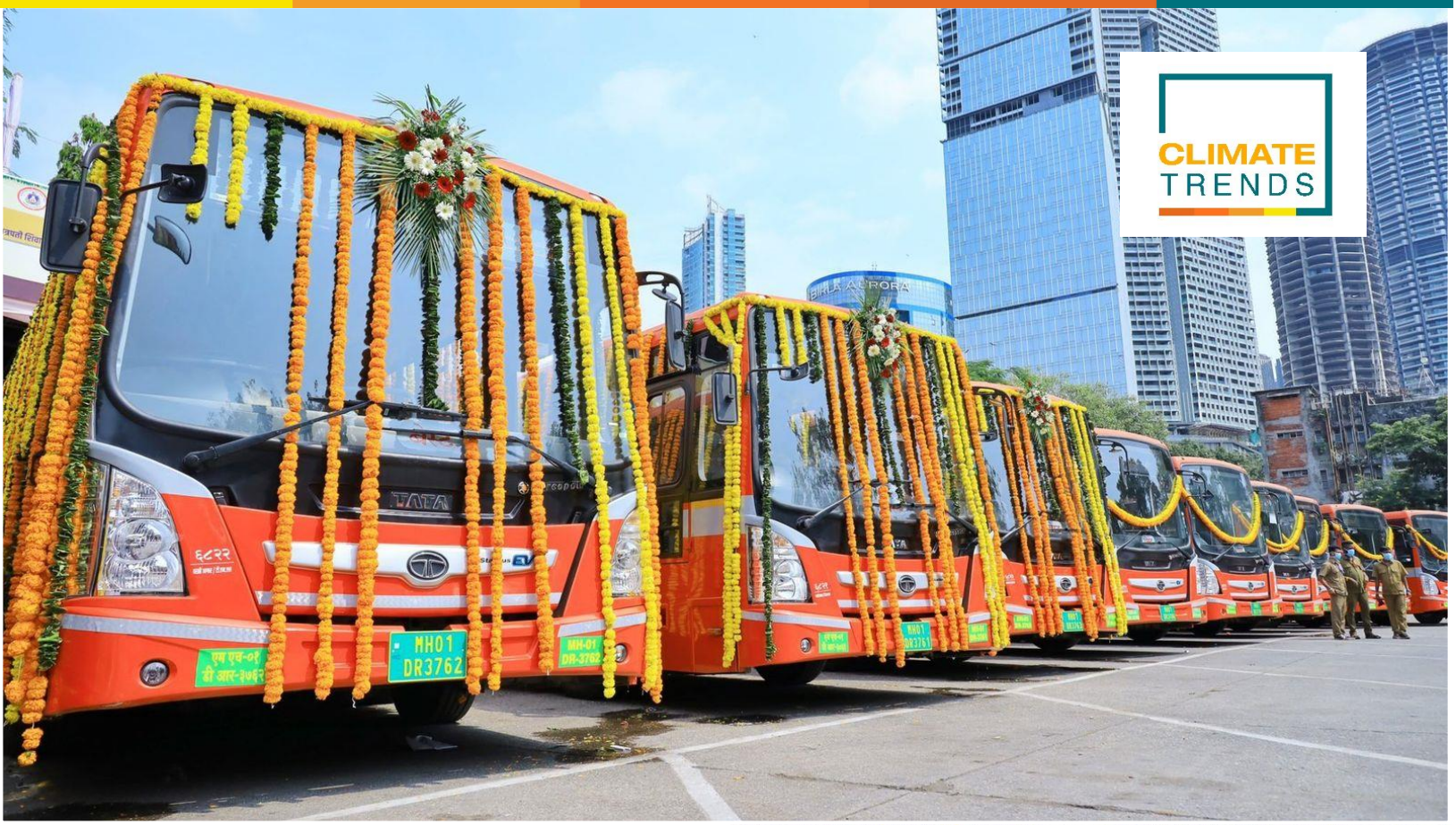

RECOMMENDATIONS TO IMPROVE DESIGN AND IMPLEMENTATION OF MAHARASHTRA'S EV POLICY

INTRODUCTION

Last year marked a notable shift in India's e-mobility space, with strong progress made across policy notifications, consumer mindset and businesses. Possibly the biggest win was India's announcement at COP26 that it would target net-zero emissions by 2070 and switch to selling only electric cars and vans by 2040. Such a commitment on e-mobility in the context of net-zero shows clear acknowledgment at the highest policy levels. Indian states have also shown strong leadership with close to 15 states announcing EV policies targeted at accelerating adoption among consumers, manufacturing and charging infrastructure.

Maharashtra announced its Electric Vehicles policy in July 2021, making its ambition clear to become a global leader in EVs. The state's policy is among the better designed and more aggressive ones, with the aim of retaining Maharashtra's leadership in the automotive manufacturing sector in India and emerging as one of the leading manufacturing and investment hubs for the EV ecosystem globally.

In a snapshot, the policy aims to ensure up to 10% of all new registered vehicles in Maharashtra to be battery electric and at least 25% of the urban fleet operated by fleet aggregators/operators in the state to transition to EVs by 2025. It also aims to boost charging infrastructure across cities and national highways and offers attractive subsidies and incentives to consumers and automotive manufacturers to boost sales and manufacturing.

The Maharashtra EV policy has been designed in a way to address three critical requirements - create initial demand for EVs, lower up-front costs and provide a competitive edge to EV technology compared to its counterpart i.e. ICE vehicles. Since its launch, the state witnessed a boost in EV sales - 30% of all EVs sold across India in 2021 were in Maharashtra, mostly between July and December. One fifth of all electric two-wheeler sales in the country came from Maharashtra. This proves that the policy has triggered the market and inspires confidence in its design.

