



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project
THE GEF TRUST FUND

Submission Date: 22 April 2009
Re-submission Date: 13 July 2009
Re-submission Date: 14 September 2009

PART I: PROJECT IDENTIFICATION

GEF PROJECT ID¹: PROJECT DURATION: 60 months
GEF AGENCY PROJECT ID: 3757
COUNTRY(IES): Kazakhstan
PROJECT TITLE: Sustainable Transport in the City of Almaty
GEF AGENCY: UNDP
OTHER EXECUTING PARTNER(S): Ministry of Environmental Protection of the Republic of Kazakhstan, Almaty City Administration
GEF FOCAL AREA (S)²: Climate Change
GEF-4 STRATEGIC PROGRAM(S): 5-Promoting Sustainable Innovative Systems for Urban Transport
NAME OF PARENT PROGRAM/UMBRELLA PROJECT: N/A

INDICATIVE CALENDAR*	
Milestones	Expected Dates mm/dd/yyyy
Work Program (for FSP)	Nov 2009
CEO Endorsement/Approval	Feb 2011
Agency Approval Date	Mar 2011
Implementation Start	Mar 2011
Mid-term Evaluation	Jan 2013
Project Closing Date	Dec 2016

A. PROJECT FRAMEWORK

Project Objective: Reduce GHG emissions from ground transport in Almaty through the promotion of a long-term modal shift to more efficient and less polluting forms of transport

Project Components	Investment, TA, or STA	Expected Outcomes	Expected Outputs	Indicative GEF Financing ^a		Indicative Co-Financing ^a		Total (\$) c = a + b
				(\$ a)	%	(\$ b)	%	
1. Improved efficiency and quality of public transport	TA, investment	Passenger mode share of public transport increase to about 40% by 2015 (as opposed to 21% in BAU)	<ul style="list-style-type: none"> -Standard public service contract developed following best available international standards and introduced with all private operators for provision of public transport services -Revised tender and contract documentation to mandate compliance of private carriers with existing regulations -City Administration M&E plan to track performance of private operators - Unified fare system and simplified fare collection for all public transport modes - Increase fleet of public vehicles (buses and trolleybuses) and required maintenance infrastructure - Trainings for drivers on safer and more environmentally friendly driving -User-friendly public transport maps, real time displays at stops to orient travelers of available transport options 	1,000,000	5	19,000,000	95	20,000,000

¹ Project ID number will be assigned by GEFSEC.

² Select only those focal areas from which GEF financing is requested.

			and routes					
2. Integrated traffic management	TA	Improved management of road space Increased average speed of public transport Faster inter-modal transfers Reduced travel times for all public transport modes	- Travel demand survey and model - Optimization of public transport flows -Mandatory procedures for traffic impact assessment for major urban development projects and plans -Amendment of existing legal framework to enable cross-sectoral cooperation and policy coordination on transport and spatial planning -Public transport information center to direct schedules and dispatch -Develop on-street parking regulations -Piloting municipal parking at key spots	1,200,000	25	3,600,000	75	4,800,000
3. Low carbon fuel standards and CO2 monitoring in transport sector	TA	5% reduction in fuel carbon content	-Design and road map for introduction of low carbon fuel standards; -Improved fuel testing procedures to ensure compliance with new standards - Model for CO ₂ analysis and monitoring system in transport sector	450,000	34	900,000	66	1,350,000
4. Demonstration and awareness raising about sustainable transport modes	TA, investment	Reduced travel times Passenger mode share of bicycles gradually increases to 2% by 2015 from 0% in BAU	-Demonstration bus/trolleybus rapid transit systems on priority routes -Introducing bicycle lanes and walking zones -Public wide campaign and PR activities to promote the pilots and increase the awareness of Almaty residents and visitors of available sustainable transport modes, including trolleybuses, bicycles and walking zones in the context of 7 th Asian Winter Games in 2011 -Awareness raising campaigns for changing travel patterns and transport options	1,900,000	23	5,000,000	77	6,900,000
8. Project management				445,000	32	930,000	68	1,375,000
Total project costs				4,995,000	14	29,430,000	86	34,425,000

B. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE and by NAME, (\$)

Sources of Co-financing	Type of Co-financing	Project
Government: Almaty City Municipality*	cash and in-kind	5,000,000
GEF Agency: UNDP	cash	50,000
Government: Ministry of Environmental Protection	in-kind	200,000

Investment and development banks: EBRD**	Grant	1,000,000
Private Sector***	cash	23,180,000
Total Co-financing		29,430,000

*Gov't co-financing comes from the Almaty Akimat (Municipality of Almaty) and Ministry of Environment in the form of both cash and in-kind contributions. The municipality will invest into upgrade of parking lots and emission control stations at around USD 1.2 million. Resources from Winter Games 2011 infrastructure development budget will be provided for demonstration component (exact amount to be specified). Municipality and Ministry of Environment will also make in-kind contributions for all project components, including for setting-up public transport information centre to direct schedules and dispatch, emission monitoring, project management and oversight.

** EBRD co-finances feasibility study for introduction of LRT system and design of incentive-based public transport contract

*** Private sector co-financing will cover the costs of new public transport vehicles (buses/trolleybuses) and required infrastructure (maintenance centers, resting points, etc) both in Components 1 and 4.

C. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Previous Project Preparation Amount (a)	Project (b)	Total c = a + b	Agency Fee
GEF financing	0	4,995,000	4,995,000	499,500
Co-financing	0	29,350,000	29,350,000	
Total	0	34,345,000	34,345,000	499,500

D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES): N/A

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

1. Kazakhstan is by far the largest GHG emitter in Central Asia with annual emissions of 243 MtCO₂e³. Transport sector is its fastest growing source of CO₂ emissions which are projected to increase from 9MtCO₂/yr in 2008 up to 22MtCO₂/yr in 2012 and 36MtCO₂/yr in 2020⁴. Significant share of transport emissions is associated with ground transportation in the former capital city of Almaty. It is the largest and most densely populated city in the country with about 1.6 million inhabitants⁵. Almaty's population is expected to exceed the 2 million threshold already in the next 3 to 5 years. Despite losing its capital status, Almaty remains major commercial and industrial center of Kazakhstan⁶ contributing 22% to the national GDP and is rapidly transforming itself into Central Asia's regional financial and business hub. In 2011 Almaty will host the 7th Winter Asian Games and is preparing a bid to host 2018 Winter Olympic Games.

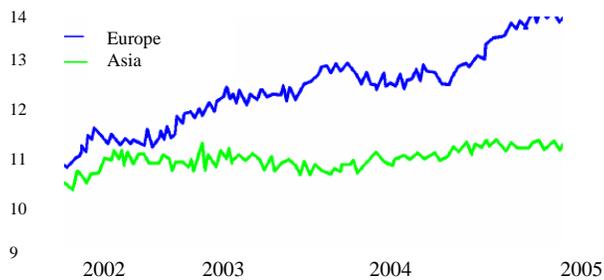


Fig 1: Average age of vehicles by region of origin

age of registered vehicles in Almaty is 10 - 14 years, almost 80% of the fleet is more than 7 years old (See Fig. 1). Catalytic converters are often being destroyed or removed from imported cars to allow the use of leaded petrol. According to Kazakhstan Research Institute of Transport and Communications, 70% of registered vehicles badly exceed emission standards. Continuous increase in traffic intensity (on average by 7% annually) and unorganized parking along major city

2. Since Kazakhstan independence in 1992 and throughout 1990s-2000s, the period of robust economic growth, rising personal incomes and massive inflow of migrant workers from rural areas and neighboring countries, Almaty has seen rapid increase in the use of private motor vehicles alongside with deterioration of public transport. In 2008, there were about 340 vehicles per 1,000 inhabitants compared to only 64 vehicles in 1995 and the total number of private vehicles is expected to grow from current 500,000 up to 850,000 by 2020. The growth is primarily associated with the increased number of inefficient second-hand cars from Europe and Asia: average

