

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 605/2024

News Item titled "Oh-zone! Why this prominent pollutant in Delhi air is becoming a cause for concern" appearing in The Times of India dated 22.04.2024

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**Adv. Amit Singh Chauhan
On behalf of Central Pollution Control Board**

Date: 17.04.2025

Place: Delhi

Report of CPCB in Original Application No. 605/2024: News Item titled "Oh-zone! Why this prominent pollutant in Delhi air is becoming a cause for concern" appearing in The Times of India dated 22.04.2024

Hon'ble NGT in OA no. 605/2024 vide order dated 23.12.2024 directed CPCB to file a report disclosing how effectively the measures that have been taken by the Government of India for control of ozone and its precursors are being implemented, and about the detailed modelling study proposed by CPCB in its report dated 20.12.2024. Relevant extract from the order is reproduced below:

"3. CPCB is directed to file the report disclosing how effectively these measures are being implemented.

5. The feasibility and mechanism for implementation of recommendations made by CPCB needs consideration. Hence, we deem it proper to implead the following as respondent no. 4:-

4. MOEF&CC through the Secretary.

6. Let Notice be issued to respondent no. 4 for filing the response by way of affidavit, especially commenting upon the recommendations that have been made by CPCB as quoted above. Let the response be filed at least one week before the next date of hearing."

7. Counsel for the CPCB has sought time for the purpose of ensuring the detailed study as mentioned in para 7, quoted above.

8. Hence, we direct the CPCB to file a fresh report at least one week before the next date of hearing.

9. List on 21.04.2025”

Copy of the order of the Hon’ble NGT dated 23.12.2024 is annexed as **Annexure-I**.

Point-wise compliance to the Hon’ble NGT order dated 23.12.2024 is placed below:

A. Implementation of measures taken by the Government of India for control of ozone and its precursors

It is humbly submitted that the initiatives to control ozone and its precursors indicated in the CPCB report dated 20.12.2024 pertained to various ministries and departments/agencies of the Central Government, and accordingly, status of their implementation was sought from them. Inputs received from various ministries and departments/agencies of the Central Government are annexed as **Annexure-II**. Summary of the implementation status against the measures undertaken, based on the inputs received and information available in public domain, is annexed as **Annexure-III**.

B. Detailed modelling study proposed by CPCB in its report dated 20.12.2024

It is humbly submitted that the Hon'ble NGT in Para 5 and 6 of the order dated 23.12.2024 had impleaded MoEF&CC as a respondent and had sought its response on feasibility and mechanism of implementation of recommendations made by CPCB regarding the detailed study.

In this regard, it is humbly submitted that upon submission of response by MoEF&CC and order of the Hon'ble NGT thereto, this answering respondent shall comply with the orders of Hon'ble NGT.



(Pankaj Agarwal)
Scientist 'F'

Central Pollution Control Board

Item No. 22

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 605/2024

News Item titled "Oh-zone! Why this prominent pollutant in Delhi air is becoming a cause for concern" appearing in The Times of India dated 22.04.2024

Date of hearing: 23.12.2024

**CORAM: HON'BLE MR. JUSTICE PRAKASH SHRIVASTAVA, CHAIRPERSON
HON'BLE DR. A. SENTHIL VEL, EXPERT MEMBER**

Respondents: Mr. Amit Singh Chauhan, Ms. Shikha Chauhan, Mr. Neelmani Guha & Ms. Shaima, Advs. for CPCB (Through VC)
Dr. Abhishek Atrey & Ms. Jyoti Verma, Advs. for CAQM (Through VC)
Mr. Balendu Shekhar & Ms. Tanisha Samanta, Advs. for DPCC

ORDER

1. In this Original Application, the Tribunal is considering the issue of rising levels of ground level ozone in Delhi, which in many areas exceeds eight hours standard.

2. In pursuance to earlier directions of the Tribunal, CPCB has filed the report dated 20.12.2024. The report of the CPCB discloses the measures for control of ozone which has been taken and also suggest a way forward. The measures which have been taken are disclosed as under:-

"6. Measures for control of ozone

It has been recognised globally that control of ozone is only possible through control of its precursors. It is also evident that control of local sources of its precursors may not yield significant benefits in terms of ozone reduction, as both ozone and its precursors can be transported over hundreds of kilometres.

Considering the same, the government has undertaken several initiatives at the national level, to control the precursors of ozone, i.e. NOx and VOC, and methane and CO to some extent.

The Government has launched National Clean Air Programme (NCAP) in 2019 as a national level strategy to reduce air pollution levels across the country. CPCB has identified 130 million plus/non-attainment cities (cities exceeding NAAQS, consecutively for five years). City Specific Clean Air Action Plans have been prepared and rolled out for implementation in all these 130 non-attainment/million plus cities to improve the air quality. These city specific clean air action plans target city specific air polluting sources like Soil & Road Dust, Vehicles, Domestic Fuel, MSW Burning, Construction Material and Industries with short-term priority action as well as those to be implemented in a medium to longer time frame along with the responsible agencies which improves the ambient air quality. Under NCAP, annual action planning for approved city action plans need to be submitted by concerned Urban Local Bodies (ULBs), which comprise the following actions to control NOx emissions:

- Use of off-peak passenger travel time to move freight and restrict entry of heavy vehicles into cities during the day
- Clean Fuel & Fuel Quality in vehicles
- Introduction of new electric buses (with proper infrastructure facilities such as charging stations) and CNG buses for public transport which will reduce plying of private vehicles on road and help to curb tail-pipe emissions.
- CNG infrastructure for auto gas supply in the city and transition of public transport vehicles to CNG mode.
- Charging infrastructure for E-vehicles
- Phase out old vehicles and introduce vehicle scrappage policy.
- Intensify monitoring of industries to reduce emission by the industries.
- Shifting of polluting industries.
- Conversion to CNG/PNG from pet coke / wood / coal / Furnace oil.
- Regular check and control of burning of municipal solid wastes.

Besides, waste management rules w.r.t solid waste, bio-medical waste, and hazardous wastes etc. are being implemented and EPR (Extended Producer Responsibility) regime for plastic waste, e-waste, used oil, tyre, etc. is in place, which stipulates mandatory targets for recycling/reuse, ensuring waste is managed in environmentally sound manner, thereby preventing it from burning and minimizing VOCs and CO emissions. Solid Waste Management Rules emphasizes on segregation and pre-processing/composting and thus minimising dumping/landfilling which has potential of Methane and VOCs formation. Further, CPCB has issued guidelines on Environmentally Sound Facilities for Handling and Scrapping of End of Life Vehicles, implementation of which helps in control of CO/VOC emissions which otherwise would be generated when environmentally sound recycling practices are not adopted.

Further, sector-specific interventions are listed below:

A. Transport Sector

- The introduction of BS VI-compliant vehicles across the country since April 2020 have reduced NOx emissions as compared to

erstwhile BSIV-compliant vehicles, with 70-85% reduction in the case of 2-wheelers, 25%-68% in the case of 4-wheelers, and 87% in the case of heavy-duty vehicles. There is also 29-49% reduction in CO emissions from BSVI compliant 2 wheelers as against BSIV compliant 2 wheelers.

- *BS-VI fuel has been introduced which has 5 times less Sulphur content (50 ppm in BS-IV to maximum 10 ppm in BS-VI compliant fuel). This has enabled the introduction of advanced emission control technologies, including Diesel Particulate Filters (DPF) to reduce Particulate Matter (PM) and Selective Catalyst Reduction (SCR) systems for reduction in Nitrogen Oxides (NOx) emissions in BS-VI vehicles.*
- *Vapour Recovery System (hereinafter referred as VRS) has been installed at all Delhi-NCR petrol pumps, in compliance with the orders of the Hon'ble NGT and Hon'ble Supreme Court. Further, VRS has been installed at those pumps selling more than 100 KLPM petrol and located in million plus cities and selling more than 300 KLPM petrol and located in cities with population more than 1 lakh. Installation of VRS minimizes the release of Benzene and other VOC emissions during petroleum refueling and unloading operations.*
- *The government is also promoting electric mobility, resulting in zero vehicular emissions, under the PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme launched in September, 2024 with an outlay of ₹10,900 crore. The scheme aims to support electric vehicles including e-2W, e-3W, e-Trucks, e-buses, e-Ambulances, EV public charging stations and upgradation of testing agencies.*
- *Over 25 states have notified or drafted state Electric Vehicle (EV) policy, to promote the use of EVs.*
- *The Government has been promoting blending of ethanol in petrol under the Ethanol Blended Petrol (EBP) Programme. The National Policy of Biofuels-2018, as amended in 2022, inter-alia advanced the target of 20% blending of ethanol in petrol to Ethanol Supply Year (ESY) 2025-26 from 2030. The target of 10% ethanol blending in petrol was achieved in June, 2022 i.e., five months ahead of the target during ESY 2021-22. Use of E10 fuel is expected to reduce CO and HC emissions by 20% in 2 wheelers and 4 wheelers as compared to normal gasoline. Use of E20 fuel is expected to reduce HC emissions by 20% for 2 wheelers and 4 wheelers, compared to emissions with normal gasoline. In case of CO, use of E20 fuel is expected to reduce CO emissions by 50% in case of 2 wheelers and 30% in case of 4 wheelers.*
- *The Ministry of Road Transport and Highways has formulated the Vehicle Scrapping Policy that includes a system of incentives/disincentives for creation of an ecosystem to phase out older, unfit polluting vehicles through a network of Registered Vehicle Scrapping Facilities (RVSFs) and Automated Testing Stations (ATs). Phasing out of older vehicles will further reduce emissions. Further, environmental friendly disposal of older vehicles through scrapping facilities also reduces the emissions*

which would have been released, had these vehicles been disposed off through unauthorised centers.

B. Power plants and Industries

- *Industrial emission Standards for NOx and VOC have been revised/ introduced for various sectors such as man-made fiber industry, Fertilizer Industry, Pharmaceutical industry, paint industry etc.*
- *NOx emission standards have also been prescribed for coal/lignite-based thermal power plants, industrial boilers, Cement Plant (without co-processing of wastes) and Standalone Clinker Grinding Plants, furnaces etc.*
- *Promotion of installation of efficient Ultra Supercritical/ Supercritical units over Subcritical Thermal Units as these units are more efficient and their emission per unit of electricity generation is less than subcritical units.*
- *Ministry of Power has issued a policy on utilization of Biomass for Power generation through co-firing in coal-based power plants. The policy mandates 5-7% co-firing of Biomass primarily of agro residue with coal, after assessing the technical feasibility.*
- *Inefficient and old thermal power plants having capacity of about 18,802.24 MW comprising 267 units have already been retired till 30.06.2024.*
- *India in its Intended Nationally Determined Contributions (INDCs) stands committed to achieve about 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. As of Jul 2024, India has already achieved 45.5% Installed Capacity from non-fossil fuel-based resources.*

C. Biomass burning, with emphasis on paddy straw burning in Northern India

1. *Central Pollution Control Board (CPCB) has framed Guidelines for grant of one-time financial support under Environment Protection Charge funds for establishment of pelletisation and Torrefaction plants to promote utilisation of paddy straw. In case of setting up of pelletisation plant, Rs. 28 lakhs per tonne per hour (TPH), or 40% of the capital cost considered for plant and machinery of a 01 TPH plant, whichever is lower, is provided as one-time financial assistance with a maximum total financial support of Rs. 1.4 crore per proposal. In case of setting up of torrefaction plants, Rs. 56 lakhs per TPH, or 40% of the capital cost considered for plant and machinery of a 01 TPH plant, whichever is lower, is provided as one-time financial assistance with a maximum total financial support of Rs. 2.8 crore per proposal. A total of 17 applications for establishment of pelletization and Torrefaction plants under the above mentioned CPCB Guidelines have been sanctioned so far, out of which 02 plants are not coming up. Pellet production capacity of 15 sanctioned plants is 2.07 lakh tonne/annum. These plants are expected to utilize 2.70 lakh tonne of paddy straw per annum.*
2. *CPCB had deployed 26 teams (in 16 districts of Punjab and 10 districts of Haryana) for the period 01st October - 30th November, 2024 to intensify monitoring and enforcement actions regarding stubble burning. These teams coordinated with concerned*

authorities/ officers deployed at the district level by the State Govt. and reported to the Commission for Air Quality Management in National Capital Region and Adjoining Areas (CAQM).

