

Sustainable Global Supply Chains

-Key levers in Import Challenges in India

Global Supply Chain needs to shift ... towards more pluricentric constellations, with more domestic & regional supply chains and intensified India trade

Emphasis on the impacts of game changers for sustainable development, especially in developing & emerging economies.”

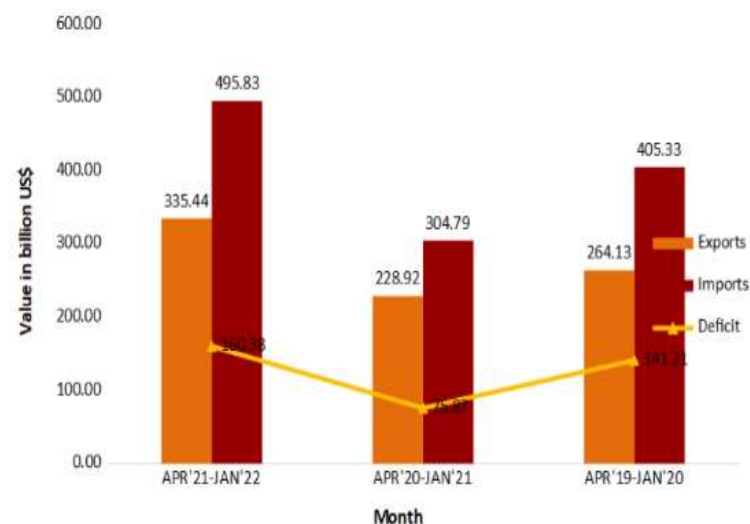


Challenges importers in India face while bringing foreign goods into the country, and possible solutions to those problems.

Imports have traditionally outpaced exports in India. The government is currently focused on boosting India's share in global exports and reducing dependence on imports with an aim to promote domestic manufacturing. But that being said, India's import volumes will not be coming down any time soon.

Statement 1: India's Merchandise Trade in 2021-22 (April-January)

	Value in Billion USD			% Growth	
	2021-22 (Apr-Jan)	2020-21 (Apr-Jan)	2019-20 (Apr-Jan)	2021-22 (Apr-Jan) over 2020-21 (Apr-Jan)	2021-22 (Apr-Jan) over 2019-20 (Apr-Jan)
Exports	335.44	228.9	264.13	46.53	27
Imports	495.83	304.79	405.33	62.68	22.3
Deficit	160.38	75.87	141.2	112.97	13.51



Drawbacks of Foreign Trade Policy 2015-2020

Even though the Policy aimed for a massive economy for India, this Policy induced a decent share of criticism. India's trade strategy failed to address multi-dimensional difficulties in the environment of insecurity, protectionism, dropping overall global demand, removing export schemes, and probably the more crucial cause of internal concerns.

The [United States filed a complaint against India at the World Trade Centre](#) challenging the Indian Government's Tax benefits to the exporters. The complaint challenged SEIS and MEIS under the FTP 2015-2020, an incentive scheme for exporters to receive a certain percentage of duty credit scrips of value of goods exported. The complaint claimed that the tax incentives given to the exporters under the SEIS and the MEIS amounted to illegal export subsidies violating the rules of the

TRADE CONCERNS BY WTO MEMBERS	
Country raising concern	Subject
Chinese Taipei	India's caustic soda quality control order
EU, Indonesia, Chinese Taipei	India's import policy on tyres
Japan	India's import restrictions on air conditioners
Japan	India's mandatory certification for steel products
United States	India's order related to requirement of non-GM cum GM-free certificate with imported food consignment
Indonesia	India's plain copier paper quality order 2020
Indonesia	India's standards and import restrictions in the automotive sector

Source: WTO annual report. 2022

Key Highlights: FTP 2015-20	Drawbacks: FTP 2015-20
<ul style="list-style-type: none"> ➤ Paperless processing of various DGFT licenses and applications. ➤ Introduction of MEIS and SEIS incentive Scheme, scrips are transferable under MEIS & SEIS Scheme – If exporter has no need they can sell in open market. ➤ It reduced export obligation from 90% to 75% for capital goods sourced from local manufacturers under the EPCG Scheme. ➤ It allows status holders to self-certify their manufactured goods as originating from India. ➤ The policy acknowledged 108 Micro Small and Medium Enterprises as a robust approach for export promotion 	<ul style="list-style-type: none"> ➤ There is a strong belief in India that free trade agreements (FTAs) haven't worked for it. ➤ Export Incentive schemes which were violating the WTO norms. ➤ Subsidy driven policies not much focus on skill development, and technological up-gradation,



High import duties :

Import duties – India versus the world

India's import duties are among the highest in the world.

