

India's climate action framework is guided by its National Action Plan on Climate Change (NAPCC), which was launched in 2008 to address climate-related challenges while promoting sustainable development. Recognizing the importance of region-specific strategies, the Government of India mandated the formulation of State Action Plans on Climate Change (SAPCCs) to integrate climate considerations into sub-national planning and policy frameworks. These SAPCCs align with the objectives of the NAPCC while addressing the unique vulnerabilities and priorities of each state.

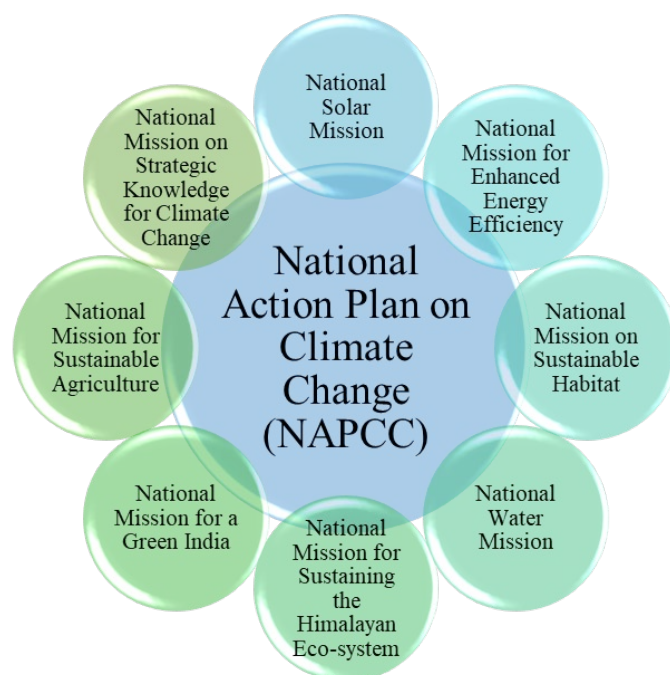
### National Action Plan on Climate Change (NAPCC)

The National Action Plan on Climate Change was launched by our hon'ble Prime Minister formally on June 30th, 2008, comprehensive framework to address climate change through **mitigation and adaptation strategies** while promoting sustainable development. This comprehensive plan outlines a strategic approach for the nation to effectively respond to climate change and improve India's ecological sustainability as it pursues development. It outlines India's strategy to mitigate greenhouse gas emissions and adapt to the impacts of climate change while ensuring sustainable development. The NAPCC is guided by the principles of ecological sustainability, inclusive growth, and climate justice, emphasizing the co-benefits of climate action and economic development. The NAPCC emphasizes the importance of maintaining a robust economic growth rate to elevate the living standards of most of India's population and reduce their susceptibility to the adverse effects of climate change. NAPCC is governed by the Ministry of Environment, Forest and Climate Change (MoEFCC). The NAPCC aligns with India's commitments under the **Paris Agreement and its Nationally Determined Contributions (NDCs)**, aiming to:

- Reduce **emission intensity** of GDP
- Enhance **renewable energy** capacity.
- Strengthen **climate adaptation** in agriculture, water, and urban sectors.

India continues to evolve its climate policies by integrating emerging concerns like **circular economy, resource efficiency, and just transitions** into its climate strategies.

At its core, the NAPCC comprises eight “National Missions” that are pivotal to its implementation. These missions are dedicated to advancing awareness and knowledge about climate change, implementing strategies for adaptation and mitigation, enhancing energy efficiency, and conserving natural resources.



### 1. National Solar Mission:

The **National Solar Mission (NSM)** or Jawaharlal Nehru National Solar Mission (JNNSM) was launched in **January 2010** to establish India as a global leader in solar energy by accelerating the adoption of solar technology. Initially, NSM aimed to achieve **20 GW** of solar power by **2022**, but this target was **increased to 100 GW in 2015**. Through various programs and schemes, India's **grid-connected solar capacity** grew from **25 MW in 2010-11** to **36.32 GW by October 2020**, with an additional **58.31 GW** under installation or tendering. The **National Solar Mission (NSM)** aims to position India as a **global leader in solar energy** by fostering policy conditions for its rapid adoption nationwide. Implemented in **three phases—Phase 1 (up to 2012-13), Phase 2 (2013-17), and Phase 3 (2017-22)**—the Mission focuses on creating an **enabling environment** for the widespread deployment of solar technology at both **centralized and decentralized** levels.

