

# Global EV Transition

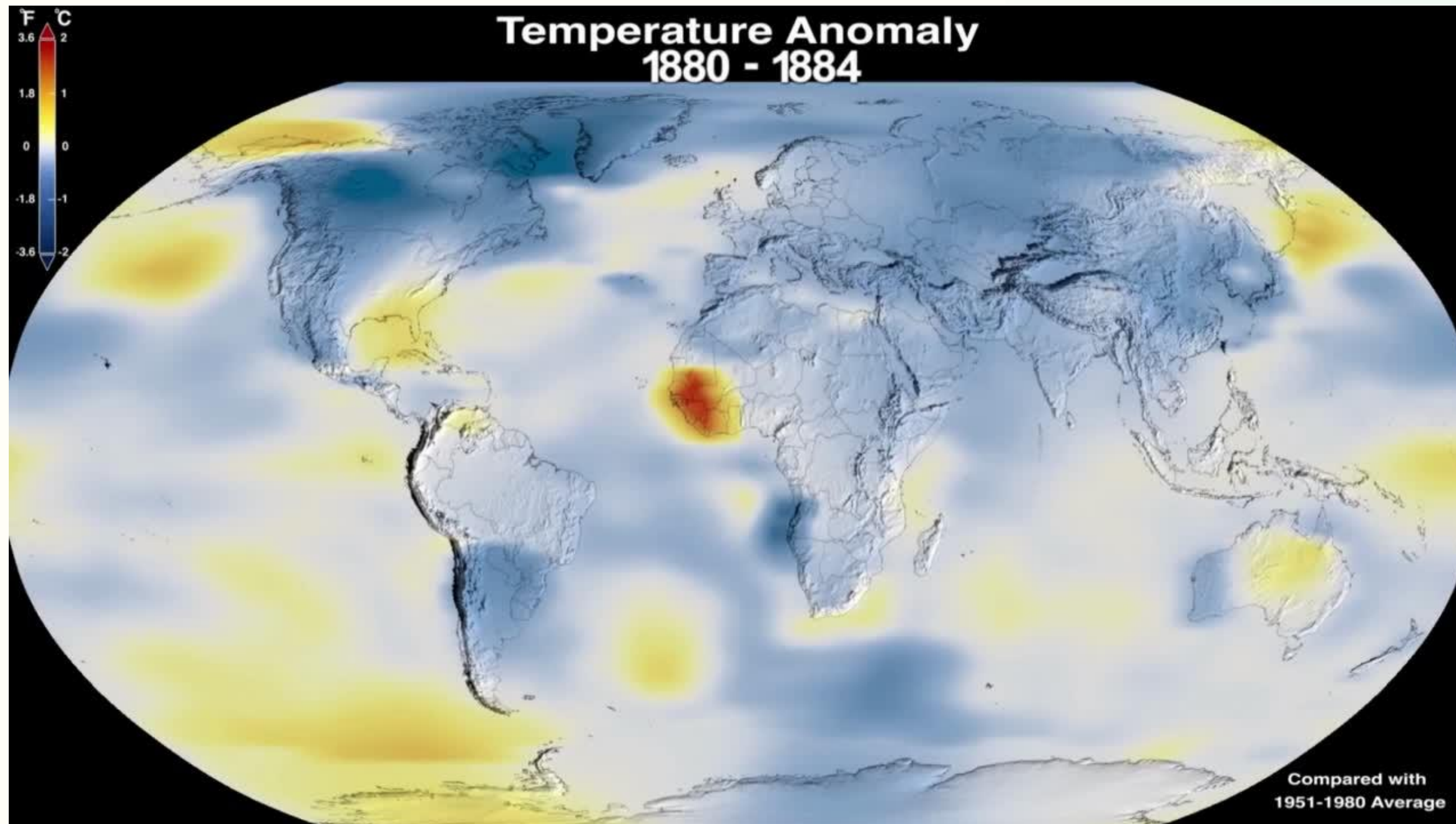
Mini-Mobility: An Emerging Segment



Nilesh Bajaj

# A Reality Check

## Climate Change



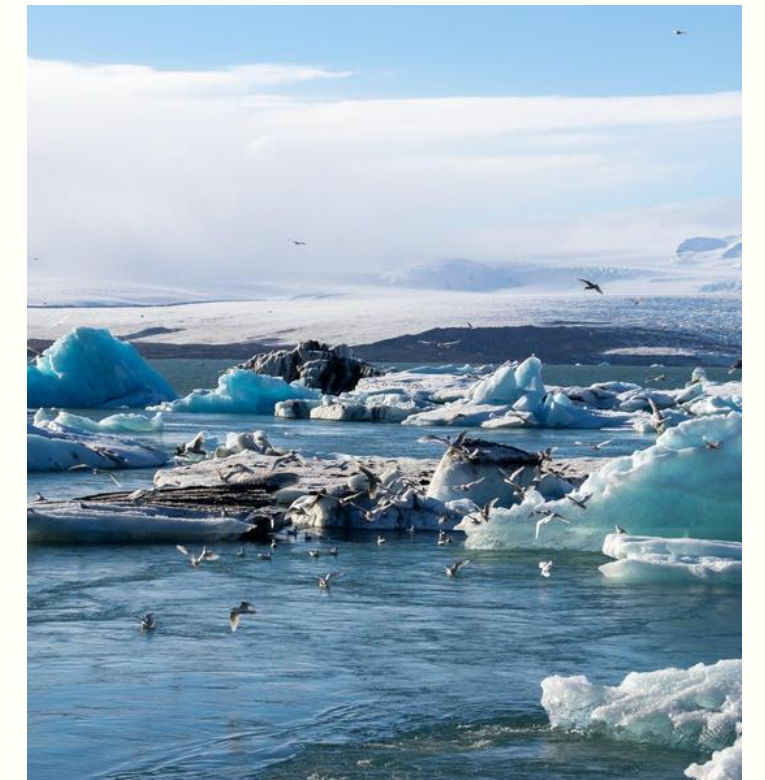
While Earth's climate has changed throughout its history, the current warming is happening at a rate not seen in the past 10,000 years.

