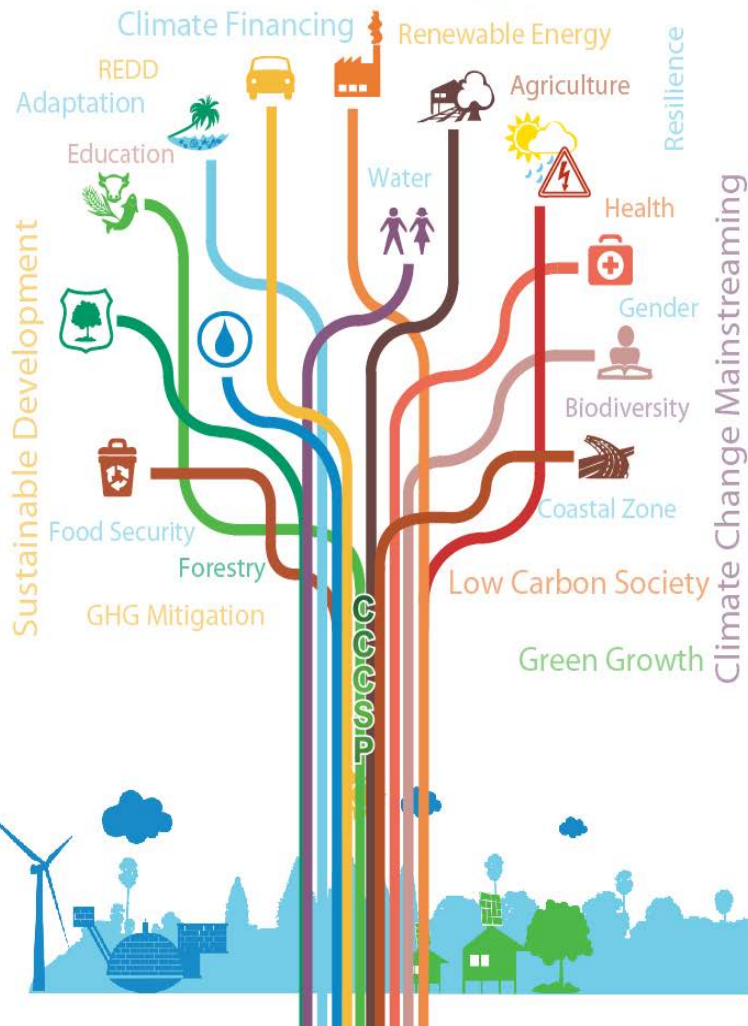


# 3<sup>rd</sup> National Forum on Climate Change

5 – 7 November 2013, Cambodia

*“Taking Action for Sustainable Development in the Changing Climate”*

## Climate Change



## National Strategic Plan for Climate Change Adaptation and Greenhouse Gas Mitigation in Transport Sector

Mr. Phollak Chreang  
Department of Planning  
Ministry of Public Works and Transport

