TROJAN
PRESENTS

Tesla's India Go-to-market Strategy

- An outside-in perspective

We are here

Business Understanding | Proposed Strategy | Go-To-Market

Contents

TESLA

To accelerate the advent of sustainable transport

Supporting Annexure Slide

Executive Summary

Following is a brief overview for setting up the Tesla business in India:

Tesla Key Objectives: Targeting the right market | Charging infrastructure | Technological Capability | Scaling operations | Path to profitability

Defining the target market

Defined the various segments of **Target market** with **specific needs** & **purchasing power** in the Indian Market

Focused customer strategy

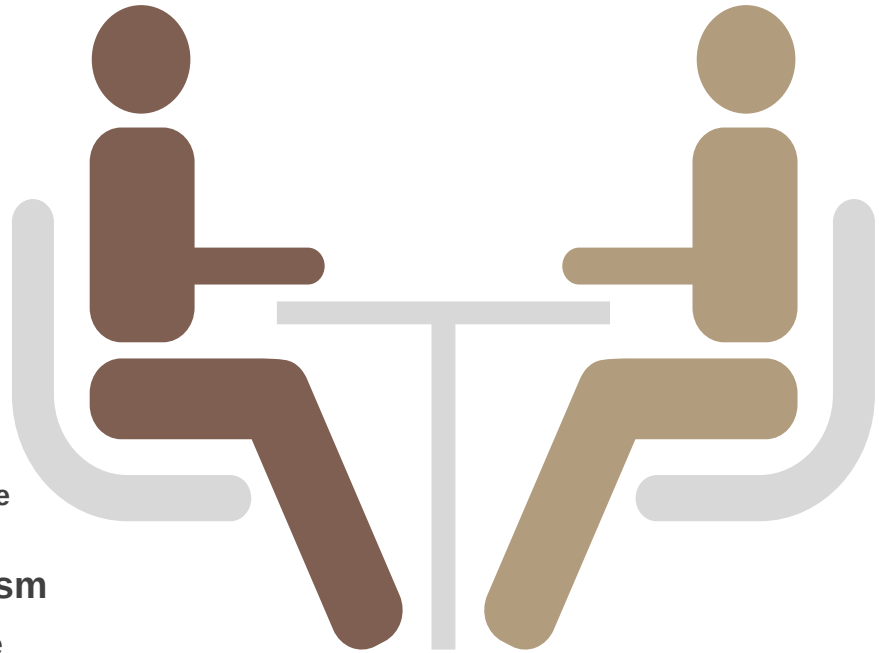
Developed in-depth **customer acquisition**, **engagement** & **retention** strategy to achieve sustained value

Sketching the Product launch

Envisioned a **phase-wise product launch** process to build the required trust & credibility w.r.t the **socio-cultural landscape**

Setting up the pricing mechanism

Synthesized a **pricing model** to arrive at the expected **launch prices** & identified the **risks** prevalent specifically in the Indian context



Tackling the charging infra

Critically evaluated alternative approaches towards a **robust charging infrastructure** & finalized on 4-dimensional ecosystem

Supply chain & distribution

Leveraging Tesla's existing advantage of **vertically integrated supply chain** to effectively expand distribution model

Gazing at the competitors

Assessed the **competitive fabric** of Indian automobile industry & drew **parallels with incumbents** like Tata motors

Building the future roadmap

Chalked out the **future steps** for Tesla management highlighting **strategic trade offs** to enter, **grow & succeed** in India

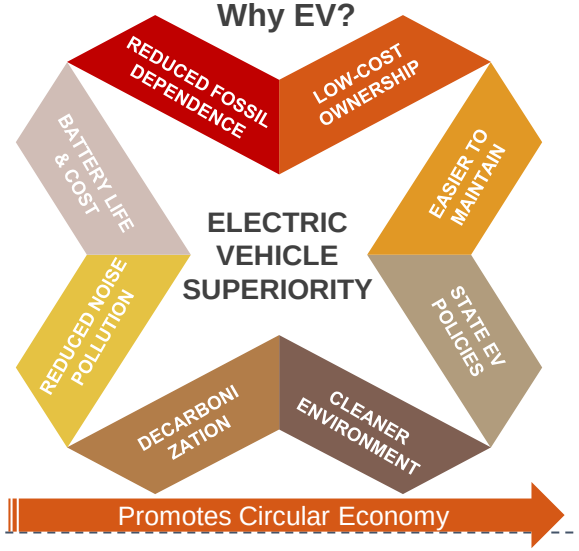
Tesla can enter in the luxury segment, establish their foothold & later scale up to the mass market with more affordable cars

As-is Indian EV Landscape

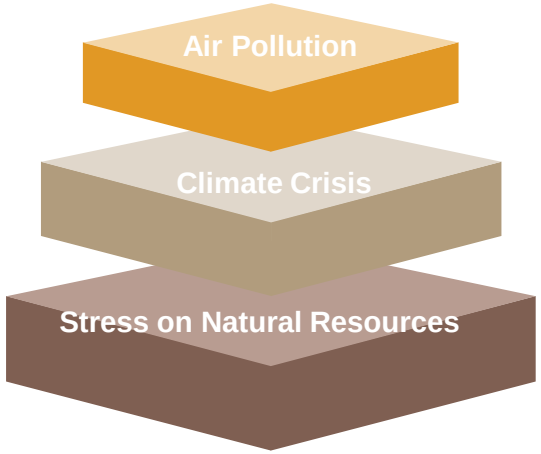
As per current forecasts, India is expected to realize only 10-15% electric cars penetration by 2030.

EV (Futuristic) vs ICE (Traditional)

Why EV?



Why India?

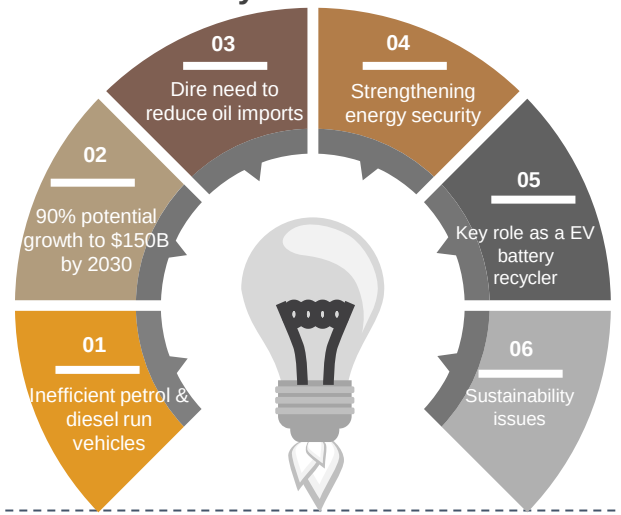


1.6 Million deaths
India accounted for more than 25% deaths world-wide due to air pollution in 2020

2020 was the 8th warmest year on record and 2011-2020 the warmest decade ever

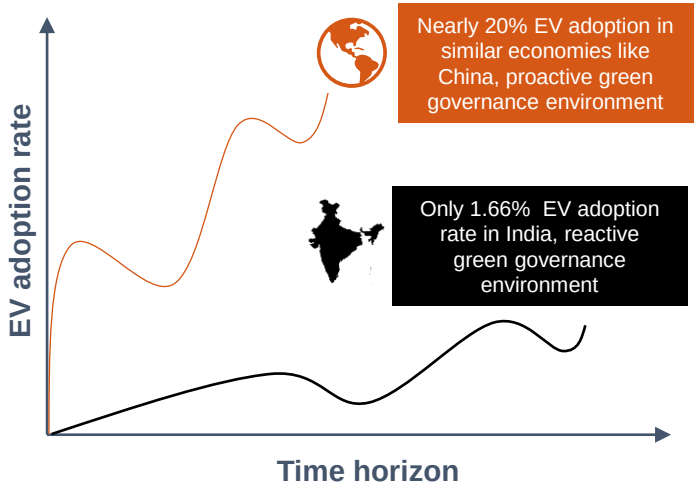
50 Years until we run out of both out and natural gas remaining, 115 years of coal production

Why EV in India?



