



UK PACT
(Partnering for Accelerated Climate Transitions)

National Dissemination Workshop on

Electrification of Public Transport and Intermediate Public Transport in Indian Cities

26th April, 2022

Session 2: IPT Electrification Strategy for Mahesana

Strategy for 3W electrification

Dr. Shalini Sinha, Mr. Khelan Modi

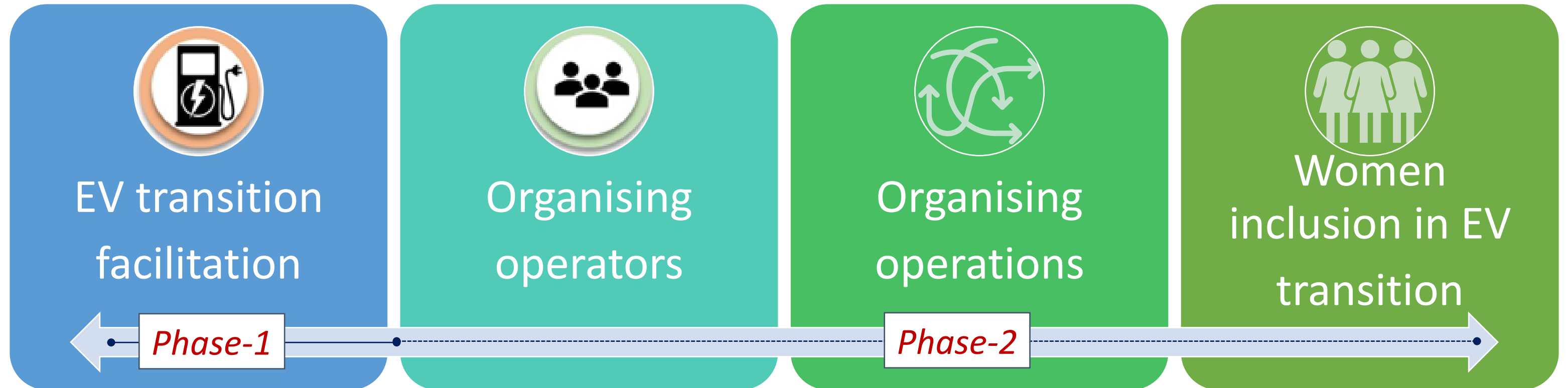


Key inputs

- Low awareness of electric vehicles in Mahesana
- Based on operational and financial considerations, E-autos a feasible option
- User concerns on service quality

Strategy Formulation

Enabling e-3W transition and improving service levels of the shared autorickshaw operations



Facilitation of EV transition

Stakeholder network formation

Awareness creation and knowledge dissemination

Identification of policy and operational constraints

Securing stakeholder buy-in

Stakeholder network formation

1. **Advisory Group Formation** at the initial stages of the project
2. **Partnership with electric vehicle manufacturers** – information on e-vehicles; participation in workshops – demonstration and trial runs of vehicles
3. **Women inclusion in e-3W operations:** Discussions with Director, Mission Mangalam, **DRDA** responsible for women's empowerment in rural areas of the district; Manager, **NULM** at Mahesana; **local NGO** which works with women groups and the OEMs.

Members	Role
District Magistrate and Collector, Mahesana	Chair
District Development Officer	Member Secretary
Superintendent of Police, Mahesana District or senior representative from Traffic Police	Member
Residential Additional Collector, Mahesana	Member
Chief Officer, Mahesana Municipality	Member
Regional Transport Officer (RTO) Mahesana	Member
Representatives from Auto/Taxi Association	Member
Representatives from Uttar Gujarat Vij Company Ltd (UGVCL)	Member
Executive Director, CoE-UT, CRDF	Member

Awareness Creation & knowledge dissemination

- a. Project need and objectives of the study
- b. Preliminary shared operations of autorickshaws in Mahesana - major routes, fares, operating hours
- c. Policy context of electrification - Government of India targets, schemes and Govt of Gujarat policy
- d. Overview of electric 3 Wheelers in India
 - a. charging technology (plug-in, swapping)
 - b. operating models for electric autorickshaws observed in India (OEM owned, auto association owned, driver owned etc.)
- e. Benefits to drivers/operators, commuters and the environment



Awareness Creation & knowledge dissemination

28th September 2021 – Awareness Workshop cum Exhibition



મહેસાણા જિલ્લા કલેક્ટરશ્રી અને
નગરપાલિકા, મહેસાણા ના સહયોગ થી,



મહેસાણા જિલ્લો
MAHESANA DISTRICT



“ચાલો ભવિષ્ય માં ઇલેક્ટ્રિક
રીક્ષા દ્વારા પ્રવેશીએ”

