Thailand Future Mobility

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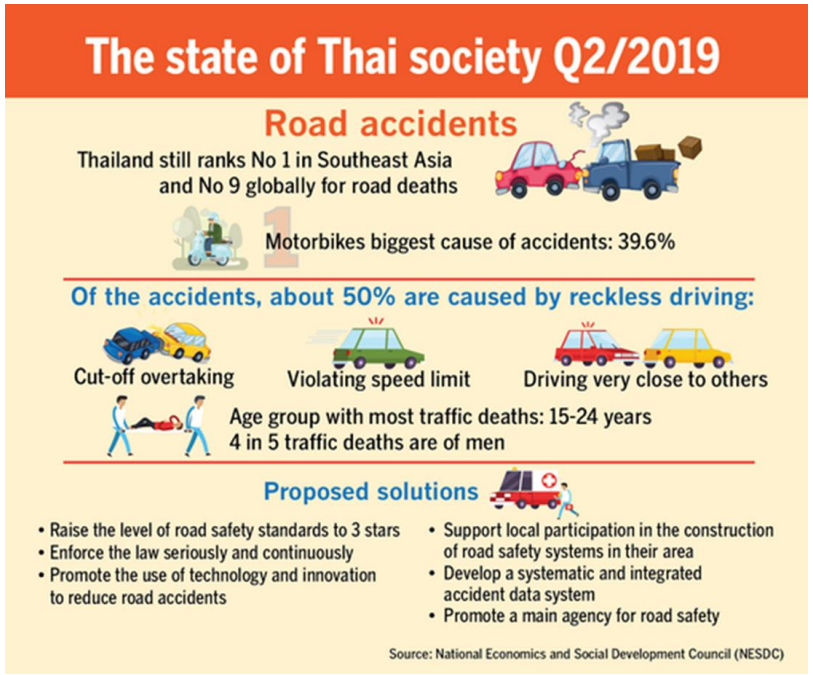
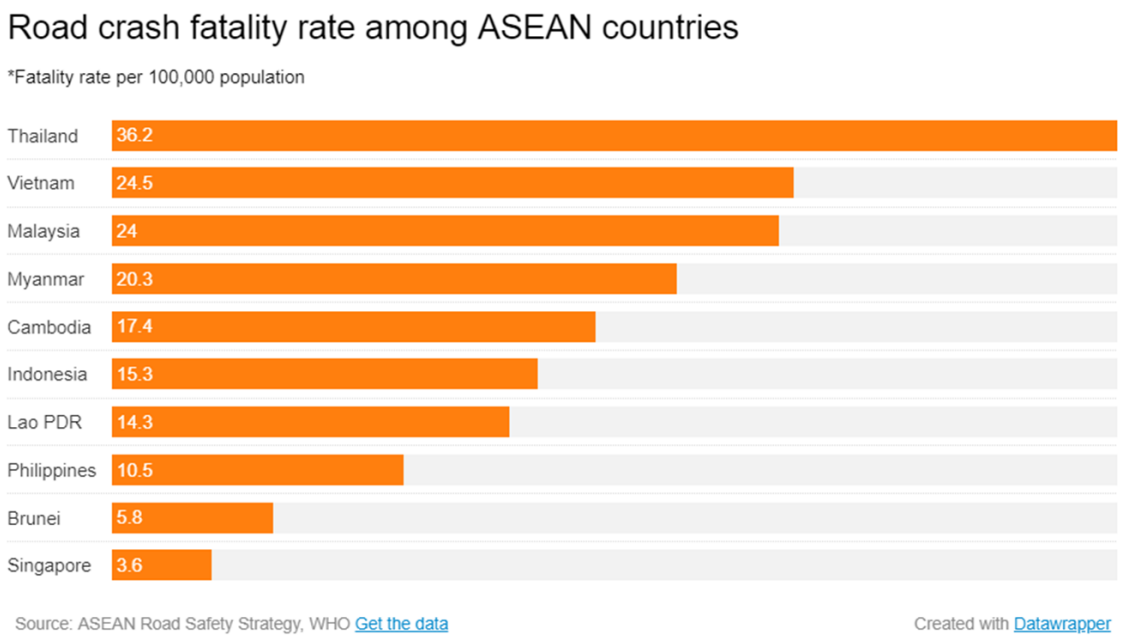
ITS Thailand

Topics

- Thailand status
- Electric Vehicle
- Connected and Autonomous Vehicle (CAV)
- Shared and Mobility services