From global temperature rise to melting ice sheets, the evidence of a warming planet abounds.



# Time To Act

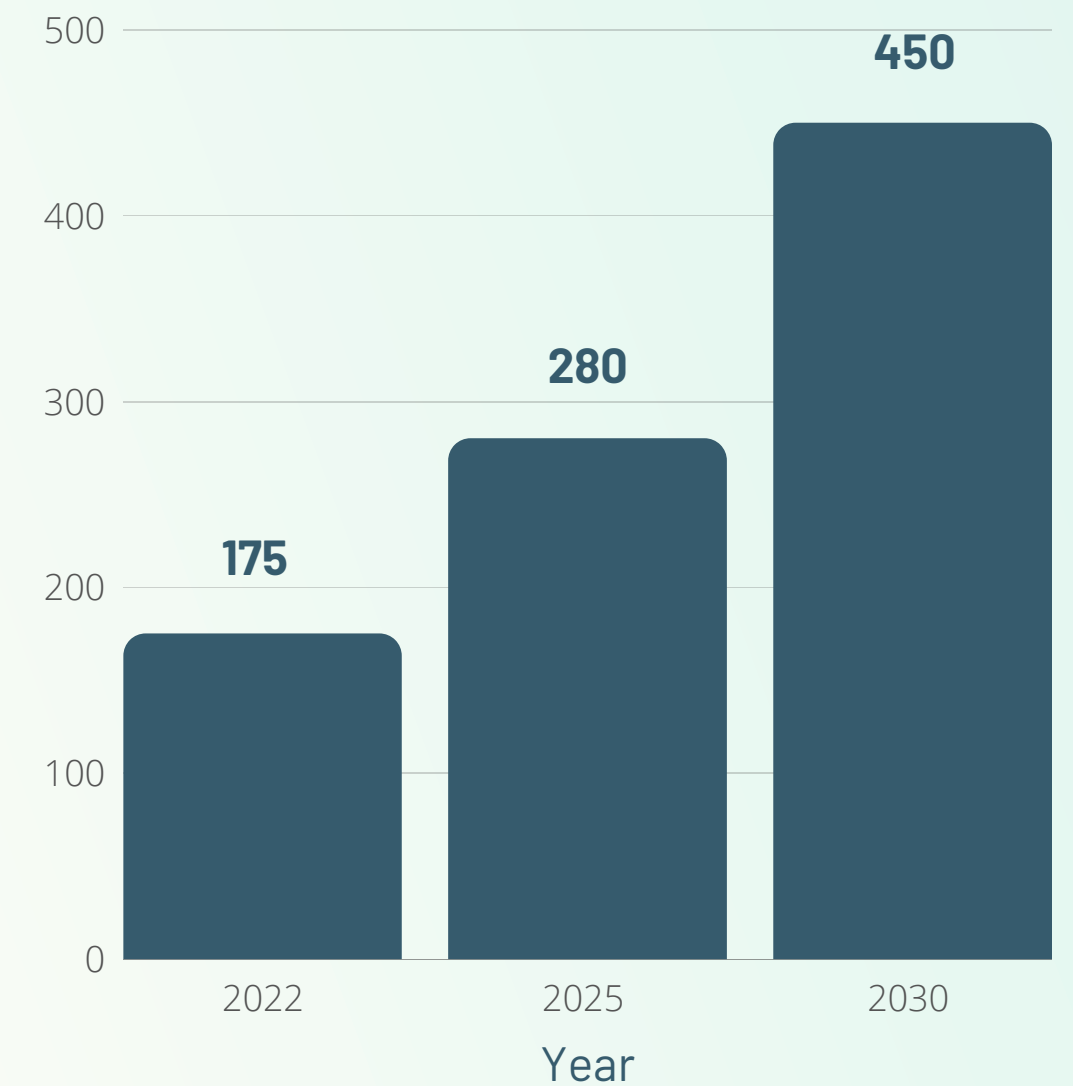
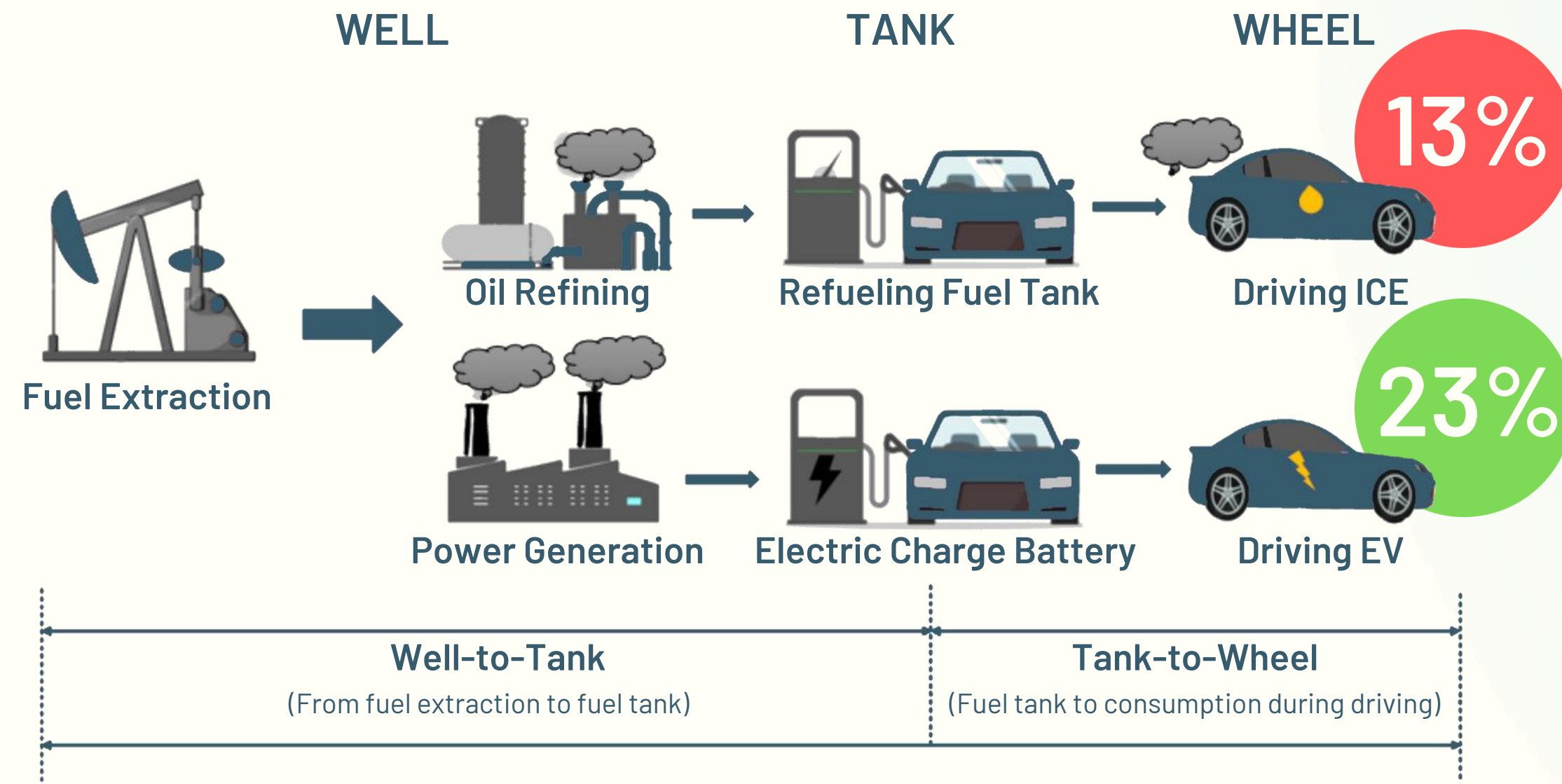
Before it's too late