3. *CAQM has issued directives & advisories to various stakeholders including the 11 Thermal Power Plants (TPPs) located within 300 km of Delhi, State Governments of Punjab, Haryana and Uttar Pradesh on "Ex-Situ Stubble Management" and to establish an ecosystem and robust supply chain mechanism to boost ex-situ utilisation of straw for tackling the problem of stubble burning.*
4. *CAQM has also directed coal based TPPs including cogenerating Captive TPPs situated in NCR to initiate immediate steps to co-fire biomass-based pellets (with focus on paddy straw utilization) with coal through a continuous and uninterrupted supply chain targeting at least 5% co-firing of biomass pellets.*
5. *CAQM has provided a Framework to the states concerned for control / elimination of crop residue burning and directed these to draw up detailed state-specific action plans based on the major contours of the framework. Based on the framework, action plans for prevention and control of paddy stubble burning were prepared and directions were issued by CAQM to state governments of Haryana, Punjab, UP, Rajasthan and NCT of Delhi for strict implementation of the framework and revised action plan*
6. *As per revised model contract for use of biomass in TPPs, issued by Ministry of Power, power plants within 300 kms of NCR shall use minimum 50% of raw material as stubble/ straw/ crop residue of rice paddy sourced from Punjab, Haryana or NCR.*
7. *Ministry of Petroleum and Natural Gas (MoPNG) has launched a scheme to provide financial assistance to Compressed Bio-gas producers for procurement of biomass aggregation equipment for ex-situ management of paddy straw.*
8. *Ministry of Agriculture & Farmers Welfare (MoA&FW) in 2018 launched scheme for providing subsidy for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in NCT of Delhi and the States of Punjab, Haryana and Uttar Pradesh for insitu management of paddy straw. MoA&FW in 2023 revised guidelines under the scheme to support establishment of crop residue/ paddy straw supply chain, by providing financial assistance on the capital cost of machinery and equipment.*
9. *MNRE is supporting setting up of Biomass Briquette/Pellet manufacturing plants and to support Biomass (non-bagasse) based cogeneration projects in Industries in the country, by providing Central Financial Assistance (CFA).*
10. *MNRE is also providing CFA for setting up of Waste to Energy plants for generation of Biogas, Bio-CNG/enriched Biogas/Compressed Biogas, Power/ generation of producer or syngas, from urban, industrial, agricultural wastes and municipal solid waste.*

11. Under the Pradhan Mantri JI-VAN Yojana, a 2G Ethanol Project has been set up by Indian Oil Corporation Limited at Panipat, Haryana, which is expected to utilize 2 lakh metric tonnes of paddy straw per annum. Another 2G Ethanol Project is being set up by HPCL at Bathinda (Punjab).

Regarding control of Methane, being a greenhouse gas, measures to control methane emissions are undertaken by several Ministries/Departments and reported to the United Nations Framework Convention on Climate Change. These measures include:

1. Promotion of Small Hydro Power, Bagasse and Biomass based power, by MNRE
2. Promoting System of Rice Intensification as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)
3. Increasing area under Direct Seeded Rice (DSR) as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)
4. Promoting crop diversification
5. Balanced Ration for Livestock, which promotes Optimum feeding of animals through Ration Balancing Programme (RBP)
6. Feeding bypass proteins: Optimizing the use of protein supplement within the ruminant system
7. Sub-Mission on Agricultural Mechanization (SMAM) and central sector scheme on promotion of agricultural mechanization for in-situ management of crops residue launched to increase the reach of farm mechanization to small and marginal farmers and promoting 'Custom Hiring Centres' to offset the high cost of individual ownership"

3. CPCB is directed to file the report disclosing how effectively these measures are being implemented.

4. The CPCB reports discloses following suggestions:-

“7. Way forward

It has been globally established that the control of ozone concentration is only possible through control of its precursors at a regional or national level, and the Government of India has taken several initiatives as listed in Section 6 above for their control.

However, considering the elevated levels of ozone that were observed during COVID-19 lockdown (April 2020) and that the ozone concentration is also influenced by transboundary movement, soil and biogenic emissions, a detailed study may be required with help of air quality experts in order to evaluate the reasons for higher ozone levels at various locations in Delhi, and further ozone formation modelling may be required to assess the contribution of transboundary, biogenic and anthropogenic sources.

The matter has also been discussed with air quality experts and it has been expressed that a study is required and the same is expected to come

out with the steps that may be required to specifically plan and control the sources of ozone (and its precursors). The study for Delhi is likely to take about one year.”

5. The feasibility and mechanism for implementation of recommendations made by CPCB needs consideration. Hence, we deem it proper to implead the following as respondent no. 4:-

4. MOEF&CC through the Secretary.

6. Let Notice be issued to respondent no. 4 for filing the response by way of affidavit, especially commenting upon the recommendations that have been made by CPCB as quoted above. Let the response be filed at least one week before the next date of hearing.

7. Counsel for the CPCB has sought time for the purpose of ensuring the detailed study as mentioned in para 7, quoted above.

8. Hence, we direct the CPCB to file a fresh report at least one week before the next date of hearing.

9. List on 21.04.2025.

Prakash Shrivastava, CP

Dr. A. Senthil Vel, EM

December 23, 2024
Original Application No. 605/2024
SN..



राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्र
वायु गुणवत्ता प्रबंधन आयोग
Commission for Air Quality Management in
National Capital Region and
Adjoining Areas



F. No. 120015/25/TPP/2021/CAQM- 1277DT

Date: 02.04.2025

To,

Sh. P Agarwal
Scientist F & DH, AQM Division
Central Pollution Control Board
East Arjun Nagar, Delhi - 110032

Subject: Measures undertaken for control of emission of ozone and its precursors in the matter of OA No. 605/2024 before the Hon'ble NGT.

Sir,

This has reference to your communications dated January 29, 2025 and March 24, 2025 on the subject matter.

2. The Commission has issued Direction No. 72 which mandates all captive thermal plants in NCR to co-fire a minimum 5 % of biomass pellets by September 30, 2023 and at least 10 % co-firing by December 2023. The compliances of this Direction is reviewed by the Commission; as per the review conducted in 2024 and the status provided by the NCR states of Haryana, Uttar Pradesh and Rajasthan all the Captive Thermal Power Plants in the NCR districts are generally complying with the mandated co-firing.
3. The Commission has also issued Direction No.-42, dated 17.09.2021 mandating co-firing of 5-10% biomass with coal in all the 11 coal based TPPs located within 300 Kms of Delhi. The Commission is also regularly reviewing the compliance of biomass co-firing in the 11 coal based thermal power plants located within 300 km of Delhi.
4. In this regard, MoEFCC has notified The Environment (Utilization of Crop Residue by Thermal Power Plants) Rules, 2023 mandating all the 11 coal based thermal power plants (located within 300 km of Delhi) to use up to 3 % pellets or briquettes made of crop residue along with coal for the year 2024-2025; and stipulates use up to 5 % of pellets/ briquettes along with coal from the year 2025-2026 onwards with provision to impose and collect Environmental Compensation from such TPPs at the rates specified, for non-utilization of mandated percentage of crop residue based biomass pellets as specified.
5. As per reports obtained from MoP, till February 2025 the 11 TPPs altogether co-fired about 11.4 Lakh MT of biomass pellets, which is about 50.3% of the target i.e. 22.64 Lakh MT for the year 2024-25.

Yours faithfully

(R. K. Agarwal)
Director (Tech)

17 वी मंजिल, जवाहर व्यापार भवन (एस. टी.सी. बिल्डिंग), टॉलस्टॉय मार्ग, नई दिल्ली-110001

दूरभाष : 011-23701213, ई -मेल : caqm-ncr@gov.in

17th Floor, Jawahar Vyapar Bhawan (STC Building), Tolstoy Marg, New Delhi-110001

Tel:011-23701213, E-mail: caqm-ncr@gov.in

Fwd: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- reg.

RS RAJNESH SINGH <rajnesh.singh02@gov.in>

Thu, 30 Jan 2025 2:27:23 PM +0530 •

To "Sumit Kumar" <sumit.kr88@gov.in>, "Amrendra singh" <dsem-mhi@gov.in>

Cc "aqmcpcb" <aqm.cpcb@gov.in>

The matter in the OM attached pertains to PM E-DRIVE and PSM schemes.

May kindly deal with the matter accordingly.

Regards

**Rajnesh Singh,
Director (Auto),
Ministry of Heavy Industries,
Tele - 011 23063707**

==== Forwarded message =====

From: CPCB AQM Div <aqm.cpcb@gov.in>

To: "rajneshsingh02" <rajnesh.singh02@gov.in>

Cc: "Pankaj Agarwal" <pagarwal.cpcb@gov.in>, "Ankush Tewani" <ankush.cpcb@nic.in>, "Gautam Kumar Sharma" <gautam.cpcb@gov.in>

Date: Thu, 30 Jan 2025 14:16:47 +0530

Subject: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- reg.

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letter dated 29.01.2025 topdf

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OA 605 order.pdf

2.1 MB •

Re: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- reg.

BR Bio Refinery Cell <socons.png@nic.in>
Fri, 21 Feb 2025 5:41:19 PM +0530 •

To "Chairman CPCB" <ccb.cpcb@nic.in>, "Pankaj Agarwal" <pagarwal.cpcb@gov.in>

Cc "Deepak Srivastava" <directorm1-png@gov.in>, "Vinay Kumar" <vinay.kumar73@nic.in>, "CPCB AQM Div" <aqm.cpcb@gov.in>, "DOTANIAP" <dotaniap@indianoil.in>, "Sridhar Polakonda" <psuofficer1.bioref@gov.in>

Sir,

Please refer to the trailing mail on the above mentioned subject.

I am directed to enclosed herewith the inputs of MoP&NG on the subject matter.

सादर/With Regards,

रवीन्द्र कुमार/Ravindra Kumar

अनुभाग अधिकारी /Section Officer

जैव - परिष्करण प्रकोष्ठ/Bio-Refinery Cell,

पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय/Ministry of Petroleum & Natural Gas,

कक्ष संख्या 312 - बी/Room No 312-B,

शास्त्री भवन, नई दिल्ली /Shastri Bhawan, New Delhi

दूरभाष/Tel: +91-11-2338 7878

ई-मेल/Email: socons.png@nic.in

==== Forwarded message =====

From: CPCB AQM Div <aqm.cpcb@gov.in>

To: "directorm1-png" <directorm1-png@gov.in>

Cc: "Pankaj Agarwal" <pagarwal.cpcb@gov.in>, "Ankush Tewani" <ankush.cpcb@nic.in>, "Gautam Kumar Sharma" <gautam.cpcb@gov.in>

Date: Thu, 30 Jan 2025 13:17:43 +0530

Subject: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- reg.

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URGENT
COURT CASE

File No. P-13034(18)/1/2025-CC (E-52060)
Government of India
Ministry of Petroleum and Natural Gas
(Bio-Refinery Section)

Shastri Bhawan, New Delhi
Dated the 21st February, 2025

OFFICE MEMORANDUM

Sub: OA 605 of 2024 - NGT Delhi - Ozone Emission & its precursors – Inputs of MoPNG –reg.

Sir,

The undersigned is directed to refer to Central Pollution Control Board (CPCB)'s Communication No. CM-13011/145/2024-LAW-HO-CPCB-HO dated 29.01.2025 along with Order dated 23.12.2024 passed by Hon'ble NGT, Principal Bench, New Delhi in the subject matter and to say that the inputs of Ministry of Petroleum and Natural Gas on the same is placed as **Annexure**.

2. This issues with the approval of Competent Authority.

Encl: a/a



(Vinay Kumar)

Under Secretary to the Government of India
Tel.: 011-23387878

To,

Central Pollution Control Board
Air Quality Management Division
[Kind Attn.: Shri P. Agarwal, Scientist 'F' and Head]
Parivesh Bhawan, East Ajrun Nagar, Delhi – 110032
Email: ccb.cpcb@nic.in, pagarwal.cpcb@gov.in

i. **Reply on Current status of ethanol blending under the Ethanol Blended Petrol (EBP) Programme**

The Government has been promoting blending of ethanol in petrol under the Ethanol Blended Petrol (EBP) Programme. The National Policy of Biofuels-2018, as amended in 2022, inter-alia advanced the target of 20% blending of ethanol in petrol to Ethanol Supply Year (ESY) 2025-26 from 2030. The target of 10% ethanol blending in petrol was achieved in June, 2022 i.e., five months ahead of the target during ESY 2021-22. Use of E10 fuel is expected to reduce CO and HC emissions by 20% in 2 wheelers and 4 wheelers as compared to normal gasoline. Use of E20 fuel is expected to reduce HC emissions by 20% for 2 wheelers and 4 wheelers, compared to emissions with normal gasoline. In case of CO, use of E20 fuel is expected to reduce CO emissions by 50% in case of 2 wheelers and 30% in case of 4 wheelers.

The supply of ethanol to Public Sector OMCs for petrol blending has increased over 13 times from ESY 2013-14 to ESY 2023-24, with blending rising from 1.53% to 14.60%. This aligns with the Roadmap for Ethanol Blending in India 2020-25. Since May 2024, OMCs have consistently blended over 15% ethanol, reaching 17.44% as of 31.01.2025 in ESY 2024-25.

ii. **Reply on Status of implementation of scheme to provide financial assistance to Compressed Bio-Gas producers for procurement of biomass aggregation equipment for ex-situ management of paddy straw.**

Government of India has approved the Scheme for providing financial assistance to Compressed Bio Gas Producers (CBG) producers for procurement of biomass aggregation machinery to support collection of biomass with a total financial outlay of Rs. 564.75 crore for the period of FY 2023-24 to FY 2026-27. Scheme guidelines have been issued on 2nd February, 2024. Portal for inviting applications under aforesaid scheme has been activated from 1st April, 2024. Portal remains active for submission of application between 1st to 30th day of each quarter.

