RU-04-01-0066-170322/BACKGROUNDER

PRESS INFORMATION BUREAU
(Research Unit)
Ministry of Information and Broadcasting
Government of India

Shoonya: Zero-Pollution Mobility Campaign

(NITI Aayog)

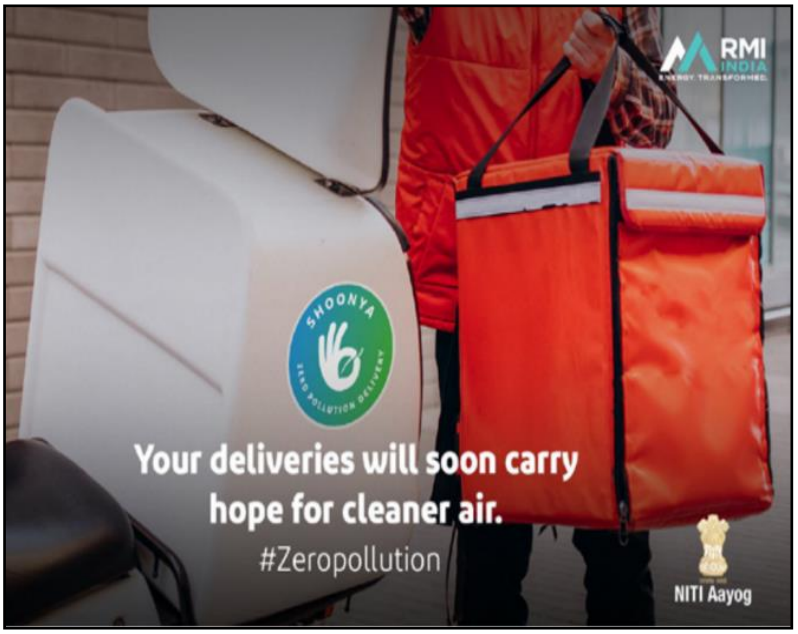
March 17, 2022

"The World is now in the middle of a new mobility revolution."

\- **Prime Minister Narendra Modi**

Introduction

Transport is a fundamental requirement of modern life, but the traditional combustion engine is quickly becoming outdated. Petrol or diesel vehicles are highly polluting and are being quickly replaced by fully electric vehicles which have zero tailpipe emissions and are much better for the environment.



In September 2021, NITI Aayog, with the support of Rocky Mountain Institute (RMI) launched *Shoonya* which is an initiative to promote zero-pollution delivery vehicles by working with consumers and industry.[i] The *Shoonya* campaign brings together consumers and industry to reduce emissions from the urban freight sector by promoting the use of Electric Vehicles (EVs). The campaign is hosted by NITI Aayog and RMI in collaboration with leading industry partners. The initiative aims **at raising awareness about EVs among consumers and recognises industry efforts through an integrated combination of corporate branding, impact assessment and consumer awareness.** [ii]

Mission

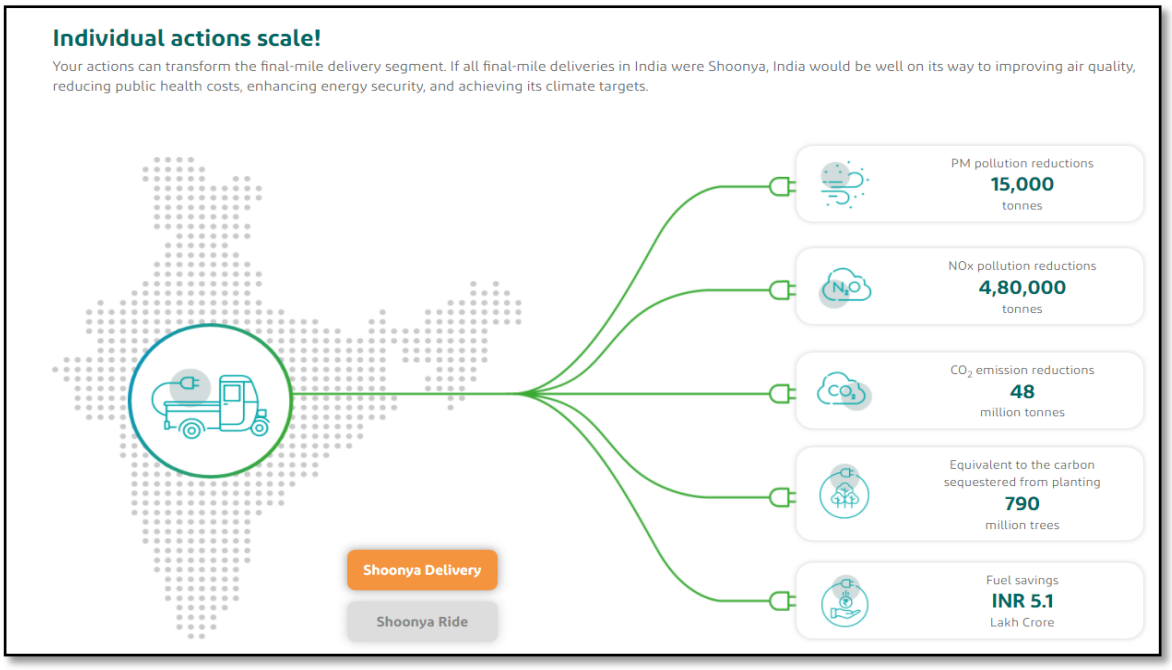
- Goods movement is an integral part of urban economy. With growing population, rapid urbanization, and increase in e-commerce, urban freight demand is expected to increase by 140 per cent in this decade. However, urban freight systems also generate negative externalities such as air pollution, hazards to public health, high CO_2 emissions, and high transportation costs.