India's MFN applied rate averaged 15 percent in 2020 and 13.8 percent in 2019, according to the World Trade Organisation (WTO). In comparison, the average MFN applied rates in 2020 for the United States, European Union, and China were 3.4 percent, 5.1 percent, and 7.5 percent, respectively.

COUNTRY	SIMPLE AVERAGE MFN APPLIED RATE (%)	MAXIMUM MFN APPLIED RATE (%)
India	34	150
United States	5.1	350
European Union	11.2	200
China	13.8	65
Japan	15.8	662
South Korea	56.8	887



The government's reasoning for keeping import duties high is to protect local industries from a flood of cheap imports that might put them out of business

Protectionist policies :

India's Foreign Trade Policy has turned increasingly protectionist in recent years. Emphasis on increasing import duties to protect domestic mfg affects importers:

- Frequent duty hikes – Frequent changes in import duty rates are the norm in India. These are announced in the Budget, presented in February, or through a notification in the Gazette of India.. With production cost and quality still an issue in India, imports continue to thrive.
- Heavy rate hikes – Apart from frequent rate changes, India's importers and its global trading partners complain of big rate hikes. For example, import duties on some agricultural products saw a huge jump between November 2017 and March 2018.
In Budget 2020-2021, the government proposed a 200 percent hike in import duty on toys, leading to protests by importers
- Heavy Antidumping duty getting imposed

RAISING THE DUTIES

Item	Existing BCD rate	New BCD rate
Footwear	25	35
Furniture	20	25
Toys	20	60
Completely built units of e-vehicles	25	40
SKD forms of e-passenger vehicles	15	30
SKD forms of electric vehicle – bus, truck and two wheelers	15	30
Completely built-up unit of commercial vehicles other than electrical	30	40
Freezers	7.5	15
Refrigerating equipments	10	15
Grinders and mixers	10	20
Headphones and earphones	10	15
Colour TV picture tubes	Nil	10
Charger	Nil	20

Complicated tariff structure :

Import duty paid- Collection of taxes and surcharges including but not limited to:

- Basic Customs Duty
- Countervailing Duty
- Anti-dumping Duty
- Safeguard Duty
- Social Welfare Surcharge

For an importer, especially a newcomer, it can be quite challenging to keep track of the various duty components applicable on their goods, how each one is calculated, and how the overall import duty is calculated. A complex structure with multiple components also means higher compliance and administrative costs.

Ex:

Assessable value of an imported item is Rs 1000

Basic Customs Duty = 10%

SWS-10% on BCD

Integrated Tax Rate = 18%

The taxes will be calculated as follows:

Assessable Value = Rs.1000/-

Basic Customs Duty = Rs.100/-, SWS- Rs.10/-

The value to impose integrated tax = Rs.1000 + Rs.110 = Rs.1110/-

Integrated tax = 18% of Rs.1110 = Rs.199.8/-

Sum of Taxes = Rs.110 + Rs.199.8 = Rs.309.8/-

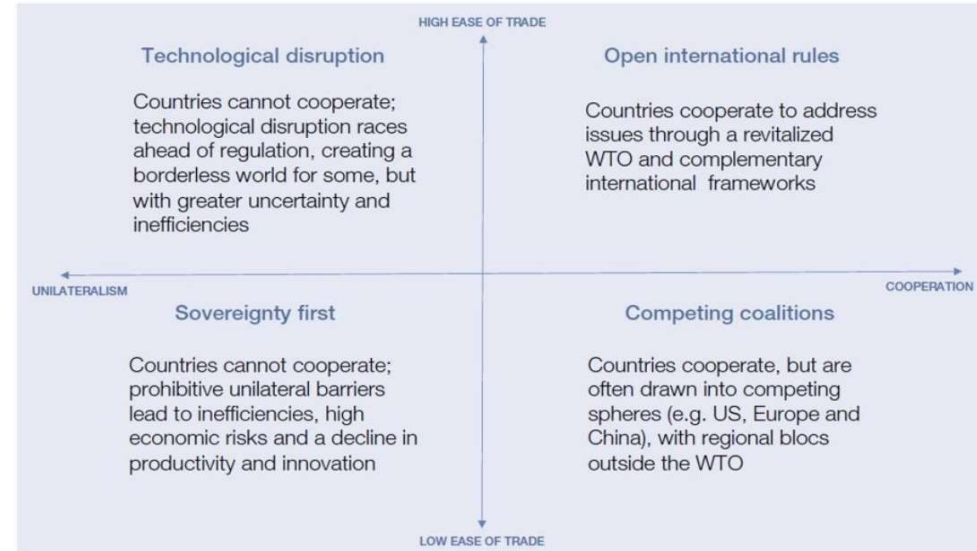
Geopolitical tensions :

