Aichi 2030 Declaration on **Environmentally Sustainable Transport (EST): Country Profile** Singapore







Developed with the support of:







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Suggested Citation: Asian Transport Outlook (ATO). (2024). Aichi 2030 Declaration on Environmentally Sustainable Transport (EST): Country Profile (Singapore),

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Aichi 2030 Declaration on Environmentally Sustainable Transport (EST): Country Profile (Singapore)

2024

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Singapore, a country in the South East Asia region, having High income status, was recorded to have a national population of about 6 million in the year 2024.

The urban population share in total is about 100%. The age wise distribution of the national population accounts for 15% and 25% of <18 years old (minors) and >60 years old (seniors) population, respectively. The GDP per capita (PPP) for the year 2022 was 120,375 USD.

The motorisation rate of the road transport vehicles for the year 2022, for all vehicles combined, stood at 166 vehicles per thousand population. Similarly, the rate for 2&3 wheelers, LDV, freight vehicles and buses were 24, 112, 28, and 3 respectively.

Introduction to the profiles: The Asian Transport Outlook (ATO) project serves as a comprehensive data repository that organizes transport-relevant data and information from various official and secondary sources. These profiles are meticulously crafted using data from this extensive collection and draw upon a carefully curated selection of key indicators from a pool of over 500 transport-related metrics (visit https://asiantransportoutlook.com/snd for more information).

These profiles also provide comprehensive summaries of national targets that are relevant to the Aichi 2030 Declaration goals as contained in ATO's national policy trackers. The profile is structured by goals, followed by policy insights and enumeration of sample projects by the MDBs corresponding to the 6 Goals.

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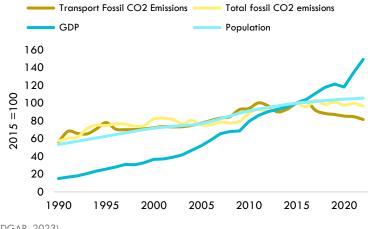
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Goal 1a – Low-Carbon (climate change mitigation):

By 2030, aim to peak transport CO2 emissions and initiate reductions in transport related CO2 emissions with the intention to move towards decarbonization of the transport sector by 2050, or shortly thereafter (Based on SDG 7.2, 9.1, 13.2, Paris Agreement)

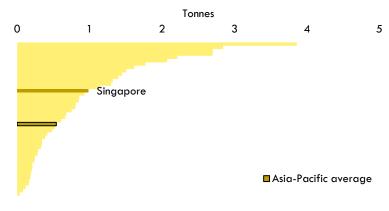
Transport CO2 emissions (fossil)

Growth of transport fossil CO2 emissions, total fossil CO2 emissions, population and GDP (PPP) (1990 - 2022)



(EDGAR, 2023)



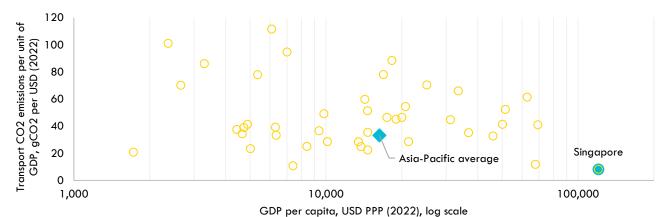


• Strong performance: Singapore has demonstrated a remarkable commitment to low-carbon transport, with an average annual decrease of 3% in transport fossil CO2 emissions between 2015 and 2022. This significantly outperforms the Asia-Pacific regional average of a 1% increase.

• Shifting energy landscape: The share of transport in total CO2 emissions decreased from 13% to 11% between 2015 and 2022, indicating a positive trend towards decarbonization.

• Road transport dominance: Road transport accounts for 95% of transport CO2 emissions, highlighting the need for continued focus on sustainable road transport solutions.





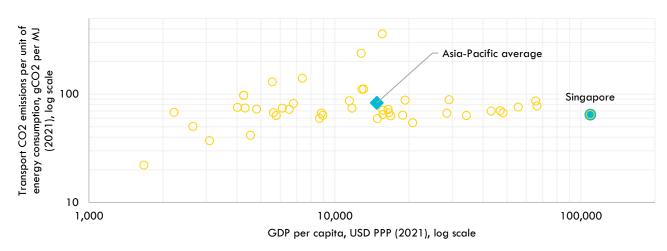
Transport CO2 emissions per unit of GDP (2022)

(EDGAR, 2023)

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Singapore

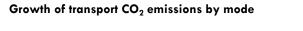
Transport energy consumption

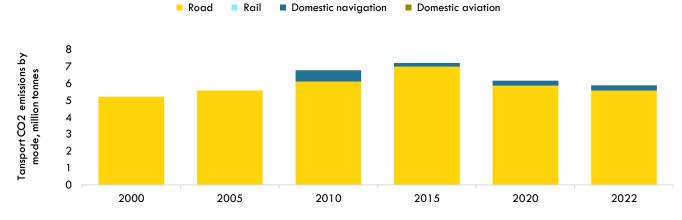


Transport CO2 emissions per unit of energy consumption and GDP per capita (2021)

(EDGAR, 2023)

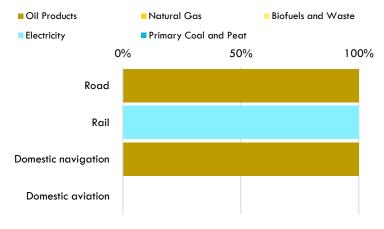




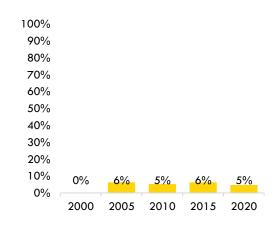


(EDGAR, 2023)