India vs International EV Landscape

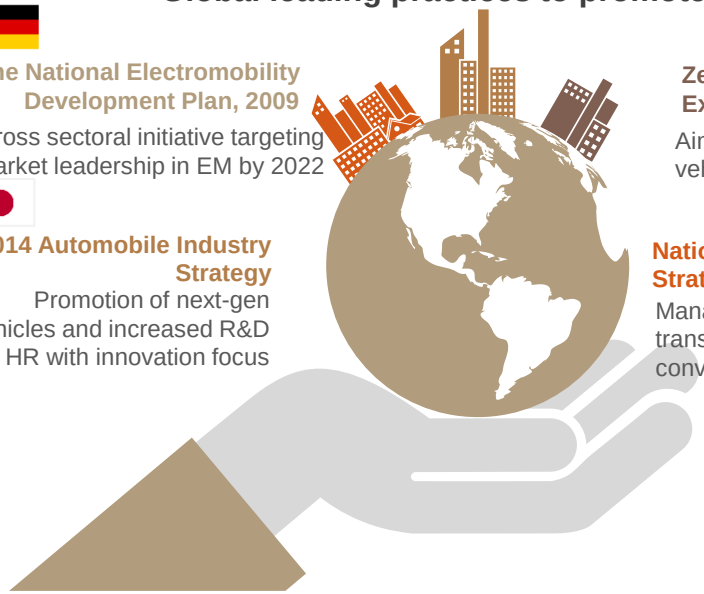
India Progress benchmarked with the world



Global leading practices to promote EVs

The National Electromobility Development Plan, 2009
Cross sectoral initiative targeting market leadership in EM by 2022

2014 Automobile Industry Strategy
Promotion of next-gen vehicles and increased R&D & HR with innovation focus

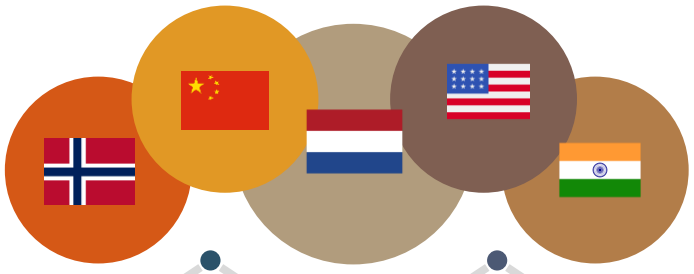


Zero Emission Vehicle Executive Order, 2018
Aim to put zero emission vehicles and infra on road

National Environment Strategy, 2020
Manage & promote land transportation to be safe, convenient & sustainable.

Indicative infrastructure landscape

(EV to EVSE ratio across the globe)



3-12 EVs per charge point

25-30 EVs per charge point

3-6 EVs per charge point

14-17 EVs per charge point

6K-8K EVs per charge point

Source: Policies to promote electric vehicle deployment – Global EV Outlook 2021 – Analysis - IEA, 2021; Niti.gov.in. 2021, Available at: https://www.niti.gov.in/sites/default/files/2021-08/HandbookforEVChargingInfrastructureImplementation081221.pdf

Evolving Industry Landscape

Following is a bird's eye view of the EV space which is expected to shape the future of mobility solutions in India:

Overview:

The Electric Vehicles market in India has huge potential for growth with an extremely positive outlook owing to robust automobile industry, mass adoption forecasts & conducive general environment

- **~$5.47 billion (2020)**
- **23.4%+ CAGR (E) '21-'26**
- **~$12.6 billion (expected investment over next 5 years)**
- **1000+ Public charging stations**
- **~1.3% of total vehicle sales ('20-'21)**

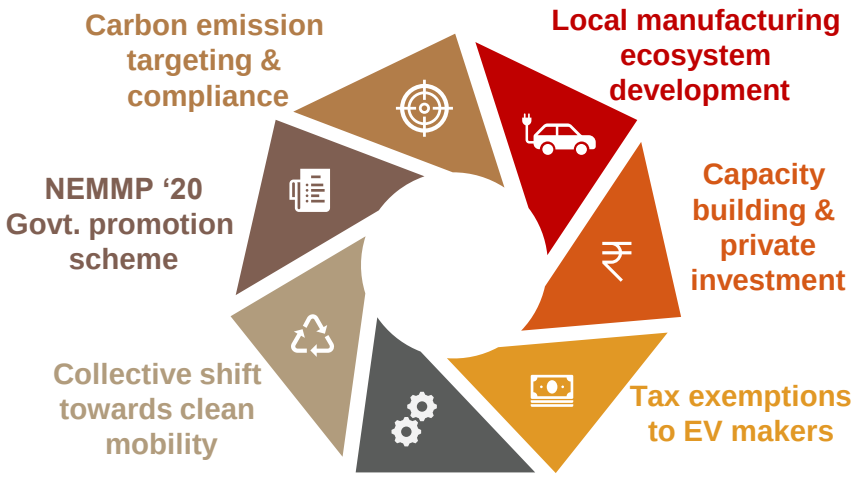
EV Sales in India (A snapshot)

**Absolute numbers (units)*

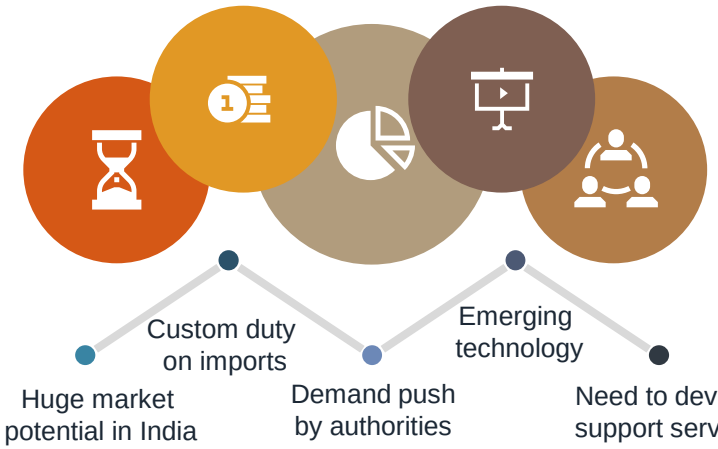
Segment	FY'20	FY'21	Change
	3,400	5,905	+74%
	152,000	143,840	-5%
	600	450	-25%

Note: Figures don't include e-Rickshaws; numbers affected by Covid-19 pandemic
Source: Quartz; SMEV; India Briefing; Frost & Sullivan

Growth drivers & Future prospects



Core characteristics



Top industry players

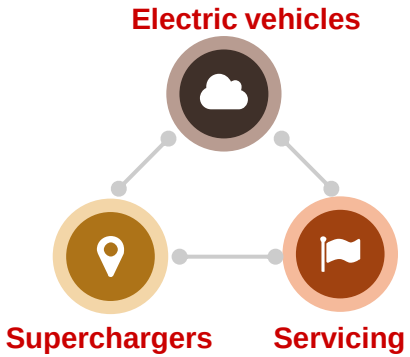
TOYOTA · TATA MOTORS · Mahindra ELECTRIC · ATHER · MARUTI SUZUKI · MG

Source: Battery bits; Transportpolicy.net; Business Standard; India Briefing; Society of Manufacturers of Electric Vehicles (SMEV); Mordor Intelligence; The Startup Lab; Frost & Sullivan

As-is Company Overview

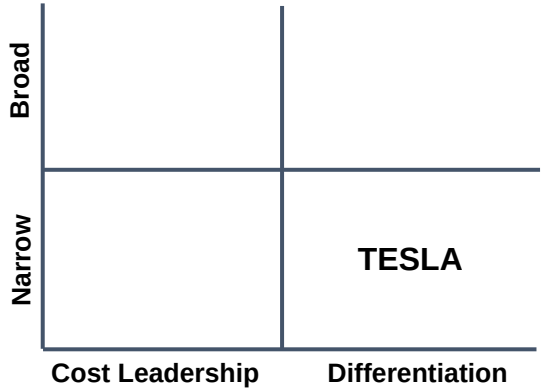
Following is the snapshot of current positioning of Tesla in the Global EV market:

Tesla's Business model



- Three-pronged approach to selling, servicing and charging their electric vehicles
- Vertically integrated supply chain, superior quality, design and performance
- Targets high end clients that value performance and are environment conscious

Competitive Positioning



Company Details

Founded: 2003 **CEO:** Elon Musk

Countries Served:

- US
- UK
- China
- Norway
- France
- Canada
- Netherlands
- Germany
- Switzerland

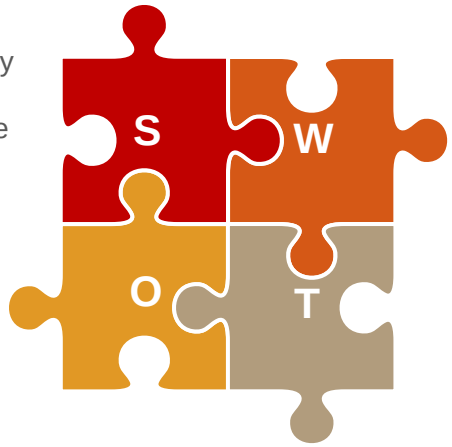
Employees: 70757 **Sales:** 31.5Bn$ (FY21)