- Electric delivery vehicles for final-mile distribution present an opportunity to reduce both operational costs and vehicular emissions associated with increasing e-commerce activities, the benefits of which can be passed on to consumers and society.

Aim

The ***Shoonya* campaign aims at improving air quality in India** by accelerating the deployment of electric vehicles for final-mile deliveries. The campaign intends to:

- Build awareness and demand for zero pollution delivery among consumers**.**
- Recognise and promote industry efforts towards fleet electrification.
- Set the final-mile delivery sector on a pathway to 100 per cent electrification.[iii]



Initiatives

- NITI Aayog and RMI are collaborating with e-commerce companies, fleet aggregators, Original Equipment Manufacturer (OEMs), and logistics companies to encourage the adoption of zero-emission vehicles in the urban freight sector. Leading companies in India's freight ecosystem are supporting the initiative by integrating electric vehicles (EVs) into their final-mile delivery routes and more industry players are expected to join the call to action with time.

- The Shoonya campaign will raise public awareness about the health, environmental, and economic benefits of electrifying the final-mile delivery segment. Moreover, the initiative will showcase the industry's positive actions in mitigating climate change through multimedia platforms.

Major components of the campaign

- **Corporate Branding Programme**

  - Rides and deliveries carried out in EVs are branded with the *Shoonya* logo.
  - The EVs used for deliveries and ride-hailing carry a *Shoonya* sticker and drivers wear a *Shoonya* badge.[iv]

- Many industry players in India are already on the path to electrifying their delivery fleet.
- To certify and applaud the initiative by e-commerce companies, vehicle manufacturers, and fleet aggregators, NITI Aayog and RMI have designed a unique brand logo for all vehicles, delivery partners, and parcels accredited under this initiative.
- This will steer awareness drives to educate consumers about the campaign.

- **Consumer Awareness Drive**

  - Public-facing awareness drive designed to highlight the health and environmental benefits of EV adoption.
  - Campaign seeks to build awareness and demand for zero-pollution rides and deliveries among consumers, solidifying Shoonya as a slogan across every household in India.[v]

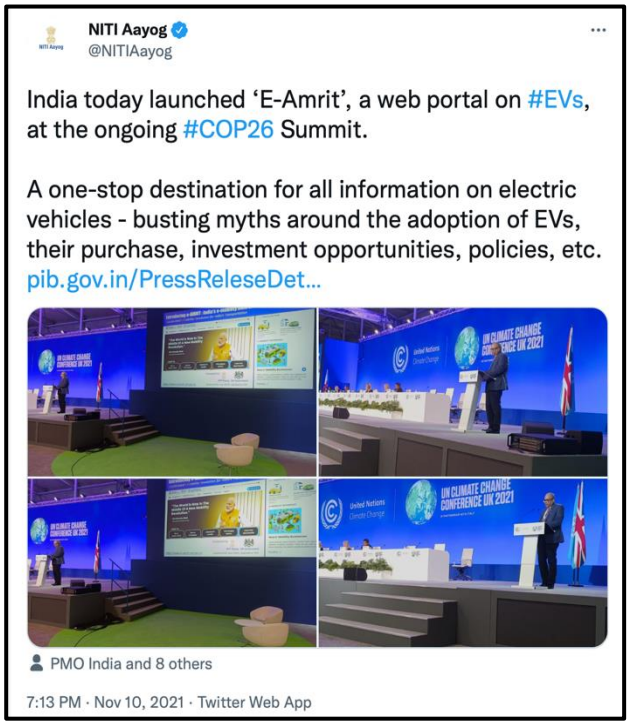
- **Resource Toolkit**

  - Provides EV users with online tools to assess the costs and impact of electric vehicle adoption. These toolkits include:
    - An impact tracking dashboard that shares the progress and impact of the campaign to date;
    - A calculator that shows a cost and emissions comparison between EVs and their petrol, diesel, and CNG counterparts;
    - A list of financing resources and policy incentives to support EV procurement.