Road Safety





Thailand is the 1st rank in ASEAN for road crash fatality rate

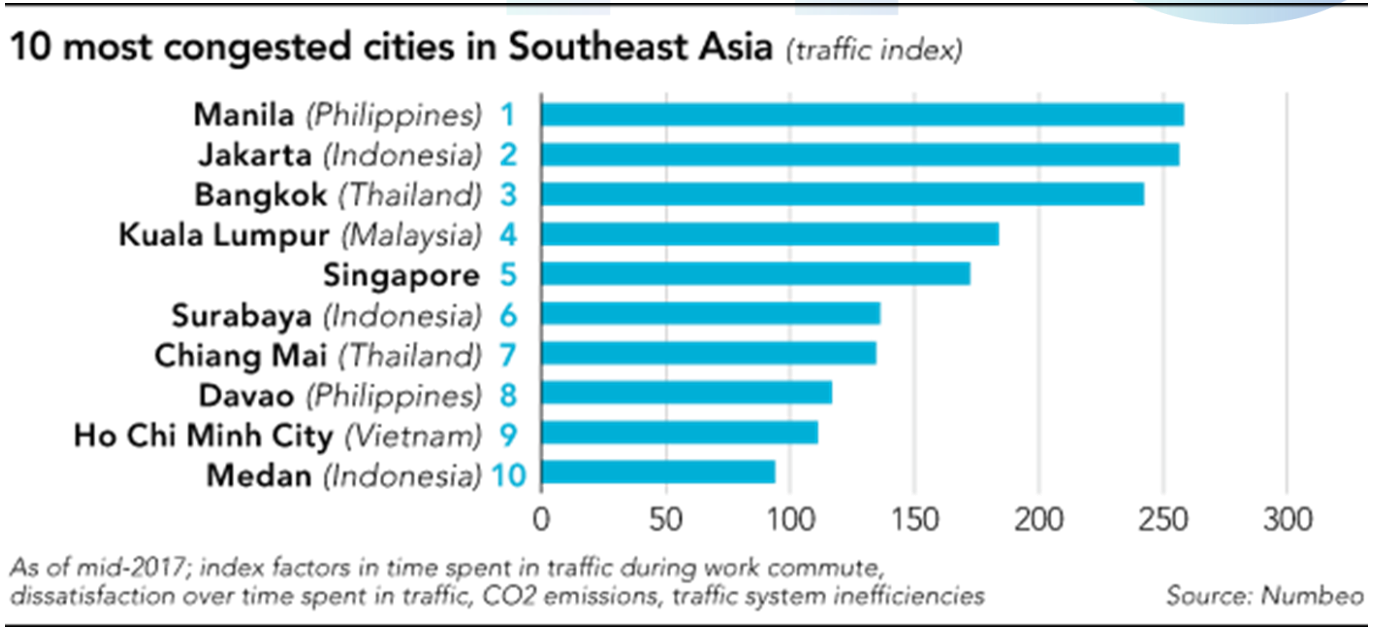
Traffic Congestion

Average speed in Bangkok

15 km/h (Morning)

19 km/h (Evening)