Market Cap: $1.03 Trillion

SWOT Analysis

Strengths
- Energy Efficiency
- Partnership
- Highly innovative
- Sturdy Brand Image

Opportunity
- Autonomous Driving Technology
- Environment-friendly cars
- Battery Production Technology



Weakness
- Limited Presence
- Premium Product Range
- Succession Strategy

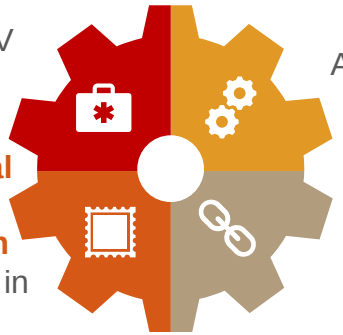
Threat
- Increased Competition
- New technologies
- Long Term Sustainability

Competitive Strengths

First Mover Advantage
Pioneer in EV market

International Brand Recognition
Highest sales in EV

Ownership based selling and distribution

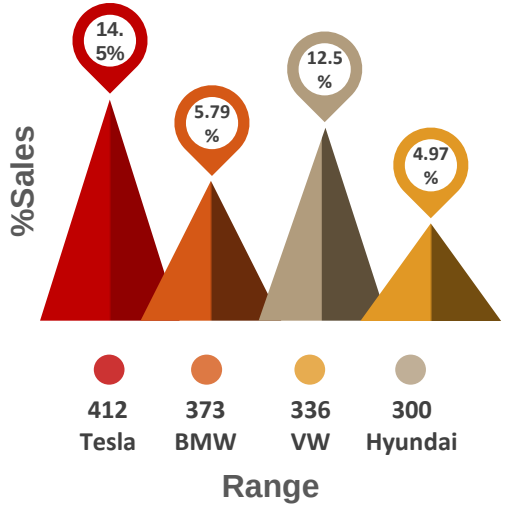


High Innovation Focus
Automation and quality improvement

Vertical Integration
Battery manufacturing plant (Gigafactory) to sales

Brand wise %Sales & Range

Tesla dominates the global EV space in terms of both range and sales



Source: "What Makes Tesla's Business Model Different?", Investopedia; Forbes; Tesla

As-is EV Challenges In India

Following is a summary of major problems associated, based upon our understanding & the interviews conducted:

Challenges Faced

Environmental concerns

Customer apprehensiveness

Weak legal & regulatory framework

Health hazard relating ICE vehicles

Inadequate resources & technology

Inefficient infrastructure

Lack of contribution to Socio-economic development

Inefficient processes

Shortage of funds channelized

We reached out to experts in the field to capture their voice.

Voice of experts

" I have studied electric mobility in detail both, in India & in Germany. The major differentiating factor between the two geographies is the consumer phycology. On one hand, in India the value of a vehicle is perceived to be purely in monetary terms whereas here in Germany, people value non-monetary aspects including environmental sustainability before making the decision, as a responsible consumer." ~ Jaskirat Singh

EHS & Sustainability Specialist
Boehringer Ingelheim

"The problem with EV adoption, and the climate crisis is that it is considered national as of now. Considering the future impact of mobility, we should see it an international problem and collectively formalize the system to increase its adoption. Commitment to pacts such as The Paris Agreement will play a pivotal role in effort convergence." ~ Vandit Bhayana

Micro Masters, Circular Bio-Economy
Wageningen University & Research

"The current policy focus should also include having adequate EV supply infrastructure, fast charging stations, smart grids, and benchmarking Indian policies with that of leading countries like Norway, China to achieve the aggressive 30% EV target with the stipulated timeline." ~ Akshay Mandar

Sustainability Consultant, EY

Source: Primary interviews

Legal & Regulatory Framework

Following is a brief overview of the existing electric mobility landscape in the country:

Details

Current EV governance landscape

FAME 1 & 2- Demand side incentive policy, focus on boosting demand via subsidies, rest spent on infrastructure development, includes hybrid electric vehicles & Electric vehicles, at least on charging grid in 3 x 3 km grid in cities, charging station every 25km on highways, lowering of GST on EVs from 28% to 12%

360% → YoY increase in sales of electric vehicles, though lagging in terms of absolute numbers

Extended Product Linked Incentives - Supply side incentive to domestic manufacturers, Automobiles and Advanced Chemistry Cell(ACC) battery manufacturing approved under PLI in Nov 2020

42.5Kcr → expected new investments in the EV space by 2026

State Policies - 14 states have their own EV policies, focus on 2 wheelers and 3 wheelers and public transport

50% states → offer subsidies on 2 wheelers and 4-wheeler based on battery capacity

Vehicle Scrappage Policy - Stringent fitness tests for vehicles older than 15%, discounts in new vehicle and road tax rebate against scrapping certificate, setting up of scrapping centers

52L → vehicles eligible for scrapping , expected 30% boost to Indian automobile segment

Other subsidies & stimulus - include waiver / concessional road tax, exemption from permit, waiver / concessional toll tax, waiver / concessional parking fees, concessional registration charges.

48.8% CAGR → estimated in public vehicles space by 2025

Shortcomings in achieving the EV vision 2030

Lack of standardization

State policies: Differ in terms of targets and incentives, common goals not present

Inadequate incentivization

Battery accounts for almost 40% lifecycle ownership cost, manufacturing locally will help lowering costs

Manpower management

Loss of jobs in ICE components industry & related manpower issues in automotive not addressed

Underdeveloped infra.

No subsidy for battery swapping, public charging stations density very low, not enough incentive for private players

Power generation

Inadequate power generation in India currently, need to meet increased electricity demand for charging of EVs

Data security concerns

EVs function with multiple sensors & utilize data points, security of this data to be taken under review & policy formulation

"Even if producing CO2 was good, given that we are going to run out of hydro-carbons we need to find sustainable means of operating." - Elon Musk

Note: Please refer slides in the annexure for to-be regulatory & policies changes to scale up the EV adoption rate in the country.

Source: Policies to promote electric vehicle deployment – Global EV Outlook 2021 – Analysis - IEA, 2021; Niti.gov.in. 2021, Available at: <https://www.niti.gov.in/sites/default/files/2021-08/HandbookforEVChargingInfrastructureImplementation081221.pdf>

Target Customer Profiles

Following is a categorical analysis of targeted customer cohorts to generate effective demand:

B2C

EV enthusiasts

- ❑ Early adopters – tech focused
- ❑ New **tech** & **features** are primary
- ❑ Willingness to pay:

0 — 100

Tesla positioning:

- ➢ Superior full self driving tech
- ➢ Access to Tesla ecosystem
- ➢ Regular first hand updates

Luxurious car owners

- ❑ Purchase as a status symbol
- ❑ **Superior design** is primary driver
- ❑ Willingness to pay:

0 — 100

Tesla positioning:

- ➢ Best-in-class looks & appearance
- ➢ High end Tesla brand experience
- ➢ Worthy addition to existing collection

Upper middle-class families

- ❑ Utility focused buyers
- ❑ **Cost benefit** is primary driver
- ❑ Willingness to pay:

0 — 100

Tesla positioning:

- ➢ Lower lifetime ownership cost
- ➢ Ecologically sustainable & fuel efficient
- ➢ Upgrade in the standard of living

B2B

Central Government

- ❑ High power to **build EV market**
- ❑ FAME policies; regulatory incentives
- ❑ Potential order volume:

0 — 100

Active lookout:

- ➢ Pollution control focus
- ➢ Vehicle scrappage policy
- ➢ Intention to lead by example

State Government & Agencies

- ❑ High power to **localize EV ecosystem**
- ❑ 13 adopted; draft policy in 4+ states
- ❑ Potential order volume:

0 — 100

Active lookout:

- ➢ Own fleet transformation
- ➢ Shift to CNG powered and EVs
- ➢ Central legislature + self targets

Corporates

- ❑ High power to **create scaled demand**
- ❑ Govt. incentives; stakeholder push
- ❑ Potential order volume:

0 — 100

Active lookout:

- ➢ Sustainable ways of working
- ➢ Employee friendly policies
- ➢ CSR + Government incentives

Source: Primary interview, market research

To-be Customer Strategy

Following is a brief overview of customized approach devised for targeted customer cohort:

