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Letter No.- NGT-293 /81-7-2024

From,

**Devendra Singh Chauhan,**  
Under Secretary,  
Environment, Forest and Climate Change Department,  
Govt. of Uttar Pradesh.

To,

**The Registrar**  
Hon'ble National Green Tribunal  
Copernicus Marg, New Delhi.

**Environment, Forest and  
Climate Change, Section-7**

Lucknow : Dated : 01 May, 2024

**Subject:-** Action Taken Report in Compliance of Hon'ble National Green Tribunal order dated 19.02.2024 in OA No.- 687/2023 In re: Air Quality Index in various Cities.

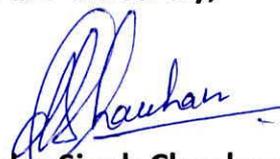
Sir,

In compliance of Hon'ble National Green Tribunal order dated 19.02.2024 in OA No.-687/2023 In re: Air Quality Index in various Cities, the Action Taken Report on behalf of State of Uttar Pradesh is being filed and annexed herewith.

It is requested that the said report may be presented before the Hon'ble Tribunal for kind consideration.

**Encl:- As above.**

**Yours' Sincerely,**



**(Devendra Singh Chauhan)**  
Under Secretary.

**Copy to:** Ms. Priyanka Swami, Standing Counsel, Hon'ble NGT, New Delhi for information and further necessary action.

BEFORE THE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 687/2023

In Re: Air Quality Index in various Cities

**Action Taken Report on behalf of State of Uttar Pradesh in compliance of the order dated 19.02.2024 passed by Hon'ble National Green Tribunal, New Delhi**

1. That Hon'ble National Green Tribunal (herein after referred to as "NGT") considered the status of Air Quality Index of Non-attainment Cities (NACs) of Uttar Pradesh and was pleased to pass the order dated 19.02.2024, the operative portion of which is reproduced here as under:

***"...6. In view of the above, we direct as under:-***

***i. The States/cities which have not furnished the reports are directed to provide the complete report at least one week before the next date of hearing.***

***ii. All the cities (53) should disclose contribution by each polluting source in terms of identified pollutant (PM10/PM2.5) as per source apportionment and progressive reduction on account of measures taken....."***

2. That there are 17 Cities of Uttar Pradesh has been identified as NACs which includes 07 Million-plus Cities and 10 Non-million-plus Cities. The city wise source of funding for abatement of air pollution in NACs are tabulated below:



NACs Funded under XV <sup>th</sup> Finance Commission (XV-FC)		NACs Funded under National Clean Air Programme (NCAP)	
S. N.	Million-plus NACs	S. N.	Non-million-plus NACs
1	Agra	1	Anpara
2	Ghaziabad	2	Bareilly
3	Kanpur	3	Firozabad
4	Lucknow	4	Gajraula
5	Meerut	5	Gorakhpur
6	Prayagraj	6	Jhansi
7	Varanasi	7	Khurja
		8	Noida
		9	Moradabad
		10	Raebareli

3. That the Grant-in-Aid for abatement of Air Pollution to NACs is released by Ministry of Environment, Forest and Climate Change (MoEF&CC) in two ways. To 07 Million-plus cities, the Grant-in-Aid is released under XV-FC Funds directly to Urban Local Bodies (ULBs) whereas to other 10 NACs it is released by MoEF&CC through Central Pollution Control Board, Delhi (CPCB) and Uttar Pradesh Pollution Control Board (UPPCB). It is submitted that the NCAP Funds were also released to 5 Million-plus cities namely Lucknow, Agra, Kanpur, Prayagraj and Varanasi in FY 2019-20 only.
4. That the pre-requisite criteria for release of XV-FC grants to million plus cities as per the MoEF&CC DO Letter no. Q-16017/25/2020-CPA dated 15.06.2023 are given below:



- a) Recommendations of State Level Monitoring and Implementation Committee (SLMIC) for release of XV-FC grants for FY 2023-24 to MoEF&CC
  - b) Submission of Grant Transfer Certificate to MoEF&CC and Department of Expenditure, Ministry of Finance
  - c) Submission of 100% Utilisation Certificates against grant released till 31.03.2022 and 75% Utilisation Certificates against grant released in FY 2022-23
  - d) Annual Action Plans (AAP) for 2023-24 should be uploaded by cities on the Portal for Regulation of Air Pollution in Non-Attainment Cities (PRANA portal)
  - e) Details of activities funded through convergence of various schemes in AAP
  - f) Details of proposals submitted to MoEF&CC under Nagar Van Yojana
  - g) Details of submission of participation in Swachh Vayu Sarvekshan under PRANA portal
  - h) Incorporation of Automatic Testing Station (ATS) and Registered Vehicle Scrapping Facility (RVSF) in City & State Action Plan as per the proposal of Ministry of Road Transport and Highways (MoRTH).
5. That the Department of Expenditure, Ministry of Finance has released a total of ₹1605.75 Cr to 07 Million-plus cities of the State of Uttar Pradesh from FY 2020-21 to end of the FY 2023-24. These 07 Million-plus cities have utilised a total of ₹ 1132.80 Cr (71%) till date against the fund



released. The City wise break-up of XV-FC Fund released and utilised is annexed herewith as **Annexure 1** to this Action Taken Report.

6. That the criteria for release of NCAP grants to non-million plus cities as per the MoEF&CC DO Letter no. Q-16016/23/2020-CPA dated 13.06.2023 includes submission of 100 % Utilisation Certificates against grants released till 31.03.2022 and 75 % Utilisation Certificates submitted against grants released in FY 2022-23 to MoEF&CC and CPCB.
7. That the MoEF&CC has released a total of ₹216.84 Cr to 10 Non-million-plus and to 05 Million-plus cities under NCAP from FY 2019-20 to end of the FY 2022-23. These 10 Non-million-plus and 05 Million-plus cities have utilised a total of ₹187.58 Cr (87%) till date against total fund released. The City wise break-up of NCAP Fund released and utilised is annexed herewith as **Annexure 2** to this Action Taken Report.
8. That the Department of Expenditure, Ministry of Finance has released a total of ₹ 478.68 Cr to 06 Million-plus cities viz. Agra, Prayagraj, Kanpur, Lucknow, Meerut and Varanasi in the current FY 2023-24 as undisbursed ambient air quality grants for best performance of these cities. MoEF&CC, GoI has also released a total of ₹180.297 Cr. to 10 non-million-plus cities which is 90% of the total allocated fund as first instalments for the FY 2023-24. The time line for utilization of funds released in FY 2023-24 is 31.03.2024.
9. That the State Government is continuously monitoring the utilization of the funds and directed to ULBs for implementation of NCAP with the time frames stipulated under Guideline of MoEF&CC.

The details of review meeting held at various level is as follows:



S. N.	Chairmanship	Date
1.	Chief Secretary, GoUP	03.10.2023
2.	Additional Chief Secretary, Department of Environment, Forest and Climate Change, GoUP	10.10.2023 and 03.11.2023
3.	Principal Secretary, Department of Urban Development, GoUP	15.09.2023 and 05.02.2024

10. That as per the daily AQI Bulletin on the basis of the CAAQMS data published by Central Pollution Control Board (CPCB) which is available at the URL [https://airquality.cpcb.gov.in/AQI\\_India\\_iframe/](https://airquality.cpcb.gov.in/AQI_India_iframe/), the details of number of Good days (AQI < 200) and days with dipped air-quality (AQI > 200) between 01.11.2023 to 31.03.2024 for 14 Non-attainment cities namely Ghaziabad, Meerut, Lucknow, Kanpur, Prayagraj, Varanasi, Agra, Noida, Moradabad, Gorakhpur, Firozabad, Jhansi, Bareilly, and Khurja is tabulated below:

S.NO.	City	No. of Observed Days	No. of Days with dipped air-quality (AQI>200)	No. of Good Days (AQI<200)
1	Meerut	152	75	77
2	Ghaziabad	152	98	54
3	Noida	152	104	48
4	Prayagraj	152	12	140
5	Lucknow	152	37	115
6	Moradabad	152	8	144

