

C40 Analysis: Policy Options for EV Deployment

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Policy Options for EV Deployment

- **Cities should design EV strategies / programs that are unique to their individual circumstances, objectives and players, but should draw on lessons from peer cities**
 - Cities with high percentages of private off-street parking
 - Develop a regulatory framework conducive for investment in charging infrastructure networks
 - Increase EV deployment by switching public fleets to EVs
 - Leverage city-owned real estate to speed up infrastructure deployment
 - Cities with low levels of private off-street parking
 - Significantly lower EV uptake is expected; may need to subsidize on-street residential charging infrastructure to accelerate the process
 - For industry development purposes
 - Perform small test-runs with the latest technology
- **City governments have limited resources to mitigate up-front EV cost but can use other policy levers to affect TCO of EVs**
 - Waiving congestion charges & parking fees, providing electricity discounts, etc.

Policy Options for EV Deployment

- **Cities should use their regulatory influence smartly to create a conducive environment for private investors of charging infrastructure – and only provide subsidies under specific circumstances**
 - Address regulatory barriers as early as possible by building political consensus
 - Mandate relevant government agency to address each issue, e.g. modifying building codes, streamlining permitting, deciding a standard in consultation with OEMs, etc.
 - Use their regulatory influence smartly to remove/mitigate barriers to create a conducive environment for private investors
 - Direct subsidies to private infrastructure providers is not required; charging networks offer a viable business opportunity
- 2 Exemptions
- Cities with large proportions of on-street residential parking where residents are undersupplied with charging infrastructure (the economics under these conditions are less appealing)
 - Cases of very high demand uncertainty
 - Can running pilot/demonstration pilot projects for proof of concept

Policy Options for EV Deployment

- **If cities or city utilities do offer charging infrastructure services, there is a strong case for subscription fee based business models to gain consumer acceptance**
 - Subscription fee models
 - Cities which run/own the charging infrastructure themselves (or by city owned utilities) should have subscription-fee based business models
- **Cities should be aware of technological uncertainties and not commit prematurely**
 - Although there are significant technology barriers, slowing down EV adaptation regarding smart grid technology does not make sense

Barriers to EV Deployment: Regional Perspective

- To date, not many lessons learned in peer jurisdictions
- No central p.o.c. within a jurisdictions
- Regional aggregate purchase agreement for EVs (currently non-existing)