Initiatives of Government for promoting the use of Electric Vehicles

- **E-Amrit Portal**

India launched 'E-Amrit', a web portal on EVs at the COP26 Summit in Glasgow, UK, in November 2021. E-Amrit is a one-stop destination for all information on EVs—their purchase, investment opportunities, policies, subsidies, etc. The portal has been developed and hosted by NITI Aayog under a collaborative knowledge exchange programme with the UK government and as part of the UK–India Joint Roadmap 2030, signed by the Prime Ministers of the two countries. E-Amrit intends to complement the initiatives of the Government on raising awareness on EVs and sensitizing consumers on the benefits of switching to electric vehicles.[vi]



- **Collaboration with IITs**

  NITI Aayog holds regular interactions with the Indian Institutes of Technology (IITs) to create a world class ecosystem for research and innovation in transformative mobility. So far, nine IITs have come forward to develop courses and R&D programmes to accelerate the adoption of EVs in the country.[vii]

- **Collaboration with Asian Development Bank**

  NITI Aayog and Asian Development Bank (ADB) are working together on several high-level initiatives through technical assistance to promote EVs in India. Some of the important activities under this collaboration include credit enhancement for various EV fleet operators and other stakeholders in the value chain, supply-chain assessment for EVs, and EV infrastructure component manufacturing in India.[viii]

- **PLI scheme for Automobiles & Auto Components by Department of Heavy Industry notified on 23rd September 2021.**

  - **It proposes financial incentives of up to 18 per cent to boost domestic manufacturing advanced automotive technology products and attract investments in the automotive manufacturing value chain**.

  Support under the Scheme shall be provided to companies engaged in manufacturing of Advanced Automotive Technology products in India.

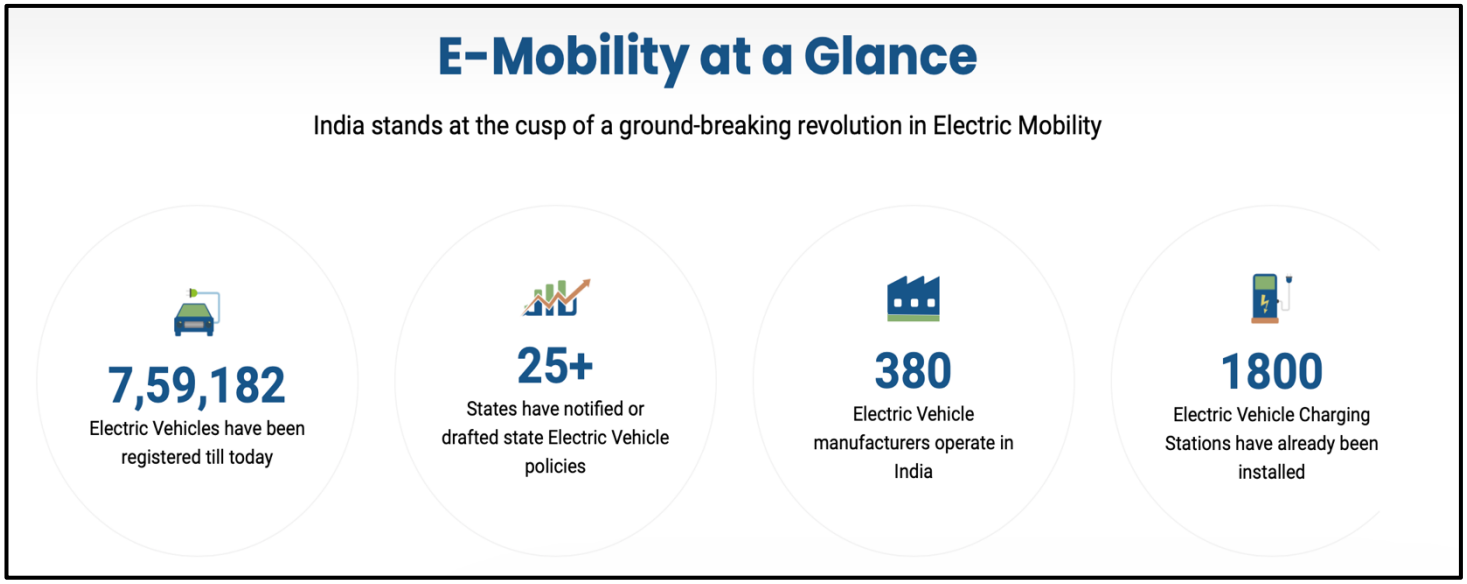
  The list of Eligible products is mentioned below:

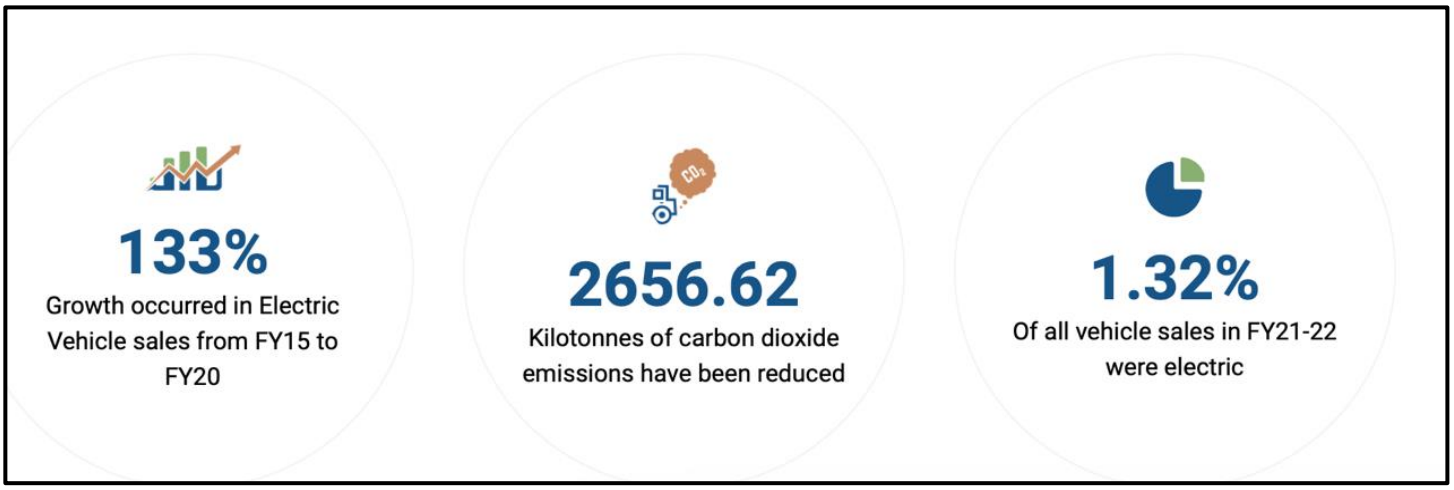
  - The list of Advance Automotive Technology Vehicles – following vehicles are prescribed by Ministry of Heavy Industries (MHI) as Advance Automotive Technology Vehicles. The list can be amended by MHI from time to time depending upon technological developments.

S. No	Description
1.	Battery Electric vehicles –All vehicle segments which meet the performance criteria of FAME-II scheme or as notified from time to time by MHI.
2.	Hydrogen Fuel Cell Vehicle – All vehicle segments.

  - The list of Advance Automotive Technology Components will be notified separately by MHI in due course of time.

E-Mobility in India: At a Glance





Benefits of Electric Vehicles

Ministry of Heavy Industries formulated a Scheme namely Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME India) Scheme in 2015 to promote adoption of electric vehicles (EVs) in the country with an aim to reduce dependency on fossil fuels.

Benefits of EVs include:

- **Lower running costs**
  - Running cost much lower than an equivalent petrol or diesel vehicle.
  - EVs use electricity to charge their batteries instead of using fossil fuels like petrol or diesel.
  - EVs more efficient, and that combined with the electricity cost means that charging an electric vehicle is cheaper than filling petrol or diesel for your travel requirements.
  - Using renewable energy sources can make the use of electric vehicles more eco-friendly.

