



Local Governments
for Sustainability

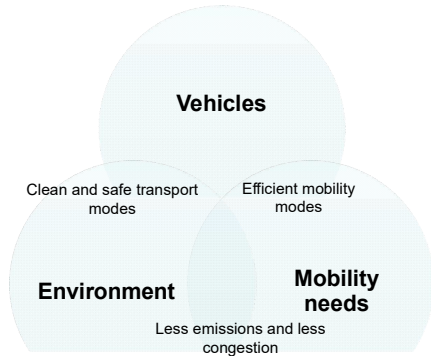
EAST ASIA

Smart Mobility Vision in Asia and the Pacific

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How would you define a **smart** mobility vision?



- Safe
- Healthy
- Clean
- Accessible
- Inclusive
- Resilient
-

When smart mobility isn't smart

1 Technology myopia

Ended up with technology demonstrations as the goal

Focus on the solutions rather than the desired outcome

Lack of societal buy-in

2 Stuck in silos

Managed horizontally across systems, data pools

Engineers vs planners

Mobility ecosystem

3 Fail to scale and replicate

No long-term planning for scaling and replication

A matter of public procurement process or meeting the national government KPIs only



Photo source (left): ANI



Conventional planning approach



Choose a technology



Fit the city to the technology



Force customers to adapt to the technology

Visionary planning approach



Design the system from the customer's perspective

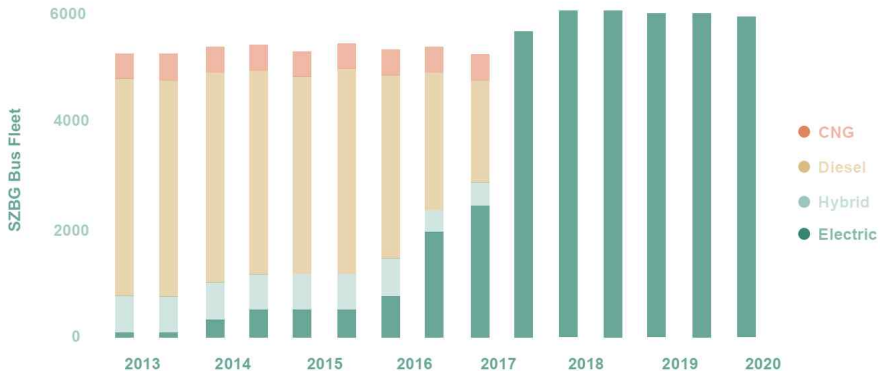


Evaluate customer-driven options from the city's perspective



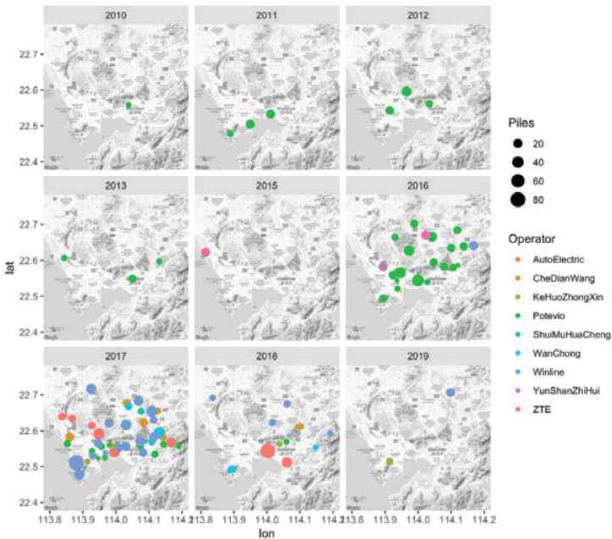
Decision

Shenzhen's journey to fully electrify its public buses

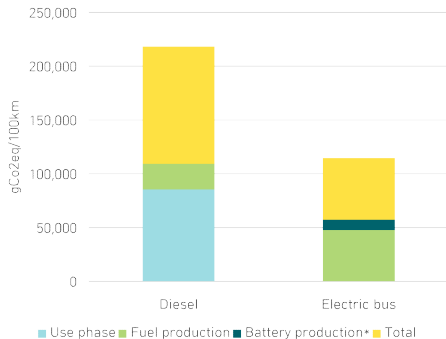


World Bank and SZBG 2021

Charging facilities



Emission reduction after bus electrification
(gCO₂eq/100km)



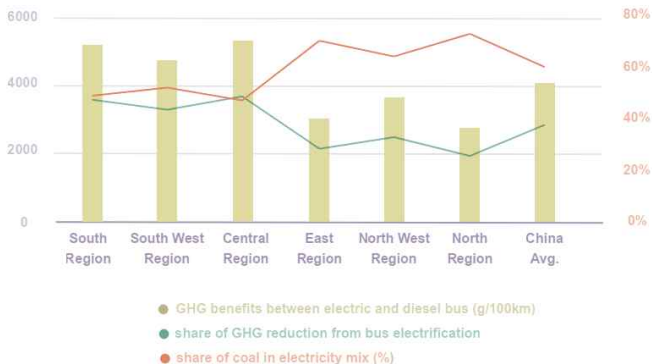
Total
51,876 gCO₂eq/100km

Air pollutant emission reduction after
bus electrification (g)

Pollutant	Diesel bus	Electric bus	Emission reduction after electrification
CO	116.8	0	116.8
NOx	568	10.81	557.19
VOC	5.8	0	5.8
PM2.5	11	0	11
PM10	17.64	0	17.64
SO2	2.5	11.38	-8.88

Data source: World Bank and SZBG 2021

Relationship between coal share and bus electrification



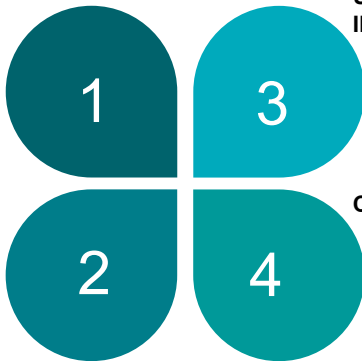
Drivers to the EV transition Shenzhen, China

POLICY SYNERGIES

- 100% public bus electrification
- 100% taxi electrification
- Next step:
Heavy-duty vehicles, sanitary vehicles, freight

TECHNOLOGICAL DEVELOPMENT

- Public-private innovation:
Vehicle manufacturers,
charging, new technology
- Grid and vehicle availability



URBAN PLANNING & INFRASTRUCTURE

- Charging strategy (public and private)
- EV-ready building code
- Low-emission zones

CONSUMER DEMAND

- Incentives to nudge behavior
- Financial incentives/ right subsidies
- EV parking privileges
- Other access privileges

Key messages

- 1 Smart mobility is a means to an end
- 2 Decarbonization + sustainability goals
- 3 Think mobility ecosystem!



THANK YOU

Please connect

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