

# GOVERNMENT

## POLICY REPORT



**Policies  
Covered In  
The Edition**



1. Sustainability



2. Climate Change



3. Technology



4. International Trade



5. Extended Producer Responsibility (EPR)

# SUSTAINABILITY

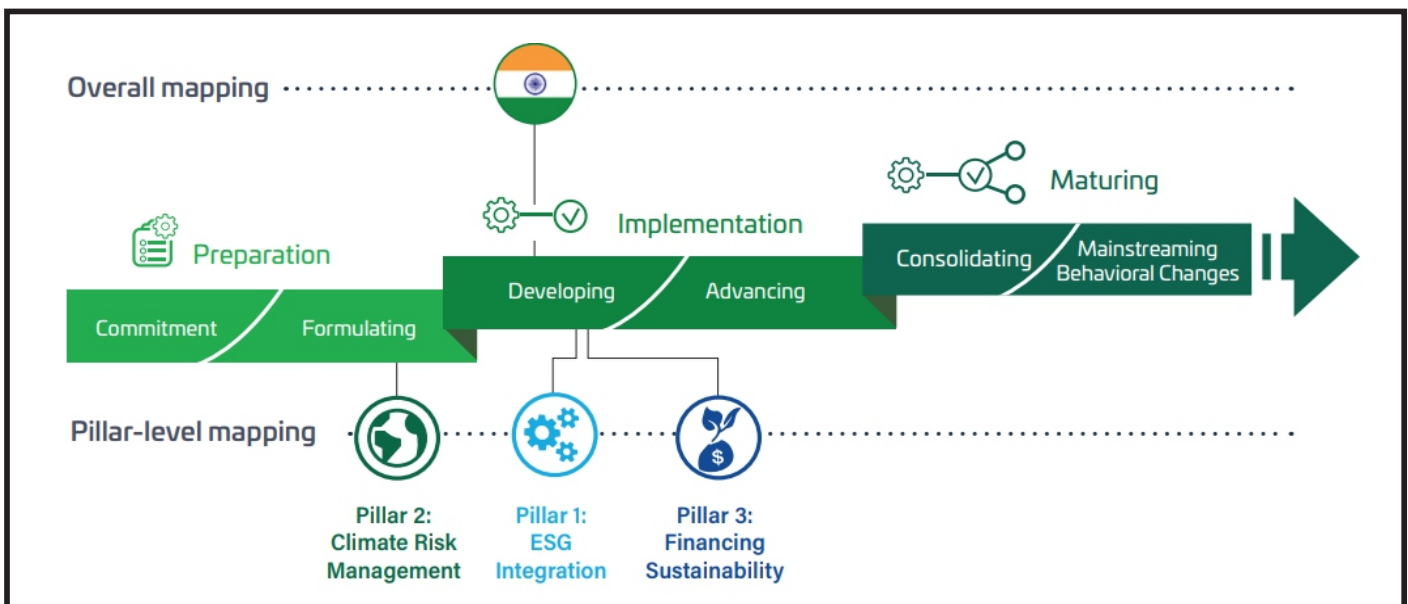


IFSCA and Climate Policy Initiative -India Signed MoU to Strengthen Cooperation on Sustainable Finance



To provide strength to India's sustainable green finance vision, recently the International Financial Services Centres Authority (IFSCA) has signed MoU with Climate Policy Initiative- India (CPI). The two have mutually agreed to provide assistance and cooperation in increasing the mobilization of sustainable financial capital into the various sectors of the Indian economy to effectively progress on various pillars of success identified by the Government of India to become a developed nation by 2047.

## India's Progress Performance on Different Pillars



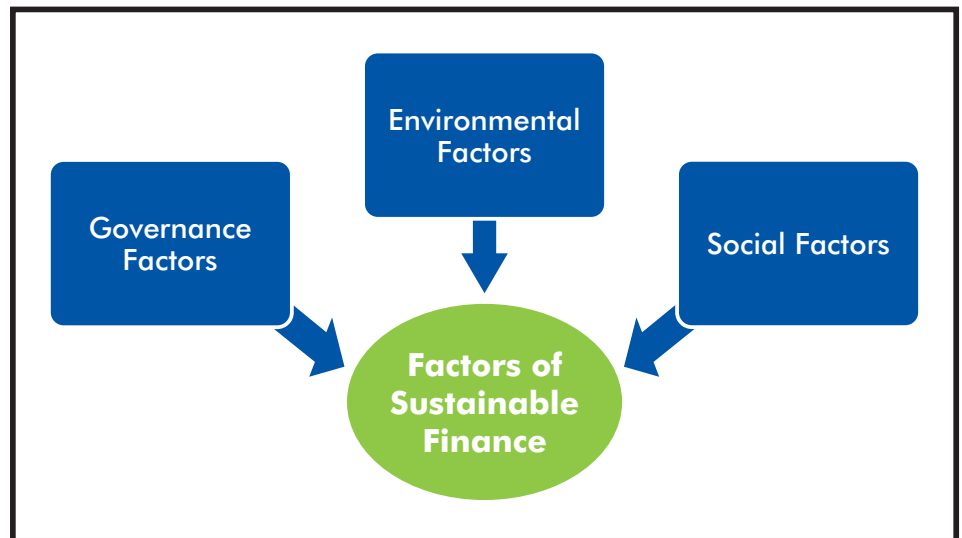
Source: [https://sbfnetwork.org/wp-content/uploads/pdfs/2021\\_Global\\_Progress\\_Report\\_Downloads/2021\\_Country\\_Progress\\_Report\\_India.pdf](https://sbfnetwork.org/wp-content/uploads/pdfs/2021_Global_Progress_Report_Downloads/2021_Country_Progress_Report_India.pdf)

Sustainable financing is one of the critical priorities under India's G20 presidency to achieve sustainable development across the G20 economies through the mobilization of sustainable finance. Thus, IFSCA and CPI, are collaborating to provide much-needed thrust to India's research & development to make green transition seamless.