India is currently experiencing some strain in its trade ties with China & the United States, its two top trading partners. While this might not affect importers as directly as, say, high tariffs, it is still cause for concern and has the potential to become more problematic in the future.

Ex- China: India's long-drawn border dispute with China has always cast a shadow on bilateral trade between the two neighbours. India's has 100 percent dependency on China in 57 product categories like pharmaceuticals, electronics, and automotives.

Single country/source risky when went into a coronavirus-induced lockdown in early 2020. India's dye industry, for example, suffered a 20 percent loss in production due to disruption in the supply of raw material.

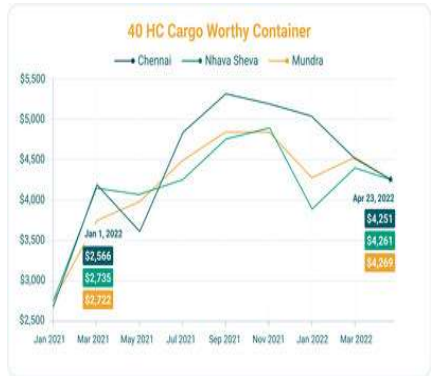
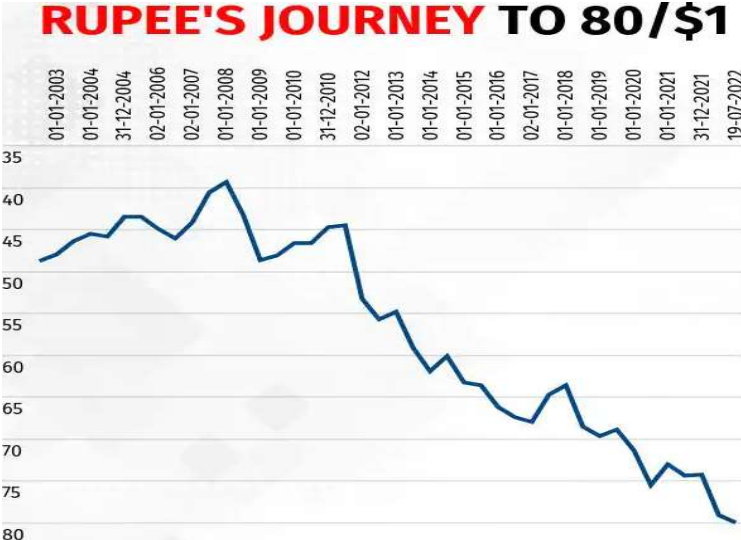
Following the Galwan incident in June 2020, there were calls for a boycott of Chinese goods in India.



PRODUCT TYPE	EXAMPLES	CHINA'S SHARE
Active pharmaceutical ingredients (APIs)	Penicillin, amoxicillin, ampicillin, and tetracycline (all antibiotics), essential vitamins	67%
Electrical machinery and equipment	Headphones, microphones, loudspeakers, transformers	40%
Organic chemicals	Heterocyclic compounds, amino compounds	38%
Machinery and nuclear reactors	Nuclear reactors, boilers	31%
Fertilisers	Urea, diammonium phosphate	31%
Plastics	Polyvinyl chloride (PVC), polypropylene	18%