³ Data for 2005, source 2nd National Communication of the Republic of Kazakhstan to the Conference of Parties of UNFCCC

⁴ Second National Communication of the Republic of Kazakhstan to the Conference of Parties of UNFCCC

⁵ Preliminary results of the 2009 Population Census, Agency of Statistics of RK

⁶ Law on special status of Almaty as scientific, cultural, historical, financial and industrial center as of June 1, 1998

routes adds to the problem by decreasing travel speed, causing road congestion and, ultimately, “stop and go” maneuvering and higher GHG emissions. Quality of fuel is also an issue: 40% of liquid fuel samples failed to meet standards as reported by the Municipal Environmental Protection Department.

3. After decades of transition Almaty public transport is no longer able to provide for comfort, convenient and fast services to commuting passengers who increasingly prefer individual transport modes to unpleasant, unreliable and unsafe public transport. Almaty’s public transport system consists of buses, trolleybuses, and trams (See Fig. 2). One metro line was planned to be introduced in 2010, but is likely to be delayed due to its high capital cost and dire situation with municipal finance. Municipality also considers upgrading tram routes and introducing light rail transit (LRT) system (feasibility study has been initiated with EBRD support). Public transport, once owned by the government, is now privatized except for the electric transport. People do complain about service frequency, overcrowding at peak hours and lack of services in off-peak hours, poor technical conditions of buses, unsafe driving, lack of cleanliness on board, etc. Customers’ complaints, however, remain unaddressed by private bus operators, while municipality lack control and enforcement mechanisms to exercise proper monitoring and ensure compliance of operators with technical and safety regulation and traffic schedule.

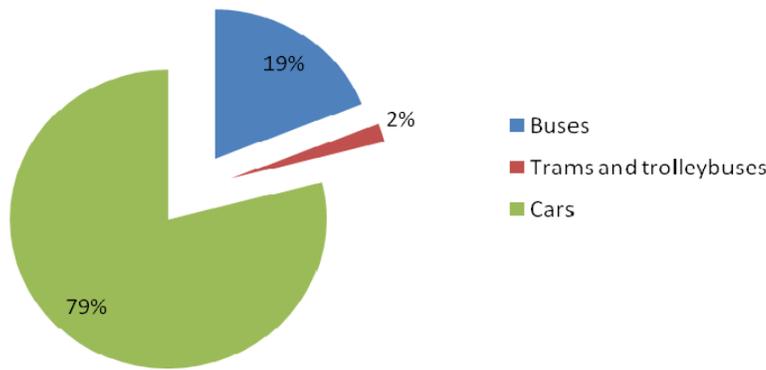


Fig. 2: Share of various transport modes in passenger-km

Electric transport — owned by *Almatyelectrotrans*, public utility company — loses competition with private bus operators and individual cars. As a result of its continuously shrinking client base, *Almatyelectrotrans* suffers from the lack of finances leading to degradation of vehicles and infrastructure. The number of trolleybuses dropped down to 186 (413 in 1991), of trams to 49 (198 in 1991); the length of trolleybus and tram lines reduced by 25% and 50% respectively; the number of service routes decreased from 20 to 9 for trolleybuses and from 10 to 2 for trams.

4. Starting 2005, Almaty municipality (*akimat*) has introduced measures to ameliorate the situation in the public transport. In particular, *akimat* (i) reduced the number of private carriers from 46 to 21 by giving preference to large and financially sustainable companies; (ii) reduced the number of buses from 3,500 to 2,000 by having private operators substitute minibuses and *marshrutkas* for buses with higher load capacity; (iii) abolished some duplicating and marginal profit routes; (iv) introduced e-cash payment system and GPS-control in the electric transport. Despite these efforts, public transport sector in Almaty continues to be highly inefficient, poorly organized and of low quality.

