Leadership in the Connected World

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13 Nov 2025

BE THE TRANSFORMATION

in India's Transport and Logistics Ecosystem

PM GatiShakti
National Master Plan for Multi-Modal Connectivity

"We cannot achieve 21st century results with 20th century mindset"

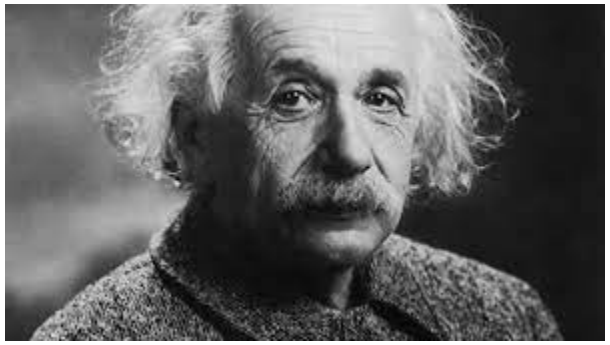
Hon'ble PM
Shri Narendra Modi Ji

Parameters to Succeed

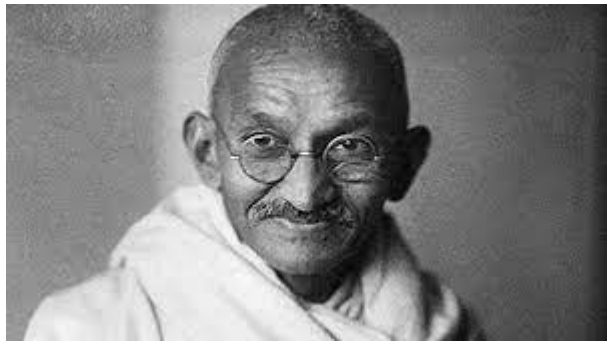
- Attitude
- Adaptability
- Ability

Leadership

"A Leader is one whose actions inspire others to do more, think more, dream more" – John Quincy Adams



Albert Einstein

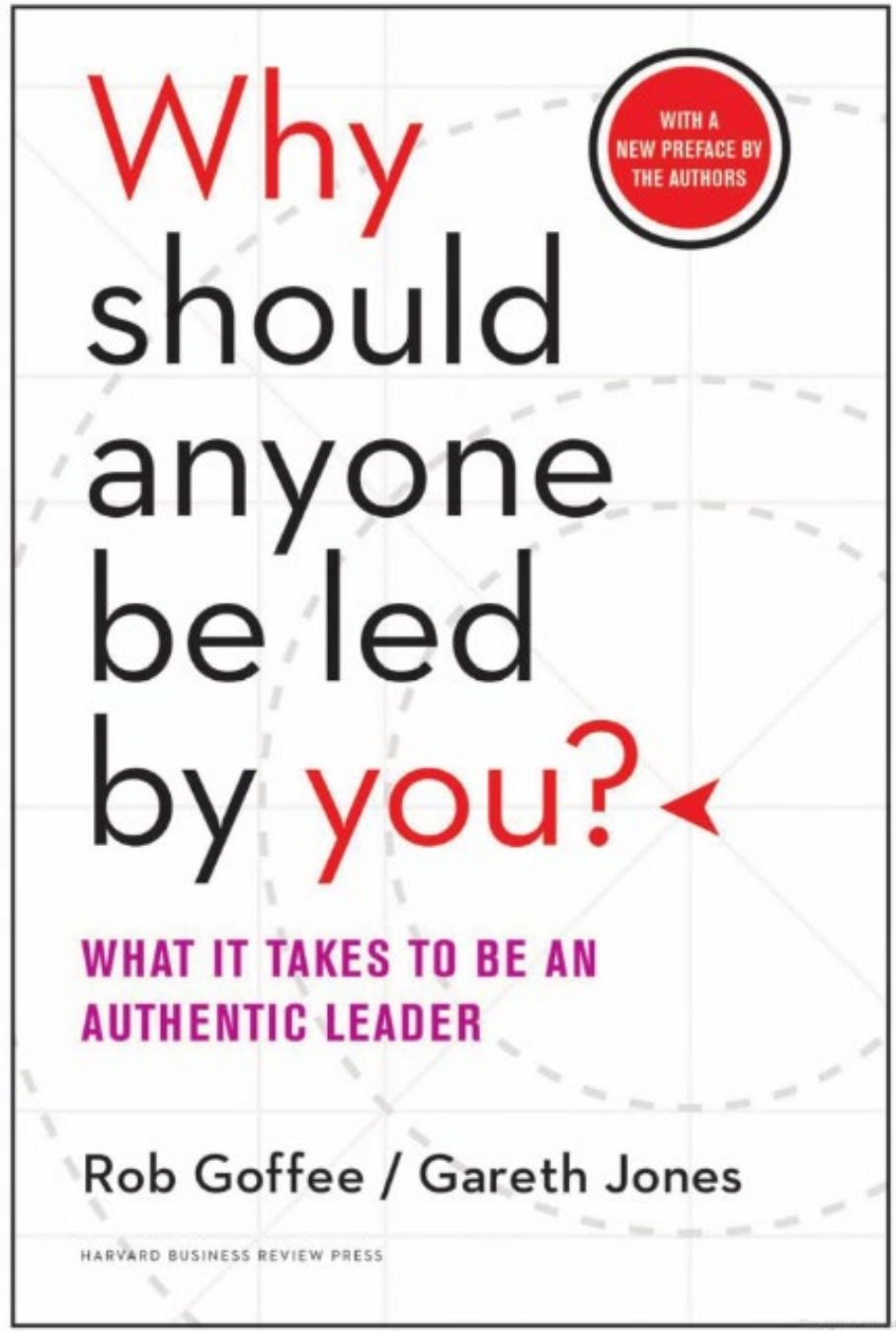


Mahatma Gandhi

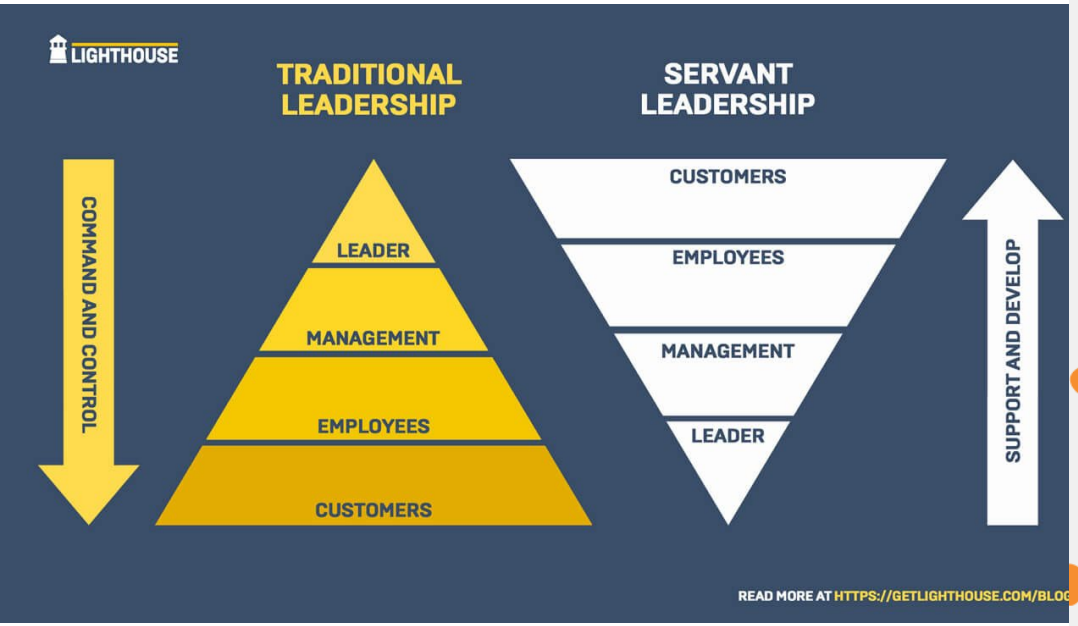
Adlof Hitler

APJ Abdul Kalam

Leadership with a conviction, value-system and purpose


Why should anyone be led by you?
WITH A NEW PREFACE BY THE AUTHORS
WHAT IT TAKES TO BE AN AUTHENTIC LEADER
Rob Goffee / Gareth Jones
HARVARD BUSINESS REVIEW PRESS

Humanity



SERVANT LEADERSHIP

THE WISDOM OF LEADING BY SERVING

TRADITIONAL LEADER

- Views leadership as a position to achieve.
- Uses power and control to drive performance.
- Measures success through output.
- Speaks.
- Believes it's about them.

SERVANT LEADER

- Views leadership as a chance to serve others.
- Shares power and control to drive engagement.
- Measures success through growth and development.
- Listens.
- Understands it's not about them.

CHARACTERISTICS OF SERVANT LEADERS

EMPOWERMENT
Ability to support others in reaching their full potential

STANDING BACK
Prioritising followers, giving credit to their contributions

HUMILITY
Maintaining a modest perspective on oneself

AUTHENTICITY
Genuine and true in professional, public and private interactions

COURAGE
Willingness to take risks, innovate and confront fears

ACCOUNTABILITY
Holding oneself and others responsible for their actions

ACCEPTANCE
Understanding and respecting others' perspectives

STEWARDSHIP
Practicing service for the greater good of the organisation or society

HOW TO PRACTICE SERVANT LEADERSHIP

Understand employees as **individuals**, not just as workers

Discover the **stressors** in employees' lives

Understand the moments that **matter** in employees' lives

Show **appreciation** for employees

Remove employee **obstacales**

Human needs and relevant technology aspects (1/2)

Needs	Technologies needed for
Water	Purify, Transport, Preserve, Store, Recycle, Sanitation …
Air	Purify, Condition, isolate hazardous…
Food	Produce, Process, Preserve, Store, Optimize, Agriculture. ..
Environment	Climate Change, Forests, sustainability, …..
Energy	Store, Generate, Transmit, Distribute, Oil, Natural Gas, Electricity, Alternate/Renewable ….
Health	Predict, Diagnose, Personalized, Precise, Tele, Remote Surgery, New medicines, ….
Social	Connect, Communicate, Interact, Share experiences
Employment	Generate, Maintain/Sustain, Effective, …
Endless	**Boundless search for new technologies**

Human needs and relevant technology aspects (2/2)

Needs	Technologies needed for
Security	Individual, Privacy, National, Cyber, ….
Entertainment	Multimedia, Games, Sports, Virtual experiences ….
Travel	Unique experiences, Aviation ……
Wealth Creation/Secure	Finance technology, Payments, Banks, Industry, Factories, Commerce….
Universe	Solar System, Lunar, Astronomy, Satellite, Under Ocean, Earth Science….
Education	Content, Pedagogy, Availability, Access, Massive Online Open Courses ……
Infrastructure	Highways, Railways, Dams, Airports, Construction, Mines, ……
Endless	**Boundless search for new technologies**

Technologies that are defining our decades (1/3)

Technology	What it means
Artificial intelligence (AI) and machine learning	increasing ability of machines to learn and act intelligently will absolutely transform our world. 
Internet of Things (IoT)	Ever-growing number of “smart” devices and objects that are connected to the internet.
Wearables and augmented humans	Wearable technology designed to improve human performance and help us live healthier, safer, more efficient lives
Big Data and augmented analytics	Make sense of and work with enormously complex and varied streams of data
Intelligent spaces and smart places	Physical spaces – like homes, offices, and even whole cities – becoming increasingly connected and smart.
Blockchain	Super-secure method of storing, authenticating, and protecting data could revolutionize many aspects of business – particularly when it comes to facilitating trusted transactions.
Cloud and edge computing	Cloud computing – data is stored on other computers and accessed via the internet. Edge computing – where data is processed on smart devices (like phones)
Digitally extended realities	Encompassing virtual reality, augmented reality, and mixed reality, this trend highlights the move towards creating more immersive digital experiences.

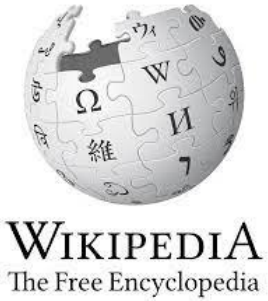
Technologies that are defining our decades (2/3)

Technology	What it means
Digital twins	A digital twin is a digital copy of an actual physical object, product, process, or ecosystem.
Natural language processing	Allows machines to understand human language
Voice interfaces and chatbots	More and more businesses will choose to interact with their customers via voice interfaces and chatbots.
Computer vision and facial recognition	Allows machines to visually interpret the world around them, with facial recognition being a prime example.
Robots and cobots	future of work is likely to involve humans working seamlessly with robot colleagues – hence the term “cobot," or "collaborative robot."
Autonomous vehicles	Vehicles of all kinds – cars, taxis, trucks, and even ships – become truly autonomous and commercially viable.
6G	faster, smarter, more stable wireless networking, thereby driving advances in many other trends (e.g., more connected devices and richer streams of data).
Genomics and gene editing	Progressing to altering the genetic structure of living organisms (for example, “correcting” DNA mutations that can lead to cancer).

