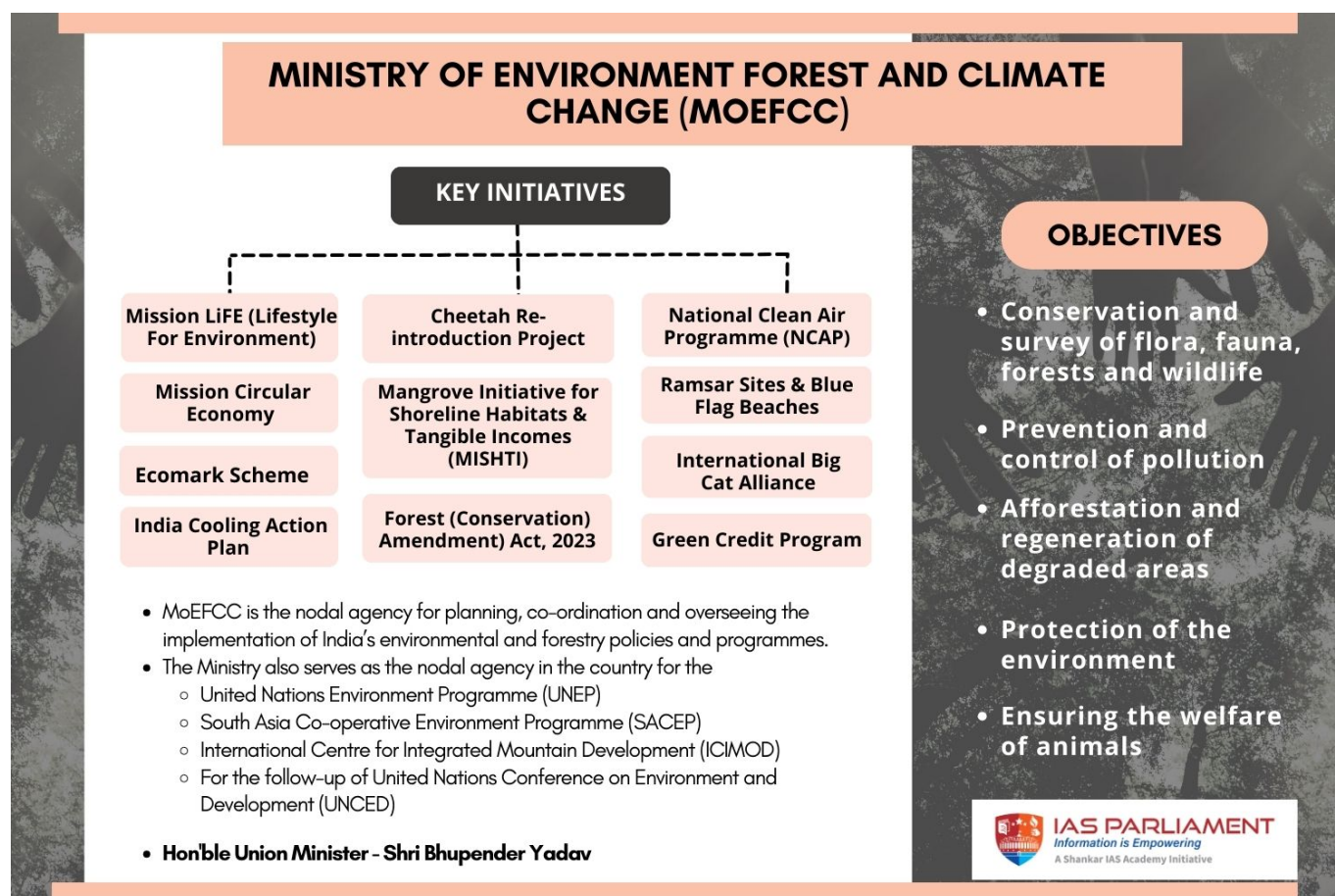


# Year End Review | Ministry of Environment and Climate Change

## About the Ministry

MoEFCC is the nodal agency for planning, co-ordination and overseeing the implementation of India's environmental and forestry policies and programmes.