However, to keep the momentum going, attention is needed on a few segments and implementation mechanisms. The initial months of the launch are an opportunity to assess market response, invite feedback from stakeholders and identify gaps and teething troubles to course correct and fine tune the policy.

With the objective of identifying ways to enable better and faster implementation of the Maharashtra EV policy, Climate Trends organised a virtual workshop with representatives from industry, manufacturing, charging, OEMs and NGOs to deliberate upon three primary areas.

The workshop was attended by 16 individuals across these stakeholder groups, who discussed the following topics:

1. **Assessing the merits and gaps in availing the policy benefits**:
   Despite setting ambitious targets and putting in place provisions to enhance adoption of electric vehicles in the state, subsidies and exemptions on offer to consumers and supply-side stakeholders have largely remained on paper. We aimed to assess the roll out of subsidies, the implications they hold for the e-mobility transition and how gaps in implementation could be plugged.

2. **Expanding the policy benefits to Tier 2 and Tier 3 cities**: Maharashtra's EV policy has currently been developed with a city-centric approach, focusing on important urban centres and routes. This approach, while useful to kick off adoption, cannot alone lead to sustained transition to electrified transport in Maharashtra, where nearly two-thirds of the population resides outside the state's five largest cities. A self-sustained EV ecosystem in the state must include tier 2, tier 3 and non-urban areas of the state. Such an endeavour for expansion will require specific and targeted efforts to expand the EV ecosystem beyond the state's largest cities.

3. **Ease of manufacturing and distribution in Maharashtra**: The localisation of supply chains is a key factor influencing the adoption of EVs. The race for adoption of EVs in India runs side-by-side a race to manufacture as well. With many states coming up with EV policies aimed at consumers and manufacturers alike, we attempted to assess Maharashtra's manufacturing ecosystem and provisions as it pertains to manufacturing.

In this document, we present a set of recommendations that were derived from the insights of this workshop, which can improve the policy's design and accelerate implementation.

RECOMMENDATIONS

Recommendation 1: Extend the duration and applicability of early bird discounts

Currently, the early bird discount does not cover all EV types and is limited by battery capacity of 30kWh. Allowing this discount on all EVs without limitation of battery or vehicle type will open up the market for many customers. Further, the duration of early bird discounts should be extended for at least another two years, until the external EVs ecosystem is strong enough to encourage sales without financial incentives.

An additional observation that emerged during the workshop was the constraint of linking Aadhar cards to subsidy provisions. Maharashtra's current EV mandate allows for a one-time availing of subsidy benefits per Aadhar Card. While single-linkage is a useful start to streamlining, and ensures distributed policy benefits, there is currently no differentiation based on vehicle segments which can discourage wider adoption across multiple vehicle segments. This limitation is more pronounced for fleet operators who are effectively left out of the subsidy provision. This constraint can effectively be resolved through a relaxation of the single-linkage condition to accommodate EV adoption in multiple segments. Special policy provisions for fleet operators to avail subsidies must also be considered for shared transport, delivery and cargo use-cases.

Recommendation 2: Improve access to information about the policy and process of availing incentives and subsidies.

Currently, availing any benefits under the Maharashtra EV policy is a manual process, and access to information about the policy for consumers and other stakeholders is tedious. There is a need to completely digitise the information and process of availing EV policy benefits, with clarity on how to apply and claim the benefits for consumers, manufacturers, car dealers and OEMs. Further, any delay in processing and reimbursing subsidies for car dealers and OEMs can lead to cash flow issues and cost heavily to small businesses, and therefore needs to be fast tracked. A turn-around time of 15-20 days would be ideal.

Recommendation 3: Extend and adapt the Maharashtra EV policy across the state to tier 2 and 3 cities.

Currently, the policy focuses on 6 major cities with aggressive sales and charging infrastructure targets. However, tier 2 and 3 cities are huge markets for EVs, particularly in the two-wheeler segment. But in the absence of a strong EV ecosystem such as charging infrastructure, lack of reliable power, after sales and service networks, and awareness about the total cost of operations of EVs compared to ICE vehicles, this potential market is remaining untapped. Therefore, it is recommended that the Maharashtra EV policy be extended to tier 2 and 3 cities, with some changes to the benefits offered, in line with challenges faced on-ground. For example,

- To address issues of grid stability, renewable based grid storage backups could be incentivized in charging stations.
- Tier 2 and 3 is a more price sensitive market compared to tier 1 cities, therefore, offering greater financial incentives to bring down upfront cost would be an attractive proposition for customers.
- Consumer focused awareness campaigns to highlight the benefits of EVs compared to ICE vehicles, particularly from the perspective of total cost of ownership, would help in socialising this new technology in these cities.

Recommendation 4: Increase incentives to support ease of manufacturing in Maharashtra

The EV policy has several benefits for customers but the same is not available at the same scale for OEMs and manufacturers. The Public Linked Incentive (PLI) scheme has several grey areas. For example, it covers Advanced Chemistry Cell Battery Manufacturing but there are no rebates and incentives for procuring raw material. The manufacturing industry is heavily dependent on design and R & D facilities which are expensive to access for companies. EV OEMs need test tracks to test their prototypes, battery manufacturers need advanced chemistry laboratories and early stage companies need incubation facilities with advanced design and prototyping infrastructure to deliver quality products which are manufactured locally. Easy access to these facilities will go a long way in improving and bolstering the EV manufacturing ecosystem in the state and attract fresh supply-side investments.