# Well to Wheels

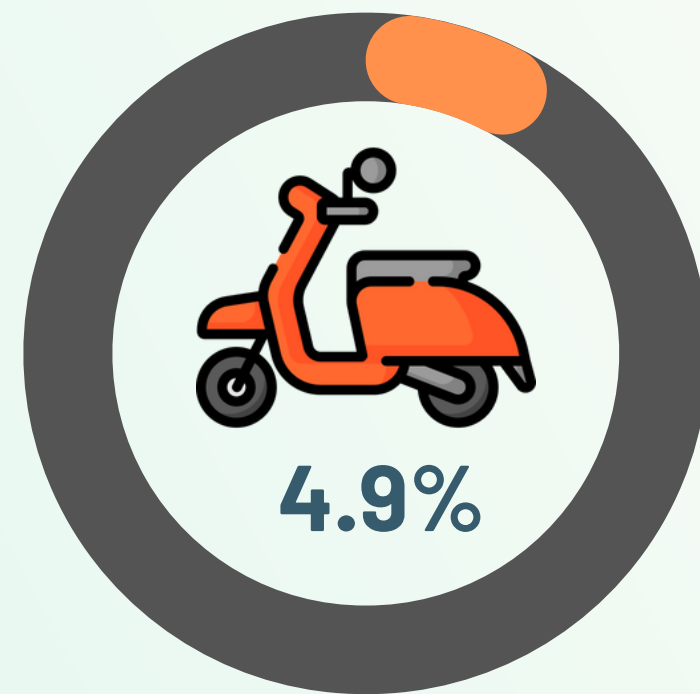
## Internal Combustion Engines vs Electric Vehicles



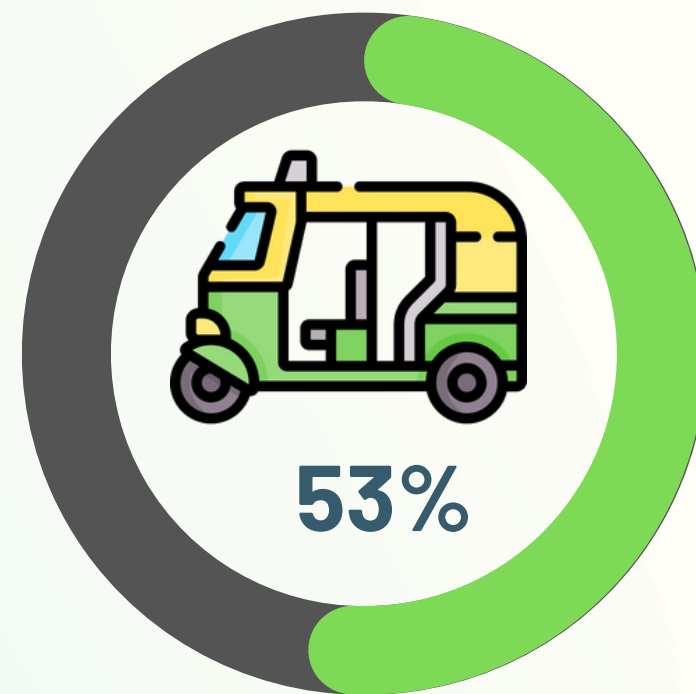
India Renewable Energy Targets 2030 (GW)

