* that relate back to the project Objective. The impression is that the PMU focused on implementing the activity and then assessing the impact only at the end, which is a natural tendency, but not ideal if the baseline data or project data was not collected sufficiently during the activity.

The project design is very complex with many different activity types, and in a perfect scenario each activity type would have had its own monitoring, reporting, verification (MRV) protocol that was further customized for each location. This would represent a heavy load on the project initially but would have paid dividends toward the end. Such a task should have been given greater emphasis in the ProDoc and in the initial project planning to provide a proper platform for project evaluation. The ProDoc PRF is not detailed enough to have provided all the necessary indicators and MRV that the project needed. This is common for most UNDP/GEF projects but sometimes this is recognized and further developed early in the project.

This point also reinforces the previous suggestion to limit the number of activity types in project design and rather focus on doing these limited number of activities very well. Urban transport projects literally have more moving parts than renewable energy or land-use change projects and lesson here is that its critical to zero in on the few demonstration interventions that have the greatest impact and chance to become an innovation that diffuses throughout the national stakeholders after the project has ended.

The biggest success of the project may be in relation to the policy and legislative activities, i.e. the "top down" measures. It is often more difficult to successfully implement top-down measures than pilot projects (bottom-up measures) and the project model for interacting with the government institutions as well as the approaches used to getting SUT policy norms and standards into draft legislation and passed into law should be further studied in detail and documented by UNDP for use on future projects.

The PMU's *Lessons Learned* report was mostly on target and self-reflective. It was clearly budgeted for from the start of the project and it is known to be "best practice" within UNDP to have the International CTA join the project near the beginning of the project.

Otherwise, most of the main lessons bear repeating in this report to reach a wider audience. For example, the project suggested in the *Lessons Learned* report that UNDP should:

> *Create [a] requirement for either [an] internal UNDP department to be responsible across all UNDP projects for GHG baseline data collection and continual monitoring for consistency of reporting GHG ER; alternatively, UNDP creates a list of approved third party providers and mandates their involvement at Project Inception and various Project Phases as necessary.*

This suggestion is a good one that the evaluators can second, and one wonders why it has not been done in some fashion by UNDP or even the GEF. Having such experts that are pre-vetted by UNDP/GEF to provide

that bridge between initial M&E design in the ProDoc to functional project activity MRV would give a proper foundation for any new PMU.

Another key suggestion by the project team:

> *Indicators should be adjustable or multiple indicators prepared to deal with potential changes to the economic environment of the country where the Project is being implemented; also it is believed that Project Indicators should be allowed to be modified during implementation where they do not accurately measure Project Outcomes.*

These are reasonable suggestions that brings up the Lead Evaluator's most common criticism of the GEF/UNDP project design path: Which is almost slavish adherence to centralized planning starting with the PIF and then the ProDoc. There needs to be a better balance and flexibility provided to the PMU and Implementing Agency to modify the project program and indicators once it has been started, particularly when macro events can severely change the chance of success of key activities:

> *The factors affecting this Project will likely also impact other countries and as such, financial indicators and general economic factors/unplanned crises of countries with UNDP Projects should somehow be allowed to be able to be taken into consideration. For example, multiple indicators/targets could be prepared for Projects such as: "business as usual"; "increasing growth"; "decreasing growth" and "recession or depression" scenarios.*

In regards to what the project did well, the evaluators can agree with many of the statements in the *Lessons Learned* report. For example, the project was successful in combining "push and pull" measures in cooperation with the city and regional administrations. Central to this effort was the excellent use of ITMS as a tool for improved urban transport planning.

As noted by one of the interviewee's, the project was successful because it did not really challenge the existing administrative structures and hierarchy, but rather gave the personnel greater access to the tools they needed to do their jobs better. In some cases this did lead decision-makers to reorganize some units or departments but the key element to success was the PMU's ability to work in the existing system and thus receive support by the key leaders in the institutions. This is a key lesson to absorb for future UNDP/GEF projects as institutional resistance can doom projects to failure.

Another example of such success would be the project's inclusion of the ITMS results into the city and transport master plans, i.e. the *Transport Strategy of the Russian Federation until 2030*. Essentially the project let others take ownership of the project ideas so they could use them to promote their agenda within their organizations. This is related to finding an effective "change agent" or "champion" in organizations that can promote the project ideas as their own and overcome institutional barriers. The project did a great job of utilizing such champions in both the MoT and city administrations of Kazan and Kaliningrad.

Another example of positive results the projects start of replication activities mid-way through the project life. The ProDoc replication component described only "replication plans" rather than implemented activities as the indicator for the Project to achieve:

> *The Project, actively supported and stimulated by the UNDP/GEF RTA, began replicating the SUT strategies and practices already by its mid-term, and was able to report on a number of implemented replication pilots by the Project end. This strategy proved to be right and successful: the Project not only replicated best SUT practices in the new pilot cities but also succeeded in making up (at least*

partly) for the GHG emission reductions that had not been attained in the initial two pilots – Kazan and Kaliningrad.

The PMU also reported a specific operational lesson learned the relates to contracting. The Project failed to meet the schedule for launching the system for the monitoring of passenger traffic in public transport in Kaliningrad. The reason was that the life cycle of the monitoring system was not taken into account when selecting the supplier of the system. As a result, the least cost supplier was chosen but their product was not fully released to the market which resulted in many technical delays during the project commissioning phase. "The PMU's recommendation for future projects that will pilot innovative technical solutions is that it seems advisable to include into the bid the requirement for potential bidders to present reports on previous product implementations in other cities or regions." The evaluators can sympathize with this situation but cannot understand how any tender Terms of Reference would not have had, at a minimum, a required section in the proposal mentioning "project references" or "product track record". This example highlights the project's need for additional help that a CTA could have provided.

The PMU also discussed at length the same issues mentioned by the evaluators regarding the estimation of GHG reductions for the project. For the sake of completeness we are quoting their description of the difficulties in full:

The project faced major difficulties with GHG emission reduction assessments related mainly to a) choosing the best methodology; b) finding the available skills within contractors currently on the market; c) non-collection or availability of baseline data and d) ongoing and accurate monitoring of GHG data during Project phases.

a) ***Choosing the Methodology**: In its early phases, the Project often faced the problem of choosing between two assessment methods: 1) The GEF Transport Emission Evaluation Model (TEEMP) implemented as a package of TEEMP software programmes with a set [of] individual schematic models, and 2) The EMEP/EEA air pollutant inventory guidebook on the basis of the COPERT software; development of this model is coordinated by the European Environment Agency through the European Topic Centre for Air Pollution and Climate Change Mitigation. Widely used abroad, both methods have been introduced by the Project in the Russian Federation, and are now used to count GHG emissions from road transport, in particular for the preparation of the National Inventory of GHG Emissions for the IPCC.*

National experts used both methods and came to a conclusion that the GEF methodology (TEEMP) is less accurate; it is designed to be easy to understand for project managers who have less data and is more flexible so as to cover more types of local projects. It seems that the GEF methodology suits better to assess GHG reductions for simple and straightforward SUT solutions: EV as substitutes for buses, organisation of cycling infrastructure, or paid parking lots.

The COPERT model is more advisable for evaluating GHG reductions in an urban transport system as a whole when several hundred target measures for road and transport infrastructure development or traffic improvement are undertaken. This refers to the integrated traffic management schemes (Kazan, Kaliningrad, Rostov-on-the-Don, Krasnoyarsk), preparation of the transport chapter of the Kaliningrad Master Plan, optimisation of the public transport route network, and evaluation of the potential for direct secondary reductions resulting from adoption of regulations and institutional solutions that promote LEV use and SUT projects in the country.

b) ***Finding Skills****: One of the difficulties the Project faced was that the contractors for the works involving the use of TEEMP and COPERT did not have the skills to evaluate the GHG emission reductions following from the measures proposed or to use the transport models for gathering reliable baseline data to be used in the aforementioned GHG inventory models. Workshops for contractors and summer schools were held in Kaliningrad and Kazan to address this issue. Furthermore, a thorough independent evaluation of each stage of the research was performed to verify the baseline data collected and the results of GHG reductions expected from various measures. From one to three iterations had to be performed in practically each contract phase in order to review baseline data, revisit assumptions and revise GHG estimates.*

c) ***Baseline Data****: The main issue with evaluating the GHG emission reduction resulting from the Project's activities was insufficient baseline data, both general (such as fuel consumption volumes, number of passengers carried per one km), and specific (such as the vehicle emission class, annual vehicle mileage, travelling speeds etc.) Unfortunately, although the Project drafted several regulatory documents (guidelines) with concrete requirements to [collect] the baseline data, not all the data [was supplied].*

d) ***GHG Ongoing Monitoring****: In course of ER assessment, the Project was confronted not only with the problem of the lack of <u>baseline</u> data, but also with the problem of the lack of the <u>results of monitoring</u> of traffic flows and redistribution of passenger traffic between various means of transportation due to concrete measures developed by the Project for Kazan and Kaliningrad (the ITMS, in particular). Availability of data on field observations of changes in transport flows, results of passenger polling on their preferred means of transport before and after the respective measure were undertaken would simplify verification of GHG emission reduction significantly. In future projects, both collection of baseline data and collection of monitoring data must be provided for in course of drafting the project implementation strategy in the project document.*

*The major **recommendations** and **lessons learned** coming out from the above are:*

i) the methodology to be used would be beneficial to be already set in the ProDoc (as advised by an expert in the field) as to save time and confusion for the Project Team to research the best method for its project outcomes and to avoid various methods being trialled and evaluated:

ii) to make available a dedicated team/expertise for the life of the Project to gather baseline data, monitor GHG changes throughout the Project cycle and ensure accuracy of both data and methodology employed –with associated budgets incorporated into the Pro Doc.

These statements match very well with what the evaluators observed during the Terminal Evaluation and should be strongly analysed by UNDP/GEF staff such that future projects do not suffer the same difficulties.

In regards to using the lessons learned from this SUT project for replication with other SUT opportunities, UNDP has potential to apply for future transport projects with future Green Climate Fund as Sustainable Transport is one of the 4 thematic areas and a brief review of approved GCF projects shows no transport projects having been approved at the time of writing. Similarly, as the Paris Agreement starts in 2020, UNDP should look to implement Article 6 projects (sometimes called the Sustainable Development Mechanism) in the transport sector. As both will need well managed baseline studies and data in order to apply for project approval the experiences gained from this SUT project and others in the UNDP portfolio in the region could prove to be very valuable for future activities. Lastly, there might be opportunities to replicate the project

concepts through the Europe and Central Asia region Capacity Development Trust Fund[13] as transport and the environment are themes.

[13] http://www.worldbank.org/en/region/eca/brief/ecapdev

ANNEXES

Annex 1. Terms of Reference

Annex 2: List of Project Activities

Annex 3: Project Reporting Framework from the 2017 Project Implementation Report

Annex 4: Co-financing 2013-2017

Annex 5: TE Mission Itinerary

Annex 6: List of documents reviewed

Annex 7: Legislative Outputs from Component 1

Annex 8: Requirements to Implement Eco-labeling in Russia

Annex 9: Events Organized by the Project

Annex 1: Terms of Reference

TERMINAL EVALUATION TERMS OF REFERENCE

International Consultant for the Terminal Evaluation of UNDP/GEF Project "Reducing GHG emissions from road transport in Russia's medium-sized cities"

Reference:	PIMS 4304
Country:	Russia
Type of Contract	Individual Contract (IC)
Description of the Assignment:	International Consultant to conduct the Terminal Evaluation of UNDP/GEF – Ministry of transport of the Russian Federation project "Reducing GHG emissions from road transport in Russia's medium-sized cities"
Project:	Reducing GHG emissions from road transport in Russia's medium-sized cities
Period of Assignment/Services:	25 working days over the period from 1 October 2017 to 31 December 2017
Duty Station:	Home-based (15 working days) with 1 mission to the Russian Federation (Moscow - 6 working days, Kazan - 2 working days, Kaliningrad - 2 working days)

Introduction

The project aims to reduce GHG emissions through improved planning and management of the public transport based on efficient monitoring systems and promotion of eco-friendly vehicles. The main outcomes of the project are pilot activities in 5 cities of Russia (Kazan, Kaliningrad, Irkutsk, Krasnoyarsk, Rostov-on-Don), supportive federal policies and legislative framework for sustainable transport in the Russian Federation. Also, the project disseminates and helps to replicate successes of the pilot sites, where it supports development and implementation of integrated urban transport strategies. Those include comprehensive travel demand surveys and traffic management plans, regulations for integrated urban planning, enhanced public transport systems, and promoting innovative transport solutions such as public rapid transit and non-motorized transport modes.

The project implementation started in 2013 and the expected project's closing date is 31 December 2017.

Objective and scope

This terminal evaluation will be conducted in accordance with the rules and procedures established by UNDP and GEF as reflected in the UNDP evaluation guidance for GEF financed projects. The objectives of the terminal evaluation are to assess the achievement of project results, and to draw

lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming.

The project mid-term evaluation (MTE) took place in late 2015 (final report submitted in early 2016). The final evaluation should assess the extent to which the recommendations of the mid-term review have been taken into account by the project.

The terminal evaluation will explore in detail five major criteria:

- Relevance: the extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time;
- Effectiveness: the extent to which an objective has been achieved or how likely it is to be achieved;
- Efficiency: the extent to which results have been delivered with the least costly resources possible;
- Results: the positive and negative, and foreseen and unforeseen, changes to and effects produced by a development intervention. In GEF terms, results include direct project outputs, short- to medium-term outcomes, and longer-term impacts including global environmental benefits, replication effects and other local effects;
- Sustainability: the likely ability of an intervention to continue to deliver benefits for an extended period after completion. Projects need to be environmentally as well as financially and socially sustainable.

Evaluation approach and method

An overall approach and method for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The criteria of relevance, effectiveness, efficiency, sustainability, and impact, as defined and explained in the UNDP guidance for conducting terminal evaluations of UNDP-supported, GEF-financed projects are to be used for evaluation. A set of questions covering each of these criteria have been drafted and are to be amended, completed and submitted with the matrix as part of an evaluation inception report, and included as an annex to the final report. The evaluation must provide evidence-based information that is credible, reliable and useful. The terminal evaluation should include a mixed methodology of document review, interviews, and observations from project site visits.

The evaluation team is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, National Project Director, UNDP Project Support Office, project team, UNDP GEF Technical Adviser based in Istanbul and other key stakeholders. Interviews will be held with the following organizations at a minimum: UNDP Istanbul Regional Hub, UNDP-Russia Projects Support Office, Ministry of Transport of the Russian Federation, administrations of pilot cities (Kazan, Kaliningrad), Federal State Institution “Research Center for Complex Transport Projects of the Ministry of Transport of the Russian Federation”, OJSC “Scientific and Research institute of motor transport”, Moscow Automobile and Road Construction University (MADI), Institute for Transport Economics and Transport Policy Studies of the National Research University "Higher School of Economics", municipal institution " Organizer of passenger transportations" (the largest bus public transport operator in Kazan), administrations of pilot replication cities. The evaluation team should also speak with the key international and national

consultants of the project including the international consultant who designed and wrote the project document, the project mid-term evaluator and the project international CTA.

