Bhutan

Transport Climate Profile

Population (2024) 792.4 thousand

Urban population **45**%

Below 18 y.o. 28%

Population density 21 persons per sqkm Rural population

55%

Above 60 y.o.

10%

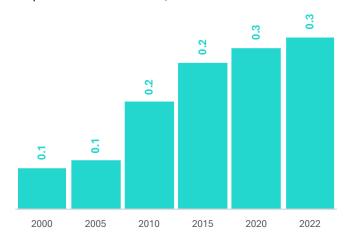
Domestic consumption is the total amount of materials directly (1,2) used in the economy (used domestic extraction plus imports), minus the materials that are exported.

Subregion Income class Low and lower middle income South Asia Gross domestic product GDP per capita (PPP, 2022) 13,781 USD (GDP PPP, 2022) (1,2)10.78 billion USD

Domestic consumption per capita, tonnes (2024) 29.5 tonnes

Transport and Climate Change

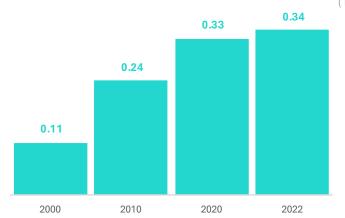
Transport fossil CO2 emissions, million tonnes



Transport CO2 emissions intensity with GDP, 2022 25 gCO2 per USD

Asia-Pacific average is 33.2 gCO2 per USD

Transport fossil CO2 emissions per capita, tonnes



(4)

In 2010, transport contributed 18.1% of total fossil CO2 emissions. By 2022, transport contributed 15.7%.

(3)

Share of transport CO2 emissions by mode (2022)

| Road | Rail 86.1% 0.0% (4)| Aviation | Navigation 7.9% 6.0% (4)

Navigation and aviation only includes domestic transportation

Between 2000-2015, road transport contributed 76.2% in transport fossil CO2 emissions. Between 2016-2022, road transport contributed 84.5%.

Transport CO2 emissions intensity with GDP trend, gCO2 per USD

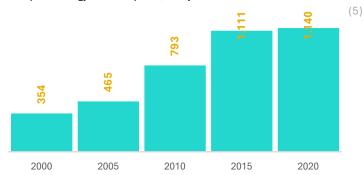
(2,4)(2,4)45 40 35 30 (1,4)25 20 15 10 5 2000 2005 2010 2015 2020







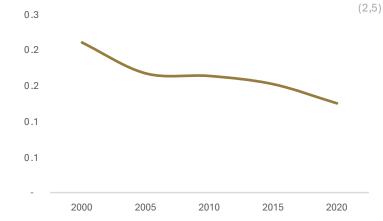
Transport energy consumption, terajoules



Transport energy intensity with GDP, 2020 **0.1 MJ per USD**

Asia-Pacific average is 0.5 MJ per USD

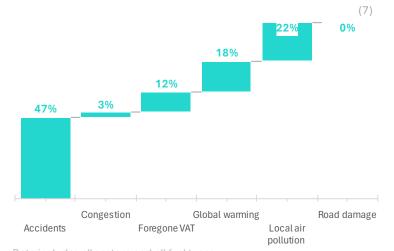
Transport energy intensity with GDP trend, MJ per USD



Transport fossil fuel subsidies, cumulative from 2010 to 2022 **None**

0.0% of Asia-Pacific total

Implicit fossil fuel subsidies due to externalities



Data includes all sectors and all fuel types

(6)

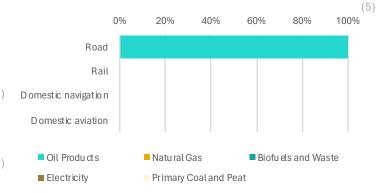
Share of transport energy consumption by mode (2020)

Road	Rail	
100.0%	0.0%	(5)
Navigation	Aviation	

0.0% 0.0% (5)

Navigation and aviation only includes domestic transportation

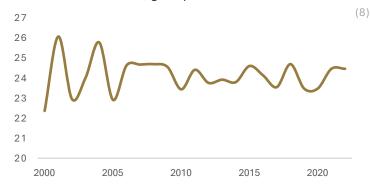
Share of transport energy consumption by source (2020)



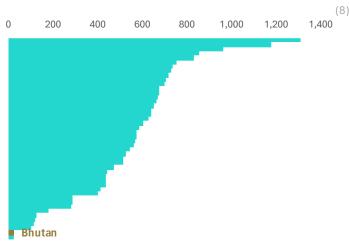
Grid emission factor (2022)



