

MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT - MINISTRY OF TRANSPORT
VIET NAM

EST Achievements, Progress and Future Strategies

EST Forum, Bangkok August 23-25, 2010

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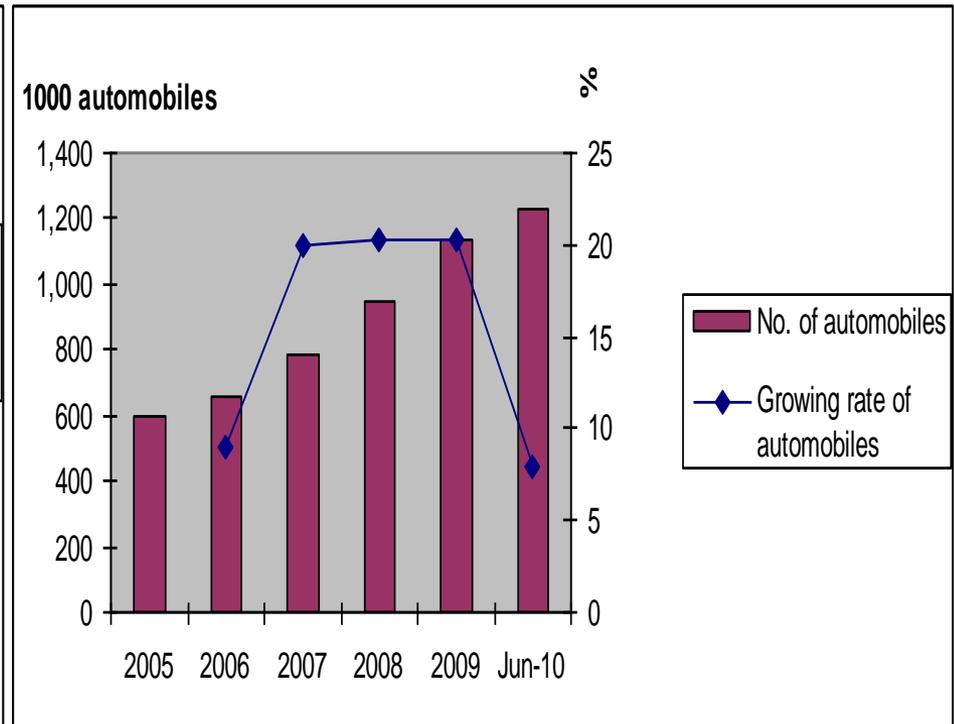
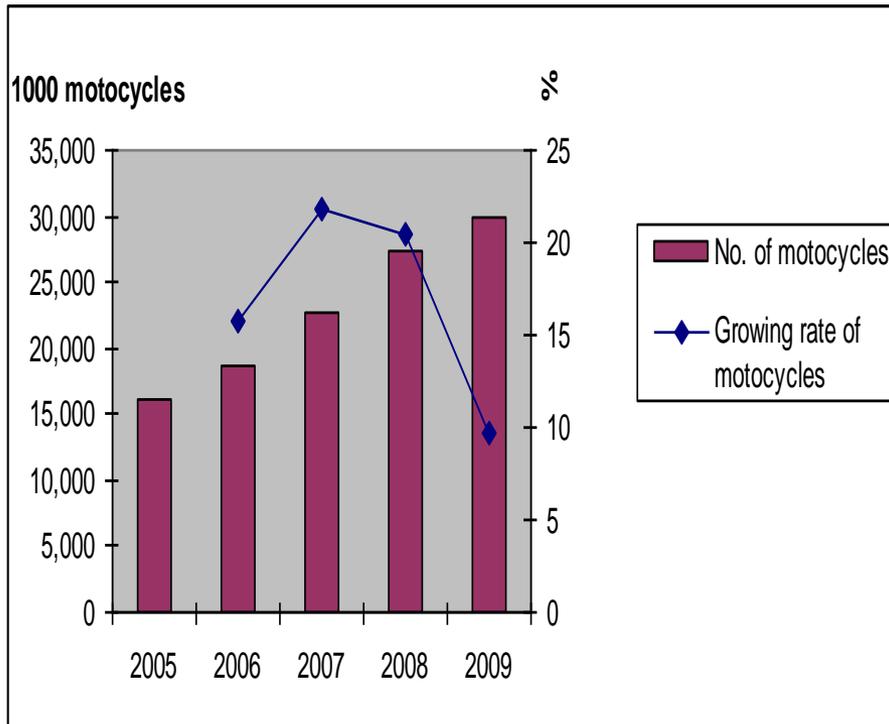
1. EST Project in Viet Nam