Customer Acquisition

Tesla Customer targeting

Pre Orders & Bookings

- Open pre-order option for **enthusiasts** & **early adopters** to get a sense of demand
- **Customized design** & **gift bookings** to build hype & excitement in new market

Referral & Promotion

- Provide Tesla **owners** with a **cash payment** for each car sold as referral

Customer Engagement

Creating a best-in-class experience

- Personalized **driver profiles** with custom settings changed with a button
- Data driven design with **integrated** customer **preferences & insights**
- **Fully upgradable, dynamic** dashboards & automated driver recognition

B2C strategy

- New **tech & update** beta trial programs for live reaction & suggestions
- Timely & **personalized recommendations** to improve user driving experience

B2B strategy

- Active participation & support in **Government programs** & events
- **Targeted corporate** communication to facilitate **transparent feedback**

Engagement strategies

- Large scale**,** High-end **launch events** targeted at gaining huge traction
- Participate in Luxury auto exhibitions & organize **test drive events**

Customer Retention

Vehicle life cycle

Proactively participate in the **vehicle replacement process** of customers to **enhance repeat purchases** & improve **retention rate** *(91% retention globally)*

Service & roadside assistance

Build an expanded **network** of **service centers** and Tesla **certified technicians** for prompt & superior customer service

Value added services & products

Continuously create value for Tesla users including **new tech updates**, **digital functionalities**

Customer lifetime

For maximum potential revenue generation throughout the customer lifetime, **two-way communication loop** for feedback, improvements, suggestions & **evolution of needs**

Source: https://www.forbes.com/sites/blakemorgan/2021/05/10/3-ways-tesla-creates-a-personalized-customer-experience/?sh=525219523b37. Retrieved 01/22

Product Entry Options

Following is the critical evaluation of potential entry models for Tesla in the Indian market:

Model 3

- The Model 3 is an electric fastback mid-size four-door sedan developed by Tesla.
- Tesla's Model 3 has become the world's best-selling plug-in electric vehicle model and had crossed 1Mn+ global unit sales.

Details:

- Price point ~ **$45K**
- Mile Range ~ **272 miles**
- Target Segment ~ **B2C**
- Purpose – **Luxury**
- Payback ~ **5 years**

Model 2

- Often referred to as the ”Baby Tesla”, the unnamed model 2 is set to be launched in 2023 across the globe.
- It’s the cheapest car amongst the Tesla’s existing product portfolio and could prove to a perfect fit appealing to Indian mass market.

Details:

- Price point ~ **$25K**
- Mile Range ~ **250 miles**
- Target Segment ~ **B2C**
- Purpose – **Economy**
- Payback period ~ **3 years**

Semi

- Tesla Semi is an all-electric battery-powered Class 8 semi-truck in development and set to be launched in 2023.
- Semi could prove a game-changer in the Indian commercial vehicle segment, given the cost-benefits study conducted.

Details:

- Price point ~ **$150K-$180K**
- Mile Range ~ **300-500 miles**
- Target Segment ~ **B2B**
- Purpose – **Utility Vehicle**
- Payback period ~ **2 years**

Model 3 ~ GTM Entry Opportunities & Risk

TOP 3 Opportunities

1. Establishing superiority & driving premium from niche
2. Building aspirational value amongst the mass market
3. Proven track record of the model and the company

BOTTOM 3 Reservations

1. Unaffordability in the Indian markets due to high tariffs
2. Relatively smaller size of target addressable market
3. High investment and fierce competition from incumebents

Model 2 ~ GTM Entry Opportunities & Risk

TOP 3 Opportunities

1. Segment with highest TAM (Target Addressable Market)
2. Best product market fit i.e., hatchback to Indian landscape
3. Overcoming Model 3 price-cost inequillibrium challenges

BOTTOM 3 Reservations

1. Dilution of augmented features in the existing line-up
2. Relatively tougher to extend into upper class after Model 2
3. Slow cost recovery and increased payback period for Tesla

Semi ~ GTM Entry Opportunities & Risk

TOP 3 Opportunities

1. Letter of Intent from corporates, central & state government
2. Low volume but high margin focused manufacturing & sales
3. Low customer acquistion cost and high lifetime value in B2B

BOTTOM 3 Reservations

1. Scare battery technology & manufacturing concerns in India
2. Relatively concentrated TAM (Target Addressable Market)
3. High cost and weaker commercial Evs perception

Source: tesla.com, electricvehicleweb.com-tesla

To-be Phase-wise Model Launch

Following is a bird's eye view of the 3-year action plan for Tesla to successfully enter and succeed the Indian market:

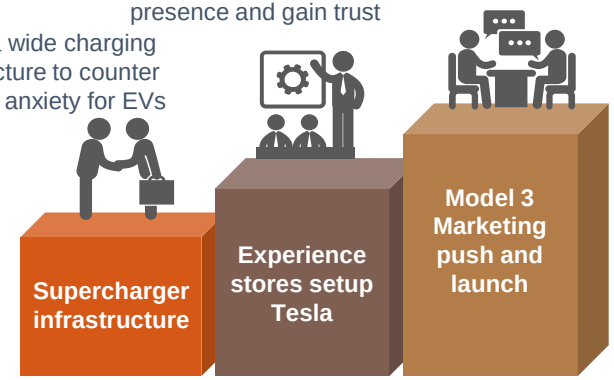
Short term ~ 0-12 months

Collaboration with the government, Establishing value chain & Launching Model 3

Create a wide charging infrastructure to counter customer anxiety for EVs

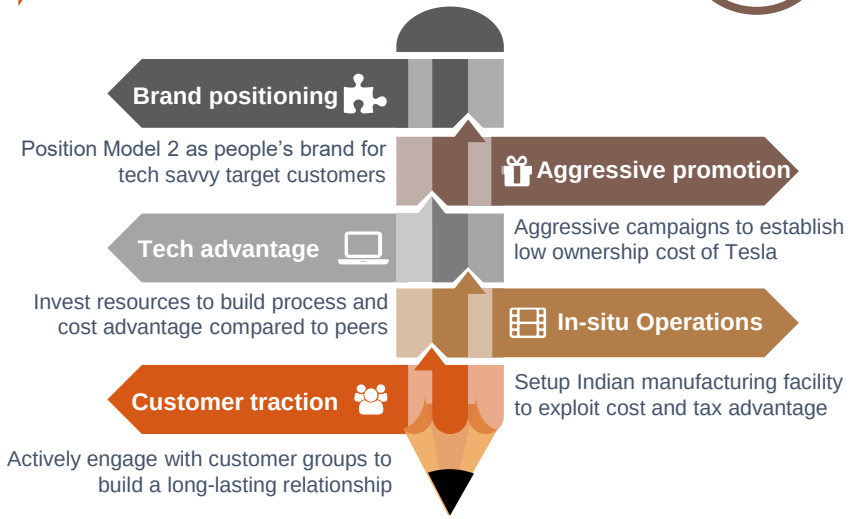
Setup physical experience stores of Tesla to establish presence and gain trust

Intense marketing of Model 3 as the aspirational must have for the target customer segment



Medium term ~ 12-24 months

Penetrate the mass market with Model 2, Monetize from capabilities, customers & tech



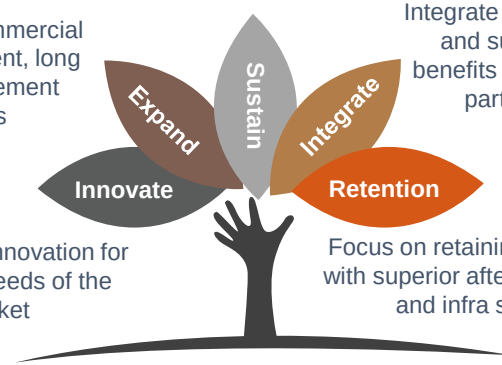
Long term ~ 24-36 months

Sustain customer value; Innovate, Grow & Expand into commercial segment with Semi

Partner with travel companies and Indian state governments for fleet transformation

Expand to commercial vehicle segment, long term engagement projects

Integrate manufacturing and supply chain benefits of Indian auto part industry



Continuous innovation for emerging needs of the market

Focus on retaining customers with superior after sale service and infra support

Phase I - Quick Wins

1. Going live with limited units of Tesla Model 3 targeting the niche, arousing aspirational value for the mass market

Phase II – Expanded offering

1. Going live with limited units of Tesla Model 3 targeting the niche, arousing aspirational value for the mass market

2. Full fledged roll out of the Tesla Model 2 across the country, targeting the Indian mass market with largest TAM

Phase III - Full Range

1. Going live with limited units of Tesla Model 3 targeting the niche, arousing aspirational value for the mass market

2. Full fledged roll out of the Tesla Model 2 across the globe, targeting the Indian mass market with largest TAM

3. Investing in development of public/ commercial vehicles solutions from a long-term perspective basis the traction

Tesla vs Tata ~ Indian Backdrop

Comparing Tesla with Indian incumbent Tata Motors to chalk out competitive advantages

Tesla's Strengths:

To accelerate the advent of sustainable transport and electric technology

Superchargers
Tesla has worldwide network of superchargers, which are superior in charging time and range and are brand agnostic

R&D Advanced
Pioneer in EV segment and has more invested in tech for long. It enjoys a superior trust and is a leader in self driving technology.

