Decarbonisation in East Asian Cities

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What is the silver bullet for?

E-mobility uptake.  
*Full steam ahead or stagnant?*

The nexus.  
*Zero Emission Venture*

Shared mobility.  
*For whom and by whom?*
E-mobility uptake. 
*Full steam ahead or stagnant?*
Electric two wheelers: gogoro

- Sold 145,678 e-two wheelers (or e-scooters as they are called in Taiwan) in 2019
- Accounted for 16% of the market share in 2019
- Between January and September 2020, sold only 8,199 e-two wheelers
- Account for only 7.9% of the market share
Factors

• Subsidies
  ○ ending this year
• Battery swapping technology
  ○ should it be the future?
• Fare schemes
  ○ Flat rate? Pay as you drive?
• Range anxiety
  ○ Battery swapping stations and grid
• Customer service
  ○ Maintenance fee, professional knowledge
• Does green purchase mean green knowledge?
At the end of the day, it’s a mode of transport than a type of consumer electronics. There is still the urban mobility problem.
The nexus.

*Zero Emission Venture*
The **nexus** of electric vehicles, renewable energy and air quality
The nexus

EV Mobility Platform
- B2B based ridesharing system
- EVs only

Renewable energy incentives
- Local solar/wind farm
- Blockchain
- Community engagement
  - People in need
  - Better social returns

Positive feedback loop for air quality awareness, renewable energy incentives, hence cleaner electric vehicles.

Air quality monitoring
- Improving government regulations
- Supporting urban planning
- Raising public awareness
Shared mobility.
For whom and by whom?
Shared mobility: car-sharing
“噗噗共乘”

- Public transport deprived areas
  - Villages in rural areas
  - Villages in mountainous areas

- People who cannot drive or need mobility assistance
  - School students
  - Parents
  - Older people
  - People with mobility and/or cognitive impairments

- Complementary to existing public transport network

- Last mile connectivity
  - In some areas, people walk 40+ minutes to the nearest bus stop
“噗噗共乘” car-sharing

- Initiated by the national government
- Horizontal integration
  - Ministry of Transportation and Communications
  - Ministry of Health and Welfare
  - Ministry of Education
  - Council of Indigenous People
- Stakeholder engagement
  - Informal operators
  - Local communities
  - Hospitals, schools, local businesses
  - Corporate Social Responsibilities: Airlines, Telecommunication companies, postal companies, etc.
The benefits

- Reducing number of trips
- Improving road safety
- Affordability
- Reducing CO2 emissions
- Social equity - access for all
- Creating jobs
Get in touch!

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