- Project: Support to development of the National Strategy on Environmentally Sustainable Transport
- Implemented by: Institute of Strategy, Policy on Natural Resources and Environment (ISOPNRE), MONRE and Department of Environment (DOE), Ministry of Transport (MOT)
- Support: United Nations Centre for Regional Development (UNCRD)
- Started in 2006
- Now: the final (4th) Draft of the Strategy
- The EST's objectives and targets were intergrated into transport development strategy and master plan on road and rail transport

2. Progress & Achievements in some areas of EST

Transport planning and transport demand control

Number of motorcycles, automobiles in Viet Nam



Source: MOT, 2010

Public transport

- Number of buses, routes and passengers in Hanoi and Hochiminh city is increasing.
- Some bus routes in smaller cities like Da Nang, Vinh, Hue, Ha Long...

Public transport

Yearly output of public bus system in Ha Noi

Item \ Year of	2005	2006	2007	2008	2009
No. of Routes	46	54	60	60	65
No. of Buses	767	887	940	940	1,114
Carried Output (10 ³ passengers)	293,131	317,894	349,428	402,543	418,424

Public transport

Yearly output of public bus system in Ho Chi Minh

Item \ Year of	2005	2006	2007	2008	2009
No. of Routes	143	146	151	151	153
No. of Buses	3,250	3,292	3,208	3,225	3,270
Carried Output (10 ³ passengers)	208,700	253,400	296,200	342,500	404,150

Non-motorised transport (NMT)



Pedestrian overpasses have been built in Ha Noi





Pedestrian underpasses have been built in Ha Noi



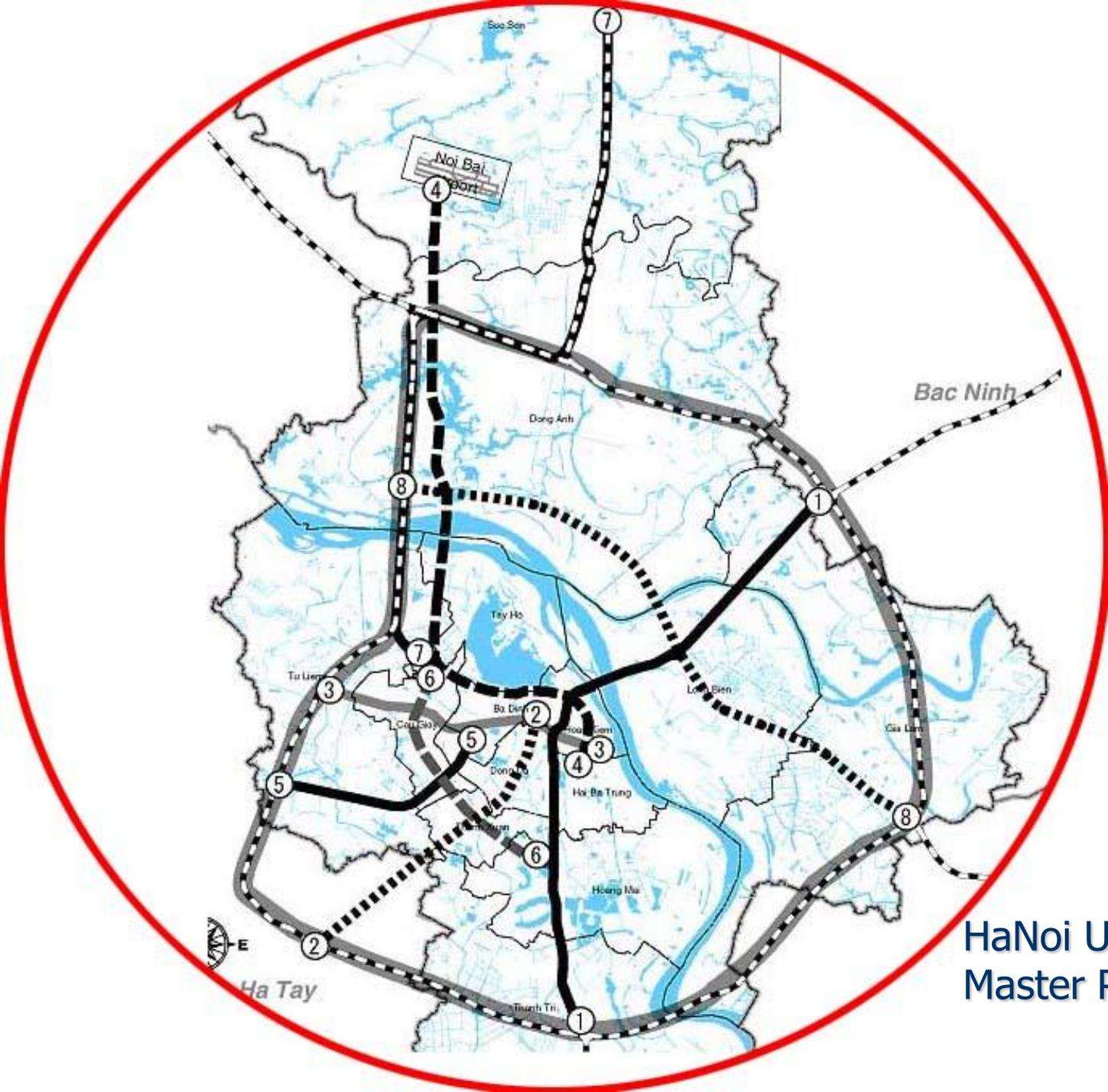
Development of transport infrastructure and road maintenance

