

Fiscal Support for Electric Vehicles in India

Incentives, CO₂ Abatement, and Policy Trade-offs

Highlights

Shyamasis Das

Fellow, CSEP

January 2026

Why is This Research Important?

Premise:

- India is pursuing several mitigation interventions that are promising but haven't gained foothold in the country.
- EV transition gets a lot of attention from policymakers. India's LT-LEDs shows **govt.'s intention to promote EVs**.
- **EV purchase** is a major recipient of **fiscal incentives** in the country including **subsidies** and **tax concessions**.

Research questions:

- What is the **climate return** on **govt. incentives** to EV adoption?
- **How** do the **EV incentives** stack up in comparison to **yet-to-grow climate solutions** in the country?
- **How** do EV incentives in **India** compare with some of the **matured EV markets**?

USP of the research:

- Employs a **comparative yardstick**, **Rupees (₹) spent per tCO₂ avoided**, to understand **climate efficacy** of **incentives**.
- **Benchmarks** existing major fiscal **support programmes** for **climate actions** in India.
- Contextualises India's EV incentives at **global level**; adjusts for **purchasing power differences** between countries.

Tax Waivers or Concessions to EV Purchase are Significant

- Purchase subsidies are targeted with defined outlays & sunset clauses; tax incentives are open-ended.
- PM E-DRIVE, the current flagship EV scheme, offers subsidies to limited number of e-2Ws (till FY26), excludes e-cars.

Differences in Applicable Taxes Between an EV and a Comparable Petrol Vehicle—An Example

The case of two-wheeled vehicles and passenger cars	Ex-factory price (₹)	GST + Cess rate	MV tax rate	Realisable GST + Cess (₹)	Realisable MV tax (₹)	Total realisable tax (₹)	Greater realisable tax revenue from sale of petrol version (₹)	
	Tata Nexon Creative 45—Electric	13.3 lakh	5%	0%	0.67 lakh	0	0.67 lakh	-
	Tata Nexon Creative AMT—Petrol	9.1 lakh	18%	11.7%	1.63 lakh	1.26 lakh	2.89 lakh	2.22 lakh
	TVS iQube—Electric	1,04,223	5%	0%	5,211	0	5,211	-
	TVS Jupiter 125—Petrol	62,141	18%	9%	11,185	6,516	17,701	12,490

Note:

- Average MV tax for petrol variants is estimated based on the MV tax rates of 13 States (as of May 2025).
- The ex-factory prices of petrol and electric variants are as of March 2025.
- The values shown in the table are rounded off. However, full values have been used in doing the calculations and the corresponding results have been considered. For this reason, the input values and the results shown in the table might not tally in some cases.

What do EV Incentives Mean in Terms of CO₂ Abatement?

Incentives for CO₂ Abatement: Electric Passenger Car and Electric Two-Wheeled Vehicle

	Electric passenger car		Electric two-wheeled vehicle	
	Tata Nexon Creative AMT (petrol)	Tata Nexon Creative 45 (electric)	TVS Jupiter 125 (petrol)	TVS iQube (electric)
1. Certified energy economy of the vehicle	17.2 km/litre	10.87 km/kWh	50 km/litre	34 km/kWh
2. CO ₂ emission factor for the energy use	2315.16 gCO ₂ /litre	702.54 gCO ₂ /kWh *	2315.16 gCO ₂ /litre	702.54 gCO ₂ /kWh *
Calculated: CO ₂ emission intensity (gCO ₂ /km)	134.6	70.7	46.3	22.5
Calculated: Lifetime emissions (tCO ₂)	18.9	9.9	3.4	1.7
Emissions avoided over lifetime of an EV (tCO ₂)	-	9.0	-	1.8
3. Budgetary incentives (₹)	-	0	-	7,500
4. Tax incentives (₹)	-	2.2 lakh	-	12,490
Total fiscal incentive for an EV (₹)	-	2.2 lakh	-	19,990
Fiscal incentive for CO₂ abatement (₹/tCO₂)	-	24,802	-	11,261
Fiscal incentive for CO₂ abatement (US\$/tCO₂)⁺	-	292	-	132

* EV emission calculation is based on the CEA-published annual avg. grid electricity emission factor (in 2023-24). Emission factor for subsequent years is assumed to decline at a 0.6% CAGR (annual avg. change noted over past 10 years).