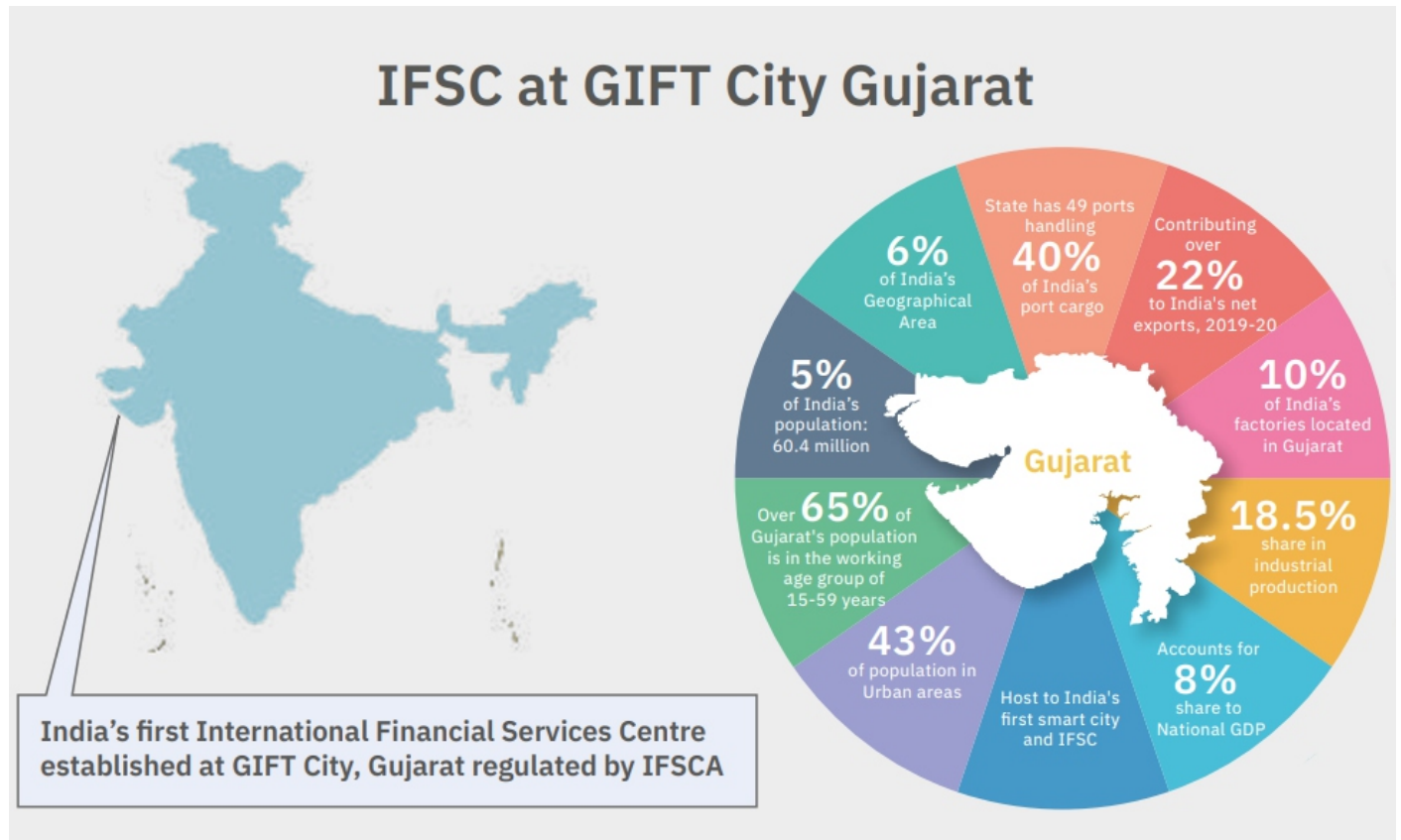
## Various Categories of Climate Change-Associated Risks



It will promote higher engagement of regulators and financial institutions in the country and tap unbounded capital flows to **support India's efforts in the areas of climate change, sustainable social development, and green energy transition that led to the growth of the green economy with innovative financial products such as green bonds.**



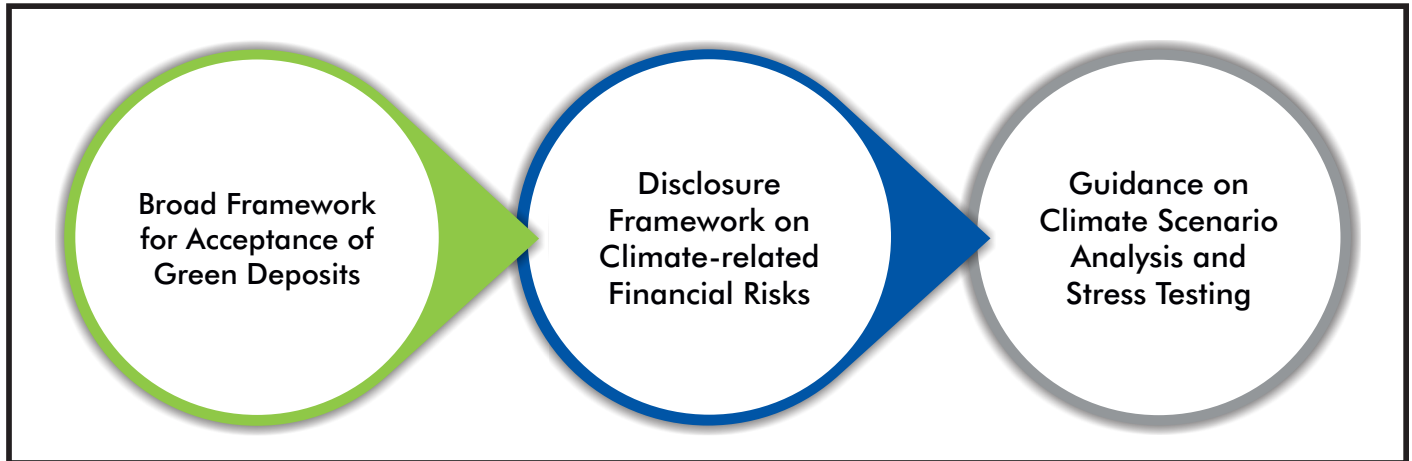
Thus, **the establishment of IFSCA as a statutory authority has taken place to regulate various financial products, services, and financial institutions under one roof** and serve as a gateway for international financial platforms in the region and develop a strong global sustainable finance connection. **The first such International Financial Service Centre (IFSC) has been established in GIFT City, Gujarat** to focus on the specialized needs of various sectors of the Indian economy in terms of mobilizing sustainable finance under a unified financial authority.



Source: [https://ifsc.gov.in/Document/Developments/IFSCA\\_Overview.pdf](https://ifsc.gov.in/Document/Developments/IFSCA_Overview.pdf)

The Reserve Bank of India has also announced various measures related to climate risk and regulated entities involved in sustainable financing in India.

### RBI Guidelines on Climate Risk and Sustainable Finance



Thus, with such a focused approach and comprehensive framework India is ready to revolutionize the international as well as domestic sustainable finance ecosystem. It will enable the country to achieve its ambitious climate change targets through sustainably linked financial products, financial services, and financial institutions while leveraging the innovative financial and policy solutions of CPI for equitable green growth along with the specialized ambit of IFSCA.



# Climate Change



To Facilitate Adaption of Indian Agriculture to Climate Change, MoES Launched WINDS Portal

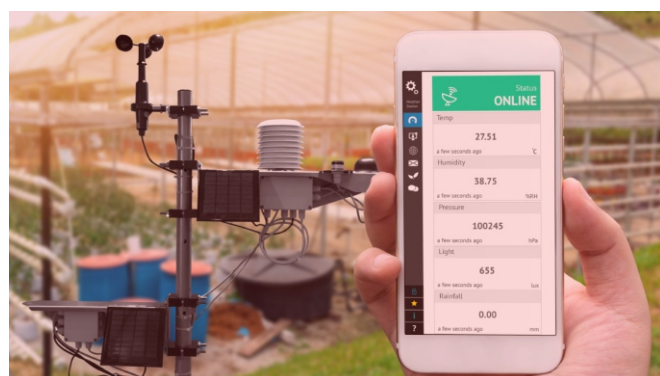


On 21st July 2023, the Ministry of Earth Sciences (MoES) launched the **'Weather Information Network Data Systems' (WINDS) portal to develop a responsive scientific mechanism that must be appropriate to adapt Indian agriculture to climate change.** The event has also witnessed the launch of the App for Intermediary Enrolment (AIDE) mobile app and Yield Estimation System, based on the Technology (YES-TECH) manual.