# EV Adoption In India

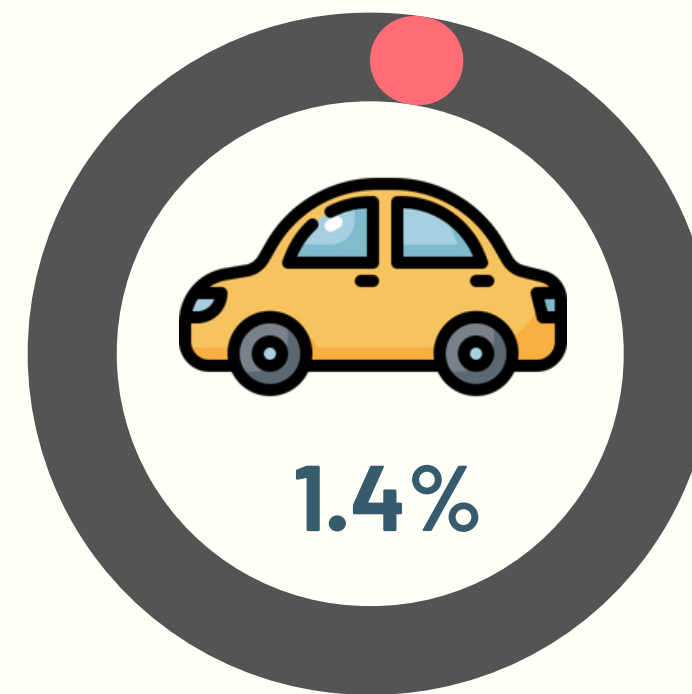
Sales Trends (FY 2022)