Vertical Integration
Tesla's competitive advantage arises from its vertical integration model. More control on ideation, design and product quality.

Regulatory Support
Tesla's investment in India is important from economic perspective and as such they will enjoy import tariff benefits

Global Brand
The global presence gives it recognition as well as acts as hedge, a must have appeal for the modern enviro-conscious user

Luxury Segment
Tesla in India with its Model 3 will be a targeting the luxury car segment, sought after by the upper middle class and top tier

Tata's foothold:

Connecting Aspirations

Lead in Infra solution
Tata has an early over advantage in infra capabilities in India. It has established itself as a self-sufficient player for E2E infra

Deep Pockets
Tata has raised 1bn USD from TPG rise and ADQ wholly for their EV business and have started heavily investing in R&D

Synergies of Tata Group
Tata is a conglomerate and is leveraging its sister companies Tata Power, chemical and Elxsi to provide an ecosystem..

Regulatory Partnerships
Tata has strong partnership with central and state government in India. It already has contracts from states for public vehicles.

Indian Market Trust
Tata has been in Indian families across generations. Across user and suppliers, garners unparalleled trusts and share of the mkt

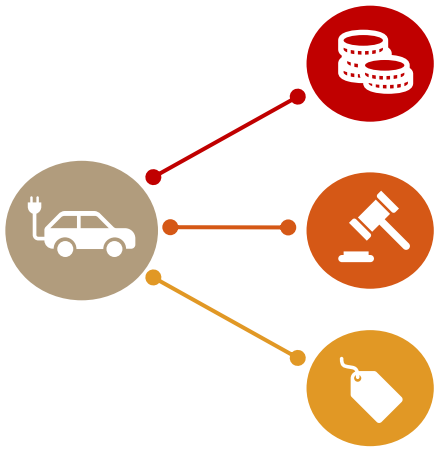
Cross Sectional Appeal
Tata with Nexon already has a mass market appeal and will be entering the luxury segment with JLRs 10 new EV models

Source: Tesla; Tata; In-depth e-mobility 2021 report, Statista

To-be Pricing strategy

A brief outline of the pricing mechanism to be followed by Tesla highlighting major challenges

Breakdown of the process



Cost coverage
In the first step of the process, Tesla adds up the total cost producing the car and other overheads incurred in manufacturing

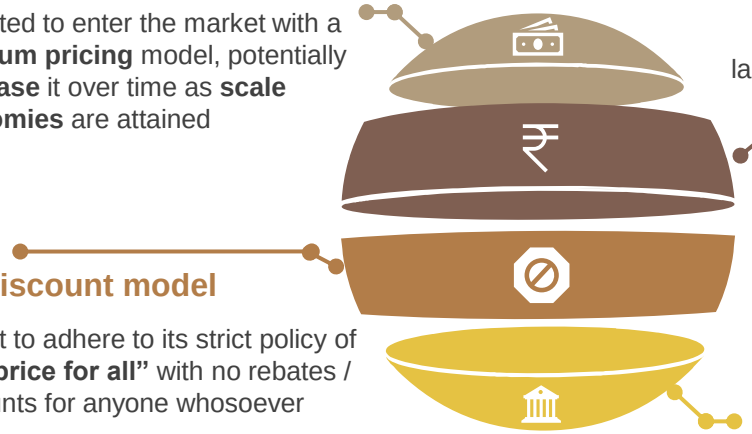
Legal payments, Taxes, Duties
For sale in the Indian market, import duties, GST and other legal & regulatory requirements need to be added to the cost

Showroom Price
After considering all fixed & variable costs, Tesla would add a reasonable margin % & arrive at the final selling price

Drivers of Price determination

Broad Price Skimming strategy
Expected to enter the market with a **premium pricing** model, potentially **decrease** it over time as **scale economies** are attained

Estimated Prices
As per the current regulatory landscape, Tesla **Model 3** to cost **~Rs. 60L**; **Model S ~Rs. 1.5Cr**



No Discount model
Expect to adhere to its strict policy of **"one price for all"** with no rebates / discounts for anyone whosoever

Govt. Confidence
Senior **Union Minister Nitin Gadkari** said Tesla car to be **affordable**, cost ~Rs. 35L

Major concerns faced by Tesla

115mm

Low ground clearance
Tesla Model 3 has a **ground clearance** of **115mm** which is too low for Indian roads – requiring reconfiguration

Industry characteristics
The Indian automobile industry has long been characterized by **low margins & higher volumes**

~6% Net margin historically

100%

Current Import Duty
If CIF value exceeds $40,000 Tesla **lobbying** with Govt. to get **concessions** being an EV

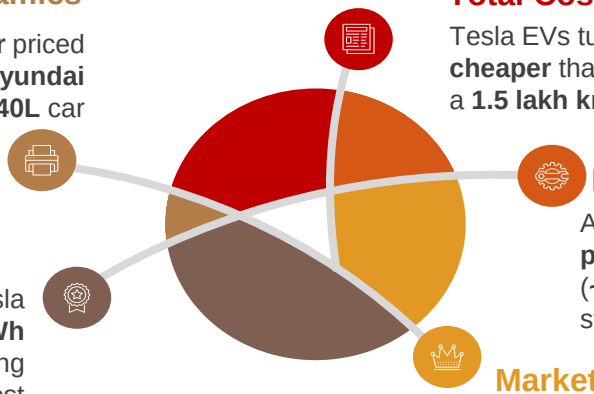
Forex adjusted price
Current US purchase price of **Standard Range Plus** Tesla model 3 is $39,990

~Rs. 29.7L

Factors affecting pricing

Competitive Dynamics
Mass market **Tata Tigor** priced at **~Rs. 13L** currently; **Hyundai** to enter with **~Rs. 40L** car

Battery costs
With a **~390km range** Tesla Model 3 has a **50 kWh battery capacity** constituting the biggest chunk of cost



Total Cost of Ownership
Tesla EVs turn out to be **~20% cheaper** than their IC counterparts at a **1.5 lakh km run** over vehicle life

Dominant Design
As industry evolves and **penetration** increases (**~40% by 2029**), market standards will crop up

Market Sensitivity
<20% of Indian consumers present in the **Rs. 25L+** segment, high price sensitivity

Source: Niti Ayog; Economic Times; Motoroctane; CCN

To-be Infrastructure Layout

Following is a snapshot of the charging stations infra strategy that Tesla can follow for India:

1. Focus on heavy duty public and commercial vehicles likes buses and mini-buses

- Identify nodal zones for public buses and **setup mega charging stations**, capable of charging **25-30 vehicles** together. Allow private agents and logistics firm to setup mega chargers at their end at DCs.
- These stations will help I **managing grid loads** by providing **subsidy** during **non-peak hour** usage, limiting the usage to specific localities.

- Public vehicles need 170-180kms of peak usage on one charge intracity. Banking in this need while **enhancing demand estimation.**

2. Micro charging points for parking areas, office location and residential Areas

- Shift in focus for personal use EVs. Focus on locations where vehicles are at standby for than a few hours.
- Charging requirement for regular routine purpose is not daily or frequently. Reduce congestion by allocating 10% space at parking, offices and residential location to charging

- Empowering customers to establish, manage and share charging space. The price per charge can be decided by the vendors.