Share of transport in renewable energy consumption:



(EDGAR, 2023)

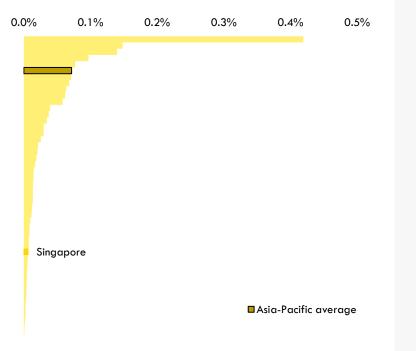
(Tracking SDG 7, 2024)

Goal 1b - Resilience:

By 2030, increase resilience and adaptive capacity of transport system to climate-related hazards and pandemics such as COVID-19. (Based on SDG 13, Paris Agreement and the Sendai Framework for Disaster Risk Reduction 2015-2030)

Estimated average annual losses to transport infrastructure due to hazards

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



• Vulnerability to hazards: Road infrastructure is particularly vulnerable to hazards, accounting for 65% of average annual losses to transport infrastructure.

• Coastal exposure: 10% of the population resides in low-elevated coastal zones, making them susceptible to sea-level rise and coastal flooding.

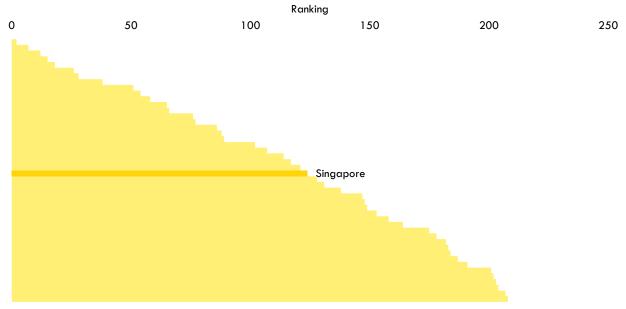
• Network redundancy: Singapore's National Road Vulnerability Index ranking of 124th out of 208 countries globally suggests room for improvement in network redundancy to minimize disruptions after climate hazards.

Note: National road vulnerability index ranking (NRVI), highest rank = 1 means fewer disruptions to trips after climate hazards due to sufficient network redundancy.

(CDRI, 2023)

Climate change vulnerability

National road vulnerability index (NRVI) ranking (2023)



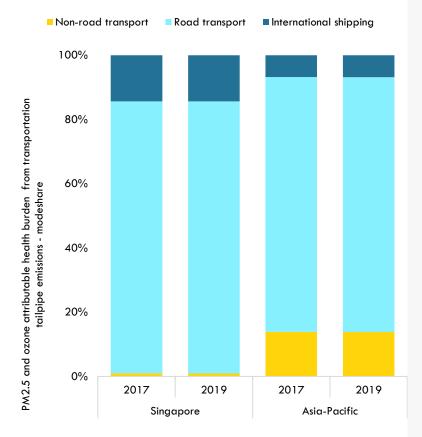
(Koks, et al., 2023)

Goal 1 c – Air pollution:

By 2030, reduce air pollution and contamination caused by traffic, including PM2.5, other air pollutants and noise. (Based on SDG 3.9, 11.6).

Transport air pollution health impact

Transport air pollution health impact (PM 2.5)



• Positive progress: Singapore has made significant strides in reducing air pollutant emissions from road transport, with annual average decreases of 3% for PM2.5, NOx, SOx, and BC between 2015 and 2022.

• Health impacts: Despite progress, the total estimated deaths due to PM2.5 and ozone air pollution from transport increased from 265 to 293 between 2017 and 2019, highlighting the ongoing health challenges.

• Non-road sources: Non-road transport, including shipping and aviation, accounts for a significant portion (85%) of deaths attributed to transport-related air pollution.

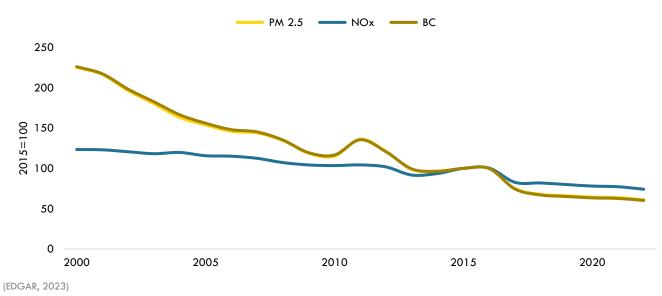
• In Singapore, the total attributable deaths due to the PM2.5 and ozone air pollution from the transport sector changed from 265 to 293 between 2017 to 2019.

• The numbers for Asia-Pacific were about 236 thousand and 253 thousand, respectively, for the same time period.

(McDuffie et al., 2021)

Transport air pollutant emissions

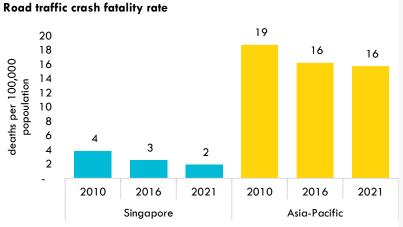
Growth of road transport air pollutant emissions



Goal 2 – Road safety:

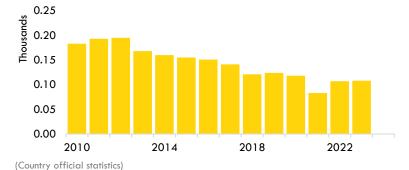
By 2030, halve the number of deaths and injuries from road traffic accidents in Asia compared to 2020, with specific attention to vulnerable road users. (Based on SDG 3.6 and second UN Decade of Action on Road Safety 2021 – 2030, Stockholm Declaration on Road Safety)

Road traffic crash fatalities



(WHO, 2023)





• Low fatality rate: Singapore boasts a road traffic crash fatality death rate of 1.9, significantly lower than the Asia-Pacific average of 15.7.