7	Kanpur	152	18	134
<b>S.NO.</b>	<b>City</b>	<b>No. of Observed Days</b>	<b>No. of Days with dipped air-quality (AQI&gt;200)</b>	<b>No. of Good Days (AQI&lt;200)</b>
8	Jhansi	143	10	133
9	Khurja	143	8	135
10	Gorakhpur	145	8	137
11	Firozabad	150	7	143
12	Bareilly	151	5	146
13	Agra	152	1	151
14	Varanasi	152	0	152

That it is evident from the above table that barring 3 cities in NCR-UP, the air quality of the other cities has been largely good during the period from 01.11.2023 to 31.03.2024. The air quality of NCR-UP region is also affected by the source in the upwind states namely Delhi, Haryana and Punjab resulting in the dipped air quality.

11. That the CPCB has uploaded the annual average PM<sub>10</sub> concentration on PRANA Portal, the city specific annual average PM<sub>10</sub> concentration for FY 2022-23 in comparison to actual achieved data of FY 2017-18 for Non-attainment Cities which are given below:



S. N.	NACs	Average PM10 Concentration ( $\mu\text{g}/\text{m}^3$ )		% Improvement w.r.t. FY 2017-18
		FY 2017-18	FY2022-23	
1	Varanasi	230	94	-59%
2	Firozabad	247	106	-57%
3	Moradabad	222	116	-48%
4	Bareilly	207	110	-47%
5	Agra	202	118	-42%
6	Lucknow	253	149	-41%
7	Kanpur	227	143	-37%
8	Gorakhpur	150	102	-32%
9	Ghaziabad	285	198	-31%
10	Raebareli	145	102	-30%
11	Khurja	195	150	-23%
12	Prayagraj	169	125	-26%
13	Noida	229	202	-12%
14	Anpara	175	166	-5%
15	Gajraula	204	194	-5%
16	Jhansi	109	118	+8%
17	Meerut	122	177	+45%

The above data shows that air quality of the 15 NACs have improved in FY 2022-23 as compared to that in FY 2017-18.

12. That the Commission for Air Quality Management in NCR and Adjoining Areas, vide Direction No. 77 dated 6<sup>th</sup> October, 2023, issued statutory direction for implementation of the revised schedule of the Graded Response Action Plan (GRAP) with immediate effect as and when orders under GRAP are invoked. The Sub-Committee for invoking actions under the GRAP in its earlier meetings had invoked actions under Stage I, Stage II, Stage III and Stage IV of the GRAP on dated 6<sup>th</sup> October 2023, 21<sup>st</sup> October 2023, 2<sup>nd</sup> November 2023, 5<sup>th</sup> November 2023, 22<sup>nd</sup> December 2023, and 14<sup>th</sup> January 2024 respectively. CAQM vide its latest order dated 27.02.2024, revoked the order issued for action under Stage -I of the GRAP with immediate effect as Delhi AQI reached below the threshold for invoking the GRAP actions annexed herewith as **Annexure 3** of this Action Taken Report. There is a likelihood of sustaining the improvement in AQI. That in compliance to the orders of the CAQM, actions under Stages-I to Stage-III of the GRAP are being implemented, monitored and reviewed by all agencies concerned in the entire NCR-UP to ensure that the AQI levels do not increase.

13. That in compliance of the order passed by the Hon'ble NGT in OA No.- 681/2018 dated 20.11.2019, it is submitted that GRAP is further implemented as "Comprehensive Action Plan for reducing Air Pollution" in remaining 14 NACs of U.P. namely Agra, Kanpur, Lucknow, Varanasi, Prayagraj, Noida, Moradabad, Bareilly, Firozabad, Jhansi, Gajraula, Khurja, Raebareli and Gorakhpur.

14. That the status of source apportionment study in Non-attainment cities of Uttar Pradesh is annexed herewith as **Annexure 4** of this Action Taken Report.



15. Contribution by each polluting source in terms of identified pollutant (PM10/PM2.5) as per source apportionment Study conducted by various Institutes/loRs is annexed herewith as **Annexure 5** of this Action Taken Report.

It is therefore most humbly prayed that this Hon'ble Tribunal may kindly consider this Action Taken Report.

