



UPSC & STATE PCS CURRENT AFFAIRS · UJIYARI.COM

EDITORIAL ANALYSIS

India on E-Wheels: Gujarat Needs More Buses, Not Just More EVs

 DOWN TO EARTH

26 August 2026

ENVIRONMENT

GS3

CURATED & WRITTEN BY

**Bharat Choudhary**

UPSC Educator & Content Creator

 [linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

ALSO FROM THE CREATOR

BharatNotesFree UPSC notes, MCQs, PYQ analysis. **100% Free.**bharatnotes.com → **ADVERTISE****Advertise with Ujiyari**

Reach thousands of UPSC aspirants daily.

 epicbharat@gmail.com

India on E-Wheels: Gujarat Needs More Buses, Not Just More EVs

 Down to Earth

26 August 2026

GS3


INTERVIEW ANGLE

"An electric car emits nothing at the tailpipe and occupies the same road space as a petrol car. Which of those two facts matters more for an Indian city?"

Source: [Original editorial](#)

Down to Earth



Every fact web-verified against primary sources

THE LIFT LINE

An electric car cleans the air it drives through. It does not create the road it drives on.

WHY THIS EDITORIAL MATTERS FOR YOUR EXAM

Urban transport, air quality and clean mobility are examined across GS1 and GS3, and answers typically celebrate EV policy without interrogating it. This editorial supplies the interrogation, with numbers.

GS Paper 3: Environment and pollution; infrastructure, including transport; conservation.

GS Paper 1: Urbanisation and its problems and remedies.

CONCEPT	MEANING	WHY IT IS TESTABLE
Modal share	The proportion of trips made by each mode of transport	The measure that determines urban congestion and emissions
Transit-oriented development (TOD)	Planning high-density, mixed-use development around mass transit nodes	The spatial complement to fleet expansion
Road space per passenger	Carriageway occupied per person carried	Why buses outperform cars regardless of fuel

BACKGROUND AND CONTEXT

The Gujarat Figures

INDICATOR	POSITION
Buses operated in Ahmedabad	About 1,100 across AMTS and BRTS combined
Position against assessed requirement	Well short; Down To Earth reports the fleet has stagnated
Electric vehicles as a share of Gujarat's total vehicle fleet	About 1.36 per cent, per Down To Earth's August 2026 electric-mobility index

The Policy Frame

INSTRUMENT	DETAIL
FAME and its successor schemes	Central demand incentives for electric vehicle adoption
PM e-Bus Sewa	Central support for electric buses in cities
National Clean Air Programme (NCAP)	Launched 2019, targeting particulate reduction in non-attainment cities
Bharat Stage VI	Emission norms, in force since April 2020
Ahmedabad BRTS	Janmarg, among India's earliest bus rapid transit systems

Ahmedabad's inclusion in this argument is pointed, since **Janmarg** was for years cited as a national model for bus-based mass transit.

THE ANALYSIS

1. Electrification and congestion are orthogonal problems. Replacing a petrol car with an electric car reduces tailpipe emissions to zero and reduces road occupancy by nothing. A city whose problem is congestion, and most Indian cities' problem is congestion, gains only half of what the policy appears to promise.

2. A stagnant fleet cannot compete. Public transport substitutes for private vehicles only when it offers acceptable **frequency, coverage and reliability**, all three of which are functions of fleet size. At roughly about 1,100 buses, fleet stagnant, waiting times and route gaps make the private vehicle the rational choice for anyone who can afford one. The modal share then shifts further toward private transport, which raises the fleet requirement, which the existing fleet falls even further short of.

3. The electrification effort is aimed at the lower-return vehicle. The electrification effort has concentrated on private vehicles rather than on buses. This inverts the returns: one electric bus removes far more emissions than one electric car, and carries far more passengers per unit of road space. **Where electrification budgets are finite, buses are the higher-yield target.**

4. Emissions per passenger-kilometre is the honest metric. Comparing an electric car to a petrol car flatters the electric car. Comparing either to a full bus does not. Urban transport policy assessed per vehicle will always favour electrification; assessed **per passenger-kilometre**, it favours mass transit, and the second is the measure that corresponds to what a city actually needs to move.