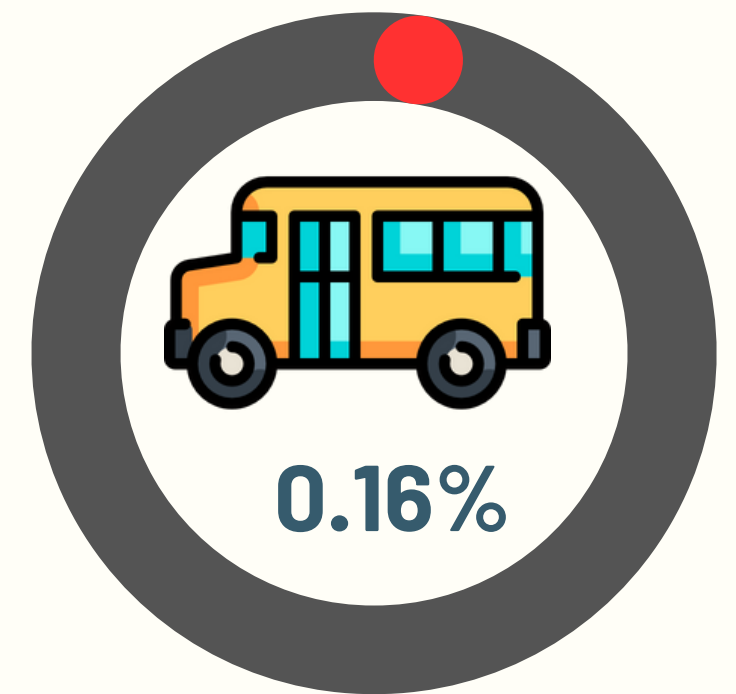
**7,79,000**  
Two Wheelers



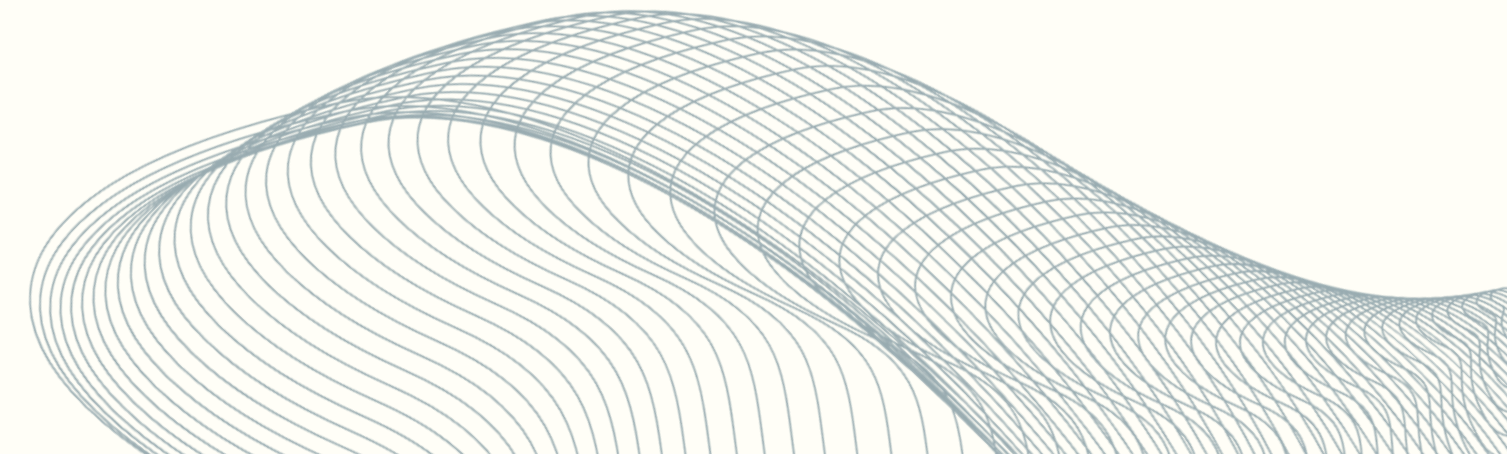
**4,07,000**  
Three Wheelers