A list of persons and organizations for interviews will be proposed by the project team and should be agreed upon at least 1 week prior to the mission to the Russian Federation. The international evaluator can request additional meetings/interviews if required. UNDP and NIM partner should be informed of additionally requested interviews/meetings and the dialogue with the evaluated party should be handled in an inclusive and transparent manner.

The international evaluator will review all relevant sources of information, such as project document, project reports – including annual APR/PIR, project budget revisions, MTR and progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, reports of contractors and sub-contractors, reports of the international CTA, reports of the national consultant, and any other materials that the evaluator considers useful for this evidence-based assessment.

Evaluation criteria & ratings

Assessment of project performance will be carried out against expectations set out in the Project Logical Framework/Results Framework, which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: relevance, effectiveness, efficiency, sustainability and impact**.** Ratings must be provided on the following performance criteria:

- Monitoring and Evaluation (M&E design at entry, M&E plan implementation, overall quality of M&E);
- IA&EA Execution (Quality of UNDP implementation, quality of execution - executing agency, overall quality of implementation/execution);
- Assessment of Outcomes (Relevance, effectiveness, efficiency, overall project outcome rating);
- Sustainability (Financial resources, socio-political, institutional framework and governance, environmental, overall likelihood of sustainability).

The completed table must be included in the evaluation executive summary.

Project finance/co-finance

The evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator will receive assistance from the Project Support Office and project team to obtain financial data in order to complete the co-financing table, which will be included in the terminal evaluation report.

Impact

The evaluator will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated:

- verifiable improvements in ecological status;
- verifiable reductions in stress on ecological systems;
- demonstrated progress towards these impact achievements.

Conclusions, recommendations & lessons

The evaluation report must include a chapter providing a set of conclusions, recommendations and lessons learned. Conclusions should build on findings and be based on evidence. Recommendations should be prioritized, specific, relevant, and targeted, with suggested implementers of the recommendations. Lessons should have wider applicability to other initiatives across the region, the area of intervention, and for the future.

Evaluation timeframe

The total duration of the evaluation will be 25 working days during the calendar period from 01 October till 31 December 2017. The following tentative timetable is recommended for the evaluation; however, the final schedule will be agreed upon in the beginning of the assignment:

- Preparation - 3 days in October 2017;
- Evaluation Mission - 10 w/days early October 2017;
- Draft Evaluation Report - 10 days, completed by mid of November 2017;
- Final Report - 2 days, completed by the end of November 2017/early December 2017

Evaluation deliverables

The international evaluator is expected to deliver the following:

- Inception report – the evaluator provides clarifications on timing and method which includes a clear statement of the objectives of the evaluation and the main aspects to be evaluated no later than 1 week before the evaluation mission and submits the report to the UNDP PSO;
- Presentation - initial findings at the end of the evaluation mission presented to the project management, UNDP PSO and UNDP Regional Technical Advisor. Approval of the preliminary draft report with the project team and NIM implementing partner;
- Draft evaluation report – with included overall rating with annexes within 3 weeks of the evaluation mission sent to UNDP PSO, reviewed by RTA, PSO and project team;
- Final report - revised report within 1 week of receiving UNDP comments on draft sent to PSO for uploading to UNDP ERC. When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report. Approval of the final terminal evaluation report with the project team and NIM implementing partner.

Evaluation ethics

Evaluation consultant will be held to the highest ethical standards and is required to sign a Code of Conduct upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the UNEG 'Ethical Guidelines for Evaluations'.

Payment installments:

10% Following submission and approval by UNDP PSO of a detailed workplan/inception report prior to the evaluation mission;
55% Following submission and approval by UNDP (National Implementing Partner, UNDP-PSO, UNDP RTA) of the 1st draft terminal evaluation report;
35% Following submission and approval by UNDP (National Implementing Partner, UNDP-PSO, UNDP RTA) of the final terminal evaluation report.

Competencies
Corporate Competencies:

- Demonstrates integrity by modeling the UN's values and ethical standards;
- Promotes the vision, mission, and strategic goals of UNDP;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability.

Functional competencies:

- Strong interpersonal skills, communication skills and ability to work in a team;
- Ability to plan and organize work, efficiency in meeting commitments, observing deadlines and achieving results;
- Openness to change and ability to receive/integrate feedback;
- Ability to work under pressure and stressful situations;
- Strong analytical, research, reporting and writing abilities.

Qualification requirements

Education

- University degree (Masters or equivalent) in the field of relevance such as urban planning and development, urban transport planning, civil engineering.

Relevant experience:

- Minimum 7 years of professional experience related to the transport sector;
- Experience with results-based monitoring and evaluation methodologies;
- Experience in UNDP and GEF evaluations is a strong advantage;
- Relevant work experience in Europe & CIS region and/or Russian Federation is an advantage;

Language skills

- Excellent English, Russian language will be considered as an advantage.

Evaluation procedure

Individual consultants will be evaluated based on a cumulative analysis taking into consideration the combination of the applicants' qualifications and financial proposal. The award of the contract shall be made to the individual consultant whose offer has been evaluated and determined as:

- Responsive, compliant, acceptable;
- Having received the highest score out of a pre-determined set of technical and financial criteria specific to the solicitation.

Technical criteria - 70% of total evaluation (max 70 points):

- University degree (Masters or equivalent) in the field of relevance such as urban planning and development, urban transport planning, civil engineering (max 5 points);
- Minimum 7 years of professional experience related to the transport sector (max 10 points);
- Experience with results-based monitoring and evaluation methodologies (max 10 points);
- Experience in UNDP and GEF evaluations is a strong advantage (max 15 points);
- Relevant work experience in Europe & CIS region and/or Russian Federation is an advantage (max 5 points);
- Excellent English, Russian language will be considered as an advantage (max 5 points);
- Interview – maximum 20 points.

Financial criteria - 30% of total evaluation (max 30 points). Only candidates passing the 70% threshold for the technical proposal will be considered for the financial evaluation. The candidate with the highest score from technical criteria + financial criteria will be selected with the maximum score possible being 100 points.

Application process

Recommended presentation of offer:

a) Completed letter of confirmation of interest and availability. Please paste the letter into the "Resume and Motivation" section of the electronic application;

b) CV or a UNDP Personal History form (P11) available at http://www.eurasia.undp.org/content/dam/rbec/docs/P11_modified_for_SCs_and_ICs.doc, indicating all past experience, as well as the contact details (email and telephone number) of the candidate and three professional references;

c) Financial proposal that indicates the all-inclusive fixed total contract price, supported by the breakdown of costs. The breakdown should contain: professional fee for home-based work (number of working days), professional fee for work on mission (number of working days), travel costs (international/local travel and per diems). Per diems cannot exceed the maximum UN daily allowance rates (http://icsc.un.org) and consultants are encouraged to bid lower amount to make their offers more competitive.

Conflict of interest

To ensure impartiality and objectivity of the evaluation, as well as to avoid the conflict of interest, UNDP will not consider the applications from the candidates that have had prior involvement in the design, formulation, implementation or evaluation of the above-indicated project.

Please note that the professional fee is all-inclusive and shall take into account various expenses incurred by the consultant/contractor during the contract period (e.g. fee, health insurance, vaccination and any other relevant expenses related to the performance of service, etc.).

If an applicant is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under reimbursable loan agreement (RLA), the applicant must indicate at this point, and ensure that all such costs are duly incorporated in the financial proposal submitted to UNDP.

Incomplete applications will not be considered. Please make sure you have provided all requested materials.

Payments will be made only upon confirmation of UNDP on delivering on the contract obligations in a satisfactory manner.

Individual consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director. Consultants are also required to comply with the UN security directives set forth under dss.un.org

General terms and conditions as well as other related documents can be found under: http://on.undp.org/t7fJs.

Qualified women and members of minorities are encouraged to apply.

Due to large number of applications we receive, we are able to inform only the successful candidates about the outcome or status of the selection process.

Annex 2: List of Project Activities

From the Project Inception Report 2013

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
***Outcome** 1. Work out supportive federal policies, regulations, institutional arrangements to increase the use of low-emission vehicles and development of SUT projects in Russia*																				
1.0. Draft work plans for 2013 and a 5-year term. Outline research areas to be included into the federal target programs																				
1.0.1 Draft work plans and prepary PSC sessions in cooperation with the project experts																				
1.0.2 Define research areas in cooperation with the project experts and foreign consultants																				
1.1. Update regulations and recommended practice for monitoring activities, data acquisition- and analysis systems to formulate the urban transport policy																				
1.1.1 Draft a model data exchange policy on vehicle fleets structure and composition based on the demo cities' examples (Year 1)																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.1.2 Amend the existing caclulation methodology for negative environmental impact from road vehicles with regard to GHG emissions (Year 1-3)																				
1.1.3 Develop methodology for analysis of the passenger and traffic flow of the urban transit systems to prepare integrated planning, managerial and engineering solutions to improve the city transport system performance (including energy and economic efficiency) (Year 1)																				
1.1.4. Prepare the selected methodology for approval at the federal level as a mandatory (recommended) practice during SUT planning																				
1.2. Prepare recommendations to improve the SUT federal policy planning process																				
1.2.1 Draft amendments to the Urban Planning Code of the Russian Federation for mandatory development of integrated transport- and traffic management schemes as well as non-motorized transit modes																				
1.2.2. Draft regulations to control the balance between a building density and height with the area transport resources based on the calculation of the throughput capacity of the road network and passenger traffic flow capacity of urban transit systems																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.2.3. Draft regulations for functional deliniation of the road network with clear marking of streets and lanes and high speed highways in the urban environment													■	■	■	■				
1.2.4. Draft regulations for the bycicle use promotion									■	■	■	■								
1.2.5. Draft regulations for pedestrian areas promotion													■	■	■	■				
1.2.6. Draft regulations for promotion of comfortable transportation hubs																	■	■	■	■
1.2.7. Draft regulations to promote parking policy in the cities (introduction of measures for paid parking space development)			■	■																
1.3. Draft recommendations to improve federal public transport policy																				
1.3.1 Review the existing transport policies to reject non-productive ideas of ‘transport market deregulation’, ‘free access to the infrastructure’, ‘competition for a passenger on the route’ as applied to regular passenger transportation by public transport											■	■	■	■	■	■				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.3.2. Draft regulations to promote centralized public transport operators including a single tariff and ticketing policy																	■	■	■	■
1.3.3. Develop measures and economic mechanisms for attraction of the private capital into the urban transit infrastructure projects (BRT, city trains, etc.)																	■	■	■	■
1.4. Federal strategy or roadmap promoting increased use of low-emission vehicles																				
1.4.1 Development of a national ministerial dialogue that is inclusive of the private sector, built on accurate auto emission baseline and scenario data (Year 1 – UNEP assistance)			■	■	■	■														
1.4.2 Assessment and evaluation of low emission vehicle technologies and enabling policies at the federal level (Years 1 and 2 – UNEP assistance)			■	■	■															
1.4.3 Evaluate different low-emission automotive technology and its advantages in comparison with the latest fuel-efficient motor vehicles at all levels of the life cycle. Benchmark efficiency of gas-fuelled and electric vehicles in Russian conditions (Year 1-5 – UNEP assistance)			■	■	■												■	■	■	■

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.4.4 Development of a roll-out strategy for pilot cities that require supporting infrastructure (such as battery charging stations) and provide timelines and required financing (Years 2 and 3 – GEF assistance)			■	■	■															
1.4.5 Review regulations and economic aspects that limit penetration of low-emission vehicles to the market (access for the manufacturers) (Year 2)			■	■	■															
1.4.6 Develop sales or market penetration goals for low emission vehicles in target regions based on the proportion of imported and domestically produced vehicles (Years 2 and 3 – UNEP assistance)												■	■	■	■	■				
1.4.7 Develop realistic proposals for the policy adjustments, economic motivation and practical use evaluation at the federal and regional levels, by consumer market and private sector (Year 2)									■	■	■	■								
1.4.8 Draft regulations for promotion of the light rail transport (Years 4 and 5)									■	■	■	■	■	■	■	■				
1.5. Prepare legal and regulatory framework for enabling access to low-emission vehicles for approval																				
1.5.1 Review international regulations to adopt best practices in Russia (Year 1-2)			■	■	■															

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
1.5.2 Draft regulations for enabling access to low emission vehicles (Year 3 and 4)																				
1.6. Formulated policy improvements based on demonstration results and policy impact analyses																				
1.6.1 Collected data and information from pilot activities in Kazan and Kaliningrad to be analyzed and impact analyses to be carried out (Years 4 and 5) Part 1 (see para. 3.6.5)																				
Administration and support of the outcome activities																				
***Outcome 2*: Sustainable urban transportation system development. Increased use of low-carbon modes of transport and improved urban mobility in Kazan**																				
2.1. Data on GHG emissions reduction in Kazan																				
2.1.1 Set up a monitoring system to measure a public transit share in the total passenger transportation volume, acquire data on the number of passengers who changed their mode of transportation and number of vehicles on park-and-ride lots (Year 3) Part M1 see para. 3.1.1.																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.1.2 Setting-up of an environmental monitoring cell within the city responsible for monitoring of transport conditions and environmental quality (Years 1 to 5)																				
2.1.3 Monitoring of GHG emission trends from vehicles (Years 1 to 5)																				
2.1.4 Monitor passenger and transport traffic dynamics using a Traffic Management System (Years 3 to 5)																				
2.2. Comprehensive Transport Scheme (CTS) for Kazan beyond 2013																				
2.2.1 Sociological and urban planning review for Kazan (master plan development) that follows analyses of similar cities in Russia and in other countries (Year 1)																				
2.2.2 Preparation of an ITS beyond 2013 to international standards that incorporates growth models for Kazan and proposes appropriate urban transit improvements system based on urban growth patterns in the sociological and urban plans (Years 1 and 2)																				
2.2.3 Review of international and Russian congestion charge practices including legal framework and feasibility studies to use it in other Russian cities based on Kazan experience																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.2.4 Preparation of an implementation plan for these improvements with associated costs and sources of financing (Years 3 and 4)																				
2.3. Priority development of Kazan public transit system																				
2.3.1 Organization and conduct of surveys for data collection and a computer model of traffic flows in Kazan in support of the region's CTS (Year 1)																				
2.3.2 Develop a new public transit scheme by 2017 (Year 3)																				
2.3.3 Conduct of a study to implement the re-structuring of fare collection system that encourages the increased use of public transit in Kazan (Year 2)																				
2.3.4 Implementation of the re-structured fare collection system. The upgrading of the scheme where there is one fare for the entire system will be evaluated (Year 3)																				
2.3.5 Preparation of a plan to implement these institutional changes with associated costs and sources of financing (Years 3 and 4)																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.4. Completed parking policy to support sustainable operation of Kazan transportation system																				
2.4.1 Development of the regulatory framework for Kazan parking policy including corridors where there are parking restrictions and parking tariffs and development of policy enforcement (Years 1, 2 and 3)	-	-																		
2.4.2 Planning and engineering of a pilot project for park-and-ride facilities with supporting infrastructure for cyclists and pedestrians (Years 2, 3 and 4)	-	-																		
2.4.3 Monitoring the increased use of public transit resulting from pilot NMV and park-and-ride infrastructure (Years 1 to 5)	-	-																		
2.4.4 Sharing information and operations data with city and the federal Ministry of Transport that will inform them of possible policy changes to further encourage the development of parking restrictions and NMV infrastructure (Years 2 to 5)	-	-																		