- Electricity cost can be reduced further if charging is done with the help of renewable energy sources installed at home, such as solar panels.[ix]

- **Low maintenance cost**

  - Very low maintenance costs because they don't have as many moving parts as an internal combustion vehicle.
  - Servicing requirements for electric vehicles are lesser than the conventional petrol or diesel vehicles. Therefore, the yearly cost of running an electric vehicle is significantly low.[x]

- **Zero Tailpipe Emissions**

  - Driving EVs helps one reduce their carbon footprint because there will be zero tailpipe emissions. One can reduce the environmental impact of charging their vehicle further by choosing renewable energy options for home electricity.

- **Tax and financial benefits**

  - Registration fees and road tax on purchasing electric vehicles are lesser than petrol or diesel vehicles.
  - Multiple state-wise policies and incentives offered by the government.

- **Petrol and diesel use is destroying our planet**

  - Toxic emissions from petrol and diesel vehicles lead to long-term, adverse effects on public health.
  - Emissions impact of electric vehicles is much lower than petrol or diesel vehicles.
  - From an efficiency perspective, electric vehicles can covert around 60% of the electrical energy from the grid to power the wheels, but petrol or diesel cars can only convert 17%-21% of the energy stored in the fuel to the wheels. That is a waste of around 80%. Fully electric vehicles have zero tailpipe emissions, but even when electricity production is taken into account, petrol or diesel vehicles emit almost 3 times more carbon dioxide than the average EV.
  - To reduce the impact of charging electric vehicles, India is ambitious to achieve about 40 per cent cumulative electric power installed capacity from non-fossil fuel-based energy resources by the year 2030.

- **Electric Vehicles are easy to drive and quiet**

  - EVs don't have gears and are very convenient to drive. There are no complicated controls, just accelerate, brake, and steer. When one wants to charge their vehicle, just plug it in to a home or public charger. Electric vehicles are also quiet, so they reduce noise pollution that traditional vehicles contribute to.

- **Convenience of charging at home**

  - Imagine being at a busy fuel station during peak hours, and you are getting late to reach your workplace. These problems can easily be overcome with an

electric vehicle by plugging one's vehicle in at their home charger for 4-5 hours before one plans to go.

- In the event one forgets to plug in their machine - then one can easily take the help of fast chargers or even battery swapping services.

- **No noise pollution**

  - EVs have silent functioning capability as there is no engine under the hood. No engine means no noise.
  - EVs are so silent that manufacturers have to add false sounds in order to make them safe for pedestrians.[xi]

Twitter References

- https://twitter.com/NITIAayog/status/1458430017696903170?s=20&t=8i5gsIduuFVRghs3lzBayg
- https://twitter.com/shoonya_india?lang=en
- https://twitter.com/NITIAayog/status/1470670296151740419?s=20

References

- PIB Press Release on NITI Aayog, RMI, and RMI India Launch 'Shoonya' Campaign dated 15 September 2021.
- PIB Press Release on Use of Electric Vehicles dated December 8, 2021.
- PIB Press Release on Reducing the Cost of Electric Vehicles dated December 14, 2021.
- PIB Press Release on Revised Consolidated Guidelines & Standards for Charging Infrastructure for Electric Vehicles dated January 15, 2022.
- https://e-amrit.niti.gov.in/home
- https://shoonya.info/
- https://pib.gov.in/PressReleasePage.aspx?PRID=1797610

Further reading

- https://www.newindianexpress.com/business/2021/sep/15/niti-aayog-launches-shoonya-programme-to-promote-zero-pollution-delivery-vehicles-2359195.html
- https://www.financialexpress.com/express-mobility/zypp-electric-supports-shoonya-zero-pollution-delivery-campaign-launched-by-niti-aayog-and-rmi/2373546/

AG/HP/RC/RN/JA

---

[i] https://www.niti.gov.in/sites/default/files/2022-02/Annual_Report_2021_2022_%28English%29_22022022.pdf
[ii] https://shoonya.info/
[iii] https://shoonya.info/mission
[iv] About Us (shoonya.info)
[v] https://shoonya.info/solution
[vi] https://www.niti.gov.in/sites/default/files/2022-02/Annual_Report_2021_2022_%28English%29_22022022.pdf
[vii] https://www.niti.gov.in/sites/default/files/2022-02/Annual_Report_2021_2022_%28English%29_22022022.pdf
[viii] https://www.niti.gov.in/sites/default/files/2022-02/Annual_Report_2021_2022_%28English%29_22022022.pdf
[ix] BENEFITS OF ELECTRIC VEHICLES (niti.gov.in)
[x] BENEFITS OF ELECTRIC VEHICLES (niti.gov.in)
[xi] BENEFITS OF ELECTRIC VEHICLES (niti.gov.in)