5. The counter-argument is correct about budgets and should be conceded. EV adoption runs on private purchase and manufacturer incentives; bus fleets run on municipal capital and operating subsidy. These are genuinely different resource pools, and slowing EV policy would not add a single bus. The binding constraint on buses is **municipal fiscal capacity**, which is a problem of urban finance rather than of clean-mobility policy. The valid criticism is therefore about **emphasis and sequencing**, not about EVs as such.

DATA AND INSTITUTIONS VAULT

PRELIMS-GRADE FACTS:

Ahmedabad operates about 1,100 buses across AMTS and BRTS combined, well short of assessed requirement; Down To Earth reports the fleet has stagnated.

Electric vehicles are about 1.36 per cent of Gujarat's total vehicle fleet, per Down To Earth's August 2026 electric-mobility index.

National Clean Air Programme (NCAP) was launched in 2019 for non-attainment cities.

Bharat Stage VI norms have applied nationwide since April 2020; India skipped BS-V.

PM e-Bus Sewa supports electric bus deployment in cities.

Ahmedabad's Janmarg was among India's earliest bus rapid transit systems.

Transit-oriented development concentrates high-density mixed-use development around mass transit nodes.

*Electric vehicles are **zero-emission at the tailpipe**, not zero-emission overall. Their lifecycle emissions depend on the generation mix charging them, which in India remains substantially coal-based. Also note that a significant share of urban particulate pollution comes from **road dust and non-exhaust sources** such as tyre and brake wear, which electrification does not address at all.*

THE DEBATE

FOR (buses before cars): Electrification does not reduce road occupancy, and congestion is the binding urban problem. A stagnant fleet cannot attract riders. The electrification effort has concentrated on the lower-return vehicle. Emissions per passenger-kilometre favours mass transit decisively.

AGAINST (they are not competing for the same money): EV adoption is privately funded and incentive-driven; bus fleets need municipal capital and operating subsidy. Constraining EV policy adds no buses and slows [decarbonisation](#). The real constraint on bus fleets is urban fiscal capacity, a separate problem with separate solutions.

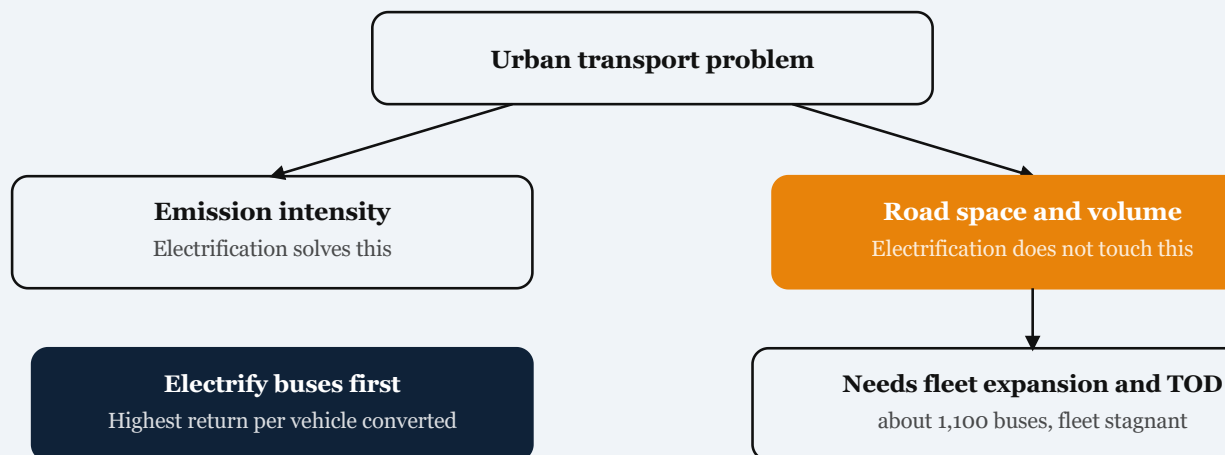
Balanced verdict: The criticism is best stated as one of **sequencing within the electrification effort**, which both sides can accept. Where public money electrifies vehicles, it should electrify **buses and shared fleets first**, because returns per vehicle converted are far higher. Separately and simultaneously, bus numbers must move toward assessed requirement, which requires addressing municipal finance and operating subsidy rather than clean-mobility policy. And both should be anchored in **transit-oriented development**, so density is planned around mass transit corridors rather than retrofitted to them after the corridors are built.