• Economic impact: Road traffic crashes, including fatalities and serious injuries, cost approximately 4 billion USD annually, representing 1% of Singapore's GDP.

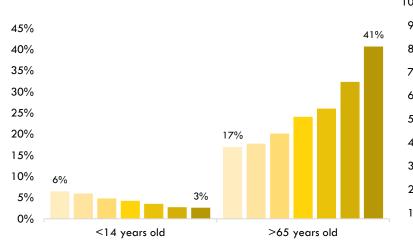
• Vulnerable groups: The share of minors (<14 years old) and seniors (>65 years old) in road crash fatalities increased from 35% to 43% between 2015 and 2019, indicating a need for targeted safety interventions.

• Pedestrian and cyclist safety: The combined share of pedestrians and cyclists in total road traffic crash fatalities is 32%, emphasizing the importance of improving safety for these vulnerable road users.

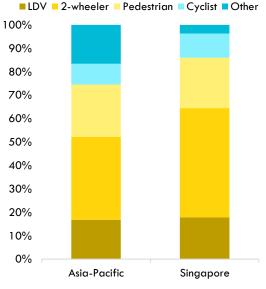
Share of vulnerable groups

Share of road crash fatalities by age

= 1990 **=** 1995 **=** 2000 **=** 2005 **=** 2010 **=** 2015 **=** 2019



Share of road crash fatalities by mode



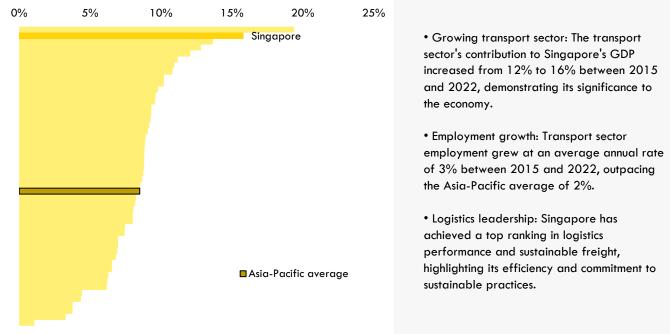
⁽WHO, 2023)

Goal 3 - Economic sustainability:

By 2030, realize sustainable economic and employment growth by leveraging science, technology and innovation and green investments in quality passenger and freight transport infrastructure and services in a manner that fully incorporates environmental and social impacts throughout the lifecycle of the transport infrastructure and services, (Based on SDG 8.4, SDG 9.1, 12.1 and 12.c)

Transport sector and GDP

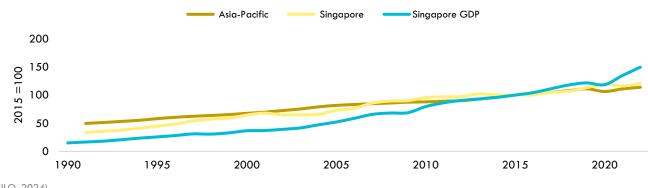
Transport as a share of GDP



(UN, 2023)

Transport employment

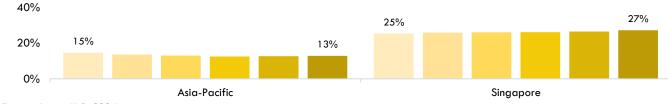
Growth of transport sector employment



(ILO, 2024)



2000 2005 2010 2015 2020 2022



Estimated using (ILO, 2024)

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Singapore

Transport investments

Official development assistance for Transport

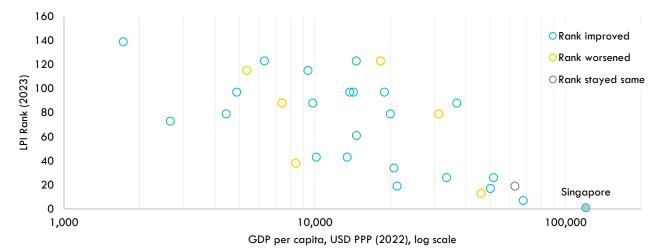
(Data not available)

Public Private Partnership in Transport

(Data not available)

Freight sector

Domestic Logistics Performance Index, Rank change (2016 - 2023)



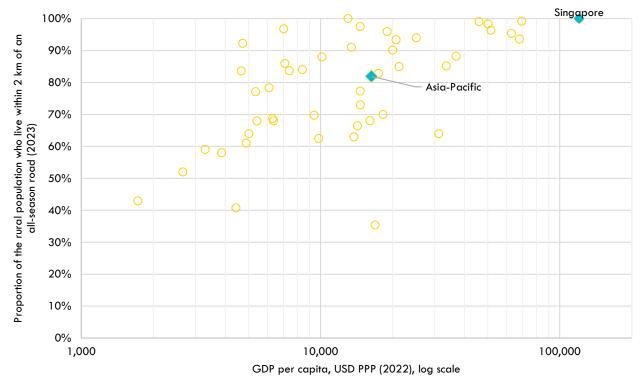
(WB, 2022)

Goal 4 - Rural access:

By 2030, realize accessible, inclusive, safe, affordable, and resilient rural transport infrastructure and services, thus facilitating improved access to markets, basic utilities and services including health and education by the farming community, and other rural population including physically disabled and vulnerable groups (Based on SDG 2 and SDG 9.1)