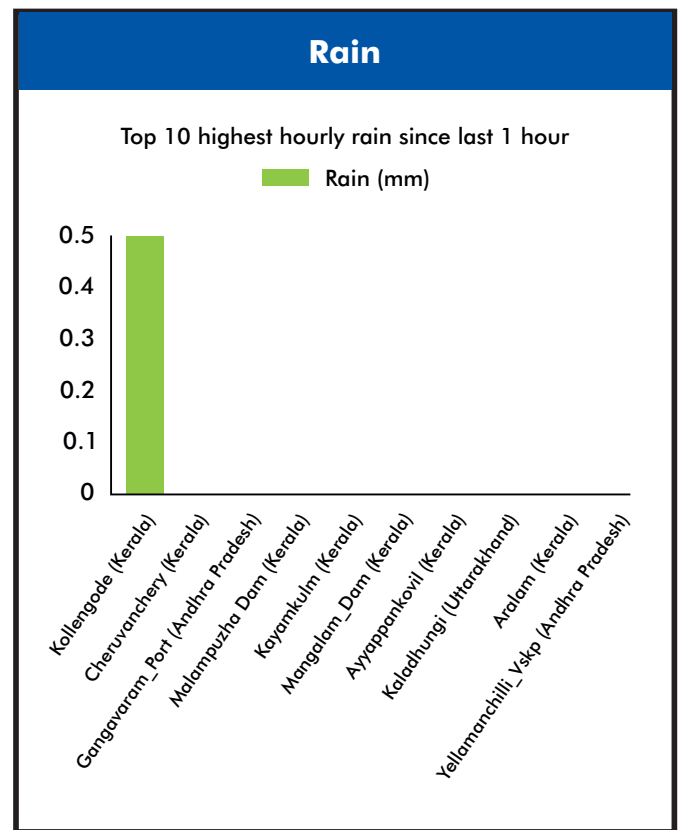
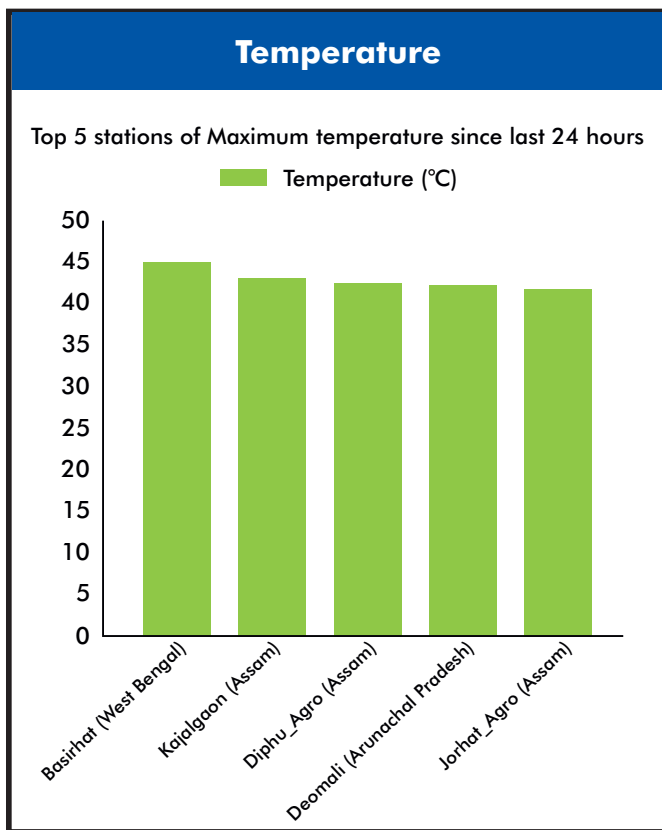


Source: <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1941556>

As the crop belts are shifting altitude due to changes in climatic conditions, the portal is thus providing the real-time status of various important characteristics of weather forecasting such as temperature and rain to take timely action to increase production. The government is introducing technology research and development in the sector to better adapt to the climate change era and utilize it for the growth of India's one of the primary sectors and the source of India's food security ambitions.



**Live Monitoring of Temperature and rain at WINDS Portal**



Source: <https://pmfby.gov.in/winds/>

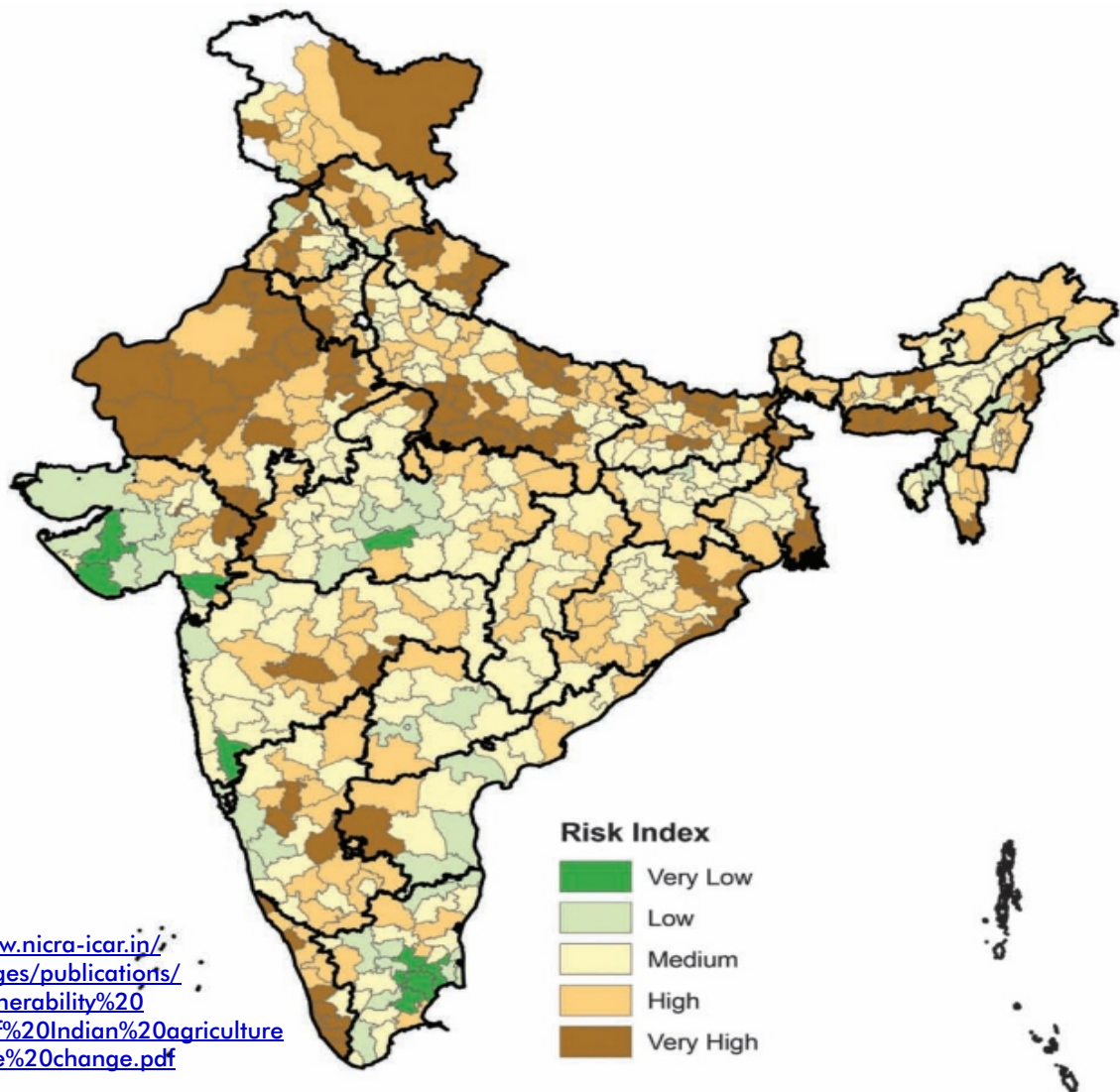
With the launch of the WINDS portal and AIDE app, the Government of India is accelerating the growth of Agriculture 4.0. The initiative will help in developing strong weather forecasting station networks across the block and gram panchayat levels. It will empower the Indian farmers to make an informed decision and bring change at the farm level that will impact all the stakeholders in the complete supply chain.