Grid emission factor trend, gCO2 per kWh



Grid emission factors in Asia-Pacific, gCO2 per kWh









(11)

(11)

(12)

0.50%

| Hybrid-electric

17.2 million USD

Vehicle Fleet

Road vehicles (2022)

102 thousand vehicles

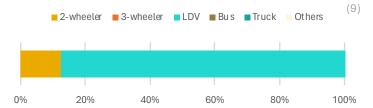
Road vehicle motorization rate (2022)

131 vehicles per thousand population

Road vehicles include 2- and 3-wheelers, LDVs, buses and other informal public transport, trucks, and other unclassified types

In 2000, Bhutan had 29 vehicles per thousand population. By 2022, this has increased to 131 compared with Asia-Pacific average of 577 in 2022.

Share of vehicles by type





Bus import value (2017-2022)

13.4 million USD (11)

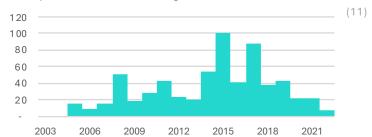
Bus vehicle production, units

(10) Bus import value trend, assuming 2015=100

Electric road vehicle import value (2017-2022)

(1,9) Electric road vehicle share in total road vehicle import value trend

24.1 million USD



Adaptation

Average annual losses to transport infrastructure due to hazards (2023)

4.02 million USD

Share of average annual losses due to hazards, by mode (2022)

National road vulnerability index ranking (2023)

202nd out of 208 countries (14)

Share of population in low elevated coastal zones (2018) **n.d.**



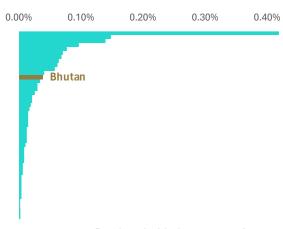


(12)

(13)

(15)

Average annual losses to transport infrastructure due to hazards, as a share of GDP, in Asia-Pacific (2023)







Urban Transport

Urban rapid transit length (2021)

|LRT None None

| Metro

None

Urban rapid transit ratio (2021)

NA

Urban rapid transit ratio, kilometers per million urban population (2000-2021)

Urban rapid transit ratio in Asia- Pacific, kilometers per million urban population (2021)

(16)

(16)

(1,16)

Based on 2015 estimates, only 16% of the population could reach the nearest city in 30 minutes, another 9% could reach in 1 hour, and another 34% could reach only after 3 hours.

Transport Investment

Public-private partnership investments in the transport sector, million USD

Official development assistance in the transport sector, million USD





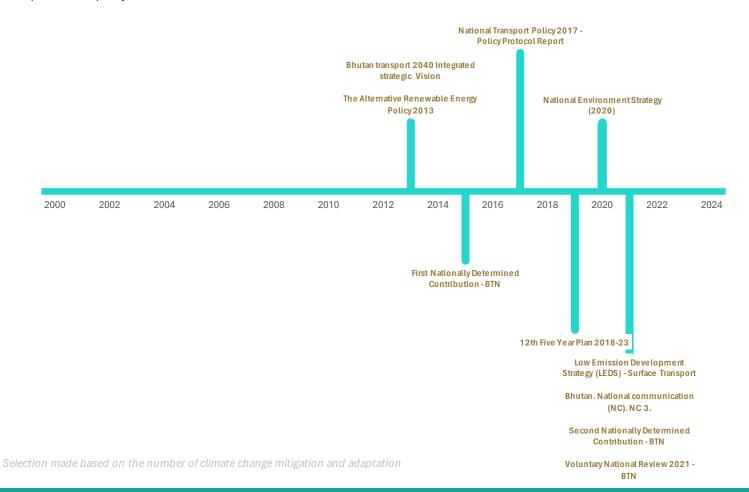






Transport Climate Policy Documents

Transport-related policy documents in Bhutan



Nationally Determined Contributions

Second Nationally Determined Contribution - BTN (adopted in 2021)

	Road	Rail	Domestic	Domestic	Urban
	transport	transport	navigation	aviation	transport
Mitigation measures	Yes	Yes			Yes
Mitigation targets	Yes				
Adaptation measures	Yes				
Adaptation targets					