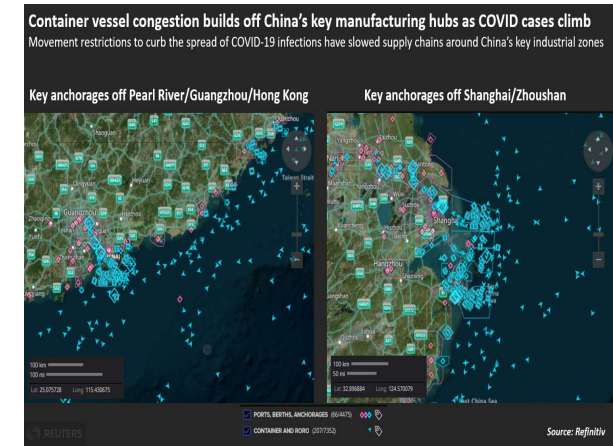
Rupee Depreciation:

The second half of June saw the rupee's value touching record lows below 78 to the US dollar. Now Rupees is touching 83 to the US dollar which is more than 5% increase within a span of 3 months.



Recent challenges in Imports

1. Ocean Freight Rates have increased very much in last 2 to 3 years, due to Covid spread specially from China, Europe and USA.
2. Container availability is very scarce all over the World specially SE Asia.
3. Vessels are not sailing and arriving as per forecast schedules causing delay in receipt of input / raw materials, etc. Due to delay in arrival of cargo shipped by sea, crucial inputs / raw materials etc., are being shipped by air thereby increasing the landed cost of Inputs/raw materials, etc.
4. Delay in transshipment of Containers at transshipment Port in Colombo and Singapore and other ports due to various reasons resulting in late arrival of sea cargo at Destination Ports.
5. More time taken for processing of Import and export clearance documents in Customs subsequent to introduction Faceless Assessment facility.
6. Time taken in processing of files in Customs for amendment in B.E's has to be reduced further.
7. Erratic fluctuation of Foreign Exchange in comparison to INR. This is making imports costly although the basic prices of materials are same at Foreign Vendors end.



BATTERY MARKET :

India Electric Vehicle Battery Market Overview by Battery type, Vehicle Type, Application and Power-Opportunities & Forecast 2019-2026

Electronics & Semiconductors Team at GMI Research

CAGR 25.3%

USD 963 million

KEY QUESTIONS THIS RESEARCH WOULD ANSWER?

- What are the growth opportunities in the India electric vehicle battery market?
- How the competitive structure looks like and which are the key players and their market share in the India electric vehicle battery market?
- Identify India electric vehicle battery market segments poised for strong growth

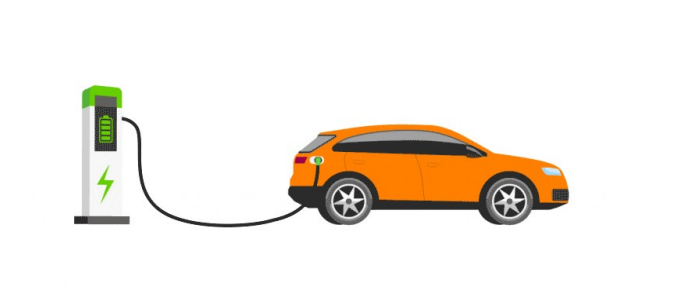
The market will be primarily driven by growing environmental concerns and government initiative to reduce carbon emission coupled with government push for electric vehicle by reducing GST rate and subsidy on commercial electric vehicle.

By Battery type, Lithium-ion will drive the market till 2026.

By Battery Capacity, less than 5 kWh battery dominated the market.

Prominent Market Players

AMARA RAJA, TOSHIBA, EXIDE, EXICOM, HERO ELECTRIC, SAMSUNG SDI, LAMBDA, TRONTEK, DENSO, TATA MOTORS, PANASONIC



India Electric Vehicle Market

CAGR 94.2%

326.6 (2021) **66,070** (2029)

Market Size in USD Million

Regional Analysis in 2021 (%)

- Uttar Pradesh
- Delhi
- Karnataka
- Bihar
- Maharashtra

Vehicle Type Segment Overview

- Two-wheeler
- Three-wheeler
- Passenger cars

Key Players

- Mahindra & Mahindra
- MARUTI SUZUKI INDIA
- Toyota Motor Corporation
- AB Volvo
- Tata motor
- Ashok Leyland
- Hero electric
- Honda Motor
- Avon Cycle Ltd
- Lohia Auto industry
- Yamaha Golf Car Company
- Club car LLC
- Speed way electric
- Club car
- Auto power
- Carrieall car pvt.ltd