Under this scheme eligible CBG producers can avail maximum financial assistance of 50% of the procurement cost of biomass aggregation machinery or Rs. 90 lakh per set (whichever is less). The financial assistance of Rs. 1.8 crore for 4 TPD CBG capacity project would be provided with a capping of Rs. 9 crore per project on pro rata basis.

So far, In-principle approval for procurement of biomass aggregation machinery has been provided to 6 CBG projects.

iii. **Reply on Status of installation and operation of 2G Ethanol plants under Pradhan Mantri JI-VAN Yojana**

Under the Pradhan Mantri JI-VAN Yojana, a 2G Ethanol Project has been set up by Indian Oil Corporation Limited at Panipat, Haryana, which is expected to utilize 2 Lakh metric tonnes of paddy straw per annum. Another 2G Ethanol Project is being set up by HPCL at Bathinda (Punjab) which is under advanced phase of completion and is expected to utilize another 1.71 Lakh metric tonnes of paddy straw per annum.

Fwd: Input to CPCB letter No. CM-13011/145/2024-LAW-Ho-CPCW- HO/8967 dated 29.01.2025

PA Pankaj Agarwal <pagarwal.cpcb@gov.in>
Sat, 22 Mar 2025 9:46:13 AM +0530
To "Ankush Tewani" <ankush.cpcb@nic.in>, "Gautam Kumar Sharma" <gautam.cpcb@gov.in>

==== Forwarded message =====
From: Sanjay Kumar Shahi <sk.shahi@nic.in>
To: "pagarwalcpcb" <pagarwal.cpcb@nic.in>
Cc: "Sangita Kasture" <sangita.kasture@nic.in>, "GAURAV MISHRA" <gaurav.mishra76@gov.in>, "Pabitra Mohan Barik" <pabitra.mnre@gov.in>, "Rajkumar Bhawariya" <rajkumarb.mnre@gov.in>, "BIKASH KUMAR" <bikash.mnre@gov.in>, "Subhajit Das" <sdas.mnre@gov.in>, "Biomass Division MNRE" <biomass-mnre@gov.in>
Date: Fri, 21 Mar 2025 17:00:31 +0530
Subject: Input to CPCB letter No. CM-13011/145/2024-LAW-Ho-CPCW- HO/8967 dated 29.01.2025
==== Forwarded message =====

Sir,

With reference to CPCB letter No. CM-13011/145/2024-LAW-Ho-CPCW-HO/8967 dated 29.01.2025, the input of MNRE is attached.

With regards,

S.K. Shahi
Scientist 'E'
7838584840 (M)

📎 1 Attachment(s) • [Download as Zip](#)



Input to CPCB.pdf
82.5 KB • 🗑️

Input to CPCB letter No. CM-13011/145/2024-LAW-Ho-CPCW-HO/8967 dated 29.01.2025

A. Status of implementation of scheme for Promotion of Small Hydro Power

1. In India, Hydro Power projects up to 25 MW are classified as Small Hydro Power (SHP) projects. MNRE is the Nodal Ministry to deal with the subject of Small Hydro Power in the Country.
2. India has an estimated SHP potential of over 21 GW, out of which 5.1 GW capacity has been installed.
3. The last SHP scheme was valid till 31.03.2017 (extended upto 30.09.2017). At present there is no existing SHP Scheme to provide financial support for development of new SHP projects.
4. Expenditure Finance Committee (EFC) memorandum is being prepared for promotion of Small Hydro Power sector.

B. Status of implementation of scheme for Promotion of Biomass Power projects

Name of the Programme: "Scheme to Support Promotion of Manufacturing of **Briquettes & Pellets** and Biomass (Non-Bagasse) Based **Cogeneration** in Industries in the Country (Up to March 2026)".

Objective: The objective of the Biomass Programme is to support setting up of Biomass Briquette/Pellet manufacturing plants and to support Biomass (non bagasse) based cogeneration projects in Industries in the country. The broader objectives of the scheme are to **reduce stubble burning** by utilizing surplus agricultural residue, to **provide additional source of income to farmers** through sale of surplus agro residue and to enable better **environmental practices** and **reduce pollution**.

Scope: The programme provides Central Financial Assistance (CFA to project developers and service charges to implementing agency and inspection agencies in respect of setting up of Briquette / Pellet manufacturing plants and Biomass (non-bagasse) cogeneration projects in industries.

CFA Pattern:

S. N.	Type of project	Rates of CFA under Biomass programme of NBP (for all states and UTs)
(a)	Briquette manufacturing plant	Rs. 9.0 lakhs/MTPH (Maximum Rs. 45.0 lakhs per project)
(b)	Non Torrefied Pellet manufacturing plant	Rs. 21.0 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 105 lakhs per project)
(c)	Torrefied Pellet manufacturing plant	Rs. 42.0 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 210 lakhs per project)

Overall Installed capacity :

- i. Briquette Plant/Pellet – 289 MTPH
- ii. Biomass based Cogeneration (non-bagasse) – 922 MW
- iv. Cogeneration (bagasse) - 7935 MW
- v. Biomass based Power plants (IPPs) – 1886 MW

Note: At present there is no Scheme in the Ministry to provide financial support for development of Bagasse based new power generation plants.

C. Status of implementation of scheme for Promotion of Waste to Energy plants

Name of the programme: “Programme on Energy from Urban, Industrial and Agricultural Waste/Residues” (Waste to Energy Programme)

Objectives of the Scheme: The objective of the programme is to support the setting up of Waste to Energy projects for generation of Biogas/ BioCNG/ Power/ producer or syngas from urban, industrial and agricultural wastes/residues.

Scope: The programme provides Central Financial Assistance (CFA) to project developers and service charges to implementing/inspection agencies in respect of successful commissioning of Waste to Energy plants for generation of Biogas, Bio-CNG/enriched Biogas/Compressed Biogas, Power/ generation of producer or syngas

CFA pattern:

S.No.	Type of Project	Standard CFA rate @ installed capacity of the plant
1.	Biogas	Rs 0.25 Cr per 12000cum/day (maximum CFA of Rs. 5.0 Cr/project)
2.	BioCNG/Enriched Biogas/-Rs Compressed Bio Gas	4.0 Cr per 4800 kg/day (for BioCNG generation from new biogas plant) -Rs 3.0 Cr per 4800 kg/day (for BioCNG generation from existing Biogas plant#) -Maximum CFA of Rs. 10.0 Cr/project for both cases.
3.	Power (based on Biogas)	-Rs 0.75 Cr/MW (for power generation from new biogas plant) -Rs 0.5 Cr /MW (for power generation from existing Biogas plant#) -Maximum CFA of Rs. 5.0 Cr/project for both cases.
4.	Power based on bio & agro-industrial waste (other than MSW)	Rs 0.4 Cr/MW (maximum CFA of Rs. 5.0 Cr/project)

5.	Biomass Gasifier for electricity/thermal applications	<ul style="list-style-type: none"> o Rs. 2,500 per kWe with dual fuel engines for electrical application o Rs. 15,000 per kWe with 100% gas engines for electrical application o Rs. 2 lakh per 300 kWth for thermal applications.
----	---	---

Overall Installed Capacity:

The Cumulative Installed Capacity of Waste-to-Energy Projects (As on 28.02.2025)		
Sl. No.	Output product	Cumulative Installed capacity
1	Biogas	8,24,647 m ³ per day
2	Bio-CNG/CBG	6,44,868 kg per day
3	Power (Grid & Offgrid)	463.028 MW

Fwd: Measures undertaken for control of emission of ozone and its precursors in the matter of O.A.No 605/2024 pending before Hon'ble NGT -reg

PA Pankaj Agarwal <pagarwal.cpcb@gov.in>
Tue, 11 Mar 2025 6:27:33 PM +0530
To "Ankush Tewani" <ankush.cpcb@nic.in>, "Gautam Kumar Sharma" <gautam.cpcb@gov.in>

==== Forwarded message =====
From: Thermal Division <thermal-power@gov.in>
To: "pagarwalcpcb" <pagarwal.cpcb@gov.in>
Cc: "Satish kumar" <satish.kumar.74@gov.in>, "Chittaranjan Acharya" <acharya.c.nmcg@nic.in>, "Nitin Kumar" <nitin.kumar90@nic.in>, "Surajit Shaw" <surajit.shaw@nic.in>, "Ashwani" <ashwani.2000@mea.gov.in>, "ankushcpcb" <ankush.cpcb@nic.in>
Date: Tue, 11 Mar 2025 18:08:57 +0530
Subject: Measures undertaken for control of emission of ozone and its precursors in the matter of O.A.No 605/2024 pending before Hon'ble NGT -reg
==== Forwarded message =====

Sir,

I am directed to enclose herewith OM dated 11.03.2025 on the subject mentioned above.

Regards,
Thermal Section
Ministry of Power
011-23719710

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 CPCB letter dated 29.01.20... .pdf
3.8 MB • 

 Annex-A_The biomass utiliz... .pdf
437.9 KB • 

 MoP OM to CPCB dated 11.... .pdf
1.1 MB • 



No. 11/10/2025- Th. I
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated 11th March, 2025

OFFICE MEMORANDUM

Subject: Measures undertaken for control of emission of ozone and its precursors in the matter of O.A. No 605/2024 pending before Hon'ble NGT -reg.

The undersigned is directed to refer to CPCB's letter dated 29.01.2025 on the above mentioned subject and to forward herewith the inputs pertaining to the MoP (**Enclosed at Annexure**) for taking further necessary actions.

2. This issue with the approval of Joint Secretary (Thermal).

Encl.: As above.


(Chittaranjan Acharya)
Under Secretary (Thermal)
Tele: 23719710

Shri P. Agarwal
Scientist 'F' and Head,
Air Quality Management Division,
Central Pollution Control Board,
Parivesh Bhavan,
East Arjun Nagar, Delhi - 110032

Point- wise requisite inputs pertaining to MoP are as under: -

- **Status of installation of efficient Ultra Supercritical/Supercritical units over Sub-critical Thermal Units :-**

95 Supercritical units having capacity of 65,950 MW and 7 Ultra-supercritical units having capacity of 4,900 MW have been commissioned till 31.12.2024.

- **Status of phasing out of Inefficient and old thermal power plants:**

CEA vide letter dated 20.01.2023 and 07.07.2023 issued an advisory to all the Thermal Power Utilities not to retire or repurpose their coal-based power stations before 2030 and to ensure the availability of thermal units after carrying out R&M activities, if required, considering the expected energy demand scenario and availability of capacity in future.

However, it is pertinent to mention that generation is a de-licensed activity as per Section 7 of the Electricity Act, 2003 and retirement of units are decided by Power generating Utilities/companies based on their own techno-economic, energy demand and environmental reasons.

The inefficient and old thermal power plants having capacity of about **18,802.24 MW** comprising **267 units** have already been retired till 20.11.2024.

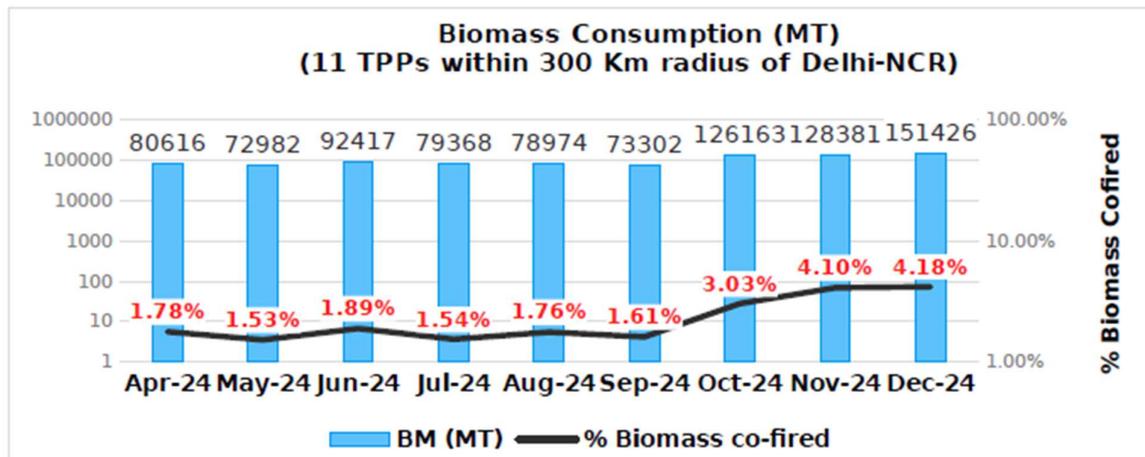
- **Status of cumulative electric power installed capacity from non-fossil fuel-based energy resources:**

The non-fossil fuel installed capacity as on 31.12.2024 is about 47.1 % (217.62 GW out of total 462.06 GW). Source wise breakup of the installed capacity (in MW) is as follows

Fossil Fuel (MW)				Non-Fossil Fuel (MW)					
Coal	Lignite	Gas	Diesel	Hydro	Wind	Solar	Bio-power	Small Hydro	Nuclear
212413	6620	24818.21	589.20	46968.17	48163.15	97864.72	11348.15	5100.55	8180
2,44,440.42				2,17,624.74					

- **Status of implementation of policy on utilization of Biomass for Power generation through co-firing in coal based power plants ; and**
- **Status of co-firing of biomass in thermal power plants within 300kms of NCR.**

Total biomass co-firing in 11 nos. of thermal power plants within 300 kms of NCR in the month of December, 2024 is **1,51,426 MT (around 4.18 %)**. The cumulative biomass co-firing within 300 kms of NCR from April, 2024 to December, 2024 is **8,83,627.53 MT (around 2.25%)**. Cumulative Biomass usage till (31.12.2024) in 11 TPPs of NCR regions since start of co-firing is **11,77,256.15 MT**.