**Lucknow**

**Dated : 01/05/2024**



**( Devendra Singh Chauhan )**

Under Secretary,  
Govt. of Uttar Pradesh

## Status of Fund Utilized by Million Plus cities under XV-FC (in Cr.)

S. No.	City Name	Fund released before FY 2022-23	Fund Utilization	% Utilization	Fund released in FY 2022-23	Fund Utilization	Total Fund Released till FY 2022-23	% Utilization till FY 2022-23	Fund released in FY 2023-24	Total Fund Released till FY 2023-24	Fund Utilization till FY 2023-24	% Utilization
1	Prayagraj	93.00	93.00	100%	39.35	39.35	132.35	100%	64.48	196.83	132.90	68%
2	Lucknow	173.18	173.18	100%	77.00	77.00	250.18	100%	126.20	376.38	271.20	72%
3	Meerut	85.59	85.59	100%	28.50	28.50	114.09	100%	25.10	139.19	116.90	84%
4	Agra	101.25	101.25	100%	35.25	35.25	136.50	100%	79.97	216.47	148.00	68%
5	Kanpur	204.25	204.25	100%	7.35	6.95	211.60	95%	69.29	280.89	211.20	75%
6	Ghaziabad	136.25	132.50	97%	0.00	0.00	136.25	0%	0.00	136.25	132.50	97%
7	Varanasi	108.10	108.10	100%	38.00	12.00	146.10	32%	113.64	259.74	120.10	46%
<b>Total</b>		<b>901.62</b>	<b>897.87</b>	<b>100%</b>	<b>225.45</b>	<b>199.05</b>	<b>1127.07</b>	<b>88%</b>	<b>478.68</b>	<b>1605.75</b>	<b>1132.80</b>	<b>71%</b>

\* --- माह फरवरी में रु० 156.50 करोड़ की धनराशि प्राप्त होने के कारण 71 प्रतिशत धनराशि का उपयोग किया गया है।

Note: Information provided by Directorate of ULB.

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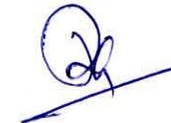
## Status of Fund Utilized by cities under NCAP (in Cr.)

Sl No.	City Name	Fund release before FY 2022-23	Fund Utilization	% Utilization	Fund release in FY 2022-23	Fund Utilization	% Utilization	Total Fund release till FY 2022-23	Fund Utilization till FY 2023-24	% Utilization	Total Fund release in FY 2023-24
1	Agra	₹ 9.45	₹ 9.20	97%	₹ 0.00	₹ 0.00	-	₹ 9.45	₹ 9.20	97%	₹ 0.00
2	Kanpur	₹ 9.45	₹ 8.55	90%	₹ 0.00	₹ 0.00	-	₹ 9.45	₹ 8.55	90%	₹ 0.00
3	Lucknow	₹ 9.45	₹ 9.01	95%	₹ 0.00	₹ 0.00	-	₹ 9.45	₹ 9.01	95%	₹ 0.00
4	Prayagraj	₹ 9.45	₹ 8.79	93%	₹ 0.00	₹ 0.00	-	₹ 9.45	₹ 8.79	93%	₹ 0.00
5	Varanasi	₹ 9.47	₹ 8.99	95%	₹ 0.00	₹ 0.00	-	₹ 9.47	₹ 8.99	95%	₹ 0.00
6	Anpara	₹ 1.24	₹ 1.24	100%	₹ 0.72	₹ 0.72	100%	₹ 1.96	₹ 2.10	100%	₹ 0.45
7	Bareilly	₹ 2.10	₹ 2.10	100%	₹ 23.03	₹ 23.03	100%	₹ 25.13	₹ 26.68	100%	₹ 48.22
8	Firozabad	₹ 2.10	₹ 2.10	100%	₹ 18.83	₹ 18.03	96%	₹ 20.93	₹ 20.13	96%	₹ 26.85
9	Gajraula	₹ 1.24	₹ 1.24	100%	₹ 2.43	₹ 1.77	73%	₹ 3.67	₹ 3.01	82%	₹ 0.74
10	Jhansi	₹ 1.34	₹ 1.34	100%	₹ 5.70	₹ 5.40	95%	₹ 7.04	₹ 6.74	96%	₹ 4.04
11	Khurja	₹ 2.00	₹ 2.00	100%	₹ 6.96	₹ 6.17	89%	₹ 8.96	₹ 8.17	91%	₹ 9.41
12	Moradabad	₹ 2.10	₹ 2.10	100%	₹ 33.20	₹ 27.32	82%	₹ 35.30	₹ 29.42	83%	₹ 43.79
13	Raebareli	₹ 1.24	₹ 1.24	100%	₹ 5.88	₹ 5.31	90%	₹ 7.12	₹ 6.55	92%	₹ 8.50
14	Gorakhpur	₹ 9.64	₹ 9.64	100%	₹ 27.87	₹ 27.87	100%	₹ 37.51	₹ 38.81	100%	₹ 29.36
15	Noida	₹ 6.67	₹ 1.43	21%	₹ 15.28	₹ 0.00	0%	₹ 21.95	₹ 1.43	7%	₹ 8.94
<b>Total</b>		<b>₹ 76.94</b>	<b>₹ 68.97</b>	<b>90%</b>	<b>₹ 139.90</b>	<b>₹ 115.62</b>	<b>83%</b>	<b>₹ 216.84</b>	<b>₹ 187.58</b>	<b>87%</b>	<b>₹ 180.30</b>