આમંત્રણ

જાગરૂકતા કાર્યક્રમ અને પ્રદર્શન

૨૮, સપ્ટેમ્બર ૨૦૨૧

સવારે ૧૦:૦૦ થી સાંજે ૦૫:૦૦

ટાઉન હોલ, મહેસાણા



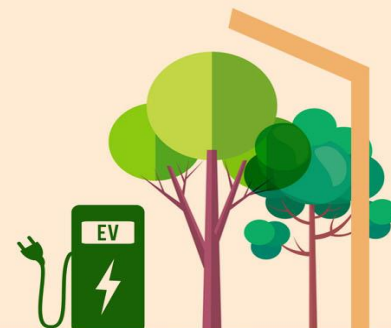
ઉદ્ઘાટક

શ્રીમતી વર્ષાબેન પટેલ
નગરપાલિકા પ્રમુખ,
મહેસાણા

સવારે 10:30 વાગ્યે

ચાલો ઇલેક્ટ્રિક ઓટો રિક્ષા ને ઓળખીએ

- ઇલેક્ટ્રિક ઓટોરિક્ષા ના મોડલ
- ઇલેક્ટ્રિક ઓટોરિક્ષા ની ટેકનોલોજી
- ઇલેક્ટ્રિક ઓટોરિક્ષા ચલાવાનો ખર્ચ
- ઇલેક્ટ્રિક ઓટોરિક્ષા મા મળતી સબસીડી



મહેસાણામાં ઇલેક્ટ્રિક રીક્ષા માટે ની કાર્ય યોજના પર વર્કશોપ અને પ્રદર્શન

તારીખ- ૨૮ સપ્ટેમ્બર ૨૦૨૧ | સમય- ૧૦: ૩૦ વાગ્યાથી | સ્થળ- ટાઉન હોલ, મહેસાણા

વર્કશોપ અને પ્રદર્શન અનુસૂચિ

૧૦:૩૦ થી ૧૧:૦૦ - નોંધણી

૧૧:૦૦ થી ૧૨:૦૦

સ્વાગત અને પ્રાસ્તાવિક સંબોધન,
ડો. શાલિની સિંહા, એક્ઝીક્યુટીવ ડાઇરેક્ટર,
સેન્ટર ઓફ એક્સેલેન્સ ઇન અર્બન ટ્રાન્સપોર્ટ, સેપ્ટ યુનિવર્સિટી

દીપ પ્રાગટ્ય સમારોહ

પ્રારંભિક સંબોધન,
શ્રી પાર્થરાજસિંહ ગોહિલ, પોલીસ અધિક્ષક, મહેસાણા

વિશેષ સંબોધન,
ડો.ઓમ પ્રકાશ (આઈ.એ.એસ), જિલ્લા વિકાસ અધિકારી, મહેસાણા

વિશેષ સંબોધન,
શ્રીમતી વર્ષાબેન પટેલ, નગરપાલિકા પ્રમુખ, મહેસાણા

મુખ્ય સંબોધન,
શ્રી ઉદિત અગ્રવાલ (આઈ.એ.એસ), કલેક્ટર અને જિલ્લા મેજિસ્ટ્રેટ, મહેસાણા

ઇલેક્ટ્રિક રિક્ષા વિષે માહિતી,
શ્રી ગૌતમ પટેલ અને શ્રી અખિલેશ મગલ

ઇલેક્ટ્રિક રીક્ષા બનાવનાર કંપનીઓ દ્વારા ઇલેક્ટ્રિક રિક્ષા મોડેલોની રજૂઆત

પ્રદર્શન ઉદ્ઘાટન
શ્રીમતી વર્ષાબેન પટેલ, નગરપાલિકા પ્રમુખ, મહેસાણા

૧૨:૦૦ થી ૦૫:૦૦

પ્રદર્શન અને અલ્પાહાર

Workshop coverage

Presentations covering:

- Addresses by Municipality Pramukh, Collector, District Development Officer, Superintendent of Police
- Operational economics of E-3Ws vis-à-vis CNG autos
- E-3 wheeler models available in the market
- Charging technology & Battery prices
- Availability of subsidy and process for availing subsidies

Exhibition:

- Display of the e-vehicle models by vehicle manufacturers
 - ATUL
 - Piaggio
 - Mahindra
 - local manufacturer AARGEE

Awareness Creation & knowledge dissemination



28th September 2021 – Awareness Workshop cum Exhibition

Workshop - Draft Strategy and Action Plan

Objectives

1

To facilitate experience sharing of E-Autos drivers with CNG auto drivers

2

To create awareness on important characteristics of e-vehicles with CNG drivers -purchase cost, subsidy, financing and maintenance subsidy and E-auto operations

3

To provide platform to have open question-answer session with stakeholders/ experts



Draft Strategy and Action Plan Workshop

"Let's, learn about Electric Rickshaw from fellow Electric Rickshaw drivers"

