



# Department of Surface Transport

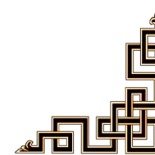
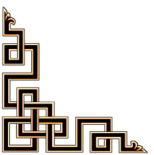
Ministry of Infrastructure and Transport  
Royal Government of Bhutan

**High-Level 16<sup>th</sup> Regional Environmentally Sustainable Transport Forum in Asia**  
**10-12<sup>th</sup> December 2024**  
**ADB Headquarters, Manila, the Philippines**



## Presentation Outline

1. Country background
2. Key achievements and initiatives
  - Policy documents
  - Policy targets
  - Programs and Projects
3. Critical challenges faced



# Country Background



- Area: 38,394 sq km
- Population: 787,424 (2023)
- GDP at current price: 2.98 billion USD
- Terrain: Mostly mountainous (591' - 24,770')
- Forest cover: 70% approximately
- Transport System: Land and Air Transport
- Total Vehicle Number: 128,087 (October 2024)
- Road Length (all types): 18,264.60 km (2020)

# Key achievements and initiatives

## 1. Policy Documents



Title of Policy Document	Publication Year	Status of Implementation	Goal 1c Air pollution	Goal 3 Economic Sustainability	Goal 5 Urban Access
Road Sector Master Plan (2007-2027)	2007	Under implementation		✓	✓
Bhutan Transport Integrated Strategic Vision 2040	2013	Under implementation	✓	✓	✓
Bhutan Electric Vehicle Initiative	2014	Implemented	✓	✓	
Economic Development Policy	2016	Under implementation	✓	✓	✓
National Transport Policy 2017 - Policy Protocol Report	2017	Under implementation	✓	✓	✓
12th Five Year Plan 2018-23	2019	Implemented	✓	✓	✓
Low Emission Development Strategy (LEDS) - Surface Transport	2021	Under implementation	✓	✓	✓
Second Nationally Determined Contribution	2021	Under implementation	✓	✓	✓

# Key achievements and initiatives

## 2. Policy Targets



Title of Policy Document	Target	Status
Low Emission Development Strategy - Surface Transport (2022)	>75% of urban roads should be covered with dedicated NMT tracks with construction of min. 10 km of footpath every year	MoIT and Local Government are jointly implementing this activity through LETMP and TSP
	1 public charging point for 6 EVs	Under implementation, there are currently 1 public EVCS for 9 EVs
	100% taxi imports to be EVs by 2035	Government is subsidizing EV taxis through project tied funding and EV Roadmap, the key policy instrument, is under revision
	100% light vehicles and buses imports to be EVs by 2045	Policy formulation under process

# Key achievements and initiatives



## 2. Policy Targets

Title of Policy Document	Target	Status
Low Emission Development Strategy - Surface Transport (2022)	Establish minimum 1 neighbourhood node with basic amenities and facilities close to growing cities - Thimphu, Paro, Phuentsholing, and Samtse	Identified in the Comprehensive National Develop Plan. This is proposed for implementation in various projects such as BGTP
	314 intra-city and 358 intercity buses. Out of the 314 intra-city buses, 96 BRT Buses to be deployed on 126 km route. The remaining buses would operate as conventional bus systems on secondary routes.	The activity is currently pursued under BGTP, LETMP and e-mobility projects.
	Improve vehicle occupancy in light vehicles and taxis by 50% and 25% respectively by 2035	Proposed to be pursued under LETMP and BGTP.
	25% modal shift for short (<3.5 km) trips from light vehicle, 2-W, and taxis to bicycling by 2040 50% modal shift for short (<2 km) trips from light vehicle, 2-W and taxis to walking by 2040	Proposed to be implemented under BGTP.

# Key achievements and initiatives



## 2. Policy Targets

Title of Policy Document	Target	Status
12 <sup>th</sup> Five Year Plan (2018 - 2023)	Frequency of urban transport services during rush hours increased = 10 mins (15 mins - 2017)	Achieved, and current headway is less than 8 mins.
	Low/zero carbon emission vehicle penetration/ uptake increased = 0.04% (0.01% - 2017)	Achieved 0.46% uptake of EVs
	Gewogs connected by public transport services = 153 (2017 - 148)	Target achieved with 153 gewog (~75%) connectivity.
	10% increase in public transport ridership (1.07 million in 2017)	Achieved

