



UPSC & STATE PCS CURRENT AFFAIRS · UJIYARI.COM

DAILY CURRENT AFFAIRS

NITI Aayog's Roadmap for Green Transition of MSMEs

22 January 2026

SUBJECTS COVERED**ECONOMY****ENVIRONMENT**

CURATED & WRITTEN BY**Bharat Choudhary**

UPSC Educator & Content Creator •

[linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

Free UPSC & State PCS Resources

ujiyari.com

NITI Aayog's Roadmap for Green Transition of MSMEs

22 January 2026

WHY IN NEWS

NITI Aayog released the *Roadmap for Green Transition of MSMEs* — a 10-year strategic action plan for decarbonising India's 69 million micro, small and medium enterprises. The roadmap comes as the EU's Carbon Border Adjustment Mechanism (CBAM) takes effect in 2026, threatening carbon-linked trade costs on Indian MSME exports.

WHAT IS THE GREEN TRANSITION ROADMAP?

The NITI Aayog document is a comprehensive 10-year action plan to reduce the carbon footprint of India's MSME sector, which is both a massive employer (~250 million workers) and a significant industrial emitter (~135 million tonnes CO_{2e} in 2022, consuming 25% of India's industrial energy).

The roadmap identifies **three core decarbonisation levers**:

Energy Efficiency — reducing energy intensity per unit of output through technology upgrades, energy audits, and standard processes

Green Electricity — transitioning MSMEs from grid power (coal-heavy) to renewable sources, modelled on the PM-Suryaghar Muft Bijli Yojana

Alternative Fuels — shifting process heat and transport from fossil fuels to hydrogen, biogas, and other clean alternatives

WHY MSMEs? THE NUMBERS THAT MATTER

ECONOMIC WEIGHT

MSMEs: **~69 million enterprises** across India

Share of GDP: **~30%**

Share of exports: **45.7%**

Employment: **~250 million people** (making them the second-largest employer after agriculture)

Sectors: textiles, leather, chemicals, auto-components, food processing, engineering goods

ENVIRONMENTAL FOOTPRINT

Total CO_{2e} emissions: **135 million tonnes** (2022) — equivalent to the annual emissions of a mid-sized European country

Industrial energy share: **25%** of India's total industrial energy consumption

Most MSMEs use outdated, energy-inefficient machinery; limited capital to upgrade

THE CBAM CHALLENGE

The **EU Carbon Border Adjustment Mechanism (CBAM)** enters its transitional phase from 2023–25 and full implementation from 2026. Under CBAM:

EU importers must buy carbon certificates for the embedded carbon in imports from non-EU countries that lack carbon pricing

Indian MSME exports most at risk: **textiles, steel, aluminium, fertilisers, engineered goods, cement**

MSMEs that cannot document or reduce their carbon footprint face higher export costs — potentially wiping out price competitiveness

NEW INSTITUTIONAL ARCHITECTURE PROPOSED

The roadmap recommends two new institutions:

NATIONAL PROJECT MANAGEMENT AGENCY (NPMA)

A central coordination body to manage and monitor India's green MSME transition at scale — similar to how the National Mission for Clean Ganga has a dedicated project authority. The NPMA would coordinate between MSMEs, lenders (SIDBI, banks), state governments, and international climate finance.

CLIMATE SISTER IMPACT FUND (CSIF)

A blended finance facility designed to crowd in private capital alongside public funding for green MSME investments. "Sister" reflects a twinning concept where a green MSME investment is paired with a concessional finance facility.

PM-SURYAGHAR-STYLE SCHEME

The roadmap proposes a dedicated scheme modelled on the PM-Suryaghar Muft Bijli Yojana (rooftop solar for households), offering **capital subsidies + Viability Gap Funding (VGF) of ₹6,000 crore** to MSMEs for rooftop solar and green energy transition. This would make the unit economics of green energy adoption viable for small workshops that lack upfront capital.

THE SIDBI-GREEN TRANSITION CONNECTION

On the same day, the Union Cabinet approved **₹5,000 crore equity infusion into SIDBI**, India's primary development finance institution for MSMEs. The timing is not coincidental:

SIDBI will need strengthened capital to offer concessional green finance to MSMEs

Its Udyami Mitra platform already connects MSMEs with formal credit

Expanded balance sheet allows SIDBI to act as the primary on-lending partner for international climate finance (Green Climate Fund, ADB Green Bonds)

INDIA'S CLIMATE COMMITMENTS AND MSME LINKAGE

India's **Panchamrit pledges at COP26 (Glasgow, 2021)** include achieving net-zero by 2070 and reducing emissions intensity of GDP by 45% from 2005 levels by 2030. MSMEs — contributing 30% of GDP and 25% of industrial energy — are central to meeting the emissions intensity target.