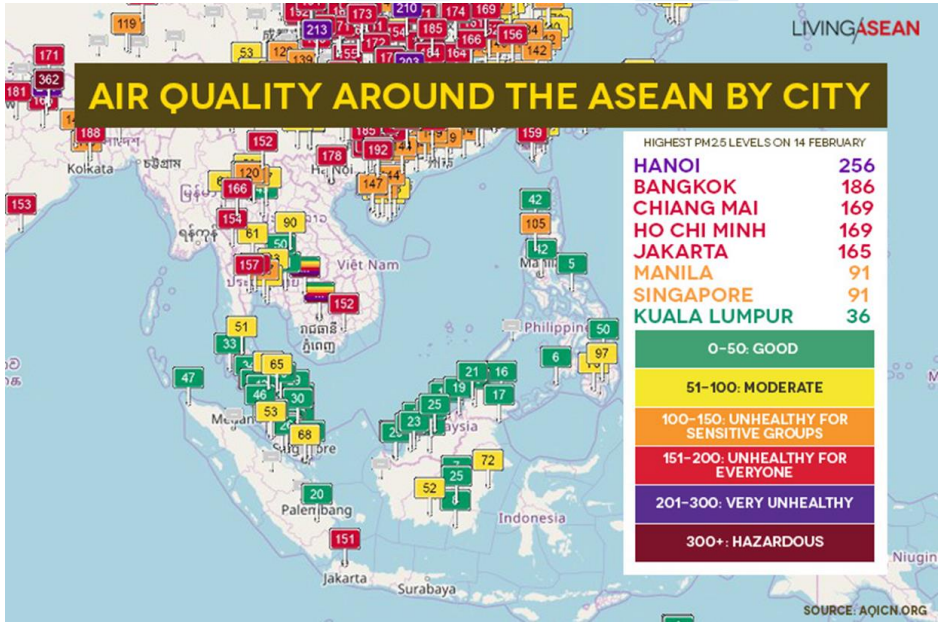
https://th.m.wikipedia.org/wiki/



Bangkok is in the top-3 rank of ASEAN for the most congested cities

Air pollution

Bangkok is in the top-3 rank of ASEAN for the worst air quality



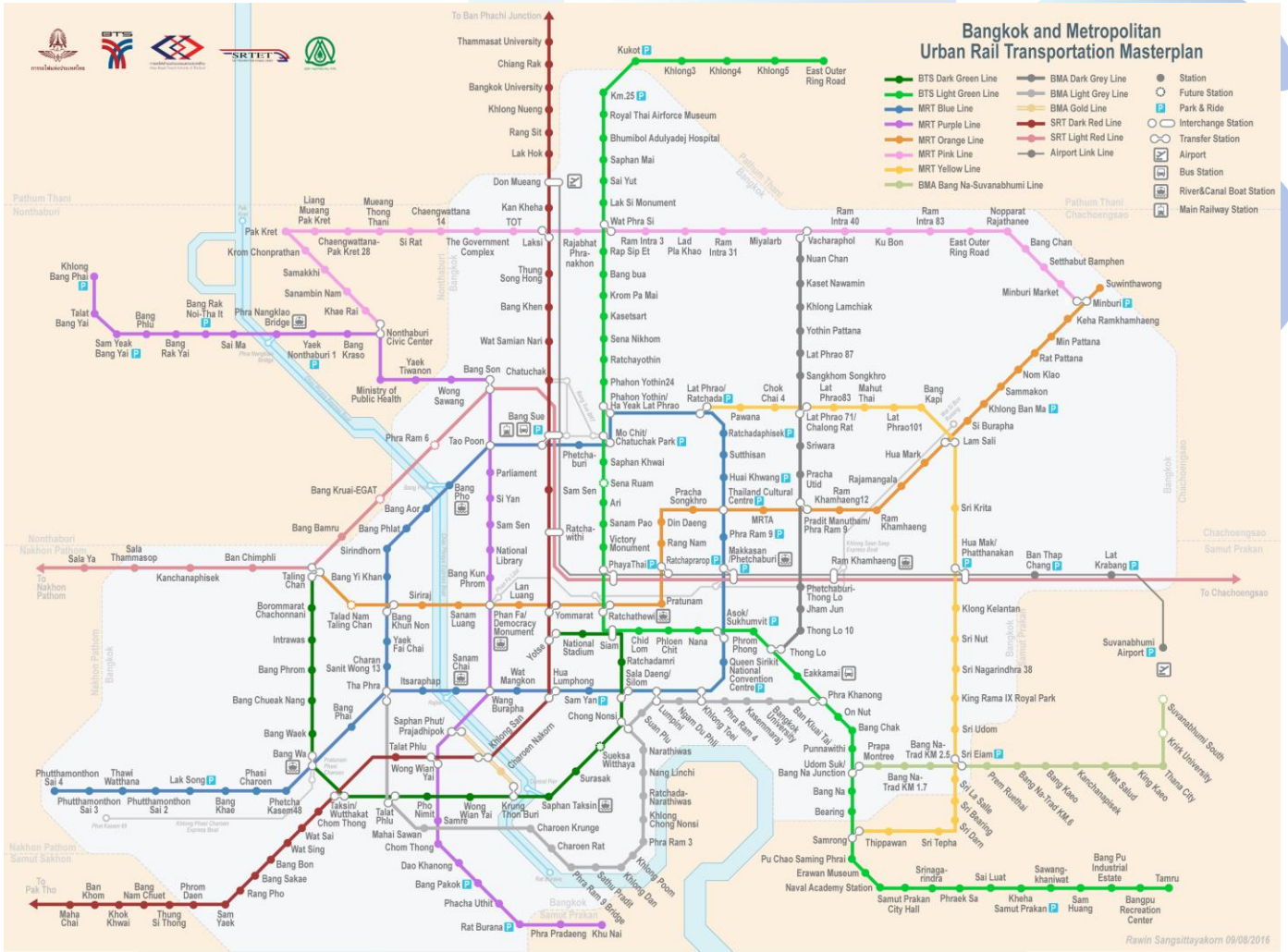
https://livingasean.com/special-scoop/air-quality-asean-air-pollution-bangkok-hanoi-jakarta/

Mass Rapid Transit in Bangkok

2021 Current Service: 210.25 km (130.64 mi)

2021 Under Construction: 123 km (76 mi)

2029 Planned total: 540 km (340 mi)



https://www.reddit.com/r/Thailand/comments/9phg62/5year_bangkok_mass_transit_plan/

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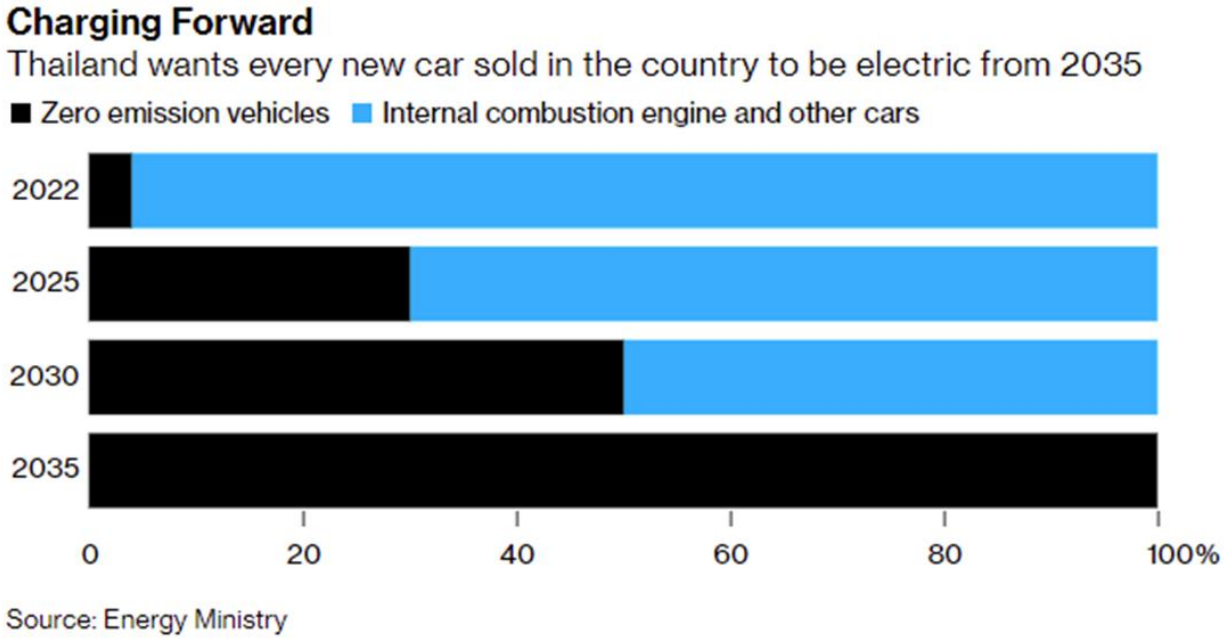
Electric vehicles

On February 7, 2020, **the National Electric Vehicle Policy Committee** was appointed by PM to drive the development of Thailand's electric vehicle industry in efficient and effective ways.