Technologies that are defining our decades (3/3)

Technology	What it means
Digital platforms	Leading many traditional businesses to transition to or incorporate a platform-based model.
Drones and unmanned aerial vehicles	Search and rescue missions, firefighting, law enforcement, and transportation will all be transformed by drone technology. Get ready for passenger drones (drone taxis), too!
Cybersecurity and resilience	ability to avoid and mitigate cybersecurity threats will be critical to success
Quantum computing	Unimaginably fast computers capable of solving seemingly unsolvable problems
Robotic process automation	automate structured and repetitive business processes, freeing up human workers to concentrate on more complex, value-adding work.
Mass personalization	Ability to offer highly personalized products or services on a mass scale
3D and 4D printing and additive manufacturing	3D and 4D printing will have very wide applications – and will be particularly transformative when combined with trends like mass-personalization.
Nanotechnology and materials science	Our increasing ability to understand materials and control matter on a tiny scale is giving rise to exciting new materials and products, such as bendable displays.







21st Century: What it means

21st Century: What it means

- Pace of Technology development has accelerated significantly
- Rate of Technology Adoption has intensified even further
- **Agility and timely-action are therefore most necessary.**

Action without knowledge is useless

Knowledge without action is futile

Disruptions worth noting (1/4)

Each one visualized Humanity as a customer base

- Netflix
  - CEO, Reed Hastings: was charged $40 for the late return of a rental film (1997). Netflix began as a DVD rental service that delivered films to its customers via mail. Initially, the firm was operating in a well-established market, competing against the likes of Blockbuster.
  - All of that changed in 2007 when Netflix decided to flip its business model on its head. The company launched the subscription-based online video streaming service

*Netflix's decision to switch to a **streaming-based business model** is a classic example of disruptive innovation backed by digital technology. Alternative and competitor firms were left unable to compete, whilst Netflix reaped the rewards of their ability to think disruptively.*

Disruptions worth noting (2/4)

Each one visualized Humanity as a customer base

- Wikipedia
  - Prior to the site's launch in 2001, the only all-encompassing sources of knowledge were encyclopedias. Hard copies of encyclopedias were expensive and time-consuming to search through, whilst the information stored on the digital format of the popular Encyclopædia Britannica was constantly going out of date.
  - Wikipedia fundamentally altered how many of us look for information. It has been many people's first address for knowledge on anything and everything for a number of years now.

Wikipedia, on the other hand, is a free service that is constantly updated by its team of ***volunteer editors****. It's clear that this disruptive innovation has been pretty significant: Wikipedia is currently one of the most visited sites on the Internet, whilst Encyclopedia Britannica ceased printing copies in 2010.*

Disruptions worth noting (3/4)

Each one visualized Humanity as a customer base

- Airbnb
  - Airbnb has shaken up the hotel industry since it was founded in 2008 as an online marketplace for homeowners who want to rent out their place.
  - It's become incredibly popular with tourists the world over, allowing users to visit their dream destinations for just a fraction of the price of regular hotels. Airbnb's meteoric rise to success is demonstrated by the fact that it served more than 9 million guests in its first five years of business.

The secret to the Airbnb's growth lay in its ability to offer consumers an alternative service that was not only cheaper but also a lot more convenient. Another disruptive Innovation

Disruptions worth noting (4/4)

Each one visualized Humanity as a customer base

- Low Cost Aviation
  - Air Deccan: Started in 2003. Captain Gopinath (True Visionary) visualized potential of low cost aviation in India. Out of Market now.
  - IndiGo: Dominant player in India Airspace now (65% Market Share now in Domestic Market). Founded by Rahul Bhatia and Rakesh Gangwal (2006).

IndiGo™

Debate Point: "Perseverance" OR too "early to market"

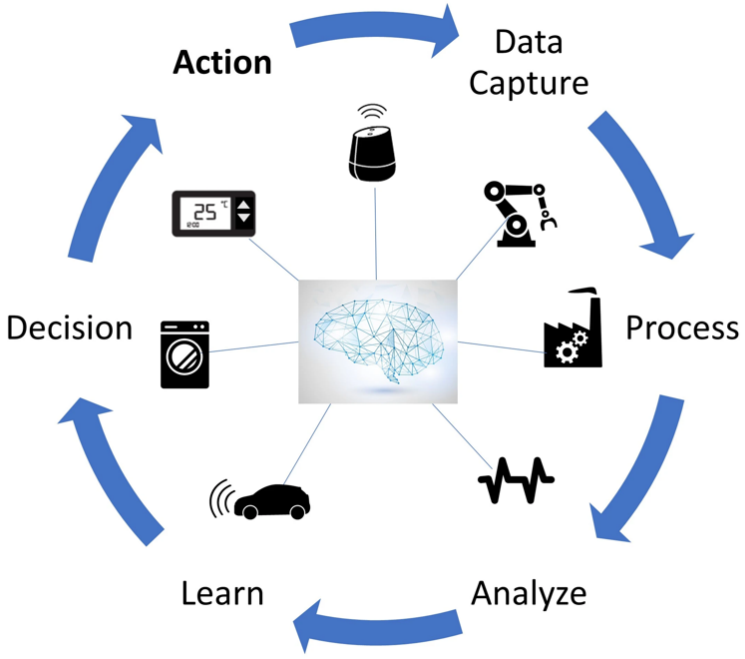
AI enabled transformation

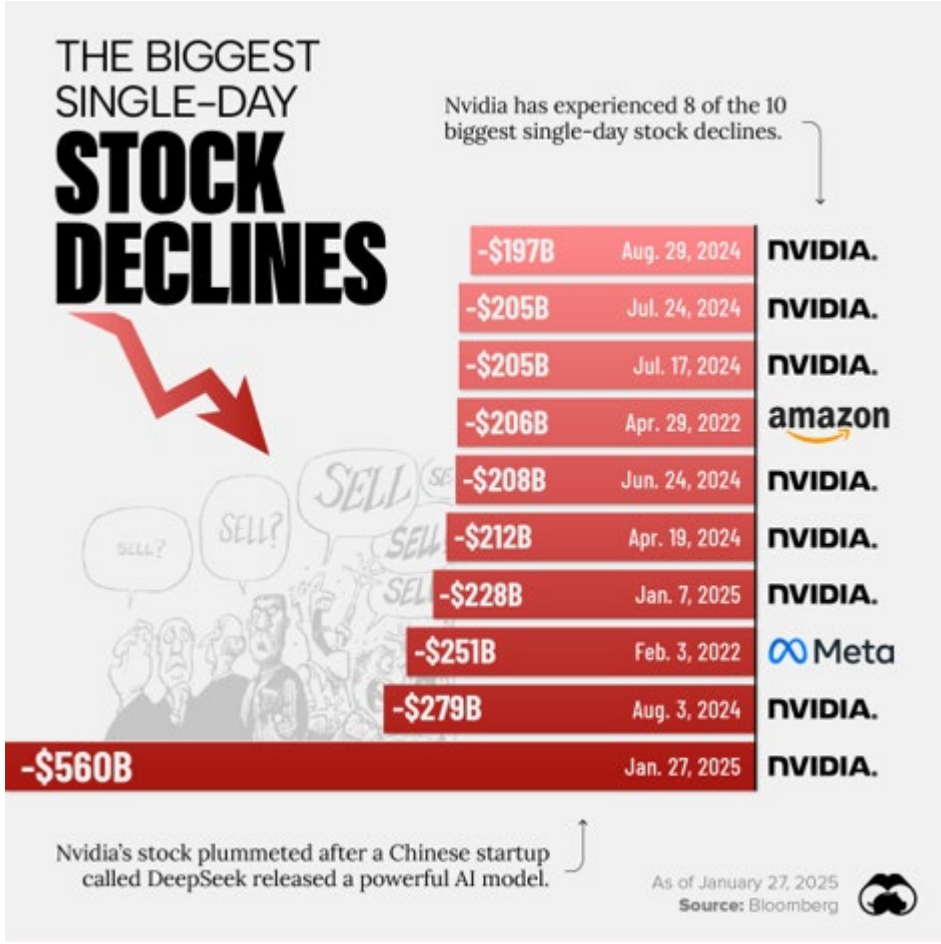
Each one visualized Humanity as a customer base