HOW TO THINK ABOUT THIS

When evaluating any efficiency improvement, ask whether it addresses the **intensity** of an activity or its **volume**. Electrification reduces emissions per kilometre driven. It does nothing about kilometres driven, or about the space each vehicle occupies while driving them.

Intensity improvements are politically attractive because they require no behavioural change and threaten no interest. Volume interventions require someone to travel differently, build differently or pay differently, and are correspondingly harder. The predictable result is that policy over-invests in intensity and under-invests in volume, and then reports progress on the metric it chose. Recognising which of the two a policy actually addresses, before assessing whether it will work, applies as much to energy efficiency, water use and materials consumption as it does to transport.

DIAGRAM-IN-WORDS



Policy is reporting progress on the left while the right determines the outcome

Both halves are real problems. Only one of them is being measured, and it is not the one that decides whether a city moves.

TAKEAWAY BOX

An electric car cleans the air it drives through. It does not create the road it drives on.

Ahmedabad about 1,100 buses across AMTS and BRTS, short of assessed requirement; electric vehicles about 1.36 per cent of Gujarat's total vehicle fleet per Down To Earth's August 2026 index; NCAP launched 2019; BS-VI nationwide since April 2020 with BS-V skipped; PM e-Bus Sewa; Ahmedabad's Janmarg BRTS; EVs are zero-emission at the tailpipe, not lifecycle; road dust and non-exhaust sources are unaffected by electrification.

Public subsidy for private electric cars benefits those who can afford cars. Is that a defensible use of clean-air funds in a city where most people travel by bus or on foot?

Connects to past UPSC Mains questions on urban air pollution, on sustainable urban transport, and on the effectiveness of the National Clean Air Programme.

"India's clean mobility policy has improved emission intensity while ignoring travel volume." Critically examine with reference to urban transport.

Source: India on E-Wheels: Gujarat Needs More Buses, Not Just More EVs — Ujiyari.com | Free UPSC & State PCS Editorial Analysis

● KEY ARGUMENTS AT A GLANCE

Writing in *Down To Earth*, the argument is that Gujarat's clean transport strategy leans almost entirely on vehicle electrification while public transport is starved, with Ahmedabad running only about 1,100 buses across its municipal and bus rapid transit services, well short of assessed requirement, and electric vehicles forming only a small fraction of the state fleet, so that without a large expansion of bus fleets and transit-oriented development, EV adoption alone cannot cut vehicular pollution or congestion.



SUPPORTING

- Electrification changes what a vehicle emits but not how much road space it occupies, so a city that replaces petrol cars with electric cars one for one retains its congestion entirely and gains only the tailpipe reduction.
- A bus fleet well short of assessed requirement means public transport cannot offer the frequency and coverage that would make it a genuine alternative, so commuters rationally choose private vehicles and the modal share continues shifting away from buses.
- Electrification effort has been concentrated on private vehicles rather than on the mode that carries the most passengers per unit of road space, with *Down To Earth*'s own electric-mobility index putting electric vehicles at about 1.36 per cent of Gujarat's total vehicle fleet, which inverts the order in which the two should be prioritised.



COUNTER

The counter-view is that electrification and public transport expansion are not substitutes competing for the same budget, since EV adoption is driven largely by private purchase and manufacturer incentives while bus procurement is a public capital expenditure, and that discouraging EV policy would slow decarbonisation without adding a single bus. On this reading, the binding constraint on bus fleets is municipal fiscal capacity and operating subsidy, which is a separate problem from EV policy.