⁺ US\$1 = ₹85

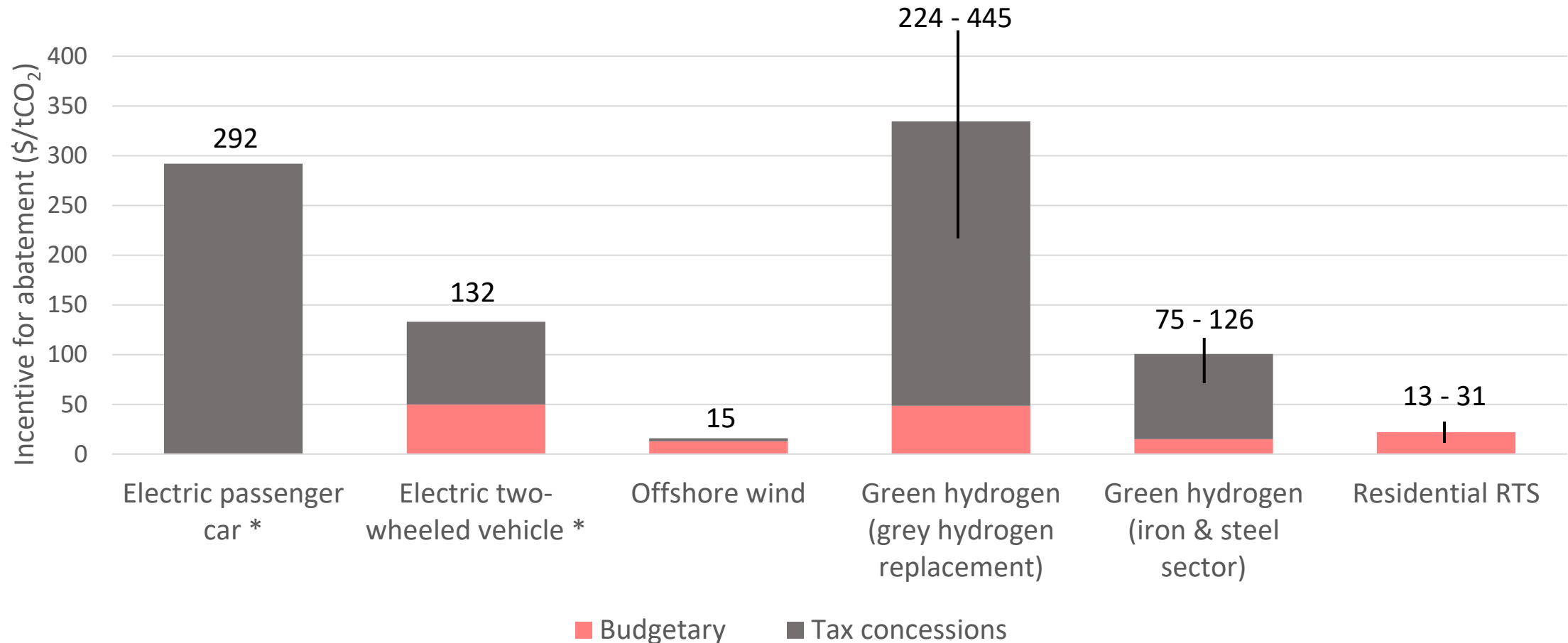
Note: The values shown are rounded off. For details of the calculations, refer to the [research paper](#).

Climate Returns on Incentives Vary between EV Segments

- Analysis shows “***value for money***” for **incentives varies between EV segments**.
 - This can be a **basis** for the govt. to design its **incentive policy**.
- **Cost of CO₂ abatement** for an **e-2W** is ~ **half** that for an **e-car**.
 - In a way, it points out that incentives to **e-2Ws deliver greater climate benefits** than **e-cars**.
- **Incentives** for abatement to an **e-car** are **entirely** in the form of **revenue forgone**.
- **Higher ex-factory price** of an e-car **magnifies** the absolute **value of tax incentive** for an e-car.

How do EV Incentives Compare with Other Climate Actions?

Government Support for CO₂ Abatement for Different Climate Actions in India



* Tax incentives for EVs will be a range depending on the ex-factory prices of the vehicle models.

Note: The values shown are rounded off. For details of the calculations, refer to the [research paper](#).

A One-size-fits-all Approach Not Appropriate to Evaluate Incentives to Different Climate Actions

- The **first filter** for treating these incentives can be the **nature of their fiscal impact**.
 - **Purchase or capital subsidies** require **budgetary allocation** whereas **tax incentives** lead to **forgone revenue**.
 - **Tax concessions** are the **dominant form of support** to EVs.
- The **second filter** for the incentive assessment can be the **current technology maturity**.
 - For example, in the EV vs solar PV comparison, **electric drivetrain** is an **early-stage technology** in Indian market.
- The **third filter** is the **conditionality of climate benefit** of an abatement measure.
 - Emissions impact of **electric mobility** hinges on the **greenness of consumed electricity**.
 - **High carbon intensity** of grid **electricity boosts** mitigation potential of **RE**, **weakens** emissions benefit of **EVs**.