ChatGPT

NVIDIA

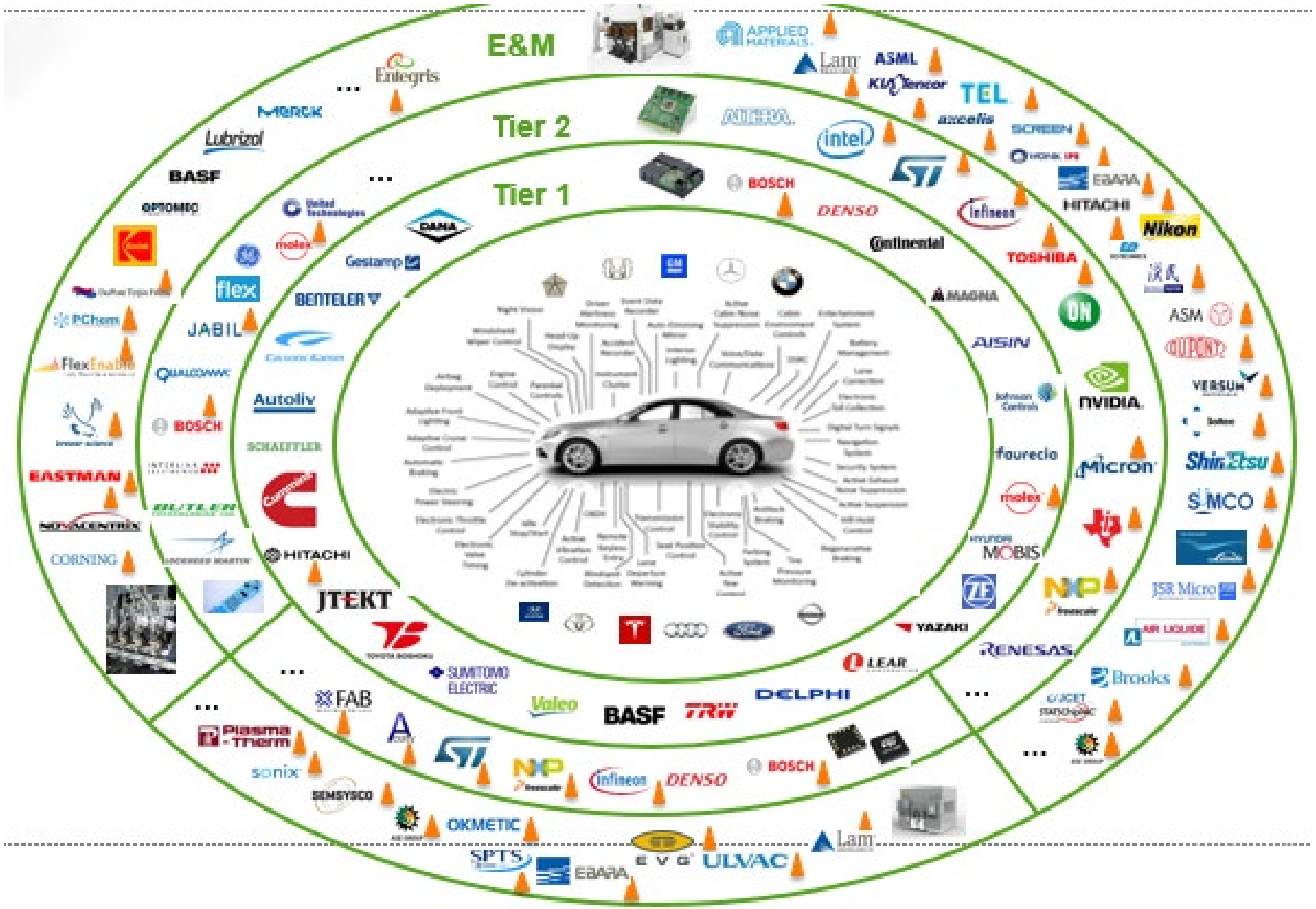
deepseek





Perceiving, Learning, Reasoning, Action

Supply Chains: Interdependent World



21st Century: Our Century

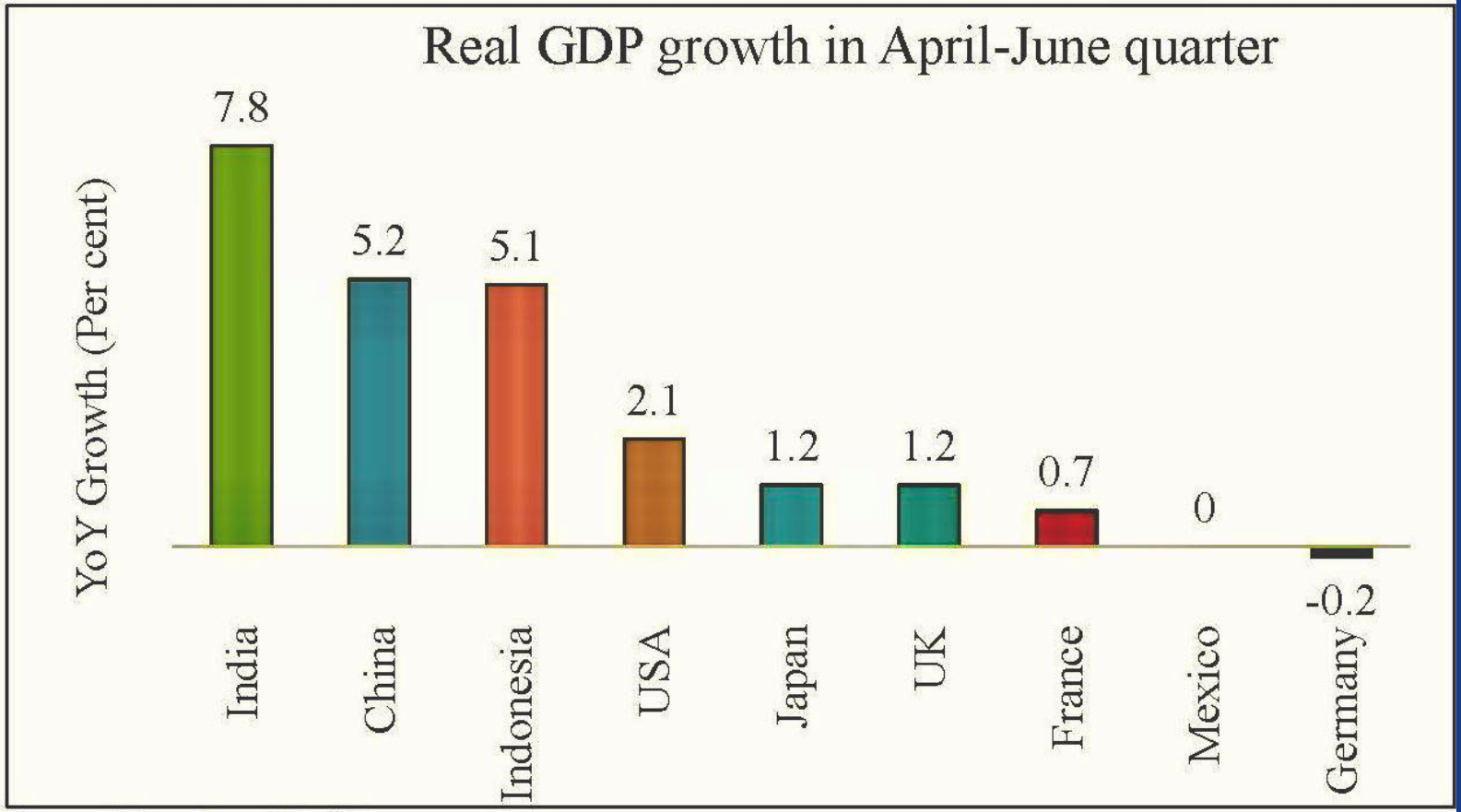
India's emergence as a Global Leader and Economic Power; to be a developed nation by 2047 (Economy size: ~ 35 Trillion USD)

Knowledge based Economy

Rising Bharat

Reform, Perform, Transform and Inform

A glimpse into Modern India



Source: Bloomberg, MoSPI

Note: The data for countries other than USA, UK and France is not seasonally adjusted

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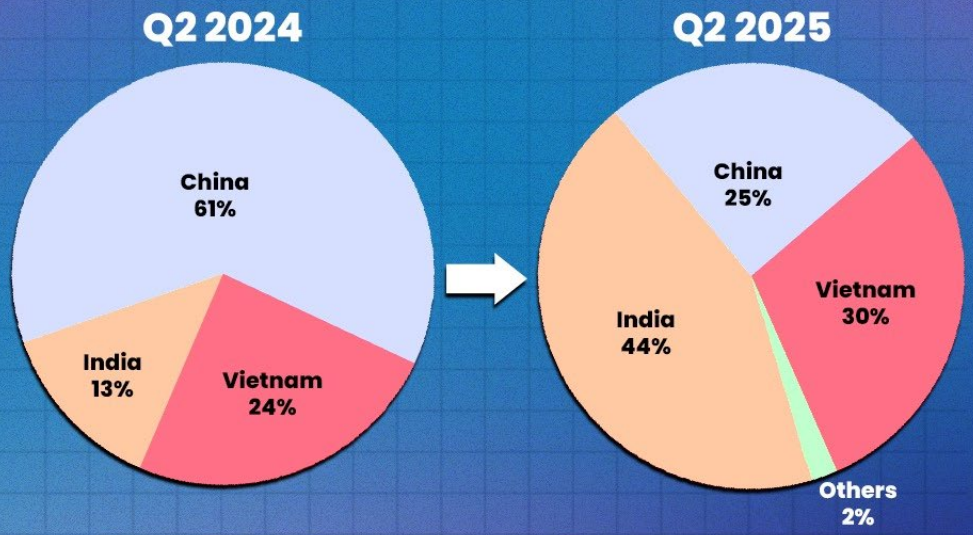
सत्यमेव जयते

India Overtakes China!

Largest manufacturer

of Smartphones shipped to US



Source: Canalys estimates (sell-in), Smartphone Horizon Analysis, July 2025

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livemint

Foxconn begins iPhone 17 production at Bengaluru unit

Taiwanese electronics giant Foxconn's Bengaluru factory, its second-largest manufacturing unit, has commenced operation with production of iPhone 17 recently at a small scale, sources aware of the development said.

Foxconn is the largest manufacturer of iPhones, and the second-biggest facility outside China in Devanahalli near Bengaluru, being set up at an investment of $2.8 billion (about ₹25,000 crore).

"Foxconn Bengaluru unit has commenced operation with the production of iPhone 17. This is in addition to the production of iPhone 17 at its Chennai unit," a source aware of the development said.

An email query sent to Apple and Foxconn elicited no reply on the development. The production had faced a brief interruption after hundreds of Chinese engineers went back abruptly. However, Foxconn has been able to get experts from various destinations, including Taiwan, to address the gap.

PTI

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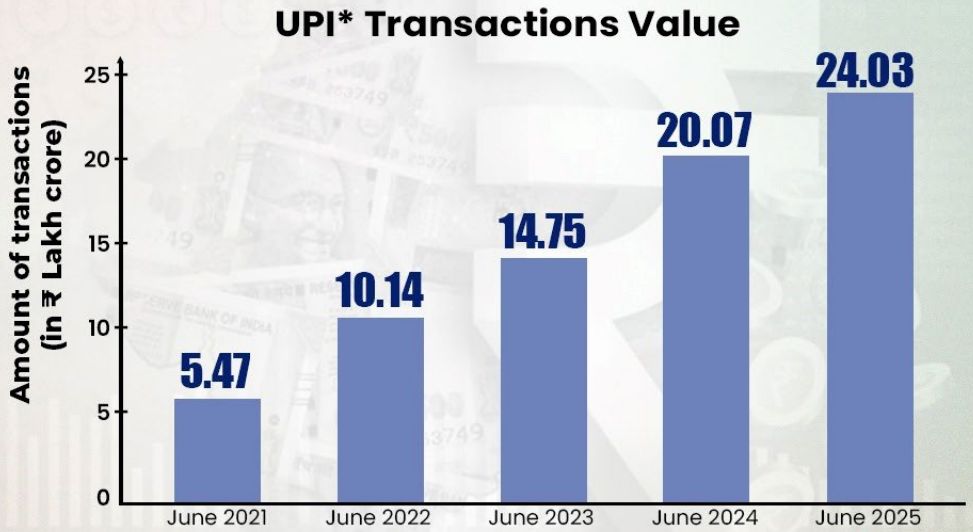
India's UPI* Revolution