6 November 2013

CAMBODIA CLIMATE CHANGE ALLIANCE

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Ministry of Environment

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# STRUCTURE OF REPORT

## I. INTRODUCTION

## II. CURRENT STATUS OF TRANSPORT SECTOR IN CAMBODIA

### 2.1 Transport status in Cambodia

#### 2.1.1 The Number of Vehicles Registration

#### 2.1.2 Road Accident

### 2.2 Public infrastructure status in Cambodia

#### 2.2.1 Road System

#### 2.2.2 Railway system

#### 2.2.3 Maritime and waterway system

#### 2.2.4 Aviation

### 2.3 Development of transport infrastructure

#### 2.3.1 Road Systems

#### 2.3.2 Railway

#### 2.3.3 Maritime and Waterway

### 2.4 Existing sector policy and plans in transport infrastructure





# STRUCTURE OF REPORT (CON'T)

## III. CLIMATE CHANGE AND TRANSPORT SECTOR IN CAMBODIA

### 3.1 Climate in Cambodia

### 3.2 Environmental problems in transport sector in Cambodia

#### 3.2.1 Greenhouse gasses emissions from transport sector in Cambodia

#### 3.2.2 Air pollution from transport sector in Cambodia

### 3.3 Impacts of Climate Change on Public Infrastructure

### 3.4 Vulnerability of Transport Sector in Cambodia

### 3.5 Climate Responses of Transport Sector

## IV. CLIMATE CHANGE STRATEGIC PLAN FOR TRANSPORT SECTOR

### 4.1 Strategic Framework for Climate Change Adaptation in Public Infrastructure

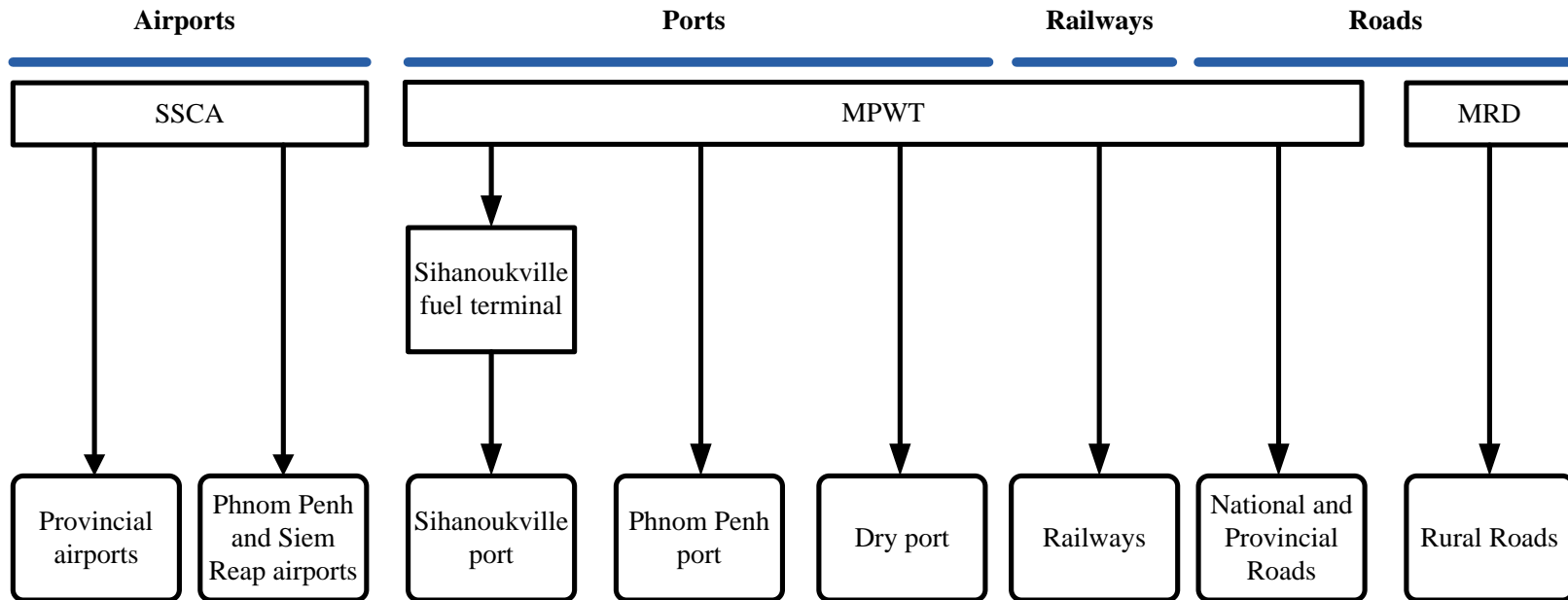
### 4.2 Strategic Framework for Greenhouse Gases Mitigation in Transport Sector

## V. ANNEX





# CURRENT STATUS OF TRANSPORT SECTOR



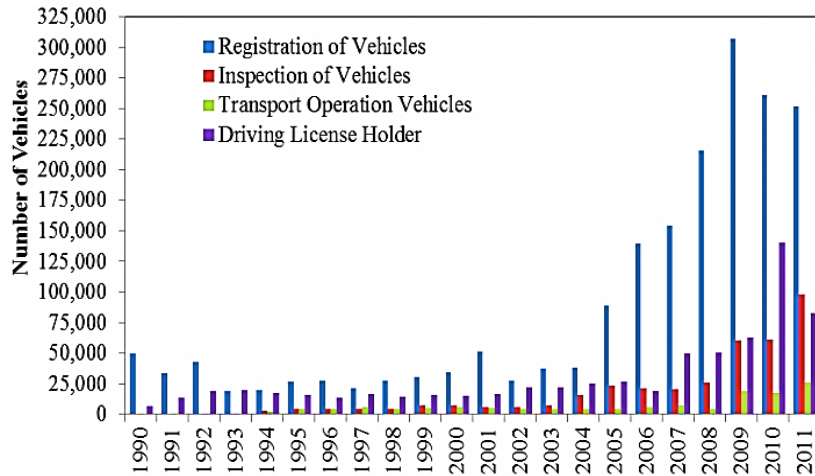
Note:  
SSCA = State Secretariat of Civil Aviation  
MPWT = Ministry of Public Works and Transport  
MRD = Ministry of Rural Development