The biomass utilization of 11 TPPs of NCR region is enclosed as **Annexure-A**.

Monthwise Biomass usage					Dec-24				FY 2024-25 Cumulative Usage (01.04.2024-31.12.2024)		
Sr. No.	Organisation	Name of the Plant	Total Installed Capacity (MW)	Co-firing started since (MM-YY)	Coal Consumption (KMT)	Biomass Cofired (MT)	Biomass %	Cumulative Biomass usage till (31.12.2024) since start of cofiring (MT)	Cumulative coal Consumption (KMT)	Cumulative Biomass Fired (MT)	Annual % of Biomass fired
1	NTPC	Dadri TPS	1820	Nov-19	567.91	28524	4.78%	245898	5018	189530	3.64%
2	NTPC JV	Indira Gandhi Super Thermal Power Project (IGSTPP), Jhajjar	1500	Sep-21	493.29	15661	3.08%	264089	4644	158813	3.31%
3	HPGCL	Rajiv Gandhi Thermal Power Station, Khedar, Hissar (RGTPS)	1200	Aug-21	403.94	16892	4.01%	59796	3280	59283	1.78%
4	HPGCL	Deen Bandhu Chhotu Ram Thermal Power Project, Yamuna Nagar TPS (DCRTPP)	600	Jun-21	8.53	0	0.00%	15850	1827	15396	0.84%
5	HPGCL	Panipat Thermal Power Station, Khukhrana Panipat (PTPS)	710	May-24	317.20	10728	3.27%	31621	2694	31621	1.16%
6	Apraava Energy	Mahatma Gandhi TPS, Jhajjar	1320	Feb-22	336.70	21604	6.03%	249691	3899	168225	4.14%
7	UPRVUNL	Harduaganj TPS	1265	Feb-21	46.44	0	0.00%	66699	2410	37770	1.54%
8	Vedanta	Talwandi Sabo Power Limited (TSPL), Mansa,	1980	Aug-22	401.48	3011	0.74%	5910	5709	5835	0.102%
9	L&T	Nabha Power Limited (NPL), Rajpura,	1400	Nov-21	424.03	36577	7.94%	121299	4455	120873	2.64%
10	PSPCL	Guru Gobind Singh Super Thermal Plant Ropar (GGSSTP), Ropar	840	Jun-22	210.09	13024	5.84%	53399	2306	50117	2.13%
11	PSPCL	Guru Hargobind Thermal Plant (GHTP), Lehra Mohabbat	920	Jul-22	261.57	5405	2.02%	63003	2173	46164	2.08%
			13555		3471.18	151426.00	4.18%	1177256.16	38413.22	883627.53	2.25%

Fwd: Status of implementation of the Vehicles Scrapping Policy-Reg

PA Pankaj Agarwal <pagarwal.cpcb@gov.in>
Mon, 03 Mar 2025 5:34:45 PM +0530

To "Ankush Tewani" <ankush.cpcb@nic.in>, "Gautam Kumar Sharma" <gautam.cpcb@gov.in>

==== Forwarded message =====
From: Transport Section <sot-rth@nic.in>
To: "pagarwalcpcb" <pagarwal.cpcb@gov.in>
Cc: "Laxmi Mishra" <ds.transport@gov.in>, "Yatender Kumar" <us.transport@gov.in>, "Chirag Sagar" <chirag.sagar@gov.in>, "Harish Sharma" <harish.sharma22@gov.in>
Date: Mon, 03 Mar 2025 17:24:25 +0530
Subject: Status of implementation of the Vehicles Scrapping Policy-Reg
==== Forwarded message =====

Sir/ Madam,

Please find the attachment on the subject cited above.

Regards,
Section Officer (Transport)
Ministry of Road Transport & Highways
Transport Bhawan, 1, Parliament Street, New Delhi- 110001
Tel: 011-23715211

📎 **1 Attachment(s)** • [Download as Zip](#)



Status of implementation.pdf
1.2 MB • 🗑️

No. RT-16025/6/2024-T
Government of India
Ministry of Road Transport and Highways
Transport Section
Transport Bhawan, 1 Parliament Street, New Delhi-110001

3rd March, 2024

To

Sh. P. Agarwal
Scientist F and Head, Air Quality Management Division
Central Pollution Control Board
Parivesh bhawan, East Arjun Nagar, Delhi-32
Email: pagarwal.cpcb@gov.in;

Subject: Status of implementation of the Vehicle Scrapping policy – reg.

Sir,

I am directed to refer to letter dated 29.01.2025 from CPCB regarding OA No. 605/2024 pending before Hon'ble NGT and to submit the status of implementation of Vehicle Scrapping Policy as per the Annexure attached.

Encl: As above.

Yours faithfully,



(Yatender Kumar)

Under Secretary to the Govt of India
Email: us.transport@gov.in

Tel: 011-23739028

ANNEXUREVehicle Scrapping Policy – Overview and Implementation StatusOverview:

The Voluntary Vehicle-Fleet Modernization Program (V-VMP) or "Vehicle Scrapping Policy" was launched by Hon'ble Prime Minister on 13th August 2021. It is aimed at creating an **eco-system for phasing out of unfit and polluting vehicles** in an eco-friendly manner. The policy targets voluntary scrapping of unfit commercial and personal vehicles **strictly based on their fitness**, irrespective of vehicle age. It is aimed at creating an eco-system for phasing out of unfit and polluting vehicles in an eco-friendly manner. For successful implementation of this policy, a network of **Automated Testing Stations (ATS)** and **Registered Vehicle Scrapping Facilities (RVSF)** is required to be set up across India. Following notifications have been issued and uploaded on the Ministry's website:

1. GSR 653 (E) dated 23.09.2021 provides the Motor Vehicles (Registration and Functions of Vehicle Scrapping Facility) Rules, 2021 for establishment of Registered Vehicles Scrapping Facility (RVSF). The notification has come into force with effect from 25th September, 2021. These rules have been further amended vide GSR 695(E) dated 13.09.2022 and GSR 212(E) dated 15.03.2024.
2. GSR 652 (E) dated 23.09.2021 provides for recognition, regulation and control of Automated Testing Stations. The notification has come into force with effect from 25th September, 2021. These rules have been further amended vide GSR 797(E) dated 31.10.2022 and GSR 195(E) dated 14.03.2024.
3. GSR 714 (E) dated 04.10.2021 provides for upward revision of registration fee, fitness testing fee and fitness certification fee of vehicles. The notification has come into force with effect from 1st April, 2022.
4. GSR 720 (E) dated 05.10.2021 provides for concession in the motor vehicle tax for the vehicle registered against submission of "Certificate of deposit". The notification has come into force with effect from 1st April, 2022.
5. GSR 272(E) dated 05.04.2022 provides for mandatory fitness of motor vehicles only through an Automated Testing Station, registered in accordance with rule 175 of the Central Motor Vehicle Rules 1989, as under:
 - (i) For Heavy Goods Vehicles/Heavy Passenger Motor Vehicles with effect from 01st April 2023 onwards, and
 - (ii) For Medium Goods Vehicles/Medium Passenger Motor Vehicles and Light Motor Vehicles (Transport) with effect from 01st June 2024 onwards.
6. GSR 663(E) dated 12.09.2023 provides for extension of date for mandatory testing of Transport Vehicles through an Automated Testing Station, registered in accordance with rule 175 of the Central Motor Vehicle Rules 1989 to 01st October 2024.
7. GSR 709(E) dated 14.11.2024 provides for extension of date for mandatory testing of Transport Vehicles through an Automated Testing Station, registered in accordance with rule 175 of the Central Motor Vehicle Rules 1989 to 01st April 2025.
8. GSR 29(E) dated 16.01.2023 provides that Certificate of registration for

vehicles owned by Central, States and UT governments and their Departments, Local government (Municipal Corporations or Municipalities or Panchayats), State transport Undertakings, PSUs and other Autonomous bodies with the Central Government and State Governments, shall not be renewed after the lapse of fifteen years.

9. GSR 74(E) dated 24.01.2025 provides draft rules for enhanced concession of upto fifty percent in Motor Vehicle Tax on vehicles registered against submission of "Certificate of Deposit" for scrapped vehicles with Bharat Stage I (BS-I) and earlier Mass Emission norms and all medium & heavy goods and passenger motor vehicles with Bharat Stage II (BSII) Emission norms.

Current Implementation Status (as on 24th February 2025):

(1) Vehicle Scrapping:

(i) **90 RVSFs are operational** across 20 States / UTs.

(ii) **1,83,700 vehicles scrapped in total** of which **96,500 are Government vehicles.**

(2) Vehicle Fitness Testing: **105 Automated Testing Stations are operational** across 14 States/UTs.

(3) Citizen Incentives: **Motor Vehicle Tax concession** against 'Certificate of Deposit' (CD) issued on scrapping of vehicles announced by **26 States/UTs.**

Fwd: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A.No.605/2024 pending before Hon'ble NGT-Reg. Court Matter

PA Pankaj Agarwal <pagarwal.cpcb@gov.in>
Tue, 04 Mar 2025 10:24:30 AM +0530
To "Ankush Tewani" <ankush.cpcb@nic.in>, "Gautam Kumar Sharma" <gautam.cpcb@gov.in>

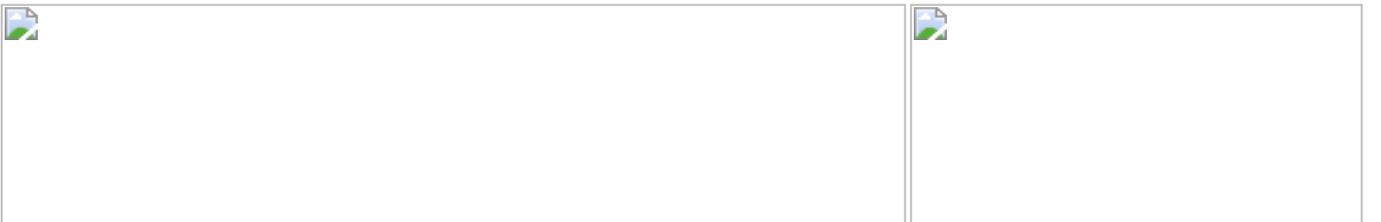
==== Forwarded message =====
From: Vijay Ramdas Thakre <feedfodder15-ahd@gov.in>
To: "Pankaj Agarwal" <pagarwal.cpcb@gov.in>
Cc: "Madhu Surya" <madhu.surya@nic.in>, "Mahendra Kumar Sagar" <mksagar-cwc@gov.in>, "Dr. H.R.Khanna" <hansraj.khanna@gov.in>
Date: Mon, 03 Mar 2025 18:53:29 +0530
Subject: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A.No.605/2024 pending before Hon'ble NGT-Reg. Court Matter
==== Forwarded message =====

Sir
Please find the attached inputs from this department for necessary information.

--

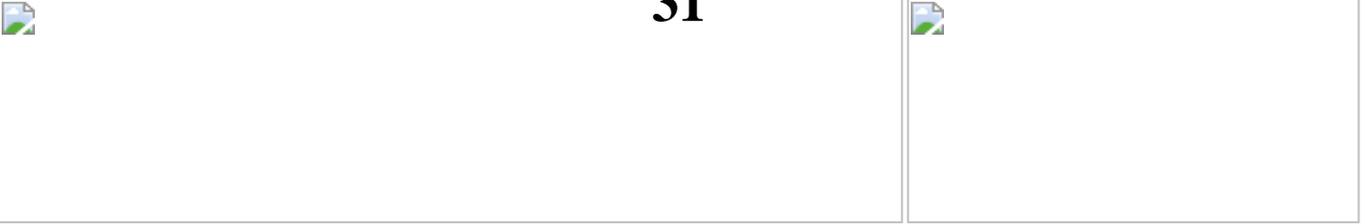
सादर (Regards),

विजय ठाकरे/ Vijay Thakre
निदेशक (आरएफएस) मुख्यालय/ Director (RFS) HQ
भारत सरकार / Government of India
पशुपालन और डेयरी विभाग / Department of Animal Husbandry and Dairying
मत्स्य पालन, पशुपालन और डेयरी मंत्रालय / Ministry of Fisheries, Animal Husbandry and Dairying
चंद्रलोक बिल्डिंग/Chanderlok Building,
जनपथ/Janpath
नई दिल्ली / New Delhi-110001
Ph 011-23311039



76

31



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NGT court case 6052024.pdf
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R-24017/1/2025-DIR ANLM [E33643]

भारत सरकार / Government of India

मत्स्य पालन, पशुपालन और डेयरी मंत्रालय /

Ministry of Fisheries, Animal Husbandry and Dairying

पशुपालन और डेयरी विभाग /Department of Animal Husbandry and Dairying

चंदरलोक बिल्डिंग/Chanderlok Building,

जनपथ/Janpath

नई दिल्ली / New Delhi-110001

Dt. February 27,2025

To

Dr. P.Agarwal

Scientist 'F'and Head

Air Quality Management Division

Central Pollution Control Board

Ministry of Environment,Forest and Climate change

Parivesh Bhawan East Arjun Nagar Delhi -110031.