## KEY INITIATIVES OF MOEFCC

### Updated Nationally Determined Contributions (NDCs)

- The [updated NDCs](#) seeks to enhance India's contributions towards achievement of the strengthening of global response to the threat of climate change, as agreed under the Paris Agreement.
- It would safeguard India's future development needs based on the principles of the United Nations Framework Convention on Climate Change (UNFCCC).

About	First NDC in 2015	Updated NDC
<b>Emission intensity of its GDP</b>	To reduce 33-35% from 2005 levels	To reduce 45% by 2030 from 2005 levels

<b>Non fossil fuel based energy</b>	40%	To achieve 50% by 2030
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- These two targets have been achieved well ahead of the time.
  - The cumulative electric power installed capacity from non-fossil fuel-based energy resources is 43.81% of the total cumulative electric power installed capacity.
  - The emission intensity of its GDP has been reduced by 33% between 2005 and 2019.

### **Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI)**

- It was launched in 2022 after India joined [\*\*Mangrove Alliance for Climate \(MAC\)\*\*](#) at [COP27](#) in Egypt.
- **Aim-** To comprehensively explore the possible area for development of [mangroves](#) covering approximately 540 sq. kms. spreading across 11 States and 2 Union Territories.
- **Tenure-** 5 years
- **Feature-** Sharing of best practices on plantation techniques, conservation measures, management practices and resources mobilization through Public Private Partnership (PPP).

### [\*\*Green Credit Program\*\*](#)

- It is an initiative within the LiFE movement that was launched by India on the side-lines of [COP 28](#).
- It is an ***innovative market based mechanism*** designed to incentivise environmental actions.
- Green Credit Rules 2023 has been notified in 2023 under ***Environment Protection Act 1986***.
- It puts in a mechanism to encourage voluntary environmental positive actions resulting in issuance of green credits.
- It is independent of the carbon credit under [\*\*Carbon Credit Trading Scheme 2023\*\*](#).

### [\*\*Ecomark Scheme\*\*](#)

- It is a ***voluntary certification*** scheme for environment friendly products and services in India.
- The ***Central Pollution Control Board*** administers the scheme in partnership with ***Bureau of Indian Standards (BIS)***, which is the national body for standards and certification.
- Products accredited under this scheme will adhere to specific environmental criteria, ensuring minimal environmental impact.

### **Mission LiFE (Lifestyle For Environment)**

- It is a public movement to mobilize individuals to become '***Pro-Planet People***' introduced by India at COP 26 in Glasgow.
- An India-led global mass movement to nudge individual and community action to