**53,843**  
Passenger Vehicles

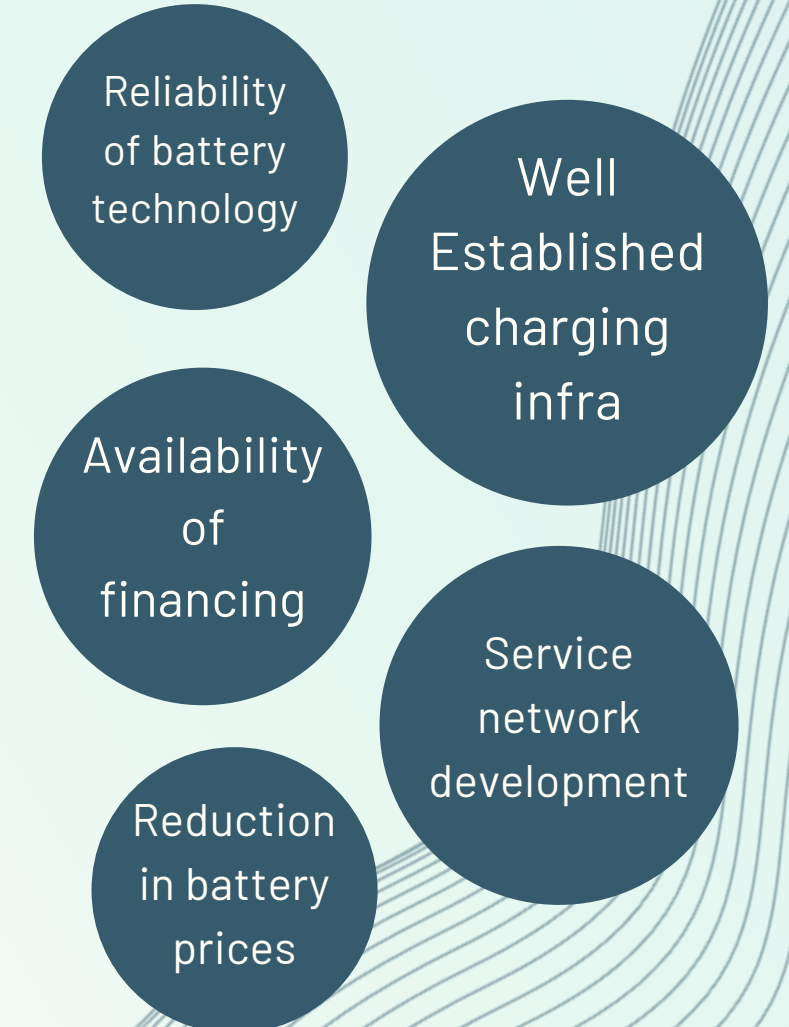
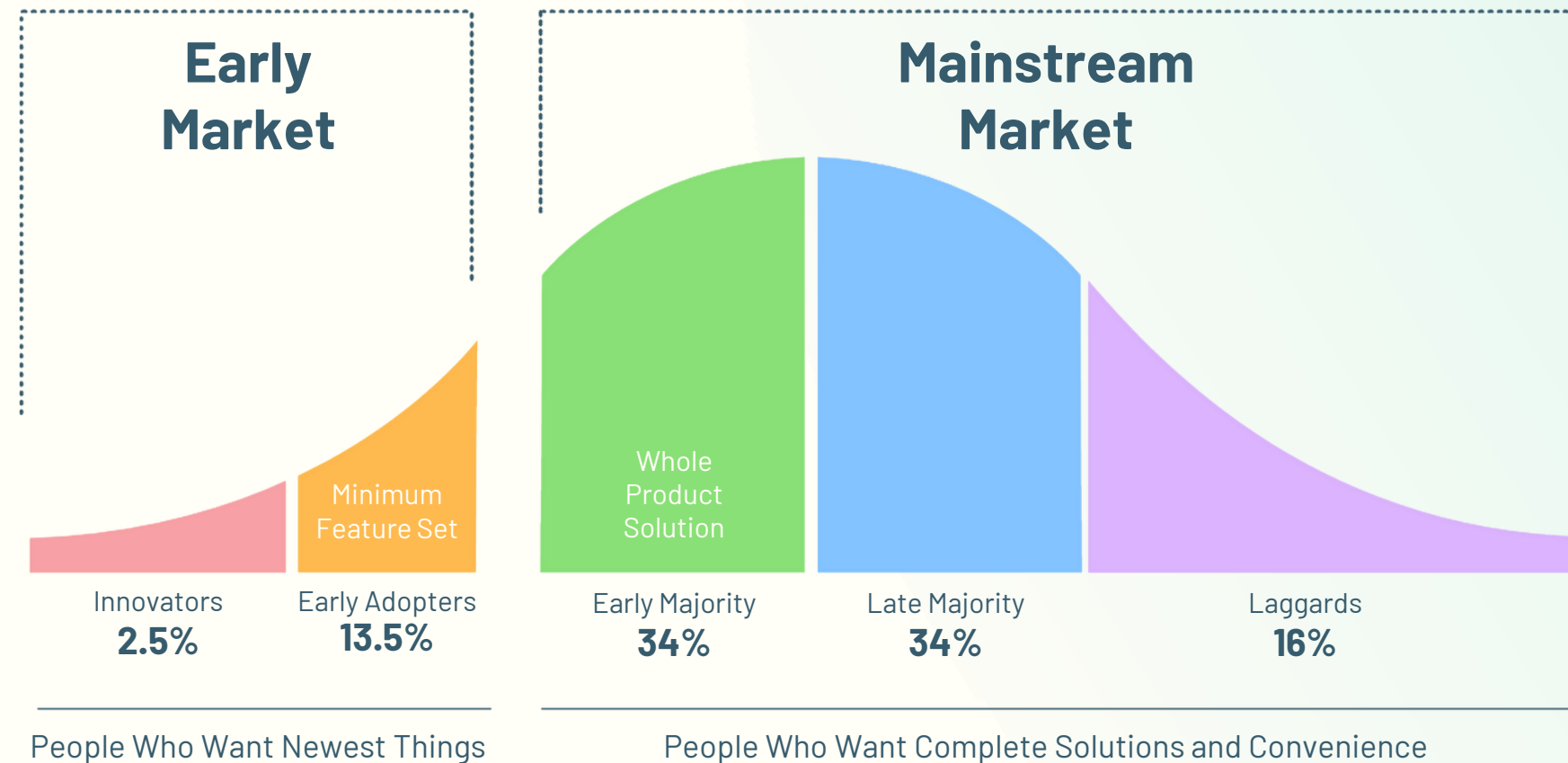