There is integration and work together to be consistent and in the same direction. The composition of the committee consists of representatives from Government agency and experts

Vision: *Thailand is the world's major production base of electric vehicles and parts.*

Goal: *By 2035: Motor drivers can register new vehicles only 100% ZEV-free vehicles (Engine Ban)*



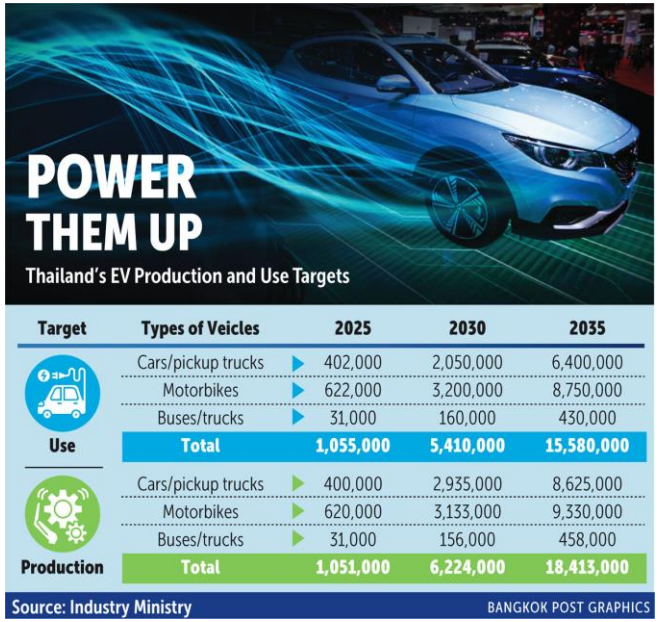
Electric Vehicle

The measures for 1-5 years are as follows.

- Adjust the tax structure such as excise tax (starting in the year 2026) and annual car tax according to the international principle, “the older the car, the more expensive it must be”.
- Management of used car wrecks, batteries and solar cells.
- Build an infrastructure (Eco System) to promote the use of ZEV.
- Provide personnel development, etc. About The National Electric Vehicle Policy Committee

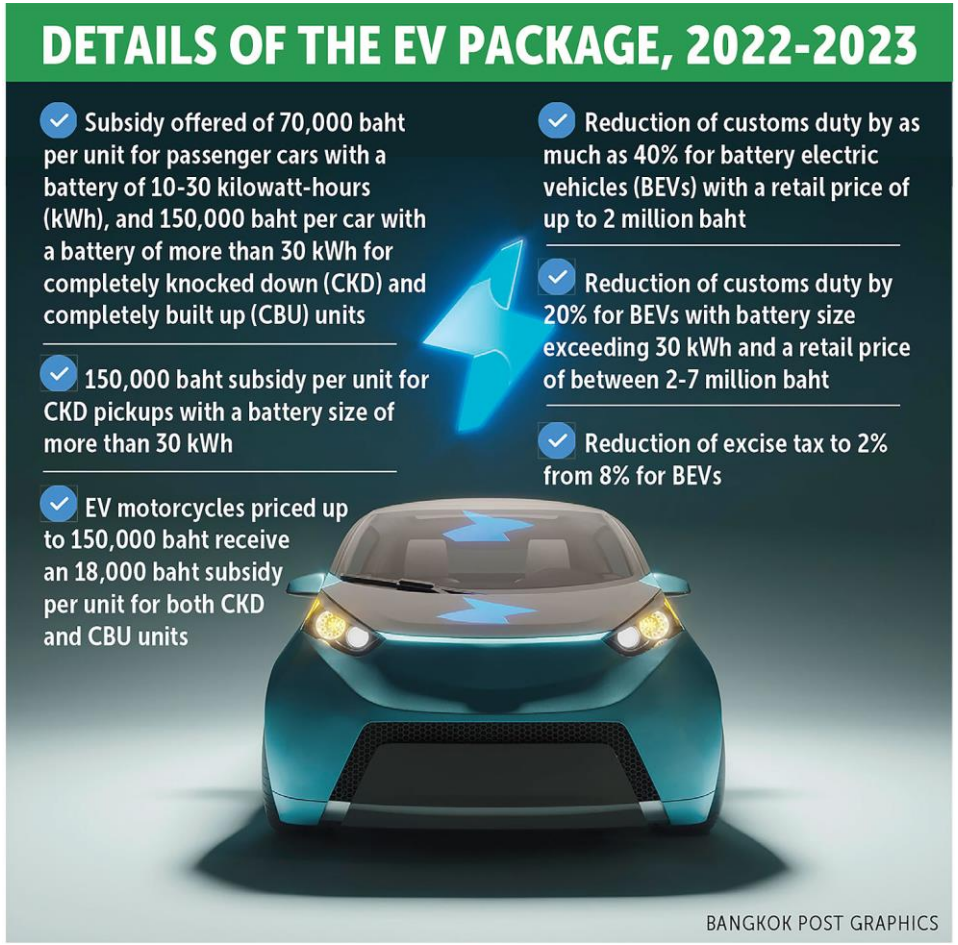
Credit: Asia-Pacific Economic Cooperation

Electric vehicles



Target	Types of Veicles	2025	2030	2035
Use	Cars/pickup trucks	402,000	2,050,000	6,400,000
	Motorbikes	622,000	3,200,000	8,750,000
	Buses/trucks	31,000	160,000	430,000
	Total	**1,055,000**	**5,410,000**	**15,580,000**
Production	Cars/pickup trucks	400,000	2,935,000	8,625,000
	Motorbikes	620,000	3,133,000	9,330,000
	Buses/trucks	31,000	156,000	458,000
	Total	**1,051,000**	**6,224,000**	**18,413,000**

Source: Industry Ministry BANGKOK POST GRAPHICS



A package of EV incentives including tax cuts and subsidies to promote electric vehicle (EV) consumption and production between 2022-2023.

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Electric vehicles

Electric boat services in river and canal are available. Electric buses are replacing the old bus in Bangkok. Thai company plays major role in developing and manufacturing these EVs.

Connected and Autonomous Vehicle (CAV)

Policy guidelines for development of automotive industry towards the connected and autonomous vehicle (CAV) industry was produced in 2021 by Thailand Automotive Institute and submitted to Office of Industry Economic, Ministry of Industry.

