# ANNUITY HYBRID E-MOBILITY (AHEM)

# OVERVIEW

### REFORM

Electric Vehicle are a technically reformed and improved version of conventional automobile sector and having blind spots and lack of clarity on standards and policy are obvious slowdown in its adoption and growth. We focus to bring small but scalable and adaptable changes with proven ecosystem as intake for governance reforms and ease in doing business. Clarification on licensing of charging stations to generic standards for charging stations, we promote these reforms in physical numbers of such facilities and create actual numbers of beneficiaries and potential future EV buyers using public transport and fleets of electric vehicles to travel between Jaipur Delhi Agra (500 km) without buying vehicles.

**PILOT UNDER** 

FAME - II

**PSU OWNED** 

CAPEX

**UNDER CSR** 

**PF PSUs** 

**BANK ADVANCE** 

**TO PSU** 

FDI & PRIVATE

**ENTITY** 

**FINANCING OPTIONS** 

Fame - II Pilot funding can be

used for initial 500 kms

Stations can be allocated Interested and Active PSUs

Its always better to own one

station than talking about 100

Despite of being a miniscule

advance it would scaleup

Not open for private funding

yet but can't be ruled out

### PERFORM

E-Mobility comes with its own range of challenges from individual EV buying decision to institutional challenges to facilitate them on road. We perform to synchronize and convert each of them in ecosystem and then minimize the lap with Single Window Clearance framework. Thus, where majority of E-Mobility stakeholders weighing first mover disadvantage and calculating the thrust- they will need to reach to business trajectory, we accumulate advantages that comes with initiators only and reduced number of days required for setting up 500 Km ecosystem from 50 days to 35 days and still performing on it.

### TRANSFORM

Agra-Delhi-Jaipur will be first 500 km electric vehicle corridor by ASSAR for Ease of Doing Business in other 12 Corridors then India will be first country to get Anti-Theft System (ATS) for Electric Vehicle Fleets, total time needed for setting up a new charging station in 50 km radius of such Electric Corridors has reduces to 36 days from 50 days, maximum waiting time for an breakdown electric vehicle on #NHforEV2020 highway is 30 minutes and by year 2020 India aim to convert all 12 highways market by MoP into electric corridors.

SINGLE WINDOW CLEARANCE

All Relevant Permits & Permissions for setup

Reducing timeline for compliance

Multi - Stakeholder Negotiation agreements & Documentation for all

Document available for on board partners & NHforEV2020 suppliers

SWC available for NHEV2020 Partner from 30<sup>th</sup> May 2019

#### **About AHEM**

In financial terminology Annuity Hybrid E-Mobility (AHEM) means that payment is made to on-boarded partners and suppliers for CapEx in a fixed amount for a considerable period of 12 months (Annuity) to earn OpEx and then in a variable annuity amount for expansion in the remaining period for coming phases based on the fleet they increase annually. Advantage of AHEM is that it gives enough liquidity to the suppliers and owner PSU and the financial risk of the bank is shared by the PSU and insurance companies.

A user focused - technology and interpretability based bidding between onboarded suppliers and partners takes place to ensure the most suitable also constitutes self sustainable OpEx for the ecosystem before awarding work / service or supply contract. Allocation of stations to interested PSU is to be done by their parent ministries as per their willingness and interest in E-Mobility. Allocated PSU or Investor entity would have liberty to call for presentations from on-boarded NHEV components partners for their allocated station while to finalise common service for ecosystem they shall constitute consortium to see presentations.