A Global Leader in Fast Payments



*Unified Payments Interface

Source: Press Information Bureau

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MINISTRY OF
INFORMATION AND
BROADCASTING

INFRASTRUCTURAL REVOLUTION OF INDIA



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BROADCASTING
सत्यमेव जयते

LOGISTICS

India's Growth Engine

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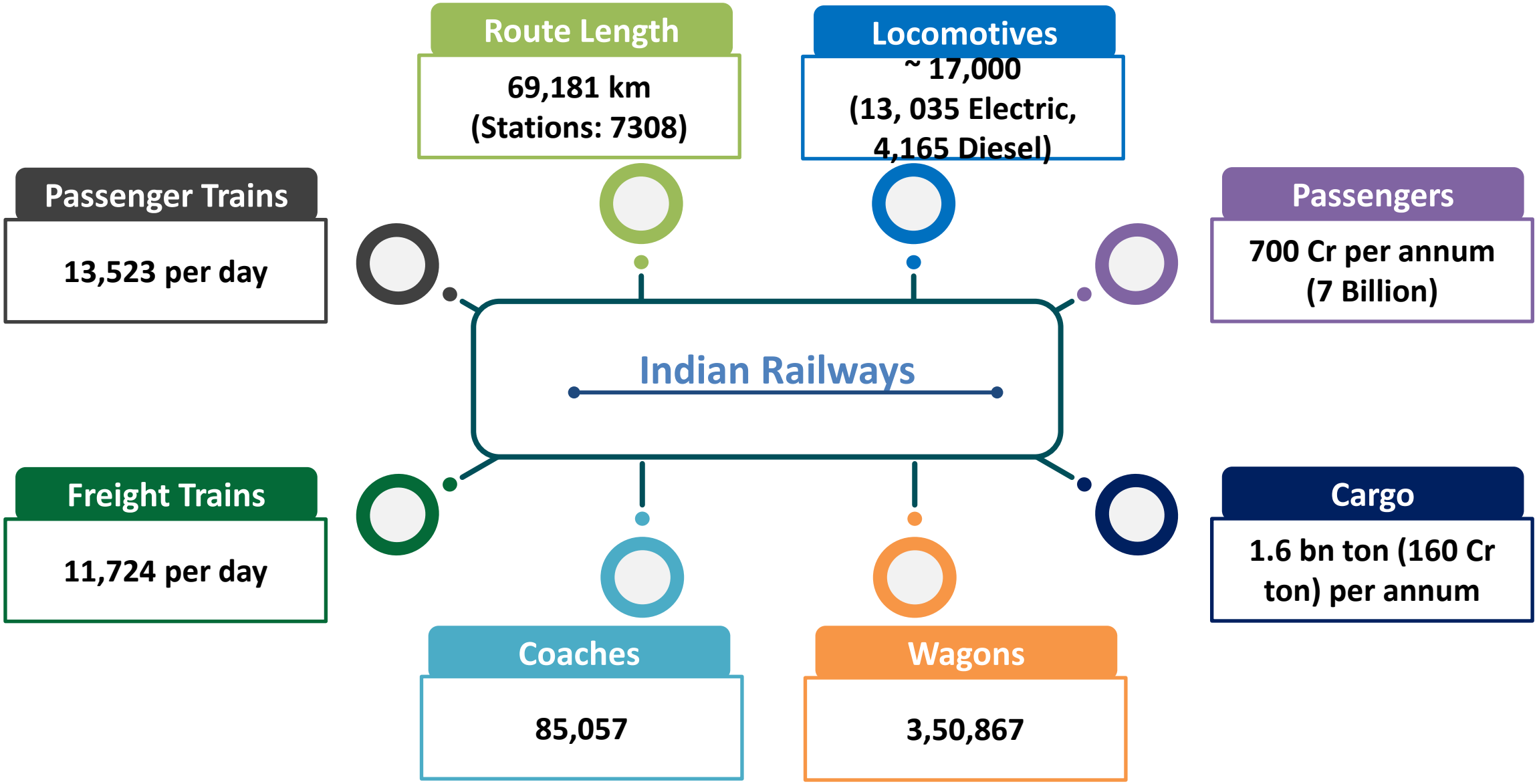
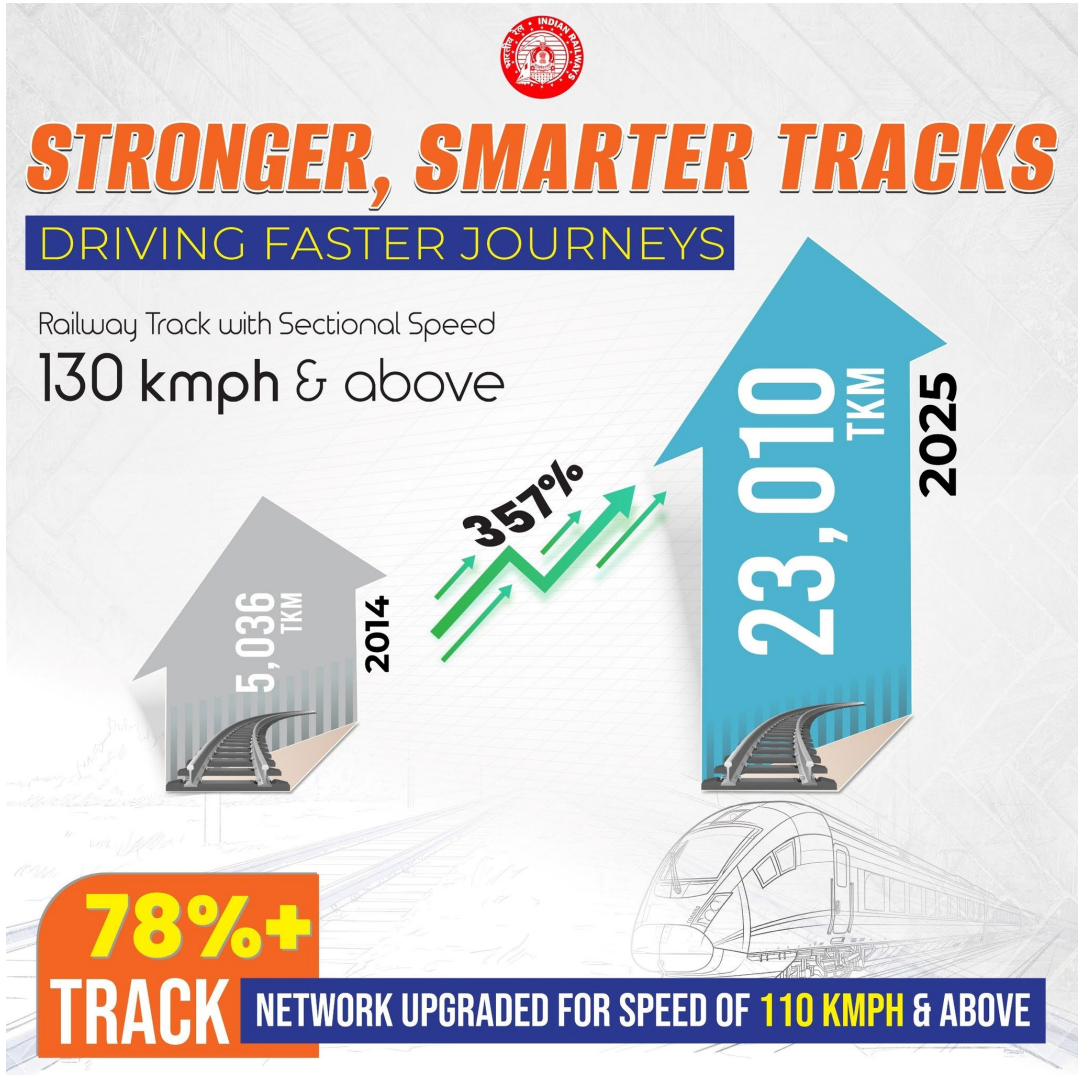
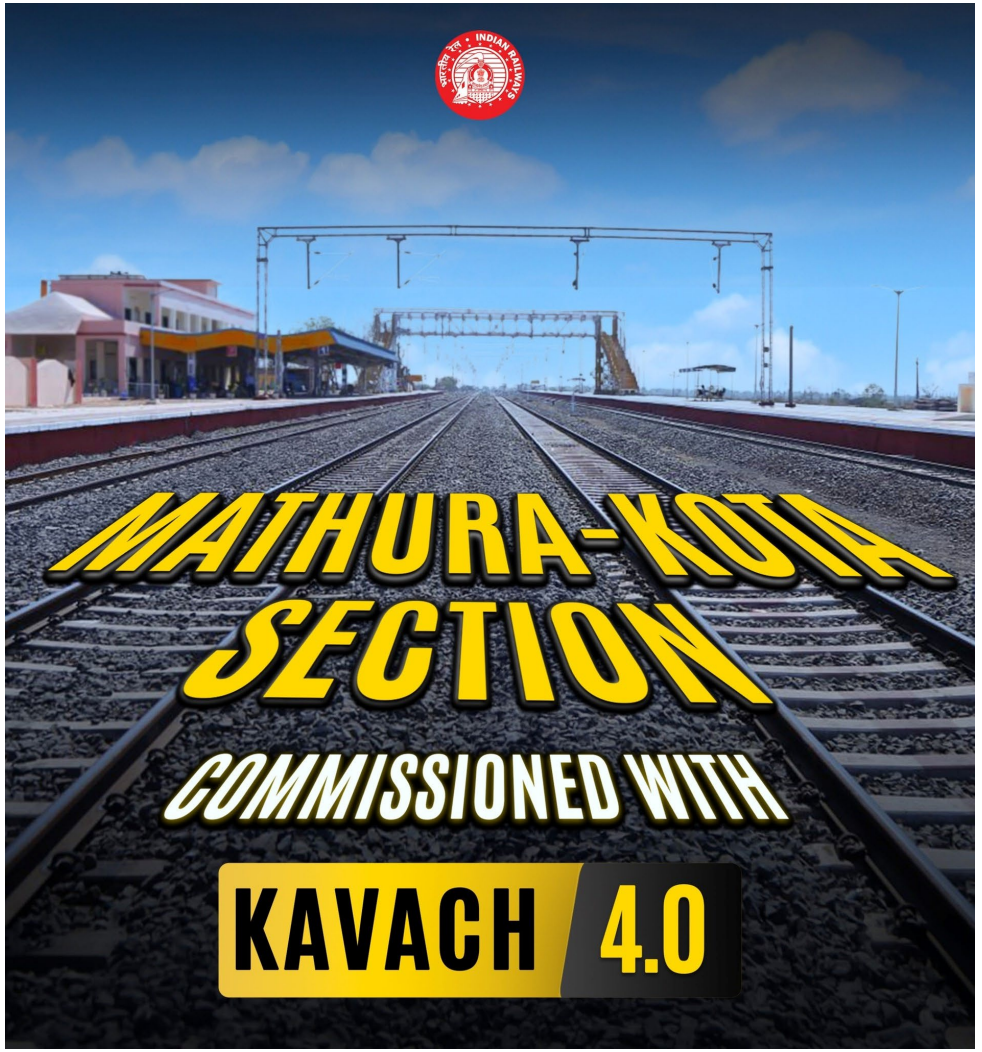
Indian Railways: An Overview




STRONGER, SMARTER TRACKS
DRIVING FASTER JOURNEYS
Railway Track with Sectional Speed
130 kmph & above
5,036 TKM
2014
357%
23,010 TKM
2025
78%+
TRACK
NETWORK UPGRADED FOR SPEED OF 110 KMPH & ABOVE


MATHURA-KOTA
SECTION
COMMISSIONED WITH
KAVACH 4.0

Locomotives

Ministry of Railways

New Milestone in Locomotive Production: India Surpasses the US and Europe by Producing 1,681 Locomotives for the Financial Year 2024-25

19% rise in production;1,681 locomotives in FY 2024-25, 209 more than 1,472 in FY 2023-24

‘Make in India’ Drives Growth: Locomotive Production Surges to 9,168 in Last 10 Years, Doubling Annual Average to 917

Posted On: 02 APR 2025 4:55PM by PIB Delhi

India has emerged as a global leader in railway locomotive manufacturing, achieving a record production of **1,681 locomotives** in the financial year **2024-25**. This milestone surpasses the total locomotive production of regions such as the **United States, Europe, South America, Africa, and Australia**, reaffirming India’s growing dominance in the global railway sector.

Vande Bharat

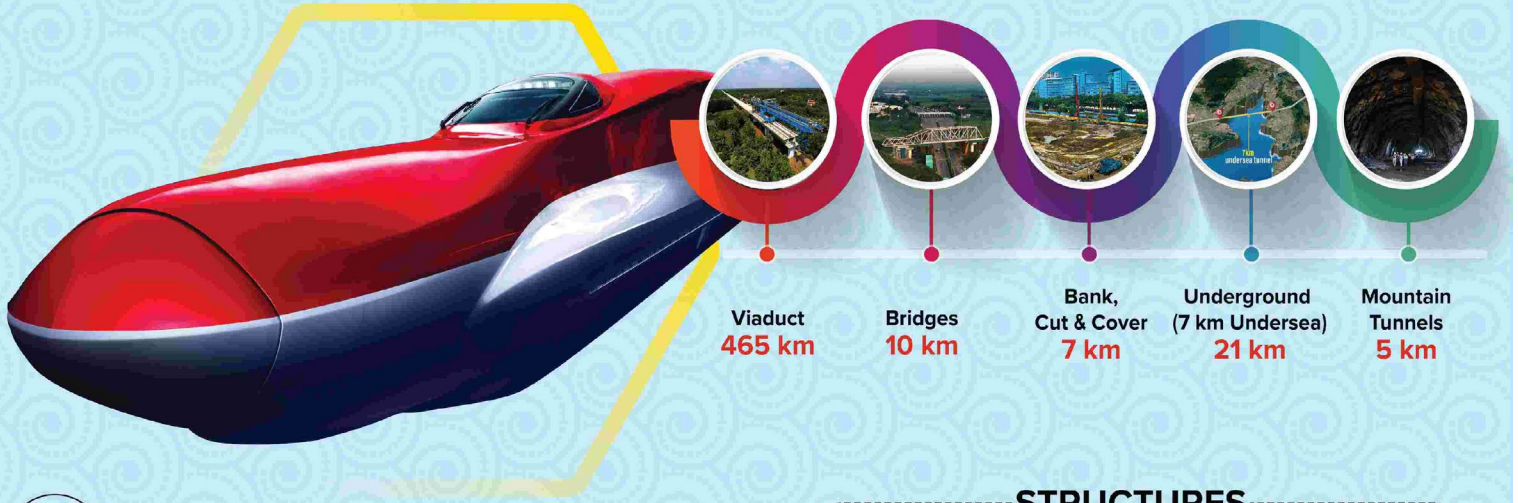
Dedicated Freight Corridor

DESIGN FEATURES

Moving Dimensions	Indian Railway	Dedicated Freight Corridor
Height (+66%) Width (+14%)	4.265 m 3,200 mm	7.1 m 3,660 mm Western Corridor 5.1 m 3,660 mm Eastern Corridor
Train Length (Double)	700m	700 / 1,500m
Train Load (>Double)	5,400 Ton	12,000 Ton
Axle Load (+30%)	22.9t	**25T** (Track Structure) Bridges & formation designed for 32.5T
Average Speed (+160%)	25 Kmph	More than 65 Kmph
Traction	**Electrical (25 KV)**	**Electrical (2x25 KV)**
Signaling	**Absolute / Automatic with 1 Km spacing**	**Automatic with 2 Km spacing in Automatic territory**

BULLET TRAIN PROJECT

MUMBAI-AHMEDABAD HIGH SPEED RAIL CORRIDOR



Viaduct
465 km

Bridges
10 km

Bank,
Cut & Cover
7 km

Underground
(7 km Undersea)
21 km

Mountain
Tunnels
5 km

Operational Speed
320 km/hr

Time
2.07 hr (Limited stops)
2.58 hr (Total stops)

Total stations
8 Gujarat
4 Maharashtra

- SABARMATI
- AHMEDABAD
- ANAND
- VADODARA
- BHARUCH
- SURAT
- BILIMORA
- VAPI
- BOISAR
- VIRAR
- THANE
- MUMBAI

TOTAL LENGTH 508 KM

GUJARAT
348 km

DNH
4 km

MAHARASHTRA
156 km

STRUCTURES

12 Aesthetically Designed Stations

8 Maintenance Depots

HSR Training Institute in Vadodara

3 Rolling Stock Depots

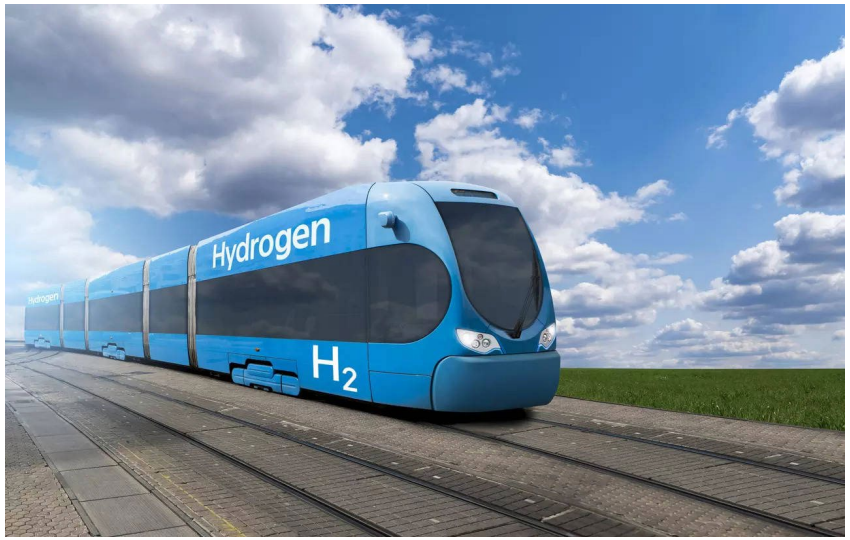
High Speed Rail Multi Modal Hub Sabarmati

(Aug 2025) Banaras Locomotive Works, Varanasi commissioned India's first 70m removable solar panel system (28 panels, 15KWp) between railway tracks—a step towards *green and sustainable rail transport*.