There are many government agencies, private companies and research institute/universities participated in this project.

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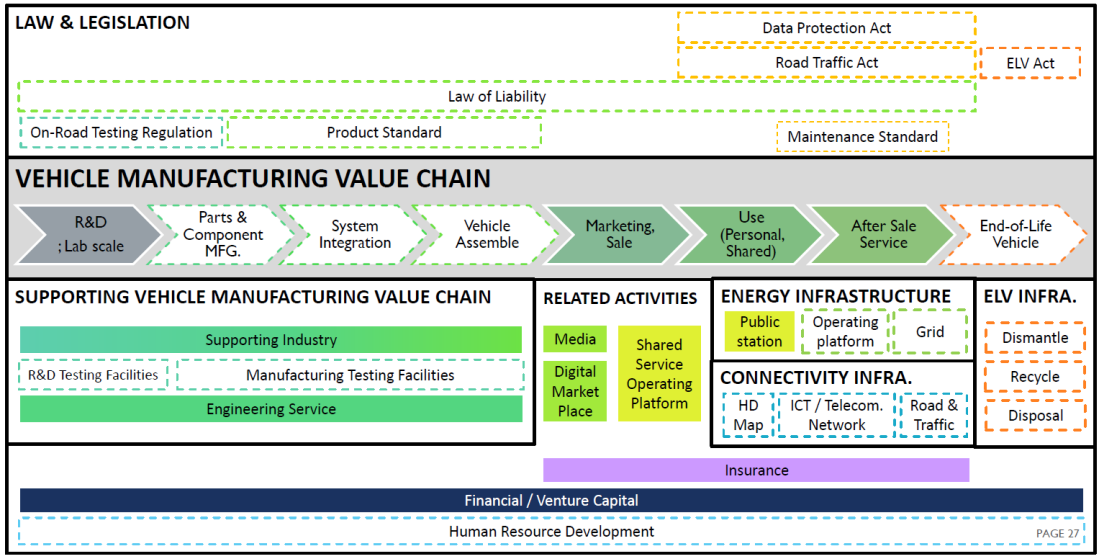
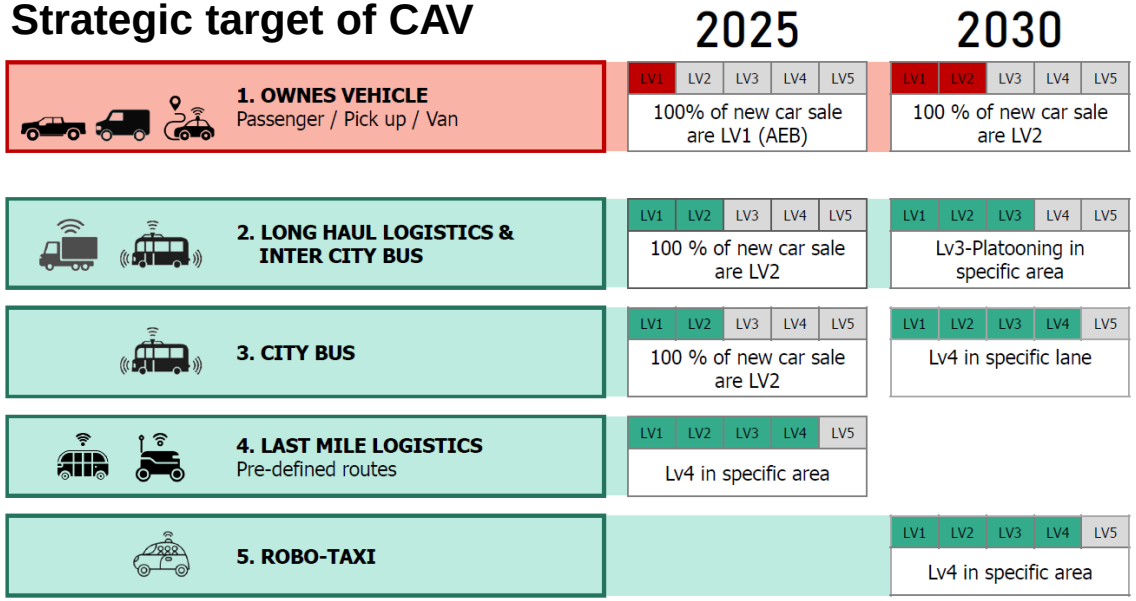
Connected and Autonomous Vehicle (CAV)

