Topic: Financing transitions to clean accessible mobility: bankable pathways for popular transport electrification in Vietnam and Kenya

Overview

In many Asian and African low- and middle-income countries (LMICs), popular transport (also known as informal transport or paratransit) - defined here as taxi or share-taxi services provided by minibuses, motorcycles, autorickshaws, and other vehicles that are poorly regulated or not regulated by state authorities – is crucial for providing access to employment, healthcare, and social activities for large proportions of the population. Popular transport systems are growing greenhouse gas emitters, major causes of urban air pollution, and often exacerbators of social and gender inequalities in the built environment.

Electrification of popular transport, therefore, offers huge potential to reduce greenhouse gas emissions, improve urban air quality, and enhance social sustainability. Electric vehicles (EVs) generally have high upfront capital costs but lower running costs relative to their internal combustion-powered counterparts¹. Therefore, for high-utilisation vehicles like those used for popular transport, the savings in running costs can recoup the initial outlay relatively quickly. To enable this to happen, affordable and accessible finance, including large scale finance for fleet and individual microcredits, is key for driving electrification in these markets.

The problem

Vietnam and Kenya face common challenges in the transport sector, such as high initial investment costs, inadequate EV infrastructure, and policy implementation barriers. Both countries have identified transport electrification as being a key tenet in meeting economic development and climate mitigation goals.

Transport electrification in Kenya and Vietnam is set in different styles of governance, regulatory environments, and transport planning. In Kenya, transport governance is decentralised and liberalised; county governments implement transport policies, which are often reliant on the private sector. Vietnam has a centralised governance structure and state-led green policy, which allows for rapid policy decisions but often lacks stakeholder engagement.

Research area

This proposal aim is to investigate how the viability of finance mechanisms for popular transport electrification is affected by governance and regulation in these governance typologies exemplified by Kenya and Vietnam. It is encouraged that other case study countries be investigated as part of this study to identify 'lessons learnt' in other jurisdictions with regards to transport governance and financing² to support electrification. In doing so, the aim of this research is to identify transferable interventions to channel finance and increase popular transport electrification in LMICs against different governance and regulatory backgrounds. The focus of the recommendations from this project will be on popular transport electrification in both Vietnam and Kenya, though the research should include detail from other country contexts.

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¹ Palmer, K., Tate, J.E., Wadud, Z., and Nelltorp, J. (2018). Total cost of ownership and market share for hybrid and electric vehicles in the UK, US and Japan, *Applied Energy* 209, pp.108–19.

² These financing mechanisms should include those for fleet and individual owners and operators.

The following **research activities** are to be carried out:

- Comparison of different popular transport electrification cases in Kenya, Vietnam, and other countries where local approaches may be applicable to the two core study countries.
- Identification of formal and informal governance systems supporting finance and electrification, and how those governance systems affect the viability of finance (e.g. SACCOs³, formalisation, etc.).
- Mapping and quantification of potential impacts of public sector-led, or public sectorblended, financing on countries' fiscal balances and the implications for future fiscal policy.
- Identification of cases with varying degrees of success where lessons and transferable factors can be identified.

The **methods** used for this research may include:

- Interviews with government officials and main stakeholders, including operators, private sector, and institutional investors.
- Development of collaborations in the countries of interest.
- Scenario workshops to identify challenges and opportunities as perceived collectively by main transport stakeholders.
- Comparative case analysis of the different governance regulatory systems and popular transport outcomes.

The **outputs** of this research will include:

- Paper and presentation on the impacts of governance and regulation on financing for popular transport electrification in Vietnam and Kenya.
- Two stakeholder workshops after initial results and two additional workshops on results with an impact dissemination strategy.
- Policy recommendations for popular transport electrification and financing in Vietnam and Kenya.

Key stakeholders

An essential requirement of research funded on this topic is that it is carried out in close cooperation with key stakeholders in Kenya and Vietnam. This means proposals should also include a clear plan for consultation with stakeholders, working with them from the start to discuss assumptions and methods and to communicating results clearly. Proposals should also include plans for capacity building where appropriate. Stakeholders may include:

- Local and national governments of Kenya, Vietnam, and other case study countries, particularly ministries/departments of transport, energy, environment, labour, and finance
- Popular transport operators in Kenya, Vietnam, and other case study countries
- Popular transport users in Kenya, Vietnam, and other case study countries
- Owner associations, finance sectors, and co-operatives for transport operations in Kenya, Vietnam. and other case study countries

³ Savings and Credit Co-operatives: a co-operative offering financial services and affordable credit to its members – as used by many minibus owner-operators in Kenya