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.4.5 Preparation of an implementation plan for these improvements with associated costs and sources of financing (Years 2 to 5)																				
2.5. Completed successful demos on infrastructure for non-motorized vehicular (NMV) transport modes in Kazan																				
2.5.1 Development of standards for pedestrian and bicycle infrastructure (Years 1 and 2)	-	-																		
2.5.2 Sharing information and operations data with city and the federal Ministry of Transport that will inform them of possible policy changes to further encourage the development of parking restrictions and NMV infrastructure (Years 2 to 5) Part 2.2 see para. 1.6.1, 2.4.4, 3.6.5	-	-																		
2.6. Completed successful pilots on the use of low-emission vehicles																				
2.6.1 Identification of a high profile company in Kazan with a high proportion of their operational costs into transport fuels (Year 2)	-	-																		

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
2.6.2 Conduct of a feasibility study on the costs and effort to acquire an advanced vehicle fleet and the projected operational cost savings over a 5-year period (Year 2)	-	-																		
2.6.3 Assistance in procurement and the sourcing of financing for a fleet of 6 low emission vehicles (Year 3)	-	-																		
2.6.4 Monitoring of the operations of the fleet of low emission vehicles, and collect data on fuel usage, maintenance and parts replacement costs, and the overall economic benefits of the fleet conversion to low emission vehicles (Years 3 to 5)	-	-																		
2.6.5.1 Recommendations for MinDorTrans of Tatarstan and Kazan City Executive Committee on support infrastructure required for the operation of low-emission vehicles	-	-																		
2.6.5.2 Sharing of information and operations data with city and the federal Ministry of Transport that will inform them of possible policy changes to further encourage the use of these vehicles (Years 3 to 5) Part 2.3 see para. 1.6.1, 2.4.4, 2.5.2, 3.6.5	-	-																		
2.6.6 Design of training on clean fleet management, incorporating the UNEP Clean Fleet Toolkit (Years 1 to 3)	-	-																		
2.6.7 Preparation of an implementation plan for these improvements with associated costs and sources of financing (Years 3 to 5)	-	-																		
Administration and support of the outcome activities	-	-																		

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
***Outcome 3*: Development of sustainable urban transit system, increased use of low-carbon modes of transport and improved urban mobility in Kaliningrad**																				
3.1. Data on GHG emissions reduction in Kaliningrad																				
3.1.1 Set up a monitoring system to measure a public transit share in the total passenger transportation volume, acquire data on the number of passengers who changed their mode of transportation and number of vehicles on park-and-ride lots (Year 3) Part M2 see para. 2.1.1.																				
3.1.2 Monitoring of GHG emission trends from vehicles based on the completed pilot SUT corridor (Years 1 to 5)																				
3.1.3 Monitoring of passenger flows- and road traffic trends using city SUT (Years 3 to 5)																				
3.2. Comprehensive Transport Scheme (CTS)for Kaliningrad																				
3.2.1 Review of the CTS completed by the Kaliningrad City as well as the Administration’s existing passenger flow data, identifying data gaps and surveys necessary for a comprehensive CTS. Drafting report with conclusions and recommendations (Year 1)																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
3.2.2 Organization and conduct of surveys for data collection and a computer model of traffic flows in Kaliningrad in support of the region's Integrated Transport Scheme (ITS) (Year 1)																				
3.2.3 Design of a new CTS by 2015 (Year 1 and 2)																				
3.2.4 Design of a new CTS based on the ITS that will provide details of traffic organization and management at particular nodes of the road network (Years 2 and 3)																				
3.2.5 Development of models that determine the effectiveness of traffic management measures to increase the efficiency of urban mobility along main corridors using the transport model for the CTS (Years 2, 3 and 4)																				
3.2.6 Updating the Kaliningrad Master Plan in line with the CTS and ITS that adhere to the best practices of urban planning (Years 4 and 5)																				
3.2.7 Conduct of a formal classroom setting at a local university or on-the-job training for the appropriate government officers and transport planning professionals on the best practices for urban transport planning in (Years 3 to 5)																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
3.2.8 Conceptual design and creation of a prototype Transport Intellectual Situational Center (possible setup: single passenger traffic operator, ATCS office, traffic control planning and development office, municipal parking lot operator, strategic transport modelling office)					■	■	■	■	■	■	■	■	■	■	■	■				
3.3. Draft feasibility study of pilot SUT scheme between SK Yantarniy (Microdistrict 7) and Prospekt Mira in the city center (Ploschad Pobedy)																				
3.3.1 Identification and justification of improvements to be made along this 4.2 km corridor that are complimentary to the CTS and ITS (Year 1)			■	■	■															
3.3.2 Preparation of an implementation plan to develop the pilot transport corridor including the number of trolleys required, phasing and sequencing of construction projects for the overpass, improvement of the road corridor (for cars, buses and bicycles), the setup of bus stops and terminal stations and the linking of cycling infrastructure with park-and-ride facilities and areas with restricted vehicle access (Year 2)					■	■	■	■												
3.3.3 Identification and design of sustainability measures. This would include an overview of collected fares and subsidies to be provided to the municipal company operating the pilot line, KaliningradGorTrans to sustain the SUT operations after completion of the GEF project (Years 2 and 3)									■	■	■	■								

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
3.4. Feasibility study for a rapid transit system in Kaliningrad																				
3.4.1 Drafting feasibility study and concept of the city rapid transit system (Years 2 to 4)				■	■	■	■	■	■	■	■	■								
3.4.2 Drafting pre-design and engineering documentation (Years 2 to 4)							■	■	■	■	■	■	■	■	■	■				
3.5. Commissioning of a pilot SUT corridor																				
3.5.1 Assist the Office of the Chief Architect in the management oversight of the construction of the SUT corridor and to ensure implementation is on time, budget and meets international standards for quality (Years 4 and 5)													■	■	■	■	■	■	■	■
3.6. Completed successful pilots on the use of low emission vehicles																				
3.6.1 Identification of a high profile company in Kaliningrad with a high proportion of their operational costs into transport fuels (Year 2)								■	■											

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
3.6.2 Conduct of a feasibility study on the costs and effort to acquire an advanced vehicle fleet and the projected operational cost savings over a 5-year period (Year 2)									■	■	■	■								
3.6.3 Assistance in procurement and the sourcing of financing for a fleet of 6 low emission vehicles (Year 3)											■	■	■	■						
3.6.4 Monitoring of the operations of the fleet of low emission vehicles, and collect data on fuel usage, maintenance and parts replacement costs, and the overall economic benefits of the fleet conversion to low emission vehicles (Years 2 to 5)											■	■	■	■	■	■	■	■	■	■
3.6.5 Sharing of information and operations data with city and the federal Ministry of Transport that will inform them of possible policy changes to further encourage the use of these vehicles (Years 3 to 5) Part 3 see para. 1.6.1															■	■			■	■
Administration and support of the outcome activities																				
***Outcome 4*: Successful pilots on SUT projects and low emission vehicles replicated in other medium-sized cities in Russia**																				
4.1. Completed workshops on results and outcomes of pilot projects in Kazan and Kaliningrad																				
4.1.1 Workshops will be provided at strategic locations to disseminate lessons learned in successfully developing the SUT pilots and roll-out of HEVs, EVs and PHEVs					■			■		■		■		■		■		■		■

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
4.1.2 A website will also be setup to provide details of the SUT pilots, feedback for improvements and SUT projects from other cities outside of Russia																				
4.2 Completed successful marketing campaign for low-emission vehicles, sustainable urban transport and benefits																				
4.2.1 An effective and wide public awareness raising campaign will target Russia's general public especially in urban areas in an attempt to modify attitudes and behavioral patterns of individual car owners on energy efficiency in urban transport and the use of alternatives to private cars in urban areas (Years 4 and 5)																				
4.3 Center of Excellence for sustainable transport																				
4.3.1 An association of urban transport planners and practitioners will be established with a membership list and list of service and equipment suppliers (Years 2 and 3)																				

Project activities	2013				2014				2015				2016				2017			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
4.3.2 Support in building capacity and knowledge base of the Transport Management Centers in Kazan and Kaliningrad through technical assistance and knowledge sharing events such as conferences and study tours (Years 4 and 5)																				
4.3.3 Circulars and guidebooks on developing SUT initiatives to be prepared for posting on the project website (Years 4 and 5)																				
4.4 Strategies for SUT replication																				
4.1.1 Guidance to be provided to interested municipalities for the development of their plans for SUT in their cities with the objective of getting other municipalities to implement other similar projects. Technical assistance can be provided through the Center of Excellence (Year 5)																				

Annex 3: Project Reporting Framework from the 2017 Project Implementation Report

Objective or Outcome	**Description**				
Objective:	**Reduction of the growth of GHG emissions from the transport sector in the medium-sized cities in Russia**				
	Description of Indicator	**Baseline Level**	**Target level at end of project**	**Level at 30 June 2016**	**Cumulative progress since project start**
	Tonnes of CO2 emissions reductions resulting from transport modal switches to public transport services development of sustainable urban transit systems and increased use of low emission vehicle technology	0 ktonnes CO2	59.23 ktonnes CO2 (direct reductions that includes "direct secondary emission reductions from approved and supportive federal policies) 592.3 ktonnes CO2eq (10-year reduction after completion of Project)	For the reporting period, the direct GHG emission reductions were associated with implementation of ITMS and other relevant SUT policies in the two pilot cities. The overall lifetime direct GHG impact achieved by the project has been estimated at 171,700 tCO2, broken down as follows: construction of 4.8 km bike lanes in Kazan – 200 tCO2; introduction of paid street parking (for 1325 cars) in Kazan – 52,400 tCO2; construction of 14.9 km bike lanes in Kaliningrad – 600 tCO2; introduction of paid parking areas (for 4196 cars) in Kaliningrad – 100,600 tCO2; replacement of 200 old buses with 145 new low carbon public transit vehicles for the new public transport network developed for Kaliningrad – 17,900 tCO2	In addition to the GHG impact achieved last year, the project reports the following overall lifetime GHG impact achieved in the reporting period, broken down as follows: A) direct ERs associated with the implementation ITMS, Public Transportation Route Network and other key SUT planning documents in Kazan and Kaliningrad: -Vakhitova st. park-and-ride facility built in Kazan: 4,232 t CO2 - 1900 m new bike lanes in Kaliningrad: 880 t CO2 - optimisation of the Public Transportation Route Network in Kaliningrad: 2,572 t CO2 achieved so far; the GHG ER reduction effect will be validated before the Final Evaluation.

					B) for all the SUT pilots which have not yet been implemented but with firm commitment from the pilot cities, the project will report projected consequential ERs, before the final evaluation. The following pilots will be assessed: confirmed plans of Kaliningrad and Kazan towards implementation of ITMS, Master Plan, Transportation route Network; ITMS in Krasnoyarsk, ITMS in Rostov, Transportation Route Network in Rostov, bikelane/pedestrian infrastructure in Irkutsk; Kazan Transportation Route Network; 21 km future bike lane infrastructure in Kazan C) for the secondary consequential ERs, the project is collecting data confirming implementation of the LEV promotion strategy it had supported in year1, and will have GHG assessment model before the project final evaluation.
	Number of firm plans from stakeholders for the implementation of improved public transport services in the pilot cities	No plans for improving public transport services	3 firm plans for replicating pilot projects of sustainable urban transport services in Kazan and Kaliningrad or in other Russian cities	5 cities (Tumen, Rostov-on-Don, Penza, Krasnoyarsk, Irkutsk) expressed commitments to co-finance replication of SUT pilots.	The target value achieved. Three replication plans are being implemented (Krasnoyarsk, Irkutsk, Rostov-on-the-Don).
	Number of financing institutions committed to financing SUT	No financing institutions	1 financing institution committed to	One SUT pilot in Kaliningrad (pilot trolleybus line Selma-city center) is	Attempts to launch a leasing subsidy mechanism failed due to the lack of long-

		committed to financing demo SUT	financing demo SUT in Kaliningrad or Kazan by Year 2	being considered for external co-financing via the Federal Ministry of Industry and Trade (subsidy for leasing, when the buses will be leased from the State Transport Leasing Company (GTLK).	term co-financing commitment from the city budget. Further attempts to ensure financial commitments in any of the pilot cities will prove in vain as there are no positive trends in the investment climate nation-wide.
	Percent increase in public transit ridership	0% increase on passenger trips on public transit in pilot cities due to preferred choice of private cars	33% increase in passengers on public transit in pilot cities by Year 5	Design and procurement of passenger traffic monitoring system for the public transport of Kaliningrad city finalised. The results from the system's operation will be analysed towards the project completion and serve the basis for assessment of %increase in public transit ridership. Retroactive baseline assessment for Kazan is in process (as part of the Integrated Traffic Management Scheme development).	The Project is facing difficulties with reporting % increase in public transit ridership, as the baseline data (that is, before the route network optimisation) is fragmented. Also, the increase in public transit ridership come from a combination of factors most to which are outside the project scope (such as the income level of the citizens). For the Final Evaluation, the project will be reporting Percent Increase in Passengers per km, which measures the efficiency of the Public Transport System and should increase by approximately 30% after appropriate Bus Network Optimization.
	Increase in sales of low emission vehicles (EV)	Negligible sales of low emission vehicles (EV) in the automotive market in Russia	150 low emission automobiles (EV) sold and used a) in pilot cities and b) throughout Russia by Year 5	- 10 EVs in Kazan and 2 in Kaliningrad; - 145 EVs throughout Russia.	Although there was a clarification to have the EV as the primary option for the low emission under this indicator, it is suggested to go back to reporting on LEV including hybrids. Level at 30 June, 2017: 920 EVs throughout Russia and in pilots cities (as of January 1, 2017, according to Autostat), and 13142 hybrids (according to General Administration for Traffic Safety of

					the Ministry of Internal Affairs of the Russian Federation).
	-	-	...		
The progress of the objective can be described as:		**On track**			
Outcome 1:	**Approved and enforced supportive federal policies, regulations, institutional arrangements to increase the use of low emission vehicles and development of SUT projects in Russia**				
	Description of Indicator	**Baseline Level**	**Target level at end of project**	**Level at 30 June 2016**	**Cumulative progress since project start**
	National strategy or "roadmap"• for market penetration of low emission vehicles	Only pilot plans such as Decree No N 488-PP by the Moscow government that has had little or no success in demonstrating low emission vehicles in Moscow	One national strategy or "roadmap"• for market penetration of low emission vehicles drafted, agreed with all relevant sectoral authorities and submitted to the Government	The target value achieved as reported last year: The Project's regulatory proposals for promoting electric and hybrid vehicle and for improving information sharinghave been included in the final version of the national comprehensive plan (road map) for the support to the use and operation of LEVs and approved by the Russian Government	The target value achieved Before the Final Evaluation, the project will collect evidence data on the implementation of the LEV promotion strategy; based on that, calculate direct/consequential secondary GHG ER potential.
	System for collection and analysis of fuel consumption and operational information and data of urban vehicle fleets	No collection of fuel consumption and operational information and data of urban vehicle fleets in any Russian cities	A model data exchange policy on vehicle fleets structure and composition (by fuel types, eco class, vehicle category, etc.) between the Traffic	The modified form №1 BDD “Information on the status of road safety” reported last year, does not solve the problem of decision-making at the municipal level, as it doesn’t provide for data disaggregation by municipalities. An alternative solution is currently explored by the project, which is to introduce a request to be issued on	On the Project’s request, Guidelines on inventory of GHG emissions from transport organisations carrying passengers on regular public transport routes were prepared to enable such organisations to count emissions in accordance with accounting rules. The Guidelines will be approved by the RF Ministry of Transport. This will create a tool for control over the amount of GHG emissions, management