# Key achievements and initiatives



## 2. Policy Targets

Title of Policy Document	Target	Status
The Alternative Renewable Energy Policy 2013	20% of the state owned and 10% of the private vehicle fleet shall be encouraged to run on clean and green fuels by 2025	Green Hydrogen Roadmap for Bhutan is launched in 2024, and the government is exploring support to implement a demonstration project.
Road Sector Master Plan (2007-2027)	Improvement of feeder roads	Achieved in all 20 Dzongkhags
	Development of Second/Southern East-West National Highway	Under implementation with two missing links that are Lhamoizingkha - Sarpang and Gelephu - Panbang
	Construction of major realignments	Target achieved with 5 major road realigned



# Key achievements and initiatives



## 2. Policy Targets

Title of Policy Document	Target	Status
Economic Development Policy (2016)	Provide targeted subsidies to operators in remote areas where public transport is un-economical due to low volume of passenger flow	Provided subsidy to all operators in uneconomical routes.
	Promote establishment of clean, safe, affordable and reliable mass transportation, starting with the major cities	Established urban transport in all 4 urban centers.
	Explore possibilities of introducing electric/hybrid public transport system in major urban centres	Introduced the first e-bus in Thimphu, and currently planning to introduce additional 45 e-buses
	The Royal Government shall promote the use of hybrid and electric vehicles through suitable policy interventions	Draft National Surface Transport Policy and EV Roadmap prepared where the target is addressed.

# Key achievements and initiatives



## 2. Policy Targets

Title of Policy Document	Target	Status
Economic Development Policy (2016)	Develop inland container depots or dry ports including railway links together with supporting facilities such as customs, immigration, quarantine etc. at the border crossings	Established landports in 5 different locations, conducting study & design of two cross-border railway links
	Multipurpose helicopter operations shall be introduced for search and rescue, medical evacuation, emergencies, disaster management	Bhutan Emergency Aeromedical Retrieval (BEAR) is established
	To enhance quality of transport services, connectivity to seaports in India, Bangladesh and to the Asian road network shall be included as a strategic part of the country's transportation network	Multiple bilateral and regional instruments such as Preferential Trade Agreement, SASEC, SAARC MVA were formed. Through this, Asian Highway 48 is constructed. Several similar projects are under study.

# Key achievements and initiatives



## 3. Projects & Programs

Project/ Program name	Status
Bhutan Green Transport Project	Project preparatory phase completed, and will be submitted to donor agency for support.
Accelerating Transport and Trade Connectivity in Eastern South Asia - Bhutan Phase 2 Project (ACCESS project)	<ul style="list-style-type: none"><li>- Preliminary engineering design of Gelephu - Tareythang roads and bridges completed</li><li>- Draft Environmental and Social Impact Assessment (Biodiversity Management Plan, Environment and Social Management Plan, Cumulative Impact Assessment, etc.) disclosed (Pelosi Amendment)</li><li>- Development of Railway Masterplan</li></ul>

# Key achievements and initiatives



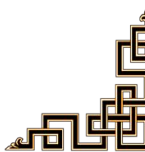
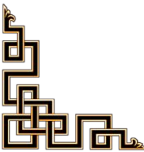
## 3. Projects & Programs

Project/ Program name	Status
Master Plan for National Highways Connectivity	<p>The project is expected to complete by the end of 2024 with the following deliverables:</p> <ul style="list-style-type: none"><li>- 3 year periodic maintenance plan up to 2029</li><li>- Long term Investment plan for until 2040</li><li>- Long term maintenance plan for until 2040</li><li>- Strategic Environmental Assessment report</li></ul>
Government of India - Project Tied Assistance	<p>This 3 year project is under implementation with the following components:</p> <ul style="list-style-type: none"><li>- Finalization of Electric Vehicle Roadmap</li><li>- Built a model for greenhouse gas (GHG) emission from the transport sector</li><li>- Procurement of 45 e-buses for urban transport in Thimphu and other suitable inter-district routes</li><li>- Procurement and installation of 30 nos. of heavy-duty charging machines for e-buses</li><li>- Procurement of 10 EV (light vehicle) for government fleet</li><li>- Capacity building of engineers/technicians</li></ul>



## Critical challenges faced

1. Bhutan is unable to reap full benefits from climate financing due to lengthy and complicated project preparatory process.
2. Key sectors do not have robust understanding on climate financing opportunities.
3. Private sector participation is still marginal which requires innovative public procurement & financing models.
4. Poor coordination among stakeholders.
5. Inefficiency in developing and retaining technical expertise.





**THANK YOU & TASHI DELEK**