WAY FORWARD

The sequencing should be corrected rather than the EV policy abandoned: prioritise electrification of buses and shared fleets, which deliver far greater emission reduction per vehicle electrified, expand bus numbers toward assessed requirement through structured

procurement models, and tie both to transit-oriented development so that density is planned around mass transit corridors rather than retrofitted to them.


MAINS ANSWER FRAMEWORK
QUESTION

India's clean mobility policy has prioritised vehicle electrification over public transport expansion. Examine the limitations of this approach for urban air quality and congestion. (250 words)

INTRODUCTION

India's clean mobility policy has been organised around electrifying vehicles, and by that measure it is progressing. Writing in Down To Earth, the argument is that Gujarat illustrates what this framing leaves out, since a strategy focused on what vehicles emit says nothing about how many vehicles a city needs.

BODY

The figures are specific. Ahmedabad operates roughly 1,100 buses across its municipal and bus rapid transit services, well short of assessed requirement, while Down To Earth's electric-mobility index puts electric vehicles at about 1.36 per cent of Gujarat's total vehicle fleet.

Two distinct problems follow. The first is arithmetic: a stagnant bus fleet cannot deliver the frequency, coverage and reliability that make public transport a genuine substitute for a private vehicle, so commuters who can afford alternatives rationally choose them, and the modal share continues to shift toward private transport regardless of what those private vehicles run on.

The second is spatial: electrification addresses tailpipe emissions and does nothing about road space. An electric car occupies the same carriageway and the same parking footprint as a petrol car, so a city that substitutes one for the other retains its congestion in full while gaining only the emission benefit. Congestion in turn has its own environmental cost through idling, and its own economic cost through lost time. The prioritisation is also inverted.

A single electric bus displaces the emissions of many private vehicles and carries many more passengers per unit of road space, so electrifying buses yields far greater returns per vehicle converted than electrifying cars, yet the electrification effort has gone overwhelmingly to private vehicles. Against this, the counter-argument has real force: EV adoption is driven by private purchase and manufacturer incentives, while bus procurement requires municipal capital and operating subsidy, so the two draw on different resources and constraining the former would not fund the latter.

CONCLUSION

A balanced answer should not treat electrification and public transport as rivals. The defensible criticism is one of sequencing and emphasis: prioritise electrification of buses and shared fleets where returns per vehicle are highest, expand bus numbers toward assessed requirement, and anchor both in transit-oriented development so that urban density is planned around mass transit rather than retrofitted to it.

 RELATED DAILY ARTICLES

26 Aug **ICAR-NBAGR Registers 16 New Indigenous Breeds, Taking...**

26 Aug **Centre Proposes Complete Ban on the Insecticide...**

25 Aug **216 Rescued Indian Star Tortoises Released into...**

20 Aug **Supreme Court: Treating Waste Disposal as Solely...**



CURATED & WRITTEN BY

Bharat Choudhary

UPSC Educator & Content Creator

[in linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)[Read Full Article on Ujiyari →](#)<https://ujiyari.com/editorials/2026/08/dte-gujarat-buses-not-just-evs-2026/>

ALSO FROM THE CREATOR

BharatNotes

Free UPSC study platform — subject-wise notes across all 4 GS papers, Prelims MCQs, Mains answer frameworks, PYQ analysis & progress tracking. **100% Free • No Login Required.**

[Start Preparing → bharatnotes.com](#)

📌 OPPORTUNITY

Advertise with Ujiyari

Reach **thousands of serious UPSC & State PCS aspirants** daily through our PDFs, website, and social channels.

Ideal for: Coaching institutes • EdTech platforms • Book publishers • Exam prep apps

[✉ epicbharat@gmail.com](mailto:epicbharat@gmail.com)

Write to us for rates & media kit

Free UPSC & State PCS Current Affairs · ujiyari.com · bharatnotes.com