			Police and municipal authorities	ad-hoc basis by the municipality to the State Inspection of Road Safety. This solution will be piloted in Kaliningrad in 2016, the request format has been developed by the project.	(due to changes in the fleet composition), and collection of data for national reporting on emissions.
	Incentive policy options for promoting increased use of low emission vehicles in pilot cities	No policies or activities to promote the increased use of low emission vehicles in pilot cities	Report on policy options for increasing the use of low emission vehicles completed in Year 2	Target value achieved as reported last year: the Project prepared proposals on the incentives for electric vehicle and hybrid vehicle use which have been included in the comprehensive plan (road map) for the support to the use and operation of LEVs approved by the RF Government	Target value achieved as reported previously.
	Legal and regulatory framework for improved auto fuel economy has been adopted by the MoT and relevant authorities	No legal or regulatory framework in place for promoting low emission vehicles	Proposed legal and regulatory framework enabling access to low emission vehicles drafted and adopted by relevant governmental authorities. Requirements to improve fuel efficiency of traditional cars developed by the end of Year 4	No changes from previous reporting period. The concept for vehicle labeling in the Russian Federation has been developed and is pending approval (the delay is due to staff turnover in the Ministry of Natural Resources).	Same as reported previously
	Results-based changes to policies for modernizing city vehicle fleets and developing SUT projects based on	MoT has no policies linked to the modernization of	5 policy changes made by MoT on modernizing urban	The model ToRs for the key transport planning documents developed for the two pilot cities	The National industry science and engineering board has approved the following methodological and regulatory

	information and data collected from pilot cities	urban vehicle fleets or developing SUT projects	vehicle fleets and developing SUT projects (based on information collected from pilot cities) completed by Year 5.	(ITMS, Regular Transportation Planning Document) are being used for preparation of methodological recommendations on development of key elements of the traffic management policy. The said recommendations will be approved by the Ministry of Transport for the use by municipalities.	enabling tools to support modernizing urban vehicle fleets and developing SUT solutions: 1. Guidelines on development of pedestrian spaces in the cities and settlements of Russia; 2. Guidelines on drafting documents on road traffic management; on development of integrated traffic management schemes and road traffic management projects for municipalities; 3. Guidelines on establishing tyre mileage norms for the operation of vehicles designed for passenger transportation; 4. Guidelines on sustainable development of interchange hubs in settlements, urban regions and federal level cities of Russia; 5. Model planning requirements on development of bicycle traffic in settlements and cities of Russia; 6. The methodology for establishing public paid parking rates for parking places located at public motorways of the regional, intermunicipal and local levels; on land plots; in buildings and structures owned by a Russian Federation entity; and for differentiation of the rates depending on the location and purpose of the parking place;

					7. Guidelines on drafting legal acts of Russian Federation entities regulating the establishment and use of parking lots (parking places) located at regional or intermunicipal public motorways.
The progress of the objective can be described as:		**Achieved**			
Outcome 2:	**Increased use of low carbon modes of transport and improved urban mobility in Kazan**				
	Description of Indicator	**Baseline Level**	**Target level at end of project**	**Level at 30 June 2016**	**Cumulative progress since project start**
	Number of trained staff of the Kazan Transport Committee who are adaptively managing public transport vehicles and traffic throughout Kazan	Trained staff of the Kazan Transport Committee for adaptive management of public transit vehicles and traffic for corridors	5 staff of the Kazan Transport Committee trained in adaptively managing public transit vehicles and traffic flows throughout Kazan by Year 5	The target value of this indicator is achieved in the reporting period: 10 employees of the Kazan Transport Committee, 20 employees of subordinate to the Kazan Transport Committee organizations trained in the principles of adaptive management of traffic flows.	The target value of this indicator was achieved in the previous period: 10 employees of the Kazan Transport Committee, 20 employees of subordinate to the Kazan Transport Committee organizations trained in the principles of adaptive management of traffic flows.
	An established and operational urban transport planning and management cell	No authority for the planning and management of the urban transport in Kazan	One fully functional authority that is responsible for planning and management of urban transport in Kazan by Year 3	The Traffic Planning and Management Department on the basis of the Kazan Civil Engineering Institute (Kazangrazhdanproyekt) was established.	Target level achieved as reported previously.
	An environmental monitoring cell/group of experts to monitor transport conditions, transport-related GHG emissions and environmental quality	No environmental monitoring cell exists in Kazan to monitor transport conditions, transport-related	One environmental monitoring cell/group of experts is established within Kazan to monitor	Experience accumulated in Kaliningrad (indicator 4.5), will be transferred to the urban transport planning and management group created under the	The monitoring group was established as part of the Single Information Traffic Management Centre, and a Monitoring system was developed in Kaliningrad

		GHG emissions and environmental quality	transport conditions, transport-related GHG emissions and environmental quality by Year 3	Kazangrazhdanproyekt Institute. Thus, the target value of this indicator will be achieved in 2017.	(Indicator 4.5). This experience will be replicated in Kazan.
	An integrated Traffic Management Scheme (ITMS) and updated master plan for Kazan beyond 2013 approved by Kazan Administration	No ITMS in Kazan	An integrated Traffic Management Scheme (ITMS) and updated master plan for Kazan beyond 2013 approved by Kazan Administration by Year 3	The Kazan Integrated traffic management scheme of Kazan approved by the Administration of Kazan in late 2015. The Administration of Kazan is working on the Master Plan adjustment based on the approved ITMS.	Target level achieved as reported previously: The Kazan Integrated traffic management scheme of Kazan approved by the Administration of Kazan in late 2015. The Administration of Kazan is working on the Master Plan adjustment based on the approved ITMS.
	Pilot projects for parking policy implenentation and infrastructure development that is user-friendly to pedestrians and cyclists	Parking plans exist with all proposed lots located in the downtown area of Kazan with no planned improvements for pedestrians and cyclists	10 km of pedestrian and cyclist routs, as well as 3 streets with parking restrictions by Year 4	The target for parking restrictions achieved: 22 street areas in Kazan with parking restrictions have been successfully piloted during the reporting period. Project co-financing agreement for the development of the walking and cycling routes (21 km) prepared and will be implemented in 2016-2017.	With respect to parking restrictions, the target indicator was reached in 2015. 4.8 km of bike lanes put into operation in the previous reporting period Construction of bike routes (21 km) designed by the project will take place in 2018.
	Number of low emission vehicles in use in Kazan.	No low emission vehicles (on improved EV and PHEV technology) in use in Kazan.	12 low emission vehicles in use in Kazan based (on improved EV and PHEV technology) and a network of charging stations by Year 5	10 EVs are in operation in Kazan. First charging station for electric cars has been launched.	13 EVs are in operation in Kazan. 1560 low emission vehicles on PHEV technology in use in Tatarstan Republic.

The progress of the objective can be described as:		**Achieved**			
Outcome 3:	**Increased use of low carbon modes of transport and improved urban mobility in Kaliningrad**				
	Description of Indicator	**Baseline Level**	**Target level at end of project**	**Level at 30 June 2016**	**Cumulative progress since project start**
	Integrated Traffic Management Scheme (for road transport) and new public transit scheme for Kaliningrad based on sustainable urban transit (SUT) principles	Integrated Traffic Management scheme is developed but not approved. There are insufficient funds to allow the CTS to be developed with modern planning practices and traffic modeling	· A completed CTS and ITS developed with modern planning practices and traffic modeling by Year 3	The target value of this indicator is achieved in the reporting period: the Integrated Public Passenger Transport Development Scheme of Kaliningrad and Integrated Traffic Management Scheme has been developed and approved, and has been reported as being under implementation by the Administration of Kaliningrad.	The target value of this indicator was achieved as reported previously: the Integrated Public Passenger Transport Development Scheme of Kaliningrad and Integrated Traffic Management Scheme has been developed and approved, and has been reported as being under implementation by the Administration of Kaliningrad.
	Bankable feasibility study for pilot SUT corridor in Kaliningrad	Feasibility studies and plans that are unable to attract sufficient funding for constructing a modern SUT corridor	One bankable feasibility study for a pilot SUT corridor in Kaliningrad by Year 3	Same as reported last year. One of the feasibility studies is now a subject for negotiations for external financing (subsidy for leasing of trolleybuses).	The feasibility studies for pilot SUT lines in Kaliningrad prepared in previous periods will not be implemented due to the city's budget limitations.
	Detailed engineering designs and implementation plans for the pilot SUT	No engineering designs and implementation plans for SUT corridor	·Detailed engineering designs and implementation plans for SUT corridor by Year 4	The initially planned pilot SUT corridor pending external financing, the decision is being facilitated via correct connections from the Ministry of Transport to the Ministry of Industry and Trade.	operational SUT pilot corridor". The pilot SUT project planned in the Project Document will not be implemented due to failure of the city to fulfil co-financing commitments. As confirmed in the official correspondence from the city, the Kaliningrad budget for the years 2017-2019 is being drawn in the context of shrinking revenues of the city, therefore it is

					impossible to find the means to procure new trolleybuses with off-line running mode
	An operational SUT pilot corridor	No operational pilot SUT corridor	One operational pilot SUT for Kaliningrad by Year 5	The originally proposed in the project document pilot SUT line between the Yantarny sports center and the city center. Final confirmation of cofinancing from the city Administration is pending the decision of the Ministry of Industry and Trade regarding the a subsidy for the purchase and leasing of trolley buses. In case the cofinancing does not materialize, pilots with comparable ER potential will be launched in other cities under project Outcome 4. Two other demos with direct emission reduction potential are also considered for Kaliningrad: Demo 2: Development of the concept and implementation of the pilot project on ICT computer-aided payment system for passenger transport in Kaliningrad. The demo is at the stage of SOW preparation. Demo 3: Implementation of the pilot project on creation of Single passenger transportation operator. SoW is prepared and agreed.	Demo 1: The city decided not to implement the pilot SUT line between the Yantarny sports centre and the city centre Demo 2: Development of the concept and implementation of the pilot project on ICT computer-aided payment system for passenger transport in Kaliningrad postponed till 2018 at the city's decision. The city is committed to 100% financing of the pilot Demo 3: Under implementation. Traffic and Transit Management Center will manage all the services of the city's traffic complex, ensure timely adoption of measures to control the situation in the streets, and ensure priority passage for the urban transport.

	Monitoring system for GHG emissions for pilot SUT corridor	No monitoring of transport-related GHG emissions for the city	One system that monitors GHG emissions from pilot SUT corridor by Year 3 ; 2,300 tonnes CO2 emission reductions from pilot SUT by Year 5	Establishment of GHG emission monitoring system of public transport in Kaliningrad is underway. It is expected to be launched in September 2016. The project attracted an expert to analyze the international experience. The work resulted in the ToR for development of GHG monitoring system in Kaliningrad.	The indicator changed to read "Monitoring system for the pilot city", not the pilot SUT corridor which never materialised Value at 30 June, 2017: In the reporting period, the system for monitoring GHG emissions from road transport in Kaliningrad created on the basis of the Bezopasnyi Gorod (Safe City) state budgetary institution was put into operation.
	Number of low emission vehicles in use in Kaliningrad	No low emission vehicles (improved EV and PHEV technology)in use in Kaliningrad	6 low emission vehicles in use in Kaliningrad (based on improved EV and PHEV technology) and a network of charging stations by Year 5	2 EVs and 361 hybrids.	3 EVs, 10 hybrids and 3 charging stations.
The progress of the objective can be described as:		**On track**			
Outcome 4:	**Successful pilots on SUT projects and low emission vehicles replicated in pilot cities and other medium-sized cities in Russia**				
	Description of Indicator	**Baseline Level**	**Target level at end of project**	**Level at 30 June 2016**	**Cumulative progress since project start**
	Information on SUT projects and low emission vehicle demonstrations in Kazan and Kaliningrad	No information on SUT projects or low emission vehicle demonstrations in Kazan and Kaliningrad	Reports and workshop proceedings on SUT pilot projects and low emission vehicle demonstrations in Kazan and Kaliningrad by Year 5	Information on SUT demo projects in Kazan and Kaliningrad is uploaded to the web-sites of the Project and UNDP Russia, and to news portals in the pilot regions and the regional media.	Information on SUT projects and low emission vehicle demonstrations in Kazan and Kaliningrad is uploaded to the web-sites of the Project and UNDP Russia, and to the websites of regional mass media.

					The project is to add info on how information of SUT projects is reflected by the cities on their web resources.
	Workshops and other media to disseminate SUT and low emission vehicle demonstrations in Kazan and Kaliningrad	No dissemination activities on any SUT activities	5 workshops conducted to disseminate SUT and low emission vehicle demonstrations in Kazan and Kaliningrad by Year 5	Information about project activities is being disseminated on a regular basis. There were 9 theoretical and practical trainings organized in Kazan and Kaliningrad. Qualified international specialists were invited as trainers. In Kazan: • Service Quality Management in Public Transportation: September 14-16, 2015; • Security Management and Risk Assessment in Public Transport - September 30 - 2 October, 2015; • Organisation of Public Transport During Large Events - February 24-26, 2016; • Public Transport Maintenance and Asset Management - March 28-30, 2016. In Kaliningrad: • Procurement and Commissioning of Buses, Including	Dissemination of information about SUT Projects and LEV demonstration in Kazan and Kaliningrad continues. The following activities carried out in the reporting period: Four workshops, three round tables, a biking congress and a summer school.

				the Bus Operation Planning - December10-11, 2015; • Urban Transport Pricing - October 13-14, 2015; • Financing and Funding of Public Transport - March 22-23, 2016; • Regulation and Contracting of Public Transport Services –February 3-5, 2016; • Public Transport Fundamentals with focus on Organizing Authorities - October 20-22, 2015. International conference “Urban transport and the ecology of the modern city” was organized on April 6, 2016. International Cycling Congress was organized for the first time in Moscow on April 21-22, 2016. International Summer School “The Transformation of Transport and Communication Space Cities” in Kaliningrad City was organized in June 29 – July 03, 2015.	