**Yearwise Growth of foodgrain production in India (in million tonnes)**

Year	2017-18	2018-19	2019-20	2020-21	2021-22
Production of food grains	285.01	285.21	297.50	310.74	315.72

Source: <https://pib.gov.in/PressReleasePage.aspx?PRID=1884236>

Agriculture is a highly climate-sensitive sector of the Indian economy, this is expected to receive a major threat from changing climate scenario. Thus, these technological interventions are making the sector equipped with strategic knowledge and digitization to adapt and mitigate the ongoing and future challenges associated with climate change to respond effectively.

**Climate Change Risk Assessment on Indian Agriculture (2020-2049)**

Source: <http://www.nicra-icar.in/nicarevised/images/publications/Risk%20&%20vulnerability%20assessment%20of%20Indian%20agriculture%20to%20climate%20change.pdf>

Besides this, to meet the future challenges of sustainable food production in the wake of changing climate, India is trying to expand innovative technology solutions such as WINDS Portal through potentially leveraging digitization efforts and infrastructure networks to benefit farmers. It is enhancing the quality of risk assessment and decision-making at various levels such as crop insurance, disaster mitigation, agricultural advisory, etc in changing extreme weather conditions like drought, and floods while achieving holistic benefits for India's agricultural landscape.

## How AG Group Can Help You

To experience our expert approach in limiting environmental impact of climate change across the sectors [Click Here](#)

# Technology



NITI Aayog Released TCRM Matrix Framework to Transform Technology Evaluation in India



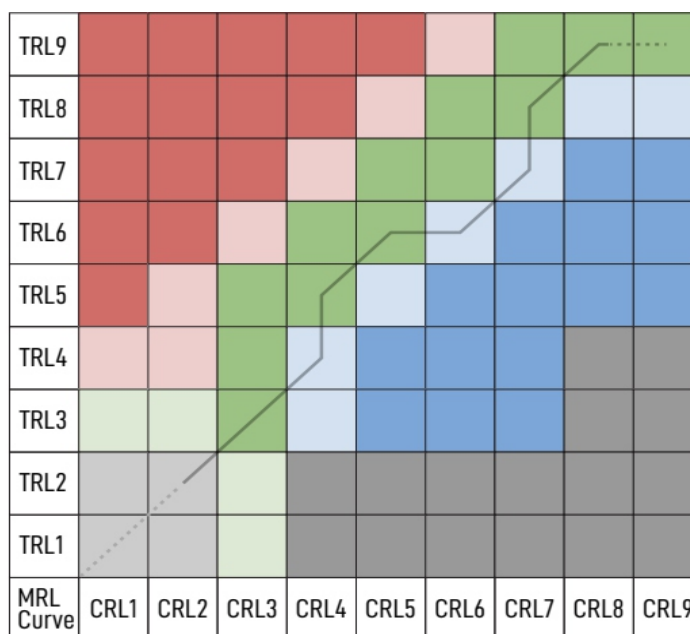
To further accelerate the growth of India's vibrant innovation and entrepreneurship ecosystem, NITI Aayog, the think tank of India has released the Techno-Commercial Readiness and Market Maturity Matrix (TCRM Matrix) Framework. This assessment tool will revolutionize technology evaluation and foster innovation among Indian entrepreneurs.



The TCRM matrix developed by NITI Aayog is based on the evolution of technological assessment frameworks that include Technology Readiness Level (TRL), Commercialization Readiness Level (CRL), and Market Readiness Level (MRL) to drive India's technological quest to fuel economic growth. These basic principles are integrated into the TCRM matrix framework to develop a contextual and actionable in-depth analysis of the technology development life cycle to bring diverse change.

Before this, the various assessment frameworks with a specialized focus on a single abstraction have been established and lack a comprehensive insight into the business challenges. Such assessment frameworks are divided into broad aspects of the individual project and their assessment focus on technology, business, and market readiness.

**TCRM Matrix Framework by NITI Aayog**



LEGEND		Concrete Idea	Commercial Lag (small)	Technological Lag (small)	Diffused Idea
/	MRL Curve	Optimum Path	Commercial Lag (large)	Technological Lag (large)	Not Possible, by definition

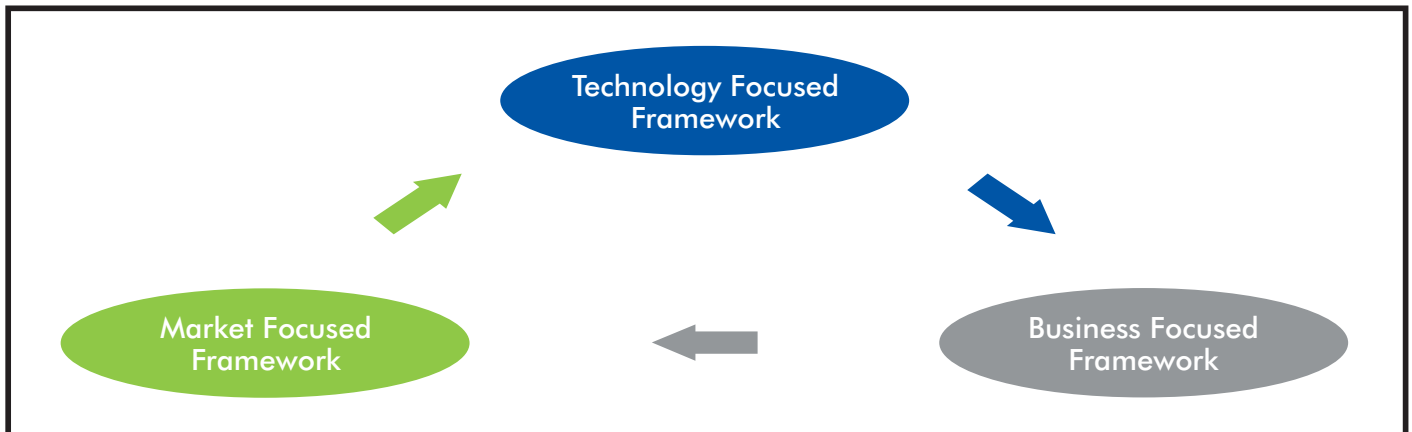
The MRL Curve increases by one 'level' every time it moves to the next cell in the matrix

