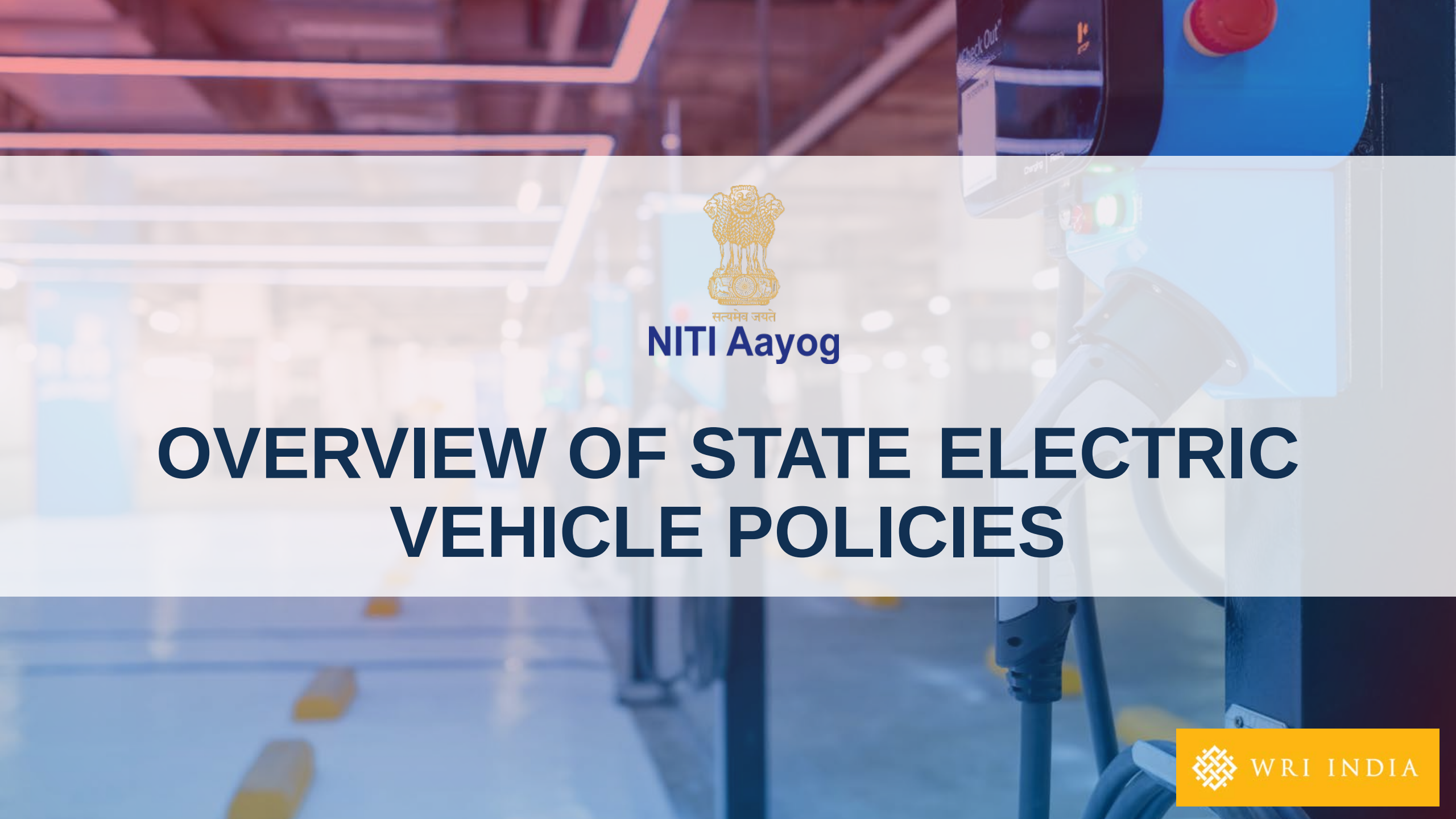

सत्यमेव जयते

NITI Aayog

# OVERVIEW OF STATE ELECTRIC VEHICLE POLICIES

WRI INDIA

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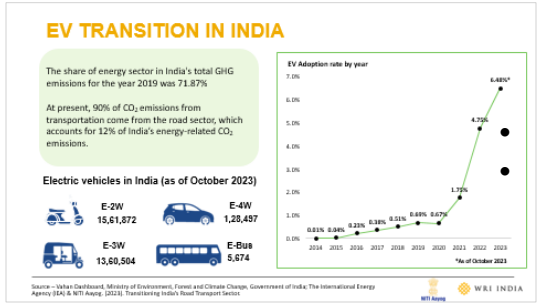
## EV TRANSITION