5. Key barriers towards the use of more sustainable and lower carbon emitting urban transport modes in Almaty include: (i) low quality of public transport services leading to continuously declining competitiveness of public transport vis-à-vis private vehicles; (ii) lack of forward-looking transport demand management plan based on comprehensive traffic demand data and model, inefficient traffic management and infrastructure; (iii) lack of integration and coordination between various public transport modes (bus, trolleybuses, trams, metro and LRT) in terms of fare collection, routes and connections, (iv) insufficient cooperation and policy coordination among relevant sectors (transport, city planning, environment and health) on transport and spatial planning and absence of enabling legislative basis for cross-sectoral cooperation; and (v) insufficient vehicle emission control system, absence of efficient inspection of vehicles, low fuel quality, inefficient monitoring and assessment of pollution and other transport-related environment and health effects. See Section F for detailed discussion on barriers.

6. This project focuses on elimination of the above mentioned barriers and proposes interventions in Almaty road transport sector with the main objective to ensure modal shifts towards more sustainable transport such as public and non-motorized modes. Ultimately, the project aims to reduce the of GHG emissions from the transport sector in Almaty by 7 mln tCO₂.

7. The project is expected to have **four outcomes** as follows: **Outcome 1** will focus on improved efficiency and quality of services of public transport; **Outcome 2** will support improvement of traffic management practices; **Outcome 3** will support the revision of fuel standards and creation of a monitoring system for transport related emissions of CO₂ and local pollutants; **Outcome 4** will demonstrate and promote in the context of 7th Asian Winter Games in 2011 a number of sustainable transport modes, i.e. rapid transit systems, bicycles and walking.

Outcome 1: Improved efficiency and quality of services of public transport

- Develop standard public service contract following best available international standards/practices and introduce it for all private bus operators
- Introduce regulatory and enforcement mechanisms and build capacity to ensure compliance of private carriers with existing technical requirements and traffic plans as provided for in the public service contract
- Establish a unified fare system and simplified fare collection system for all public transport modes
- Deliver trainings for drivers on safer and more environmentally friendly driving
- Develop and introduce user-friendly public transport maps (pocket and at stops), real time displays at stops to orient travelers of available transport options and routes
- Increase number of low-GHG emission public transport fleet
- Build technical facilities and infrastructure, including for diagnostic centers, resting points for drivers, etc.

Outcome 2: Improved traffic management

- Undertake comprehensive traffic survey and develop travel demand model
- Develop a comprehensive forward-looking transport strategy to integrate and optimize various public transport modes in terms of fare system, routes and connections
- Introduce mandatory procedures for traffic impact assessment for major urban development projects
- Amend existing regulatory framework to enable cross-sectoral cooperation and policy coordination on transport and spatial planning
- Establish a public transport information center to direct schedules and dispatch
- Develop on-street parking regulations
- Piloting municipal parking at key spots (identifying key spots and setting-up parking lots, consumer targeting campaign, innovative fee collection)

Outcome 3: Low carbon fuel standards and GHG emission monitoring system for road transport sector

- Design low carbon fuel standards for fuels used for transportation purposes in Kazakhstan and related policies to ensure consumer awareness and compliance, including:
 - Standard design (coverage, principles, minimum requirements) and road map for its introduction
 - Producer awareness and PR campaign among consumers
 - Fuel certification and labelling scheme
 - Improved fuel testing procedures
- Develop a model and set up a monitoring system for emissions of CO₂:
 - Develop country-specific indicators for carbon contents of the fuel used in Kazakhstan and methodology to estimate CH₄ and N₂O emissions from road transport in order to improve the quality of data and projections on road transport GHG emission in national inventory;
 - Develop and/or adopt based on available international tools (such as MOBILE6), test and apply the model to estimate and analyze GHG emissions from transportation in the municipality of Almaty
 - Provide training to the municipal staff in Almaty and other municipalities in Kazakhstan on using the model to monitor GHG emissions from municipal transport sector and analyze the GHG impact of proposed transport-related strategies and projects
- Monitoring and evaluation of project, including GHG emission reduction impact

Outcome 4: Demonstration of public transport rapid transit and non-motorized modes

- Demonstrate bus/trolleybus rapid transit systems on priority routes:

BRT will be piloted on one of the two priority routes for Asian Winter Games, i.e. “Almaty airport - city center” (currently there are no other services but regular bus or taxi) or “city center - Medeo, outdoor speed skating rink”. Both routes will face significant inflow of passengers during the time of the Winter Games which will increase promotion and marketing impact of the project. In the future, the municipality plans to have LRT (replacing existing tram routes) and BRT (replacing bus plus some trolleybus routes) systems combined. LRT will be introduced along two major routes: Tole Bi and Rozybakiev Ave and BRT—along three major streets: Raimbek, Temiryazev and Jandossov. LRT/BRT would have intersection points and be integrated with the future metro pathways so that passengers can easily switch among LRT, BRT and metro lines. Such a combination will allow the municipality to abolish duplicating routes of busses, trams and trolleybuses and introduce a unified fare system and collection.

- Demonstrate bicycle lanes and walking zones along specified routes
- Develop and launch PR campaign to promote the results of demonstration projects and increase awareness of the Almaty residents, visitors/tourists (in the context of 2011 Winter Asian Games) about the importance of using sustainable modes like public transport, bicycles and walking
- Nation-wide awareness raising campaign to disseminate results of Almaty project to other Kazakhstan cities

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS:

The project is in line with the national priorities in the area of climate change mitigation, promotion of sustainable mobility in urban areas and environmental protection as defined in: National Transport Strategy until 2015, Master Development Plan of the City of Almaty until 2020, State Programme of Almaty Development for 2003-2010, Programme of Environmental Protection in Almaty City for 2008-2010, Urban Passenger Services Program for 2009-2011:

- Environmental security and effective use of energy resources were identified among the key strategic priorities of the National Transport Strategy till 2015. Strategy specifically refers to the introduction of priority transit systems for public transport, establishment of traffic management and information centers, as well as development of alternative transport modes (such as NMT) in order to ensure environmental stability and social attractiveness of urban transport systems.
- Almaty Master Plan of Almaty recognizes that 80% of the city pollution is related to its transport system and calls for a set of measures aimed at development of city transportation, including, inert alia, improvement and extension of public transport system.
- The Programme of Environmental Protection in Almaty City for 2008-2010 also refers to transport sector as one of the major pollution sources in the city and envisages a number of specific direction for improvements, including integration of environmental consideration into the urban and transport planning process, development of public transport and introduction of biofuels.
- Finally, the Urban Passenger Services Program for Almaty has been specifically designed to address challenges faced by public transport system; its key objectives are:
 - To increase volume and substantially improve the quality of public transport services;
 - Coordinated and balanced development of all public transport modes;
 - Decrease environmental impact of the city transport system.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH GEF STRATEGIES AND STRATEGIC PROGRAMS:

8. The project will support achievement of GEF-4 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.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES:

9. GEF-financed interventions will constitute policy development and capacity building through provision of technical assistance and investment in demonstration activities. No loan or revolving-fund mechanisms are considered appropriate, and therefore grant-type funding is considered most adequate to enable successful delivery of the project outcomes.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:

10. The Ministry of Environmental Protection (MEP) of the Republic of Kazakhstan—being in charge of implementation of environmental protection and climate change mitigation policies at the national level and coordination of GEF-funded technical assistance — will ensure close alignment of the project’s activities with other on-going relevant initiatives. In particular, MEP developed and now implements the 2008-10 program and action plan on environmental protection in Kazakhstan that, *inter alia*, includes (i) strengthening capacities of municipalities to address environmental problems locally, (ii) development of a digital model for ambient air quality management in urban areas, (iii) research studies to identify correlations between air quality in urban areas and health of residents. The project will build on results and achievements of the program and incorporate them into the project design during the preparation stage.