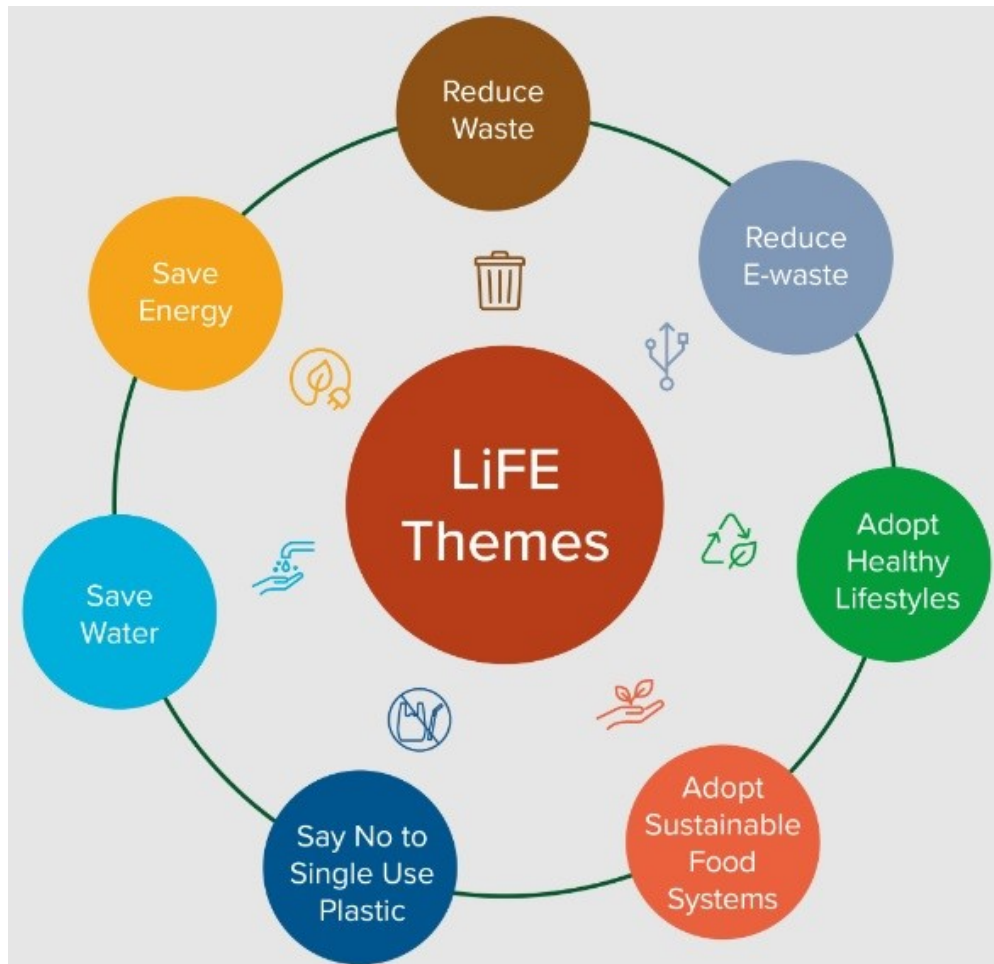
protect and preserve the environment.

## Prime Minister Narendra Modi at COP26 Glasgow Summit

### Panchamrit

- India will reach its non-fossil energy capacity to 500 GW by 2030.
- India will meet 50 percent of its energy requirements from renewable energy by 2030.
- India will reduce the total projected carbon emissions by one billion tonnes from now onwards till 2030.
- By 2030, India will reduce the carbon intensity of its economy by less than 45 percent.
- By the year 2070, India will achieve the target of Net Zero.

- It is an environment conscious lifestyle with the motto "*Mindful and Deliberate Utilisation, instead of Mindless and Destructive Consumption*".
- **Phases-** Each phase requires a fundamental shift in our approach towards sustainability.
  - Change in Demand
  - Change in Supply
  - Change in Policy



### India Cooling Action Plan

- Launched in 2019, it is the 1<sup>st</sup> country in the world to develop a comprehensive Cooling Action Plan with the long term vision.
- It seeks to provide an integrated vision towards cooling across sectors in reducing cooling demand, refrigerant transition, enhancing energy efficiency and better technology options with a 20-year time horizon.
- **Goal-** To provide sustainable cooling and thermal comfort for all while securing socio-economic and environmental benefit for all in the society.

### 50 years of Project Tiger

- **Launch year-** 1973
- **Objective** - Conservation of tiger and ensures the preservation of their natural habitat.
- It is one of the most successful species conservation programmes in the world, it has 53 tiger reserves spread over 75,000 km.
- **National Tiger Conservation Authority-** It was created under Wildlife Protection Act, 1972 which strengthens the tiger conservation in the country.

### International Big Cat Alliance

- It is a mega international event launched to commemorate **50 years of Project Tiger**.
- It is launched for conservation of 7 big cats - Tiger, Lion, Leopard, Snow Leopard, Cheetah, Jaguar and Puma.

- It will reach out to “range” countries that are home to the 7 big cats to strengthen efforts to conserve these denizens in the wild.
- It will facilitate the mobilization of financial and technical resources to support the entire ecosystem linked to big cats.