Global Lead Acid Battery Market

Impact of COVID-19 Analysis

CAGR 4.51%

61.45 (2021) **87.45** (2029)

Market Size in USD Billion

Regional Analysis in 2029 (%)

- North America
- Europe
- Asia Pacific
- Middle East & Africa
- South America

Type Segment Overview

- SLI
- Motive
- Stationary

Key Players

- Exide Industries Ltd.
- Johnson Controls International Plc.
- GS Yuasa Corporation
- Amar Raja Batteries Ltd
- HOPPECKE
- HBL Power Systems Limited
- C&D Technologies, Inc.
- East Penn Manufacturing Co.
- FIAMM Energy Technology

India Forklift Battery Market

Impact of COVID-19 Analysis

CAGR 6.69%

587.30 (2020) **918.67** (2027)

Market Size in USD Million

Regional Analysis in 2020 (%)

- North India
- South India
- East India
- West India

Type Segment Overview

- Lithium Ion (Li-ion)
- Lead-Acid
- Others

Key Players

- Exide
- Amara Raja Batteries Limited
- Microtex
- UNIK
- Jackvolt
- Micronix
- Eternity
- Amaron Brute
- Others

INDIA ELECTRIC RICKSHAW BATTERY MARKET

CAGR 13.2% (2020-2024)

\$385.0 MILLION (2019) **\$722.3 MILLION** (2024)

Market Drivers

- Proliferation of electric rickshaws on Indian roads
- Increasing average age of electric rickshaws

Market Players

- Exide Industries Ltd.
- Amara Raja Batteries Ltd.
- Eastman Auto & Power Ltd.
- Okaya Power Pvt. Ltd.
- Sparco Batteries Pvt. Ltd.
- Jay Ace Technologies Ltd.
- Grand Batteries Pvt. Ltd.
- Gem Batteries Pvt. Ltd.



Industry specific Challenges:-

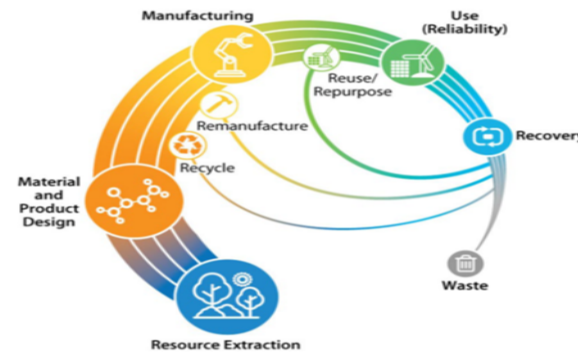
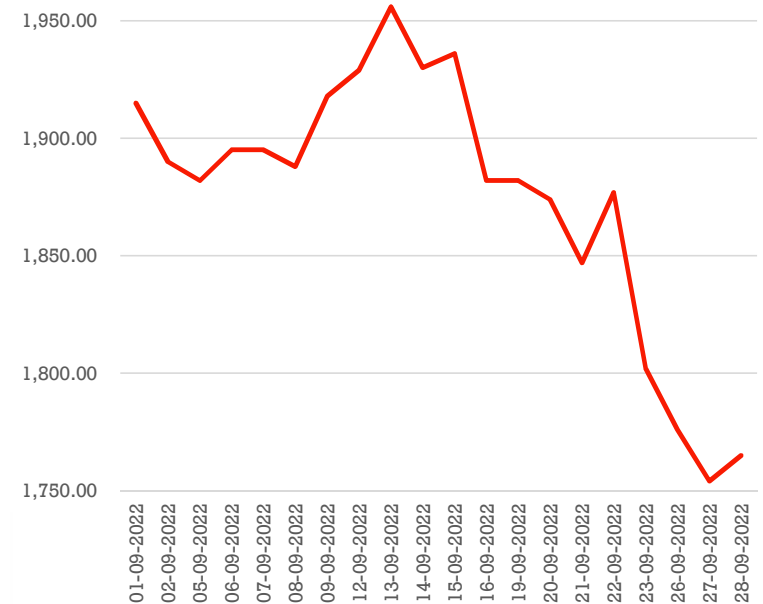
In case of Lead Acid storage Battery Industry the major raw material Lead is a highly volatile as per LME is concerned.

