



MINISTRY OF ROAD, TRANSPORTATION, CONSTRUCTION AND URBAN DEVELOPMENT  
MINISTRY OF NATURE, ENVIRONMENT AND TOURISM OF MONGOLIA

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### **Policies and Strategies for Sustainable Transport System Establishment**

by Mr. Jadamba BAT-ERDENE, State Secretary



# MONGOLIA



- **Location:** land-locked country in the Central Asia, between China and Russia;
- **Territory:** 1.566 million square kilometers
- **Population:** 2.7 million;
- **Density:** 1 square km per 1.6 persons (34.0 million heads of livestock)
- **Land boundaries:** **8,158 km**, with Russia 3,485 km and with China 4,673 km
- Mongolian population live in 21 provinces, in three cities. In Ulaanbaatar City 1.25 million, In Orkhon province 90,000, in Darkhan-Uul 100.000 people.





## Current Situation of Urban Transport

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- Number of means of transportation is increasing massively in last 20 years.
- As October of 2011, only 625 km long roads in Ulaanbaatar.
- 80 percent of all automobiles in Ulaanbaatar are used vehicles more than 7 years.



# Causes and Effects from Transport Means to the Environment

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## Causes:

- Current urban development is erratic and no cohesive
- Insufficient long and lack of systematic networks of paved roads
- Disorder of traffic arrangement
- Heavy load vehicles are running in and around Ulaanbaatar since most of heat, power, and water supplement system establishment, housing and industrial buildings in Ulaanbaatar are being built in downtown.
- Means of transport which have being used in private consumption from 1995 were put on public transport service because of economic difficulty.

## ➤ Effects:

- Cloud of dust is raised
- Extremely heaviness of traffic congestion
- Crashes and accidents
- Exceedingly toxic smokes and noises



## Effects to the Environment from Transport Means Consumption

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- 78,8 % of nitrogen dioxides and 14-30% of carbon oxide in air are emitting from transport means as founding in the research conducted by the University of Science and Technology and Professional Authority of Air Quality.
- As analysis of laboratory of Nature and Environment Investigation Center, 144,6 thousand tons of toxic substances are emitted of which 39,3% or 56,8 tons from automobiles and other moveable means.



## Goals for Clean Air and Sustainable Transport System

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Action program of the Government of Mongolia raises the following goals to reduce air pollution by rehabilitating public transport means and change its fuel as gas.

- Introduce GPS technology
- Rationalize the public transport service and establish new optimal public transport system
- Use public transport instead of our cars to reduce congestion, parking problems, fuel consumption and pollution.



## Strategic Goals for Sustainable Transport

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**Strategic goal 7.** To improve Ulaanbaatar auto road networks and public passenger transport service,

- To improve coherence of Ulaanbaatar auto road networks with urban planning and transport policy,
- To assemble and manufacture domestically electric means of transport,

**Strategic goal 8.** To reduce negative effects from means of transportation to human health, environment and traffic mobility,

- To use more liquefied gas in means of transport in Ulaanbaatar and major cities,
- To update the tax policy on means of transport estimating its influences to environment,



## Polices for Goal Implementation and Problem Solution

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As indicating in clause 171 of Law of Mongolia on Auto Transport:

- Means of auto transportation must be met the requirements of human health and possibly accepted level of effects to our environment, standards of transportation and technical operations.
- As amendment to above law dated in 2009, gas and electric batteries must be used for means of public transportation within and around the cities. This policy will be effective from 2012.
- Law on Air and Law on Air Duty were approved on June 2010.





## Polices for Goal Implementation and Problem Solution

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- Public passenger and transport service: General requirement for public transport classification and service-MNS 5012-2008 Standard prohibits to use the vehicles are used more than 12 years in public transport service and 10 years in taxi service from April 2010.
- Diesel engine automobile: Possibly accepted level and measuring method of smoke – black- MNS5014:2009 determines precisely the possibly accepted top level of toxic substances.
- Ecology and economic evaluation on toxic smoke and gas are emitted from auto transport consumption are made.
- The program of Ulaanbaatar air pollution reduction passed in 2010 aims to reduce toxic smoke by increasing the electricity engine transport means in the public transport sector.



# What We are Doing for Policy Implementation for Sustainable Transport



Improving a number of electric vehicles and frame of service for public transport service.