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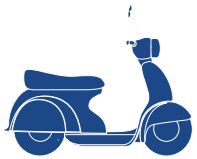
WRI INDIA

# EV TRANSITION IN INDIA

The share of energy sector in India's total GHG emissions for the year 2019 was 71.87%

At present, 90% of $CO_2$ emissions from transportation come from the road sector, which accounts for 12% of India's energy-related $CO_2$ emissions.

## Electric vehicles in India (as of October 2023)

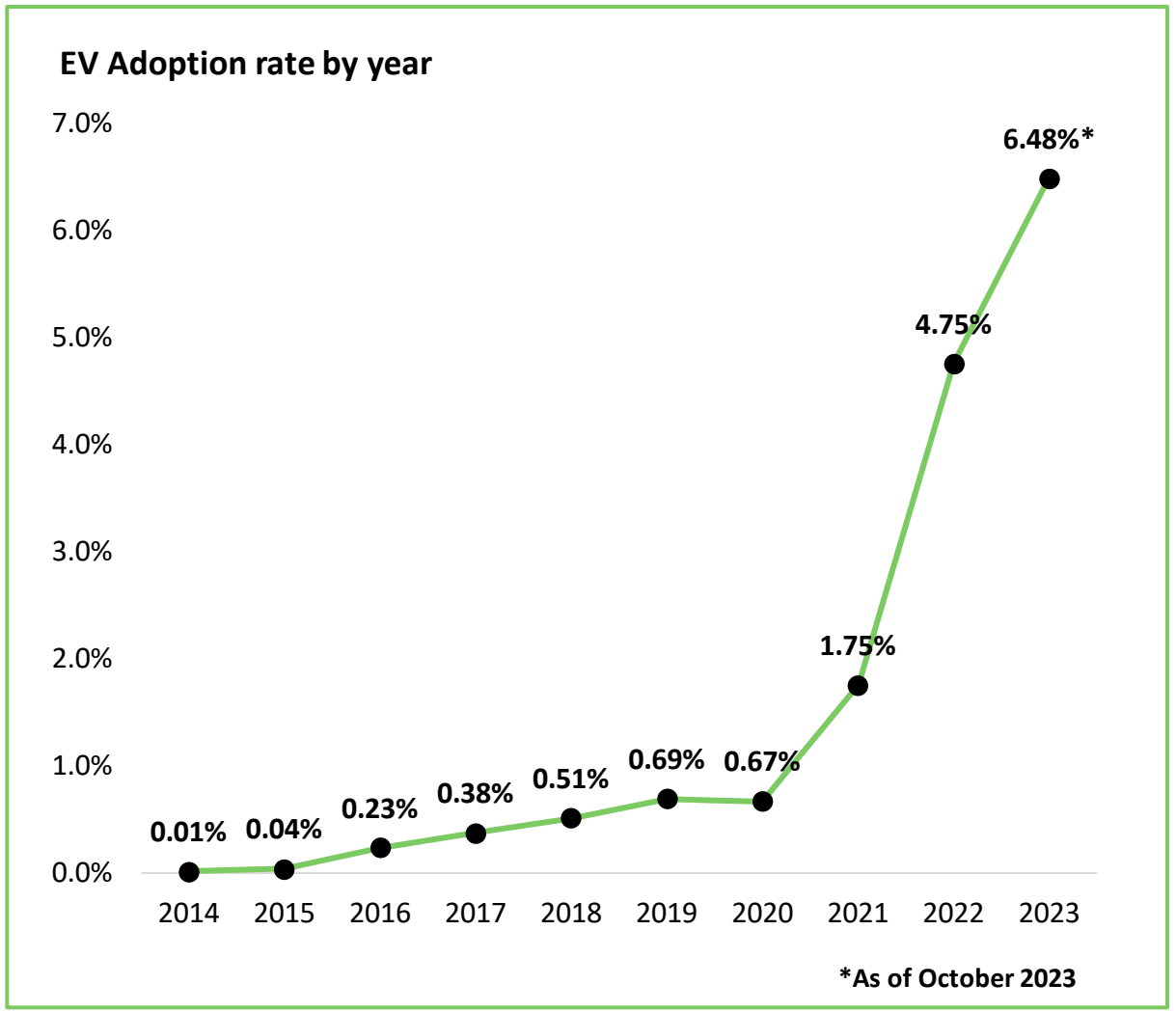


**E-2W**
**15,61,872**

**E-4W**
**1,28,497**

**E-3W**
**13,60,504**

**E-Bus**
**5,674**




Source – Vahan Dashboard, Ministry of Environment, Forest and Climate Change, Government of India; The International Energy Agency (IEA) & NITI Aayog. (2023). Transitioning India's Road Transport Sector.

