Light Electric Vehicles: Asian and North American experiences

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Africa Clean Mobility Week
Can disruptive tech shift motorization curve?
China e-bike market

• Takeaway 1: e-bikes are the fastest and largest growth of alt-fuel in the history of motorization.
China e-bike technology

• Takeaway 2: e-bikes are the most energy (and CO$_2$) efficient motorized mode that exists
EV’s in China

China’s technology adoption driven by:

• Motorcycle ban
• Ubiquitous (compatible) bike infrastructure (and parking/charging)
• Indigenous industry and informal repair infrastructure

Challenges

• Safety
• Battery End-of-Life
• Congestion and road conflict
Shared Mobility

Shared mobility as externality moderator

- Assure vehicle safety quality (maintenance and performance)
- End-of-life environmental management
- Provide coordinated policy influence
- Can overcome capital investment for future fuel saving
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