Structure of transport sector in Cambodia

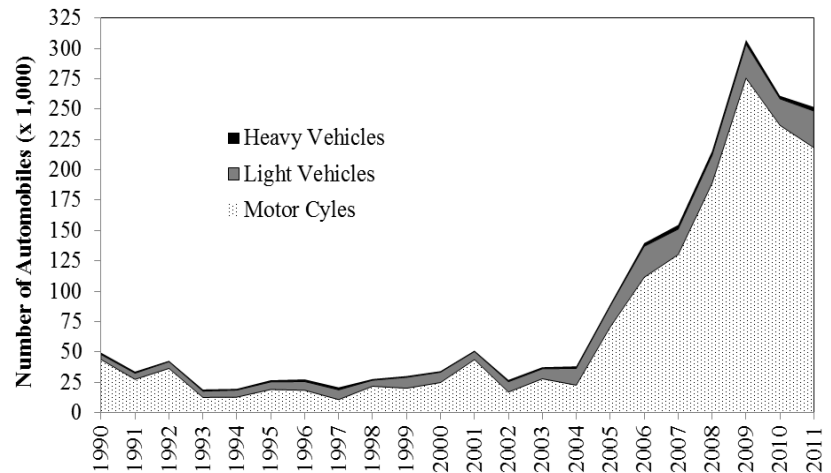




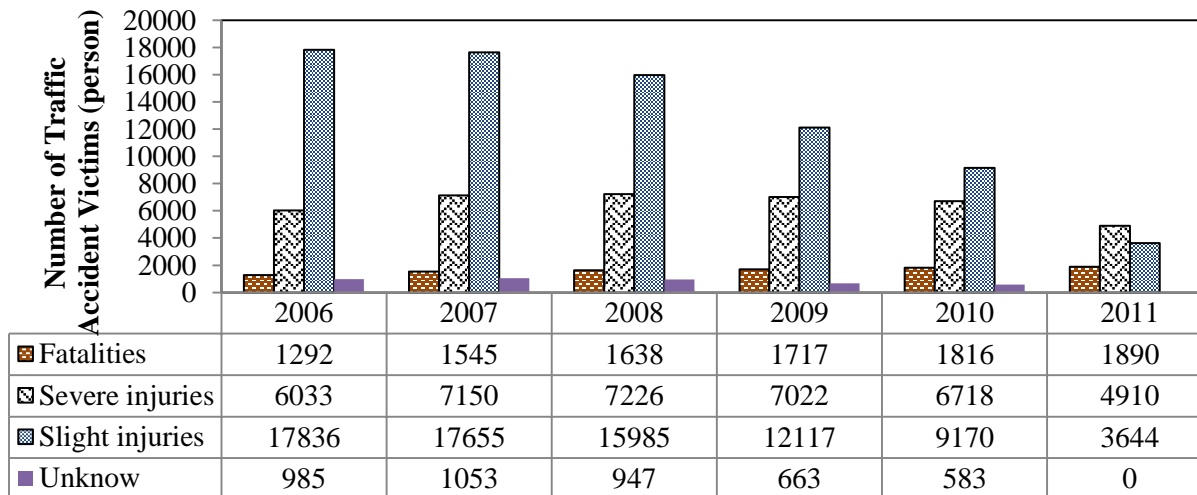
# CURRENT STATUS OF TRANSPORT



Number of vehicles



Number of registered automobiles

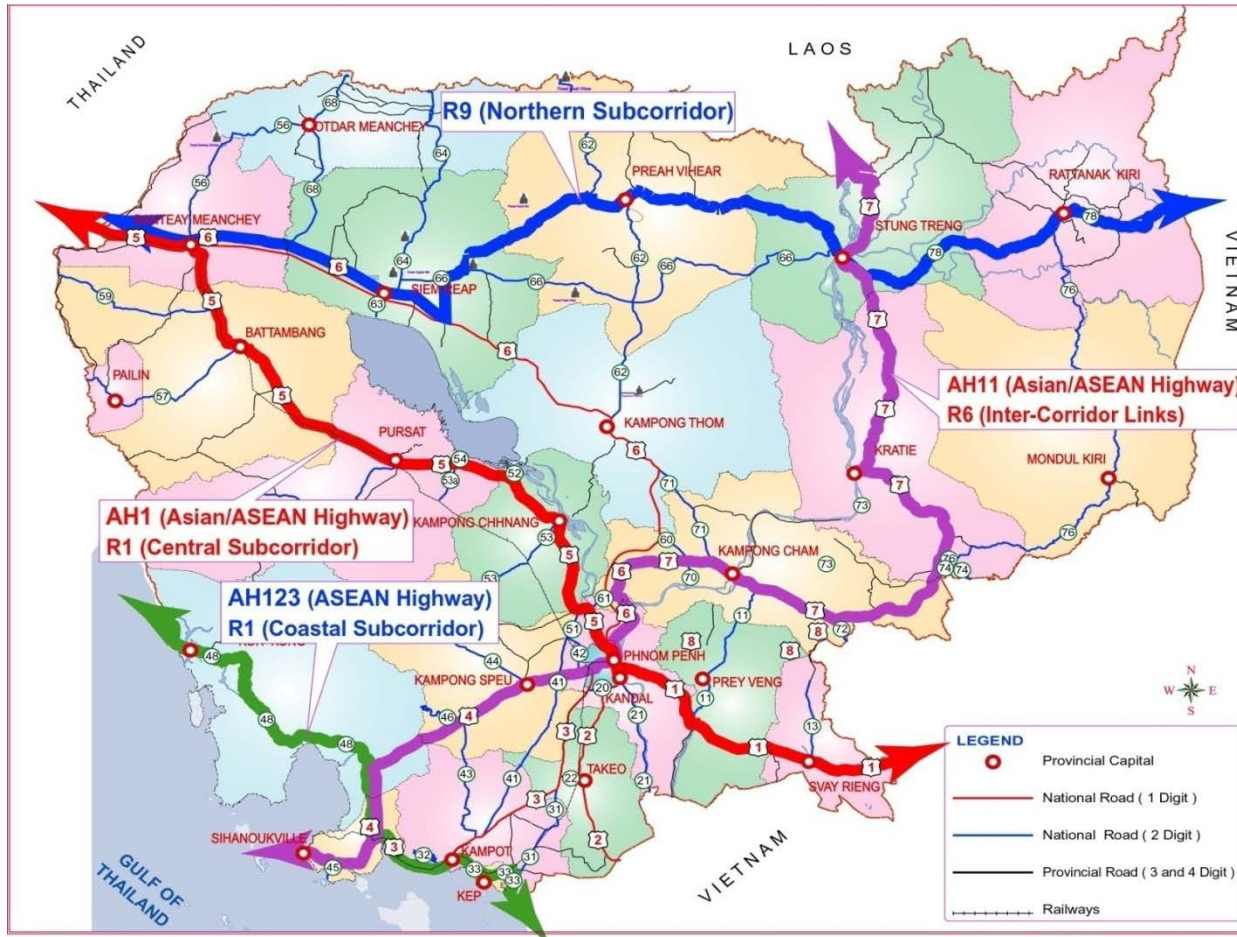


Number of traffic accident victims in Cambodia in 2006-2011



# PUBLIC INFRASTRUCTURE STATUS

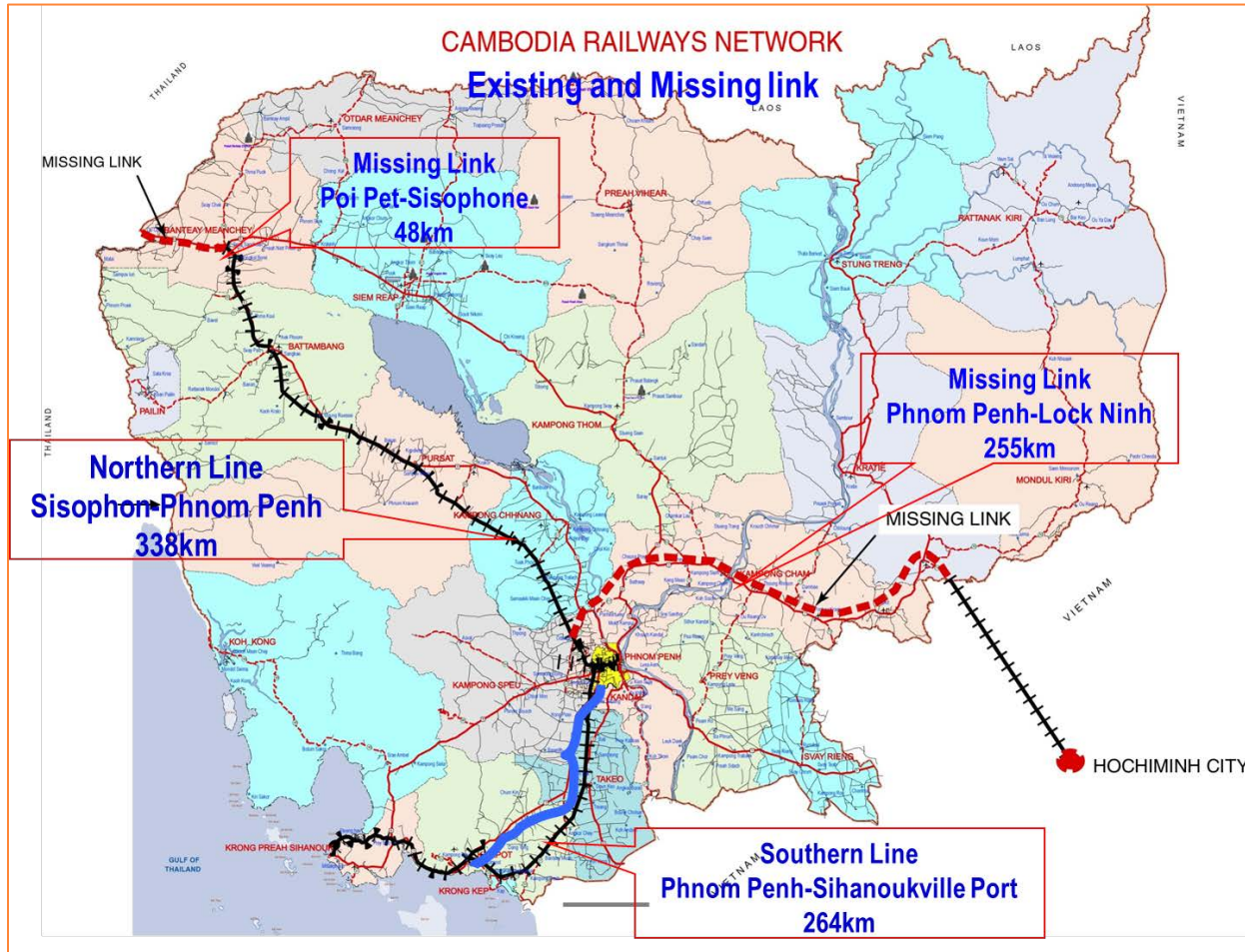