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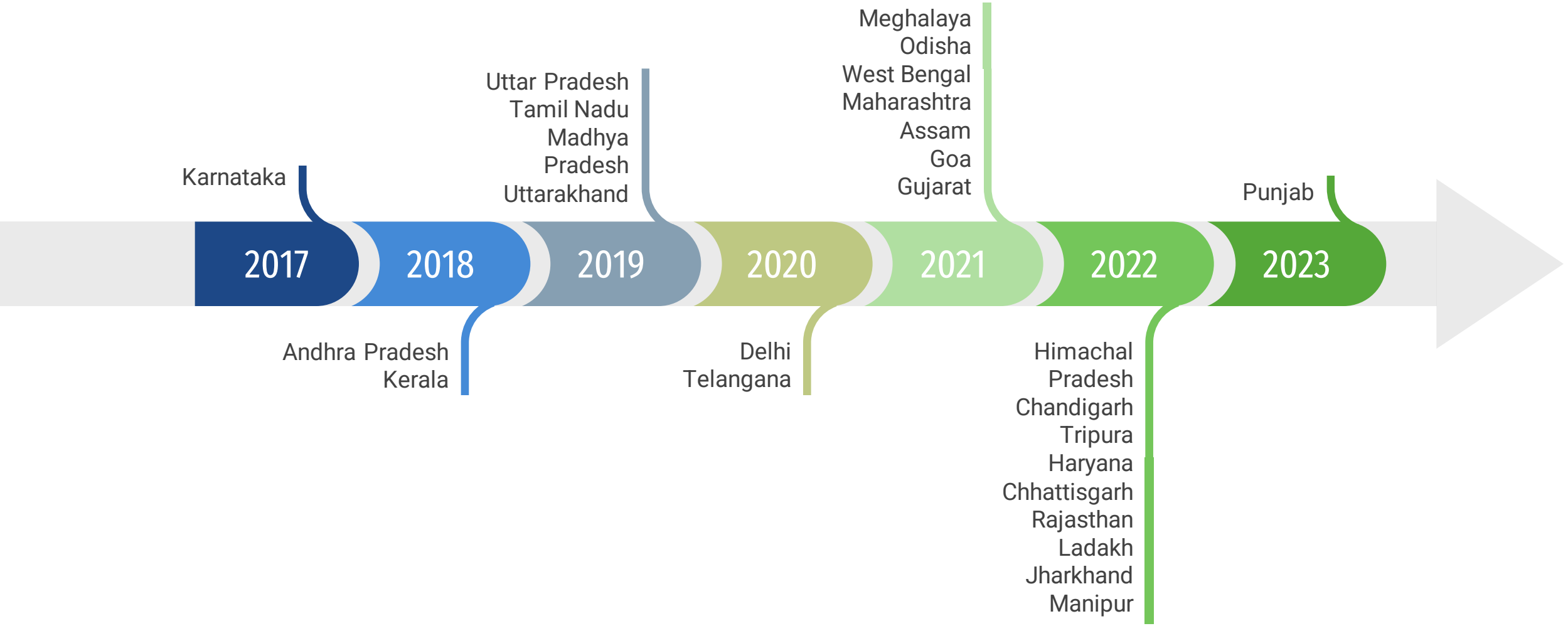