How do India's EV Incentives Compare Globally?

Climate Benefit from Electric Car Incentives in Different Countries

Country	Type of central support	Nominal incentive per electric car (US\$)	Incentive per electric car (US\$ _{PPP})	Incentive per tonne of CO ₂ abatement (US\$/tCO ₂)	Incentive per tonne of CO ₂ abatement (US\$ _{PPP} /tCO ₂)
India	▪ GST concession	1,137	4,677	126	520
Norway	▪ 25% VAT exemption ▪ Registration tax exemption	4,999	17,384	276	961
US	▪ Clean Vehicle Credit under IRA	4,000	4,000	281	281
China	▪ Exemption from the 10% Sales Tax ▪ Trade-in subsidy	4,313	12,280	376	1,069

Note:

- Only central government fiscal supports have been considered in the country-level comparison.
- The values shown are rounded off. For details of the calculations, refer to the [research paper](#).

- A specific e-car model is considered as the case in point to make a like-to-like comparison of incentive amounts.
- PPP adjustments of the incentives have been made to reflect the differences in prices between countries.

Understanding The Fine Prints of Country-level Differences

India's nominal incentives for an e-car are lower than some of the advanced EV markets.

- India's GST concession for EVs is similar to China's sales tax exemption and VAT exemption in Norway.

The Chinese govt. continues to offer subsidies despite e-car sales reaching 50% share.

- It plans to continue the sales tax incentives till 2027.

Norway's incentive per e-car remains the highest among all countries assessed.

- E-cars account for 90% of new car sales in this Nordic country.

For same incentive level, India is able to realise greater CO₂ abatement than these countries.

- This is despite India's grid being most carbon-intensive along with a much slower rate of decarbonisation.

There is a substantial value of the current fiscal incentives for EVs in the Indian context.

- After adjusting for PPP, India's e-car incentive for each unit of CO₂ avoided becomes ~ 4X of the nominal value.
- India still has a lower EV incentive per tCO₂ abated vis-à-vis Norway and China in PPP terms.

Policy Perspectives

India's EV journey has been relatively short. It started getting momentum in 2019*.

- In contrast, the 1st national climate roadmap released in 2008 and National Solar Mission launched in 2010.

It is a strategic imperative for India to accelerate the share of clean electricity in the supply.

- High carbon burden of electricity grid being a major underlying cause for EVs to deliver lower climate benefits.

There will be opportunity cost for delaying climate levers that depend on greenness of grid.

- Effort should be made to try available means like RE-powered charging bay to align EV use with climate objectives.

Residential RTS uptake shows consumer-facing clean tech. needs sustained govt. support.

- Experience from other EV markets shows a premature incentive rollback can stall progress in EV transition.

Absence of clear direction can lead to divided policy support, uncertainty in the industry and market inertia.

- Potential alternative technologies like biofuels with flex-fuel engine, fuel cells, etc. have their own constraints.

The country has to prioritise investment in solutions that can take the economy to Net Zero.

* with the launch of Phase-II of FAME scheme.

A Call to Action to Maximise Climate Return on EV Incentives

1 Develop a decarbonisation strategy for road transport to guide policy actions

- It should consider **risks** and **co-benefits** and **link incentives with outcomes**.
- This will help target govt.'s resources to support climate mitigation effectively.

2 Accelerate RE penetration in the grid supported by utility-scale energy storage

- **Solar-aligned time-of-day** electricity **tariffs for EVs** will be a useful instrument.

3 Construct a priority-order for directing govt. incentives based on climate benefit

- **Spending** on **shared infra.** delivers benefits at **fraction of the cost**.
- Incentives to **hard-to-electrify** segments should be **prioritised**.