Industry has no control on the LME price fluctuation which varies from day to day and even an up down of U\$ 100-200 / MT in a single day is not unnatural

The other factor governing the price of metal import is the premium which constitutes of Warehousing cost, Interest, Freight, Insurance, profit etc. and it also fluctuates heavily from month to month. The premium goes high when the LME prices are at low level.

There is scarcity of Pure Lead in the market due to China's policy of No export of Lead backed by other countries producing Lead are exporting their materials to USA and Europe markets at a much higher Premium than that is paid by importers in India.

LME daily fluctuation Graph for Sep 22



Industry specific Challenges:-

- ✓ Lead scarcity in the International market is affecting the Battery Industry to a great extent. Primary Lead is being sold at very high premium. Even secondary Lead is also extremely tight backed by high premium expectations .
- ✓ The LME price of Lead is also extremely volatile with a range of \$100 - \$ 200 / MT up/down level.
- ✓ USA and UK are a major importer of Lead from Korea, Australia, UAE etc. at very high premium which is affecting the Indian market.
- ✓ Shortage / scarcity of Lead scarps and scarp batteries is also a major area of concern for the Smelters on whom the Battery Industry is depending on.
- ✓ Pollution control restriction on recycling of Lead is becoming more and more stringent from Environmental angle which is also a challenge now faced by Industry. Inorganic lead dust is the most significant health exposure in battery manufacture. Lead can be absorbed into the body by inhalation and ingestion. Inhalation of airborne lead is generally the most important source of occupational lead absorption.
- ✓ The long-drawn War with Ukraine is also creating Geopolitical pressure on lot of countries leading problem in smooth Supply chain management.
- ✓ R/M like plastics, Separators of various sizes and forms / types which is an important component in Battery is also becoming very expensive due to increase in raw material and energy cost in China. This is leading to high input cost which is very difficult to recover from the market.



Key Policy Levers by Govt. for Indigenization



- Desire for self-sufficiency- Motivations for purchasing storage systems are not purely financial. In Germany, for example, ecological motives, independence from utilities, resiliency, and technical curiosity are all thought to be motivations. Similarly, self-sufficiency is a strong driver in Italy, the UK, and Australia.
- National policy. Many countries are turning to renewable energy storage to reduce dependence on energy imports, enhance the reliability and resiliency of their systems, and move toward environmental and de-carbonization targets.
- Cost and performance improvements. Particularly relating to lithium-ion batteries, driven by expanding electric vehicle markets and related manufacturing economies of scale, costs are dropping while performance is improving.
- Grid modernization. The growth of battery storage goes hand-in-hand with grid modernization efforts, including the transition to smart grids. Batteries help to unlock the full potential of smart technologies & versa.
- Global movement toward renewables. Broad support for renewable energy and emissions reduction is also driving adoption of battery storage solutions.
- Participation in wholesale electricity markets. Battery storage can help balance the grid and improve power quality regardless of the generation source. Nearly every nation we examined is revamping its wholesale market structure to allow batteries to provide capacity and ancillary services.
- Financial incentives. Multiple nations are increasing the availability of financial incentives for storage investment. This reflects the growing awareness of policymakers of the range of benefits battery storage can deliver throughout the electricity value chain.

Challenges in global battery storage markets

Prominent barriers to storage deployment can be traced to the speed with which battery storage technologies and their applications are evolving, and to the multiplicity and flexibility of battery storage. They include:

Perceptions of high prices. Costs have been dropping so quickly that decision-makers may have outdated notions about the price of systems, thinking that batteries still cost the same as they did a couple of years ago, or even six months ago.

Lack of standardization. Participants in early stage markets often contend with diverse technical requirements as well as varied processes and policies. Battery suppliers are no exception, making lack of standardization a roadblock to further deployment.

Outdated regulatory policy and market design. As can be expected with emerging technologies, regulatory policy is lagging the energy storage technology that exists today. Besides wholesale market rules, retail rules will also need to be updated, especially as residential and commercial and industrial interest grows.

Incomplete definition of energy storage. Energy storage is having an identity crisis, with stakeholders and policymakers around the world wrestling with how to define fast-acting battery storage

THANK

YOU!