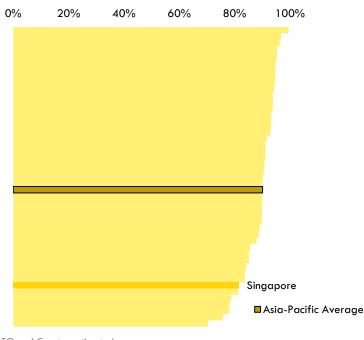
Rural access

Rural access index



(CIESIN-rural, 2023)

Share of Secondary and Tertiary roads in Total road network



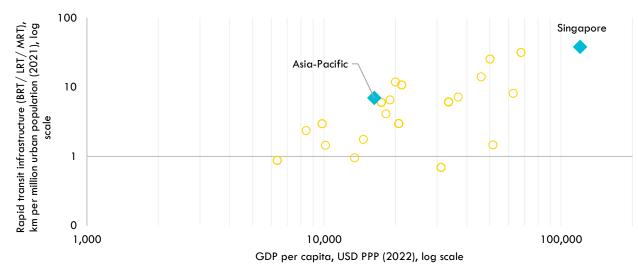
(ATO and Country estimates)

Goal 5 - Urban access:

By 2030, ensure access to accessible, inclusive, safe, efficient, affordable, and sustainable transport facilities, systems and services for urban dwellers, including physically disabled and vulnerable groups through the development of urban transport infrastructure and services (Based on SDG 11.2 and 11.7)

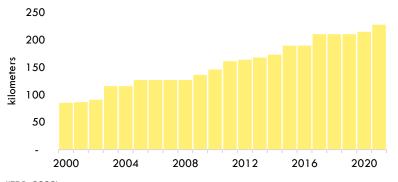
Urban rapid transit infrastructure

Rapid transit infrastructure to resident ratio (RTR)



(ITDP, 2022)

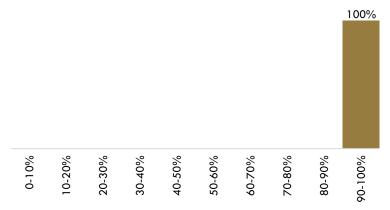




(ITDP, 2022)

Urban access

Share of cities by level of urban access (out of 1 cities)



• Expanding rapid transit: Singapore has steadily expanded its urban rapid transit infrastructure, with the total length increasing from 146 km in 2010 to 228 km in 2021.

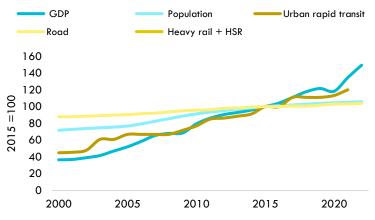
• High accessibility: The urban rapid transit infrastructure to resident ratio is significantly higher than the Asia-Pacific average, indicating excellent accessibility.

Goal 6 - National access and connectivity:

By 2030, facilitate inclusive multi-modal national (including rural-urban) and regional (cross-border) connectivity through the provision of sustainable multi-modal freight and passenger transport infrastructure and services (Based on SDG 9.1)

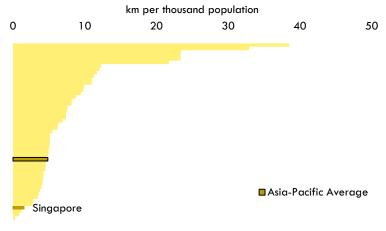
Transport infrastructure

Growth of transport infrastructure



(IRF, 2024) (UIC, 2024) (ITDP, 2022) (ATO and Country estimates)

Road transport infrastructure availability (2022)



(IRF, 2024) (ATO and Country estimates)

Rail transport infrastructure (including HSR) availability (2021)

Singapore has a robust transport infrastructure, with a dense road network and efficient public transport system. The country's high rankings in airport and shipping connectivity indices highlight its role as a global transport hub. Extensive telecommunication infrastructure further enhances national connectivity.

• Extensive road network: Singapore has a well-developed road network, with a road length per thousand population of approximately 2.

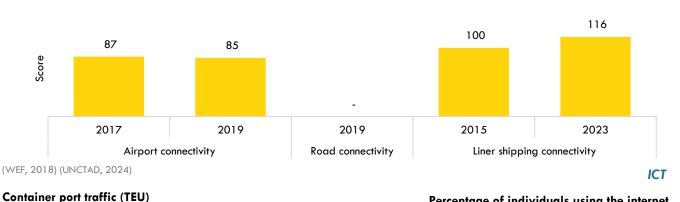
• Global connectivity: Singapore boasts high IATA airport connectivity and Liner shipping connectivity scores, reflecting its strong global connections.

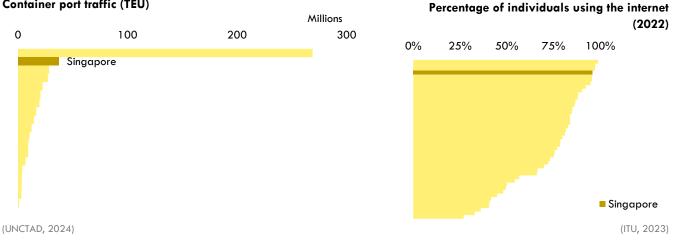
• Major port: Singapore's container port traffic of 37 million TEU in 2022 positions it as a major player in the region.

• Digital inclusion: A high percentage of the population has access to 2G, 3G, and 4G mobile network technology, and internet usage has increased significantly.