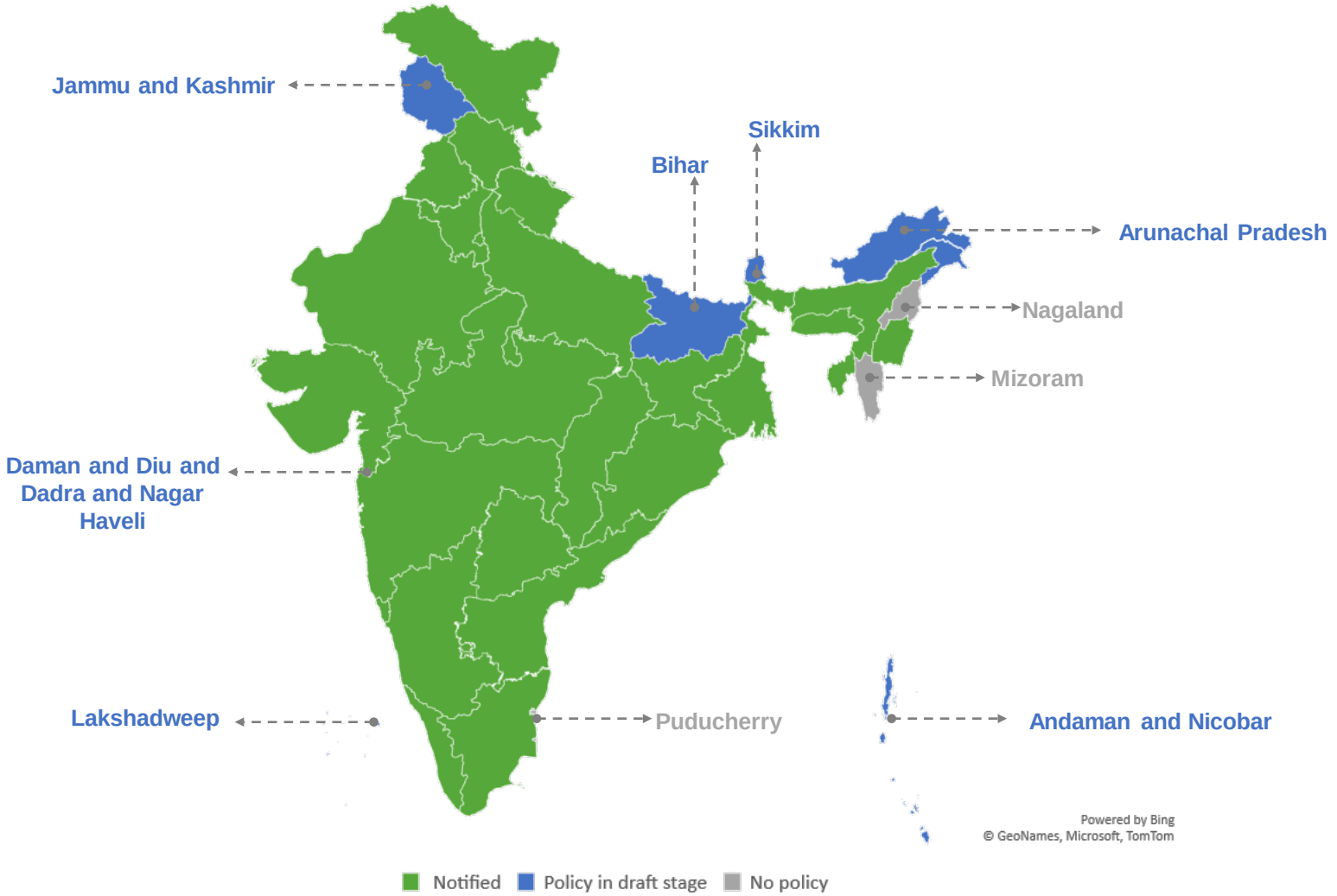
# TIMELINE – STATE EV POLICY NOTIFICATION