Note: Information available as per PRANA Portal and provided by Directorate of ULB.

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



No.120017/27/GRAP/2021/CAQM/4572

27<sup>th</sup> February, 2024

**ORDER**

**Sub.: Revocation of actions under stage I ('Poor' Air quality, AQI: 201-300) of GRAP.**

The Commission for Air Quality Management in NCR and adjoining areas, vide Direction No. 77 dated 6<sup>th</sup> October, 2023, had issued statutory direction for implementation of the revised schedule of the Graded Response Action Plan (GRAP). The same is also available on the CAQM website (caqm.nic.in).

2. Based on the decision of the Sub-Committee actions under Stage-I were first invoked vide CAQM order dated 06.10.2023, pursuant to forecast of deterioration in the average Air quality of Delhi due to calm winds and stable atmospheric conditions as per forecast of IITM/IMD.

3. Currently, Stage-I of GRAP is in force in NCR pursuant to revocation of stage-II on 19.02.2024. Subsequently, from time to time, based on the Air Quality in Delhi and predictions by IMD/IITM, further stages of GRAP were also imposed/revoked. GRAP Stage-IV, Stage-III and Stage-II were withdrawn on 18.11.2023, 18.01.2024 and 19.02.2024 respectively.

4. The sub-Committee in its meeting held on 27<sup>th</sup> February, 2024 further reviewed the air quality scenario in the region as well as the IMD/IITM forecasts for meteorological conditions and air quality index of Delhi and observed as under:

“Average AQI of Delhi has improved considerably during last few days and is in “Moderate” category with an AQI of less than 200 consistently since 22<sup>nd</sup> February, 2024 onwards. The forecast by IMD/IITM also predicts the AQI levels to be in “Moderate category” in coming days”.

5. The sub-Committee, accordingly, hereby decides to revoke the order, issued on 06.10.2023, for actions under Stage-I of the GRAP with immediate effect.

6. All the agencies concerned of the State Govts./GNCTD in the NCR, in an effort to sustain the better AQI levels as being experienced currently and not to let the air quality slip to the “Poor” category, however need to ensure that all statutory directions, advisories, orders etc. issued by the Commission are followed and implemented in right earnest, including the rules/regulations/guidelines issued by MoEFCC and the Central Pollution Control Board and related instructions/ guidelines issued by the respective

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

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

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

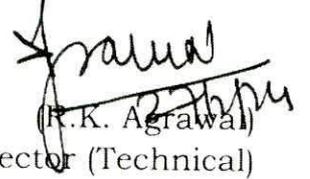
Tel:011-23701213, E-mail: caqm-ncr@gov.in

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State Govts./GNCTD and Pollution Control Boards/DPCC, across all contributing sectors.

7. In this context, all the agencies concerned are also required to take note of various actions and the targeted timelines as envisaged in the comprehensive policy issued by the Commission to curb air pollution in the NCR and take appropriate actions accordingly in the field.