Source: <https://niti.gov.in/sites/default/files/2023-07/TCRM-Matrix-Framework-FAD3.pdf>



The business model frameworks such as **Business Model Canvas by Alexander Osterwalder** have served as a basis to deliver results by a company based on various building blocks primarily desirability, viability, and feasibility earlier to the TCRM framework matrix.

**Various Categories of Assessment Frameworks**



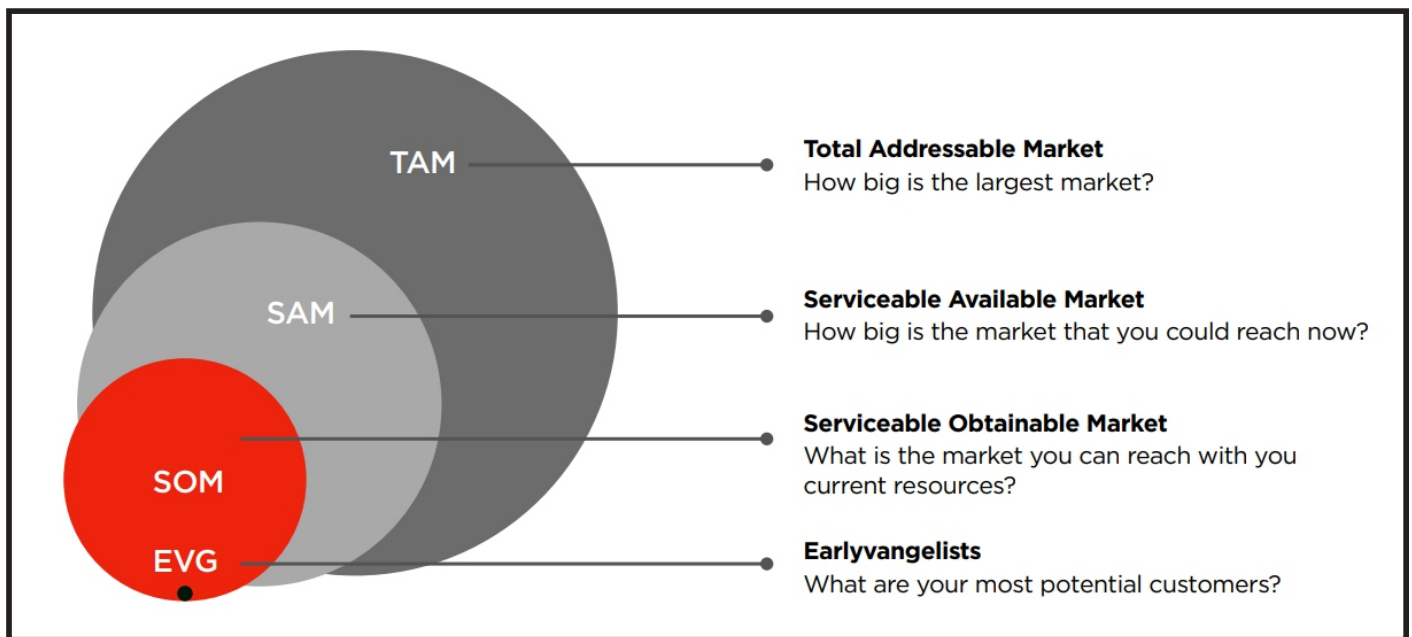
**Business Model Canvas by Alexander Osterwalder**

<p><b>KEY PARTNERS</b> Describe the network of suppliers and partner that make the business model work.</p>	<p><b>ACTIVITIES</b> What are the most important activities that the company must do to make the business model work</p>	<p><b>VALUE PROPOSITION</b> What do you provide to customers?  Describe the bundle and/ or services that provide value to customers.</p>	<p><b>CUSTOMER RELATIONSHIPS</b> How do you foster and maintain relationships with customers?</p>	<p><b>CUSTOMER SEGMENTS</b> Which groups of customers do you currently serve?  Briefly describe each different customer group.</p>
<p><b>KEY RESOURCES</b> What assets do you have under your control for delivering on your value proposition?</p>		<p><b>CHANNELS</b> How do you currently deliver products or services to customers?</p>		
<p><b>COST STRUCTURE</b> What are the major categories of costs that you incur to make your business model work? Describe each major cost category.</p>			<p><b>REVENUE STRUCTURE</b> Hod do you generate revenue from each customer grouping? Describe your different revenue streams.</p>	

Source: <https://niti.gov.in/sites/default/files/2023-07/TCRM-Matrix-Framework-FAD3.pdf>

The market-focused framework, help companies to prepare and check their market readiness based on various extrinsic market indicators.

### Market Sizing Technique Under Market-focused Framework

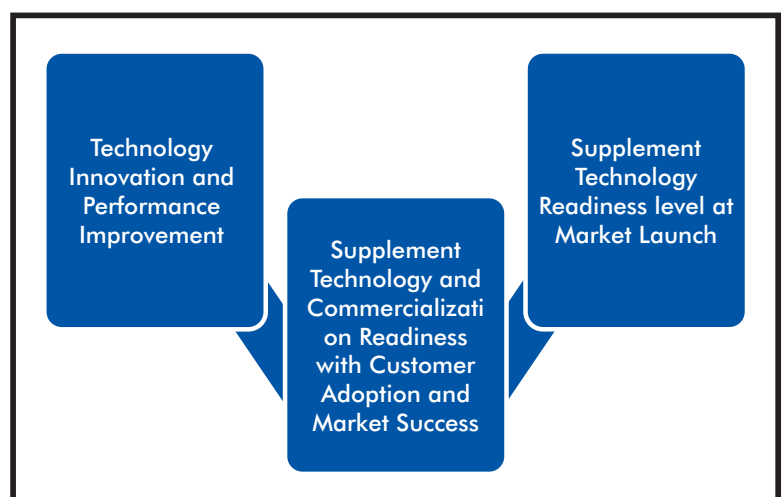


Source: <https://niti.gov.in/sites/default/files/2023-07/TCRM-Matrix-Framework-FAD3.pdf>

India is moving fast in Global Innovation Index, with the help of a fast-growing startup ecosystem. This TCRM matrix will provide a base for robust analysis for innovators, entrepreneurs, researchers, investors, and other stakeholders to take the stride further.