CAV Ecosystem



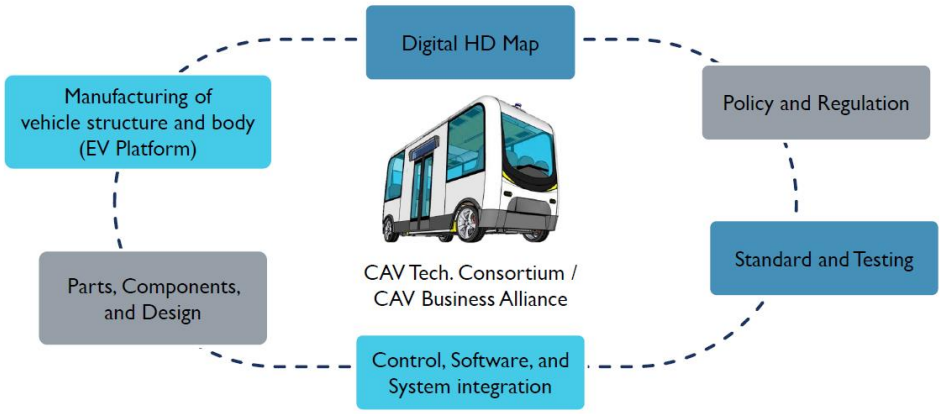
Strategic target of CAV

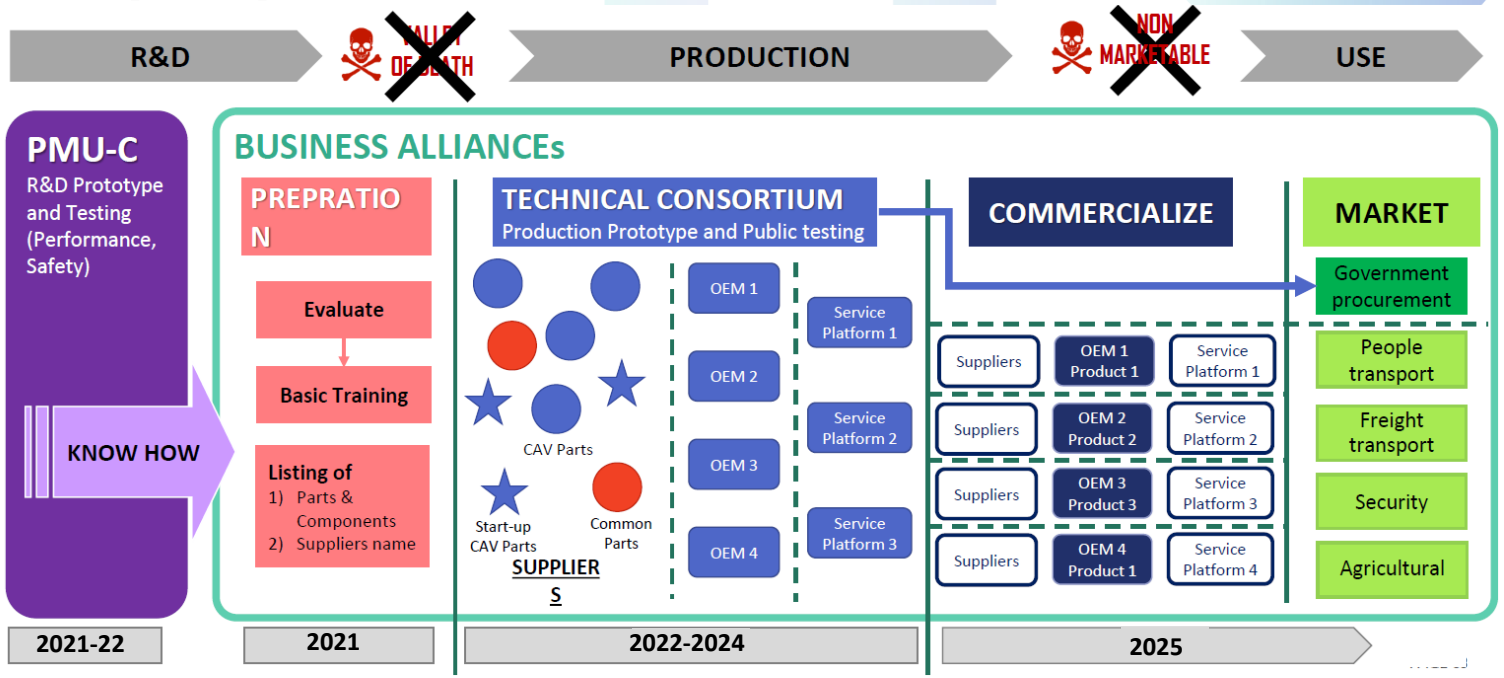


Source: Policy guidelines for development of automotive industry towards the connected and autonomous vehicle (CAV) industry
Credit: Thailand Automotive Institute

Connected and Autonomous Vehicle (CAV)