NHEV stations will have their own self sustainable OpEx model post construction and installation of products and services with annual AMC and warranties. They shall only be liable to pay Electricity consumption charges when they charge E-vehicles otherwise they would have OpEx revenue from their on site utilities. Surplus revenue generated by stations from utilities will be mixed into State and Central PSU Annuity contribution for any expansion or capacity up-gradation to cater more EV fleets, if not required will be used for reaching to their breakeven. Such distinguish ecosystem for choosing partners, products and service suppliers demands modification in traditional invitation, screening, bidding, procurements and contract models therefore its called Annuity Hybrid E-Mobility Model. Initially its focused on Self-Sustainability rather than focusing most low cost cost quoted, it makes it slightly complex in choosing for first stretch but at the same time takes 75% lesser-time in subsequent expansion beyond Agra and Jaipur with comparatively cheaper cost with availability of Model RFP from EODB Prototype stretch. It aims to include inputs, constraints, limitations, challenges, viability, availability and liability of stakeholders we received from various on-board partners, supporting govt entities, knowledge-group and working group professionals, technocrats over last one year and present it as win - win situation for all like Hybrid Annuity Model (HAM) replaced advanced version of the Model Concession Agreement (MCA) Build Operate Transfer (BOT) and transformed National Highways construction speed.

# **ECO-SYSTEM ENABLERS**

Documentation open 1<sup>st</sup> May to 31<sup>st</sup> June 2019

Mobile App and Digital Interface

Skilled - Man Power

EV - Digital Wallet

Station Lightening

Design Partner

Advertising Partner

# FOR ELECTRIC VEHICLE USER, FLEET OPERATOR & CHARGING STATION OWNER

Max 30 Minutes Backup TAT for EV Breakdown on National Highways and Agra - Jaipur Corridor

Battery Leasing Model to cutdown EV Cost upto 45%

**Self Drive EV Fleet Management and its Financing Model for CAB/BUS Operators of Delhi Agra Jaipur** 

User App and Vehicle Mounted Integration for Range Anxiety

Digital interface for Charge Point Station Operator

Luxury EV Network on Jaipur – Delhi – Agra for tourists

Cutting down Charging time on Highways beyond existing technological limitations

# CATEGORIES COMPONENTS

EV Manufacturer BUS / HMV

EV Car / LMV Manufacturer

EV 2 Wheeler Auto 3 Wheeler

Battery Operator / Manufacturer

Charger / Charging Infra Providers

Electrification Contractor

# PRE - BID WORKSHOP FOR PRODUCT COMPONENTS AND ECO-SYSTEM SERVICE PROVIDERS

Luxury EV Network Financing on Jaipur - Delhi - Agra

Fleet Management and its Financing Model for Cab / Bus Operator

Financing Model for Battery Leasing and Service Provider Companies

Electric Vehicle Registration (EVR)
System and Anti-Theft System (ATS)

OpEx from Promotion,
Advertisement and Enrollment

Cost

(AHEM)

NHforEV2020 Solar Powered Charging Stations for future

Govt initiatives to act as growth drivers for E-Mobility

Priority in allocation to Govt or Private entities for CapEx

# Time Line - 2019

| April 2018                   | May                            | June                        | July                            | Aug                          | Sep                              | Oct                      | Nov                                    | Dec                         | Jan                         | Feb                      | March 2019                                      |
|------------------------------|--------------------------------|-----------------------------|---------------------------------|------------------------------|----------------------------------|--------------------------|--|-----------------------------|-----------------------------|--------------------------|---|
| Background<br>Initiative     | Industry<br>Research           | Challenge<br>Identification | Stakeholder<br>Interest         | Component<br>Procurement     | Standard<br>Framework            | Survey &<br>Location Map | Real nos. of<br>Convertable<br>Traffic | Ecosystem<br>EOI            | Construction &<br>Civil SWC | Keynote<br>Inauguration  | Construction &<br>Installation<br>Compatibility |
|                              |                                |                             |                                 |                              | Time Li                          | ne - 2020                |  |                             |                             |                          |   |
| April 2019                   | May                            | June                        | July                            | Aug                          | Sep                              | Oct                      | Nov                                    | Dec                         | Jan                         | Feb                      | March 2020                                      |
| Annuity Hybrid<br>E-Mobility | Project Timeline<br>& Workshop | Closing<br>Component        | Final Presentation to Investors | Allocation of Station & Work | Installations &<br>6 M Trail Run | State Intro<br>at Jaipur | Trail Run -<br>Ecosystem               | Trail Run<br>Testing Buffer | State Intro<br>at Agra      | Reserved for Contingency | Global Investor<br>Launch at ISUW               |