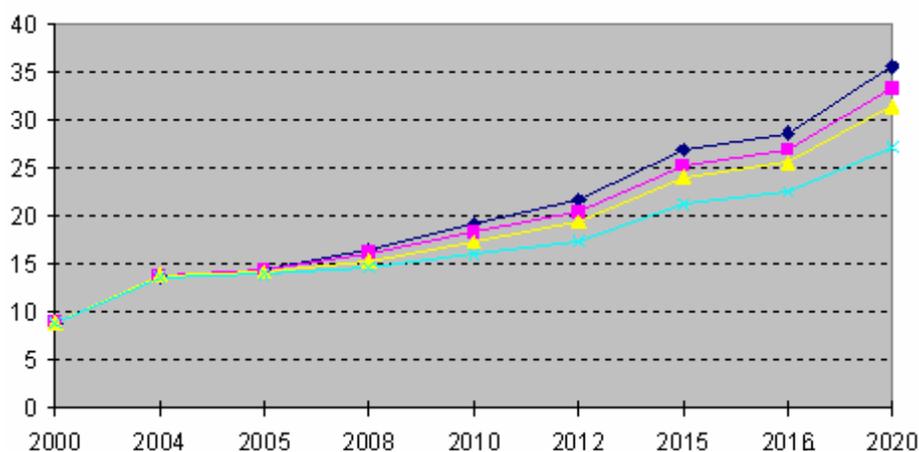
11. The Almaty City Municipality, the project’s main executing partner, developed and approved several strategic documents to tackle persisting urban transport and infrastructure development problems. The project is particularly supportive of the Urban Passenger Services Program for 2009-10 aimed at improved efficiency of the public passenger services in Almaty (Outcome 1).

12. The Government of Singapore through EBRD provided €300,000 to fund improvements to the electric transport services network in Almaty. This investment resulted in the upgrade of the electric transport information and dispatcher center (including GPS control), and installation of e-case validators to collect fare in trolleybuses and trams. Results of the project will be integrated into the design of Outcomes 1 and 2, mainly related to creation of a unified fare system and public transport information center. In addition, the UNDP/GEF project will look into results of the recently approved EBRD TA of total 600,000 € to assess the feasibility of introducing LRT in Almaty and will work closely with EBRD team on designing and introducing standardized public service contract (EBRD grant- 180,000€). Finally, the project will build on the results and rely on expertise developed under earlier EC funded/Almaty Urban Air Pollution Project (2001-2003) that aimed at creating conditions for improvements in ambient air monitoring, vehicle conditions, fuel quality, traffic management and driver habits by bringing together public bodies involved.

F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING :

13. Under the “business-as-usual” scenario, capacity and quality of public transport services in Almaty will continue to decline, leading to the increase of GHG emissions from the transport sector from 3.5 MtCO₂ in BAU up to 9 MtCO₂ in 15 years time (see Table 1) following the general trend for transport GHG emissions in Kazakhstan (Fig. 3).

Fig. 3 GHG Emissions from Transport Sector in Kazakhstan (blue line – BAU)



Source: 2nd National Communication to UNFCCC of the Republic of Kazakhstan

14. GEF support is needed to overcome the identified **key barriers** and tackle the urban transport challenges in Almaty:

(i) Low quality of public transport services leading to continuously declining competitiveness of public transport vis-à-vis private vehicles: In 1996, the Government of Kazakhstan opted for privatization of its public transport sector, except for the electric transport. While privatization has had a positive effect on public budget, being poorly implemented it gave birth to largely uncontrolled market, lead to proliferation of non-professional private bus operators, degradation of bus fleet and maintenance services, and consequently rapid deterioration of the quality of public transport services. Bus drivers—not provided with a proper labor agreement and forced to work 12-18 hours in a shift—have low incentives to

maintain vehicles properly and neither able nor motivated to provide good services to customers. Only 6 out of 21 registered bus operators have workshops and technical bases to ensure regular check-ups and proper maintenance of their vehicles. Customers' complaints, however, remain unaddressed. Municipality lacks control and enforcement mechanisms to exercise proper monitoring and ensure compliance of operators with technical, labour and safety regulation and traffic schedule. Recent survey conducted by the Institute of Transport and Communications, showed that inhabitants of Almaty have few incentives to prioritizing public transport for their urban travel, notably due to the lack of attractive, user-friendly and effective alternatives. It also pointed out to the low level of awareness among residents about the negative, health and climate consequences of current travel patterns.