### Benefits of TCRM Matrix



Thus, the innovative matrix provides clear guideline to find the correlation of the TCRM matrix with the vision of an accelerated innovation ecosystem. It will help in realizing the full potential of the innovation landscape and encourage policymakers, academicians, investors, mentors, and strategists to bring meaningful change in Indian innovation and entrepreneurship to enhance technology commercialization in achieving a significant milestone for innovation-led economic growth of India and place it as a leader in the global innovation landscape.

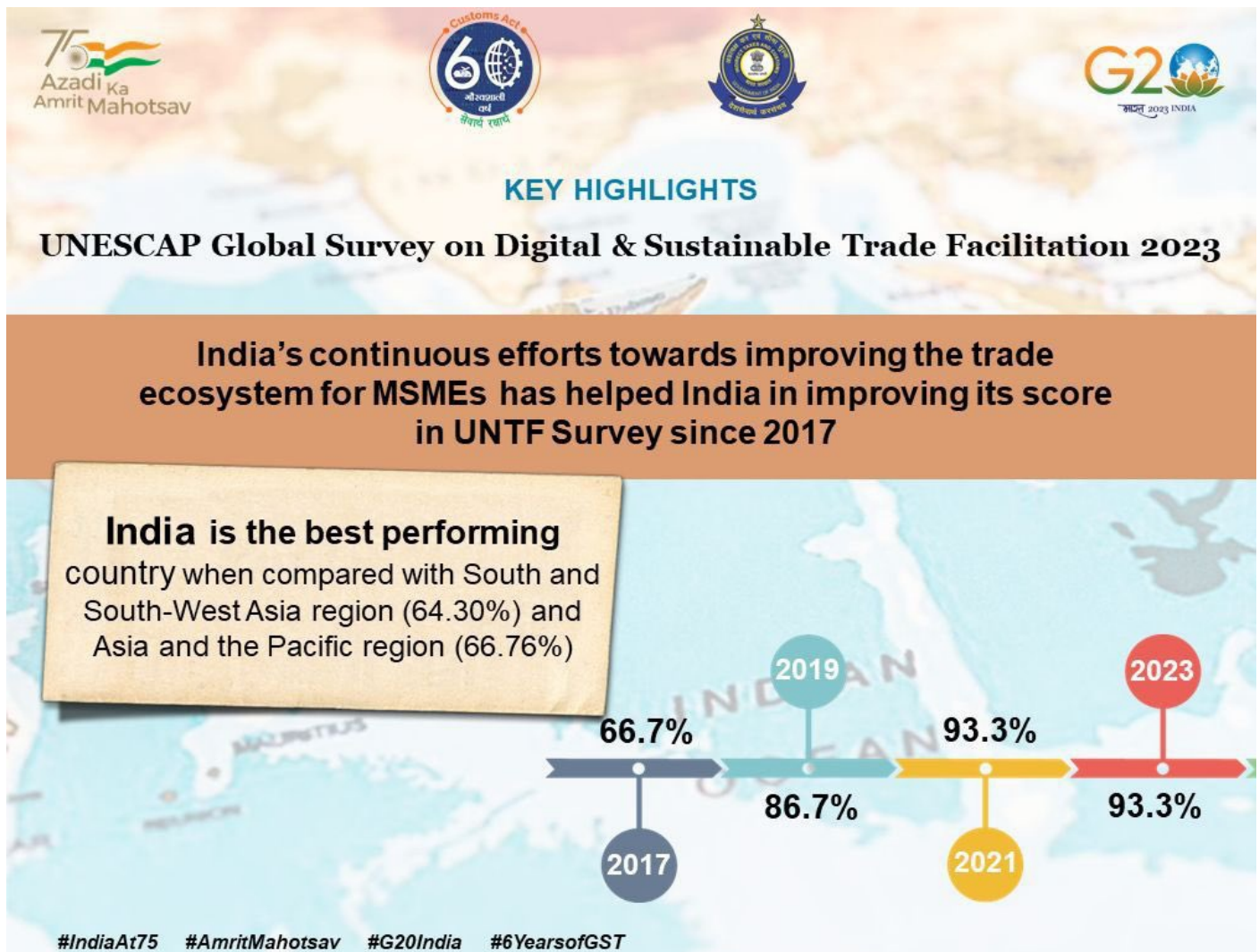
# International Trade



India at the Forefront of Digital and Sustainable Trade Facilitation as Per UN Global Survey, 2023



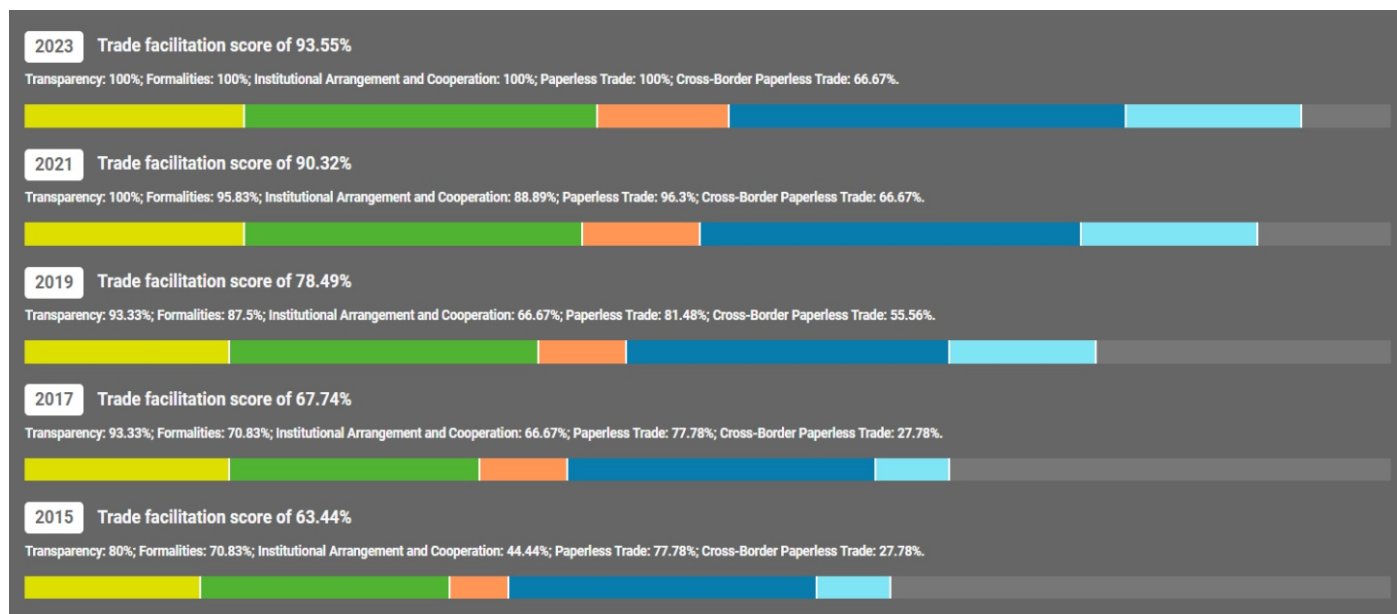
India has shown remarkable progress under United Nations Economic and Social Commission for Asia Pacific's (UNESCAP) recent Global Survey on Digital and Sustainable Trade Facilitation this year. **The remarkable progress over the last few years received an impressive score of 93.55% in the 2023 survey. India scored high in the overall performance scale under 60 trade facilitation measures** compared to several developed economies such as Canada, France, the UK, and Germany out of a total of 140 economies.