Micro sharing stations
Empowering customers and increasing convenience

Swapping and portability
Invest in tech for portability and swapping facility

Heavy load optimization
Controlled demand and grid loads. Lower cost

Long range anxiety
Overcome last bit of doubts with stations along routes

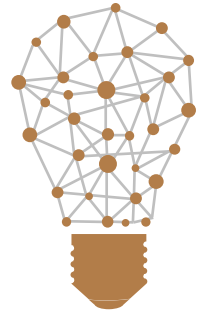
3. Long Range charging stations across highways and expressways

- **Long range travelling** and **range anxiety** needs to be address to **gain trust** of consumer

- At every **75-100 kms** installation of charging facilities for passenger as well as commercial vehicles. Focus on the **busiest routes** first like near metro cities and tourist destinations
- These routes can make **use of superchargers** as travelers would be time constrained. These facilities would be costly and can be built in **partnership with existing petrol pumps**

4. Swapping Stations and build technology for portable super chargers

- Invest in **emerging technologies** to develop small portable superchargers for on the run consumer.



- Swapping stations require small space, low time intensive, less upfront cost and might also lead in **battery-life improvement**. These would be best for small commercial vehicles like 3 wheelers or taxis.
- Investing in technology for more **efficient portable superchargers** can eradicate consumer anxiety completely. They can be more **cost efficient** and **reusable**

Source: The Hindu; Niti Ayog; Business Standard; Everporter

Approaches to Charging Setup

A comparative analysis of a self owned vs collaborative strategy to infra setup In India for Tesla

Self Owned ●●○○○

Wholly owned and used by Tesla

Better brand image and control

Financial synergy: ●○○○○

Tesla will have to bear huge capital investment and battle rising competition if it ventures with totally self owned infra model

Control vs Interoperability: ●○○○○

Much more operational and design control. Lesser R&D required due to low compatibility req & higher exclusivity

Commitment and Risk: ●●○○○

Very high commitment required for setup as well as maintenance and high sunk cost in case of market exit

Speed and Adoption: ●●○○○

Lower speed of setup initially and adoption heavily dependent on sale of Tesla vehicles in India, vicious circle

Brand Image vs Lobby Power: ●●●○○

Brand image remains exclusive and tech remains in house but the lobby power of tesla over govt policy reduces

Collaborative ●●●●○

Partnership with major layers in Industry

Better Financial synergy and adoption

Financial synergy: ●●●○○

Development of infra is capital intensive but the benefits is reaped by multiple stakeholders. Subsidies by gov., and pooled investment can reduce the load.

Control vs Interoperability: ●●○○○

Higher R&D required for cross brand compatibility, but customer apprehension regarding interoperability reduced

Commitment and Risk: ●●○○○

Shared commitment among players, reducing business risk for each and reduced barriers to exit

Speed and Adoption: ●●●●○

Increased speed of setup and high adoption rate majorly due to increased interoperability

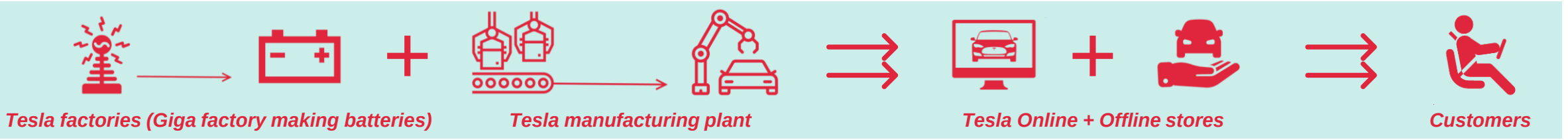
Brand Image vs Lobby Power: ●●●○○

Brand exclusivity dilutes but tesla in the consortium gets much more lobbying power over favorable regulatory policies.

Overall, a collaborative approach to setting up infra emerges as a better solution for Tesla in Indian Market

Setting up the Supply Chain

Supply chain considerations for Tesla while setting up operations in the Indian market



Raw material sourcing

Responsible sourcing practices including **eco-friendly** products & **ethical suppliers** – not using immoral practices like child labour

Also looking for potential investments in **producing raw materials** like Lithium

Component procurement

Basic component parts procured by **collaborating with automobile makers** like Daimler & Toyota; partner with **Indian domestic suppliers** to source **lightweight forged** parts & possibly steering wheels

Vertical Integration

Owing to lesser # of components in EVs, Tesla to benefit from vertical backward integration by **importing self made** batteries, motors, etc. India poses the **threat** of **high import duties** that are to be considered

Data driven decisions

Ton of data to rank suppliers & take decisions base on production times. Potential to **leverage a data foundation**, produce **actionable insights** & complete the **data loop** from pre to post production

Smart Inventory management

Risk minimization objective, **very little** inventory on hand, **Increase in wait time** dealt with offering **additional customization** options

Better inventory mgmt contributed to direct savings - **5.3% of sales***

Source: *TradeGecko report, Tesla Form 8-K (Financial Statements); teslarati.com

Distribution & Retailing

Following is the proposed long-term strategy for product distribution & forward logistics in the Indian market

Set up own showrooms, galleries & service centers in addition to online store (Direct Retailing)

Consumer benefit:

Savings in the direct-to-consumer model estimated to be 8.6% of price*

Control & Brand synergies in integrated distribution system, high CapEx investment major concern

Organic model

Why not Franchising:

Existing distributors:

- ❑ **Conflict of interest** in selling gasoline & electric cars
- ❑ **Self-Cannibalization** of business seen as risky

New distributors:

- ❑ Uncertainty of **expertise** related to EV segment
- ❑ Inability to make a case for **technicalities** & **features**

Location

Strategic Store locations:

- ❑ High **foot traffic,** high **visibility** retail venues
- ❑ **Interaction** with potential customers **before** they decide **which car to buy**
- ❑ **Product specialists** to address customer concerns
- ❑ Focus on **store experience** rather than selling more cars

Exclusivity

The Tesla experience:

- ❑ Dedicated stores with **exclusive branding**
- ❑ Organic footprint for better **operations control** and real time **PoS data**
- ❑ **High end Galleries** for luxury customer segments
- ❑ **Uniformity** of service and delivery across showrooms

Service coverage

Superior service delivery:

- ❑ Plan to have **more service centers** than showrooms
- ❑ Highly specialized & trained **expert professionals** for speedy resolution
- ❑ Target a service center in **<50 miles** of every customer
- ❑ **Digital services** such as **store finder** for easy access and prompt discovery

Source: *Goldman Sachs Report

Success Factors for Tesla India

Supply chain considerations for Tesla while setting up operations in the Indian market

Leveraging Assets

Strong brand recognition
High awareness & deep trust

Ecosystem advantage
Wide reach with customer base and brand

Existing infrastructure
Prior experience, capabilities, and tech superiority

Scaling Tesla

Customer obsession
Compelling, validated value proposition, commercial, branding

Scalable and flexible technology
Own tech stack, 100% automation and decisioning, strong tech capabilities

Agile org and governance
Tesla as the decision maker, accelerated stagging

Sustaining success

Data-driven
For relevant pipeline of offerings, marketing and value points

Risk Management
Mitigate risks as an auto and a tech player

Path to profitability
Product sequencing while balancing revenue and costs

Source: Choi, J. (2021). Emerging Challengers and Incumbent Operators

Roadmap to Successful Entry

Laying out the market entry plan towards building a dominant position in the Indian EV market

Levers for establishment

Inroads to business landscape

Market specific iterations to strategic ways

Operations & supply management

Build a long term leadership position

5 Future outlook: Attaining Scale

- **Capital Investment** – Set up production & **manufacturing capabilities** in India
- **Evolve** with the growing market & attain **scale economies** to **expand product** offerings

4 React to competitive stimuli:

- Observe **competitor strategies** and build a **robust response mechanism** to build dominance
- Constant **boundary spanning** to identify **emerging trends** & technology