(ii) Lack of a comprehensive and forward-looking transport demand management plan, inefficient traffic management and infrastructure: Almaty, especially the city centre, was not designed to accommodate current number of vehicles. Urban area was not well planned to separate the city's inhabitants from poorly controlled and unorganized traffic. According to the 2008 traffic flows monitoring report, intensity of the road traffic increased by 40% compared to 2001.⁷ Road traffic intensity in the city grows annually at about 7% on average. Chaotic and unorganized parking of private and commercial vehicles promotes traffic congestion which results in "stop and go" manoeuvring and higher emissions of GHG. A comprehensive transport demand survey hasn't been conducted in Almaty since early 1990.

(iii) Lack of integration between various public transports modes (metro, buses, trolleybuses, LRT) in terms of ticketing system, routes and connections. Each transport mode is being managed in isolation without proper integration of connections and ticketing system thus making the public transport unattractive and inconvenient for customers. Trolleybuses, trams and buses compete not only with private vehicles, but more so with each other for passengers during peak hours. Competition for high-profit routes is rather intense, leading to duplication of service routes adding to congestion and decreased safety of city traffic.

(v) Insufficient cooperation and policy coordination among relevant sectors (transport, city planning, environment and health) on transport and spatial planning and absence of enabling legislative basis for cross-sectoral cooperation: The city administration invests considerable financial resources (56 mln US\$ in 2008 only!)⁸ to improve the road infrastructure (putting new junctions/roads, widening and rehabilitation of existing roads) hoping that isolated engineering solutions are the panacea to the city's transport related problems. Uncoordinated policies and investment decisions on transport and spatial planning, however, contribute to promoting the unsustainable development of urban areas, which is accompanied by urban sprawl and the replacement of public transport infrastructure and services by new roads and parking space to meet the demands of private car users.

(vi) Insufficient vehicle emission control system, absence of efficient inspection of vehicles, low fuel quality, inefficient monitoring and assessment of pollution and other transport-related environment and health effects: Road patrol police conducts annual mandatory vehicle inspections and, at the same time, performs ad-hoc monitoring of vehicle emissions. The fact that regulatory and controlling functions rest in hands of one institution does not contribute to efficient inspection of vehicles and exercising proper emission control. Few of the fuel-testing laboratories are functioning properly, their equipment is inadequate and the testing protocols are not strictly followed. On the whole, it is difficult to obtain any accurate information on fuel quality.

(vii) Lack of data and tools to estimate and analyze GHG emission from transport sector: existing system for GHG inventory and monitoring do not enable municipal decision-makers, planners and transport organization to analyze the GHG emissions impacts of their transportation plans and projects.

G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN:

⁷ Source: Science and Research Institute of Transport and Communications, Almaty

⁸ Source: www.almaty.kz

Risk	Risk Rating	Mitigation Measures
Protracted global financial crisis leads to significant cuts in government spending for public transport sector	H	The risk that municipal government planned highly capital-intensive investment plan in public transport infrastructure (primarily metro) will not materialize as planned is quite likely given the dire situation with municipal budget. The project will therefore focus on promoting less capital-intensive measures and modal shifts which should be possible to finance and implement in the situation of resources-constrained budget.
Insufficient support for key decisions from important government institutions	L	Key government and city officials will be fully involved and consulted during project preparation and requested to endorse the project strategy and recommendations prior to obtaining GEF approval for FSP
Resistance of public to switch to less GHG intensive transportation	M	Mitigation measures to this risk will form a core part of project strategy, i.e. making sure that public transport meets customers' expectations in terms of time, conform and quality. All project components (except Outcome 3) are designed to contribute to the change in perception and motivate people to use alternatives to private cars

H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

15. It is expected that the project will deliver between 7-10 mln t CO₂eq of emissions reductions directly and indirectly over its 10-year influence period. This is equivalent to a ratio of at least 4.3 USD/t CO₂eq, which is cost-effective as compared to other available alternatives for Kazakhstan.