# STATUS - STATE EV POLICIES




**26**
States/UTs with Notified EV Policy

**7**
States/UTs with Draft EV Policy

**3**
States/UTs with No EV Policy

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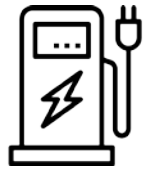
# INCENTIVES

Every State/UT Electric Vehicle (EV) policy divides incentives and measures into three categories – consumer demand incentives, charging infrastructure incentives, and industry incentives

## Consumer Demand Incentives

State-level consumer demand incentives include purchase subsidies, redemption on road tax and scrapping and retrofitting incentives



## Charging Infrastructure Incentives

State incentives for EV charging include a financial incentives, regulations and bylaws as well as availability of Consumer interface for EV charging.

## Industry Incentives

The State EV policies feature industry incentives ranging from fiscal to legal support extending incentives to research, innovation, development, employment generation, and skill enhancement, providing holistic support to the ecosystem.

# CONSUMER DEMAND INCENTIVES


Source -State EV Policies

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# DEMAND - EV SUBSIDY

**States providing EV subsidy:**

**₹7,000 Cr (approx.)**

Total amount of purchase subsidies offered by all states.

| States | E-Cycle | E-2ws | E-3ws | E-4ws | E-buses | Estimated Total Subsidy (₹) |
|---|---|---|---|---|---|---|
| **Chandigarh** | ₹3,000 for 25,000 e-cycles | ₹30,000 for 10,000 vehicles | ₹30,000 for 1,000 e-autos and e-carts | ₹5,000 for 2,000 cars and 1,000 Goods carrier vehicles | - | ₹67,50,00,000 |
| **Punjab** | ₹4,000 for 5,000 e-cycles | - | ₹3,000 for 10,000 e-3ws | ₹3,000 for 5,000 Goods carrier vehicles | - | ₹82,75,00,000 |
| **Maharashtra** | - | ₹5,000 for 1,00,000 vehicles | ₹5,000 for 15,000 e-autos | ₹5,000 for 10,000 cars and Goods carrier vehicles | 10% of the vehicle cost for 1,000 e-buses | ₹535,00,00,000 |
| **Tamil Nadu** | ₹5,000 for 6,000 e-cycles | ₹10,000 for 6,000 vehicles | ₹10,000 for 15,000 e-autos | ₹10,000 for 3,000 vehicles | ₹20,000 for 300 e-buses | ₹225,00,00,000 |
| **Jharkhand** | - | ₹5,000 for 1,00,000 vehicles | ₹5,000 for 15,000 e-autos | ₹5,000 for 10,000 vehicles | 10% of the vehicle cost for 1,000 e-buses | ₹437,00,00,000 |

# DEMAND – OTHER PURCHASE INCENTIVES

**Purchase incentives include:**


**Road tax Exemption –** Telangana offer 100% exemption on road tax for 2,00,000 E-2ws, 20,000 E-3ws,5,000 E-4ws and 500 E-buses.

**Scrappage and retrofitting incentives** -Delhi offers a scrapping incentive of ₹ 5,000 and ₹ 7,500 for purchase of E-2ws and E-3ws respectively and Telangana offers a retrofitting incentive at 15% of the retrofitting cost, capped at ₹15,000 per vehicle, for 5,000 e-autos.

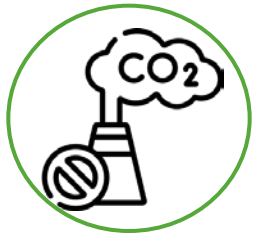

**Access to EV Financing-** Delhi offers an interest subvention of 5% for the commercial e-3W, e-cart, and e-carrier segments for loans from the Delhi Finance Corporation (DFC) and other empaneled finance providers.