## Road System



# PUBLIC INFRASTRUCTURE STATUS



## Railway system



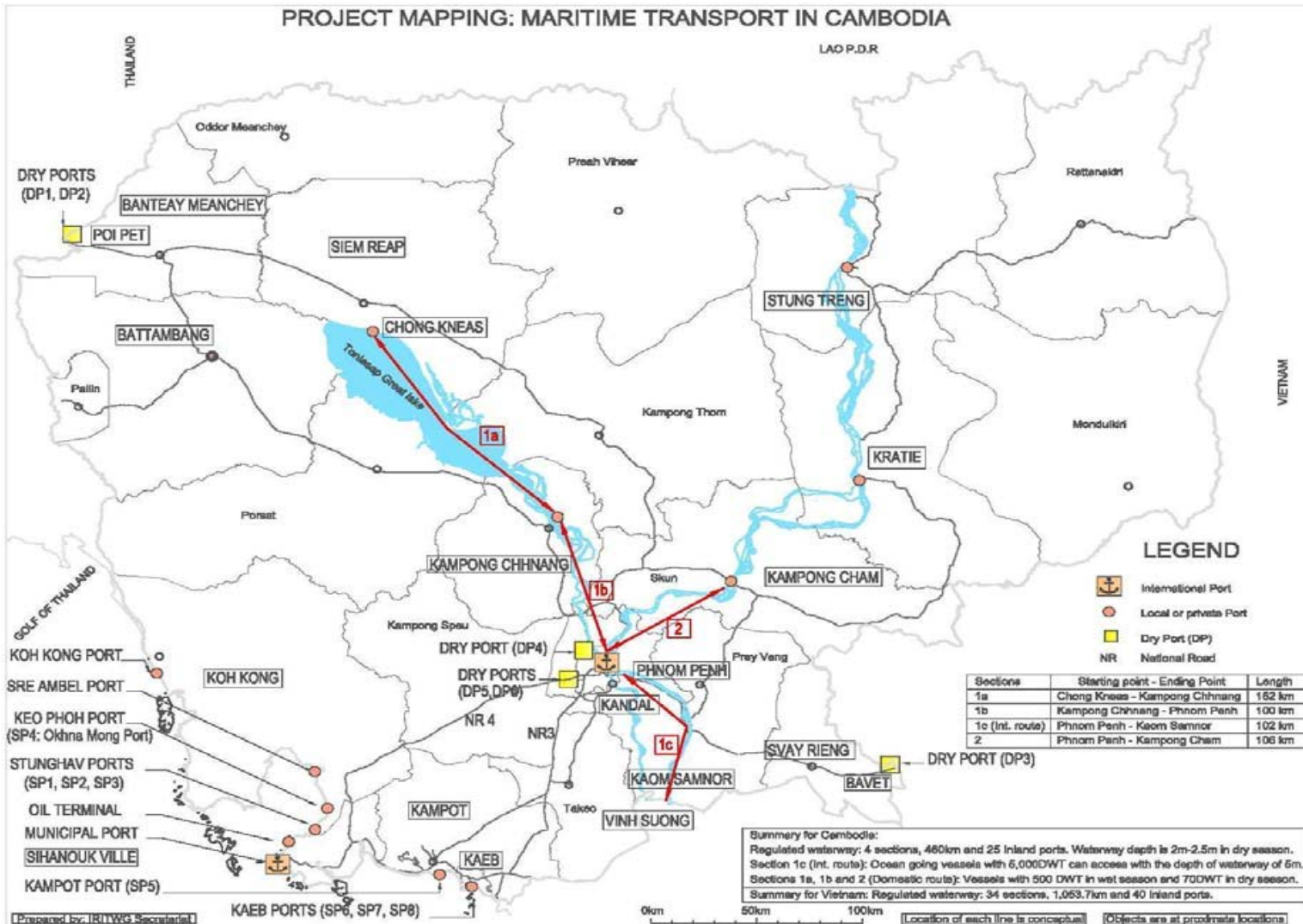
## Cambodia Railway Network

3<sup>rd</sup> National Forum on Climate Change

# PUBLIC INFRASTRUCTURE STATUS

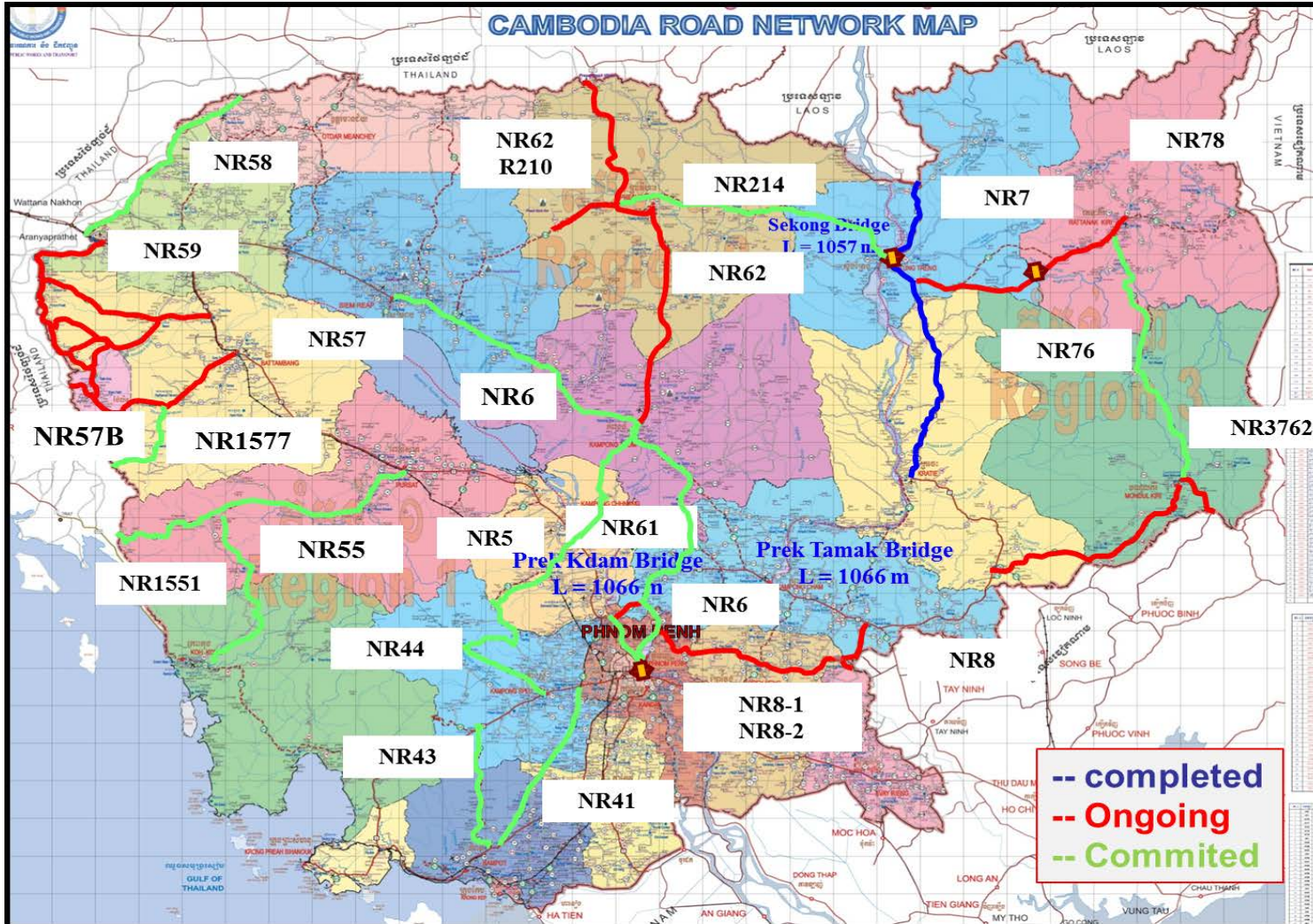


## Maritime and waterway system





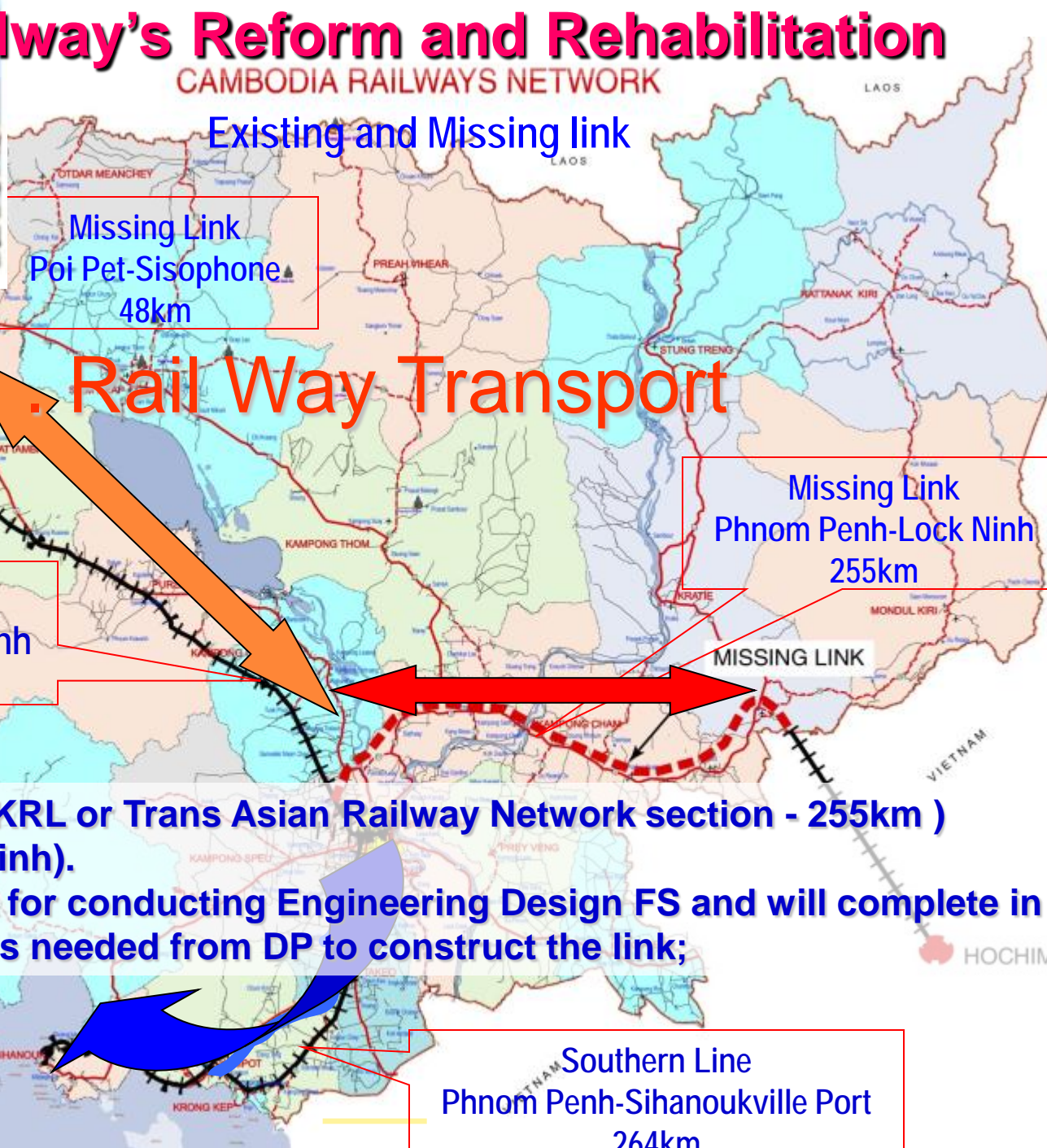