Direct GHG emissions reduction from piloting public transport rapid transit systems and increasing the number of buses (+200 new buses) will amount to about 22,435 CO₂/year or 224,350 tCO₂ over the technology life-cycle, 10 years (Table 1). Full estimates of the project direct GHG emission reduction impact will be provided at PPG stage (once the scope of demo-activities is finalized).

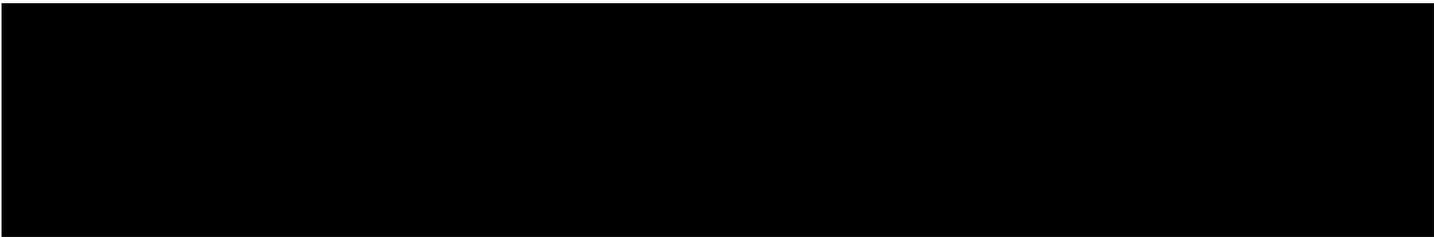
Table 1: Current and Projected Passenger-km by Public Transport

16. Cumulative (direct and indirect) emissions reductions are estimated to be in the range of 1 mln tCO₂/year by the end of the project resulting from the shift from private to public transport, increase in vehicle efficiency and optimization of city traffic (calculated as difference between BAU GHG emission scenario, Table 2, and project GHG emission scenario, Tables 3) or cumulatively up to 10 mln t CO₂ eq over the 10 year post-project influence period (depending on the success and enforcement of new policies and sustainability of project results).

Table 2: GHG emissions under BAU: Year 0, Year 5, Year 15

Sources: (1) – Municipality of Almaty; (2), (3) - Scientific Institute for Transport and Communication, Almaty; (4), (5) - IPCC Default Values

Table 3: GHG emissions in project: Year 0, Year 5, Year 15



I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:

17. For over 20 years UNDP has been involved in providing transport-related technical assistance to developing countries with a focus on poverty alleviation and improved access to social services through promotion of public transport. Over 2,000 such UNDP projects have been implemented, including but not limited to 11 GEF-funded projects on sustainable transport (51 mln US\$). Main focus of UNDP assistance has been and remains on the following priority areas:

- designing and supporting infrastructure that improves the safety and attractiveness of non-motorized projects, including setting up safety programs;
- providing technical assistance to governments to improve the performance of public/collective transport;
- developing motor vehicle traffic controls in urban areas to control traffic congestion impacting public transport routes;
- working with governments to set-up strategic urban air pollution mitigation strategies.

The above areas are fully consistent with the strategy of the proposed project in Kazakhstan and justify UNDP's comparative advantage as GEF's Agency for the project.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
 (Please attach the [country endorsement letter\(s\)](#) or [regional endorsement letter\(s\)](#) with this template).

NAME	POSITION	MINISTRY	DATE (<i>Month, day, year</i>)
N. Ashimov	Minister of Environmental Protection of Kazakhstan	Minister of Environmental Protection of Kazakhstan	1 April 2009

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (<i>Month, day, year</i>)	Project Contact Person	Telephone	Email Address
John Hough, Officer in Charge		09/14/2009	Marina Olshanskaya UNDP/GEF Regional Technical Specialist on Climate Change, Europe and CIS	+421-259-337-285	marina.olshanskaya@undp.org