Subject: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A.No.605/2024 pending before Hon'ble NGT-Reg. Court Matter

Sir,

I am directed to refer your letter No.CM-13011/145/2024-LAW-HO-CPCB-HO dated 29.1.2025 on above cited subject wherein it is requested to share the inputs with CPCB on how effectively the measures are being implemented on the following

- Status of implementation of Balanced Ration for Livestock ,which promotes Optimum feeding of animals through Ration Balancing Programme (RBP)
- Status of implementation of Feeding bypass proteins, wherein the use of protein supplement within the ruminant system is optimized.

2. In this connection, the matter were taken up with the National Dairy Development Board Anand for furnishing the inputs on the same.

3.The NDDB vide their letter dt 24 th Feb 2025 has informed that National Dairy Development Board initiated a large-scale pilot of the Ration Balancing Programme (RBP) to educate milk producers on the scientific feeding of their animals. Under the National Dairy Plan (Phase-I), RBP was successfully implemented in 18 states, covering 2.8 million milch animals owned by

2.2 million farmers. The programme was implemented by dairy cooperatives with the support of trained Local Resource Persons (LRPs). After the completion of NDP-I, the e-Gopala Android application was developed to enable farmers to formulate balanced rations on their own. This service has now been integrated into the 1962 Farmer App.

Similarly, NDDDB has standardised, commercialised and promoted Bypass Protein feed technology to improve protein utilisation efficiency of high yielding animals. As a result, since 2002, total 21 bypass plants for commercial production of Bypass protein feed have been successfully established in all major dairy cooperatives.

NDDDB has continued coordination with cooperative milk unions, milk producer companies, NGOs and farmers for increasing adoption of Ration Balancing and providing technical support to milk unions and private entrepreneurs for promoting Bypass Protein feed technology at a larger scale. As a result, dairy farmers/cooperative milk unions are now successfully adopting Ration Balancing and Bypass Protein feed. However, NDDDB does not compile the data/information pertaining to these activities.

The information as received from the NDDDB may be considered as input from DAHD and accordingly CPCB for take further action.

Your's faithfully,



(H.R.Khanna)

Joint Commissioner (NLM)

Encl: a/a

Copy for information to :

1. Sr.PPS to Secretary (AHD),Krishi Bhawan New Delhi
2. PPS to AHC,DAHD Chandralok Buidling New Delhi



राष्ट्रीय डेरी विकास बोर्ड
National Dairy Development Board

CEO:DAHD- 40/2025

24 February 2025

Shri Vijay Thakre
Director (RFS) HQ
Department of Animal Husbandry & Dairying
Ministry of Fisheries, Animal Husbandry & Dairying
Government of India
Krishi Bhawan, New Delhi- 110 001

Sub: Measures undertaken for control of emissions of ozone and its precursors
in the matter of O.A.No. 605/2024 pending before Hon'ble NGT-Reg. Court
Matter

Sir,

The National Dairy Development Board initiated a large-scale pilot of the Ration Balancing Programme (RBP) to educate milk producers on the scientific feeding of their animals. Under the National Dairy Plan (Phase I), RBP was successfully implemented in 18 states, covering 2.8 million milch animals owned by 2.2 million farmers. The programme was implemented by dairy cooperatives with the support of trained Local Resource Persons (LRPs). After the completion of NDP-I, the e-Gopala Android application was developed to enable farmers to formulate balanced rations on their own. This service has now been integrated into the 1962 Farmer App.

Similarly, NDDB has standardised, commercialised and promoted Bypass Protein feed technology to improve protein utilisation efficiency of high yielding animals. As a result, since 2002, total 21 bypass plants for commercial production of Bypass Protein feed have been successfully established in all major dairy cooperatives.

NDDB has continued coordination with cooperative milk unions, milk producer companies, NGOs and farmers for increasing adoption of Ration Balancing and providing technical support to milk unions and private entrepreneurs for promoting Bypass Protein feed technology at a larger scale. As a result, dairy farmers/ cooperative milk unions are now successfully adopting Ration Balancing and Bypass Protein feed. However, NDDB does not compile the data/information pertaining to these activities.

In the light of the above, we sincerely regret to inform you that we would not be in a position to provide the information sought by you.

Thanking you,

Yours faithfully,
For National Dairy Development Board

Rajesh Kumar

Rajesh Kumar
CEO Office

No. 16-9/2019-M&T-I&P-Part II (84337)
 Government of India
 Ministry of Agriculture & Farmers Welfare
 (Department of Agriculture & Farmers Welfare)
 Mechanization & Technology Division

573, Krishi Bhawan, New Delhi -110001

Dated: 4th April, 2025

Subject: Measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- regarding.

The undersigned is directed to refer letter No. CM-13011/145/2024-LAW-HO-CPCB-HO dated 29th January, 2025 on the above subject. In this connection, please find attached herewith the requisite information as under for further necessary action.

Sr. No.	Particulars	Inputs
1.	Status of implementation of Sub-Mission on Agricultural Mechanization and scheme for promoting in-situ management of crop residue.	Inputs of M&T Division is enclosed as Annexure-I
2.	Status of implementation of Promoting System of Rice Intensification as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)	Inputs received from Crops Division is enclosed as Annexure-II
3.	Status of implementation of Increasing area under Direct Seeded Rice (DSR) as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)	
4.	Status of implementation of Promoting crop diversification (being implemented in the states of Punjab, Haryana and Uttar Pradesh since 2013-14)	

This is issued with the approval of Competent Authority of this Department.

Encl: As above



(A. N. Meshram)

Deputy Commissioner (M&T)

Tel: 23382922

Email: arvind.meshram@gov.in

To:

Shri P. Agrawal,
 Scientist 'F' and Head,
 Air Quality Management Division, Central Pollution Control Board,
 Ministry of Environment, Forest & Climate Change,
 Parivesh Bhawan, East Arjun Nagar,
 Delhi – 110032

A) Sub-Mission on Agricultural Mechanization (SMAM):**1. Objectives of Sub-Mission on Agricultural Mechanization**

- (i) Increasing the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low;
- (ii) Promoting Custom Hiring Services of agricultural machines to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership;
- (iii) Creating awareness among stakeholders through demonstration, capacity building activities and differentiated Information, Education and Communication strategies;
- (iv) Ensuring performance testing and certification at designated testing centers located all over the country;

2. Various components of Sub-Mission on Agricultural Mechanization and Pattern of Assistance under these components

- (a) Financial assistance to farmers for procurement of farm machinery and equipments on individual ownership basis - Financial assistance @ 50% of the cost of machine for small and marginal farmers, farmers of the Scheduled Caste and Scheduled Tribe category, women farmers and farmers of the North Eastern States and Himalayan Regions & 40% for all other farmers
- (b) Establishment of Custom Hiring Centres (CHCs - financial assistance @ 40% of the project cost is provided to the Rural Entrepreneurs (Rural youth and farmer as an entrepreneur), Cooperative Societies of Farmers, DAY-NRLM Self Help Groups (SHGs), Registered Farmers Societies, Farmer Producer Organizations (FPOs) and Panchayats for establishment of custom hiring centres
- (c) Establishing Village Level Farm Machinery Banks (FMBs)- financial assistance @ 80% of the project cost is provided to the Cooperative Societies of Farmers, Registered Farmer Societies, Self Help Groups, FPOs and Panchayats
- (d) Promotion of Agricultural Mechanization in North Eastern Region :- financial assistant @ 100% of cost of machine costing up to Rs. 1.25 lakhs will be provided for farmers & financial assistance @ 95% of the project cost is provided to the Cooperative Societies of Farmers, Registered Farmer Societies, Self Help Groups (SHGs), FPOs and Panchayats for establishing Farm Machinery Banks (FMBs)
- (e) Financial Assistance for Mechanized operations :- The financial assistance upto @ 2000/ha for hiring of Drones from the Custom Hiring Centres, Women SHGs to Small and Marginal Farmers upto 2 ha. in identified villages in low mechanized states.
- (f) Demonstration of newly developed agricultural/ horticultural/ crop residue management machines post-harvest technologies and Kisan Drones at farmers' fields - provided grants @ 100% of the cost for purchase of machinery and equipments including Kisan Drones for conducting their demonstrations on the farmers' fields to Implementing Agencies like FMTTIs, State identified institutions, ICAR institutions, ATMA institutions, KVKs under ICAR/SAUs, National Innovation Foundation (NIF), PSUs of GOI & @ 75% for the FPOs
- (g) Skilling in field of farm mechanization, post-harvest management and Kisan Drones- Assistance will be available as per the Common Norms for Skill Development Schemes of the Government of India as notified by the Ministry of Skill Development & Entrepreneurship (as may be amended from time to time).
- (h) Testing of agricultural machines and equipments for performance evaluation- provided one time grant of Rs. 1.5 crores each to implementing institutions to FMTTIs and Authorized Centres under ICAR/SAUs/State/ Central Governments as per their proposals for augmenting the facilities and infrastructure for testing.

3. Benefits accrued to the Farmers (Since inception of SMAM)

- (i) During the period from 2014-15 to 2024-25 (as on 28.02.2025), an amount of Rs. 8565.00 crores have been allocated for various activities such as training of farmers, testing of machinery for quality check, demonstration of technologies on farmer's field for its speedy adoption, subsidy for purchase of agricultural machines by the farmers, establishment of Custom Hiring Centres, Hi-tech hubs of high cost machinery and village level farm machinery banks to ensure easy availability of agricultural machines and equipments to the farmers on rental basis.
- (ii) 146601 trainees have been trained on various aspects of agricultural mechanization which has helped them in improving their skill levels for efficient operations thereby saving in cost of operations. It has also created employment /self-employment opportunities.
- (iii) Total 14061 various types of machines and equipments have been tested with a view to provide quality and safe machines to farmers.
- (iv) 69053 demonstrations have been conducted which has resulted in adoption of advanced agricultural machines in the agricultural production system for higher productivity.
- (v) 19,51,080 numbers of various machines and equipments have been provided to the farmers on subsidy which has resulted in reduction in cost of operations, higher productivity of the farms and higher income to the farmers
- (vi) 26801 Custom Hiring Centres have been established which have avoided unnecessary investment by the farmers in purchasing and maintaining the machines. On the other hand, it has brought additional income to custom Hiring Centre operators and gave access to mechanization for all groups of farmers irrespective of the size of their holdings.
- (vii) 702 Hi-tech hubs have been established which have gained access to latest technology they would otherwise not be able to afford for managing the high value and cash crops
- (viii) 24670 Farm Machinery Banks have been established at the village levels which have provided easy access of farm machinery and equipments to the small and marginal farmers of the low mechanized areas.

B) Paddy Straw Management

1.0 Background

- In order to support the efforts of the concerned state governments to address air pollution and to subsidize machinery for management of crop residue, a Scheme on Crop Residue Management in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi' was introduced in 2018-19. The scheme focuses on management of crop residue through various in-situ and ex-situ management options. The Scheme was 100% centrally funded w.e.f. 2018-19 to 2022-23. On the recommendations of Expenditure Finance Committee (EFC), the scheme has been merged with Sub-Mission on Agricultural Mechanization (SMAM) w.e.f. 2023-24 and is being implemented under the Umbrella of Rashtriya Krishi Vikas Yojana (RKVY) as Centrally Sponsored Scheme with funds sharing between Centre and State in 60 (Centre):40(State) ratio.

2.0 In-situ Management

- The Scheme promotes the usage of machines such as Super Straw Management Systems, Happy Seeder, Super Seeder, Smart Seeder, Surface Seeder, Zero till seed cum fertilizer drill, Mulcher, Paddy Straw Chopper, Hydraulically Reversible Mould

Board plough, Crop reapers and Reaper binders for in-situ management of crop residue.

- Under the scheme, financial assistance @ 80% of the project cost for the projects costing up to Rs. 30 lakhs is provided for establishment of Custom Hiring Centres (CHCs) of crop residue management machinery by Rural Entrepreneurs, Cooperative Societies of Farmers, Registered Farmers Societies, Farmer Producer Organizations (FPOs) and Panchayats to make available machines and equipments on rental basis.
- Financial assistance @ 50% of the cost of machinery is provided to farmers for procurement of crop residue management machinery on individual ownership basis.