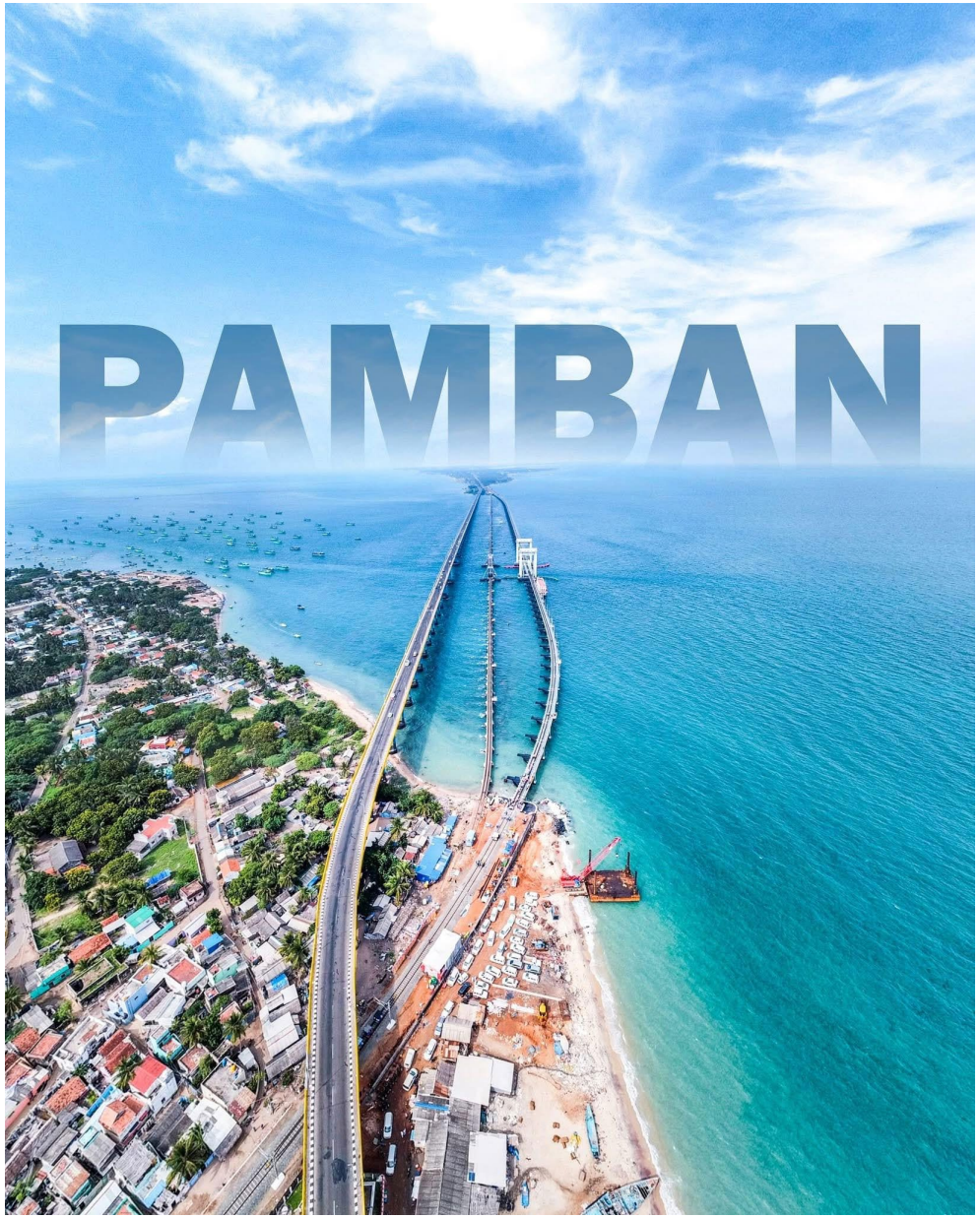
Hydrogen powered train

❑ Features and Specifications:

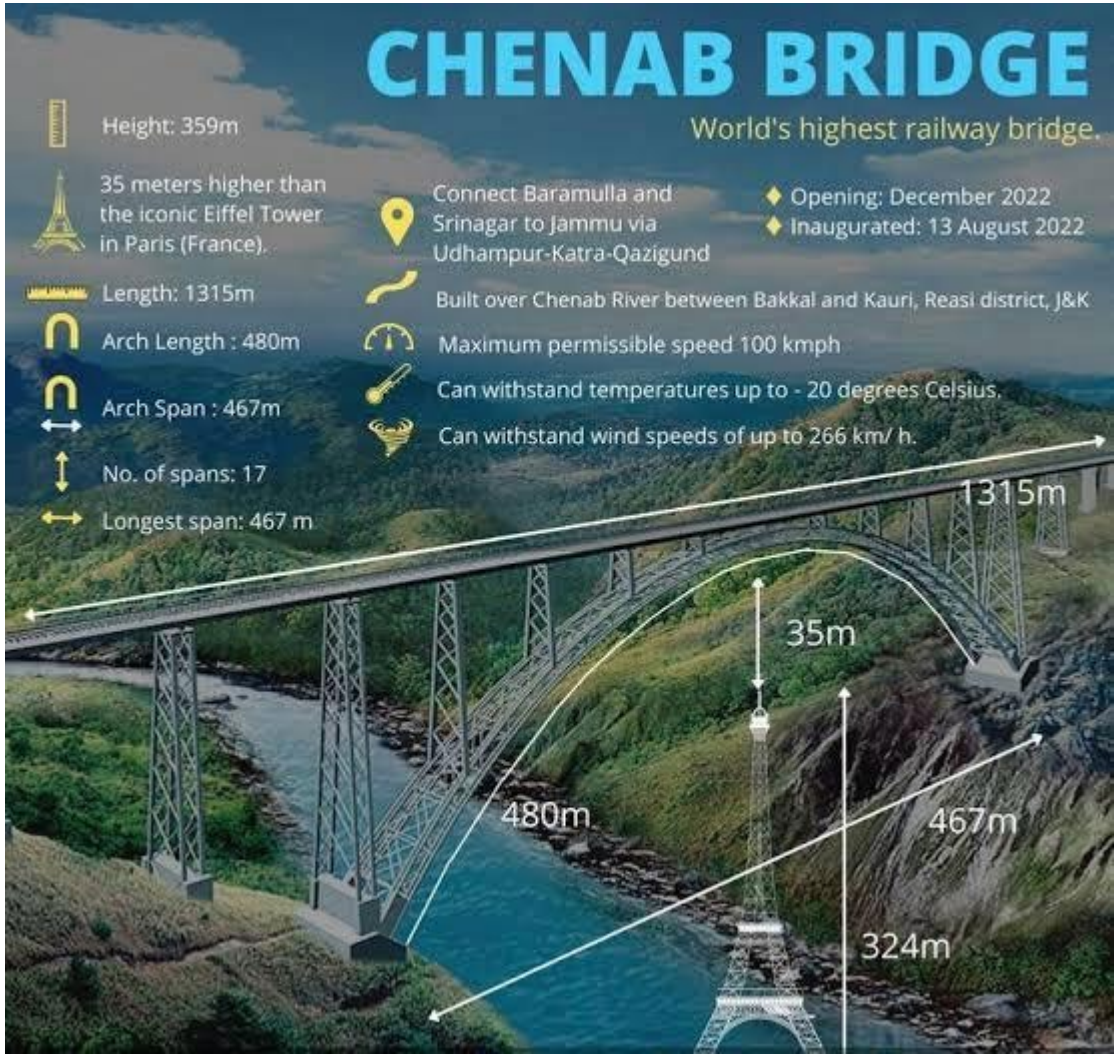
- Route: The train will initially operate on the 89-kilometer Jind-Sonipat route in Haryana.
- Engine: **It will be equipped with a 1,200-horsepower hydrogen engine, making it the most powerful hydrogen-powered train globally.**
- Capacity: The train has a passenger capacity of 2,638.
- Speed: The train will have a top speed of 110 km/h.
- Sustainability: Hydrogen-powered trains are a sustainable alternative to diesel engines, reducing carbon emissions.
- Manufacturing: The train is being manufactured by the Chennai-based Integral Coach Factory (ICF).



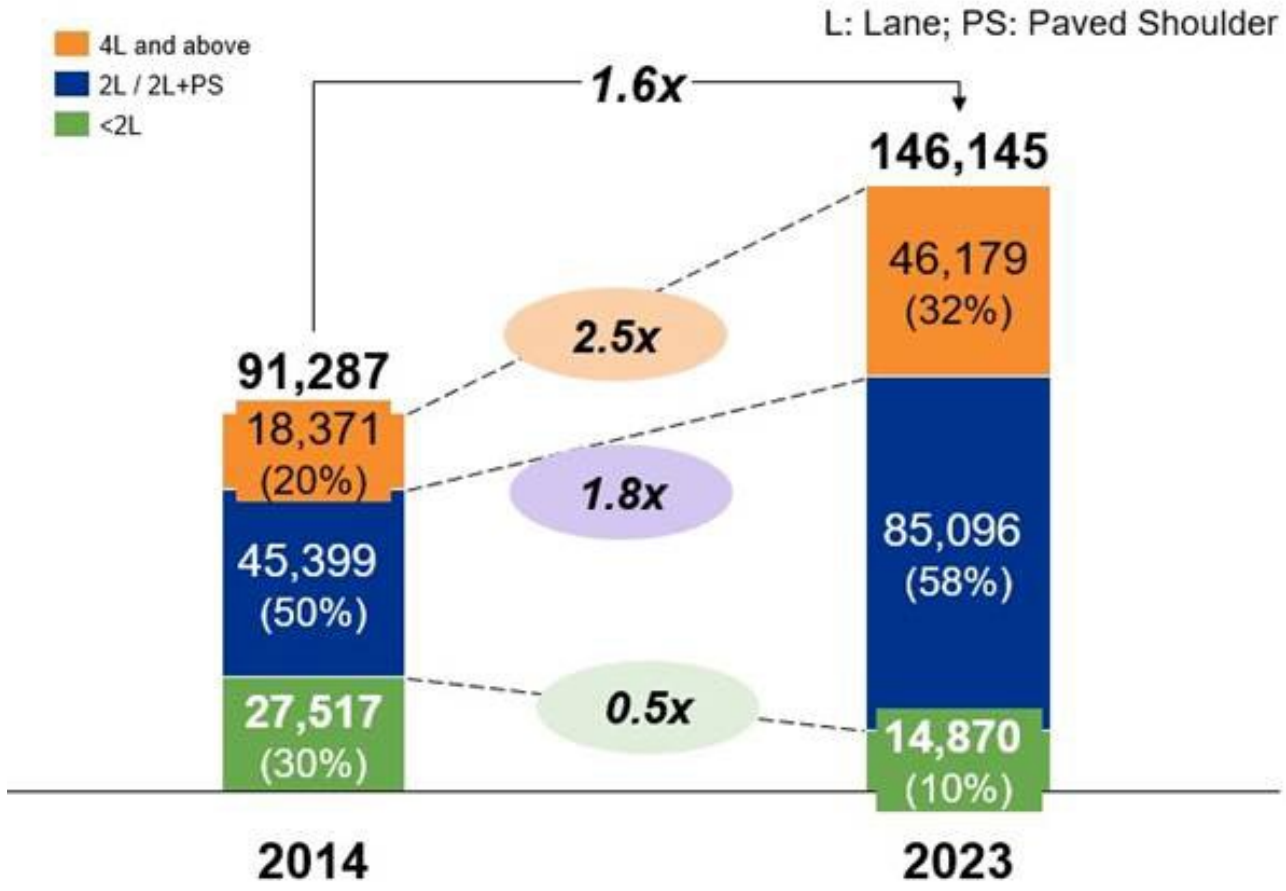
Pamban Bridge: An Engineering Marvel



Chenab Bridge: An Engineering Marvel



National Highways



National Highways

Year End Review 2024; Ministry of Road Transport and Highways

Government of India undertakes several initiatives to enhance and strengthen the National Highways network through flagship programmes such as the Bharatmala Pariyojana

National Highway network grown by 60%; rising from 91,287 km in 2014 to 146,195 km