### **Indira Parayavaran Bhawan**

- It houses the building of Ministry of Environment, Forest and Climate Change.
- It is India’s **first on site net zero building** built by adoption of solar passive design and energy efficient building material.
- It has been designed as the highest green rated building, i.e., **GRIHA 5-Star and LEED India Platinum**

### **India State of Forest Report (ISFR) 2021**

- **Released by-** Forest Survey of India (FSI)
- **Publication-** Biennial (Every 2 years)
- **Significance-** The report for the 1<sup>st</sup> time provides the forest cover in tiger reserve areas, tiger corridors and Gir forests that houses the Asiatic lion.
- Increase in forest cover has been observed in open forest followed by very dense forest.
- The North East region reported the biggest losses in forest cover.

<b>Aspects</b>	<b>Top 3 States</b>
Area-wise largest forest cover	Madhya Pradesh, Arunachal Pradesh and Chhattisgarh
Forest cover as % of total geographical area	Mizoram, Arunachal Pradesh and Meghalaya
Increase in forest cover	Andhra Pradesh, Telangana and Odisha

### **PARIVESH 2.0**

- It is a **Pro Active and Responsive** facilitation by **Interactive and Virtuous Environmental Single window Hub**.
- It is a single window integrated system for Environment, Forest, Wild Life and Coastal Regulation Zone Clearance Process.
- The updated version leverages on emerging technology such as GIS, Advance Data Analytics, etc. for providing faster decisions on green clearances.
- The PARIVESH Portal and Gati Shakti Portal are seamlessly integrated through Map service.

### **Ramsar Sites**

- **Aim** - To preserve the ecological character of their wetlands of international importance.
- **Pillars-**
  - Wise use of wetlands
  - International Cooperation
  - **Wetlands of International Importance** - Designation and Management

- The convention does ***not directly bind*** on the nation, but countries formulate policies based on it.
- **Categories**- The Ramsar sites are grouped into 3 categories.
  - Marine and Coastal wetlands
  - Inland wetlands
  - Human-made wetlands
- India ratified the Ramsar Convention in 1982.
- Recently, India added 10 wetlands to the List of Wetlands of International Importance (Ramsar Sites) within the framework of Ramsar Convention.
- This takes the total number of Ramsar Sites in India to **75**, the 2<sup>nd</sup> largest network of Ramsar sites in Asia.

<b>List of wetlands recently added to the Ramsar Sites</b>	
Koonthankulam Bird Sanctuary	Tamil Nadu
Gulf of Mannar Biosphere Reserve	
Vembannur Wetland Complex	
Vellode Bird Sanctuary	
Vedanthangal Bird Sanctuary	
Udhayamarthandapuram Bird Sanctuary	
Nanda Lake	Goa
Ranganathittu Bird Sanctuary	Karnataka
Sirpur Wetland	Madhya Pradesh
Satkosia Gorge	Odisha

- **Keoladeo National Park** (in Rajasthan) and **Chilika lake** (in Odisha) were the 1<sup>st</sup> two sites to be placed on the Ramsar list by India.

*Amrit Dharohar Yojana has been launched for conservation of Ramsar sites through community participation.*

<b>Government Initiatives for Wetland Conservation</b>
<ul style="list-style-type: none"> <li>• <b>National Plan for Conservation of Aquatic Ecosystems</b>- To assist States in preparing and implementing the integrated management plans for Ramsar sites and other priority wetlands.</li> <li>• <b>Wetlands (Conservation and Management) Rules, 2017</b> - Accords legal protection to Ramsar sites.</li> <li>• <b>Sahbhagita Guidelines</b> - Outlines an “all of society” approach and governance framework for wetlands conservation.</li> </ul>

### **Forest (Conservation) Amendment) Act, 2023**

- It amends the [Forest Conservation Act, 1980](#) which provides for the conservation of forest land.
- It is amended to achieve the country’s national as well as international commitments of NDCs, carbon neutrality, eliminate the ambiguities and bring clarity about the applicability of the Act.

- It will promote the plantation in non-forest land, enhance the productivity of the forests.