3 Demand management & smooth supply:

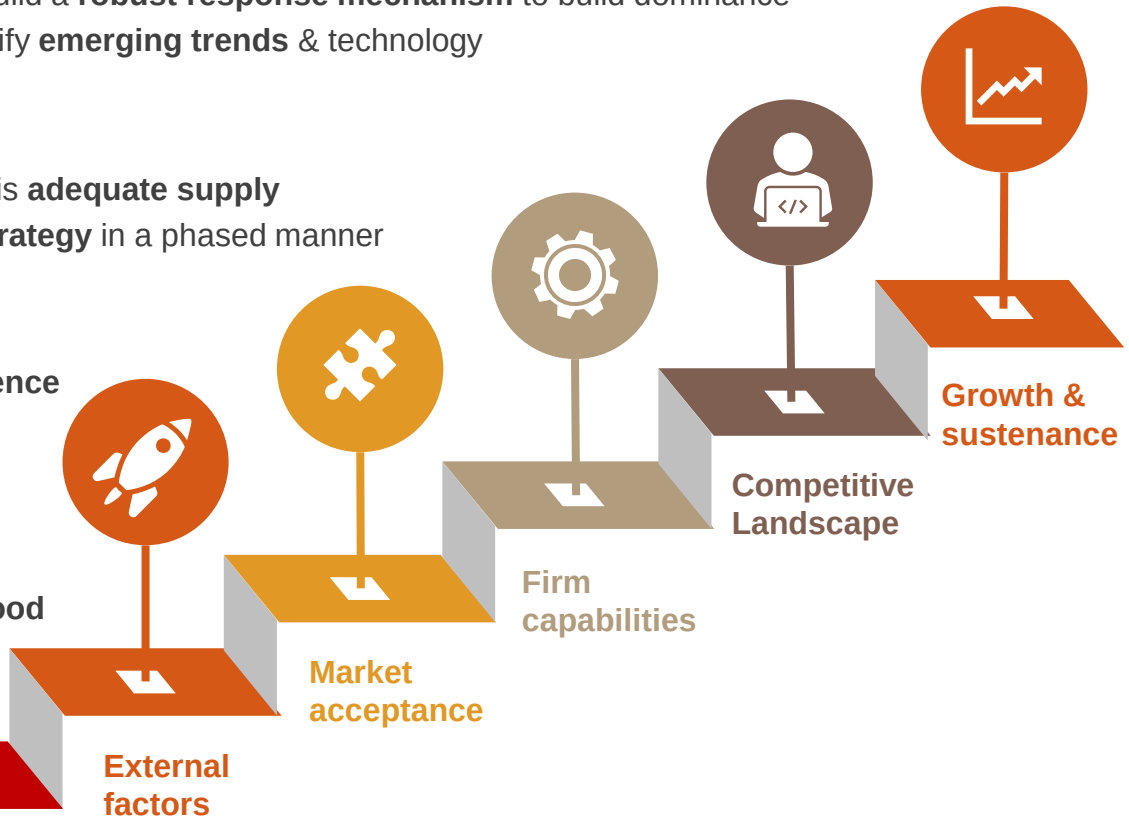
- Successfully **estimate demand** & make sure there is **adequate supply**
- Prepare & execute a successful **product launch strategy** in a phased manner

2 Attain a good product market fit:

- **Communicate value proposition** effectively to the **target audience**
- Prepare & execute a **successful product launch strategy**

1 Tackle the General Environment:

- Lobby with the Government for **favourable taxation** & **import policies**
- Build calling in the **Indian socio-cultural fabric** of automobiles as a **luxury good**



Strategic Choices for Tesla

A comparative analysis of a self owned vs collaborative strategy to infra setup In India for Tesla

➢ ***Strategic choices that are visible to the overall market & has impact on Tesla's positioning in India***

01

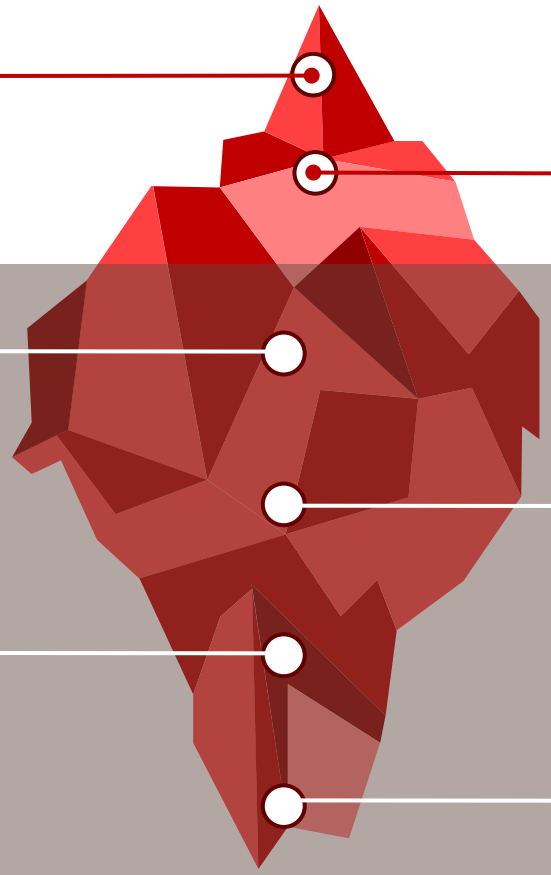
Product Model for entry

Model 3 recommended for entry, as the low cost model of tesla. It will attract the value sensitive yet aspirational customers of India

02

Supercharging Infrastructure

Collaborative approach positions Tesla as the promoter of EV, enhances image and regulatory lobbying power



03

Commercial Vehicle Launch

R&D to reduce cost by process innovation and launch cheaper commercial EVs. More profitable segment in India

04

State Government Partnerships

Fostering partnership with states to supply EVs for public fleet and infra setup, possible tax rebate and longer engagements

05

Giga Factory & Manufacturing setup

Take advantage of cheaper labor market, established auto component industry and abundant skilled engineers. In situ manufacturing area push to enter the mass market for Tesla

06

India as exporting hub of the region

India has a potential to be Tesla's exporting hub in south-east Asian region in the long run. Lesser regulatory risk and lower costs compared to China.

➢ ***Underlying choices that are not apparent necessary to sustain the positioning and grow in the Indian market***

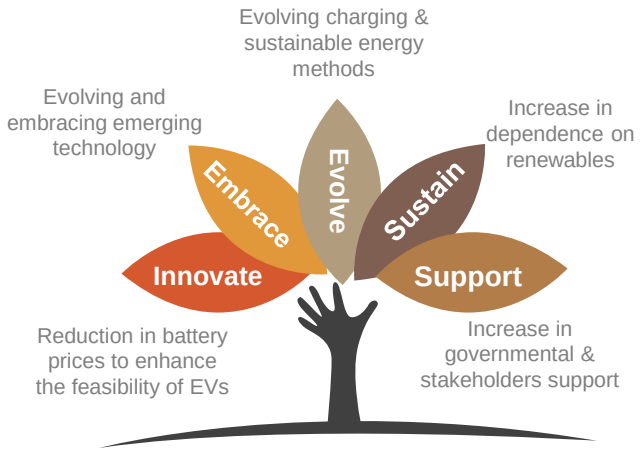
Annexure

Back

Inroads to the future for India

Following is high-level view of the aspects to be considered in order to realize the EV 2030 target:

Drivers of EV adoption



Geopolitical implications

International trade

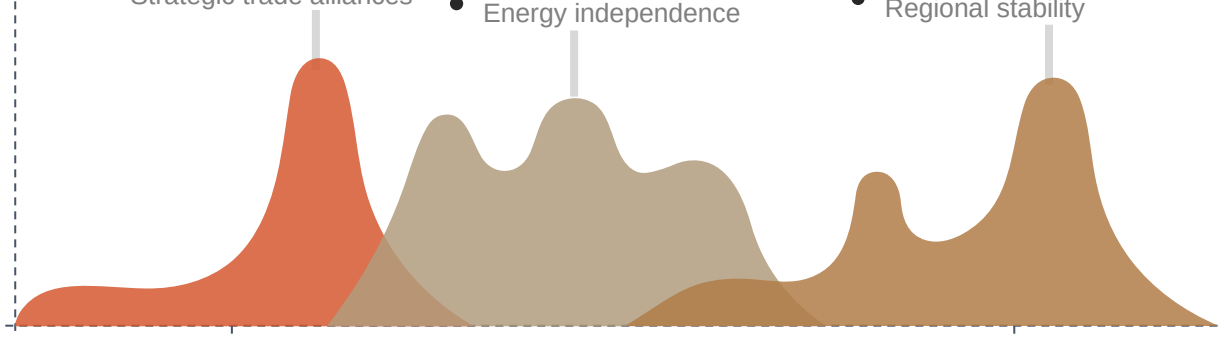
- Rise of green free trade agreements
- Strategic trade alliances