HaNoi and Ho Chi Minh Urban Rail Network Master Plan have been developed:

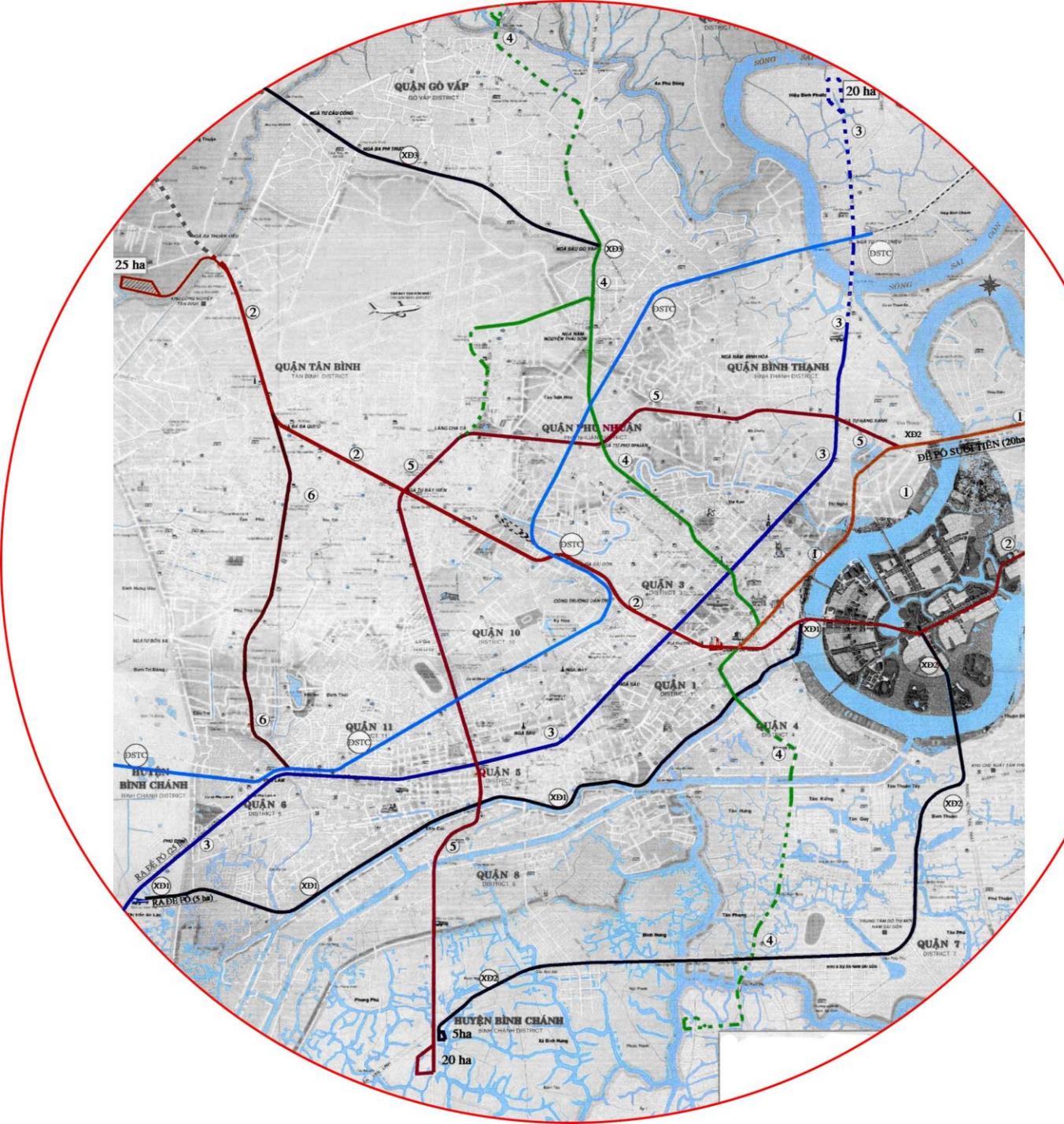
HaNoi: 08 lines

Ho Chi Minh:

- 06 LRT/Metro lines
- 03 tramp/monorail lines
- 01 elevated railway line



HaNoi Urban Rail Network
Master Plan - 08 lines



Ho Chi Minh Urban Rail Network Master Plan:

- 06 LRT/Metro lines
- 03 tramp/monorail lines
- 01 elevated railway line

**Ho Chi Minh City Urban
Railway
Construction Project
Bến Thành - Suối Tiên Section
(Line 1):**



- A final study was completed on the investment project with the assistance from the Japan Bank for International Cooperation (JBIC) in 2006 and was approved by the HCMC People's Committee.

- Total investment capital of the project: 1.09 million USD.
The line 1 has 19.7 km length including 2.6-km long Underground section and 17.1km long Elevated section

- Expected completed time: 2014