National High-Speed Corridors increase from 93 km in 2014 to 2,474 km

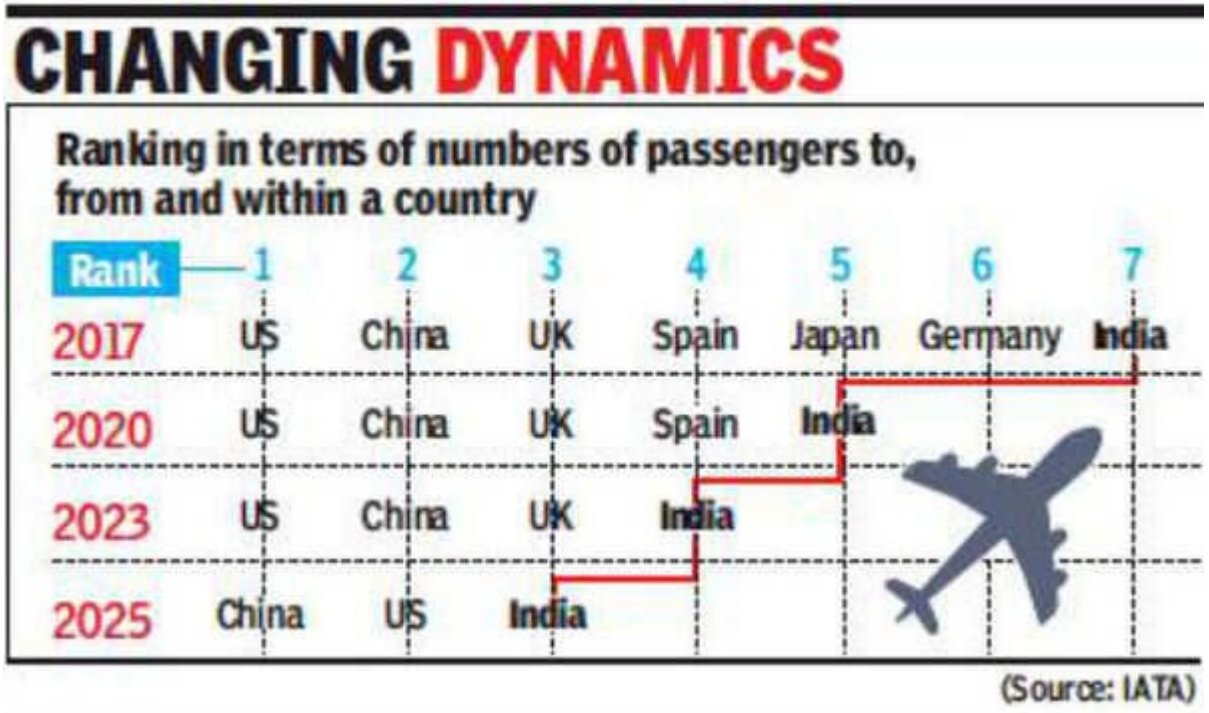
Cabinet Committee on Economic Affairs chaired by Hon'ble Prime Minister approves development of 08 important National High Speed Corridor projects with a Length of 936 km at a cost of Rs. 50,655 crore across the country

Under Asset Monetisation following TOT (Toll Operate and Transfer) model, NHAI monetises four TOT bundles realising Rs. 15,968 crore during FY 2023-24 totalling Rs. 42,334 crore

MoRTH plans network of 35 Multimodal Logistics Parks to be developed as part of Bharatmala Pariyojana

To ensure adequate last-mile connectivity to all operational/under implementation ports in country, MoRTH develops comprehensive Port Connectivity Masterplan for Promotion of Industry and Internal Trade identifying connectivity requirements; 59 critical infrastructure projects of length ~1,300 km selected for implementation

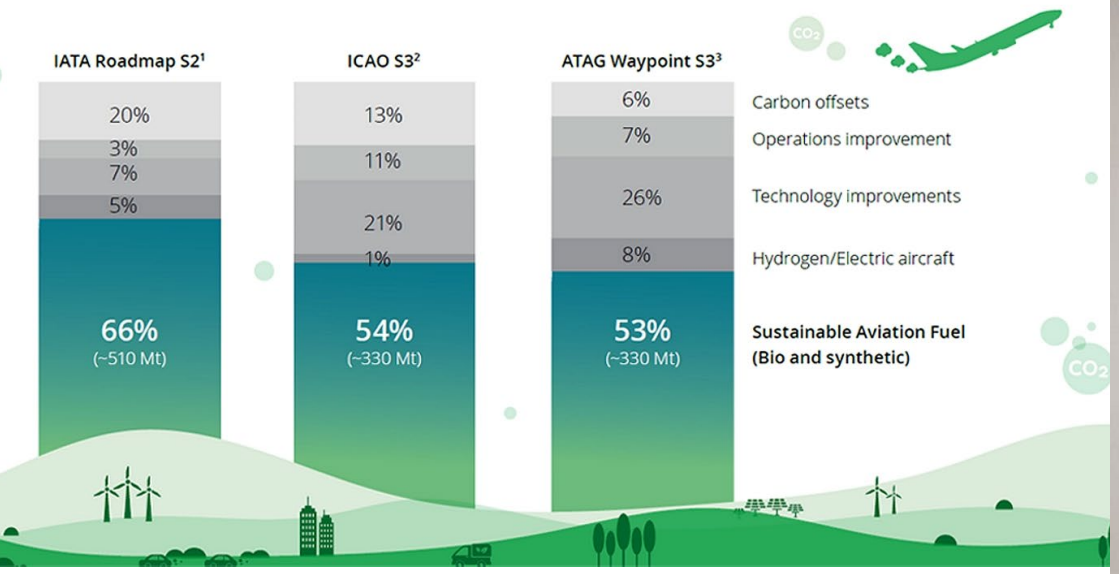
Aviation


CHANGING DYNAMICS
Ranking in terms of numbers of passengers to, from and within a country
Rank 1 2 3 4 5 6 7
2017 US China UK Spain Japan Germany India
2020 US China UK Spain India
2023 US China UK India
2025 China US India
(Source: IATA)


RCS UDAN: FLAGSHIP SCHEME OF MINISTRY OF CIVIL AVIATION
Launched by Prime Minister on April 27, 2017
(As on August 2022)
1 Crore
Passengers benefited since launch
425
New Routes
68
New Airports
(By Year 2026)
4 Crore
Passengers will benefited
1000
New Routes
100
New Airports


नागर विमानन मंत्रालय
MINISTRY OF
CIVIL AVIATION
Tracking India's remarkable domestic aviation growth
5th May 2025
Departing Pax: 4,85,659
Aircraft Movement: 6,561
5th May 2024
Departing Pax: 4,55,955
Aircraft Movement: 6,108

Sustainable Aviation Fuel



Inland waterways

- India has about 14,500 km of navigable waterways which comprise of rivers, canals, backwaters, creeks, etc. About 133.03 Million Metric Tonnes(MMT) of cargo is being moved annually by Inland Water Transport (IWT), a fuel - efficient and environment -friendly mode.
- Operations are currently restricted to a few stretches in the Ganga-Bhagirathi-Hooghly rivers , the Brahmaputra, the Barak river, the rivers in Goa, the backwaters in Kerala, inland waters in Mumbai and the deltaic regions of the Godavari - Krishna rivers.
- Besides these organized operations by mechanized vessels, country boats of various capacities also operate in various rivers and canals. and substantial quantum of cargo and passengers are transported in this unorganized sector as well.

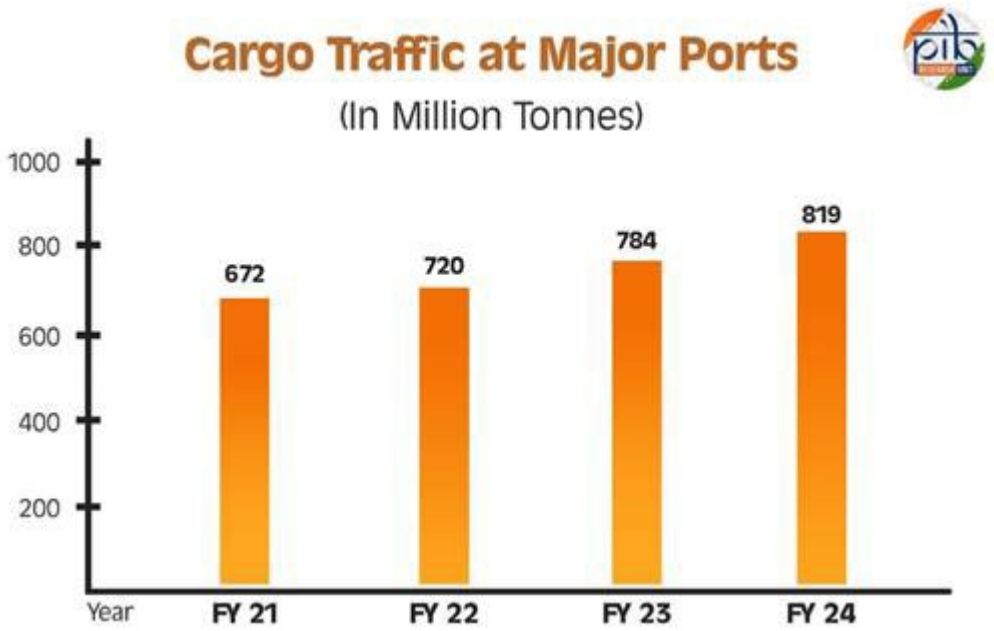
Maritime Sector

- India's maritime sector, crucial for its trade and economy, handles nearly 95% of trade by volume and 70% by value, with 12 major ports and over 200 minor ports. Positioned along the world's busiest shipping routes, India is not just a key trading hub but a rising global power.
- As India ascends the global stage by becoming 3rd largest economy soon, its maritime sector emerges as a linchpin for commerce, connectivity, and international cooperation. In 2023-24, **major Indian ports reduced container turnaround time to 22.57 hours**, exceeding global benchmarks.

Functional Major and Non-Major Ports in India

Sr. No.	State / UT	Non-Major Ports	Major ports
1	Andhra Pradesh	15	1
2	Goa	5	1
3	Gujarat	48	1
4	Karnataka	13	1
5	Kerala	17	1
6	Maharashtra	48	2
7	Odisha	14	1
8	Tamil Nadu	17	3
9	West Bengal	1	1
10	Andaman and Nicobar Islands	24	-
11	Daman & Diu	2	-
12	Puducherry	3	-
13	Lakshadweep	10	-
		Total = 217	12

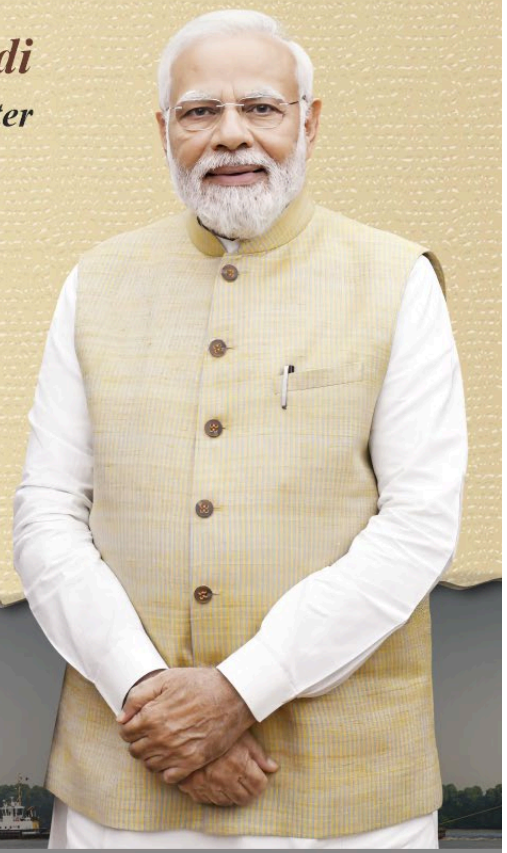
(As of July 26, 2024)



GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS

India is accelerating efforts to reach new heights in shipbuilding. We have now granted large ships the status of infrastructure assets.

Shri Narendra Modi
Hon'ble Prime Minister



INDIA MARITIME WEEK 2025

29th OCTOBER

NESCO Exhibition Centre, Mumbai

ShipminIndia | Shipmin_India | Sagarmala Project | Sagarmala.gov.in / shipmin.gov.in

GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS

When the global seas are rough, the world looks for a steady lighthouse. India is well poised to play that role with strength and stability.

Shri Narendra Modi
Hon'ble Prime Minister

INDIA MARITIME WEEK 2025

29th OCTOBER

NESCO Exhibition Centre, Mumbai

ShipminIndia | Shipmin_India | Sagarmala Project | Sagarmala.gov.in / shipmin.gov.in

Viksit Bharat ka Amrit Kaal
Seva, Sushasan, Garib Kalyan ke
11 SAAL

SAGARMALA

GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS

FASTER PORTS, STRONGER TRADE!

Average Turnaround Time for Containers reduced from

43%
REDUCTION
Over the last 11 Years

**Reduction in Average Turnaround Time (in HRS)*

INDIA MARITIME WEEK 2025
https://imw.org.in/
ShipminIndia | Shipmin_India | Shipmin_India | Sagarmala Project | sagarmala.gov.in / shipmin.gov.in

Viksit Bharat ka Amrit Kaal
Seva, Sushasan, Garib Kalyan ke
11 SAAL

SAGARMALA

GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS

Capacity OF INDIAN PORTS

77%
GROWTH
Over the last 11 Years

2762
MMT
2024-25

1561
MMT
2014-15

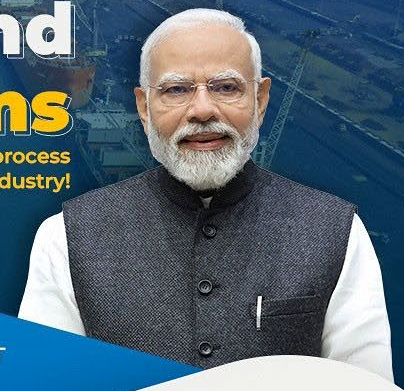
**Capacity of all Indian Ports (in Million Metric Tonnes)*

INDIA MARITIME WEEK 2025
https://imw.org.in/
ShipminIndia | Shipmin_India | Shipmin_India | Sagarmala Project | sagarmala.gov.in / shipmin.gov.in

Pillar 4

Legal, Policy and Process Reforms

India is making waves with new legal, policy, and process reforms to strengthen its maritime industry!