Energy security

- Transnational energy infrastructure
- Energy independence

Access to strategic resources

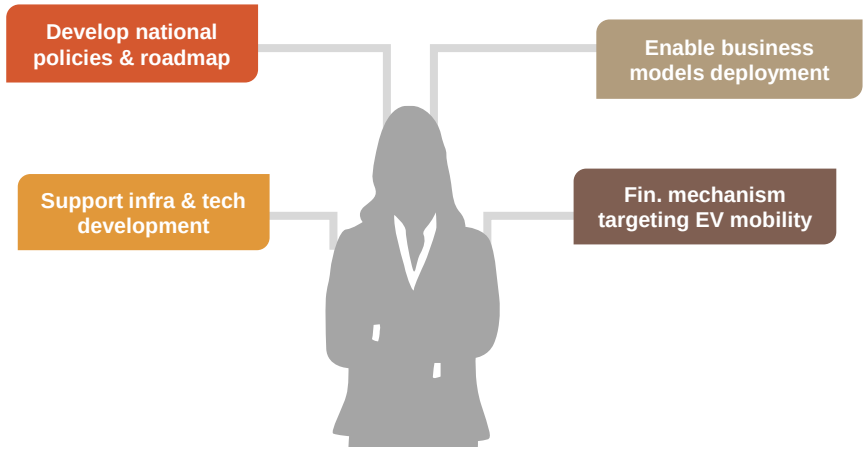
- Increase access to global trade & resources
- Regional stability



Identified need of EV stakeholders

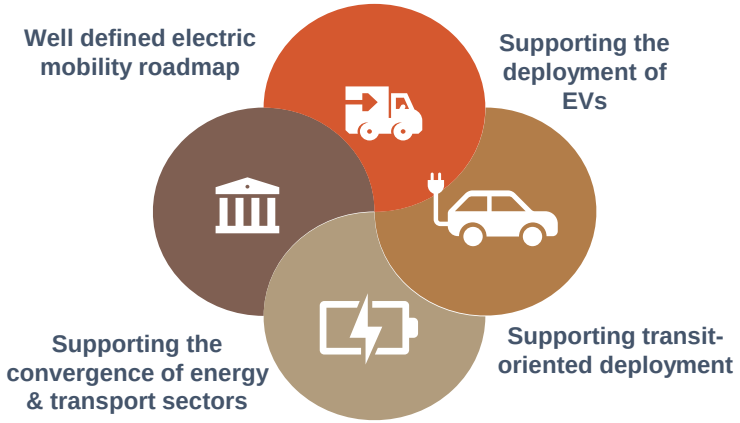
Need of the hour to enable EV quick wins

Indian EV market is expected to reach $47 billion by 2026 with a CAGR of 44%



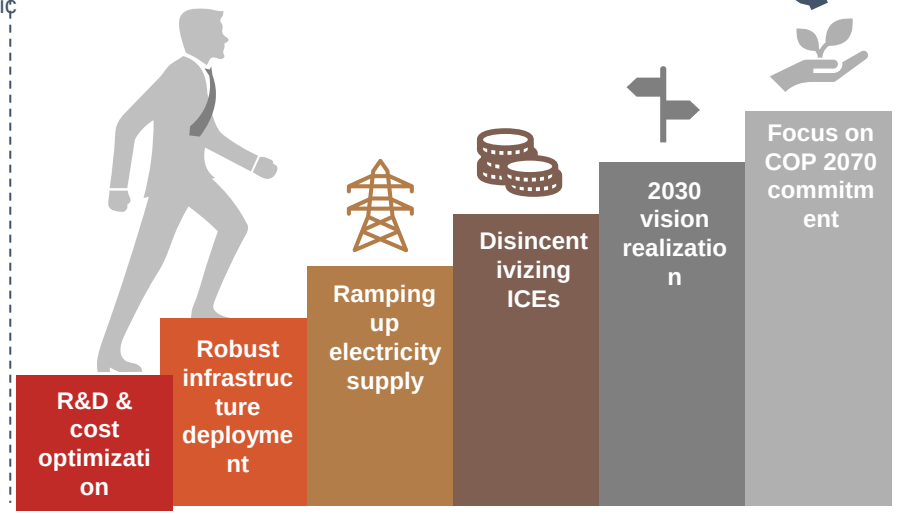
Initiatives in Electric Mobility

Running cost for ICEs is approximately 3-10 times higher that of electric vehicle



Inroads to the future for India

Click here for detailed roadmap



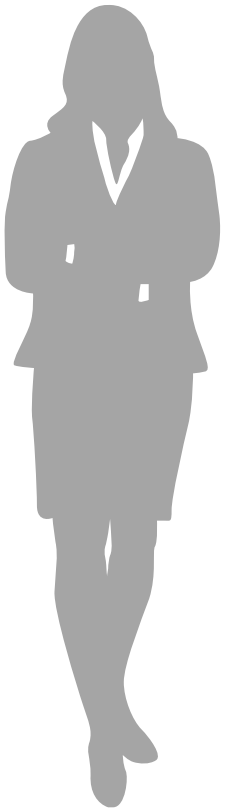
Note: Please refer "Way forward & policy roadmap" slide in annexure for more details.

Source: Policies to promote electric vehicle deployment – Global EV Outlook 2021 – Analysis - IEA, 2021; Niti.gov.in. 2021, Available at: <https://www.niti.gov.in/sites/default/files/2021-08/HandbookforEVChargingInfrastructureImplementation081221.pdf>

Policy Recommendations

Following is the non-exhaustive list of recommendations suggested in the existing electric mobility policies

Recommendations to overcome the existing problems



01 Benchmarking

Need for external benchmarking with the leading electric mobility practices adopted by the countries across the globe

02 Investment in technology

Channelizing funds by investing in technology and tools for making the battery and related components more efficient and sustainable

03 Increased financial & non-financial incentives

Financial assistance in the form of subsidies, reduction in taxes, direct benefits to incentivize the existing and potential private players to drive formalization

04 Battery disposal regulations

Mandatory battery disposal regulations as well as hiring of experts to conduct life cycle audits ensuring strict compliance with the standards

05 Public transport licensing support

Charting incentivization schemes for the public transport players for instance auto drivers, to facilitate faster EV adoptions and providing them adequate support in faster licensing, permits etc.

06 Inclusive FDI & private investment policies

Despite allowing 100% FDI through automatic route, strong emphasis on making policies more inclusive in lines with global policies to attract more private and foreign equity investments

07 Robust data privacy & security rules

Reliance of EVs on various sensors and collected customer data, magnifies the need for having robust data protection and privacy laws in place.

Ramping up electricity capacity & supply

Cost optimization & innovation focus

Efficient & sustainable

Non-renewable recycling

Environmental protection

Barriers to be cognizant of

Economic barriers

- ❑ Business viability issues
- ❑ High upfront EV costs
- ❑ Huge and rapid investment in charging infrastructure

Regulatory barriers

- ❑ Characterization of EV charging activity
- ❑ Tariff related issues
- ❑ Bureaucracy & red-tapism

Technical barriers

- ❑ Charger standards and protocol issues
- ❑ Grid stability issues
- ❑ Battery performance issues

Informational barriers

- ❑ Stakeholder apprehensiveness
- ❑ Lack of awareness
- ❑ Range anxiety

To truly improve EV adoption and India's role as a value chain participant, it will need to attract more private investment to the country.

Way Forward & Policy Roadmap

Following is a brief overview of an indicative implementation roadmap & way forward for the policy decision makers:

2022

Investment in R&D with focus on cost optimization

- Identify cost efficient battery technologies
- Ensure retail price reduction of EVs to increase demand
- Leverage expertise of institutes of higher education

2023

Robust infrastructure deployment

- Sufficient charging station with emphasis on super fast charges
- Attracting private investments
- Optimizing density as per demand variation

2025

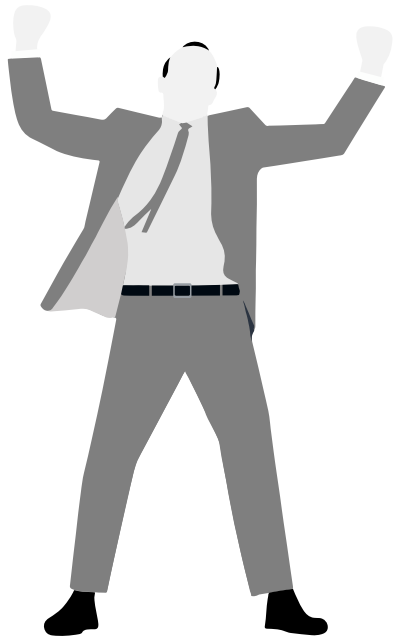
Ramping up electricity supply to match demand

- Increase production capacity to meet increased demand due to EVs
- Focus on shift to renewable power

2027

Disincentivizing ICE vehicles

- Focus on reducing ICE vehicles from road
- Vehicle scrappage policy 2.0



2030

Vision realizing & future focus on COP 2070 commitment

- 30% EV penetration across the country
- Sustained focus on innovation and finding alternate opportunities for a greener economy
- New, aggressive and SMART future targets

Policy review & sustain