The roadmap also complements India's **Updated NDC (2022)**, which targets 50% electricity from non-fossil fuels by 2030 and an absolute emissions cap trajectory.

CRITICAL ANALYSIS

Strengths of the Roadmap:

Comprehensive — covers financing, technology, institutions, and monitoring

Draws on proven models (PM-Suryaghar) rather than creating entirely new mechanisms

Responds directly to the CBAM threat — a strategic, not just environmental, necessity

Challenges:

Implementation capacity: India's 69 million MSMEs include 63+ million micro-enterprises — most lack formal accounts, energy meters, or digital infrastructure needed for Monitoring, Reporting, and Verification (MRV)

Finance gap: Even with ₹6,000 crore VGF and SIDBI capital, the total green transition investment required runs into tens of lakh crore over a decade

CBAM awareness: Many MSME exporters are unaware of CBAM requirements; compliance documentation alone is a barrier

Technology transfer: Green manufacturing technology is often controlled by developed nations; making it accessible at MSME-scale pricing requires active policy

UPSC RELEVANCE

CBAM full name and mechanism; NPMA, CSIF definitions; India MSME share of GDP (30%), exports (45.7%), employment (~250 million); SIDBI headquarters, founding year; Panchamrit pledges; VGF definition

MAINS GS-3:

“Discuss how the EU’s Carbon Border Adjustment Mechanism challenges India’s MSME sector and evaluate NITI Aayog’s green transition roadmap as a policy response.” | “Examine the role of development finance institutions (DFIs) in enabling green transition for small enterprises in India.”

ESSAY:

“India’s growth story cannot be written without greening its MSMEs” | “The climate transition is a justice question before it is a technology question”

★ FACTS CORNER — KNOWLEDGEPEDIA

INDIA MSME SECTOR — CORE DATA:

- Total MSMEs: ~69 million enterprises
- GDP contribution: ~30%
- Export share: 45.7%
- Employment: ~250 million people (2nd largest employer after agriculture)
- CO₂ emissions: 135 million tonnes CO₂e (2022)
- Industrial energy share: 25% of India's industrial energy

EU CBAM — KEY FACTS:

- Full form: Carbon Border Adjustment Mechanism
- Transitional phase: October 2023 – December 2025 (reporting only)
- Full enforcement: From January 2026
- Sectors covered: Cement, iron & steel, aluminium, fertilisers, electricity, hydrogen
- How it works: EU importers pay carbon price = EU ETS price minus carbon price paid in exporting country
- India's risk sectors: Textiles, steel, engineered goods, chemicals

NITI AAYOG ROADMAP — KEY PROPOSALS:

- Timeline: 10-year strategic action plan
- New institutions: NPMA (National Project Management Agency), CSIF (Climate Sister Impact Fund)
- VGF proposed: ₹6,000 crore (PM-Suryaghar-style scheme)
- Three levers: Energy Efficiency, Green Electricity, Alternative Fuels

SIDBI — CORE DATA:

- Established: April 1990 | Act: SIDBI Act, 1989 | HQ: Lucknow
- Supervision: RBI (All India Financial Institution)
- FY25 MSME portfolio: 76.26 lakh enterprises
- FY28 target: 102 lakh enterprises (after ₹5,000 crore capital infusion)
- Platform: Udyami Mitra (MSME credit linkage)

INDIA'S CLIMATE TARGETS:

- Net-Zero year: 2070 (announced COP26, Glasgow, November 2021)
- Panchamrit: 500 GW non-fossil capacity, 50% renewable electricity, -45% emissions intensity (vs 2005), net-zero 2070, offset 1 billion tonnes by 2030
- Updated NDC (2022): 50% non-fossil electricity by 2030, 45% emissions intensity reduction

OTHER RELEVANT FACTS:

- MRV: Monitoring, Reporting, Verification — essential for CBAM compliance and carbon credit systems
- Green Climate Fund (GCF): UN climate finance body; India eligible for developing country funding
- MSME Ministry: Ministry of Micro, Small and Medium Enterprises (MoMSME)
- MSME definition (post-2020 revision): Manufacturing/Services unified; Micro: up to ₹1 cr investment / ₹5 cr turnover; Small: up to ₹10 cr / ₹50 cr; Medium: up to ₹50 cr / ₹250 cr

PM-Suryaghar Muft Bijli Yojana: Rooftop solar scheme for households; target 1 crore rooftop systems; ₹75,021 crore outlay

Sources: NITI Aayog PIB, Insights on India, DD News

CURATED & WRITTEN BY

Bharat Choudhary

UPSC Educator & Content Creator

 [linkedin.com/in/epicbharat](https://www.linkedin.com/in/epicbharat)

Published on ujjari.com · Free UPSC & State PCS Current Affairs