# DEVELOPMENT OF TRANSPORT INFRASTRUCTURE



Road project map

# Railway's Reform and Rehabilitation

CAMBODIA RAILWAYS NETWORK



Existing and Missing link

Missing Link  
Poi Pet-Sisophon  
48km

Rail Way Transport

Northern Line  
Sisophon-Phnom Penh  
338km

Missing Link  
Phnom Penh-Lock Ninh  
255km

MISSING LINK

Link to Vietnam: (SKRL or Trans Asian Railway Network section - 255km )  
from Penh to Loc Ninh).  
PRC is provided TA for conducting Engineering Design FS and will complete in 2010.  
Financing support is needed from DP to construct the link;

Southern Line  
Phnom Penh-Sihanoukville Port  
264km

HOCHIMINH CITY



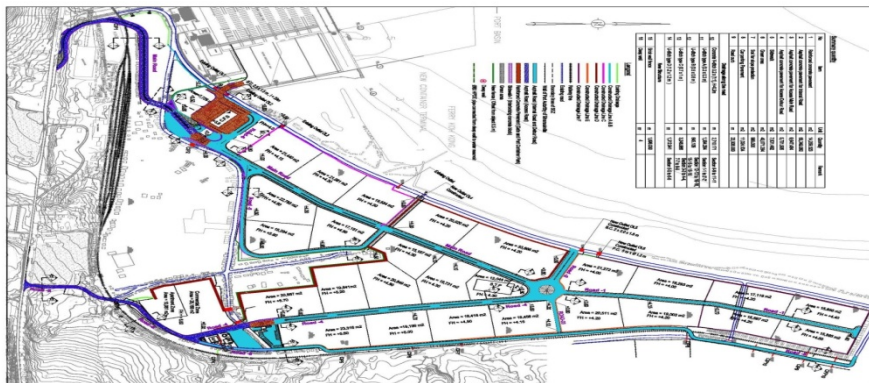
# The Development Plan of PAS for 05Year-Period (2009-2014)

are:

- SEZ Development Project (2009-2011)
- Multipurpose Terminal Project (2009-2014)
- Transfer the Old Jetty to be a Passenger Terminal (2010-2012)
- SEZ Development Project – Phase III (2011-2015)
- Reinforcement of Port Security and Safety in Maritime System (2010-2012)
- Study Next Development Plan of New Container Terminal with -14m draft (2010-2011).