Monitoring emission from vehicles



Approval of Exhausted gas emission control programme for in-used motorcycles and mopeds in cities
(PM's Decision No. 909/QD-TTg, dated 17th June 2010)

Inspect, control and penalty vehicle causing pollution on the way

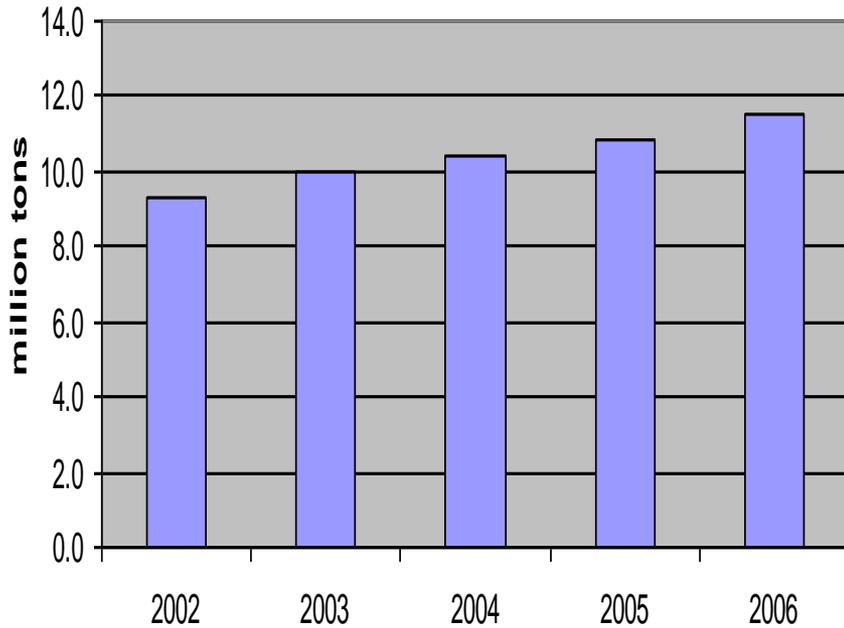
Exhausted gas emission inspection for motor vehicles

No.	Types of Vehicle	No. of Vehicles Inspected		
		2007	2008	2009
1	Imported Vehicle			
	<i>Secondhand Automobile</i>	11,209	15,644	22,214
	<i>New Automobile</i>	16,274	39,114	54,862
	<i>New Motorcycle</i>	134,635	137,316	112,363
2	Manufactured Vehicle			
	<i>Automobile</i>	20,630	152,509	114,512
	<i>Motocycle</i>	2,804,802	2,897,422	2,863,716
3	In-used Automobile			
	<i>Ha Noi</i>	94,975	114,117	163,287
	<i>Ho Chi Minh City</i>	152,192	170,315	204,965
	<i>Hai Phong</i>	24,200	27,408	35,172
	<i>Da Nang</i>	14,683	16,127	20,859
	<i>Can Tho</i>	8,188	8,152	7,678