				International Summer School "Transforming the public transport and communication space of the city. The transport hub "Compressorniy" will be organized in Kazan in August 22-26, 2016. In addition to the above mentioned events, 3 seminars and 7 round tables were organized during the reporting period.	
	A Center of Excellence for SUT development in Russia	Plans for establishing a Center of Excellence for SUT development in one of the piiot cities	A strengthened Center of Excellence for SUT development is established in Kazan/Kaliningrad by Year 5	Negotiations regarding establishment of the Centre with the Administrations of the cities, local universities, as well as with the professional community are underway.	The Department of sustainable urban transport established jointly by the Moscow State Automobile & Road Technical University (MADI), and the Scientific and Research Institute of Motor Transport (NIIAT). The Agreement between the MADI, NIIAT and Project on joint implementation of the mentioned activities was signed on 27.02.2017. The Department held three scientific workshops on sustainable urban transport with the Project's support. https://www.niiat.ru/news/919/ The audience of each workshop included more than 150 people including representatives of federal and regional authorities, the scientific and expert institutes, postgraduates and students. The programme of the international scientific lectures is based on international and

					Russian best knowledges. The course also is providing opportunities for all participants to take part in interactive discussions and case study presentations. Thus, information about SUT is being disseminated on a regular basis. Moreover, it will be disseminated after the Project implementation too.
	Number of awareness raising activities (i.e. marketing campaigns, etc.) for low emission vehicles and SUT projects	No advertisements on low-emission vehicles sales in Russia	5 television spots, 5 magazine ads and a SUT webpage on the benefits of low emission vehicles and SUT projects on the environment and health that have raised public awareness on their benefits to health and environment are completed by Year 5	During the reporting period, 5 video spots for Russian “car addicts” were placed on youtube promoting: - Advantage of urban public transport; - Cycling; - Eco-driving; - Low-carbon transport; - Sustainable urban transport. These spots were integrated into the news items on the federal and regional channels and spread received wide on different social media websites. Project accounts in Facebook, VKontakte, Twitter, Odnoklassniki, and Instagram are continuously developing. Additionally, accounts in social networks Google+ and Moi mir were created. It is planned to extend the target audience, by	The project is to add data on how many times which TV spots were run, and get visitation data for the YouTube channel for the videos During the reporting period, the Project held several large-scale international events. These include the II International Cycling Congress in Moscow on 14 - 15 April 2017; International Summer School "Transforming the public transport and communication space of the city. The transport hub "Compressorniy" organized in Kazan in August 22-26, 2016; the 5 round tables and seminars. Project activities and trainings helped raise awareness of the issues of SUT, low emission vehicles, urban environment and climate change among government authorities, profit and non-government organizations, community-based associations and society as a whole.

				promoting video spots through the social networks.	The Project continued to support promotion of five short videos related to eco-driving, greater use of public transport, cycling and walking and sustainable transport systems. The videos were massively posted in major social media to raise awareness of city residents in Russia about the benefits of low-carbon vehicles, sustainable urban transit system and alternative transport modes in urban environment. Also, the Project takes pride in its achievements to engage Russian cities in the European Mobility Week (16-22 September) and the Global Day without Cars (22 September). In 2014, the Project became an official Russian national coordinator of the European Mobility Week. Thanks to the Project's efforts, the list of Russian cities officially participating in the Week and the World Day without Cars grew from two cities in 2013 to 58 in 2016. In 2017, the Project expects the participation of more than 70 cities. The Project helps promote healthy lifestyle, involve new groups of population and organizations into cycling and hiking and promote the use of public transport instead of private vehicles.
	Number of SUT replication plans using Kazan and Kaliningrad pilot projects as a basis.	No replication plans for SUT for any cities in Russia	5 SUT replication projects proposed based on modules from lessons learned	Five new pilot project cities selected for the replication of the SUT demonstration projects: Tyumen, Rostov-on-Don, Penza, Krasnoyarsk,	Three replication plans are being implemented (Krasnoyarsk, Irkutsk, Rostov-on-the-Don).

			from the Kazan and Kaliningrad pilot SUT projects by Year 5	and Irkutsk. The main criteria for selection being: - conformity with the project objectives and the key directions of the federal Transport Strategy, including priority development of public transport and reducing negative impact on environment, and - confirmation of co-financing for the implementation of each demo project from the respective city budget (not less than 50%). The UNDP/GEF project budget will be used to finance the following: - the development / adaptation of design - the expert review of design solutions, - modeling of the transport systems and analyzing ways for their optimization; - monitoring of transport systems and similar analytical applications of SUT model development. The city's contribution to the budget will be used to finance	

				- rolling stock procurement, - construction, - manufacturing, and - operation.	
	Number of SUT professional training curricula	No advanced training courses in Russia for municipal staff on urban transit systems and best practices. Federal state educational standards for higher vocational education for specialists and engineers in traffic management are lacking any disciplines that teach students SUT best solutions and practices	1 formal curriculum or advanced training course on SUT 1 SUT methodology training set as part of training course on Transport Technology (bachelor degree) for Road Transport Management engineers	Development of teaching aid on SUT for universities is completed and under consideration. The training course for Road Transport Management practitioners is elaborated as a part of training course on Transport Technology (bachelor degree).	One syllabus for the subject matter "Sustainable Urban Transport Systems" developed.
The progress of the objective can be described as:		**On track**			

Annex 4: Co-financing 2013-2017

The calculations were made at the exchange rate of USD 1= RUB 56.9966 at 11 September, 2017.

		2013	2014	2015	2016	2017	TOTAL	According to ProDoc
		$	$	$	$	$	$	$
1	**Contribution of RF Ministry of Transport (amount of co-financing)**	**28,449,905.48**	**936,580.14**	**459,202.10**	**545,088.16**	**0.00**	**30,390,776.00**	**8,600,000.00**
2	**Contribution of Kazan City Administration (amount of co-financing):**	**12,537,434.71**	**1,322,440.00**	**8,673,364.49**	**6,512,696.69**	**2,674,080.41**	**40,345,590.00**	**113,000,000.00**
	for the activities, implemented in the frame work of ITMS		213,429.65	8,673,364.49	6,401,869.16	2,468,776.73		
	for the activities, implemented in the frame work of the new route network					205,303.68		
	for the activities, planned in the frame work of the Parking policy development programm				90,297.16			
	for the activities, planned in the frame work of the Biking infrastructure development				20,530.37			
3	**Contribution of the Kaliningrad City Administration (amount of co-financing):**	**729,836.17**	**22,758,627.00**	**6,466,863.49**	**32,212,009.47**	**23,065,738.20**	**85,233,074.33**	**34,656,000.00**

	for the activities, implemented in the frame work of ITMS		401,391.49	6,320,619.60	2,592,155.62	1,406,330.20		
	procurement of the buses			*5,007,387.95*	*1,764,812.56*			
	for the activities, planned in the frame work of the Master Plan			146,243.89	29,422,841.86	21,659,408.01		
	for the activities, planned in the frame work of the Operation Transport Master-plan				197,011.98			
4	**Unplanned contribution (amount of co-financing):**	**11,027.10**	**0.00**	**0.00**	**29,930.36**	**878,715.40**	**919,672.85**	0.00
	Immanuel Kant Baltic Federal University	11,027.10						
	Friedrich Ebert Foundation				29,930.36	13,686.91		
	Rostov-on-Don City Administration					254,029.08		
	Krasnoyarsk City Administration					256,629.60		
	Irkutsk City Administration					350,727.12		
	MADI					3,642.69		
5	**Liotech**							**1,880,000.00**
TOTAL		**41,728,203.46**	**25,017,647.14**	**15,599,430.08**	**39,299,724.67**	**26,618,534.01**	**156,889,113**	**158,136,000**

Annex 5: TE Meetings and Itinerary

Dates	**Venue**	**Meetings**
October 5	Moscow, 9 Leontievsky side-street	Meeting with John O'Brien, Regional Technical Advisor on Climate Change Mitigation, UNDP Regional Centre for Europe and the CIS; Irina Bredneva, Programme Officer, UNDP PSO; Michael Saunders, Project Chief Technical Advisor; Project team (Nikolai Kharitoshkin, Project Manager; Rimma Filippova, Deputy Project Manager); Artur Romanenko, National Project Evaluator.
		Project Steering Committee Meeting.
October 9	Moscow, 9 Leontievsky side-street, room 205.	De-briefing with Michael Saunders, Project Chief Technical Advisor; Irina Bredneva, Programme Officer, UNDP PSO; and the project team. Project results and logframe
		Video skype interview with Natalia Olofinskaya, Head of UNDP PSO
		Interview with John O'Brien, Regional Technical Advisor on Climate Change Mitigation
October 10	Moscow, 9 Leontievsky side-street	Yury Trofimenko, Head of the Department of Technosphere Security of the Moscow Automobile and Road Construction University (MADI), director of the Institute of Energy and Environment Challenges at MADI
		Vadim Donchenko, Scientific director of OJSC "Scientific and Research institute of motor transport" and Ms. Yekaterina Bryazgina, Deputy General Director of OJSC "Scientific and Research institute of motor transport"
October 11		Skype calls to Krasnoyarsk, Rostov-on-Don, Irkutsk
		Oleg Evseev and Tatiana Panfilova, Research Center for Complex Transport Projects of the Ministry of Transport
		Alexey Tulikov, Head of Legal Department of the Federal State Budgetary Institution "Russian Energy Agency" (Minenergo of Russia), Project Consultant for the preparing the legal and regulatory framework for the effective realization of the Integrated Plan of measures to support the production and use of environmentally friendly transport

Dates	**Venue**	**Meetings**
		Alexander Gusarov, Chief Editor of the journal of automotive engineers (Journal of the Association of Automotive Engineers of Russia), Executive Director of the Association of Automotive Engineers
October 12		Yussup Khassiev, Head of The International Association of Public Transport (UITP) in Moscow & Astana offices
		Gleb Evgheniev, Project Consultant for the preparing the legal and regulatory framework
		Dr. Mikhail Yakimov, Director of the Institute for transport planning of the Russian Academy of Transport
		Konstantin Trofimenko, Director of the Institute for Transport Economics and Transport Policy Studies / Centre for Research of Urban Transport Problems, National Research University "Higher School of Economics"
		Nikolai Asaul, Deputy Minister of Transport of the Russian Federation, National Project Director, and Vladimir Lugovenko, Deputy Director of the Department of Government Policies in the Field of Vehicle and Urban Passenger Transport of the RF Ministry of Transport, Deputy National Project Director
October 16		Sidorov Alexey Vasilievich Head of Transport Department of the Ministry of Transport and Roads of the Republic of Tatarstan
October 17	Kazan	Aidar Abdulkhakov, Chairman of Transport Committee of Kazan City Administration
	Kazan, Str.Ostrovskogo 23, liter 1.	Evgeniy Popov, director of the "Organizer of passenger transportations" (the largest bus public transport operator in Kazan)
	Kazan, str. Gruzdeva, 5	Timur Kadyrov, Deputy Chief Architect of Kazan city
October 18	Kazan, str. Teatralnaya, 13	Igor Kulyazhev, Chairman of the Urban Improvement Committee of Kazan City Administration, and Anzhelika Melentieva, Projects Manager at "Artel Anzheliki Melentievoy" Ltd
		Nataliya Galyamova, Cycling Union of The Republic of Tatarstan
October 19		Site-visit to Kaliningrad GorTrans, demonstration of passenger flow control system in action
		Interviews with Anatoly Mukhomor, Director of the Municipal Enterprise "Kalinigrad-GorTrans";
		Aleksandr Khimich, Head of Road and Transport Department, Municipal Services Committee, Kaliningrad Administration;

Dates	**Venue**	**Meetings**
		Aleksei Poleanskih, Deputy Head of the Development Department, Company «SHTRIH-M»
		Interview with Yury Kondratiev, Deputy Chairman of the Transport Committee of the Executive Committee of the Kazan municipal council
		Interview with Sergei Melnikov, Head of the Baltiysk municipal Administration, Kaliningrad Region; former Kaliningrad City Administration Focal Point for the project
		Informal meeting with Nikita Nikitin, Activist of the KoenigBicycle team, Associate Professor of Immanuel Kant Baltic Federal University, Associate Researcher of the Center for Social and Humanitarian Informatics
October 20		Interview with Elena Dyatlova, Minister of Infrastructure Development of the Kaliningrad Region
		Site-visit to the Traffic and Transit Management Center
		Interview with Artur Krupin, Deputy Head of the Administration, Chairman of the Architecture and Construction Committee of the Urban District "City of Kaliningrad"
		Interview with Igor Shlykov, Head of the Administrative Department, Administration of Kaliningrad Municipality
		Interview with Andrei Nosonov, Deputy Director of ANO "Kaliningrad 2018 Directorate"

Annex 6: List of Project Documents Reviewed during the TE

List of Project Documents provided for The Desk Review Prior to the Evaluation Mission

- The Minutes of the 2 nd PSC meeting of 10.12.2013 (ENG_T)
- 2013 Co-financing of Kaliningrad
- 2013 Co-financing of the Ministry of Transport of the Russian Federation
- 2013 Co-financing of the Mindortrans of the Russian Federation
- 2013 Work plan
- 2013 The Agreement between the United Nations Development Program and the State Enterprise "Scientific Center of Transport Problems of the Ministry of transport of the Russian Federation" on Cooperation in the Realization of the Project "The Reduction of Greenhouse Gas Emissions from Road Transport in Russia" with the Support of the Global Environment Foundation
- 2013 The Letter from the Committee of Municipal Economy of Kaliningrad about the Volume of Municipal Financing in 2013
- 2013 The letter to the Ministry of transport of the Russian Federation, to the Head of the Office of Project's Support the Development Program of the United Nations in Russia about Subsidies for Pilot Regions (Kaliningrad oblast, Republic of Tatarstan)
- 2013 Final LOE of the Steering Group on Transport of the Russian Federation 2014 Work plan 2013-2018
- 2014 Co-financing of Kaliningrad
- 2014 Co-financing of the Mindortrans RT - 2
- 2014 Co-financing of the Mindortrans RT
- 2014 Final 4304-Climate Change Mitigation-2014 PIR Report
- 2014 Co-financing of the Ministry of Transport of the Russian Federation for 35 million rubles
- 2014 Co-financing of the Kazan City Hall
- The Minutes of the 3 rd Meeting of the KKP of 03.12.14 (ENG_T)
- 2015 Work plan 2013-2018
- 2015 Co-financing of Kaliningrad
- 2015 Co-financing of the Mindortrans RT
- 2015 The Co-financing Table of the Project 2015 – 2035 (ENG_4)
- 2015 Summary. Eco-labelling ENG

- The Minutes of the 5 th PSC Meeting of 24.11.2015 (ENG_T)
- 2015 Protocol of the 4th PAC of 20.05.15 ENG

2015 The Report on the Construction of the Overpass, Pedestrian Sidewalks and Bicycle Paths in 2014

The Letter to the Director of the Department of Auto and Urban Electric Transport with the Minutes of the Round Table, Devoted to Urban Transport Planning