### 2. National Mission for Enhanced Energy Efficiency:

The **National Mission on Enhanced Energy Efficiency (NMEEE)** aims to **strengthen the energy efficiency market** by establishing a supportive **regulatory and policy framework** while promoting **innovative and sustainable business models**. Launched in **2011**, the Mission comprises **four key initiatives** to enhance energy efficiency in **energy-intensive industries**:

- **Perform, Achieve, and Trade (PAT)**
- **Market Transformation for Energy Efficiency (MTEE)**
- **Energy Efficiency Financing Platform (EEFP)**
- **Framework for Energy Efficient Economic Development (FEEED)**

### 3. National Mission on Sustainable Habitat:

The **National Mission on Sustainable Habitat (NMSH)** was approved by the **Prime Minister's Council on Climate Change** in **June 2010** to promote sustainable urban development while addressing climate change challenges. Its key objectives include:

- **Developing sustainable habitat standards** to support resilient and climate-conscious urban growth.
- **Formulating city development plans** that integrate adaptation and mitigation strategies.
- **Designing comprehensive mobility plans** to facilitate long-term, energy-efficient, and cost-effective urban transport.
- **Building capacity** to support the implementation of mission-related initiatives.

### 4. National Water Mission:

The **National Water Mission (NWM)** aims to promote **integrated water resource management** by conserving water, minimizing wastage, and ensuring **equitable distribution** within and across states. Aligned with the **National Water Policy**, the Mission seeks to **enhance water use efficiency by 20%** through **regulatory mechanisms**, including differential entitlements and pricing. It also emphasizes **wastewater recycling** to meet urban water demands and encourages **new technologies**, such as **low-temperature desalination**, to address water scarcity in coastal cities. The Mission has identified **five key goals**:

- Developing a **comprehensive water database** and assessing the impact of **climate change** on water resources.
- Encouraging **citizen and state-led initiatives** for **water conservation, augmentation, and preservation**.
- Addressing **vulnerable and over-exploited water regions**.
- Enhancing **water use efficiency** by 20%.
- Promoting **basin-level integrated water resource management**.

#### 5. **National Mission for Sustaining the Himalayan Ecosystem:**

The **National Mission for Sustaining the Himalayan Ecosystem (NMSHE)** aims to **prevent glacier melting** and **protect biodiversity** in the Himalayan region. It focuses on rapidly developing **four key national capacities**:

- Human and knowledge capacities
- Institutional capacities
- Evidence-based policy and governance
- Continuous self-learning to balance natural forces and human activities

**NMSHE addresses critical issues such as:**

- Himalayan glaciers and their hydrological impacts
- Biodiversity conservation and protection
- Wildlife conservation
- Traditional knowledge systems and livelihoods
- Sustainable planning for the Himalayan ecosystem

#### 6. **National Mission for a Green India:**

The **National Mission for a Green India (GIM)**, approved as a **Centrally Sponsored Scheme**, integrates **greening** with **climate change adaptation and mitigation**. It aims to enhance **ecosystem services** like **carbon sequestration, hydrological balance, and biodiversity conservation**, while also supporting forest-dependent communities.

**Key objectives of the Mission are:**

- Increase forest/tree cover on 5 million hectares (m ha) and improve forest quality on another 5 m ha.
- Enhance ecosystem services, including biodiversity, hydrology, and carbon storage, across 10 m ha.
- Boost forest-based livelihoods for 3 million households.
- Increase CO<sub>2</sub> sequestration by 50–60 million tonnes annually by 2020.

#### 7. **National Mission for Sustainable Agriculture:**

The **National Mission for Sustainable Agriculture (NMSA)**, operational since **2014-15**, aims to make agriculture **more productive, sustainable, remunerative, and climate-resilient**. It promotes **integrated farming systems, soil and moisture conservation, soil health management, efficient water use, and rain-fed technologies**.