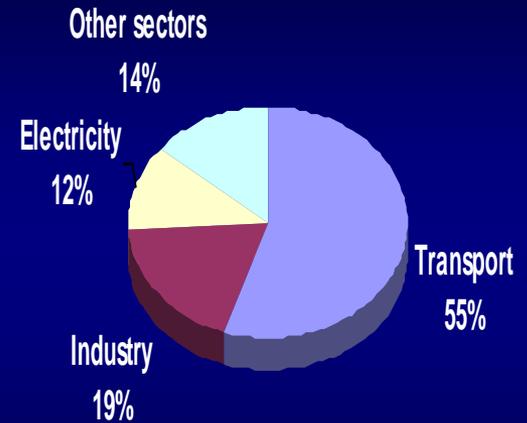


Managing fuel quality

Total gasoline consumed



Gasoline consumption distribution by transport



Source: Viet Nam Environmental Report 2007

Cleaner Fuel

- Unleaded gasoline was introduced since July 2001.
- Leaded gasoline is phased out since 2001.
- Some taxi in Hanoi have already used CNG as fuel
- A research on usage of CNG for motorbike has successfully completed recently at the Da Nang Polytechnic University
- Pilot operation of CNG buses in Ho Chi Minh City and Electric sightseeing minibuses in Ha Noi



Pilot operation of CNG buses in Ho Chi Minh City and Electric sightseeing minibuses in Ha Noi

Cleaner Fuel

The Ministry of Science and Technology has published a number of standards (TCVN) and technical regulations (QCVN) to control quality of gasoline, diesel and biofuel:



- TCVN 7716 :2007
Ethanol denatured fuel (E100) for blending with gasolines for use as automobive spark-ignition engine fuel- Specifications

- TCVN 7717 :2007
Biodiesel fuel blend stock (B100)- Specifications



- TCVN 8063:2009
5% Ethanol unleaded gasoline blends - Specifications.

- TCVN 8064:2009
5% fatty acid methyl esters diezel fuel oils - Specifications



QCVN 1:
2009/BKHCHN
National technical regulation on gasoline, diesel fuel oils and biofuels

Bio-ethanol production projects



In Aug 2010, Dai Tan Bio-ethanol Factory in Quang Nam, invested by Dong Xanh joint stock Company, produced bio-ethanol (E5). This is the first bio-ethanol product manufactured in Vietnam.

- The Factory was started to built in 2007 with total invested capital of appro 600 million VND.
- Capacity: 100,000 tons bio-ethanol per year.
- Material: 300,000 tons dry cassava

Plan and Program of implementing biofuel projects until 2015, vision to 2025 of Petro Vietnam

Petro Vietnam has been building 3 bio-ethanol production factories, located in 3 regions of Vietnam: North, Central and South with capacity of each one of 100,000 m³ bio-ethanol per year.

Phu Tho Bio-ethanol factory:

- Area: 50ha
- Capital: 80 mil USD
- Expected operation time: end of 2010

Dung Quat Bio-ethanol factory

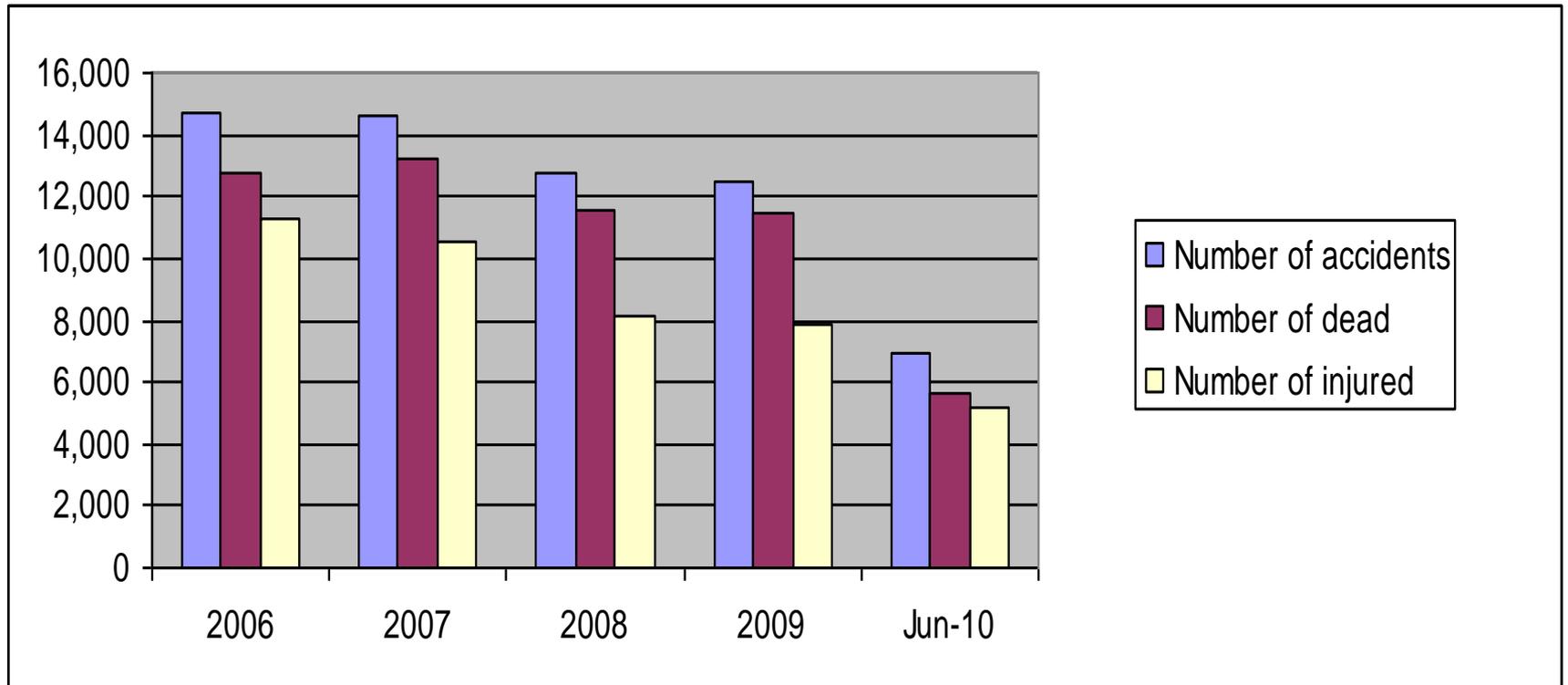
- Area: 24,62ha
- Capital: about 80 mil USD
- Building time: 21 months (started from Sep 2009)

Binh Phuoc Bio-ethanol factory

- Capital: over 80 mil USD
- Building time: 18 months (started from Mar 2010)

Traffic safety

Slight reduction in accidents and victims



Source: National Traffic Safety Committee, MOT, 2010

Traffic safety

Some actions have been done

- Promote traffic safety in urban areas: increase public awareness of traffic law compliance; relieve traffic congestion at some school gates during rush hours;

- The National Committee for Traffic Safety chaired by the Minister of Transport was established and introduced several practical measures:

- Introduce regulation requiring motorbikes riders to wear helmets in all roads and streets from 15 Dec 2007.

- Directive Number 22-CT/TW dated 24 Feb 2003 by the Party Secretariat on enhancement of Party leadership in ensuring traffic safety;

- Resolution Number 14/2002/QH11 of the National Assembly and Resolution Number 13/2002/NQ-CP on 19 Nov 2002 on measures to reduce traffic accidents and traffic jams were released.

Equity and gender in transport



Buses with handicapped signal and Elevator

Equity and gender in transport



Shift to Low-floor buses for easier accessibility

Equity and gender in transport



**Routeing Information about the bus equipped for handicapped
(route, time, phone number)
Requirements for assisting vulnerable passengers**

3. Future Strategies

Developing public transport network

- Continue to implement Rail Network Master Plan in Ha Noi and HCM city;
- Raise the number of buses and service quality;
- Target: share of public transport is 35-45% in 2020

Investing in the development of road transport infrastructure

Ensuring that the land reserved for urban transport accounts for 16%-26% of the total urban area, including stationary and dynamic transport

Implement Exhausted gas emission control programme for in-used motorcycles and mopeds in cities

(PM's Decision No. 909/QD-TTg, dated 17th June 2010)

Thank you for attention!