Ships as infrastructure:

- Indian-built, owned and flagged ships over 1,500 GT
- Notified on 19th Sept 2025 for better access to finance
- Indian-owned and flagged commercial ships above 10,000 GT

Boosting demand and ownership:

- Government identified need for 112 vessels
- Supporting domestic shipbuilding and self-reliance (Atmanirbharta)
- Reducing foreign exchange spent on overseas shipping

New maritime laws passed:

- Bills of Lading Act, 2025
- Carriage of Goods by Sea Act, 2025
- Coastal Shipping Act, 2025
- Merchant Shipping Act, 2025
- Indian Ports Act, 2025

Benefits:

- Easier business in the maritime sector
- More opportunities for Indian shipbuilders
- Access to maritime financing just got simpler

PILLAR 2

MARITIME DEVELOPMENT FUND

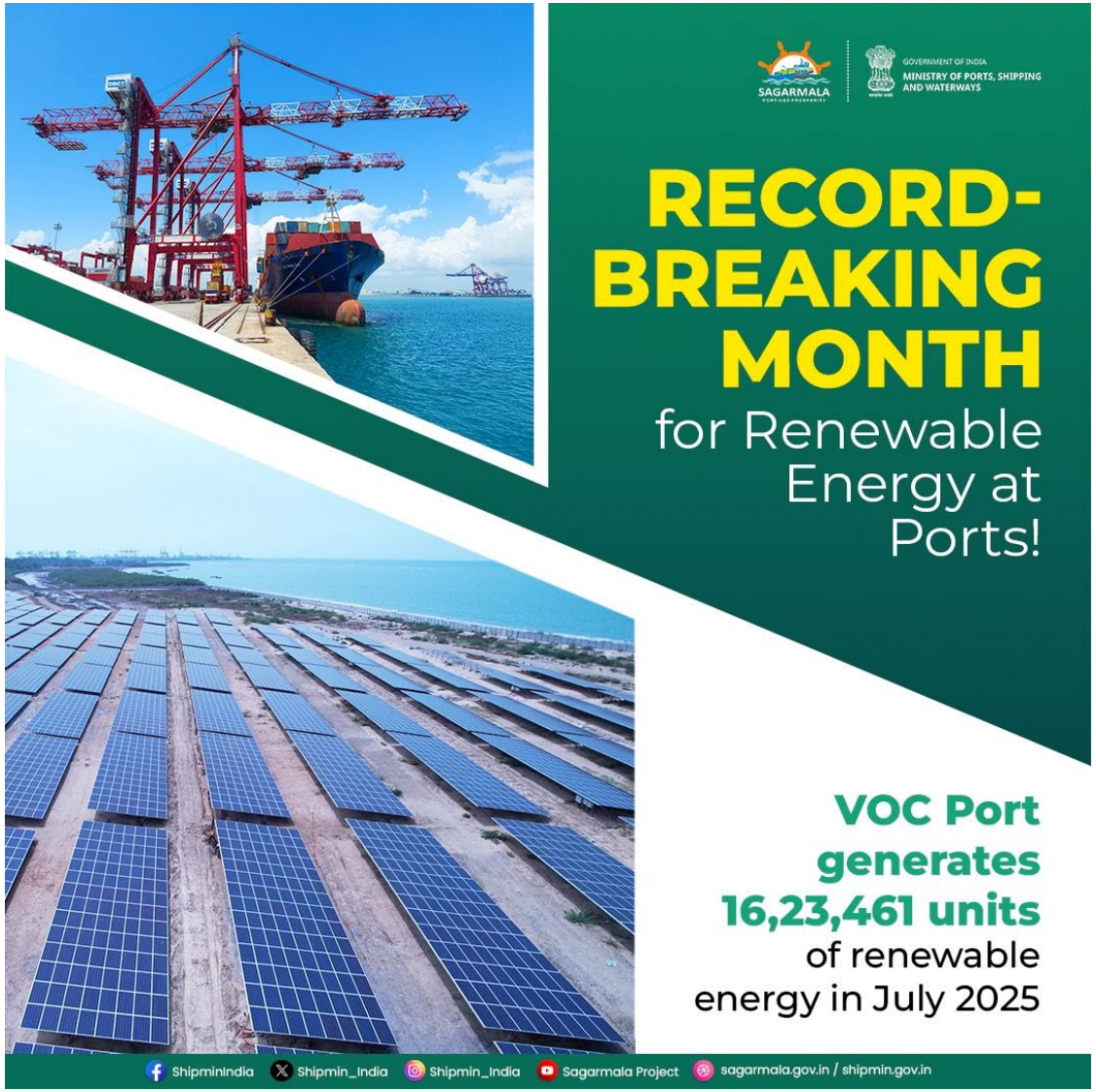
Fueling India's maritime ambitions with **₹25,000 Cr** investment support.

Maritime Investment Fund: **₹20,000 Cr** blended finance, mobilizing **₹1.8 Lakh Cr** investments

Interest Incentivisation Fund: **₹5,000 Cr** to ease shipyard financing

Low-cost, long-term capital for high-impact maritime projects

A visionary step to unlock growth, innovation and global competitiveness in India's maritime sector


SAGARMALA
GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS
RECORD-BREAKING MONTH
for Renewable Energy at Ports!
VOC Port generates 16,23,461 units of renewable energy in July 2025
ShipminIndia
Shipmin_India
Shipmin_India
Sagarmala Project
sagarmala.gov.in / shipmin.gov.in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GOVERNMENT OF INDIA
MINISTRY OF PORTS, SHIPPING AND WATERWAYS
ITOCHU


GREEN ENERGY
TO POWER VIKSIT BHARAT
L&T Energy GreenTech
ITOCHU Corporation
300 KTPA Green Ammonia Facility
Kandla, Gujarat
ShipminIndia
Shipmin_India
Shipmin_India
Sagarmala Project
sagarmala.gov.in / shipmin.gov.in

PM GatiShakti | SAGARMALA | GOVERNMENT OF INDIA MINISTRY OF PORTS, SHIPPING AND WATERWAYS

Mormugao Port Authority goes 100% Solar!

MPA achieves complete transition to Solar Energy,
reinforcing India's commitment to **Sustainable Maritime Growth**

ShipminIndia | Shipmin_India | Sagarmala Project | Sagarmala.gov.in / shipmin.gov.in

19 June 2024

Cabinet approves ‘Development of an all-Weather Greenfield deepdraft Major Port at Vadhavan in Maharashtra'

On completion Rs.76,200 crore Port will be one of the top 10 ports of the world

Posted On: 19 JUN 2024 7:55PM by PIB Delhi

The Union Cabinet, chaired by Prime Minister Shri Narendra Modi, today approved setting up a Major Port at Vadhavan near Dahanu in Maharastra. The Project will be constructed by Vadhavan Port Project Limited (VPPL), an SPV formed by Jawaharlal Nehru Port Authority (JNPA) and Maharashtra Maritime Board (MMB) with a shareholding of 74% and 26%, respectively. The Vadhavan Port will be developed as an all-weather Greenfield deep draft major port in Vadhavan, Palghar District, Maharashtra.

The total project cost, including the land acquisition component is Rs.76,220 Crore. This will include development of Core infrastructure, Terminals and other commercial infrastructure in public-private partnerships (PPP) mode. The cabinet also approved establishing the road connectivity between the Port and National Highways by Ministry of Road Transport & Highways and rail linkage to the existing rail network and the upcoming Dedicated Rail Freight Corridor by Ministry of Railways.

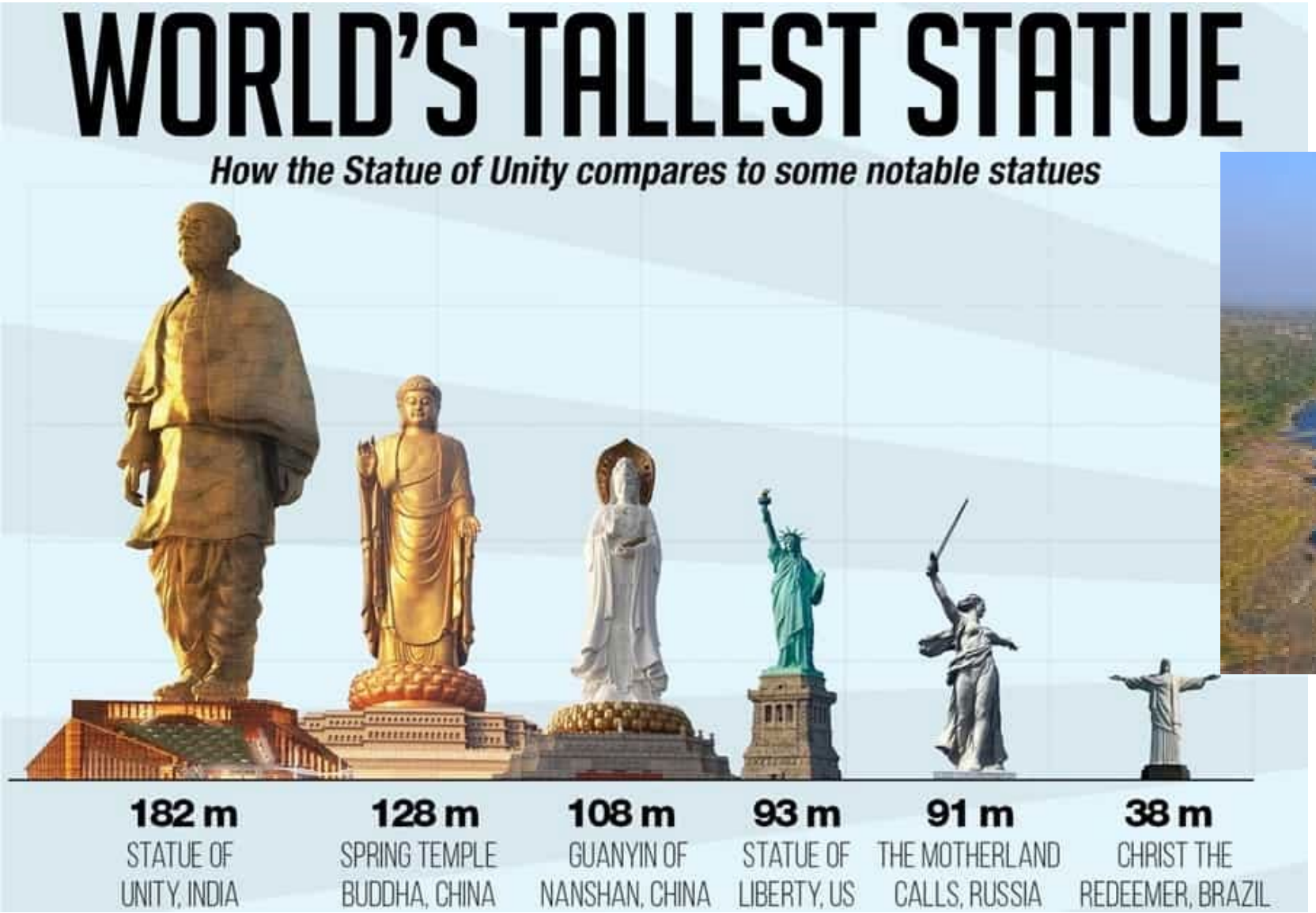
The Port will comprise nine container terminals, each 1000 meters long, four multipurpose berths, including the coastal berth, four liquid cargo berths, a Ro-Ro berth, and a Coast Guard berth. The Project involves the reclamation of 1,448 hectares of area in the sea and the construction of 10.14 km of offshore breakwater and container/cargo storage areas. The Project will create a cumulative capacity of 298 million metric tons (MMT) per annum, including around 23.2 million TEUs (Twenty-foot equivalents) of container handling capacity.

The capacities created will also aid EXIM trade flow through IMEEC (India Middle East Europe Economic Corridor) and INSTC (International North South Transportation Corridor). The world-class maritime terminal facilities promote public-private partnerships (PPP) and leverage efficiencies and modern technologies to create a state-of-the-art terminals capable of handling mainline mega vessels plying on international shipping lines between the Far East, Europe, the Middle East, Africa and the Americas. Vadhavan Port, on completion, will be one of the top ten ports of the world.

The Project, aligned with the objectives of PM Gati Shakti program, will add to further economic activity and also have the potential for direct and indirect employment opportunities for around 12 lakh individuals, thereby contributing to the local economy.

Integrated Transport Planning

Statue of Unity



Energy Security

India's energy journey over the past decade reflects a strategic shift towards self-reliance, sustainability, and innovation.

From green hydrogen to solar rooftops, rural electrification to digital procurement, every initiative underscores India's vision of inclusive, secure, and clean energy for all.