**1,904**  
Commercial Vehicles (Bus)



# Enabling EV Adoption

## Crossing the Chasm





# Passenger Mobility

Top Four Upcoming Trends

Mini-Mobility



- M....

Autonomous Vehicles



- Promises

eVTOL



- The global

Fast Charging



- Alternative



# Minimobility

What is Minimobility?



1-2 PERSONS



100-500 KGS



25-90 KMPH

3 Wheels

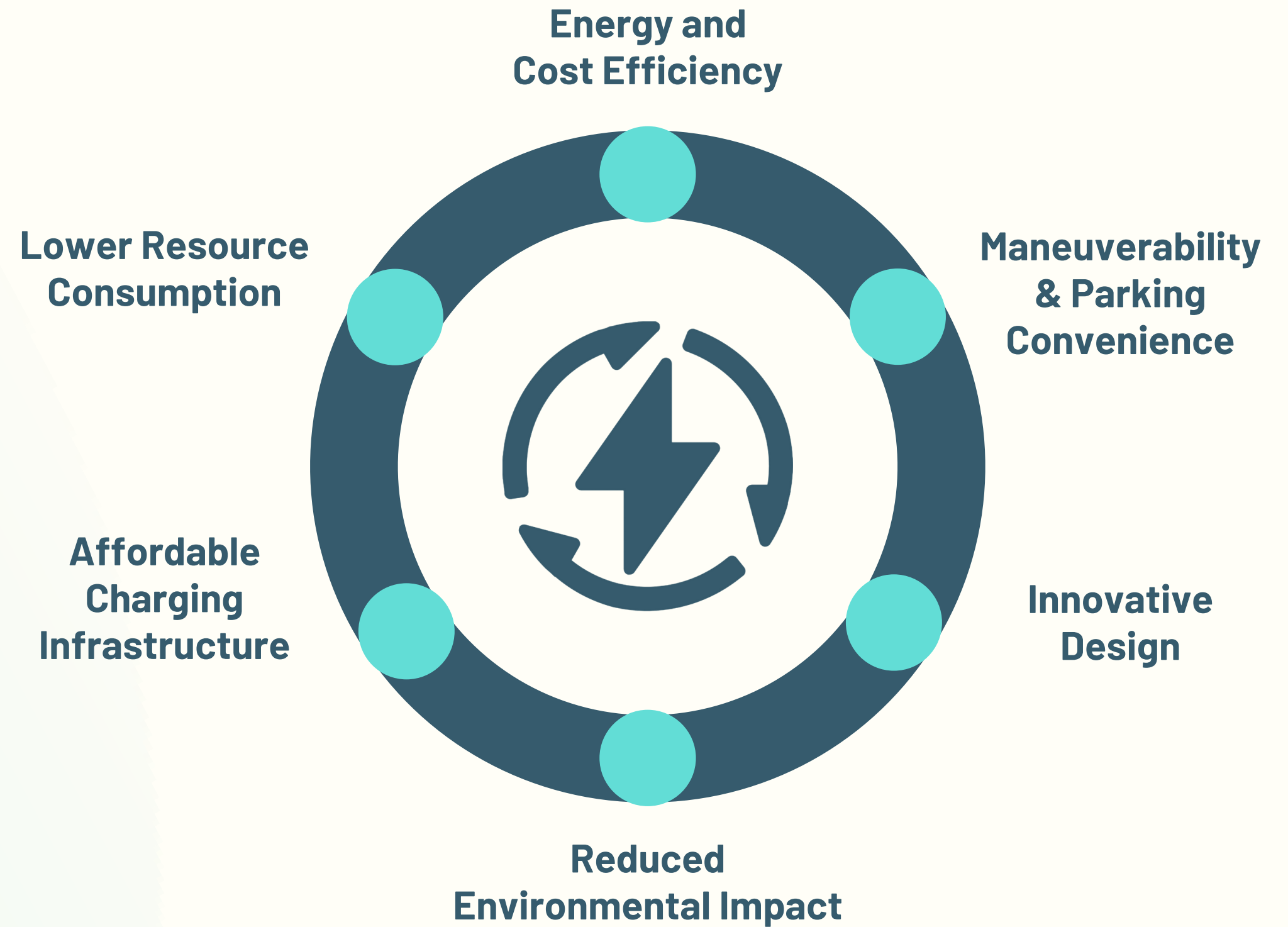


4 Wheels





# Minimobility Advantages



# Smart EVs

Worldwide

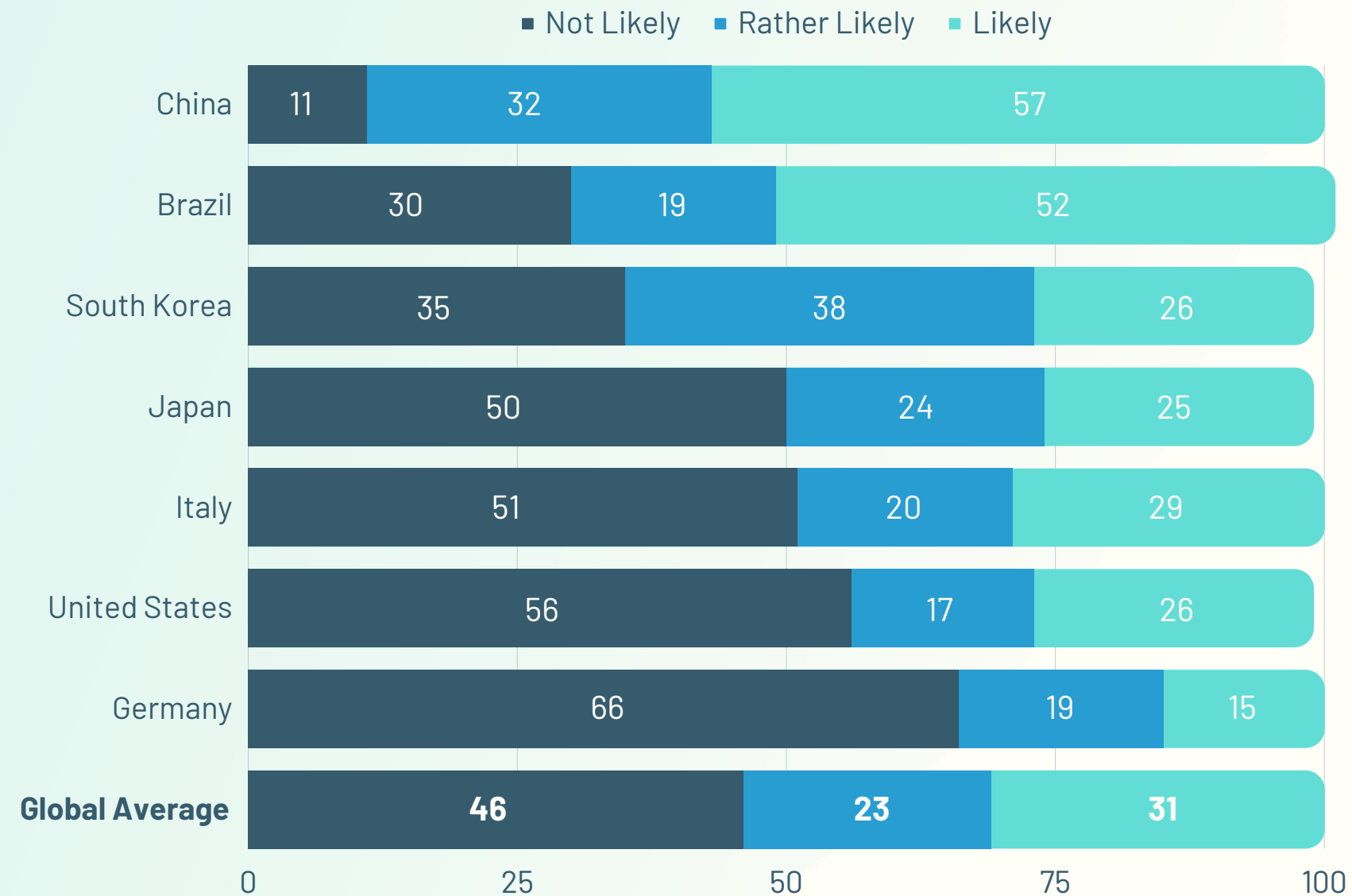




# Comparative Analysis

## Region Wise

Consideration of minimobility usage and implied private-vehicle replacement,<sup>1</sup> % of respondents:



More than 30 percent of surveyed global consumers would use a minimobility vehicle in their future mobility mix.