### Blue flag beaches

- The [Blue Flag certificate](#) is given by the ***Foundation for Environment Education in Denmark (FEE)*** for beaches, marinas, and sustainable boating tourism operators.
- **Mission-** To promote sustainability in the tourism sector, through environmental education, environmental protection and other sustainable development practices.
- To receive the certificate, the beaches must comply with all the *33 criteria* as mandated by the FEE.



### National Clean Air Program

- **Launch year - 2019**
- **Aim-** To improve air quality in 131 cities (non-attainment cities and Million Plus Cities) in 24 States/UTs by engaging all stakeholders.
- **Non-attainment cities-** They are the cities which did not meet the national ambient air quality standards (***NAAQS***) for 2011-15 under the National Air Quality Monitoring Program (***NAMP***).
- **Swachh Vayu Sarvekshan-** More than 100 cities are monitored for air quality with an intent and plan to improve the air quality through holistic approach.
- The programme envisages to achieve reductions up to 40% or achievement of NAAQS

for PM 10 by 2025-26.

### National Ambient Air Quality Standards (NAAQS)

Air (Prevention and Control of Pollution) Act empowers Central Pollution Control Board (CPCB) to set standards for the quality of air.

Current NAAQS were notified by CPCB in the year 2009.

Pollutants covered under NAAQS are

1. Sulphur Dioxide (SO<sub>2</sub>)
2. Nitrogen Dioxide (NO<sub>2</sub>)
3. PM 10, PM 2.5
4. Ozone (O<sub>3</sub>)
5. Lead (Pb)
6. Carbon Monoxide (CO)
7. Ammonia (NH<sub>3</sub>)
8. Benzene (C<sub>6</sub>H<sub>6</sub>)
9. Benzo(a)Pyrene (BaP)
10. Arsenic(As)
11. Nickel (Ni)

### National Air Quality Index (AQI)

NAQI, launched by CPCB, is a number used to communicate to the public how polluted the air currently is or how polluted it is forecasted to become.

The air quality is classified into 6 colour coded grades.

These pollutants are

1. Ground-level Ozone or O<sub>3</sub>
2. PM 2.5 and PM 10
3. Carbon Monoxide or CO
4. Sulphur Dioxide or SO<sub>2</sub> and
5. Nitrogen Dioxide or NO<sub>2</sub>
6. Ammonia or NH<sub>3</sub>

### Mission [Circular Economy](#)

- **Purpose-** To create new business models and employment opportunities, thereby integrating the informal sector.
- It will result in moving away from mindless consumption to mindful utilisation and will help achieve the vision of Mission LiFE.
- **Efforts** - Mission Circular Economy is emphasised through
  - [Plastic Waste Management Rules](#)
  - [e-Waste Management Rules](#)
  - Construction and Demolition Waste Management Rules
  - Metals Recycling Policy, etc.
- To expedite the transition of the country from a linear to a circular economy, 11 committees have been formed for 11 focus areas such as scrap metal, Li-ion batteries,