3.0 Ex-situ Management

- Subsidy for balers @ 50% of the cost for individual farmers and @ 80% under CHCs is provided.
- With a view to enable efficient ex-situ management of paddy straw, provisions have been made w.e.f. 2023-24 to establish techno-commercial projects for paddy straw supply chain with a flexibility in financial contribution of beneficiary/ aggregator (Farmers, Rural entrepreneurs, Cooperative Societies of farmers, Farmers Producer Organizations (FPOs) and Panchayats) and Industries utilizing the paddy straw. The Government provides financial assistance @ 65% on the capital cost of machinery costing up to Rs. 1.50 crores. Minimum 10% of the project cost has to be contributed by the beneficiary/aggregator. The intervention aims at establishing a robust supply chain of paddy straw for various end user industries in biomass power generation and biofuel sectors.

4.0 Information Education and Communication (IEC) Activities:

- Under the scheme, the funds are also provided to the State Governments and Krishi Vigyan Kendras (KVKs) of ICAR for undertaking Information, Education and Communication (IEC) activities on a massive scale for creating awareness among farmers which include Print and electronic media advertisements, awards to the Gram Panchayats for zero burning, awareness programmes/ Kisan Melas, Columns /articles, TV Programmes and Panel Discussions, Hoardings, Posters and banners at prominent locations, Publicity materials distribution - leaflets & pamphlets, Radio Jingles, TV Scrolls & films on television channels, Training of Farmers & demonstration of technologies at farmers' fields, Mobilization of School Students etc.

5.0 Use of Bio-decomposer

- The Indian Council of Agricultural Research (ICAR) has developed Pusa Decomposer, a microbial consortium of fungal species (in liquid, capsule and powder forms) for rapid decomposition of paddy straw. Use of this consortium accelerates process of paddy straw decomposition in the field itself in 20-25 days. Provisions have been made under Crop Residue Management Scheme for conducting large-scale demonstration of bio-decomposer technologies on the farmers' fields by State Governments, Krishi Vigyan Kendras (KVKs) and institutions under Indian Council of Agricultural Research (ICAR) by engaging service providers/custom hiring centres, having adequate resources.

6.0 Fund Released [2018-19 to 2024.25 (as on 12.02.2025)] (Rs. in crore)

State	Funds released since 2018-19 to 2023-24	Funds released in 2024-25	Total Fund released	Percentage of total fund
Punjab	1531.45	225.00	1756.45	47.49%
Haryana	1006.71	75.00	1081.71	29.24%
UP	713.67	50.00	763.67	20.65%
NCT of Delhi	6.05	0.00	6.05	0.16%
ICAR and Others	82.18	8.39	90.57	2.45%
Total			3698.45	

7.0 Physical Achievements**[since 2018-19 to 2024-25 (as on 31.01.2025)]**

State/ Agency	No. of machines distributed since 2018-19 to 2023-24	No. of machines distributed in 2024-25	Total Number of Machines distributed	Percentage
Punjab	130851	16817	147668	45.67%
Haryana	91038	9844	100882	31.20%
Uttar Pradesh	71976	2572	74548	23.06%
Delhi	247	0	247	0.07%
Total			323345	

State/ Agency	No. of CHCs established since 2018-19 to 2023-24	No. of CHCs established in 2024-25	Total No. of Custom Hiring Centres Established	Percentage
Punjab	24736	1181	25917	61.75%
Haryana	6775	0	6775	16.14%
Uttar Pradesh	9073	203	9276	22.10%
Delhi	0	0	0	0
Total			41968	

- Of the total machines supplied, maximum number of machines (45.67% of total machines) have been supplied in the State of Punjab and maximum number of Custom Hiring Centres (61.75% of the total) have been established in Punjab.

8.0 Detailed Ex-situ utilization of Paddy Straw during 2024:**Figures in Million Tonnes**

Sr. No.	Application	Ex-situ utilization of Paddy Straw in Million Tonnes	
		Punjab	Haryana
1	Industrial boilers and furnaces	4.00	1.03
2	Biomass based power generation	1.01	0.83
3	CBG Plants	0.35	0.10
4	2G Bio-ethanol plants	0.20	0.20
5	Co-firing in TPPs	0.74	0.28
6	Brick kilns and misc.	0.36	0.10
	Total Ex-situ utilization	6.66	2.54

9.0 Reduction on Paddy Stubble Burning:

State	Incidences of Paddy Stubble Burning in the States (Numbers)							
	2017	2018	2019	2020	2021	2022	2023	2024
Punjab	67079	59664	50735	83002	71304	49922	36650	10909
Haryana	13085	9227	6364	4202	6987	3661	2296	1406
UP whole (UP NCR)	8784 (492)	6623 (208)	4230 (204)	4631 (407)	4242 (252)	3017 (198)	3985 (212)	6142 (414)
Total	88948	75514	61329	91835	82533	56600	42931	18457

Reduction in Paddy Stubble Burning incidence in 2024

- 79.2% Reduction in comparison to 2017
- 75.6 % reduction in comparison to 2018
- 67.4% Reduction in comparison to 2022
- 57.0% Reduction in comparison to 2023

Due to the concerted efforts of the Govt, burning incidents have reduced by 57% as compared to last year.

F.No. 15-1/2024-CU-II
 Government of India
 Ministry of Agriculture & Farmers Welfare
 Department of Agriculture & Farmers Welfare
 Division of Crops and Post Harvest Management of Foodgrain

Krishi Bhawan, New Delhi,
 Dated: 21st February, 2026

Subject: Inputs on measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- regarding.

The undersigned is directed to refer to the M&T Division's email dated 18.02.2025 on the subject cited above.

2. So far as Crops Division is concerned, the inputs on the points no. ii, iii & iv of Hon'ble National Green Tribunal are as under:

Sr. No.	Particulars	Inputs of Crops Division
ii.	Status of implementation of Promoting System of Rice Intensification as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)	<ul style="list-style-type: none"> • National Food Security and Nutrition Mission (NFSNM) programme is being implemented in identified districts of 28 States and 2 UTs viz: J&K and Ladakh with the objective to Increase production of rice, wheat, pulses, coarse cereals (Maize and Barley) and Nutri-Cereals. • Under NFSNM Rice, assistance is given through State/UTs governments to farmers for interventions like cluster demonstrations on improved package of practices, distribution of seeds of High Yielding Varieties (HYVs)/hybrid, plant protection measures, nutrient management/soil ameliorants, cropping system based trainings to the farmers etc.
iii.	Status of implementation of Increasing area under Direct Seeded : Rice (DSR) as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)	<ul style="list-style-type: none"> • Under NFSNM-Rice, State/UTs may conduct various types of demonstration such as System Rice Intensification (SRI), Direct Seeded Rice (DSR) and Line transplanting, Cropping system based demonstration. • The 24 States & UT of J&K are covered under NFSNM-Rice. However, state of Punjab & Haryana are not covered under NFSNM-Rice. • The "Bringing Green Revolution to Eastern India" (BGREI) program was discontinued in 2021,

		signifying the end of this initiative aimed at increasing agricultural productivity in the eastern Indian states by addressing constraints in rice-based cropping systems; this program was primarily focused on states like Assam, Bihar, Chhattisgarh, Jharkhand, Odisha, Eastern Uttar Pradesh, and West Bengal.
iv.	Status of implementation of Promoting crop diversification (being implemented in the states of Punjab, Haryana and Uttar Pradesh since 2013-14)	<ul style="list-style-type: none"> • Crop diversification Programme (CDP) is being implemented under Pradhan Mantri - Rashtriya Krishi Vikas Yojana (PM-RKVY) in Original Green Revolution States namely Haryana, Punjab and western Uttar Pradesh to divert the area of water guzzling paddy to alternative crops viz; pulses, oilseed, coarse cereals, nutri cereals (Shree Anna), cotton and Agroforestry since 2013-14. • The Government of India also provides flexibility to the states for state specific needs/priorities under Pradhan Mantri - Rashtriya Krishi Vikas Yojana (PM-RKVY). • The states can promote crop diversification under PM-RKVY with the approval of State Level Sanctioning Committee (SLSC).

Manisha Meena
21/2/25
(Manisha Meena)
AD (Crops)

Deputy Commissioner (M&T)
Room No. 573
M&T Division
DA&FW, Krishi Bhawan
New Delhi

F.No. 15-1/2024-CU-II
Government of India
Ministry of Agriculture & Farmers Welfare
Department of Agriculture & Farmers Welfare
Division of Crops and Post Harvest Management of Foodgrain

Krishi Bhawan, New Delhi,
Dated: 4th April, 2025

Subject: Inputs on measures undertaken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- regarding.

The undersigned is directed to refer to the M&T Division's D.O. letter No. 13-12/2020-M&T (I&P) dated 31.03.2025 on the subject cited above.

2. So far as Crops Division is concerned, the inputs on the points no. ii, iii & iv of Hon'ble National Green Tribunal has already provided to M&T Division vide letter No. 15-1/2024-CU-II dated 21.02.2025 (copy enclosed). However, after discussion with officials of M&T Division, the financial and physical progress of NFSNM and CDP are as under:

ii. & iii. The Fund released for the state of Uttar Pradesh under NFSNM-Rice

(Rs. in crores)

Sr. No.	State	Total Fund Released (from the year 2018-19 to 2024-25)
1.	Uttar Pradesh	81.37

• Physical Achievement for demonstrations (DSR/SRI/Line transplanting) for the state of Uttar Pradesh under NFSNM-Rice:

(Area: in hectares)

Sr. No.	State	Total demonstrations (from the year 2018-19 to 2024-25)
1.	Uttar Pradesh	32,451

iv. The Fund released under Crop Diversification Programme (CDP) for replacing paddy:

(Rs. in Lakhs)

Sr. No.	State	Total Fund Released (from the year 2013-14 to 2024-25)
1.	Haryana	37767.00
2.	Punjab	23013.00
3.	Western Uttar Pradesh	20428.29
Total		81208.29

• Physical Achievements (Alternative crop demonstrations) under CDP for replacing paddy:

(Area: in hectares)

Sr. No.	State	Total area (from the year 2013-14 to 2024-25)
1.	Haryana	192910
2.	Punjab	280925
3.	Western Uttar Pradesh	134149
Total		607983

Manisha Meena
(Manisha Meena)
AD (Crops)
4/4/2025

Deputy Commissioner (M&T)
Room No. 573
M&T Division
DA&FW, Krishi Bhawan
New Delhi

12(12)/2025-AEI (30715)
Government of India
Ministry of Heavy Industries
AEI Section

Udyog Bhawan, New Delhi-11
Dated: 11th April, 2025

To

Sh. P. Agarwal,
Scientist 'F' and Head
Air Quality Management Division
Central Pollution Control Board,
M/o Environment, Forest & Climate Change
Parivesh Bhawan, East Arjun Nagar
Delhi-110032

Subject: - Measures under taken for control of emissions of ozone and its precursors in the matter of O.A. No. 605/2024 pending before Hon'ble NGT- reg.

Sir,

I am directed to refer to your letter No. CM-13011/145/2024-LAW-HO-CPCB-HO dt 24.03.2025 and dt 29.01.2025 on the subject captioned above.

2. In view of above, point-wise response of MHI is as under:

S. No.	Measures	Remarks
i.	Status of implementation of PM Electric Drive Revolution in Innovative Vehicle Enhancement (PME-DRIVE) Scheme.	<p>1. Overall, India's e-mobility sector is poised for significant growth, driven by supportive policies. The growth story of electric mobility is visible by numbers below:</p> <p>i. In the Financial Year 2024-25, a total of 11,49,334 electric two-wheelers (e-2W) were sold, reflecting a 21% increase compared to 9,48,561 units sold in FY 2023-24.</p> <p>ii. Similarly, the sales of electric three wheelers e-3W (L5) reached 1,59,235 units in FY 2024-25, marking a 57% growth over the 1,01,581 units sold in the previous financial year.</p> <p>2. Under the PM E-DRIVE scheme in FY 2024-25, 10,10,101 nos of e-2W, 1,22,982 nos of e-3W(L5) have been registered in VAHAN portal. Sales of more than one million of EVs have taken place in FY 2024-25.</p> <p>3. The scheme's impact Data till 31 March 2025 is reflected in the following key environmental benefits:</p> <ul style="list-style-type: none"> Fuel saving per day: 8,55,723 litres Total fuel saved: 15,77,33,334 litres

		<ul style="list-style-type: none"> • CO2 reduction per day: 12,48,100 kg • Total CO2 reduction: 23,01,73,978 kg <p>This initiative by the Government of India is set to address critical challenges related to environmental pollution and fuel security while advancing sustainable transportation solutions.</p>
ii.	Status of notification of policies to promote the use of EVs at State/UT level	The PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme has been notified on 29.09.2024 by Ministry of Heavy Industries (MHI) to provide impetus to the green mobility & development of EV manufacturing eco-system in the country. The scheme has an outlay of Rs.10,900 crore over a period of two years from 01.04.2024 to 31.03.2026. The Electric Mobility Promotion Scheme (EMPS) 2024 implemented for the period of six months from 01.04.2024 to 30.09.2024, is subsumed in PM E-DRIVE scheme. The scheme is being implemented on Pan India basis to promote the use of EVs in states/UTs.