(Data not available)

Transport connectivity Transport connectivity





Transport Policy insights:

The insights are based on the transport policy trackers developed by the ATO. Trackers include analysis of policy measures and targets from all the transport relevant policy documents for a country published after the adoption of the Aichi 2030 Declaration, i.e. 2021.

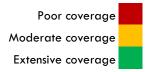
Singapore's transport policy landscape has a strong focus on mitigating climate change. Close to 80% of transport policy documents published since 2015 extensively address Goal 1a – Low-Carbon. The emphasis on climate action is further underscored by the vast majority (95%) of targets within these documents being dedicated to Goal 1a. While air pollution and urban access and connectivity also receive considerable attention, other aspects of the EST goal, such as resilience and economic sustainability, currently have limited direct coverage in the policy landscape. In 2019, the Land Transport Authority (LTA) released the Land Transport Master Plan (LTMP) 2040, envisioning "A 45-Minute City with 20-Minute Towns." This master plan aligns with the Aichi Goals, demonstrating Singapore's comprehensive approach to sustainable transport.

Transport relevant policy documents

Red - Poor coverage; Orange - Moderate coverage; Green - Extensive coverage

Doc.			Goal 1a	Goal 1b	Goal 1c	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
No.	Document Name	Year	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ
1	Climate Action Plan	2016								
2	Logistics Industry Transformation Map	2016								
3	E-mobility Technology Roadmap	2016								
4	Singapore First NDC	2016								
5	Land Transport Master Plan 2040	2019								
6	Singapore's Long-Term Low-Emissions Development Strategy	2020								
7	Updated Nationally Determined Contribution - SGP	2020								
8	Singapore Green Plan	2021								
9	Singapore's Fifth National Communication and Fifth Biennial Update Report	2022								
10	Second Update of First Nationally Determined Contribution	2022								
11	MPA Sustainability Report 2023	2023								
12	EV Policy	2022								
13	Logistics Industry Digital Plan	2022								
14	Voluntary National Reviews 2023	2023								
15	Singapore Sustainable Air Hub Blueprint	2024								

(ATO National policy tracker)



Transport relevant national targets

Doc. No.	Target	Year	Goal 1a	Goal 1b	Goal 1c	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
1	Climate Action Plan						0		0	
	To facilitate walking and cycling, our sheltered walkway network will be quadrupled from the existing 56km to 200km by 2018. Cycling paths will double from 355km in 2015 to more than 700km by 2030.	2030	X		x	x				3
	By 2030, the rail network will be 360km, and will be comparable in rail density with developed cities like London, New York and Tokyo. More than 120 trains will also be added to existing train lines, increasing the total fleet size by more than 40 per cent.	2030	x	x	x					
	n 2015, building on our earlier commitment, Singapore pledged to reduce our Emissions Intensity11 (EI) by 36 per cent from 2005 levels by 2030, and stabilise emissions with the aim of peaking around 2030.	2030	X		x					
	By 2050, the aim is to further increase this share to 85 per cent.	2050	x		х	x				
	Achieve 75 per cent use of public transport by 2030	2030	x		х	x				Γ
4	Singapore First NDC									Γ
	For the 2021-2030 period, Singapore intends to build on its previous mitigation efforts to stabilise its emissions with the aim of peaking around 2030.	2030	x		x					
5	Land Transport Master Plan 2040									Γ
	By 2020, Singaporeans will have 267,000 bicycle parking spaces, with more to come by 2040.	2040	x		x	x				
	Looking ahead, we will continue to expand the cycling path network to more than 1,000km by 2040	2040	x		x	x				
	We want a Singapore that is a 45-Minute City with 20-Minute Towns in 2040 All journeys to the nearest neighbourhood centre using Walk- Cycle-Ride modes of transport will take less than 20 minutes. We will aim for 9 in 10 peak-period journeys using Walk-Cycle-Ride to be completed in less than 45 minutes. We will expand our rail network, improve bus speeds and bring jobs closer to homes. These will save the average commuter about 15 minutes every weekday. To facilitate a comfortable walking environment, we will add 150km of covered linkways between MRT stations, residential areas and amenities by 2040.	2040	x				x		x	
	We will also give seniors and persons with disabilities more time to cross the road. We have introduced the Green Man Plus scheme at about 1,000 pedestrian crossings and will extend this to another 1,500 pedestrian crossings in housing estates by 2026	2026				x				
	However, we should and will do more to improve barrier-free accessibility, so that more journeys by walking, cycling and riding public transport are barrier-free by 2040.	2040				x				