CAV Tech. Consortium and Business Alliance

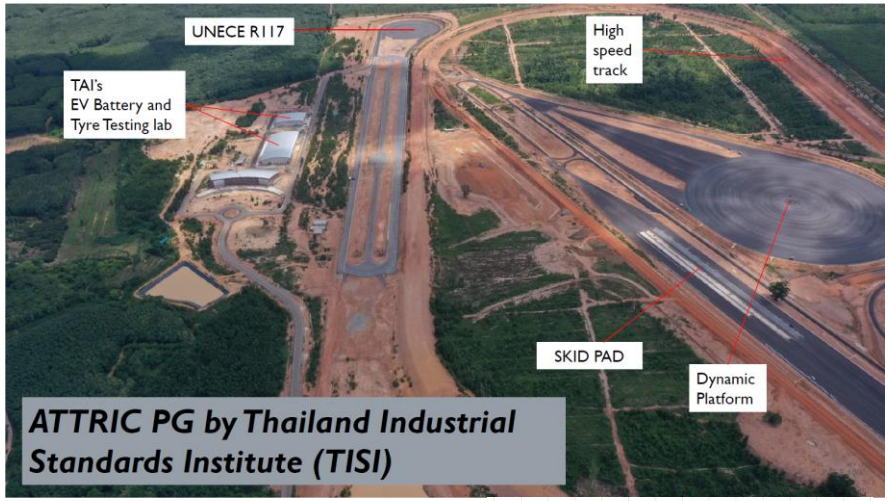


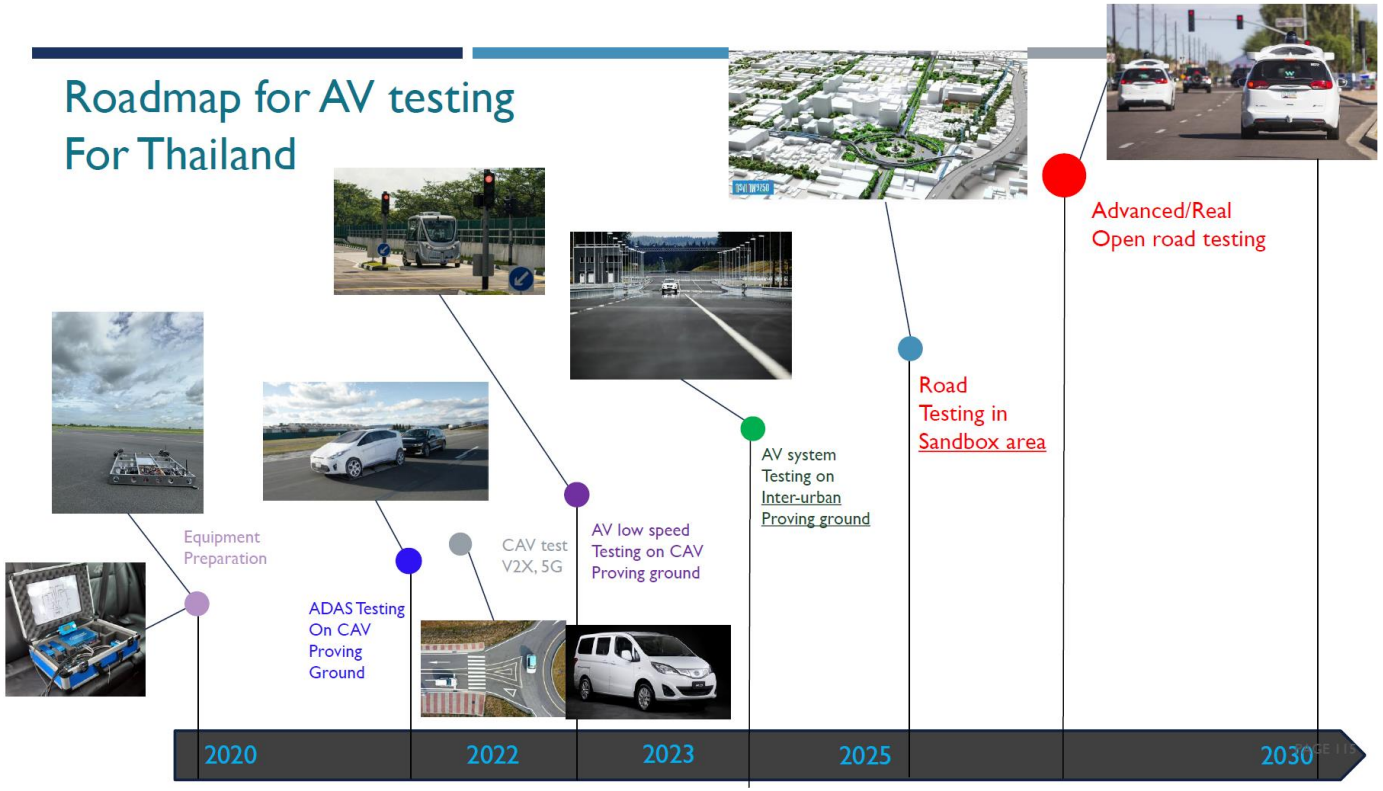


Source: Policy guidelines for development of automotive industry towards the connected and autonomous vehicle (CAV) industry
Credit: Thailand Automotive Institute

Connected and Autonomous Vehicle

Inter-urban CAV proving ground





Low speed / urban CAV proving ground

Credit: Thailand Automotive Institute

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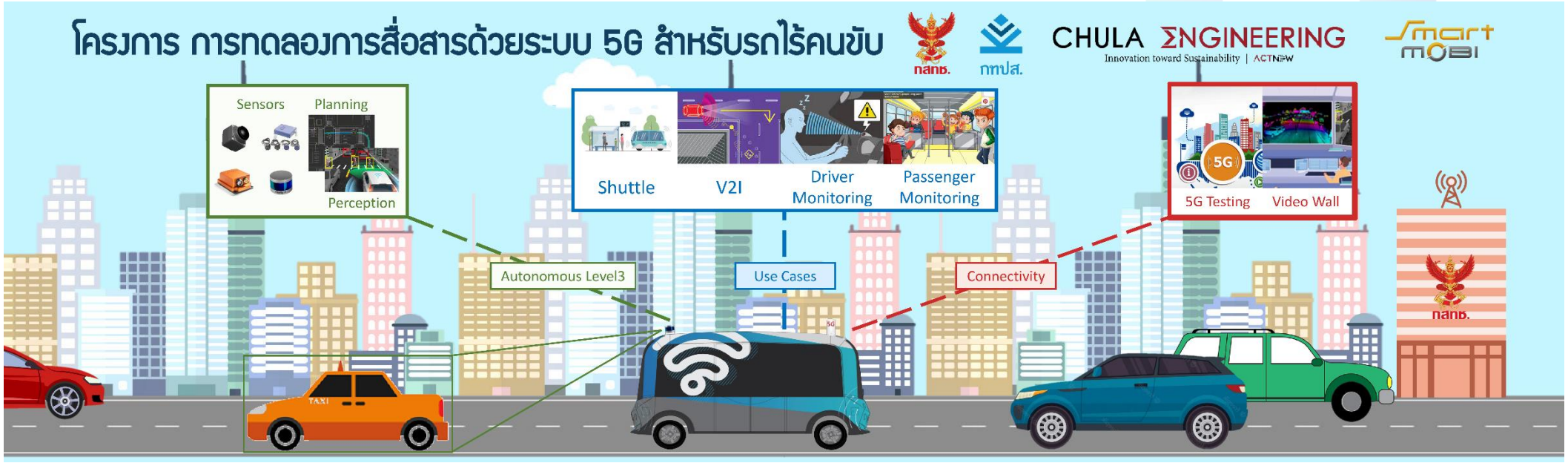


The National Broadcasting and Telecommunications Commission (NBTC) project on testing the autonomous shuttle vehicle with 5G C-V2X use cases