3. This issues with approval of the competent authority.



(Ajay Kumar)

Under Secretary to the Govt. of India

011-23061531

Annexure-III

Summary of the implementation status against the measures undertaken by the Government for control of ozone and its precursors

Name of the concerned Ministry/ Department/ agency	Measure/initiative undertaken	Implementation status
CPCB	Implementation of Waste management rules w.r.t solid waste, bio-medical waste, and hazardous wastes etc. and EPR (Extended Producer Responsibility) regime for plastic waste, e-waste, used oil, tyre, etc.	Solid Waste Management Rules 2016, Hazardous and Other Wastes (Management and Transboundary Movement) [HOWM] Rules, 2016, Battery Waste Management Rules, 2022 and E-Waste (Management) Rules, 2022 have been notified by the Ministry of Environment Forest & Climate Change (MoEF&CC), Government of India for handling and management of waste in environmentally sound manner.

		<p>Regulations for Extended Producer Responsibility (EPR) regime on Used Oil, End-of-Life Vehicles (ELV), batteries, e-waste, waste tyre and plastic waste have been notified by the Government of India and their implementation is in progress through online portals developed by CPCB.</p> <p>Under the EPR regime, the producers are obligated to meet certain targets, which are to be fulfilled through EPR certificates/credits provided by recyclers.</p> <p>As on 11.04.2025, against cumulative EPR obligations of 2,41,12,679 MT for plastic waste, e-waste, battery waste and tyre</p>
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waste, 1,60,26,034 MT have been achieved.

For solid waste management, a total of 62.17 Million tonnes of municipal solid waste is generated annually in the country and 57.1 million tonnes/annum is collected. Further, 33.4 million tonnes/annum is processed/treated and 15.13 million tonnes/annum is disposed off in landfills.

Various enforcement measures have been taken by CPCB to implement the rules and EPR regulations, including preparation of several SOPs and guidelines and issuance of directions.

Further, prohibition on manufacture, import, stocking, distribution,

		<p>sale and use of some single use plastic items which have low utility and high littering potential has also been notified by MoEF&CC. Workshops and awareness activities have also been carried out in this regard.</p> <p>Implementation of waste management rules and EPR regime ensures proper and scientific management of waste, thereby preventing the waste from burning and minimising VOC and CO emissions.</p>
<p>ULBs/SPCBs/PCCs & State Transport department (implementing agency)</p>	<p>Action points for control of NOx emissions, covered under NCAP.</p>	<p>National Clean Air Programme (NCAP) is an ongoing multi-sectoral initiative involving the coordinated efforts of the Central and State Governments, Urban Local Bodies (ULBs), and other stakeholders. It</p>

emphasizes source-specific mitigation measures through city, state, and national-level clean air action plans.

With regard to the actions to control NOx emissions, as reported by ULBs of cities under NCAP, it is submitted that off-peak passenger travel time to move freight and restricting heavy vehicle entry into cities during day time is being implemented in 121 cities; clean fuel outlets (CNG/ LPG/ Blended Fuel/ Ethanol) have been established in 113 cities; Electric/ CNG buses for public transport are operational in 57 cities; EV charging stations have been established in 95 cities; Vehicle Scrappage Policy has been notified for 114 cities; Online

		<p>Continuous Emission Monitoring System (OCEMS) Installed in industries of 113 cities to monitor emissions from industries;</p> <p>Red/Orange/Green category industries are being operated in designated areas in 85 cities; Conversion of industries to CNG/PNG from pet coke/wood/coal/Furnace oil has been done in 75 cities; For regular check and control of municipal solid waste burning, Public Grievance Redressal System (PGRS)/ Helpline number have been developed in 130 cities.</p>
Implementation w.r.t Transport Sector		
Ministry of Petroleum and Natural Gas (MoPNG)	Implementation of BS VI norms in vehicles	Only BS-VI compliant vehicles are permitted to be registered across the country from 01.04.2020.

		BS-VI vehicles have lower NOx and CO emissions as compared to BS-IV compliant vehicles.
Ministry of Petroleum and Natural Gas (MoPNG)	Supply of BS-VI fuel	<p>BS-VI fuel supply is available across the country from 01.04.2020.</p> <p>BS-VI fuel has 5 times less Sulphur content as compared to BS-IV compliant fuel, enabling the introduction of advanced emission control technologies, which can help reduce NOx emissions</p>
CPCB	Installation of Vapour Recovery System (VRS) at petrol pumps	VRS have been installed at over 3200 petrol pumps in Delhi-NCR and over 2000 petrol pumps across the country, as per Hon'ble NGT, Hon'ble Supreme Court, and CPCB's directions.

		Installation of VRS minimises the release of Benzene and other VOC emissions during petroleum refuelling and unloading operations.
Ministry of Heavy Industries	Promoting electric mobility under the PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme launched in September, 2024	Under the PM E-DRIVE scheme in FY 2024-25, 10,10,101 nos. of e-2W, 1,22,982 nos. of e-3W(L5) have been registered in VAHAN portal. Sale of more than one million of EVs have taken place in FY 2024-25. Electric vehicles do not release any emissions.
Ministry of Heavy Industries	State Electric Vehicle (EV) policies, to promote the use of EVs.	The PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme has been notified on 29.09.2024 by Ministry of Heavy Industries (MHI) to provide impetus to the green mobility & development

		<p>of EV manufacturing eco-system in the country. The scheme has an outlay of Rs. 10,900 crore over a period of two years from 01.04.2024 to 31.03.2026. The scheme is being implemented on Pan India basis to promote the use of EVs in states/UTs.</p>
<p>Ministry of Petroleum and Natural Gas (MoPNG)</p>	<p>Blending of ethanol in petrol under the Ethanol Blended Petrol (EBP) Programme</p>	<p>The supply of ethanol to Public Sector Oil Marketing Companies (OMCs) for petrol blending has increased over 13 times from Ethanol Supply Year (ESY) 2013-14 to ESY 2023-24, with blending rising from 1.53% to 14.6%. This aligns with the roadmap for ethanol blending in India 2020-25. Since May 2024, OMCs have consistently blended over 15% ethanol, reaching</p>

		<p>17.44% as of 31.01.2025 in ESY 2024-25.</p> <p>Use of ethanol blended fuel is expected to reduce CO and HC emissions.</p>
<p>Ministry of Road Transport and Highways of India (MoRTH)</p>	<p>Vehicle Scrapping Policy for creation of an ecosystem to phase out older, unfit polluting vehicles through a network of Registered Vehicle Scrapping Facilities (RVSFs) and Automated Testing Stations (ATSs)</p>	<p>The Voluntary Vehicle-Fleet Modernization Program (V-VMP) or "Vehicle Scrapping Policy" is aimed at creating an eco-system for phasing out of unfit and polluting vehicles in an eco-friendly manner. The policy targets voluntary scrapping of unfit commercial and personal vehicles strictly based on their fitness, irrespective of vehicle age. It is aimed at creating an eco-system for phasing out of unfit and polluting vehicles in an eco-friendly manner. For successful implementation of this policy, a network of Automated Testing</p>

Stations (ATS) and Registered Vehicle Scrapping Facilities (RVSF) is required to be set up across India.

Various notifications have been issued by MoRTH, including for establishment of RVSF, ATS, mandatory fitness testing of vehicles through ATS, granting Motor vehicle tax concession against 'Certificate of Deposit' issued on scrapping of vehicle, and non-renewal of Certificate of registration for vehicles owned by Central Government and State Governments after fifteen years.

As on 24.02.2025, 90 RVSFs are operational across 20 States/UTs. 1,83,700 vehicles have been scrapped in total of

		<p>which 96,500 are government vehicles.</p> <p>105 automated testing stations are operational across 14 states/UT for vehicle fitness testing.</p> <p>Motor vehicle tax concession against 'Certificate of Deposit' issued on scrapping of vehicles has been announced by 26 states/UTs.</p> <p>Environmental friendly disposal of older vehicles through scrapping facilities also reduces the emissions which would have been released, if these vehicles would have been disposed off through unauthorised centres.</p>
Implementation w.r.t Power Plants and Industries		
CPCB	Introduction of Industrial emission Standards for NOx and VOC for various sectors	Vide GSR 541(E) dated 6th August, 2021, MoEF&CC notified standards for Bulk Drug

	<p>NO_x emission standards for coal/lignite-based thermal power plants</p>	<p>and Formulation (Pharmaceutical) Industry in exercise of the powers conferred by Section 6 and 25 of the Environment (Protection) Act, 1986. The Notification stipulates limiting values for concentration of Benzene, Toluene, Acetonitrile, Dichloromethane, Xylene and Acetone in the Tank Farm Vents to minimize VOC emissions.</p> <p>The standards for NO_x emissions from coal/lignite based thermal power plants and cement plants have been notified by MoEF&CC.</p> <p>MoEF&CC vide notification dated 07.12.2015 prescribed the limit of NO_x emission as 600 mg/Nm³ for TPPs (units) installed before</p>
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		<p>31.12.2003, 450 mg/Nm³ for TPPs (units) installed between 01.01.2004 to 31.12.2016 (amended vide notification dated 19.10.2020) and emission limit of 100 mg/Nm³ for TPPs. It is to mention that emission limit of 100 mg/Nm³ for TPPs (units) installed after 01.01.2017 is under review by joint committee of CAQM, MoEF&CC, MoP, CEA, NTPC and CPCB in compliance of Hon'ble Supreme Court orders in WP(C) 13029 of 1985.</p> <p>The emission standards are enforced through consent mechanism by SPCBs/PCCs under the Air Act and compliance is monitored by SPCBs/PCCs.</p>
<p>Ministry of Power (MoP)</p>	<p>Promotion of installation of efficient Ultra Supercritical/Supercritical units</p>	<p>95 Supercritical units having capacity of 65,950 MW and 7 Ultra-supercritical units having capacity of 4,900 MW have been commissioned till 31.12.2024.</p> <p>These units are more efficient and have lower coal consumption and</p>

		<p>their emission per unit of electricity generation is less than sub-critical units.</p>
<p>Ministry of Power (MoP)</p>	<p>Utilization of Biomass for Power generation through co-firing in coal-based power plants</p>	<p>Total biomass co-firing in 11 nos. of thermal power plants within 300 kms of NCR in the month of December, 2024 is 1,51,426 MT (around 4.18 %). The cumulative biomass co-firing within 300 kms of NCR from April, 2024 to December, 2024 is 8,83,627.53 MT (around 2.25%). Cumulative Biomass usage till (31.12.2024) in 11 TPPs of NCR regions since start of co-firing is 11,77,256.15 MT.</p> <p>Combustion of biomass releases lower NOx emissions, as compared to coal combustion, and further, prevents emissions that would have been released on</p>

		open burning of biomass.
Ministry of Power (MoP)	Retirement of Inefficient and old thermal power plants	<p>Generation is a de-licensed activity as per Section 7 of the Electricity Act, 2003 and retirement of units are decided by Power generating Utilities/companies based on their own techno-economic, energy demand and environmental reasons.</p> <p>The inefficient and old thermal power plants having capacity of about 18,802.24 MW comprising 267 units have already been retired till 20.11.2024.</p>
Ministry of Power (MoP)	Increasing share of non-fossil fuel-based energy in cumulative electric power installed capacity, as per Intended Nationally Determined Contributions (INDCs)	<p>The non-fossil fuel installed capacity as on 31.12.2024 is about 47.1% (217.62 GW out of total 462.06 GW).</p> <p>Fossil fuel use (244.44 GW): Coal- 212.41 GW, Lignite- 6.62 GW, Gas-</p>

		<p>24.81 GW, Diesel- 0.589 GW</p> <p>Non-fossil fuel use (217.62 GW): Hydro- 46.96 GW, Wind- 48.16 GW, Solar- 97.86 GW, Bio-Power- 11.34 GW, Nuclear- 8.18 GW</p> <p>Use of non-fossil fuel based energy such as hydro, wind and solar, prevents release of emissions which would have been released, had fossil fuels like coal been used.</p>
<p>Implementation w.r.t abatement & control of Biomass burning, with emphasis on paddy straw in Northern India, to prevent release of emissions of CO and other pollutants</p>		
<p>CPCB</p>	<p>Financial support for establishment of pelletisation and Torrefaction plants to promote utilisation of paddy straw</p>	<p>CPCB has sanctioned ~Rs.15.03 crore for 16 applications for setting up paddy straw based pelletisation/torrefaction plants in the states of Punjab and Haryana and Rs. 12.75 crore has been released to 12 applicants.</p>

		Total pellet production capacity of 16 plants is 59.5 TPH and these are expected to utilise 2.79 lakh tonnes paddy straw annually.
Commission for Air Quality Management in National Capital Region and Adjoining Areas (CAQM)	Ex-situ utilisation of paddy straw in 11 Thermal Power Plants (TPPs) located within 300 km of Delhi	As per the review conducted in 2024 and the status provided by the NCR states of Haryana, Uttar Pradesh and Rajasthan, all the Captive Thermal Power Plants in the NCR districts are generally complying with the mandated co-firing.
Ministry of Power (MoP)	As per revised model contract for use of biomass in TPPs, issued by Ministry of Power, power plants within 300 kms of NCR shall use minimum 50% of raw material as stubble/straw/crop residue of rice paddy sourced from Punjab, Haryana or NCR.	Regarding co-firing of 5-10% biomass with coal in all the 11 coal based TPPs located within 300 Kms of Delhi, as per reports obtained from MoP, till February 2025 the 11 TPPs altogether co-fired about 11.4 Lakh MT of biomass pellets, which is about 50.3% of

the target i.e. 22.64 Lakh MT for the year 2024-25.