	New registrations of diesel cars and taxis to cease from 2025	2025			x	$ \longrightarrow $		H
	All new airside light vehicles, forklifts and tractors at Changi Airport to be electric from 2025	2025	x		x			
	All airside vehicles at Changi Airport to run on cleaner energy by 2040	2040	x		x			
8	Singapore Green Plan							
	Singapore's NDC is an economy-wide absolute GHG emissions limitation target to peak its GHG emissions at 65 MtCO2e around 2030. Singapore's GHG emissions in 2030 are expected to amount to no higher than 65 MtCO2e.	2030	x		x			
7	Updated Nationally Determined Contribution - SGP							
	We actively support IMO's efforts on its Initial Strategy on Reduction of Greenhouse Gas (GHG) Emissions from Ships and its key target to reduce the total annual GHG emissions from international shipping by at least 50% by 2050 compared to 2008 levels	2050	x					
	9 in 10 peak period journeys on "WalkCycle-Ride" by 2040	2040	x		x	x		Ĺ
	Enhanced 2030 Nationally Determined Contribution (NDC) Peak emissions at 65 MtCO2e around 2030	2030	x		x			
	Expanding the rail network from 230km in 2017 to 360km by 2030, with eight in ten households to be within a ten-minute walk from a train station;	2030	x	x	x			
	Cleaner vehicles by 2040	2040	x		x			L
	To make EVs more accessible and promote their adoption, Singapore will expand the public charging infrastructure for EVs. The Government will work with the private sector to improve charging provisions in public and private carparks. By 2030, we aim to have up to 28,000 chargers in public carparks island-wide, from around 1,600 today.	2030	x		x			
	We aim to phase out internal combustion engine vehicles by 2040, and have all vehicles running on cleaner energy.	2040	X		x			
	By 2040, our cycling path network will be extended to more than 1,000km from 440km in 2019.	2040	x		x	x		
	A further 150km of these covered linkways will be added by 2040.	2040	x		x	x		
6	Singapore's Long-Term Low-Emissions Development Strategy							T
	By 2040, our entire bus and taxi fleet will use cleaner energy, contributing to a clean environment.	2040	x		x	x		
	In the next decade, the upcoming Thomson-East Coast Line, Jurong Region Line and Cross Island Line, extensions to the North East Line and Downtown Line, and closing of the Circle Line loop, will create an even more expansive rail network that spans 360km by 2030.	2030	x	x	x			
	Beyond Phase 1, we plan to connect the CRL to the Punggol area by 2031.	2031	x	x	x			
	2023 and the Downtown Line (DTL) from Expo to Sungei Bedok by 2024; closing the loop on the Circle Line from Harbourfront to Marina Bay by 2025 and opening Hume Station on the DTL by 2025							
	extending the North East Line from Punggol to Punggol Coast by							

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	All new car and taxi registrations to be of cleaner-energy models from 2030	2030	x		x				
	Deploy 60,000 EV charging points nationwide by 2030	2030	x	-	x	-	\dashv	+	x
	All HDB towns to be Electric Vehicle (EV) ready with chargers at all HDB carparks by 2025	2025	x		x				x
	All vehicles to run on cleaner energy by 2040	2040	x		x			-	x
	Electric buses to make up half of the public bus fleet by 2030. Existing diesel buses will be replaced with cleaner energy buses by 2040	2030	x		x				×
	We are making good progress towards achieving our goal of bringing 8 in 10 households within a 10-minute walk of a train station by the 2030s	2030	x		x	x)
	Expand rail network to 360km by early 2030s	2030	x	x	x			\neg	,
	All new harbour craft operating in our port waters to be fully electric, be capable of using B100 biofuels, or be compatible with net zero fuels from 2030	2030	x		x				>
	All new harbour craft operating in our port waters to be fully electric, be capable of using B100 biofuels, or be compatible with net zero fuels from 2030	2030	x		x				
	Achieve more than 80% mass public transport (i.e. rail and bus) peak- period modal share Public, active and shared transport modes to account for 9 in 10 of all peak-period journeys	2040	x		x	x			
	Achieve 75% mass public transport (i.e. rail and bus) peak-period modal share	2030	x		x	x			
	The International Civil Aviation Organization's long-term global aspirational goal (LTAG) for international aviation to reach net zero carbon emissions by 2050	2050	x						
	The International Maritime Organization's revised target (i.e. 2023 IMO GHG Strategy) to reach net-zero GHG emissions for international shipping by or around, i.e. close to, 2050, with indicative checkpoints in 2030 and 2040.	2050	x		x				
	Electric buses to make up half of the public bus fleet by 2030. Existing diesel buses will be replaced with cleaner energy buses by 2040	2040	x		x	x			
2	EV Policy							-	
	All new car registrations will have to be of cleaner-energy models from 2030. Cleaner-energy models include electric, hybrid or hydrogen fuel cell cars. We will also stop new diesel car registrations from 2025.	2025	×		x				
	The accessibility of charging infrastructure is vital for encouraging EV adoption, and we have set a target of 60,000 EV charging points by 2030. This includes working with the private sector to achieve 40,000 charging points in public carparks and 20,000 charging points in private premises.	2030	X		x				2
	Every HDB town will also be an EV-Ready Town, with approximately 2,000 carparks to be equipped with charging points by 2025.	2025	x		x				2
	Our taxi fleet operators have also set targets to electrify their fleet, by committing at least half of the total taxi fleet to go electric by 2030.	2030	x		x			+	3