- 2015 The Letter to the Head of the Office of Project's Support the Development Program of the United Nations in Russia about Co-financing of the Ministry of Transport of the Russian

Federation and the Allocation of 35 Million Rubles for the Research «Creation of New Parking Zones in Russian Cities»

- 2015 Climate Change Mitigation - 2015 PIR Report
- 2015 The Letter to the Head of the Office of Project's Support the Development Program of the United Nations in the Russian Federation about the Implementation of the Municipal Parking Meters in Kazan
- 2015 Co-financing of the Ministry of Transport of the Russian Federation
- 2015 Co-financing of the Kazan City Hall
- 2016 Work plan 2013-2018
- 2016 Co-financing of Kaliningrad
- 2016 4304- Climate Change Mitigation-2016 PIR Report 1
- 4304- MTE-ReportSigned
- 2016 Co-financing of the Ministry of Transport of the Russian Federation - 2
- 2016 Co-financing of the Ebert Foundation Congress 2016
- 2016 The letter from the Friedrich Ebert Foundation about the Successful Holding of "The Transformation of Transport Systems in the Russian Federation" School
- 2016 The Minutes of SCM Transport of July ENG
- 2016 The Minutes of SCM Transport of November ENG
- 2016 The Minutes of the Cycling Congress in Moscow 21-22.4.2016
- 2016 The Detailed Transport MTE Management Response
- 2016 Order 193 of June 11, 2016 by the Coordination Council
- 2016 The list of requirements for Pilot Regions of 2015

- 2016 The Report on the Development of Researches on “The Development of Services of Clever Transport Systems in Transport Studies”, “The Development of the Quality of the
- Assessment System of Road Traffic in the Russian Federation”, “The Development of Modern Methods of Traffic Management”
- 2016 Co-financing of Kazan Summer Foundation Eberta School
- 2017 PIR (Project Implementation Review) Word Report-UNDP PIMS4304-GEFID4008 Transport
- 2017 Work plan ENG
- 2017 Co-financing of the Road Transport Authority of Kaliningrad
- 2017 Co-financing of the Irkutsk Administration
- 2017 Co-financing of the Krasnoyarsk Administration
- 2017 Co-financing of the Directorate of the World Cup (Kaliningrad Region)
- 2017 Co-financing of the Architecture Committee of Kaliningrad
- 2017 Co-financing of the Kazan City Hall
- 2017 Co-financing of Rostov-on-Don. Annex 1: the list of measures
- 2017 Co-financing of Rostov-on-Don
- 2017 Co-financing of the Ebert Foundation
- 2017 The Letter from the Committee of Municipal Economy of Kaliningrad on Modifications of the Scheme of Traffic Organization in Kaliningrad
- 2017 The Letter from the Committee of Transport of Kazan on the Restructuring of Municipal Parking and Bicycle Zones
- 2017 The Letter from Committee of Architecture of Kaliningrad on the Implementation of Street-Road Network Objects
- 2017 The Report of the Administration of Krasnoyarsk on the Development of Complex System of Urban Traffic from 2017 to 2032, taking into account the XXIX World Winter Universiade 2019
- 2017 The Report of the Committee of Urban Development of Irkutsk on the Resettlement of Pedestian Crossing in Irkutsk
- 2017 Summary. Co-financing of the Project in the Pilot Regions with Brief Pilot Projects, Project's Contribution in Pilot Regions, the Region's Contribution and Pilot City's Obligations on Completion/Development of Pilot Regions and Co-financing
- 2017 The Report of the Administration of Rostov-on-Don on the Construction of a City-wide Highway and on the Improvement of the reliability of Transport Links

- 2017 The List of the Key Events, organized by the Project from 2013 to 2017

  2017 Summary. The Information Map of Using the Results of Scientific Researches, Devoted to the Project

- 2017 Summary. Irkutsk Bicycle Infrastructure

- 2017 Summary. Traffic Management in Rostov-on-Don

- 2017 4304- Sustainable Revision of the Transport Budget 2017_April

- 2017 Summary. The Master Plan of FIFA2018 in Kaliningrad

- 2017 Co-financing of Moscow Automobile and Road Construction State Technical University (MADI)
- An Inception Report ENG_01
- An Inception Report RUS_01
- The List of Members of the Project Steering Committee
- The List of Members of the Project Management Unit
- The Letter to the Director of the Department of Auto and Urban Electric Transport about the Success of the International Conference "Optimization of Transport Solutions During National and International Mass Events to Reduce Greenhouse Gas Emissions»
- The Letter to the Head of the Office of Project's Support the Development Program of the United
- Nations in Russia about Subsidizing the Project on the Formation of the System of Minimal Transport Standards for Citizens in the Russian Federation
- The Letter to the Head of the Office of Project's Support Office In Russia about Subsidizing the Training Program for Drivers in Pilot Regions
- Summary. The ITMS, Kazan ENG

- 4304- PIMS of the Document «The ProDoc in Transport Industry» ENG

- Summary. Gas as Motor Fuel
- Summary. The Integrated Scheme of Public Transport in Kaliningrad

- Terms of Reference of the Final National Evaluation Consulting Transport Project of 17.07 - JO
  - Terms of Reference of the Int Transport TE

- The general plan of Kazan with the link of CSODD
- The Final Agreement between FSUE and UNDP RUS
- The Selective Competition between Project's Pilot Cities
- The Statement of Work for the Adjustment of the Transport Strategy of the Russian Federation 2030

List of Project Documents provided after the Site Visits

- The Report of the *"Lessons Learned"* Project
- *The Project GHG Estimates Report* by Dzmitry Halubouski, International consultant for verification and correction of GHG emission reductions
- *The Table of Co-financing*

Annex 7: Legislative Outputs from Component 1

Activities and legislation for the development and implementation of federal policies, regulations and enabling environment in support of SUT management in medium-size cities in Russia

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
1.	No. 01-2013-UNDP **Development of Proposals on a Set of Measures Aimed at Creating Conditions for Phased Upgrading of the Rolling Stock of Public Motor Transport, and Road Services and Public Utility Transport to Vehicles on Gas Fuel, and For Stimulating Development of the Corresponding Infrastructure**	Resolution of the Russian Federation Government No. 767-p, dated 13 May, 2013 "On Enhancing the Use of Natural Gas as Motor Fuel"	Implemented	Prepared with the participation of the RF Ministry of Transport with account for the works performed under the Project. The Resolution includes instructions on the development of a set of legal, economic and organisational measures of state support for production, commissioning and operation of natural-gas fuelled vehicles and agricultural machinery, building of a refuelling and service infrastructure alongside roads, creation of a system for accounting statistics and technical regulation in using natural gas as the motor fuel; in particular, it is ordered to develop a set of measures aimed creating conditions in the Russian Federation for bringing the level of natural gas fuel use in the public transport and road service and public utility transport by 2020 to the levels specified below, and to present the same to the RF Government: - In cities with over 1M population: up to 50% of the total rolling stock; - In cities with over 300K population: up to 30% of the total rolling stock; - In cities with over 100K population: up to 10% of the total rolling stock; In the years 2014 to 2016, constituent entities of the Russian Federation procured 3087 natural-gas fuelled buses and public utility vehicles under the system of federal subsidies.
		The comprehensive action plan for enhancing the use of natural gas as motor fuel approved by Vice-Chairman of the RF Government A.V. Dvorkovich on 14 November, 2013.	Implemented	
2	№ 2014-131-01 **"Development of a Comprehensive Plan of Measures for to Support Manufacturing and Use of Low Emission Vehicles"**	A comprehensive plan of measures to support manufacturing and use of low emission vehicles approved by Vice-Chairman of the RF Government A.V. Dvorkovich on 22 October, 2014 in Order No. 7116p-P9	Implemented	In 2013 and 2014, the Project worked closely with the RF Ministry of Economy and Development to develop the Comprehensive Plan for Low-emission Vehicle (LEV) Production and Use. On 22 October, 2014, the Comprehensive Plan was approved by Vice-Chairman of RF Government A.V. Dvorkovich in resolution No. 7116p-P9. The comprehensive plan of measures for to support manufacturing and use of LEVs is aimed at ensuring coordination between RF entities and large urban agglomerations in developing green transport; furthermore, it gives legal definitions of the concept, types and categories of LEVs; gives a list of measures of state support for manufacturing and use of LEVs, their components, and the respective refuelling and other infrastructure; contains instructions on encouraging production of LEVs and their components; describes basic principles of LEV production and use, and of building the refuelling and service infrastructure for their operation. In its turn, the above Comprehensive Plan influenced the development and approval of a number of regulatory acts, which will enable implementation of all the measures for the development and operation of LEVs in Russia.
		Instruction of the RF Government No. AD-P9-5126, dated 27 August, 2016, on ensuring co-ordination between entities of the Russian Federation and large urban agglomerations in developing green public transport.	Implemented	

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
		Decree of the RF Government No. 890 dated 27 August, 2015 "On Installing Charging Columns for Electric Vehicles on Filling Stations"	Implemented	According to this Resolution, gas stations are obliged to build charging columns on their premises. According to this document, effective November 1, 2016, the government began to keep record of all the gas stations that had charging columns (stations) for electric vehicles on their premises.
		- Draft federal law "On Road Traffic Management" (submitted to the RF State Duma in accordance with the established procedure)	Submitted	To promote the use of LEVs, the RF Ministry of Transport drafted the federal law "On Management of Road Traffic" (submitted to the State Duma of the Russian Federation in accordance with the established procedure), which, among other things gives entities of the Russian Federation a right to introduce entry restrictions for low emission standard vehicles (under 4) in particular areas of the municipality, and benefits for using LEVs, which will enable promotion of a wider LEV use.
		Decree of the Russian Federation Government No. 832, dated 12 July, 2017 "On Making Amendments to the Traffic Rules"	Implemented	This Decree introduced new concepts (electric vehicle, hybrid vehicle, traffic island) and new road signs: 5.35 "Area with Restrictions on Emission Class of Motor Vehicles", 5.36 "Area with Restrictions on Emission Class of Heavy Duty Vehicles", 7.21 "Filling Station with Electric Vehicle Charging Equipment", and 8.25 "Vehicle Emission Class". The proposed novelties will enable introduction of restrictions on vehicles based on their emission standards and to flexibly prevent entry of environmentally unfriendly vehicles. In addition, the RF Ministry of Transport has in the past years introduced significant changes in the existing Traffic Rules amending the conceptual framework related to bicycle traffic.
4	2014-160-01, 2014-161-01, 2014-162-01 **Development of proposals on introduction of "eco-labelling" for newly registered and operating road transport in the Russian Federation**	Order of the RF Ministry of the Interior No. 496, Order of the RF Ministry of Industry and Energy No. 192, Order of RF Ministry of Economic Development No. 134 dated 23 June 2005 (as amended on 10 March, 2017) "On Approval of the Regulation on Vehicle Certificate of Title and Carriage Frame Certificates of Title"	Implemented	Under the Project, measures were undertaken to support introduction of labelling for newly registered and operating road transport in Russia, and to develop guidelines supporting development of comfortable transportation hubs. Eco-labelling is a system of measures (application of special stickers, declarations, information sheets, electronic chips / marks, electronic databases, special marks in the registration documents etc.) to provide information on vehicle emission and energy-related characteristics, CO_2 emission levels and other relevant information to interested persons, organisations and/or management systems.
		Letters to federal executive authorities with proposals to amend the laws and regulations prepared.	In progress	
5	No. 20-2015-UNDP, dated 05 August,15 **"Preparation of Law and Regulations for Sustainable Use of Public Transport in Pursuit of Federal Law No. 220-FZ, dated 13 July, 2016, "On Organising Regular Passenger and Baggage**	Decree of the RF Government No. 239 dated 07 March, 1995 (as amended on 25 January, 2017) "On Measures for Improvement of Government Regulation of Prices (Tariffs)"	Implemented	The works implemented under the Project are aimed at improving the operation of public transport, reducing the contract terms for contractors, optimising the fare, eliminating duplicating routes and introducing additional routes under the existing and proposed rolling stock to ensure connectivity between municipalities and city districts. The accounting system has been improved. This will enable to take motor fuel consumption into consideration in assessing the operation of public transport, and in this way to find out actual GHG emissions.
		Article 14 of Federal Law No. 44-FZ, dated 05 April, 2013 "On the Contract System in Procurement of Goods, Works and Services for State and Municipal Needs", as amended in version No.108-FZ on 07 June, 2017.	In progress	

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
	Transportation by Road Transport and Urban Ground Electric Transport in the Russian Federation and On Amending Certain Legislative Acts of the Russian Federation."	Order of RF Ministry of Transport No. 309, dated 19 October, 2015 "On Declaring Order of the RF Ministry of Transportation No. 178, dated 14 August, 2003, to Be No Longer in Force."	Implemented	
		The draft order of the RF Ministry of Transport "On the Order of Determination of the Initial (Highest) Price of Contract, of the Price of Contract with the Only Vendor, the Price for Works Related to Regular Passenger and Baggage Transportation by Road Transport and Urban Ground Electric Transport at Controlled Rates"	In progress	
		Order of the RF Ministry of Transport No. 333, dated 10 November, 2015 "On Approval of the Form of Request to Establish or Amend an Interregional Route for Scheduled Operations"	Implemented	
		Order of the RF Ministry of Transport No. 367, dated 16 December, 2015 "On Approval of the Form of Quarterly Reports on Scheduled Operations and on Determining the Dates for Submitting the Reports to the Authorised Federal Bodies, Authorised Body of the RF Entity, and Authorised Local Government Body".	Implemented	
		Order of the RF Ministry of Transport No. 366, dated 16 December, 2015 "On Approval of the Order of Identifying the Throughput Capacity of the Vehicle Stop and the Lengths of Technical Intervals for Vehicles Departing from the Vehicle Stop."	Implemented	
		Order of the RF Ministry of Transport No. 368, dated 15 December, 2015 "On Determining Intervals in the Schedules of Vehicle Departure Envisaged in Part 1, Article 7 of Federal Law No. 220-FZ, dated 13 July, 2015."	Implemented	
		Order of the RF Ministry of Transport No. 108, dated 19 April, 2016 "On Approval of Requirements to Parking at Night Time of Vehicles Used for Regular Passenger and Baggage Transportation by Road Transport and Urban Ground Electric Transport, in the Absence of the Driver."	Implemented	