# DEMAND - OPERATIONAL INCENTIVES

**Operational incentives include:**

**Open permit systems -** Odisha offers open permit for e-autos.


**Parking incentives -** Madhya Pradesh provides a 100% exemption from parking charges for EVs

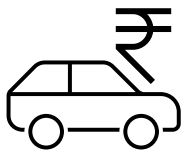



**Zero emission zone or Green -**Punjab proposed to set up Special green zones in target cities to promote e-mobility


**Toll fee waivers -** Bihar offers toll fee waivers for EVs on select state highways.

# DEMAND - ICE DISINCENTIVES

**ICE CESS**



**FUEL CESS**

Other effective means of fostering electric vehicles is use of disincentives to discourage the use of ICE vehicles. Often these incentives are used to cross-subsidize electric vehicles.

Pollution cess and Clean fuel cess are disincentives on ICE vehicles which can significantly help in increasing adoption rate of EVs. Pollution cess, a one-time fee, is collected during the registration and renewal of ICE vehicles, while clean fuel cess is imposed on the sale of petroleum fuel.

## ANDAMAN AND NICOBAR ISLANDS

Andaman and Nicobar Islands are implementing **pollution cess** rates as follows: ₹800 per vehicle for 2-wheelers (ICE), ₹15,000 per vehicle for 3-wheelers (ICE), and ₹4,000 per vehicle for LMV and other vehicles (ICE). Additionally, there is a **clean fuel cess** of 0.5 per litre for petrol and 0.75 per litre for diesel.

## DELHI

Delhi levies **cess** on the sale of diesel at 25 paise per litre. 50% of the collected amount is transferred to the State EV Fund monthly.

# CHARGING INFRASTRUCTURE INCENTIVES


Source -State EV Policies

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# CHARGING INFRASTRUCTURE INCENTIVES

**Charging Infrastructure development initiatives include a mix of financial incentives, and planning and regulatory frameworks that support the deployment and integration of EV charging within the existing electrical systems.**

**Capital Subsidies –**

- Chandigarh provides subsidies of up to ₹6,000 per private charger for the first 30,000 chargers.
- Chhattisgarh provide 100% tax exemptions on the purchase of batteries for battery swapping stations.

**Building regulations and bylaws –**

- Delhi's building bylaws mandate that a minimum of 20% of parking capacity in residential buildings or workplaces must be designated as 'EV ready,' with pre-installed conduits and power supply infrastructure, as outlined in the EV policy.
- In Andhra Pradesh, all new permits for commercial complexes, housing societies and residential townships with a built-up area 5,000 sq.mt and above will mandate charging stations.

**Concession on EV charging tariff –**

The lowest EV charging tariff rates in the country:

- Chandigarh (₹3.6/unit)
- Gujarat (₹4.1/unit)

# CHARGING INFRASTRUCTURE INCENTIVES

**Subsidies for Renewable energy sources –**
Rajasthan provides 50% concession on the allotment of land for the first 500 renewable energy-based EV charging stations.

**Consumer interface for EV charging information –**
Delhi has a dedicated website to provide real time information on EV chargers availability and accessibility to their users.

# INDUSTRY INCENTIVES


Source -State EV Policies

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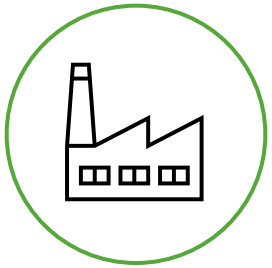
# INDUSTRY - CAPITAL INCENTIVES

Industry incentives promote innovation, research, and workforce in the manufacturing electric vehicles and its components.



Capital Incentives for industries include,

1. Haryana provides a capital subsidy of 25% on Fixed Capital Investment up to ₹15 lakh for micro industries, 20% on Fixed Capital Investment of up to ₹40 lakhs, ₹50 lakhs and ₹20 crore for small industries, medium and mega industries, respectively and 10% on Fixed Capital Investment up to ₹10 crore for large industries.

2. Andhra Pradesh also provides, similar capital subsidies for micro, small, and medium industries and a 35% subsidy on plant & machinery for clean production measures.

3. Kerala provides 20% capital subsidy on new EV manufacturing units, while Telangana offers capital subsidies up to 20% of investment capped at INR 300 million for mega enterprises.

4. Goa provides a capital subsidy of 30% on Fixed Capital Investment up to ₹5 lakh for micro industries, 30% on Fixed Capital Investment of up to ₹10 lakhs for small industries, medium industries.