Rail

Long-term Strategies

None



Mitigation measures Mitigation targets Adaptation measures Adaptation targets



es ets

Road





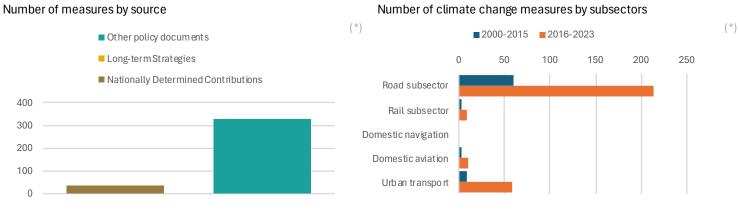
transport transport navigation aviation transport

Domestic

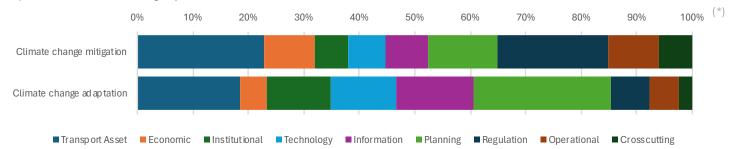
Urban

Domestic

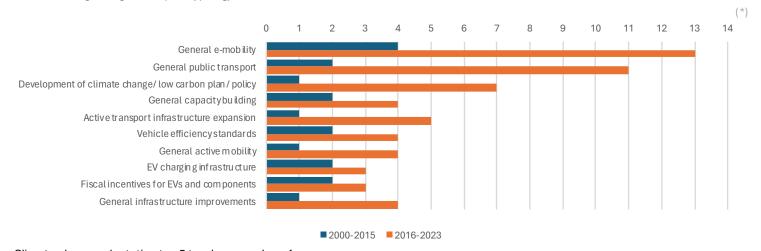
Transport Climate Policy Overview



Transport-related climate change by framework



Climate change mitigation top 10 typology, number of measures



Climate change adaptation top 5 typology, number of measures











Climate Change Mitigation Policy Measures - Road Transport

Policy document	Year	Measures
Bhutan. National communication (NC). NC 3.	2021	Active transport infrastructure expansion, General active mobility, Fiscal incentives for EVs and components, General e-mobility, General infrastructure improvements, Intelligent transport systems (ITS), Biofuels, Access restriction by corridor/ road, General capacity building, Development of transport plan/ policy, Vehicle air pollution emission standards, Vehicle efficiency standards
Low Emission Development Strategy (LEDS) - Surface Transport	2021	Development of active transport plan/ policy, Active transport infrastructure expansion, Bike sharing, General active mobility, General data repositories and data collection, Ban of ICE sales, EV charging infrastructure, Fiscal incentives for EVs and components, Hydrogen, General e-mobility, Intelligent transport systems (ITS), Express lanes/ public transport priority, General IPT/ paratransit measures, General public transport, General shared mobility, Target - Modal shift, Access restriction by corridor/ road, Measures to increase car occupancy, Number of vehicle registration limit, General parking measures, Employment in transport, communication, and storage, Logistics hub, Coordinate planning across government agencies, Involvement of subnational government for transport activities, Passenger and freight load limits, General education and behavior change, Vehicle restrictions (import, age, access, sale, taxation)
National Transport Policy 2017 - Policy Protocol Report	2017	Active transport infrastructure expansion, Road space repurpose to allow access for other modes, General active mobility, General data repositories and data collection, Fiscal incentives for EVs and components, General e-mobility, Intermodality measures, General infrastructure improvements, Fuel quality, Vehicle inspection and maintenance, Vehicle scrappage scheme, Intelligent transport systems (ITS), Technical standards for road infrastructure, Vehicle labelling, Transit-oriented development (TOD), Alternatively-powered rolling stock, BRT, Bus fleet renewal, Public transit integration, General public transport, Routine transport asset maintenance, Access restriction by corridor/ road, Energy efficient vehicle purchase incentives, Road charging and tolls, Vehicle taxes, General parking measures, General transport demand management, Technology and knowledge transfer, Logistics hub, Road infrastructure expansion, Define roles and accountabilities across agencies, Involvement of subnational government for transport activities, Development of other transport-related plan/ policy, Development of road plan/ policy, Road-side checks on overloading, General education and behavior change, Vehicle efficiency standards, General vehicle improvements, Vehicle manufacturing, Vehicle restrictions (import, age, access, sale, taxation)
Second Nationally Determined Contribution - BTN	2021	Active transport infrastructure expansion, Development of e-mobility transport plan/policy, General e-mobility, Programs to reduce emissions in logistics, General infrastructure improvements, BRT, General public transport, General shared mobility, Traffic management, Development of climate change/ low carbon plan/ policy, Vehicle efficiency standards, Vehicle restrictions (import, age, access, sale, taxation)
The Alternative Renewable Energy Policy 2013	2013	Active transport infrastructure expansion, EV charging infrastructure, Fiscal incentives for EVs and components, General e-mobility, Biofuels, Fossil fuel subsidy elimination, Coordinate planning across government agencies
12th Five Year Plan 2018-23	2019	EV charging infrastructure, Vehicle inspection and maintenance, BRT, General public transport, General transport demand management, Technology and knowledge transfer, Transport law, Vehicle manufacturing
Bhutan transport 2040 Integrated strategic Vision	2013	Road space repurpose to allow access for other modes, General active mobility, General infrastructure improvements, Technical standards for road infrastructure, Bus fleet renewal, Public transit integration, General public transport, General shared mobility, General transport asset management, Energy efficient vehicle purchase incentives, Financial instruments to support decarbonisation, Number of vehicle registration limit, Vehicle taxes, General transport demand management, Measures to improve rural-urban connectivity, Define roles and accountabilities across agencies, Development of road plan/ policy, Transport law, Road-side checks on overloading, General education and behavior change, Vehicle efficiency standards