	We have started by deploying 60 electric buses and will replace 400 diesel buses with electric buses by 2025. With these 60 electric buses, the CO2 tailpipe emissions from buses will decrease by approximately 7,840 tons annually.	2025	x	x			x
	The Singapore Green Plan 2030 includes a strong push to electrify our vehicle population, which would help Singapore achieve our vision of 100% cleaner energy vehicles by 2040.	2040	x	x			x
	We have started by deploying 60 electric buses and will replace 400 diesel buses with electric buses by 2025. With these 60 electric buses, the CO2 tailpipe emissions from buses will decrease by approximately 7,840 tons annually.	2025	x	x	×		
	Our taxi fleet operators have also set targets to electrify their fleet, by committing at least half of the total taxi fleet to go electric by 2030.	2030	x	x	x		x
11	MPA Sustainability Report 2023						
	By 2030, all new harbour craft operating in Singapore's port waters must be fully electric, be capable of using B100 biofuels, or be compatible with net-zero fuels	2030	x	x			
	By 2050, the harbour and pleasure craft sectors to achieve net-zero emissions	2050	x	x			
	Singapore's port terminals to reduce absolute Scope 1 and 2 carbon emissions by 50% by 2030, compared to 2019 baseline year	2030	x	x			
	By 2030, our port terminals will reduce absolute emissions by at least 60% from 2005 levels, amidst projected growth in volumes.	2030	x				
10	Second Update of First Nationally Determined Contribution						
	phase out internal combustion engine vehicles by 2040	2040	x	x			
	Singapore's NDC is an economy-wide absolute GHG emissions limitation target to reduce its GHG emissions to around 60 MtCO2e in 2030 after peaking emissions earlier.	2030	x	x			
	In addition, Singapore will also aim to achieve net zero emissions by 2050, as outlined in Charting Singapore's Low-Carbon and Climate Resilient Future	2050	x				
9	Singapore's Fifth National Communication and Fifth Biennial Update Report						
	Beyond the 200 km of sheltered walkways from transport nodes to homes and public amenities built as of now, a further 150 km of these sheltered walkways will be added by 2040.	2040	x	x	x		x
	Singapore will accelerate the building of cycling paths and active mobility infrastructure to make cycling and walking more convenient and attractive. By 2030, our cycling path network will be extended to more than 1,000 km, up from 460 km in 2020.	2030	x	x	x		x
	Singapore is working on the large-scale adoption of green vehicles. By 2040, we aim to phase out internal combustion engines and have all vehicles running on cleaner energy	2040	x	x			

	We will also expand our public charging infrastructure to support the growth of the EV population, with a target of 60,000 charging points nationwide by 2030.	2030	x		x			x
	By 2040, all journeys to the nearest neighbourhood centre using WCR modes of transport will take no more than 20 minutes, while nine in 10 peak period WCR journeys will be completed in less than 45 minutes.	2040	x		x	x		x
	To further encourage the use of public transport, the length of the rail network in Singapore will increase from about 245 km today to about 360 km in early 2030s.	2030	x	x	x			x
	Building on our 2020 pledge, Singapore has also enhanced our 2030 NDC to reduce emissions to around 60 MtCO2 eq in 2030 after peaking our emissions earlier.	2030	x		x			
	Public transport is the most energy-efficient mode of powered transport. Singapore's target is for the mass public transport modal share during the morning and evening peak hours to reach 75% by 2030.	2030	x		x	x		
	Following the adoption of the Glasgow Climate Pact last year, Singapore will raise our ambition to achieve net zero emissions by 2050.	2050	x					
14	Voluntary National Reviews 2023							
	We continue to promote active mobility, and are expanding our cycling network to around 1,300km by 2030.	2030	x		x	x		×
	No new diesel car registrations from 2025, and no new internal combustion engine car registrations from 2030;	2025	x		x			
	No new diesel car registrations from 2025, and no new internal combustion engine car registrations from 2030;	2030	x		x			
	Adopting cleaner-energy vehicles such as electric vehicles (EVs) and encouraging people to walk, cycle, or take public transport are key initiatives to support a greener land transport system. We aim to roll out 60,000 EV charging points and electrify half of our bus fleet by 2030.	2030	x		x			×
	This will bring us towards our aim of increasing peak-period public transport journeys completed by Walk-Cycle-Ride modes under 45 minutes from 70% today to 90% by 2040.	2040	x		x	x		×
	We are working with Malaysia on the Johor Bahru-Singapore Rapid Transit System Link, which is slated to commence service by end-2026.	2026	x	x	x			×
	For land transport, our rail network will expand by 50% over the next decade, to reach 360km by the early 2030s.	2030	x	x	x			×
15	Singapore Sustainable Air Hub Blueprint							
	To kickstart SAF adoption in Singapore, flights departing Singapore will be required to use SAF from 2026. We will aim for a 1% SAF target for a start, to encourage investment in SAF production and develop an ecosystem for more resilient and affordable supply.	2026	X		x			
	Our goal is to raise the SAF target beyond 1% in 2026 to $3 - 5\%$ by 2030, subject to global developments and the wider availability and adoption of SAF.	2030	x		x			
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The Changi Airport community is committed to expand the use of cleaner energy for airside vehicles, to have the entire airside vehicle fleet operate on cleaner energy sources by 2040, and for all new light vehicles, such as cars, vans and minibuses, and selected new heavy vehicles like forklifts and tractors to be electric from 2025, along with the installation of additional charging stations. To support this transition, CAAS will work with stakeholders to commence a trial on the use of renewable diesel (RD) for airside vehicles, particularly heavy and specialised vehicles, in 2024.	2025	x	x		x
The Changi Airport community is committed to expand the use of cleaner energy for airside vehicles, to have the entire airside vehicle fleet operate on cleaner energy sources by 2040, and for all new light vehicles, such as cars, vans and minibuses, and selected new heavy vehicles like forklifts and tractors to be electric from 2025, along with the installation of additional charging stations. To support this transition, CAAS will work with stakeholders to commence a trial on the use of renewable diesel (RD) for airside vehicles, particularly heavy and specialised vehicles, in 2024.	2040	x	X		x
Under the Blueprint, CAAS will work with aviation stakeholders to achieve net zero domestic and international aviation eomissions by 2050	2050	x			
Under the Blueprint, CAAS will work with aviation stakeholders to reduce domestic aviation emissions from airport operations by 20% from 2019 levels (404ktC02) in 2030	2030	x			

(ATO National policy tracker)

Transport relevant sample projects:

A sample list of projects by the MDB highlights their focus with respect to the Aichi 2030 Declaration Goals.