5. Telangana offers  20% of investment capped at 30 Cr. for Mega Enterprises.

# INDUSTRY – OTHER INCENTIVES

**Charging Infrastructure development initiatives include a mix of financial incentives, and planning and regulatory frameworks that support the deployment and integration of EV charging within the existing electrical systems.**

**Land Development –**

- Rajasthan provides 100% exemption for market fee, stamp duty, land conversion charges, land tax for 7 years.

**Utility concession & subsidies–**

- For a period of five years, Karnataka grants MSMEs engaged in the production of EV batteries and EV charging/swapping infrastructure equipment a 100% energy duty exemption.
- Andhra Pradesh offers a subsidy of 25% on water treatment plant expenditures with a constraint of ₹2 crores on this subsidy.

**Battery recycling initiatives–**

- Delhi aims to set up battery collection centers and join forces with manufacturers for battery recycling.

# INDUSTRY – OTHER INCENTIVES

**Employment and skill development incentives –**

- Rajasthan provides 50% reimbursement of the employer's contribution towards EPF and (Employees' State Insurance) ESI for 7 years.
- Uttar Pradesh provides a one-time incentive in the form of stipend reimbursement, amounting to ₹5,000 per employee per year.

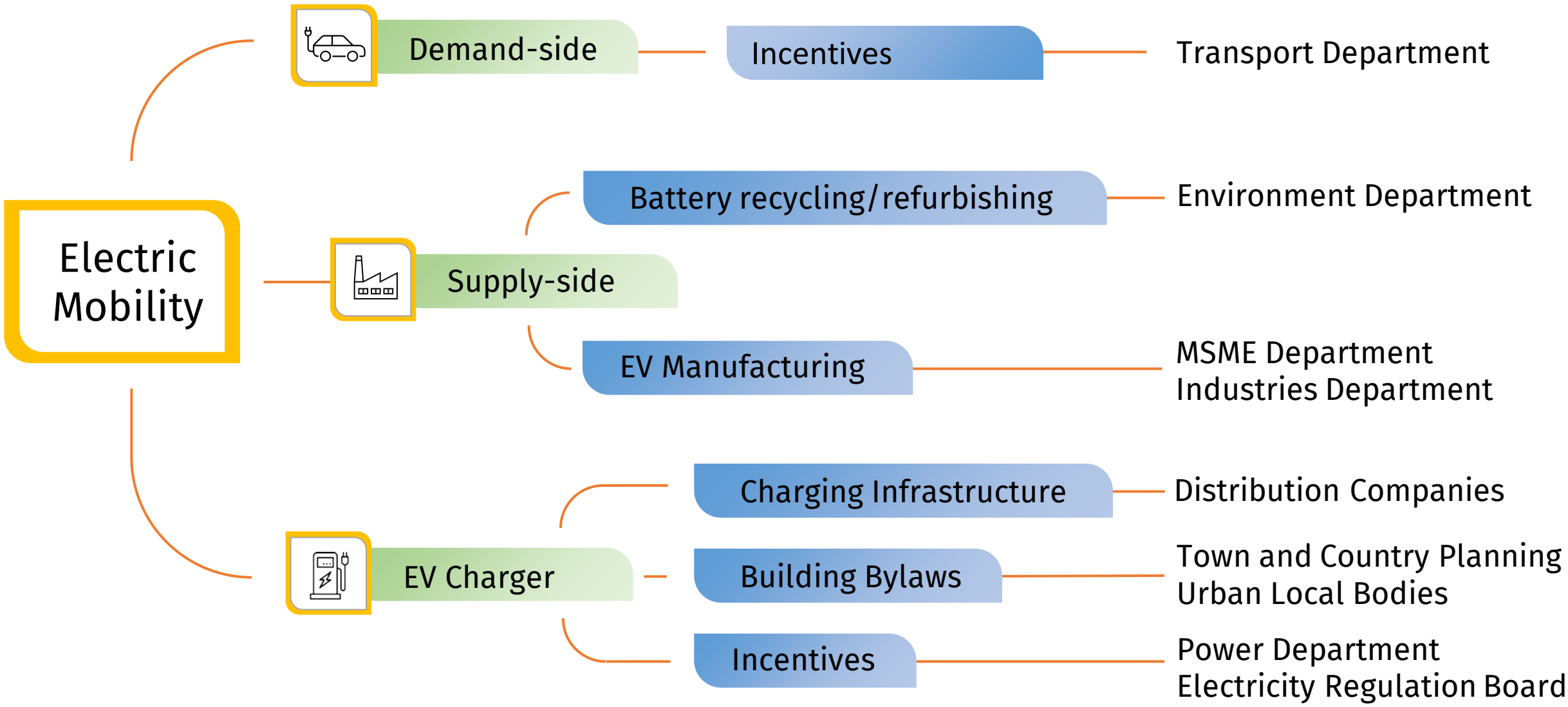
**R&D initiatives–**

Haryana provides the following subsidies for R&D

• Educational or Research Institutes setting up R&D centers shall be provided a subsidy of 50% of the project cost up to ₹ one crore for the first five units to develop new electric charging technology.

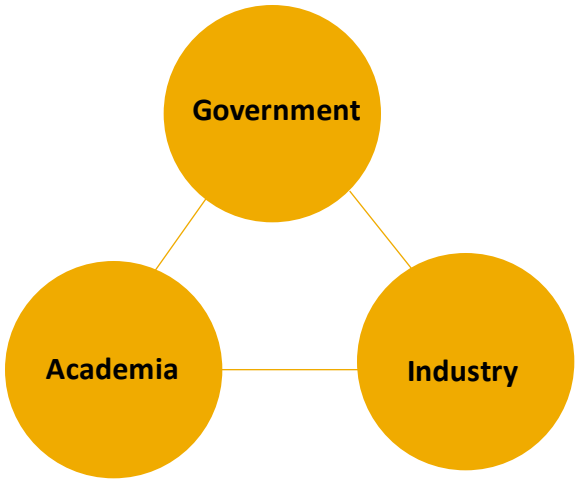
• The state government will award a ₹5 crore incentive to the top 10 research institutes or centers dedicated to researching and developing non-fossil-fuel-based mobility solutions based on selecting the best proposals during the policy period.