Climate Change Mitigation Policy Measures - Road Transport

Policy document	Year	Measures
Technology Action Plan Report	n.d.	General transport asset management, General transport finance, General capacity building, Coordinate planning across government agencies, Development of road plan/policy
Global Status Report on Road Safety 2018	2018	Design standards for sidewalks and bicycle paths, National speed law, Speed limits on urban roads <= 30 kph, Speed limit on rural roads <= 70 kph, Speed limit on motorways <= 90 kph
Voluntary National Review 2021 - BTN	2021	EV charging infrastructure, General e-mobility, Freight consolidation, General public transport, Development of climate change/ low carbon plan/ policy
National Environment Strategy (2020)	2020	General public transport, Energy efficient vehicle purchase incentives
Bhutan Electric Vehicle Initiative	2014	EV charging infrastructure, EV manufacturing, Fiscal incentives for EVs and components, General e-mobility
Economic Development Policy (2016)	2016	General e-mobility, General public transport, Financial instruments to support decarbonisation, Road infrastructure expansion
National Energy Efficiency & Conservation Policy of Bhutan (Nov 2019)	2019	General active mobility, General e-mobility, General alternative fuels, General public transport, General transport demand management, Vehicle efficiency standards
National Strategy and Action Plan for Low Carbon Development, 2012	2012	General alternative fuels, Target - Transport energy consumption, Target - Transport GHG emission
First Nationally Determined Contribution - BTN	2015	General e-mobility, Intelligent transport systems (ITS), General transport demand management, General capacity building, Vehicle air pollution emission standards, Vehicle efficiency standards
Road Sector Master Plan (2007-2027)	2007	General transport finance, General capacity building, Road infrastructure expansion
National Gender Equality Policy	2020	General data repositories and data collection, General infrastructure improvements
Energy transition pathways for the 2030 ESCAP agenda : SDG 7 roadmap for Bhutan	2022	General e-mobility
Road Safety Opportunities and Challenges: Low- and Middle-Income Country Profiles	2020	Vehicle inspection and maintenance, Vehicle import inspections