Benefits of Electric Rickshaw

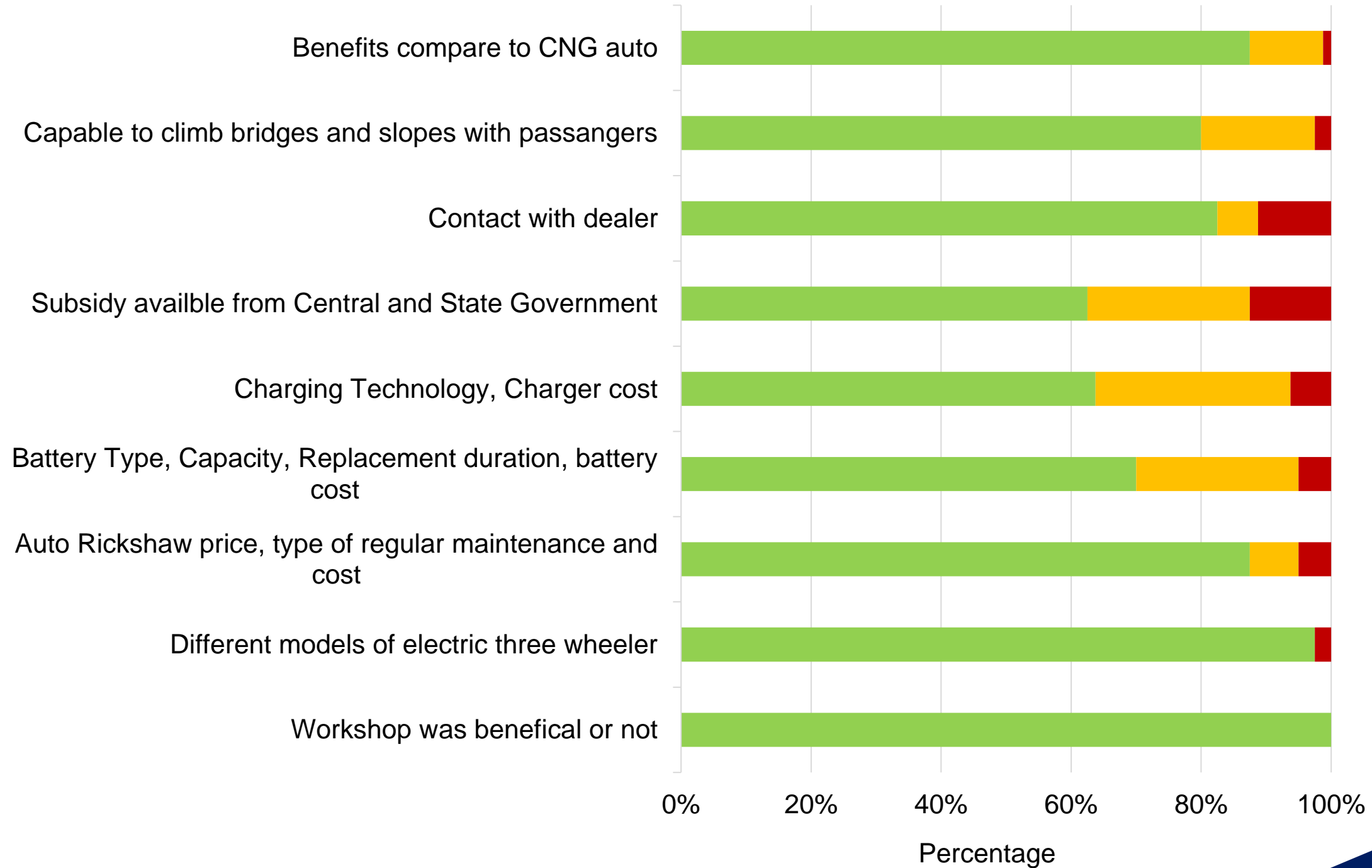
- Safer, Cleaner, More Economical
- Low Maintenance and Clear Profit
- CNG Rickshaw's Maintenance = Electric Rickshaw's EMI
- Saves the environment and money
- Pollution Free Journey




Post workshop – Driver Surveys

- ❑ About 80 drivers were surveyed for their understanding regarding various aspects of E-3wh.
- ❑ Concerns/ questions were also addressed during discussion with the drivers.
- ❑ **60% of the drivers plan to purchase an electric auto in the near future (within 2 years)**
- ❑ **About 12 drivers have purchased new E-Autos (as confirmed with the OEM Mahindra) after September 2021.**

■ Very Useful ■ Useful ■ Not Useful



Identification of policy and operational constraints

1. Long duration for release of Government of Gujarat subsidy
 2. No linkage of e-vehicle purchase with subsidy registration
 3. Range anxiety – no opportunity charging locations
 4. Access to finance from formal sector banks
 5. Exchange scheme for old vehicles
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Securing stakeholder buy-in

Chief Officer, Municipality

- Municipality is considering development of charging points with the required infrastructure at major auto stands in the city.
- Driver Association members can reach out to the Municipality regarding any concerns on IPT infrastructure in the city area.

Fire Officer, Municipality

- With the support of the Auto association and drivers, Bus stands and Auto stands can be co-planned and designed to facilitate integration of these services.

Area Business Manager, Mahindra,
Mahesana

- Mahindra will try to provide loans to drivers whose CIBIL score was affected as a result of Covid-19.
- Mahindra will raise concerns about high interest rate internally and consider reducing the same.

RTO Officer, Mahesana

- Association members and drivers can visit the RTO office any time to get clarity on electric vehicle registration processes and charges.

Next Steps

1. Locations for charging points and possible operating models
2. Strategies for inclusion of women in e-3W operations
3. Good practice city visits for Mahesana officials/IPT representatives