8. The sub-Committee shall be keeping a close watch on the air quality scenario and may take appropriate decisions depending on the air quality, as recorded from time to time, and the forecasts made by IMD/IITM to this effect.



(R.K. Agrawal)

Director (Technical)

(Member & Convenor of Sub-Committee on GRAP)

## Details of Source Apportionment Study (SAS) of Uttar Pradesh

S. No.	City	Institute carrying out SAS	Status of SAS	Remarks
1.	Agra	IIT-Kanpur	Completed	-
2.	Kanpur	IIT-Kanpur	Completed	-
3.	Ghaziabad	IIT-Delhi	Completed	-
4.	Varanasi	IIT-Kanpur	Completed	-
5.	Prayagraj	IIT-Kanpur	Completed	-
6.	Lucknow	TERI-New Delhi	On-going	Emission Inventory completed.
7.	Anpara	IIT-Kanpur	On-going	Report of "Rapid Study of Source Apportionment and Carrying Capacity" received and Comprehensive report will be completed and submitted by IITK by 30 June -2024.
8.	Firozabad	IIT-Kanpur	On-going	
9.	Gajraula	IIT-Kanpur	On-going	
10.	Jhansi	IIT-Kanpur	On-going	
11.	Khurja	IIT-Kanpur	On-going	
12.	Raebareli	IIT-Kanpur	On-going	
13.	Moradabad	IIT-Kanpur	On-going	Report of "Rapid Study of Source Apportionment and Carrying Capacity" received
14.	Noida	IIT-Kanpur	On-going	Report of "Rapid Study of Source Apportionment and Carrying Capacity" received
15.	Bareilly	IIT-Kanpur	On-going	Report of "Rapid Study of Source Apportionment and Carrying Capacity" received
16.	Gorakhpur	Under Tendering Stage	Under Tendering Stage	Tender floated through GEM Portal (GEM/2024/B/4615115) (Emission Inventory done in CPCB approved City Action Plan)
17.	Meerut	IIT-Roorkee	On-going	Work Order issued to IIT Roorkee on Date 21/10/2023 (Ref Letter - 4304/2023/ सां निं वि०/23-24) by Municipal Commissioner Meerut Nagar Nigam. (Emission Inventory done in CPCB approved City Action Plan)

*Auditya*

*Rudra*

*[Signature]*

## City-wise PM 10 contribution in percentage as per Source Apportionment Study -

Sources	Construction and Demolition	Hotels, Restaurants, GHs & BHs	MSW Burning	Road Dust	Domestic	Industries	Industrial DG Sets	Hospitals	Vehicular	Brick kilns	Power plant	Unauthorized Industries	Open area	Hot mix plants
Agra	2.3%	3.7%	1.4%	82.3%	3.3%	1.6%	0.0%	0.1%	5.1%	0.0%	0.0%	0.0%	0.1%	0.0%
Kanpur	2.0%	0.7%	2.0%	81.9%	2.5%	4.2%	0.3%	0.0%	6.4%	0.0%	0.0%	0.0%	0.1%	0.0%
Noida	6.6%	2.3%	0.4%	62.2%	1.9%	1.0%	0.1%	0.0%	25.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Khurja	5.6%	0.7%	0.7%	77.8%	7.2%	3.9%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Firozabad	0.2%	1.3%	0.5%	86.7%	5.1%	0.9%	0.0%	0.0%	4.2%	1.1%	0.0%	0.0%	0.0%	0.0%
Anpara	0.3%	0.1%	0.0%	18.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.4%	80.9%	0.0%	0.0%	0.0%
Gajraula	1.2%	0.6%	0.0%	92.6%	1.0%	0.0%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Jhansi	1.8%	1.3%	0.5%	71.7%	3.1%	3.0%	0.0%	0.0%	18.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Moradabad	0.7%	1.1%	0.6%	68.0%	4.7%	2.1%	0.0%	0.0%	8.8%	0.0%	0.0%	14.0%	0.0%	0.0%
Raebareli	0.4%	0.4%	0.0%	88.2%	0.8%	5.9%	0.0%	0.0%	4.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Bareilly	0.4%	1.5%	0.6%	76.0%	5.5%	2.5%	0.0%	0.0%	11.9%	1.5%	0.0%	0.0%	0.0%	0.0%
Prayagraj	2.3%	1.8%	1.5%	81.9%	5.3%	0.0%	0.0%	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Varanasi	0.8%	2.8%	0.8%	83.9%	2.6%	0.2%	0.0%	0.0%	8.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Meerut	1.1%	0.2%	0.2%	22.8%	3.2%	38.3%	0.5%	0.0%	2.6%	18.3%	0.0%	0.0%	0.0%	12.7%
Gorakhpur	38.3%	0.0%	0.1%	47.7%	2.2%	5.7%	0.1%	0.0%	0.2%	4.0%	0.0%	0.0%	0.0%	1.7%