Climate Change Mitigation Targets - Road Transport

Policy document	Target year	Targets
Low Emission Development Strategy (LEDS) - Surface Transport	2050	• >75% of urban road should be covered with dedicated NMT tracks
·		Construct min. 10 km of footpath every year
Low Emission Development Strategy (LEDS) - Surface Transport	2025	Launch PBS system in Thimphu city
Low Emission Development Strategy (LEDS) - Surface Transport	2050	1 public charging point for 6 Evs
Low Emission Development Strategy (LEDS) - Surface Transport	2050	18,515 public bicycles by 20501,850 docking stations by 2050
Low Emission Development Strategy (LEDS) - Surface Transport	2035	100% taxi imports to be EVs by 2035
Low Emission Development Strategy (LEDS) - Surface Transport	2045	100% light vehicles and buses imports to be EVs by 2045
Low Emission Development Strategy (LEDS) - Surface Transport	2050	25% heavy vehicles (freight) imports to be EVs by 2050
The Alternative Renewable Energy Policy 2013	2025	20% of the state owned and 10% of the private vehicle fleet shall be encouraged to run on clean and green fuels by 2025
Low Emission Development Strategy (LEDS) - Surface Transport	2030	 Develop and implement parking 'de-growth' plan in consonance with target of no more than 5,500 new vehicles per year, post 2030, permitted to register Achieve 50% of parking 'de-growth' in preparation for gradual phasing out ICE passenger vehicles 100% parking slots with parking turnover more than 5 in major urban areas should be digitised by 2030
12th Five Year Plan 2018-23	2023	Frequency of urban transport services during rush hours increased = 10 mins (15 mins - 2017) Low/zero carbon emission vehicle penetration/ uptake increased = 0.04% (0.01% - 2017) Towns with urban transport system introduced = 4 (3 - 2017) Gewogs connected by public transport services = 153 (2017 - 148) Increase in public transport ridership = 10% (1.07% - 2017)

Climate Change Mitigation Targets - Road Transport

Policy document	Target year	Targets
Low Emission Development Strategy (LEDS) - Surface Transport	2050	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.
Low Emission Development Strategy (LEDS) - Surface Transport	2050	Hydrogen pilot (Fuel cell based and Combustion based) with Light, Medium and Heavy vehicles
Low Emission Development Strategy (LEDS) - Surface Transport	2035	Improve vehicle occupancy in light vehicles and taxis by 50% and 25% respectively by 2035
Low Emission Development Strategy (LEDS) - Surface Transport	2040	• 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
Low Emission Development Strategy (LEDS) - Surface Transport	2035	Phase out import of ICE passenger vehicles after 2030 Cap annual import of 2- wheelers and light vehicles at 700 numbers and 5,500 numbers respectively after 2030
Second Nationally Determined Contribution - BTN	0	Private vehicle demand management through shared mobility, traffic system management carpooling, ride sharing and rental services, import restriction on internal combustion engine cars from 2030 and introducing annual import quota system.

Climate Change Mitigation Policy Measures - Rail Transport

Policy document	Year	Measures
Bhutan. National communication (NC). NC 3.	2021	General public transport, Development of transport plan/ policy
Low Emission Development Strategy (LEDS) - Surface Transport	2021	General rail improvement, Urban passenger rail infrastructure improvement, Freight rail infrastructure improvement
First Nationally Determined Contribution - BTN	2015	General public transport
Second Nationally Determined Contribution - BTN	2021	Programs to reduce emissions in logistics, Urban passenger rail infrastructure improvement
Bhutan Electric Vehicle Initiative	2014	Railway electrification
The Alternative Renewable Energy Policy 2013	2013	Urban passenger rail infrastructure improvement

Climate Change Mitigation Targets - Rail Transport

Policy document	Target year	Targets
Low Emission Development Strategy (LEDS) - Surface Transport	2050	• 6 trains on 182 km route connecting all urban towns
Low Emission Development Strategy (LEDS) - Surface Transport	2050	13 passenger trains on 120 km route
Low Emission Development Strategy (LEDS) - Surface Transport	2025	2025 Prepare DPR and secure funding for the feasibility study for: • A) LRT on Thiomphu – Paro route • B) Passenger train on Thimphu-Phuentsholing route
Low Emission Development Strategy (LEDS) - Surface Transport	2030	2030 • Implement passenger trains on 97 km ThimphuPhuentsholing route • Implement LRT between Thimphu-Chuzom-Paro

Climate Change Mitigation Policy Measures - Domestic Aviation

Policy document	Year	Measures
Voluntary National Review 2021 - BTN	2021	Development of aviation plan/policy
Bhutan. National communication (NC). NC 3.	2021	Development of transport plan/ policy
Low Emission Development Strategy (LEDS) - Surface Transport	2021	General data repositories and data collection
National Gender Equality Policy	2020	General data repositories and data collection
National Transport Policy 2017 - Policy Protocol Report	2017	Intermodality measures
National Strategy and Action Plan for Low Carbon Development, 2012	2012	Target - Transport energy consumption, Target - Transport GHG emission

