NATIONAL BIOENERGY PROGRAMME: ENVIRONMENT

NEWS: MNRE Revises Biomass Guidelines to Boost Bio Energy and Ease of Doing Business

WHAT'S IN THE NEWS?

The Ministry of New and Renewable Energy (MNRE) revised the Biomass Programme guidelines to promote clean energy, simplify processes, and incentivize biomass use through performancelinked subsidies and digital monitoring. These changes aim to reduce pollution, support rural industries, and help meet India's net-zero target by 2070.

Context: Revised Biomass Programme Guidelines (2025)

- The Ministry of New and Renewable Energy (MNRE) has released **updated guidelines** for the **Biomass Programme** under **Phase-I of the National Bioenergy Programme**.
- Objective: To promote cleaner energy, improve ease of doing business, and accelerate adoption of biomass technologies as part of India's larger goal of net-zero emissions by 2070.

What is Biomass Energy?

- **Biomass**: Material of **biological origin** like wood, cow dung, agricultural residues, or charcoal.
- **Biomass Energy**: Involves converting **organic materials into energy** (electricity, heat, fuel) through combustion, gasification, or anaerobic digestion.

National Bioenergy Programme – Overview

1. Aim

• To promote sustainable utilization of surplus biomass, cattle dung, and urban/industrial waste for energy generation.

2. Financial Assistance

- Provides Central Financial Assistance (CFA) for eligible components including:
 - Power generation from biomass
 - Biogas and Bio-CNG plants
 - Briquette and pellet manufacturing

Sub-Schemes under the National Bioenergy Programme

1. Waste to Energy Programme

- Focus: Large-scale **biogas**, **Bio-CNG**, and **power plants** from agricultural, industrial, and urban waste.
- Excludes Municipal Solid Waste (MSW) to Power projects.

2. Biomass Programme

- Supports:
 - Manufacturing of pellets and briquettes
 - Cogeneration projects in industries using non-bagasse biomass.
 - Encourages industries to adopt **biomass-based energy** for cleaner production.

3. Biogas Programme

- Supports setting up of:
 - Family-size and medium-size biogas units
 - Especially targeted for **rural areas**, helping improve sanitation and energy access.

Key Features of Biomass Programme (Post-Revisions)

1. Central Financial Assistance (CFA)

- For Briquette/Pellet Manufacturing Plants:
 - Rs. 9.00 lakh per TPH (ton per hour)
 - Maximum CFA: Rs. **45.00 lakh per project**

2. Monitoring System

- Mandatory incorporation of SCADA or IoT-based remote monitoring.
- Ensures real-time tracking and improved transparency in operations.

3. Eligibility Conditions

- Only **new machinery and equipment** are eligible for subsidy.
- Encourages technology upgradation and avoids second-hand infrastructure.

4. Inspection Authorities

- Inspections and verifications to be carried out by:
 - State Nodal Agencies (SNAs)
 - Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE)

Revised Guidelines: Major Reforms (2025)

1. Simplified Procedures

• Reduction in **paperwork** and **faster approvals** to promote ease of doing business.

• Especially beneficial for **MSMEs** in the clean energy sector.

2. Relaxed Documentation

• Briquette/Pellet plant developers **no longer need multiple clearance documents**, reducing compliance burden.

3. Low-Cost Monitoring

- Plants allowed to use **IoT-based monitoring** as a **cost-effective alternative** to expensive SCADA systems.
- Improves viability for small and rural operators.

4. Flexible Sales Model

• Earlier requirement of **2-year sales contracts** replaced with **general sale agreements**, enabling greater market flexibility.

5. Performance-Linked Subsidy Model

- CFA now linked to **plant performance**:
 - Full subsidy for plants operating at \geq 80% capacity
 - **Pro-rata basis** below that (e.g., plant at 70% gets 7/8 of CFA)

6. Simplified Inspections

• Only **10 hours of continuous operation** required for **capacity verification**, replacing previous lengthy procedures.

7. Region-Specific Support

- Pellet units in Delhi, Punjab, Haryana, NCR (Rajasthan, UP) can choose between:
 - MNRE scheme or
 - CPCB scheme,
- Specifically aimed at **addressing stubble burning** and air pollution in these regions.

Expected Impact of the Revised Guidelines

- Ensures **timely disbursement** of financial assistance to approved projects.
- Encourages the setup of new biomass plants, especially in rural and industrial clusters.
- Supports sustainable agricultural waste management, preventing open burning.
- Contributes to tackling **air pollution** and improving rural livelihoods.
- Aligns with India's climate commitments and circular economy goals.

Related Initiatives in Biomass and Bioenergy

1. GOBAR-Dhan Scheme

- Full form: Galvanizing Organic Bio-Agro Resources Dhan
- Launched under Swachh Bharat Mission (Grameen) in 2018.
- Objectives:
 - Improve village cleanliness
 - Promote biogas generation from cattle dung and biodegradable waste
 - Convert waste into wealth and energy

2. SATAT Initiative

- Full form: Sustainable Alternative Towards Affordable Transportation
- Focuses on promoting Compressed Bio-Gas (CBG) infrastructure.
- Benefits:
 - Provides clean fuel alternatives for the transport sector
 - Supports farmers and rural entrepreneurs through biogas production
 - Reduces reliance on fossil fuels

Source:

https://www.pib.gov.in/PressReleaseIframePage.aspx?PRID=2140327#:~:text=New%20Bioma ss%20Guidelines%20Spark%20Momentum%20for%20India's%20Clean%20Energy%20Dr ive&text=The%20Ministry%20of%20New%20and,%E2%80%9322%20to%202025%E2%8 0%9326.