Sources	Mixed combustion	Resuspended Dust I	Resuspended Dust II	Secondary formation	Vehicular	Copper smelter	Brick processing	Mixed metal processing
Ghaziabad	23.6%	24.4%	24.8%	11.9%	6.9%	4.7%	3.5%	0.9%

Sources	Transport	Road Dust Re-suspension	DG sets	Residential sector	Refuse Burning	Hotels & Restaurants	Crematoria	Construction	Landfills	Aviation	Industry
Lucknow	5.9%	85.7%	0.04%	0.04%	0.01%	0.02%	0.2%	5.5%	0.10%	0.02%	2.6%

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## City-wise PM 2.5 contribution in percentage as per Source Apportionment Study -

Sources	Construction and Demolition	Hotels, Restaurants, GHs & BHs	MSW Burning	Road Dust	Domestic	Industries	Industrial DG Sets	Hospitals	Vehicular	Brick kilns	Power plant	Unauthorized Industries	Open area	Hot mix plants
Agra	1.4%	5.0%	2.5%	67.9%	6.6%	4.1%	0.1%	0.3%	12.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Kanpur	1.4%	1.1%	4.1%	57.9%	5.4%	11.5%	0.8%	0.1%	17.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Noida	3.5%	2.9%	0.6%	33.1%	3.8%	2.1%	0.2%	0.0%	53.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Khurja	3.9%	1.0%	1.4%	54.7%	16.5%	10.8%	0.1%	0.0%	11.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Firozabad	0.2%	2.2%	1.2%	65.7%	12.7%	3.1%	0.0%	0.0%	12.4%	2.6%	0.0%	0.0%	0.0%	0.0%
Anpara	0.2%	0.1%	0.0%	10.1%	0.1%	0.0%	0.0%	0.0%	0.8%	0.6%	88.2%	0.0%	0.0%	0.0%
Gajraula	1.0%	1.1%	0.1%	79.4%	2.7%	0.0%	0.0%	0.0%	15.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Jhansi	1.1%	1.8%	0.9%	43.6%	6.4%	1.9%	0.0%	0.0%	44.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Moradabad	0.4%	1.4%	0.9%	36.6%	8.5%	3.9%	0.0%	0.0%	18.6%	0.0%	0.0%	29.8%	0.0%	0.0%
Raebareli	0.3%	0.7%	0.1%	66.5%	2.0%	17.6%	0.0%	0.0%	12.8%	0.0%	0.0%	0.0%	0.0%	0.0%
Bareilly	0.2%	2.1%	1.1%	47.2%	11.3%	6.2%	0.0%	0.0%	29.0%	2.9%	0.0%	0.0%	0.0%	0.0%
Prayagraj	1.6%	5.1%	3.2%	57.9%	12.5%	0.0%	0.0%	0.0%	19.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Varanasi	0.6%	6.3%	1.7%	59.5%	6.3%	0.5%	0.0%	0.0%	25.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Meerut	0.9%	0.2%	0.2%	11.7%	5.0%	48.1%	0.9%	0.0%	4.9%	4.2%	0.0%	0.0%	0.0%	23.8%
Gorakhpur	43.9%	0.0%	0.1%	35.1%	4.5%	9.9%	0.3%	0.0%	0.6%	1.3%	0.0%	0.0%	0.0%	4.4%

Sources	Mixed combustion	Resuspended Dust I	Resuspended Dust II	Secondary formation	Vehicular	Copper smelter	Brick processing	Mixed metal processing
Ghaziabad	17.62%	13.63%	10.35%	20.57%	21.99%	3.85%	9.29%	4.70%