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
		Order of the RF Ministry of Transport No. 331, dated 10 November, 2015 "On Approval of the Form of the Permission to Provide Scheduled Transportation Services and on the Order of Filling in the Same."	Implemented	
		Order of the RF Ministry of Transport No. 332, dated 10 November 2015 "On Approval of the Form of the Scheduled Operations Routes and on the Order of Filling in the Same."	Implemented	
6	No. 22-2015-UNDP **"Preparation of Guidelines on Developing Easy-To-Use Interchange Hubs"**	**Approved in a Meeting of the Project Steering Committee:** Guidelines on sustainable development of interchange hubs in settlements, urban regions and federal level cities of Russia (optimisation of interchange hub placement for the purpose of reducing the need to move transport and passengers); Guidelines on development of pedestrian spaces in the cities and inhabited areas of Russia (development of pedestrian traffic, reduction of short trips); Model planning requirements on development of bicycle traffic in settlements and cities of Russia (development of cycling transport as an alternative means of travelling over short and medium, reducing the need for motor transport); Guidelines on establishing tyre mileage norms for the operation of vehicles designed for passenger transportation (developed for typical sizes of tyres for use on light-duty vehicles, buses and trolley-buses (M_1, M_2, M_3 categories) that have not been reconditioned: excessive wear of the tyres results in additional emissions of Pm10 particles and higher fuel consumption, which increases GHG emissions); Guidelines on drafting documents on road traffic management; on development of integrated traffic management schemes and road traffic management projects for municipalities (optimisation of road traffic in	The documents are being prepared for signing by N.A. Asaul	All the guidelines and regulatory acts developed under the Project were taken as a basis for designing, constructing and operating safe and efficient transportation hubs, and bicycle and pedestrian facilities, for developing multimode urban transport systems, for implementing efficient road traffic management activities etc. Also, the municipalities received a unified legal and regulatory framework for monitoring, and data collection and analysis to work out the urban transport policy. This will enable individual entities of the Russian Federation to analyse the existing situation and draft sustainable urban transport systems based, among other things, on environmental friendliness and protection of human lives and health as a result of reduction in the number of traffic accidents and of emissions from road transport.
7	No. 29-2015-UNDP **"Development of Guidelines on Pedestrian Spaces (Areas) in the Cities"**			
8	No. 32-2015-UNDP **"Development of Methodologies and Standards for Transport Infrastructure Facilities, Namely for Pedestrian and Bicycle Traffic"**			
9	No. 54-2016-UNDP **"Development of Science-Based Proposals on Amendments to the RF Legal and Regulatory Base with Respect to the Use of Inflated Tires for Passenger Vehicles for the Purpose of Vehicle Energy Efficiency Improvement"**			

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
10	No. 61-2016-UNDP **"Development of Guidelines on Drafting Documents on Traffic Management in Municipalities"**	order to reduce vehicle delays and congestions resulting in unproductive vehicle fuel consumption and GHG emission growth.)		
11	No. 67-2016-UNDP **"Guidelines on Training in Economical and Ecological Driving (Eco-Driving)"**	Guidelines on training in economical and ecological driving (eco-driving)	The documents are being prepared for signing by N.A. Asaul	In its letter No. MS-22/8841, dated 04 July, 2017, the RF Ministry of Transport submitted to the RF Ministry of Education its proposals inclusion of a range of topics related to economy driving and factors influencing the operating flow rate of fuel into the special cycles of the Vocational Training Programmes for Drivers approved by order of the RF Ministry of Education No.1408, dated 26 December, 2013 (annexes to Addenda No. 2, 3, 4, 13, 14 to the aforementioned Order of the RF Ministry of Education.) Letter of reply from the RF Ministry of Education No. LO 1010/06, dated 25 July, 2016, received, about the adoption of the proposals by the RF Ministry of Transport and the plan to make amendments in course of the scheduled revision and updating of the programmes. The Guidelines will be circulated to the RF constituent entities for application in December 2017.
12	No. 21-2015-UNDP **"International and Russian Experience of Congestion Charging in the City Centres, Including Analysis of the Legal Framework and Evaluation of its Expedience in Russian Cities (Using Kazan as an Example)"**	The results were used in preparation of the Federal Law on organising regular passenger and baggage transportation by road transport and urban ground electric transport in the Russian Federation and on amending certain legislative acts of the Russian Federation.	Draft Law 1047264-6 passed the first reading in the State Duma	The draft law among gives entities of the Russian Federation a right to introduce entry restrictions for low emission standard vehicles (under 4) in particular areas of the municipality, and benefits for using LEVs, which will enable promotion of a wider LEV use.
13	No. 34-2015-UNDP **"Development of Guidelines on Holding Regular Transport and Transport Sociology Surveys Aimed to Analyse the Operation of the Transport System in RF Cities"**	Order of the RF Ministry of Transport No. NA-197-r, dated 28 December, 2016 "On Approval of a Tentative Programme of Regular Transport and Transport Sociology Surveys of the Functioning of the Transport Infrastructure of Settlements and Municipalities in the Russian Federation"	Implemented	The Tentative Programme prepared under the Project contains proposals for gathering data describing the current state of the transport infrastructure of settlements and municipalities, which will enable regular monitoring and forecasting of the volumes carried by urban passenger transport and of the population mobility, addressing issues of environmental safety and reduction in GHG emissions from road transport. The Programme provides for various surveys such as polling, field studies, and surveys based on statistical reporting. Special features of each survey type are determined. Document forms for each type of activity are given. The document will be used in developing future programmes of vehicle traffic optimisation and in finding out the potential for GHG emission reduction.
14	№ 43-2016-UNDP **"Development and Approval of Motor Vehicle Standards On Public Transportation Services**		In progress	The results of this work will ensure efficient functioning of the urban ground transport management system that, by using the standardisation procedure tools, will enable to raise the quality of services by urban passenger transport based on the needs of the population of Russian cities and in pursuance of Russian Federation Transport Strategy for the period until 2030 with respect to priority

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
	And Application Thereof In Regular Transportation Operations With Account For The Demands To Reduce GHG Emissions"			development of public transport, reduction of environmental damage, and increased sustainability of the Russian transportation system.
15	No. 53-2016-UNDP **"Development of Science-Based Proposals on Procedures for Organisation and Performance of Pre-Trip Check of Vehicles' Technical Condition and Compliance With Environmental Regulations"**	Order of the RF Ministry of Transport No. 141, dated 06 April, 2017 "On Approval of the Order of Organisation and Conduct of Pre-Trip Check of Vehicle's Technical Condition", which takes into account environmental requirements, is undergoing the process of registration in the RF Ministry of Justice (verification of vehicle compliance with the environmental requirements)	Implemented	According to estimates by NIIAT Transport Institute and MADI University, improving environmental control will enable reducing CO_2 emissions to 0.628M tons of equivalent / year as part of control activities on the municipality-owned bus fleet alone.
16	No. 44-2016-UNDP **Development of the syllabus for the subject matter "Sustainable Urban Transport Systems"**	Submitted to the Moscow State Automobile & Road Technical University for a second review and approval	In progress	A textbook for training students in various areas; currently used in the second year of master's programme in Environment Protection.
17	No. 72-2016-UNDP **"Development of a Concept of a Universal Public Transport Payment System in the Russian Federation"**	In the process of amendment based on the comments from the RF Ministry of Transport; deadline: 15 November, 2017	In progress	The Concept developed under the Project will determine the areas, activities, target indicators for the development of a universal public transport payment system and aim to increase the attractiveness and comfort of public transport use over private transport, and to carry out a set of measures for the reduction of negative impacts on the environment, climate and human health.
18	No. 73-2016-UNDP **"Development of Proposals on Amendments in the Russian Federation Laws on Urban Activities and in Technical Regulation Documents Related to Control over Emissions of GHG from Road Transport in the Russian Federation in Course of Development of Traffic Management Documents for**	The plan is to develop laws and regulations on provision of transport to areas with various use types and building density.	In progress	Russian regulatory documents on urban planning and the Russian urban planning practice lack any norms aimed at creating a quality urban environment that are common in other countries such as "liveable city", "sustainable city", "sustainable mobility", and "digital age transportation". Practical implementation of those concepts will in any case depend on ensuring a reasonable balance between the model of urban development and land use, on one hand, and widespread mobility formats coupled with transport demand management tools for particular areas, on the other hand. The work will include preparation of tools for assessment and monitoring of the transport service level and the level of GHG emissions from road transport for newly-developed sites and for existing neighbourhoods. Also, guidelines must be prepared that enable assessing the effect from introducing regulations in Russian cities that introduce norms on the balance between the density and number of floors vs. the

No.	Contract reference, Contract Title	Outcome	Status	Comment / Assessment of impact of this work on the sustainability of urban transport systems, transport ecology, reduction in greenhouse gases, improvement in passenger services provided by urban public transport etc.
	Territorial Planning and Urban Zoning, and in Preparing Design Documentation"			transport resources in the area, on the basis of the GEF guideline "Calculation of GHG Emission Reductions Reached Owing to Global Environmental Facility Projects in the Transport Sector."
19	No. 82-2017-UNDP **"Development of Guidelines on Preparation of a Document on Planning Regular Passenger and Baggage Transportation by Road Transport and Urban Ground Electric Transport"**	The optimum composition and content of the document on planning scheduled transportation determined. A unified approach to planning and management of scheduled passenger and baggage transportation by motor transport and urban electric ground transport in Russia developed, including approach to planning scheduled trips and decision-making pertaining to the development of a public transport system.	In progress	The ***purposes of the guidelines are*** to: - Cover the needs of all population groups for transportation with a certain quality and price levels, with account for the region's transportation and budget capacity; - Create conditions for switching population groups with medium and higher income levels from private transport to public transport as a means of transport, which is safer, more environment-friendly, and less burdening on the road network; - Look for a balance between the attainable level of transportation service and the acceptable level of expenses of the budget and population by analysing route schemes, schedules and the respective expenses and revenues. Priority targets may vary for various settlements and municipalities depending on the respective social and economic situation.
20	No. 48-2016-UNDP **"Guidelines for Transport Organisations Carrying Passengers by Motor and Urban Electric Transport (Trams, Trolley-Buses) on Taking the Inventory of GHG Emissions"**	Letter from the RF Ministry of Nature No. 14-39/36063, dated 29 December, 2016, proposing to include the said Guidelines into the new version of the respective document currently under preparation by the RF MNR.	Partly implemented. Implementation in 2018.	The material developed was used to draft guidelines enabling to find GHG emissions in the Energy Sector with respect to the urban electric transport. In addition, the Guidelines will enable assessing more accurately the reductions in GHG emissions on a municipality basis, which is in line with the Mayor Agreement in the EU.

Annex 8: Legislative and regulatory documents establishing a system of traffic "eco-labelling" in Russia

№	The proposed measure	Proposed amendments to existing legislation	Legal documents proposed for development
1	2	3	4
For the step "Production and issuance of the Eco-label"			
1	Introduction of the classification by CO_2 emissions (energy efficiency) for vehicle categories M1 and N1; definition of the criteria and procedures for the confirmation of classification	1. Amendments to the Federal Law "On energy saving ...» № 261 (in Part 1 of Article 10) with regard to the definition of milestones and deadlines to establish classes of energy consumption for the vehicle category M1 and N1 (Stage 1), for the other categories (2nd stage) and determining the competence in this field* 2. Adding to the Federal Law "On energy saving ..." a new article 13 "Providing for energy saving and energy efficiency of motor vehicles", which establishes the procedure for the development of the energy efficiency requirements of vehicles of federal executive bodies in accordance with the rules approved by the Government of the Russian Federation* 3. Amendments to the TR CU # 018/2011 "On the safety of the Wheeled Vehicles" for methods of determining the power consumption and form "type approval" (entering data on consumption of fuel + CO_2 emissions) *	1. Draft Resolution of the Government of the Russian Federation "On the classification and labeling of vehicles according to environmental performance and power consumption characteristics of the established classes in the energy efficiency/CO_2 emission"* 2. Method of determination of energy consumption and CO_2 emissions of heavy commercial vehicles (within the framework of the Russian delegation's contribution to WP.29 on global technical regulations of the 1998 Agreement)
2	The introduction of energy-environmental declaration of the manufacturer for each type of vehicle, which received type approval	1. Amendments to the TR CU # 018/2011 "On the safety of the Wheeled Vehicles" in terms of determining the vehicle's energy consumption and CO_2 emissions by the manufacturer for each option of engine within the approved vehicle type; 2. Amendments to the Federal Law "On energy saving ...» № 261 in the form of an additional article (Article 13. Part 4) regarding the requirements for the manufacturer to issue energy and environmental declaration *	1. Draft Resolution of the Government of the Russian Federation "On the classification and labeling of vehicles on environmental performance and power consumption characteristics", establishing the contents and procedure of filling out and registration of energy and environmental declarations*
3	"Eco-labeling" of the vehicle put into circulation (sticker, RFID tag or the like)		1. The special item in the Resolution of the Government of the Russian Federation "On the classification and labeling of vehicles on environmental performance and power consumption characteristics" on the development of labeling with request to the Ministry of Industry.
4	Creation of an electronic database of environmental classes, classes of CO_2 emissions, energy efficiency (fuel economy) for models of the vehicles in the market		1. The special item in the Resolution of the Government of the Russian Federation "On the classification and labeling of vehicles on environmental performance and power consumption characteristics" with request to the Ministry of Industry to create the appropriate database.
5	The obligation of the manufacturer or his representative to inform consumers about the environmental performance and energy consumption of the vehicles	1. Taking into account the proposals for amendments to the Federal Law "On energy saving ...", currently there is sufficient legal basis in the Federal Law" On Protection of Consumer Rights ..." 2. Amendments to the Federal Law "On Environmental Protection" N 7 (Art. 45 "The requirements for the protection of the environment during the production and operation of motor and other vehicles") in terms of additional requirements for the dealer to inform the consumer *	1. A special section in the decision of the Government of the Russian Federation "On the classification and labeling of vehicles on environmental performance and power consumption characteristics" with regard to establishing the requirements for the format and content of information and mandatory provision of this information*
6	The responsibility of the manufacturer or its	1 Amendments to the "Code of the Russian Federation on Administrative Violations"	

	representative for the issuance of the vehicles that do not meet labeling requirements, and for the lack of information on the environmental aspects and energy use of vehicle in places of retail	(Administrative Code) N 195-FZ, expanding the article 8.22.1 "Issuance of motor vehicles exceeding the standards of pollutants emissions, fuel consumption, or noise levels"*	
Operational Stage			
7	Creation of an electronic database for the vehicles, including their environmental performance and power consumption characteristics; Amendments to the Vehicle Passport (including developing an electronic title for the Customs Union countries)	1. Amendments to the Federal Law "On protection of atmospheric air» № 96 (in Article 17) requiring the presence of marking and / or database to identify the environmental characteristics of the vehicle *	1. Amending the Joint Order of June 23, 2005 № 496 of the Russian Ministry of Internal Affairs, № 192 of the Ministry of Industry, №134 of the Ministry of Economy of 23'rd June 2005 "On approval of provisions on passports of vehicles" in terms of additions Vehicle Passport data on CO_2 emissions and energy consumption class * 2. Amendments to the Order of the Ministry of Internal Affairs of 03.12.2007 № 1144 "On the system of information support for the State Automobile Inspectorate" in terms of formation and introduction into circulation of the relevant database*
8	Formation of the statistical monitoring system for cars of different environmental and energy efficiency classes, different types of engines and transmission		1. Changes to the form of federal statistical observation number 1 Road Safety "information on the status of road safety" (Section 4 "The number of the registered motor vehicles and trailers"), developed by the Ministry of Internal Affairs and approved by order of the Federal State Statistics Service of 01.21.2014 № 42 "On approval of statistical tools for organization of the federal statistical observation of the state of road safety by the Ministry of Internal Affairs"
9	"Eco-labeling" of the vehicles in operation by the stickers	1. Amendments to the Federal Law "On protection of atmospheric air» № 96 (in Part 6 of Article 17) in terms of requiring the presence of marking and/or database to identify the eco-characteristics of the vehicle * 2. Introduction of amendments and additions to regional law	1. A special section in the Resolution of the Government of the Russian Federation "On the classification and labeling of vehicles on environmental performance and power consumption characteristics"*
10	The establishment of low emissions zones (LEZ)	1. Amendments to the Federal Law "On protection of atmospheric air» № 96 (in Part 5 of Article 17) with regard to establishing the criteria for the imposition of restrictions on the movement of the vehicles and determining the boundaries of the LEZ *	
11	Creating the conditions for the tax regulation depending on environmental class and/or energy efficiency class of the vehicles	1. Amendments to the Tax Code	1. Amendments to the joint order of the Ministry of Interior (№948) and Federal Taxation Agency (№ ММ-3-6/561) of 31'st October 2008 "On approval of the regulation" On the interaction of divisions of traffic police and tax authorities in the presentation of information concerning vehicles and persons to which they are registered" in terms of inclusion in the list transmitted to the tax authorities the data of environmental class, energy efficiency and CO2 emissions class of the vehicle"

Annex 9: Events Organized by the Project

In 2013:

A round table «Methodology for monitoring of GHG-emissions reductions from road transport in Kazan and Kaliningrad cities» was held on **May 28, 2013**, with participation of main project stakeholder representatives, as well as experts in the field of transport and environment. The main purpose of the event was to present GEF requirements and methods for calculating of GHG-emissions from road transport. Experts also discussed viable options for preparation of new and amendment of existing legal and regulatory framework in the field of relevance for the project.