**Question:** How likely are you to consider using a minimobility vehicle as part of your future mobility mix?

# Commitments by OEMs

Target for 100% Electric Vehicles (All Types) Worldwide

polestar

Now

TESLA

Now

VOLVO

2030

 **MAZDA**

2030



2035



2040

**HONDA**

2040

 **HYUNDAI**

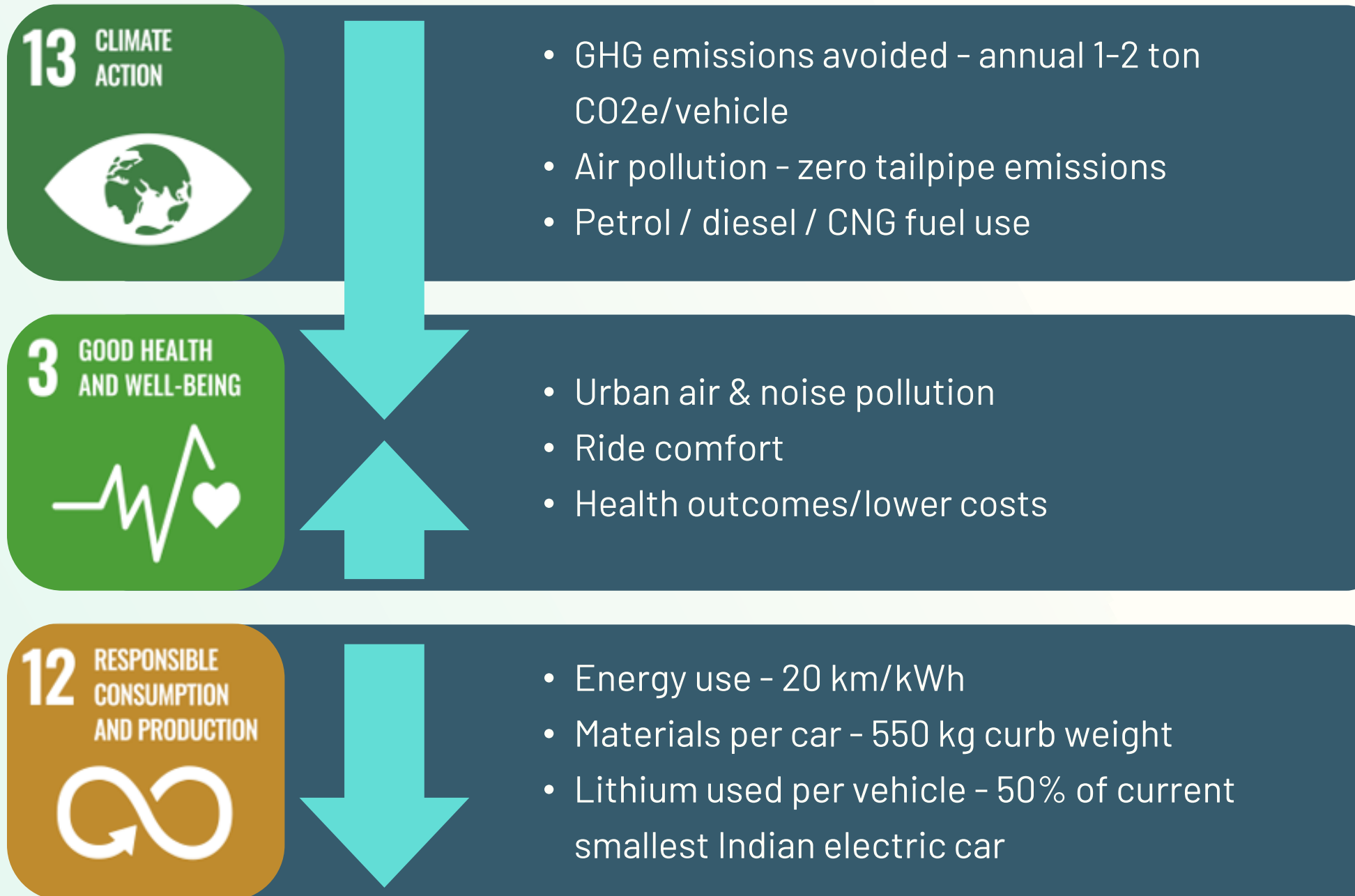
2040



2040



# Impact Of EVs



# India's Challenges

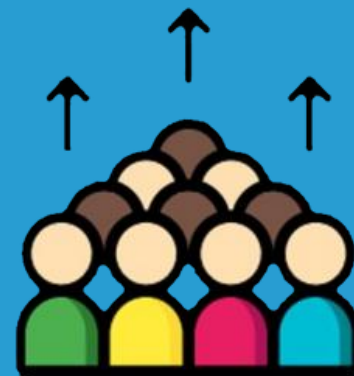
Transport sector's  
contribution to  
GHG emission

23%



World's most  
polluted cities in  
India

14 out  
of 20



Oil import bill for  
India in 2022

USD  
158bn



The cost of  
serious health  
impacts from air  
pollution




5.4%  
GDP



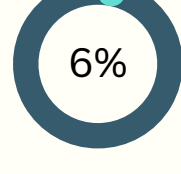
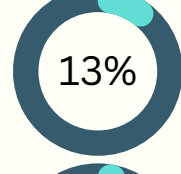
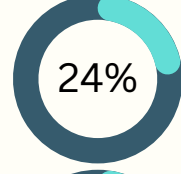
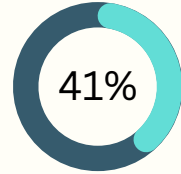
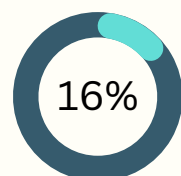


# Traffic Index Ranking

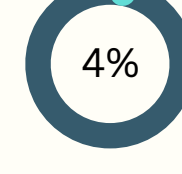
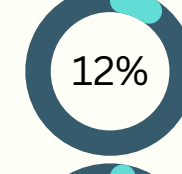
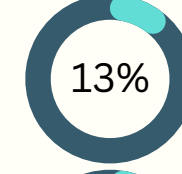
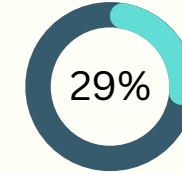
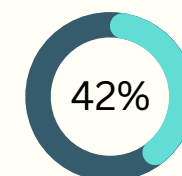
Average Travel Time per 10 KM

	London	36min 20s
	Bengaluru	29min 10s
	Dublin	28min 30s
	Sapporo	27min 40s
	Milan	27min 30s
	Pune	27min 20s
	Bucharest	27min 20s
	Lima	27min 10s
	Manila	27min 00s
	Bogota	26min 20s

2015



2023



India Body Type Development From 2015 to 2023

Drastic shift from Hatchback to SUV models, rendering these primary vehicles all the more unsuitable for daily urban use.

# India's Urban Mobility

A Nielson Survey



71%

of Indian car owners  
either travel alone or  
with one passenger.



81%

of commuters carry  
only a laptop bag on  
their daily commute.



90%

of respondents feel that a compact  
smart car can reduce their travel  
time and parking hassle.



# Introducing EVA

Redefining City Commute



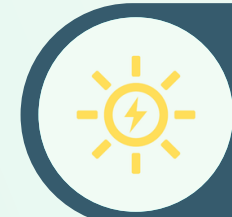
Stylish, Easy Driving,  
Connected Car



250 KM Range, Small  
Footprint, 2 Adults + 1 Child



Charging: 4 HR (Home Socket)  
1 HR (DC Charger)



Solar Range: 3000 KM/year



# Thank You