Launching new type of huge capacity transport means for Public transport in Ulaanbaatar City.





## Continue...“ ULAANBAATAR CITY PUBLIC TRANSPORT DEVELOPMENT AND IMPROVEMENT” PROJECT FUNDED BY ASIAN DEVELOPMENT BANK



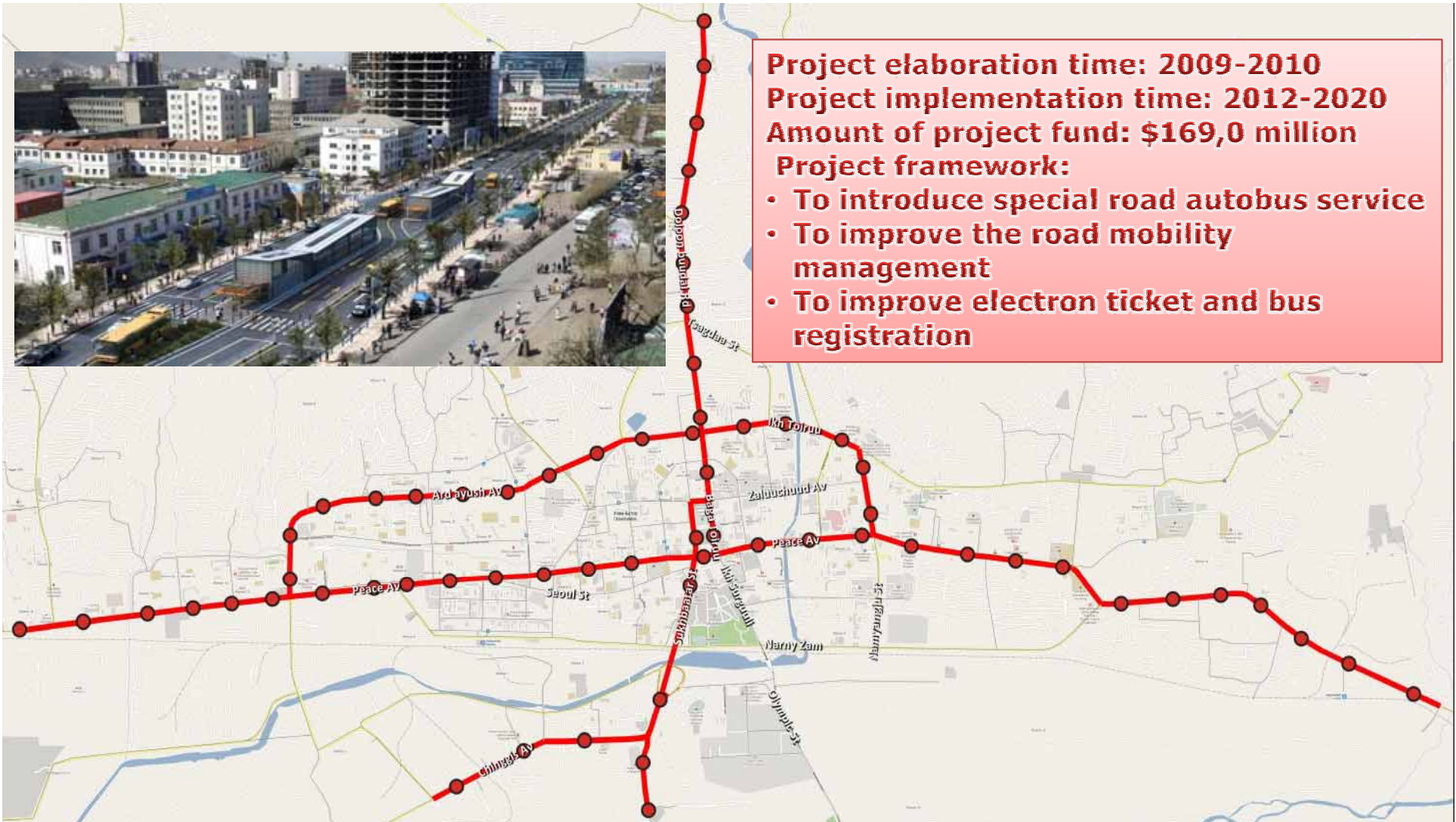
**Project elaboration time: 2009-2010**

**Project implementation time: 2012-2020**






**Amount of project fund: \$169,0 million**

**Project framework:**

- To introduce special road autobus service
- To improve the road mobility management
- To improve electron ticket and bus registration