MoEFCC has notified The Environment (Utilization of Crop Residue by Thermal Power Plants) Rules, 2023 mandating all the 11 coal based thermal power plants (located within 300 km of Delhi) to use up to 3% pellets or briquettes made of crop residue along with coal for the year 2024-2025; and stipulates use up to 5% of pellets/ briquettes along with coal from the year 2025-2026 onwards with provision to impose and collect Environmental Compensation from such TPPs at the rates specified, for non-utilization of mandated percentage of crop residue based biomass pellets as specified.

<p>Ministry of Petroleum and Natural Gas (MoPNG)</p>	<p>Financial assistance to Compressed Bio-gas producers for procurement of biomass aggregation equipment for ex-situ management of paddy straw.</p>	<p>Total financial outlay of the scheme is Rs. 564.75 crore for the period of FY 2023-24 to FY 2026-27. Scheme guidelines have been issued on 2nd February, 2024..</p> <p>Under this scheme, eligible CBG producers can avail maximum financial assistance of 50% of the procurement cost of biomass aggregation machinery or Rs. 90 lakh per set (whichever is less). The financial assistance of Rs. 1.8 crore for 4 TPD CBG capacity project would be provided with a capping of Rs. 9 crore per project on pro rata basis.</p> <p>So far, in-principle approval for procurement of biomass aggregation machinery</p>
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		has been provided to 6 CBG projects.
Ministry of Agriculture & Farmers' Welfare (MoAFW)	Subsidy for purchase of crop residue management machinery and establishment of custom hiring centres (CHCs) in NCT of Delhi and the States of Punjab, Haryana and Uttar Pradesh for insitu management of paddy straw and establishment of crop residue/paddy straw supply chain, by providing financial assistance	<p>The 2018 scheme for providing machinery for management of crop residue has been merged with Sub-Mission on Agricultural Mechanization (SMAM) and is being implemented under the umbrella of Rashtriya Krishi Vikas Yojana (RKVY).</p> <p>Under the scheme, financial assistance is provided for procurement of machines for in-situ management (Super Straw Management Systems, Happy Seeder,, Mulcher, Paddy Straw Chopper, etc.) and ex-situ management (balers) of crop residue is promoted, along with establishment of is CHCs of crop</p>

		<p>residue management machinery.</p> <p>Further, during 2023-24, provisions have been made to establish techno-commercial projects for paddy straw supply chain.</p> <p>Besides the above, funds are also provided to the State Governments and Krishi Vigyan Kendras (KVKs) of ICAR for undertaking Information, Education and Communication (IEC) Activities. During 2018-19 to 2024-25 (till 12.02.2025), Rs. 3698.45 crore has been released to States of Punjab, Haryana, UP and NCT of Delhi and ICAR and others. Using this funds, 323345 machines have been distributed and 41968</p>
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		CHCs have been established.
MoAFW	Sub-Mission on Agricultural Mechanization (SMAM) and central sector scheme on promotion of agricultural mechanization for in-situ management of crop residue	Sub-Mission on Agricultural Mechanization (SMAM) aims to increase the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low, promote Custom Hiring Services of agricultural machines to offset the adverse economies of scale arising due to small landholding and high cost of individual ownership, create awareness among stakeholders through demonstration, capacity building activities and differentiated Information, Education and Communication strategies, and ensuring performance testing and certification at

		<p>designated testing centers located all over the country.</p> <p>Components of Sub-Mission on Agricultural Mechanization include:</p> <ul style="list-style-type: none"> • Financial assistance to farmers for procurement of farm machinery and equipments on individual ownership basis • Establishment of Custom Hiring Centres (CHCs) • Establishing Village Level Farm Machinery Banks (FMBs) • Promotion of Agricultural Mechanization in North Eastern Region • Financial Assistance for Mechanized operations (hiring of Drones)
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- Demonstration of newly developed agricultural/horticultural/ crop residue management machines post-harvest technologies and Kisan Drones at farmers' fields
- Skilling in field of farm mechanization, post-harvest management and Kisan Drones
- Testing of agricultural machines and equipment for performance evaluation

During the period from 2014-15 to 2024-25 (as on 28.02.2025), an amount of Rs. 8565.00 crores have been allocated for various activities. 146601 trainees have been trained on various aspects of agricultural mechanization. Total 14061 various types of

		<p>machines and equipment have been tested. 69053 demonstrations have been conducted. 19,51,080 numbers of various machines and equipment have been provided to the farmers on subsidy. 26801 Custom Hiring Centers have been established. 702 Hi-tech hubs have been established. 24670 Farm Machinery Banks have been established at the village levels.</p>
<p>Ministry of New and Renewable Energy (MNRE)</p>	<p>Financial Assistance for setting up of Biomass Briquette/Pellet manufacturing plants and to support Biomass (non-bagasse) based cogeneration projects in Industries</p>	<p>The objective is to support setting up of Biomass Briquette/ Pellet manufacturing plants and to support Biomass (non-bagasse) based cogeneration projects in Industries in the country. The programme provides Central Financial Assistance (CFA) to project developers and service charges to</p>

		<p>implementing agency and inspection agencies in respect of setting up of Briquette / Pellet manufacturing plants and Biomass (non-bagasse) cogeneration projects in industries.</p> <ul style="list-style-type: none"> • For a briquette manufacturing plant, Rs. 9.0 lakhs/MTPH (Maximum Rs. 45.0 lakhs per project) is provided as CFA. • For a Non Torrefied Pellet manufacturing plant, Rs. 21.0 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 105 lakhs per project) is provided as CFA. • For a Torrefied Pellet manufacturing plant, Rs. 42.0
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		<p>lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 210 lakhs per project) is provided as CFA.</p> <p>Overall Installed capacity: Briquette Plant/Pellet – 289 MTPH, Biomass based Cogeneration (non-bagasse) – 922 MW, Cogeneration (bagasse) - 7935 MW & Biomass based Power plants (IPPs) – 1886 MW</p>
<p>Ministry of New and Renewable Energy (MNRE)</p>	<p>Financial Assistance for setting up of Waste to Energy plants for generation of Biogas, Bio-CNG/enriched Biogas/Compressed Biogas, Power/ generation of producer or syngas, from urban, industrial,</p>	<p>The objective is to support the setting up of Waste to Energy projects for generation of Biogas/ BioCNG/ Power/ producer or syngas from urban, industrial and agricultural wastes/residues. The programme provides</p>

	<p>agricultural wastes and municipal solid waste</p>	<p>Central Financial Assistance (CFA) to project developers and service charges to implementing/inspection agencies in respect of successful commissioning of Waste to Energy plants for generation of Biogas, Bio-CNG/enriched Biogas/Compressed Biogas, Power/generation of producer or syngas.</p> <ul style="list-style-type: none"> • For Biogas projects, Rs 0.25 Cr per 12000 cubic m/day (maximum CFA of Rs. 5.0 Cr/project is provided as CFA. • For BioCNG/Enriched Biogas/Compressed Bio Gas projects, Rs. 4.0 Cr per 4800 kg/day (for BioCNG generation from new biogas plant), Rs 3.0 Cr per 4800 kg/day (for
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		<p>BioCNG generation from existing Biogas plant#), Maximum CFA of Rs. 10.0 Cr/project for both cases is provided as CFA.</p> <ul style="list-style-type: none"> • For Biogas power projects, Rs 0.75 Cr/MW (for power Generation from new biogas plant), Rs 0.5 Cr /MW (for power generation from existing Biogas plant) and Maximum CFA of Rs. 5.0 Cr/project for both cases is provided as CFA. • For Power based on bio & agro- industrial waste (other than MSW), Rs 0.4 Cr/MW (maximum CFA of Rs. 5.0 Cr/project is provided as CFA. • For Biomass Gasifier for electricity/thermal applications, Rs. 2,500 per kWe with dual fuel engines for electrical
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		<p>application, Rs. 15,000 per kWe with 100% gas engines for electrical application, Rs. 2 lakh per 300 kWth for thermal applications is provided as CFA.</p> <p>The cumulative installed capacity of biogas projects is 8,24,647 m³ per day, 6,44,868 kg per day for Bio-CNG/CBG, 463.028 MW for Power (Grid & Offgrid) projects.</p>
Ministry of Petroleum and Natural Gas (MoPNG)	Setting up of 2G Ethanol Projects	The second 2G Ethanol Project is being set up by HPCL at Bathinda (Punjab) which is under advanced phase of completion and is expected to utilize another 1.71 Lakh metric tonnes of paddy straw per annum.
Ministry of New and Renewable Energy (MNRE)	Promotion of Small Hydro Power, Bagasse and Biomass based power	Hydro Power projects up to 25 MW are classified as Small Hydro Power (SHP) projects. India has

		<p>an estimated SHP potential of over 21 GW, out of which 5.1 GW capacity has been installed.</p> <p>The last SHP scheme was valid till 31.03.2017 (extended up to 30.09.2017). At present there is no existing SHP Scheme to provide financial support for development of new SHP projects. Expenditure Finance Committee (EFC) memorandum is being prepared for promotion of Small Hydro Power sector.</p>
Implementation w.r.t Control of Methane		
Ministry of Agriculture & Farmers' Welfare (MoAFW)	Promoting System of Rice Intensification as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)	<ul style="list-style-type: none"> • National Food Security and Nutrition Mission (NFSNM) programme is being implemented in identified districts of 28 States and 2 UTs viz:

	<p>Increasing area under Direct Seeded Rice (DSR) as part of National Food Security Mission (NFSM) and Bringing Green Revolution to Eastern India (BGREI)</p>	<p>J&K and Ladakh with the objective to Increase production of rice, wheat, pulses, coarse cereals (Maize and Barley) and Nutri-Cereals.</p> <ul style="list-style-type: none"> • Under NFSNM Rice, assistance is given through State/UTs governments to farmers for Interventions like cluster demonstrations on Improved package of practices, distribution of seeds of High Yielding Varieties (HYVs)/hybrid, plant protection measures, nutrient management/soll ameliorants, cropping system based trainings to the farmers etc. • Under NFSNM-Rice, State/UTs may conduct various types of demonstration such as System Rice Intensification (SRI),
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		<p>Direct Seeded Rice (DSR) and Line transplanting, Cropping system based demonstration.</p> <ul style="list-style-type: none">• The 24 States & UT of J&K are covered under NFSNM-Rice. However, states of Punjab & Haryana are not covered under NFSNM-Rice.• The "Bringing Green Revolution to Eastern India" (BGREI) program was discontinued in 2021, signifying the end of this initiative aimed at increasing agricultural productivity in the eastern Indian states by addressing constraints in rice-based cropping systems; this program was primarily focused on states like Assam, Bihar, Chhattisgarh, Jharkhand, Odisha,
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		Eastern Uttar Pradesh, and West Bengal.
	Promoting crop diversification	<p>Crop diversification Programme (CDP) is being Implemented under Pradhan Mantri Rashtriya Krishi Vikas Yojana (PM-RKVY) in Original Green Revolution States namely Haryana, Punjab and western Uttar Pradesh to divert the area of water guzzling paddy to alternative crops viz; pulses, oilseed, coarse cereals, nutri cereals (Shree Anna), cotton and Agroforestry since 2013-14.</p> <p>The Government of India also provides flexibility to the states for state specific needs/priorities under Pradhan Mantri Rashtriya Krishi Vikas Yojana (PM-RKVY).</p>

		The states can promote crop diversification under PM-RKVY with the approval of State Level Sanctioning Committee (SLSC)
Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D)	Balanced Ration for Livestock, which promotes Optimum feeding of animals through Ration Balancing Programme (RBP)	National Dairy Development Board initiated (NDDB) a large-scale pilot of the Ration Balancing Programme (RBP) to educate milk producers on the scientific feeding of their animals. Under the National Dairy Plan (Phase 1) RBP was successfully implemented in 18 states, covering 2.8 million milch animals owned by 2.2 million farmers. The programme was implemented by dairy cooperatives with the support of trained Local Resource Persons (LRPs). After the completion of NDP-I, e-Gopala Android
	Feeding bypass proteins: Optimizing the use of protein supplement within the ruminant system	

application was developed to enable farmers to formulate balanced rations on their own. This service has now been integrated into the 1962 Farmer App.

Similarly, NDDB has standardised, commercialised and promoted Bypass Protein feed technology to improve protein utilisation efficiency of high yielding animals. As a result, since 2002, total 21 bypass plants for commercial production of Bypass protein feed have been successfully established in all major dairy cooperatives.

NDDB has continued coordination with cooperative milk unions, milk producer companies. NGOs and farmers for increasing

		<p>adoption of Ration Balancing and providing technical support to milk unions and private entrepreneurs for promoting Bypass Protein feed technology at a larger scale. As a result, dairy farmers/cooperative milk unions are now successfully adopting Ration Balancing and Bypass Protein feed.</p>
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