E-mobility roadmap for Dar es Salaam

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Institute for Transportation & Development Policy

Promoting equitable and sustainable transport worldwide.
Where are we now?
• Geographical area of
  ~1,500km²
• City population estimated
  at 5.4million
• Electricity access in urban
  areas is approximately 73%
Mobility context in Dar es Salaam

- More than 50% use motorized transport
BRT system in Dar es Salaam

<table>
<thead>
<tr>
<th>Phase</th>
<th>Distance (km)</th>
<th>No. buses</th>
<th>Expected ridership once it open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>20.9</td>
<td>770</td>
<td>873,810</td>
</tr>
<tr>
<td>Phase 2</td>
<td>20.3</td>
<td>715</td>
<td>1,208,199</td>
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<tr>
<td>Phase 3</td>
<td>23.6</td>
<td>675</td>
<td>887,551</td>
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<tr>
<td>Phase 4</td>
<td>30.1</td>
<td>590</td>
<td>698,000</td>
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<tr>
<td>Phase 5</td>
<td>26.0</td>
<td>430</td>
<td>889,000</td>
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<tr>
<td>Phase 6</td>
<td>33.5</td>
<td>105</td>
<td>233,936</td>
</tr>
<tr>
<td>TOTAL</td>
<td>154.4</td>
<td>3,285</td>
<td>3,901,496</td>
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</tbody>
</table>

Total number of buses - 3,285

Ridership - 3,901,496 residents in a daily basis
Mobility context in Dar Es Salaam

• Transport master plan advocate for transport systems which are efficiency, inclusive, affordable and environment friendly

• Transport and energy as leading mitigation sectors-NDC

• No e-mobility policy in place

• No e-vehicles charging masterplan in place
E-mobility initiatives
UEMI for SOLUTIONplus financed the e-bikes project in 2022

16 e-bikes and 5 extra batteries were imported

UEMI with support from ITDP is conducting a pre-feasibility study to scale-up e-bikes for urban deliveries
E-mobility initiatives (e-3Ws)

- 2 start-ups received seed funding
- SESCOM - assembling 3 vehicles
- Auto-Track - assembling 2 vehicles and retrofitting 1
E-mobility initiatives (e-3Ws)

- A new solution plus call for e-bajajs
- 50,000 euros will be offered to procure e-3Ws(bajajs)
- 14 companies applied
E-mobility initiatives (e-buses)

- Roadmap for e-buses by DART
- UNEP-study on BRT electrification (ongoing)
- UN Habitat-policies to support electric mobility in Tanzania (ongoing)
Opportunities for scaling up the initiatives
E-3Ws (bajajs)

Market barriers;
- Start-up costs
- Lack of public awareness
- Lack of charging infrastructure

Opportunities
- A number of emerging local companies/start-up
- Institutional framework
- National framework for deploying and scaling up electric mobility
Opportunities for deploying the e-buses

- Tanzania is rich on natural gases; Compassion Natural Gas (CNG) buses
- E-buses; On-going power generation projects ie Mwalimu Nyerere (2115MW), Shinyanga jua etc
- Charging; Phase 2 depot has dedicated space for charging
- Providing space for charging in the new depot for BRT phase 1
Opportunities for E-bikes for deliveries

- SOLUTIONplus feasibility study to scale-up e-bikes for urban deliveries in Dar
- Demand; Apart from FASTA, there are number of emerging companies/individuals into business
Fiscal measures

- Import duty of 25%, expect horse tractors and trailers which attract 10%
- Clearance Processing Fees (CPF) 0.6% of CIF value
- Value Added Tax (VAT) is 18%
- Import duty for motorbikes 15%
- Excise duty 5% of the sum of CIF-vehicles exceeding 1000cc but not exceeding 1999cc and 10% for passenger vehicles with a carrying capacity of less than 10 passengers

Reduce import duty, VAT AND CPF to e-vehicles
Reduce import duty for e-motobikes
Other measures

- Government should provide incentive to companies manufacturing and assembling electric three-wheeled vehicles
- Rent-free land for charging stations (This should be applied to land owned by the government)
- Reviewing the urban planning standards and regulations to accommodate places/points for charging and batteries disposal
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