Transport relevant projects

Year	Project name	Amount (million USD)	Goal 1a	Goal 1b	Goal 1c	Goal 2	Goal 3	Goal 4	Goal 5	Goal 6
2023	Singapore: Regional Transport Connectivity Project	70		х			х			x

(MDB Projects database)

References:

Asian Transport Outlook (ATO) + Country. (2024). ATO estimates based on Country Official Statistics	(ATO and Country estimates)
Asian Transport Outlook (ATO) + UNEP. (2024). ATO analysis of UNEP Index using latest data	(ATO analysis of UNEP data)
Coalition for Disaster Resilient Infrastructure (CDRI). (2023). Building & infrastructur. https://giri.unepgrid.ch/facts-figures/building-infrastructures	(CDRI, 2023)
Socioeconomic Data and Applications Center (SEDAC). (2023). SDG Indicator 11.2.1: Urban Access to Public Transport, 2023. https://sedac.ciesin.columbia.edu/data/set/sdgi-11-2-1-urban-access- publictransport-2023	(CIESIN-urban, 2023)
Socioeconomic Data and Applications Center (SEDAC). (2023). SDG Indicator 9.1.1: The Rural Access Index (RAI), 2023. https://sedac.ciesin.columbia.edu/data/set/sdgi-9-1-1-rai-2023	(CIESIN-rural, 2023)
Asian Transport Outlook (ATO). (2024). ATO National policy tracker. The trackers are based on the national level policies.	(ATO National policy tracker)
Emissions Database for Global Atmospheric Research (EDGAR). (2023). EDGAR - Emissions Database for Global Atmospheric Research. https://edgar.jrc.ec.europa.eu/	(EDGAR, 2023)
Ember. (2023). Yearly electricity data. https://ember-climate.org/data- catalogue/yearly-electricity-data/	(EMBER, 2023)
Global Burden of Disease (GBD). (2021). GBD Results. http://ghdx.healthdata.org/gbd-results-tool	(GBD, 2021)
International Council on Clean Transportation (ICCT). (2023). https://theicct.org/	(ICCT, 2023)
International Energy Agency (IEA). (2022). Fossil Fuels Consumption Subsidies 2022. https://www.iea.org/reports/fossil-fuels-consumption-subsidies-2022	(IEA, 2022)
International Monetary Fund (IMF). (2024). Climate Change Dashboard. https://climatedata.imf.org/pages/access-data	(IMF, 2024)
International Road Federation (IRF). (2024). https://irfnet.ch/data-statistics/4	(IRF, 2024)
International Trade Centre (ITC). (2024). Trademap. https://www.trademap.org/	(ITC, 2024)
Institute for Transportation and Development Policy (ITDP). (2022). Rapid Transit Database. https://www.itdp.org/rapid-transit-database/	(ITDP, 2022)
International Telecommunication Union (ITU). (2023). Statistics. https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx	(ITU, 2023)

-	
Koks, et al. (2023). A global assessment of national road network vulnerability. https://iopscience.iop.org/article/10.1088/2634- 4505/acd1aa	(Koks, et al., 2023)
McDuffie et al. (2021). Global Burden of Disease-Major Air Pollution Sources. https://costofairpollution.shinyapps.io/gbd_map_global_source_shinyapp/	(McDuffie et al., 2021)
Organisation for Economic Co-operation and Development (OECD). (2022). Data Explorer. https://stats.oecd.org/Index.aspx?DataSetCode=CRS1#	(OECD, 2022)
International Organization of Motor Vehicle Manufacturers (OICA). (2023). Statistics. https://www.oica.net/production-statistics/	(OICA, 2023)
Tracking SDG 7. (2024). The energy progress report. https://trackingsdg7.esmap.org/	(Tracking SDG 7, 2024)
International Union of Railways (UIC). (2024). https://uic-stats.uic.org/	(UIC, 2024)
UN. (2023). Downloads. https://unstats.un.org/unsd/snaama/Downloads	(UN, 2023)
UN. (2018). Environmental Vulnerability Indicators. https://www.un.org/development/desa/dpad/least-developed-country- category/evi-indicators-ldc.html	(UN, 2018)
UN. (2021). Energy Statistics. https://unstats.un.org/unsd/energystats/	(UN, 2021)
UN. (2022). Population Database. https://population.un.org/wpp/	(UN, 2022)
UN Conference on Trade and Development (UNCTAD). (2024). Statistics. https://unctadstat.unctad.org	(UNCTAD, 2024)
UNEP. (2023). Global Materials Flow Database. https://www.resourcepanel.org/global-material-flows-database	(UNEP, 2023)
World Bank. (2022). https://data.worldbank.org/	(WB, 2022)
World Bank. (2023). PPI Database. https://ppi.worldbank.org/en/ppi	(WB, 2023)
World Economic Forum (WEF). (2020). Global Competitiveness Report Special Edition 2020. https://www.weforum.org/publications/the-global- competitiveness-report-2020/	(WEF, 2018)
World Helath Organisation (WHO). (2023). Global Status Report on Road Safety 2023. https://www.who.int/teams/social-determinants-of- health/safety-and-mobility/globalstatus-report-on-road-safety-2023	(WHO, 2023)
International Labour Organization (ILO). (2024). Statistics. https://www.ilo.org/global/statistics-and-databases/langen/index.htm	(ILO, 2024)
Asian Transport Outlook (ATO). (2024). ATO compilation of the MDB projects. The database is a compilation of the transport relevant projects undertaken by 3 MDBs - ADB, AIIB and World Bank having the project approval year 2019 or after.	(MDB Projects database)
Country official statistics. (varies). Country official statistics in the form of statistical yearbooks, handbooks, databanks etc.	(Country official statistics)
GDP data is sourced from (WB, 2022) and Population data from (UN, 2022)	