Some shares of the Car-free day were held in Kazan city and on Sviyazhsk Island on **22 September 2013**: setting up environmental and pedestrian zones for the day and organizing some open events in public space of Kazan city.

The international conference “Optimization of transport solutions for national and international mass actions to reduce GHG-emissions from road transport” was also held in Kazan city on **23 September 2013**, in which representatives of the main partners of the project, experts in the field of urbanistics, transport and ecology participated.

On 4-5 October 2013 in Kaliningrad city the International Conference "Modelling and Management of Sustainable City Transport Systems" was held in partnership with Immanuel Kant Baltic Federal University as part of the 7th Baltic Educational Forum.

The international round table on a theme: “Improving Fuel Efficiency and Reducing Emissions from Road Transport in Russia” was held in Moscow city **06th December 2013** as a part of the VII International Forum “Transport of Russia”. The Minister of Transport of the Russian Federation Maxim Sokolov, the Director of Bratislava Regional Centre, United Nations Development Programme Europe and the CIS, Olivier ADAM and representatives of the United Nations Environment Programme (UNEP), of main partners of the project, experts in the field of transport and ecology participated in this round table.

In 2014:

The partnership and cooperation Agreement with the all-Russian public and state organization “Volunteer Society for Cooperation with the Army, Aviation, and Fleet” (DOSAAF) was signed on **April 15, 2014**. The purpose of cooperation is joint training in efficient and eco-friendly driving for the driving-instructors of the driving schools and the road transport enterprises. On April 15, 2014, the press-launch for the media was held. The topic was “Celebrate the Day of environmental awareness under the motto Eco Driving, Eco Saving!”, addressing the issues of eco-driving in Russia.

On May 28, 2014, in the Moscow VVC fairground in terms of the 4th Special international exhibition “ElectroTrans-2014” the conference on “Transport and urban environment. Issues of energy efficiency improvement and electric transport” was organized by the project.

On June 17-18, 2014, the International conference on “Improvement of fuel efficiency and reduction of emissions from the road transport in Russia” was organized by the project. The event was held with the support of the United Nations Environment Programme (UNEP), The Chamber of commerce and industry of the Russian Federation, several ministries and professional associations.

The training in fuel saving and eco-friendly driving ("Eco-driving") for the driving instructors with "D" category license from Kaliningrad driving schools and transport enterprises was held on **September 20-23, 2014** in Kaliningrad. The eco-driving training was organized with the support of the Russian public and state organization "Volunteer Society for Cooperation with the Army, Aviation, and Fleet" (DOSAAF). Teaching staff was formed from the instructors from the driving schools of Saint-Petersburg, Leningrad Oblast, Smolensk, Kaliningrad, Kaliningrad Oblast, as well as from master-instructors of Kaliningrad transport enterprises. International trainers from the Association of Austrian Driving Schools and Austrian Automobile, Motorcycle and Touring Club (ÖAMTC) and consultants from the Austrian Energy Agency have conducted eco-driving training.

On 22 September 2014 in terms of the Global Car-free Day an international seminar on European experience in promotion of public and alternative types of transport, development of low-carbon urban transport systems and practical implementation of projects was held with the support of the Kaliningrad City Administration.

In August 2014, the Project was officially introduced into the list of national coordinators of European mobility week in the Russian Federation. During the period from August 01 to September 25, the project has organized activities on engagement of Russian cities to the Global Car-free Day (40 cities have joined) and the European mobility week (16 cities became official participants).

From October 20 to 24, 2014, the project implementation team held the training in principles of transport planning and adaptive management of urban transport flows for the specialists of the Executive Committee of Municipal Entity "the City of Kazan", Kaliningrad City Administration, the public corporation "Kazgrazhdanproject" and Institute for Transport and Technical Service of the I. Kant Baltic Federal University. Software applications PTV VISUM and PTV VISSIM were used for the training. The standard certificates were awarded to the participants.

In terms of the 14th specialized exhibition "Dortransexpo-2014", the project implementation team held the round table on "Urban transport planning" on **October 22, 2014** in Kazan.

From **01 to 06 December, 2014** the project team participated in the 2014 Russian Transport Week and the International congress "ROAD TRAFFIC RUSSIA". Organization of the road traffic in the Russian Federation".

In 2015:

A seminar "The realization of the Projects with the use of Public-Private Methods" was organized in the UNDP office **on April 3, 2015**.

A round table "The Future of Transportation Planning in Russia" was held by the Project on the platform of Higher School of Economics (National Research University) **on May 18, 2015.**

An international seminar "Inventory Methods of GHG emissions from road transport: the requirements and scientific researchers' typical mistakes" was organized by the Project at the Moscow Automobile and Road Construction University **on May 25, 2015.**

The International Summer School "The Transformation of Transport and Communication Space Cities" started in Kaliningrad City on **June 29 – 3 July, 2015**[14]

[14] http://www.proecotrans.ru/press-center/news/589/

Two trainings together with U.I.T.P. Aisbl (Union International des Transports Publics) were organised in Kazan city:

- Service Quality Management in Public Transportation (**September 14-16, 2015**);
- Security Management and Risk Assessment in Public Transport (**September 30 - October 2, 2015**).

24 - 28 August 2015 a training on principles of transport planning and adaptive management of urban transport flows in Kaliningrad (PTV VISSIM and PTV VISSUM softwear) for the specialists of the Kaliningrad Regional Government, Kaliningrad City Administration and Immanuel Kant Baltic Federal University was organised.

Three trainings held in Kaliningrad jointly with the International Public Transportation Union:

- Urban Transport Pricing (**13-14 October, 2015**);

- Public Transport Fundamentals with focus on: Organising Authorities (**20-22 October, 2015**);

- Procurement and Commissioning of Buses, Including the Bus Operation Planning (**10-11 December, 2015**).

The Project held 3 round tables:

"Sustainable Development of Urban Public Transport", attended by representatives of the Kaliningrad city administration (**23 October, 2015**);

"Developing Non-motor Traffic in the Cities", as part of the Transport Week-2015 (**Moscow, 03 December, 2015**)[15]

"On the Outlooks for the Introduction of Unified Rating Policy Tools and an E-Ticketing in Kaliningrad" (**Kaliningrad, 09 December, 2015**).

In the period from **25 to 28 November 2015**, in Kaliningrad, the round table: "Mobility within the Central part of Kaliningrad – the path of development and incentives. Improved mobility as one element of reducing greenhouse gas emissions" was held. The event is organized jointly by the Project, the Administration of city district "City of Kaliningrad", as well as the scientific and project organization "Southern Urban Development Centre". The round table was attended by representatives of the scientific community, research and design organizations, higher educational institutions (MADI, HSE, Immanuel Kant Baltic Federal University, Technical University of Madrid, St. Petersburg State Architecture and Construction University, National Research Irkutsk Technical University, and others), professional public associations and non-profit organizations (Union of Architects of Russia, ANO "Directorate of the Kaliningrad 2018", Movilization, Baltic Guild of Urban Planners, All-Russia Society of Motorists, Kaliningrad Veloturistam Club, the Project "Let's bike it", The Federation of Sports Managers in Russia, etc.). The round table was attended by over 50 participants from 4 countries, including 4 doctors and 11 candidates of Sciences (post-graduate degree), there were 27 presentations and messages.

The seminar, devoted to an Integrated traffic management scheme in the City of Kazan during 2014 – 2020 with perspective until 2030 was held on **18 November, 2015.** The seminar presented the results of the analysis of the transport situation in Kazan, as well as the main options for development of the new road network. The event was attended by Mayor of Kazan Ilsur Metshin, representatives of the UN development Programme, the Ministry of transport of the Russian Federation, the Cabinet of Ministers of Republic Tatarstan, Institute of transport economy and transport policies, Higher School of Economics, Institute of Energy and Environmental Problems in MADI, the head of administrations of areas, heads of structural divisions of Executive Committee, members of the working group and representatives from planning, transportation and public organizations.

On 29 October, 2015, the Project co-held the International Conference "Green Economy and the Quality of Life in the City".

[15] http://www.proecotrans.ru/press-center/news/710/

In 2016:

Four trainings held in Kaliningrad and Kazan jointly with the International Association of Public Transport (UITP):

- Financing and Funding of Public Transport (**22-23 March, 2016**);
- Regulation and Contracting of Public Transport Service (**3-5 February, 2016**);
- Organisation of Public Transport During Large Events (**24-26 February, 2016**);
- Public Transport Pool Maintenance and Management (**28-30 March, 2016**).

On January 28, 2016 a round table, related to the implementation of the pilot projects on the use of low-carbon vehicles in Kazan and Kaliningrad, was organized in Moscow.

On February 22, 2016, the Let's bike it! project, with the the Project's assistance finished the 2nd Annual Animated Film Competition "Make Way for the Winter!" The results were summed up, the winners were decorated.[16]

The International conference on the topic: "Urban Transport and the Ecology of a Modern City" in the frame of the 6th Professional International Exhibition ElektroTrans 2016 was organized **on April 6, 2016.**

The International Cycling Congress was organized by the Project jointly with the Ebert Foundation in the Russian Federation (Moscow) and the project Let's bike it! **on 21-22 April 2016.**[17]

The International Summer School "Transforming the public transport and communication space of the city" was organized in **Kazan in August 22-26, 2016**. Summer school in Kazan allowed to transfer theoretical and practical knowledge to young specialists and to discuss various aspects of low carbon development of cities and modern approaches to territory development and transport planning. Goals of organizing the summer school:

- dissemination of lessons learned and experience of successful preparation and implementation of projects on sustainable mobility;
- acquaintance with the best international practice in the field of transit-oriented development;
- training of young specialists on comprehensive approaches to planning of city;
- updating of theoretical base and development of a platform for cooperation of universities with design institutions and international organizations, which participate in development and implementation of city development plans;
- professional development of specialists in the field of transport and urban planning and territory development control.

Objectives of organizing and hosting the summer school:

- to improve interaction of local authorities, scientific and business communities;
- to establish new international and inter-regional relations in the field of transport planning;
- to develop the innovative potential of participants and to have a powerful motivational impact.

Transport planners and researchers with professional experience, as well as young specialists took part in the Summer School.

In 2017:

The 2nd International Cycling Congress in Moscow was organised on 14-15 April 2017 (more than 500 participants from 80 Russian cities and 18 countries).[18]

[16] http://letsbikeit.ru/zimedorogu/
[17] https://vimeo.com/169104857
[18] http://proecotrans.ru/press-center/news/856/ http://moscowcyclingcongress.ru/

A Center of Excellence for SUT developed in Russia **in 2017**. Department of sustainable urban transport established jointly by the Moscow State Automobile & Road Technical University (MADI), and the Scientific and Research Institute of Motor Transport (NIIAT).

The Department of sustainable urban transport established jointly by the Moscow State Automobile & Road Technical University (MADI), and the Scientific and Research Institute of Motor Transport (NIIAT). The Agreement between the MADI, NIIAT and Project on joint implementation of the mentioned activities was signed on 27.02.2017. The main purpose of the Department activities is to improve the educational process through the development of practice-oriented relations of MADI, Project and NIIAT.

The main objectives of the Department establishment are:

1. To organize and conduct lectures in innovative forms related to scientific and practical problems/issues of sustainable urban transport with the involvement of Russian and international leading experts in respective fields;

2. To develop scientific research activities of the Department with the involvement of students, postgraduates, teachers, and academics;

3. To provide and perform educational, research and real working practices aimed to enhance the professional orientation of the students.

An international scientific workshop (3 lectures) was organized in the frame of the Sustainable Urban Transport Department of the Moscow Automobile and Road Construction University (MADI). The Department was founded in 2017 jointly with the JSC "NIIAT" and the Project.

The Project equipped the newly established Department with all the technical outputs produced so far, and led the thematic content for its activity in 2017. With the essential support from the project, the Department held three scientific workshops on sustainable urban transport. The audience of each workshop included more than 150 people including representatives of federal and regional authorities, the scientific and expert institutes, postgraduates and students. The programme of the international scientific lectures is based on international and Russian best knowledges. The course also is providing opportunities for all participants to take part in interactive discussions and case study presentations. Thus, information about SUT is being disseminated on a regular basis. It is fundamental for the Project team to focus not only on the technical outputs of the Projects but to result in increased empowerment, enhanced human and institutional capacities of key partners, transfer of open, transparent and inclusive project management approaches.

30 June 2017 in Kaliningrad city Administration together with the Project held a seminar on "Integrated development of the urban transport system". Participation the workshop was attended by representatives of transport companies, as well as experts and representatives of the business community.

22 September 2017 in the city of Baltiysk in the framework of the European mobility week and World car-free day, the government of the Kaliningrad region in cooperation with the Project held a seminar on the theme: "Planning for sustainable urban transport systems". Participation the seminar was attended by representatives of regional and municipal Executive authorities of the Kaliningrad region, as well as experts and representatives of the business community.

Also, the Project takes pride in its achievements to engage Russian cities in the **European Mobility Week**[19] **(16-22 September) and the Global Day without Cars (22 September).** In 2014, the Project became an official Russian national coordinator of the European Mobility Week. Thanks to the Project's efforts, the list of Russian cities officially participating in the Week and the World Day without Cars grew from 2 (two) cities in 2013 to 51 in 2016 and 55 in 2017. The Project helps promote healthy lifestyle, involve new groups of population and organizations into cycling and hiking and promote the use of public transport instead of private vehicles.

[19] http://www.mobilityweek.eu/