4 Adopt predefined logic-based sunset clauses for incentive schemes

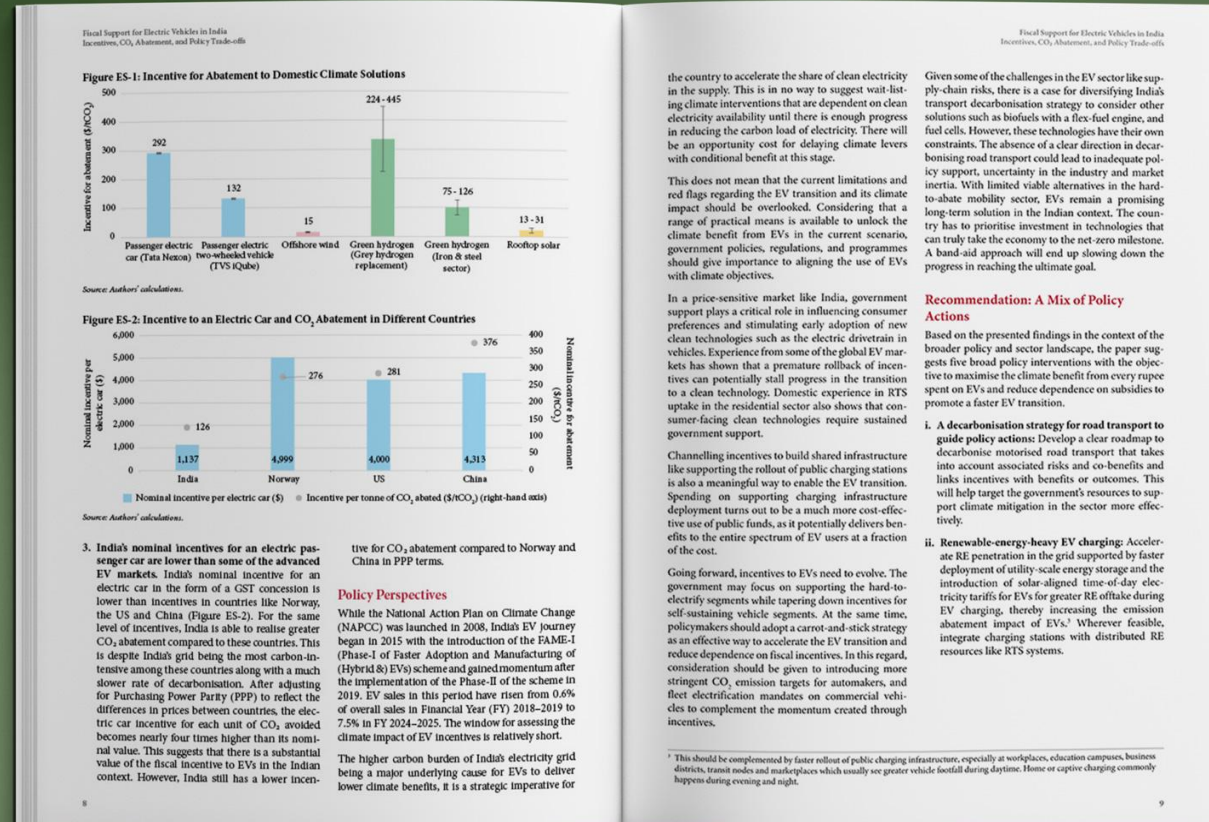
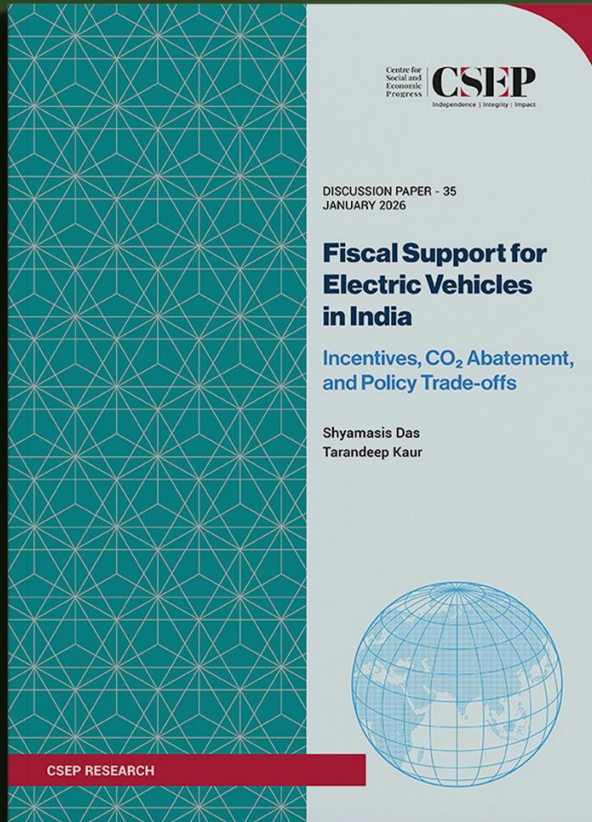
- Incentive **phase-out plan** should be based on a **set rationale**, ideally **linked** with **targeted outcomes**.

5 Focus on R&D to reduce cost of adoption and improve product performance

- **R&D** will help **reduce dependence** on **EV purchase incentives** and unlock **greater climate benefits**.

For Details, Refer to The Discussion Paper

Thank you!



Link to download: <https://csep.org/discussion-note/fiscal-support-for-electric-vehicles-in-india-incentives-co2-abatement-and-policy-trade-offs/>

For queries, contact: sdas@csep.org | (+91) 97 11 00 9767