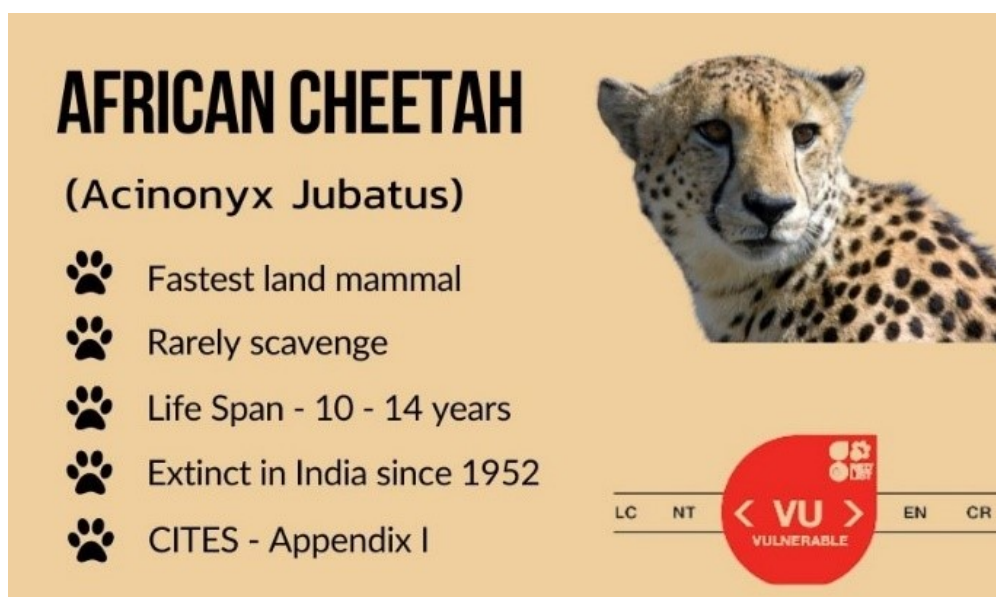


electronic wastes, etc.

- The Indian Railways has set a target of becoming ***net zero carbon emitter by 2030.***
- Regulations on market based *Extended Producer Responsibility (EPR)* principle have been notified for 4 categories of wastes - plastic packaging waste, battery waste, e-waste and waste tyre.

## Cheetah Reintroduction in India

- **Project Cheetah-** It is India's relocation programme, the first intercontinental reintroduction of a wild, large carnivore species.
- The project is to bring in 5-10 animals every year, over the next decade, until a self-sustaining population of cheetahs is established.
- In India, the cheetah was found from Jaipur and Lucknow in the north to Mysore in the south, and from Kathiawar in the west to Deogarh in the east.
- The cheetah was officially declared ***extinct*** by the Indian government in ***1952.***
- A plan to reintroduce cheetahs in India was endorsed in 2009 but it was shot down by the Supreme Court in 2013.
- The idea was revived in 2017, and the SC cleared the move in 2020 on an experimental basis.
- **Kuno-Palpur National Park**, Madhya Pradesh was found to be ready to receive the cheetah immediately, as it had already been prepared for the translocation of Asiatic Lion.
- **Need for reintroduction-** The main objective is
  - To restore India's historic evolutionary balance
  - To develop a cheetah metapopulation that will help in the global conservation of the animal
  - As it is a flagship species, the conservation of the cheetah will revive grassland-forests habitat



## G20 INDIA PRESIDENCY 2023

- **G20 framework on Land Degradation-** To accelerate actions on achieving the **G20** goal of reducing degraded land by 50% by 2040, through enhancing the G20 Global

Initiative for Reducing Land Degradation (GIRLD).

- **G20 Resource Efficiency and Circular Economy Industry Coalition**- To foster global partnerships among key industries for enhancing technological cooperation, exchange of ideas and mobilizing de-risked finance.

### Initiatives to promote circular bio economy

- **Sustainable Alternative Towards Affordable Transportation (SATAT)**- It was launched in 2018 to set up Compressed Bio-Gas (CBG) production plants and make CBG available in the market for use as a green fuel.
- **GOBARDhan**- It aims to transform “Waste to Wealth” using a “Whole of Government” approach, the main focus is to keep villages clean, increase the income of rural households, and generate energy and organic manure from cattle waste.
- **Ethanol Blended Petrol program**- It is a biofuel initiative with the target of 20% blending of petrol by 2025.

- **GIR-GIP**- Gandhinagar Implementation Roadmap and Gandhinagar Information Platform (GIR-GIP) emanated from G20 deliberations to tackle restoration of forest fire and mining degraded lands.
- **Green Development Pact**- It envisages a green development pact that endorses high-level principles on lifestyle
  - **Chennai principles**- For a sustainable resilient blue economy
  - **Deccan principles**- For food security and nutrition
- **Chennai High-Level Principles for a Sustainable and Resilient Blue/Ocean-based Economy**- It stresses on a sustainable ocean-based economy, strengthening international cooperation to tackle shared maritime challenges, and enhancing ocean finance.

### References

1. [PIB- Year-end review of MoEFCC](#)
2. [MoEFCC- Annual report 2022-23](#)
3. [PIB- Updated NDC](#)