Source: <https://pib.gov.in/PressReleasePage.aspx?PRID=1938008>

The survey has highlighted **India's outstanding performance in four key areas with 100% scores in transparency, formalities, Institutional Arrangement and Cooperation, and Paperless Trade** with its trade facilitation measures such as Turant Customs, pre-Arrival Data Processing, Coordinated Border Management, e-Sanchit, etc.

### Year wise India's performance Growth on UN Global Survey and Sustainable Trade Facilitation Survey



Source: <https://www.unfsurvey.org/economy?id=IND&year=2023>

India has also shown tremendous improvement in the 'Women in Trade facilitation' component. **This year, the country has recorded a 77.8% score in comparison to the earlier 66.7% score.** It shows India's effort towards gender equality and inclusivity along with women empowerment measures.

The 2023 survey has given testimony to India's effort to facilitate sustainable trade through a cooperative policy framework and improve its position in the international supply chain.



Source: <https://pib.gov.in/PressReleasePage.aspx?PRID=1938008>



Source: <https://www.unftsurvey.org/economy?id=IND&year=2023>

India's effort to improve trade facilitation in the MSME sector has given due support to India's outstanding performance in this fact-based survey. This will give the required thrust to India's effort to take next-generation trade facilitation measures and make the business environment in the country more inclusive and vibrant for stakeholders.



## How AG Group Can Be a Help

For catalyzing optimized investment resources and non tangible inputs for business growth [Click Here](#)

# Extended Producer Responsibility (EPR)



India Notified Environment Compensation Fund Under Battery Waste Management Rules, 2022



To effectively implement environmental compensation efforts and support mandatory recycling provisions under Battery Waste Management Rules, 2022, has been implemented to set the Extended Producer Responsibility of battery manufacturers. The provision of the Environment Compensation Fund has been implemented to address the operational modalities and management of waste batteries to ensure environmental protection through sustainable means such as recycling and refurbishing.

Battery Energy Storage has occupied a major part of the energy storage market with the prominent use of rechargeable batteries in electronic gadgets such as mobile phones, laptops, and automobile applications. With a wide range of applications to enhance productivity, this energy solution can play a vital role in achieving climate targets as well as Sustainable Development Goals (SDGs). This has led to **the expected growth of the Indian battery market with a CAGR of 10.56% between 2023-2028.**

## Share of the total battery market in 2021



**48.98%**

Lead acid batteries (LABs)



**51.01%**

Lithium-ion battery (LIBs)

## Application Category of Battery Energy Storage



- Consumer electronics applications (CEAs)
- Stationary applications (SAs)
- Transportation applications (TAs)

Source: [https://www.niti.gov.in/sites/default/files/2022-07/ACC-battery-reuse-and-recycling-market-in-India\\_Niti-Aayog\\_UK.pdf](https://www.niti.gov.in/sites/default/files/2022-07/ACC-battery-reuse-and-recycling-market-in-India_Niti-Aayog_UK.pdf)

Recently, the **Ministry of Electronics and Information Technology (MeitY)** has also developed the '**Centre of Excellence on E-waste Management**' along with the approval of the transfer of cost-effective recycling technology related to Li-ion battery waste.

Major Highlights of Battery Waste Management Rules, 2022

Mechanism for Extended Producer Responsibility (EPR)

Waste Management Provisions

Growth Opportunity for Technology Advancement and Investment

Reduction in New Raw Material Dependency

Online Monitoring and Tracking

Compensation Provisions

Provision of Utilizing Environmental Compensation Fund

The environmental compensation fund will provide due support in the collection/refurbishment/ recycling of various types of waste batteries and supplement secondary raw material requirements.

What is Extended Producer Responsibility (EPR)?