## Sihanoukvill SEZ

- With 70ha
- Development Project (2009-2011)
- Project Cost = US\$ 35,000,000



## Multipurpose terminal Development

- Construction Period = 2011-2014
- Operation = May 2014
- Project Cost:US\$ 87,882,000





## Summary of Effects of Typhoon Ketsana on Transport Sector (2009)

No	Province Name	Damage Length (km)	Damages (USD)	Losses (USD)	Total (USD)
1	Kampong Thom	58.90	945,595.80	1,171,821.46	2,117,417.26
2	Battambang	34.70	1,392,491.29	1,085,385.27	2,477,876.56
3	Kampot	8.21	473,973.00	729,316.42	1,203,289.42
4	Kep	11.90	464,000.00	307,070.78	771,070.78
5	Kratie	11.60	326,000.00	234,790.20	560,790.20
6	Stung Treng	14.98	407,320.00	292,529.40	699,849.40
7	Ratanak Kiri	75.40	1,704,127.46	551,633.38	2,255,760.84
8	Oddar Meanchey	25.71	456,310.59	771,101.96	1,227,412.55
9	Banteay Meanchey	65.11	1,369,749.43	612,460.78	1,982,210.21
10	Kampong Cham	12.14	463,477.73	1,075,706.43	1,539,184.16
11	Pailin	27.00	405,200.00	203,616.58	608,816.58
12	Mondul Kiri	32.50	937,600.00	257,095.10	1,194,695.10
13	Siem Reap	183.74	3,448,567.60	2,955,944.17	6,404,511.77
14	Kampong Chhnang	36.25	367,458.75	65,403.07	432,861.82
15	Preah Vihear	30.60	1,204,337.23	525,493.86	1,729,831.09
16	Kandal	0.70	11,682.80	114,455.38	126,138.17
17	Koh Kong	0.25	4,960.00	70,688.87	75,648.87
18	Preah Sihanouk	0.08	5,980.24	35,344.44	41,324.68
	<b>TOTAL</b>	<b>629.77</b>	<b>14,388,831.91</b>	<b>11,076,698.15</b>	<b>25,465,530.06</b>

# Strategic Framework for Climate Change Adaptation in Transport Infrastructure

**Vision:** Transport infrastructure will be in good condition to adapt to extreme climate events.

**Mission:** To strengthen the quality of transport infrastructure to be in good condition to adapt with extreme climate events

**Goals and Objectives:** To improve the quality of road infrastructure to deal with the impact of climate change

**Strategy 1:** Repair and rehabilitate the existing road infrastructure and ensure effective operation and maintenance system

**Strategy 2:** Design and construct road drainage system to meet changing conditions expected with climate change

**Strategy 3:** Enhance Adaptation Capacity of Road Network to Extreme Climate Events

**Strategy 4:** Capacity building and institutional strengthening



# Strategic Framework for Greenhouse Gases Mitigation in Transport Sector

**Vision:** The amount of the emissions of greenhouse gases from transport sector will be reduced significantly.

**Mission:** To enhance efficient, comfortable and safety transport system to mitigate the emissions of greenhouse gases from transport sector

**Goals and Objectives:** The objectives of the strategies are to develop efficient, comfortable and safety transport system, to introduce modern public transport system, to reduce traffic congestion, to enhance inspection and maintenance of vehicles, to enhance traffic management, and to enhance the quality of fuel.

**STRATEGY 1:** To raise the public awareness about climate change caused by the emissions of greenhouse gases from transport sector.

**STRATEGY 2:** To Enhance inspection and maintenance of vehicles

**STRATEGY 3:** Promote Public Transport in Major Cities



# Strategic Framework for Greenhouse Gases Mitigation in Transport Sector

**STRATEGY 4:** Mitigation and low carbon development

**STRATEGY 5:** Capital-Intensive Urban Transport Infrastructure Development and Planning

**STRATEGY 6:** Efficient and Proven Transport Technology

**STRATEGY 7:** Improve Petroleum-Based Fuel

**STRATEGY 8:** Shift long distance freight movement from truck to train

**STRATEGY 9:** Enhanced Traffic Management

**STRATEGY 10:** Promotion of efficient driving





# Challenges

- National Transport Policy has not yet been approved by government
- Maritime and Waterway: no data of the emissions from this sector
- Aviation has no longer under management of MPWT. It is under SSCA
- Railway: under construction and rehabilitation
- Data on air pollution from Transport Sector in Cambodia is not available
- No data on vulnerability of transport sector to climate change
- No policy related to climate change and transport in the ministry



# CCAP of MPWT

## A. Objectives

- Identify the measures that not only promote the development transport sectors but also addressing both adaptation and mitigation aspects of climate change response effectively
- Outline the actions and activities to be implemented during 5 year periods (2014-2018) for each sector strategic objectives of CCSPs

## B. CCAP Preparation

- CC working group of MPWT leads the preparation of CCAP
- Methodology:
  - Working group meetings
  - Consultation meetings with national and international experts
  - Consultation meetings with stakeholders
- Plan:
  - Draft of CCAP section I, II & III by the first week of November 2013
  - Final Draft of CCAP by the end of December 2013



# THANK YOU FOR YOUR ATTENTION!

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