As the nation moves forward, its balanced and forward-looking energy strategy continues to power economic growth and a sustainable future

नवीन एवं
नवीकरणीय ऊर्जा मंत्रालय
MINISTRY OF
NEW AND
RENEWABLE ENERGY

India Rises to 4th in Global Renewable Energy Capacity

In box :

2014 → 2025

81 GW → 257 GW (+217%)

Solar Power: 2.8 GW → 128 GW (+4,470%)

Solar Module Manufacturing: 2 GW → 110 GW (+5,400%)

Solar Cell Manufacturing: 0 → 27 GW

Wafer Manufacturing: 0 → 2.2 GW

mnreindia mnreministry mnre.gov.in

नवीन एवं
नवीकरणीय ऊर्जा मंत्रालय
MINISTRY OF
NEW AND
RENEWABLE ENERGY

Wind Power Crosses 53 GW

India's journey toward clean energy gathers pace. The rise of renewables continues

mnreindia mnreministry mnre.gov.in

Operation Sindoor demonstrated India’s capabilities and progress, based on self-reliance

Outlay: INR 50,000 Crore

Anusandhan National Research Foundation (ANRF)

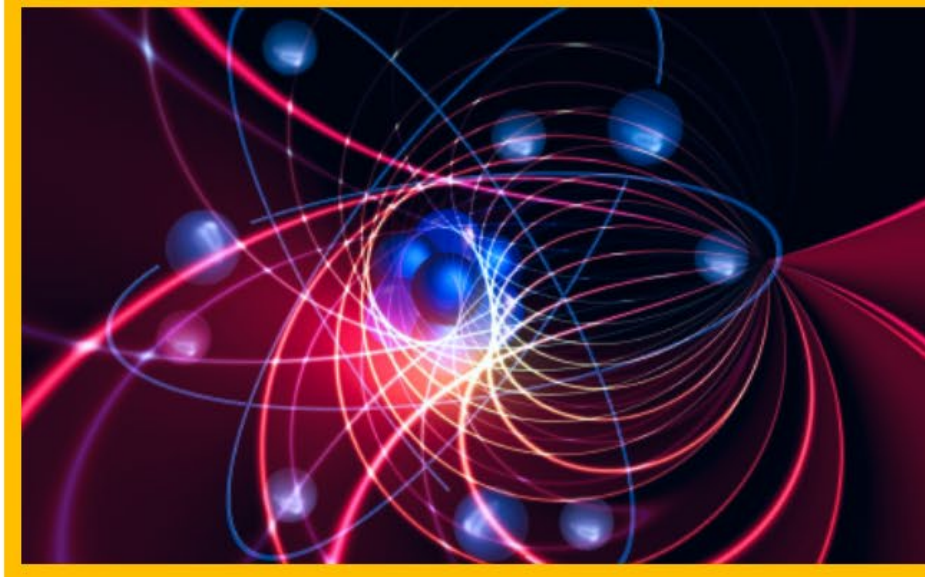
The Anusandhan National Research Foundation (ANRF) has been established with Anusandhan National Research Foundation (ANRF) 2023 Act. The ANRF aims to seed, grow and promote research and development (R&D) and foster a culture of research and innovation throughout India's universities, colleges, research institutions, and R&D laboratories. ANRF will act as an apex body to provide high-level strategic direction of scientific research in the country as per recommendations of the National Education Policy (NEP). With the establishment of ANRF, the Science and Engineering Research Board (SERB) established by an act of Parliament in 2008 has been subsumed into ANRF. ANRF will forge collaborations among the industry, academia, and government departments and research institutions, and create an interface mechanism for participation and contribution of industries and State governments in addition to the scientific and line ministries.

Cabinet Approves Over Rs 10,300 Crore for IndiaAI Mission, will Empower AI Startups and Expand Compute Infrastructure Access

National Quantum Mission

This mission will initiate work in the understanding and control of quantum mechanical systems with many degrees of freedom.

HOME | PM-STIAC | **National Quantum Mission**



Outlay: INR 6,000 Crore

Mission Implementation includes setting up of four Thematic Hubs (T-Hubs) in top academic and National R&D institutes in the domains:

1. **Quantum Computing**
2. **Quantum Communication**
3. **Quantum Sensing & Metrology**
4. **Quantum Materials & Devices**

National Green Hydrogen Mission (INR 19,744 Crore)

National Green Hydrogen Mission

Overarching Objective

"To make India the Global Hub for production, usage and export of Green Hydrogen and its derivatives. This will contribute to India's aim to become Aatmanirbhar through clean energy and serve as an inspiration for the global Clean Energy Transition. The Mission will lead to significant decarbonisation of the economy, reduced dependence on fossil fuel imports, and enable India to assume technology and market leadership in Green Hydrogen."

Demand Creation

Exports: Mission will facilitate export opportunities through supportive policies and strategic partnerships.

Domestic Demand: The Government of India will specify a minimum share of consumption of green hydrogen or its derivative products such as green ammonia, green methanol etc. by designated consumers as energy or feedstock. The year wise trajectory of such minimum share of consumption will be decided by the Empowered Group (EG).

Competitive Bidding: Demand aggregation and procurement of green hydrogen and green ammonia through the competitive bidding route will be undertaken.

Certification framework: MNRE will also develop a suitable regulatory framework for certification of Green Hydrogen and its derivatives as having been produced from RE sources.

Renewable Energy

As we step into 2025, India stands tall as a global lighthouse of sustainable development : Union Minister Pralhad Joshi

27 GW of RE capacity added during calendar year 2024

Solar Energy Capacity reaches 94.17 GW in 2024, Wind at 47.96 GW

PMSGMBY achieves 7 lakh installations in 10 months—an average of 70,000/month

Posted On: 31 DEC 2024 8:24PM by PIB Delhi

Union Ministry of New & Renewable Energy (MNRE) continued its remarkable journey toward transforming India's energy landscape in 2024. This progress is in line with India's commitment to achieving its 500 GW of non-fossil fuel energy in line with the 'Panchamrit' goals set by Prime Minister Shri Narendra Modi.

"Under Prime Minister Shri Narendra Modi's transformative leadership, 2024 has marked a great moment in India's renewable energy journey. Our achievement of more than 214 GW from non-fossil sources isn't just a number – it represents our nation's unwavering commitment to reaching our ambitious 500 GW goal by 2030, " said Union Minister of New and Renewable Energy Shri Pralhad Joshi. The Minister added "As we step into 2025, India stands tall as a global lighthouse of sustainable development. Our achievements under Prime Minister Shri Modi aren't merely about meeting targets; they're about reimagining what's possible in the worldwide energy transition. Through these initiatives, we're crafting a blueprint for a future where economic growth and environmental stewardship go hand in hand."

Shri Pralhad Joshi assumed the office of Union Minister of New and Renewable Energy in June 2024 and under his guidance, India crossed the 200 GW milestone of total installed Renewable Energy capacity in September 2024. The total installed non-fossil fuel capacity has further increased to 214 GW in November 2024 which is an increase of over 14% as compared to the 187.05 GW in the same period last year. Between April and November of 2024 alone, India added nearly 15 GW of renewable energy capacity, almost double the 7.57 GW added during the same period last year.

Missions: National Super Computing Mission (Launched: 2015)

- **Goal**: attain global competitiveness and ensure self-reliance in the strategic area of supercomputing technology.
- **Application Areas**: Climate Modelling, Weather Prediction, Aerospace Engineering, Computational Biology, Molecular Dynamics, Atomic Energy Simulations, National Security/Defence Applications, Seismic Analysis, Disaster Simulations and Management, Computational Chemistry, Computational Material Science and Nanomaterials, Astrophysics, Large Complex Systems Simulations, Cyber Physical Systems, Big Data Analytics, Finance, Information repositories/ Government Information Systems etc.

Missions: India Semiconductor Mission (Launched: 2021)

- **Goal**: attain global competitiveness and ensure self-reliance in the strategic area of electronics and semiconductor technology. (Import bill of Electronics is as high as Oil)

India Semiconductor Mission: Progress

Navigating India's Skill Landscape

Outlay: INR 50,000 Crore)

Bridging India’s Skill Gap, Empowering India’s Workforce

Cabinet Approves Continuation and Restructuring of Skill India Programme

Programme to Strengthen Workforce Development & Make skilling the backbone of country’s economic growth

Posted On: 07 FEB 2025 8:39PM by PIB Delhi

The Union Cabinet, chaired by Prime Minister, Shri Narendra Modi, today approved the continuation and restructuring of the Central Sector Scheme ‘Skill India Programme (SIP)’ till 2026 with an overlay outlay of Rs.8,800 crore from the period 2022-23 to 2025-26.

This approval underscores the government’s commitment to building a skilled, future-ready workforce by integrating demand-driven, technology-enabled, and industry-aligned training across the country.

Pradhan Mantri Kaushal Vikas Yojana 4.0 (PMKVY 4.0), the Pradhan Mantri National Apprenticeship Promotion Scheme (PM-NAPS), and the Jan Shikshan Sansthan (JSS) Scheme – the three key components, are now combined under the composite Central Sector Scheme of “Skill India Programme”. These initiatives aim to provide structured skill development, on-the-job training, and community-based learning, ensuring that both urban and rural populations, including marginalized communities, have access to high-quality vocational education. Under the three flagships schemes of Ministry of Skill Development and Entrepreneurship, there are more than 2.27 Crore beneficiaries till date.

Space Mission

ISRO's year end mission to seek the rare feat of docking or merging or joining together two satellites in Space

SpaDeX, India's final Space Mission for 2024: How ISRO will dock 2 satellites in space with PSLV rocket's round design

"SpaDEX" will mark a milestone, showcasing India's expertise in spacecraft docking technology

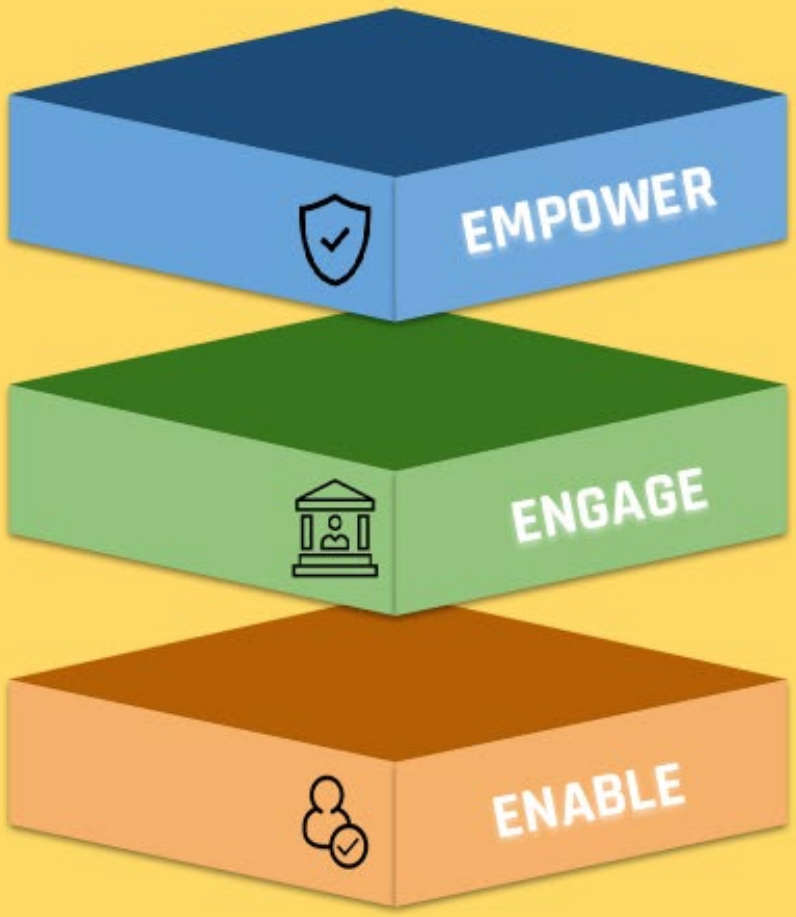
ISRO's SpaDeX mission aims to achieve a historic Space Docking Feat on December 30, 2024, demonstrating India's capabilities in Space Technology and advancing its Space program : Dr Jitendra Singh

Docking technology is key for long-term missions like "Chandrayaan-4" and the planned Indian space station. It is also crucial for the eventual manned "Gaganyaan" mission

Space Mission : Learnings

India's Public Digital Infrastructure

A set of foundational digital infrastructure services



Data infrastructure

Transaction infrastructure

Identity Infrastructure

Summary: We are fortunate

- **We are living in a country at such a time:**
  - Drawing strengths from its rich heritage and culture, and approaching challenges with optimism of democracy and technology
  - Defines its own interests, articulates its own position, find its own solutions and advance its own model
  - Not averse to taking calculated risks, focus on value creation in the knowledge-economy
  - Focusing on Advanced Technologies (National Missions as priority areas)
  - Evolving to gain its rightful place as a leader in the world !!

Thought-process and Actions that are accelerating these developments:

- Mindset of Collaboration and Synergy
- Technology-Enabled Approach

THANK YOU