Type of Batteries Covered under Battery Waste Management Rules, 2022

01

Electric Vehicle Battery

02

Portable Battery

03

Automotive Battery

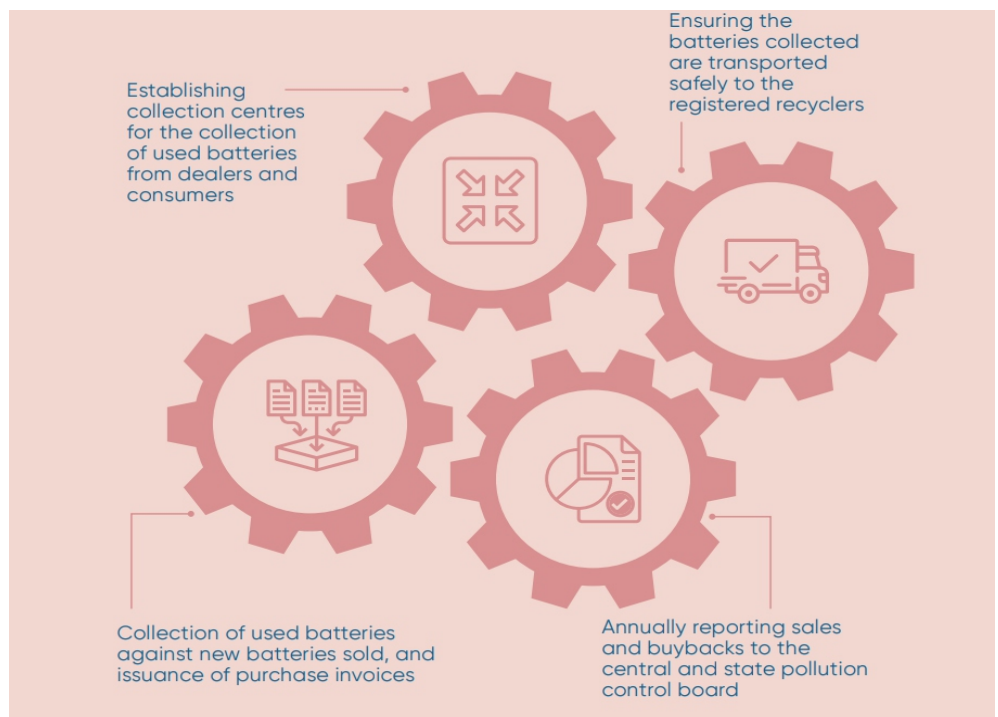
04

Industrial Battery

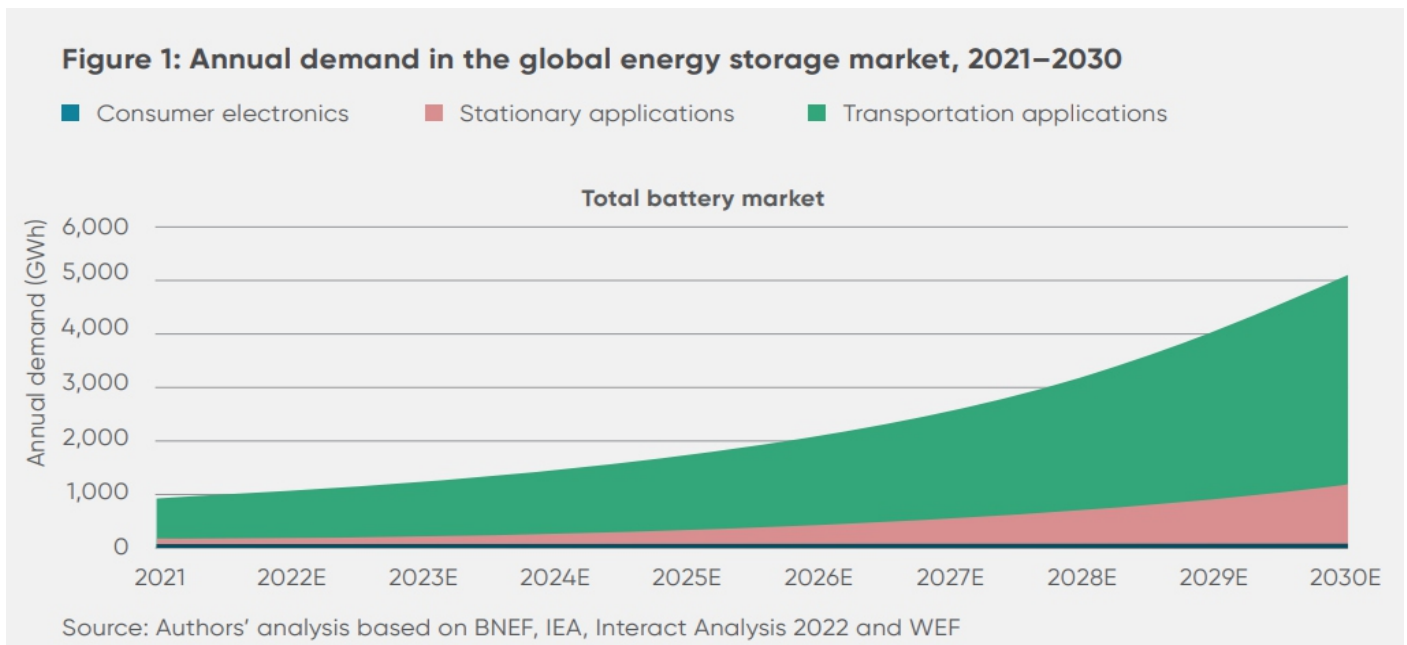
To tackle battery waste, every stakeholder in the value supply chain has its designated responsibility under the rules including the quarterly return filing on information about battery waste collected/ received from various sources, recycled/ refurbished quantities including other details of waste generation after recycling/ refurbishing process.

The **global battery demand has increased by 25% of CAGR between 2010 and 2020**. The trend was the same in the Indian context and due to the policy push towards electric vehicle promotion, the demand for Li-ion batteries has grown significantly. As per the projections, the **battery demand is expected to grow five times by 2030 and achieve the annual demand target of around 5,100 GWh with an 18.5% CAGR in the current decade**.

### Roles and Responsibilities of Various Stakeholders



### Annual Demand Projection of Global Energy Storage Market (2021-2030)



Source: [https://www.niti.gov.in/sites/default/files/2022-07/ACC-battery-reuse-and-recycling-market-in-India\\_Niti-Aayog\\_UK.pdf](https://www.niti.gov.in/sites/default/files/2022-07/ACC-battery-reuse-and-recycling-market-in-India_Niti-Aayog_UK.pdf)

Thus, the various provisions of the rule will bring EPR obligations into effective implementation for stakeholders. It will also bring new business opportunities in the recycling/ refurbishing of waste batteries with innovative technological solutions and attract more investment to fulfill EPR targets and responsibilities for the sustainable future of the sector.



## Resources

1. <https://pib.gov.in/PressReleaseDetail.aspx?PRID=1938733>
2. <https://www.climatepolicyinitiative.org/>
3. <https://ifsca.gov.in/Home>
4. <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21071>
5. [https://sbfnetwork.org/wpcontent/uploads/pdfs/2021\\_Global\\_Progress\\_Report\\_Downloads/2021\\_Country\\_Progress\\_Report\\_India.pdf](https://sbfnetwork.org/wpcontent/uploads/pdfs/2021_Global_Progress_Report_Downloads/2021_Country_Progress_Report_India.pdf)
6. <https://www.greenfinanceplatform.org/financial-measures/browse/country/india-206>
7. <https://www.moneycontrol.com/news/business/mc-explains-heres-what-rbis-new-approach-on-climate-risk-and-sustainable-finance-means-10041451.html>
8. <https://indianexpress.com/article/cities/ahmedabad/committee-on-sustainable-finance-submits-suggestions-to-ifsca-8190346/>
9. <https://economictimes.indiatimes.com/news/economy/policy/rbi-announces-regulatory-guidelines-on-climate-risk-and-sustainable-finance-for-res/articleshow/97718777.cms?from=mdr>
10. <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1941556>
11. <https://pib.gov.in/PressReleasePage.aspx?PRID=1884236>
12. <https://pmfby.gov.in/winds/>
13. [https://pmfby.gov.in/pdf/Revised\\_Operational\\_Guidelines.pdf](https://pmfby.gov.in/pdf/Revised_Operational_Guidelines.pdf)
14. <http://www.nicraicar.in/nicrarevised/images/publications/Risk%20&%20vulnerability%20assessment%20of%20Indian%20agriculture%20to%20climate%20change.pdf>
15. <https://pib.gov.in/PressReleaselframePage.aspx?PRID=1940547>
16. <https://niti.gov.in/sites/default/files/2023-07/TCRM-Matrix-Framework-FAD3.pdf>
17. <https://www.livemint.com/technology/tech-news/niti-aayog-introduces-tcrm-matrix-framework-to-revolutionize-tech-assessment-foster-innovation-11689709633012.html>
18. <https://pib.gov.in/PressReleasePage.aspx?PRID=1938008>
19. <https://www.aninews.in/news/world/asia/india-is-at-forefront-of-global-trade-facilitation-efforts-unescape-survey20230707210655/>
20. <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1943206>
21. <https://cpcb.nic.in/rules-5/>
22. <https://cpcb.nic.in/uploads/hwmd/Battery-WasteManagementRules-2022.pdf>
23. <https://pib.gov.in/PressReleasePage.aspx?PRID=1854433>
24. <https://www.mordorintelligence.com/industry-reports/india-battery-market>

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Electric Vehicle	Infrastructure: Highway/Tunnels	Animal Husbandry	Healthcare	Climate Change
Traffic Management		Horticulture & Forestry		

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