# POLICY GOVERNANCE AT STATE



# COORDINATING MECHANISMS

## 1 GOVT-INDUSTRY PARTNERSHIPS




1. **Charging infrastructure deployment:** Urban local bodies, CPOs
2. **Battery technology development:** DST, Research Labs, Startups
3. **Skill development initiatives:** EV OEMs, skilling institutions and academic institutions, Ministry of Skill Development and Entrepreneurship, ASDC, etc.

## 2 BUS SCHEMES

**MoHUA**
Guidelines Formation and Central Assistance

**CESL**
Model RFP and tendering for e-bus demand

**State Government**
Provide viability fap funding and state guarantee for PSM

**City**
Prepare proposal for scheme and implement systems.

**OEMs**
Deliver and operate – electric buses and chargers.

## 3 SINGLE WINDOW INITIATIVE

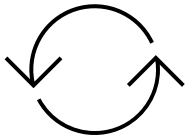
STATE STEERING COMMITTEE
↓
DISTRIBUTION COMPANY
↓
EMPANELLED CPO

Consumer must be able to access single window portal as a one-stop solution.

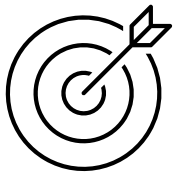
1. Select EV charger or empanelled vendors
2. Obtain new electrical connection
3. Install charging point
4. Avail subsidy for chargers

# RECOMMENDATIONS

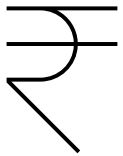
States that do not yet have a notified EV policy may aim to prepare and notify such a policy to ensure equitable development of electric mobility in their regions.



State level EV policies should be periodically reviewed and updated to ensure their relevance and effectiveness in addressing the dynamic nature of the electric vehicle landscape.



State EV policies should be specific, with clear long-term targets that are aligned with national level targets, with commensurate measures that match the objectives of the policies.



While some industrial states have focused their EV policies on attracting investments and jobs in EV manufacturing and services, all states will benefit from supporting an accelerated transition to e-mobility through appropriate demand incentives.

# THANK YOU