Climate Change Mitigation Policy Measures - Urban Transport

Policy document	Year	Measures
Low Emission Development Strategy (LEDS) - Surface Transport	2021	Development of active transport plan/ policy, Active transport infrastructure expansion, Bike sharing, General active mobility, EV charging infrastructure, Freight consolidation, General freight and logistics improvements, Development density or intensiveness, General land use, Express lanes/ public transport priority, Urban passenger rail infrastructure improvement, General IPT/ paratransit measures, General public transport, Access restriction by corridor/ road, Measures to increase car occupancy, General parking measures, Employment in transport, communication, and storage, Freight rail infrastructure improvement, Coordinate planning across government agencies, Involvement of subnational government for transport activities, General education and behavior change
National Transport Policy 2017 - Policy Protocol Report	2017	Active transport infrastructure expansion, Road space repurpose to allow access for other modes, General active mobility, Intelligent transport systems (ITS), Transit-oriented development (TOD), General land use, BRT, General public transport, Access restriction by corridor/ road, General parking measures, General transport demand management, Development of other transport-related plan/ policy
12th Five Year Plan 2018-23	2019	EV charging infrastructure, BRT, General public transport, General transport demand management, Technology and knowledge transfer
Second Nationally Determined Contribution - BTN	2021	BRT, Urban passenger rail infrastructure improvement, General public transport
The Alternative Renewable Energy Policy 2013	2013	Urban passenger rail infrastructure improvement, Coordinate planning across government agencies
Bhutan transport 2040 Integrated strategic Vision	2013	Road space repurpose to allow access for other modes, General active mobility, General public transport, Number of vehicle registration limit, General transport demand management, Development of road plan/ policy
National Environment Strategy (2020)	2020	General public transport, Energy efficient vehicle purchase incentives
Voluntary National Review 2021 - BTN	2021	EV charging infrastructure, General e-mobility
National Energy Efficiency & Conservation Policy of Bhutan (Nov 2019)	2019	General active mobility, General public transport, General transport demand management
Bhutan. National communication (NC). NC 3.	2021	General public transport
Economic Development Policy (2016)	2016	General public transport
First Nationally Determined Contribution - BTN	2015	General transport demand management
Global Status Report on Road Safety 2018	2018	Speed limits on urban roads <= 30 kph

Climate Change Mitigation Targets - Urban Transport

Policy document	Target year	Targets
Low Emission Development Strategy (LEDS) - Surface Transport	2050	>75% of urban road should be covered with dedicated NMT tracks Construct min. 10 km of
Low Emission Development Strategy (LEDS) -		footpath every year Launch PBS system in
Surface Transport	2025	Thimphu city
Low Emission Development Strategy (LEDS) - Surface Transport	2050	1 public charging point for 6 Evs
Low Emission Development Strategy (LEDS) - Surface Transport	2050	6 trains on 182 km route connecting all urban towns
Low Emission Development Strategy (LEDS) - Surface Transport	2050	18,515 public bicycles by 20501,850 docking stations by 2050
Low Emission Development Strategy (LEDS) - Surface Transport	2050	• Establish minimum 1 neighbourhood node with basic amenities and facilities close to growing cities - Thimphu, Paro, Phuentsholing, and Samtse
Low Emission Development Strategy (LEDS) - Surface Transport	2030	 Develop and implement parking 'de-growth' plan in consonance with target of no more than 5,500 new vehicles per year, post 2030, permitted to register Achieve 50% of parking 'de-growth' in preparation for gradual phasing out ICE passenger vehicles 100% parking slots with parking turnover more than 5 in major urban areas should be digitised by 2030
12th Five Year Plan 2018-23	2023	Frequency of urban transport services during rush hours increased = 10 mins (15 mins - 2017) Low/zero carbon emission vehicle penetration/ uptake increased = 0.04% (0.01% - 2017) Towns with urban transport system introduced = 4 (3 - 2017) Gewogs connected by public transport services = 153 (2017 - 148) Increase in public transport ridership = 10% (1.07% - 2017)

Climate Change Mitigation Targets - Urban Transport

Policy document	Target year	Targets
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Low Emission Development Strategy (LEDS) - Surface Transport	2035	Improve vehicle occupancy in light vehicles and taxis by 50% and 25% respectively by 2035
Low Emission Development Strategy (LEDS) - Surface Transport	2025	2025 Prepare DPR and secure funding for the feasibility study for: • A) LRT on Thiomphu – Paro route • B) Passenger train on Thimphu-Phuentsholing route
Low Emission Development Strategy (LEDS) - Surface Transport	2030	2030 • Implement passenger trains on 97 km ThimphuPhuentsholing route • Implement LRT between Thimphu-Chuzom-Paro