Key Components of the NMSA are as follows:



- **Farm Water Management (FWM):** Initially part of NMSA (2014-15), it focused on enhancing water use efficiency through drip irrigation, sprinklers, and secondary storage. It was later merged into the 'Per Drop More Crop' (PDMC) component of PMKSY in 2015-16.
- **Soil Health Management (SHM):** Encourages Integrated Nutrient Management (INM) by optimizing the use of chemical fertilizers, organic manure, and bio-fertilizers, while strengthening soil and fertilizer testing facilities.
- **Soil Health Card Scheme (2015):** Provides farmers with soil nutrient status reports and recommendations on appropriate fertilizer use to enhance soil health and productivity.



## 8. National Mission on Strategic Knowledge for Climate Change:

The **National Mission on Strategic Knowledge for Climate Change (NMSKCC)** aims to develop a **robust knowledge system** to support **ecologically sustainable development** and national climate action.

Key Deliverables of the mission includes:

- Establish **10+ thematic knowledge networks** in areas like **climate science, regional modelling, adaptation strategies, and emission inventories**.
- Generate **10-12 technical reports** on **climate change adaptation, mitigation, and impacts** on sectors like **agriculture, water, health, and energy**.
- Develop **regional climate models** incorporating **tropical physics and Indian monsoon-Himalayas interactions**.
- Establish **50 chair professorships** and train **200 climate change professionals**.
- Facilitate **at least three Public-Private Partnerships (PPPs)** in **adaptation and mitigation technologies**.
- Create **technology watch groups** on **renewable energy, carbon sequestration, precision agriculture, and waste management**.
- Develop **thematic reports** on **technology-policy interfaces, energy use, and emissions scenarios**.
- Strengthen **S&T collaborations** with **USA, China, Japan, the EU, and multilateral groups** on prioritized climate-related research areas.

## Principles of NAPCC:

- Protecting the poor through an inclusive and sustainable development strategy, sensitive to climate change
- Achieving national growth and poverty alleviation objectives while ensuring ecological sustainability
- Efficient and cost-effective strategies for end-use demand-side management
- Extensive and accelerated deployment of appropriate technologies for adaptation and mitigation
- New and innovative market, regulatory, and voluntary mechanisms for sustainable development
- Effective implementation through unique linkages – with civil society, LGUs, and public-private partnerships

## Significance of the NAPCC:

The NAPCC is a landmark initiative that reflects India's commitment to addressing climate change while pursuing its development goals. It aligns with the principles of equity and common but differentiated responsibilities (CBDR) enshrined in the United Nations Framework Convention on Climate Change (UNFCCC). By focusing on both mitigation and adaptation, the NAPCC recognizes the dual challenges faced by developing countries like India.

The plan also emphasizes the importance of inclusive and participatory approaches. It encourages the involvement of state governments, local communities, and the private sector in implementing climate actions. This decentralized approach ensures that climate strategies are tailored to local contexts and needs.

## **Conclusion**

The Indian government's National Action Plan on Climate Change (NAPCC) is a crucial step in the fight against global warming and climate change. It is notable that the emphasis is placed on sustainable development and other climatic development aspects. However, the 8 missions outlined in the NAPCC should be carried out successfully, and respectable governing organisations should keep track of their progress. All facets of climate change, including energy, water, the Himalayan Ecosystem, green India, and agriculture, must be equal to the focus of attention. In its 30th report on the effectiveness of the National Action Plan on Climate Change (NAPCC), the Committee on Estimates (2018-19) stated that urgent action is needed to establish a mechanism involving all stakeholders who are directly or indirectly impacted by the changes in the Himalayan system so that an integrated approach is adopted in the entire restoration process. Through collective action and innovation, India can achieve its climate goals while ensuring prosperity for its people and the planet.

**For more details about National Action Plan on Climate Change (NAPCC), please visit:**  
**<https://moef.gov.in/national-action-plan-on-climate-change>**