Credit: Smart Mobility Research Center, Chulalongkorn University

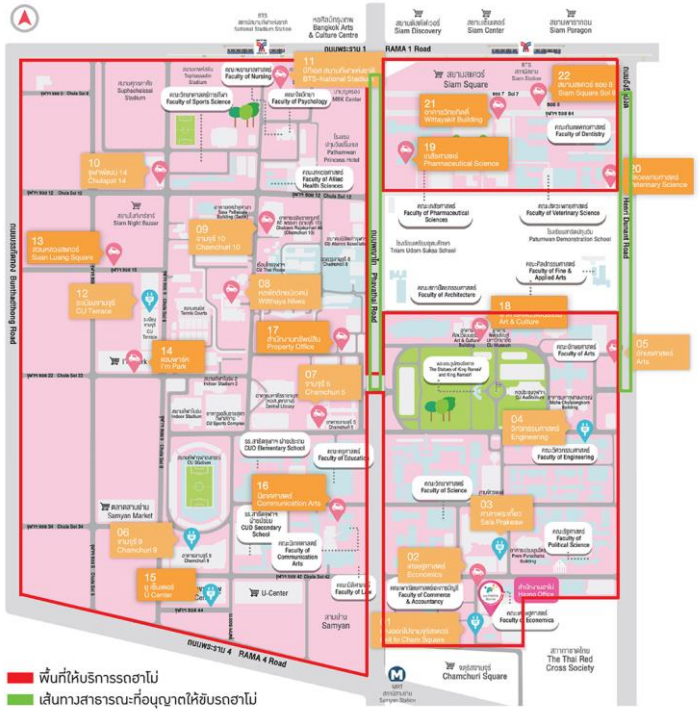
Shared and Mobility Services

Research based and commercial based sharded and mobility services are expanding in Thailand.

First/Last Mile Shared micro EV.

CU Toyota HA:MO

This research project was carried out during 2018 – 2021 in Chulalongkorn University Campus, downtown Bangkok.



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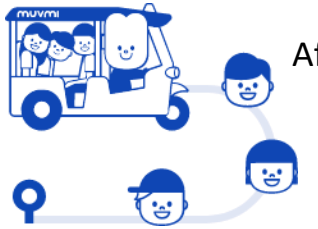
Shared and Mobility Services

Research based and commercial based sharded and mobility services are expanding in Thailand.

Local Ride Sharing Service.

Electric (EV) Tuk Tuks serving multiple areas around Bangkok

Request a ride via our app
Cashless payment via QR code



Affordable ridesharing system

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Shared and Mobility Services

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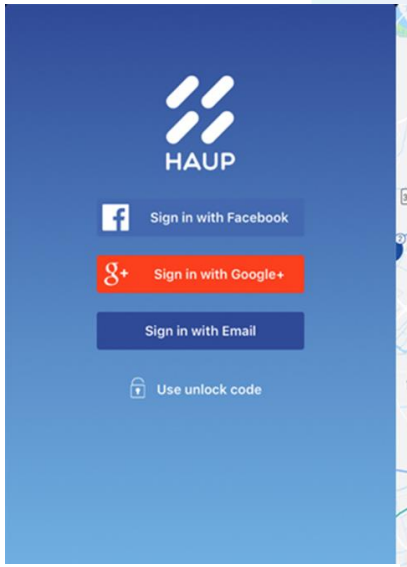
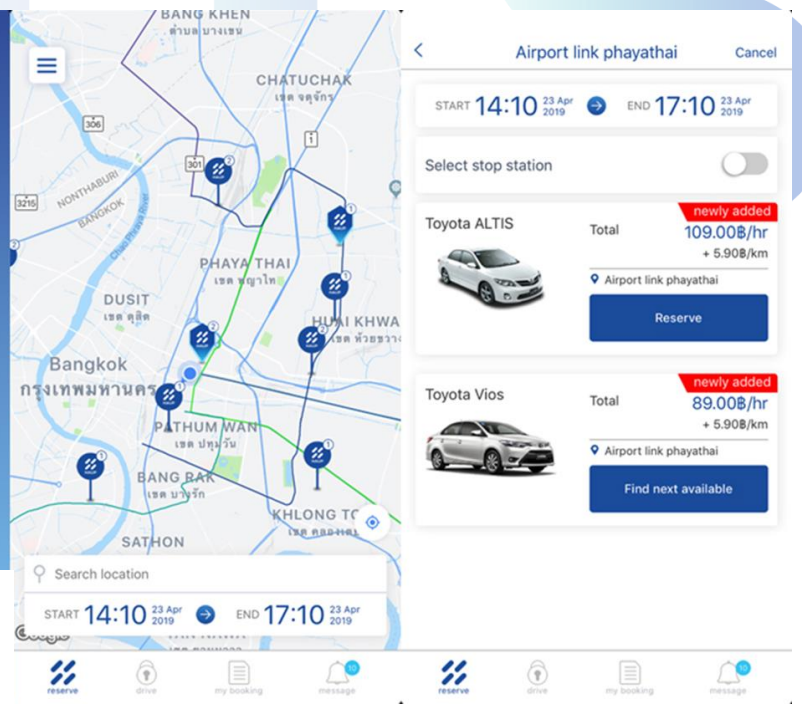
B2C Car Sharing Service

HAUP





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Conclusion

- Thailand policy for low carbon society, improving air quality and upgrading automotive industry drive for the high adoption of EV.
- CAV is in the beginning state for government policy. Many stakeholders are interested in the study/preparation and adoption of CAV in public.
- Shared and mobility services in Thailand are expanding. Recently, local Thai startups/company success in their business model.
- Mass rapid transit in Bangkok and other provinces needs supporting from the C-A-S-E to fulfill the good quality in operation and services of the future mobility.

THANKS

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