Climate Change Adaptation Policy Measures

Policy document	Year	Measures
Bhutan. National communication (NC). NC 3.	2021	Disaster notification/ early warning system, Intelligent transport systems (ITS), Transport infrastructure resilience, Investment required for specific projects, Adaptation-related education and training, Development of climate change/ low carbon plan/ policy, Development of national development plan/ policy, Development of transport plan/ policy (Sub-sectors: Road transport, Rail transport, Domestic Aviation)
National Transport Policy 2017 - Policy Protocol Report	2017	General infrastructure improvements, Technologies supporting post-crash response, Climate-resilient design standards, Development of transport asset management plan/policy, Performance-based transport maintenance contracts, Routine transport asset maintenance, General transport asset management, General capacity building, Coordinate planning across government agencies, Define roles and accountabilities across agencies, General transport institutional reform, Involvement of subnational government for transport activities, Development of other transport-related plan/ policy, Development of road plan/ policy (Sub-sectors: Road transport, Urban transport)
Voluntary National Review 2021 - BTN	2021	Climate-resilient design standards, Transport infrastructure resilience, Development of climate change/ low carbon plan/ policy, Development of transport plan/ policy (Sub-sectors: Road transport)
National Environment Strategy (2020)	2020	General data repositories and data collection, Disaster notification/ early warning system, Resilient transport technologies, Transport infrastructure resilience, General transport asset management, Coordinate planning across government agencies, Disaster monitoring and risk assessment for transport infrastructure (Sub-sectors: Road transport)
Technology Action Plan Report	n.d.	Resilient transport technologies , Transport infrastructure resilience, General transport asset management, General transport finance, General capacity building, Coordinate planning across government agencies, Development of road plan/ policy (Sub-sectors: Road transport)
Bhutan transport 2040 Integrated strategic Vision	2013	General aviation improvements, General infrastructure improvements, Technical standards for road infrastructure, Transport asset condition assessment, Routine transport asset maintenance, Technologies on transport asset management, General transport asset management, Technology and knowledge transfer, Define roles and accountabilities across agencies, Development of other transport-related plan/ policy, Development of road plan/ policy, Transport law (Sub-sectors: Road transport, Domestic Aviation, Urban transport)
Bhutan Electric Vehicle Initiative	2014	Development of climate change/ low carbon plan/ policy (Sub-sectors: NA)
Second Nationally Determined Contribution - BTN	2021	Investment required for specific projects, Development of climate change/ low carbon plan/ policy, Development of national development plan/ policy (Sub-sectors: Road transport)
Low Emission Development Strategy (LEDS) - Surface Transport	2021	General data repositories and data collection, Development of logistics plan/policy, Intelligent transport systems (ITS), Development of other transport-related plan/ policy, Transport law (Sub-sectors: Road transport, Domestic Aviation)
First Nationally Determined Contribution - BTN	2015	Disaster notification/ early warning system, Intelligent transport systems (ITS), Transport infrastructure resilience, Development of transport adaptation/ emergency/ disaster plan/policy (Sub-sectors: Road transport)
12th Five Year Plan 2018-23	2019	Intelligent transport systems (ITS), Disaster monitoring and risk assessment for transport infrastructure, Transport law (Sub-sectors: Road transport)
Bhutan National Adaptation Programme of Action	2008	Disaster notification/ early warning system, Relocation from climate-risk areas (Sub-sectors: NA)

Climate Change Adaptation Policy Measures

Policy document	Year	Measures
National Gender Equality Policy	2020	General data repositories and data collection, General capacity building (Sub-sectors: Road transport, Domestic Aviation)
Road Sector Master Plan (2007-2027)	2007	Transport infrastructure resilience, General transport asset management, General transport finance, General capacity building (Sub-sectors: Road transport)
Economic Development Policy (2016)	2016	Transport services adaptation (Sub-sectors: Domestic Aviation)

Notes



(*) Policy measures and targets were extracted from policy documents as listed in the ATO National Transport Policies Database

https://bit.ly/ATOpolicyrepository

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AIIB Support: Asian Transport Outlook Phase 3.

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