## Continue...Policy implementation for Air Pollution Reduction & Use of Means of Electric Transportation

Year of invest-ment	Amount of invest-ment /in tugrug ₮/	Dedication of Investment	Outcomes	
2008 - 2010	1,5 billion	To assemble and produce the trolleybus and duo bus domestically	Electric engines are installed in used 15 autobus and assembled 11 trolleybuses and 1 duo bus for public transport service. 32% of electric transport means park was reconstructed.	
2011	330.0 million	To assemble and produce the duobuses	“Electric Transport” State owned company is starting assembling duo bus and produced 4 trolleybuses in Ulaanbaatar.	
	1.0 тэрбум төгрөг	To strengthen assembling and producing sections of “Electric Transport” State owned company and assemble trolleybuses.	New and reconstruction of manufacturing and maintenance sections of “Electric Transport” State owned company have been already started.	 
<b>Total</b>	In 2008-2011, totally 32 electric transport vehicles were assembled and put on operation which ₮2.5 billion spent on.			
2009	31,7 billion	In the framework of goals for improvement of Ulaanbaatar public transport services, large capacity of 400 autobuses are used in public transport.		



## Continue..., **Policy Implementation for Air Pollution Reduction**

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At the President's office of Mongolia, National Committee for Ulaanbaatar Air Pollution Reduction was established.

- For reduction of toxic smoke emitting, this Committee decided to spend 4,0 billion tugrugs from Clean Air Fund from which 3,5 billion tugrugs for replacing fuel use of large capacity of 400 buses as liquefied gas use, and 500.0 million tugrugs for installing the filters for toxic smoke 942 small capacity, 485 large capacity autobuses and 59 police and security vehicles.
- Amendments to tax law on imposing more tax on used vehicle import in order to limit amount of used vehicle imports are on agenda of the Parliament of Mongolia.
- Procurement of purchasing equipment for determination of amount of toxic smoke and substances from vehicle is being conducted.



## Policy Implementation in 2012

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In the framework of reducing toxic smoke and substances are emitting from auto transport:

- To improve the stations for gas refill in vehicles in accordance with the decision of using only gas in large capacity of buses from January 1, 2012.
- To transfer 400 buses with large capacity to combined consumption of diesel and liquefied gas.
- To install the filters for toxic smoke in 1500 vehicles.
- To provide special truck for transporting ashes from ger districts.
- To newly assemble 19 duo buses and put on service.



## Updating Legal Framework for Air Pollution Reduction

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- Stick sign of “Eco” in red and green colors will be issued to all type of vehicles are running in Ulaanbaatar and limit running.
- Revenue from “Eco” stick sign will be spent on traffic safety and prevention.

### Tax Policy on Means of Transportation:

- Exempt liquefied gas use vehicles from special taxes, but impose high taxes on diesel fuel use heavy load trucks.
- To fix tax imposition on means of transportation to be increased from year to year.
- Tax increase, for instance, two times increase of value added tax, in the means of transportation except from vehicles use liquefied, bio-ethanol and biodiesel fuel.



# Improving Infrastructure: Upgrading UB's Road System

“ New Development “Mid term program which was adopted by the Parliament of Mongolia on June 24, 2010 targets to build newly and reconstruct totally 5572 km roads including 990 km high way and following urban roads are going to be build in 2012.

- Upgrade 350 km of the city's road
- Build 212 km worth of new roads
- Construct 7 double-level intersections

54% of UB roads > 25 years old;  
24% of UB's roads > 15 years old



- Traffic congestion in UB's ring roads will be reduced significantly.
- Capacity of main roads will be improved dramatically
- Standard of living and ease of transit will improve dramatically





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## Expected Outcomes

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For Environmentally Sustainable Transport:

- More number of use of liquefied fuel and gas use vehicles and public transport
- GPS technology will be used.
- New optimal public transport system will be established.
- More Public transport instead of our car will be used.
- Congestion, parking problems, fuel consumption and pollution will be reduced.
- Environmentally friendly high way and paved roads of 5572 km long will be built.

**THANK YOU FOR YOUR  
ATTENTION**