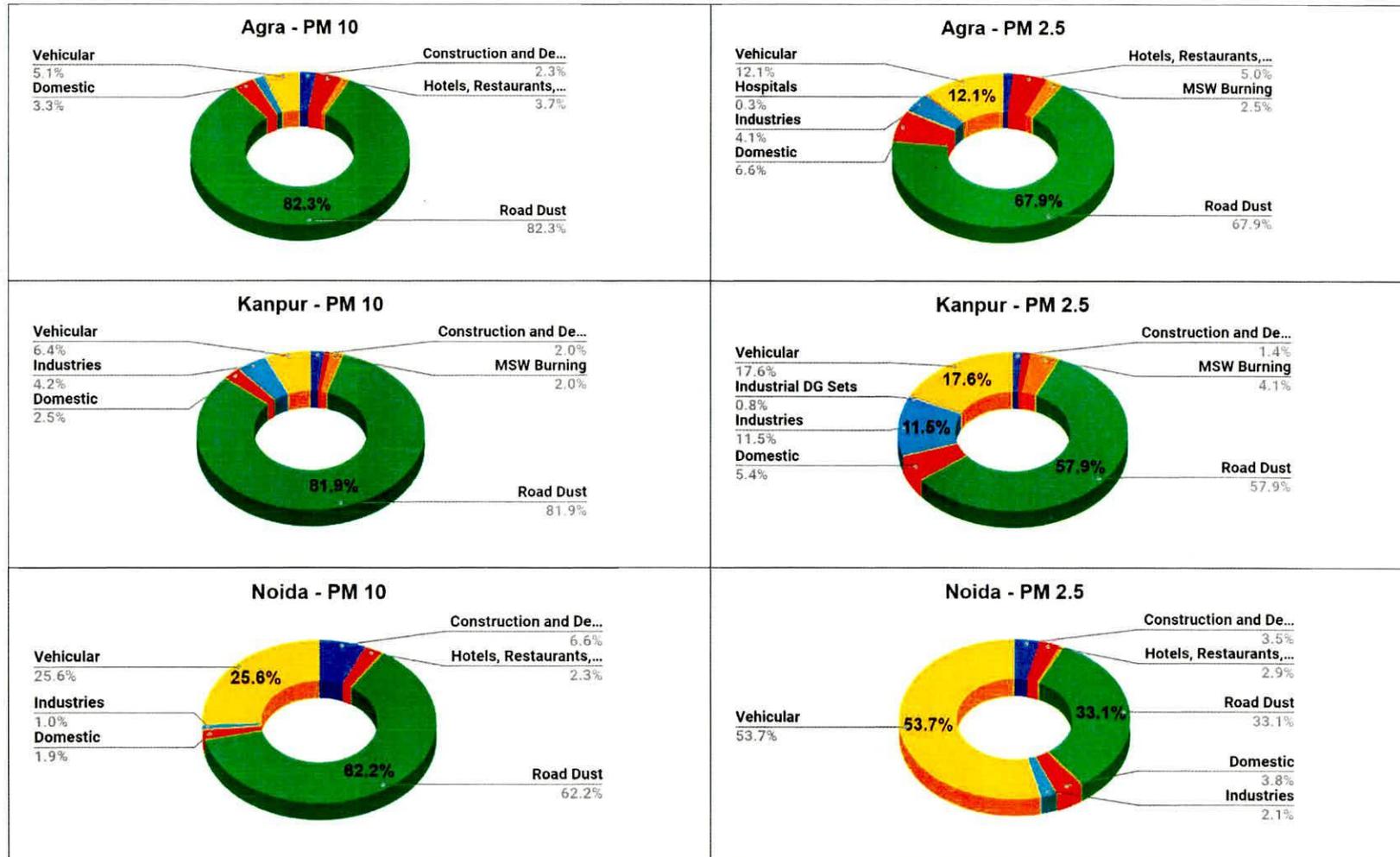
Sources	Transport	Road Dust Re-suspension	DG sets	Residential sector	Refuse Burning	Hotels & Restaurants	Crematoria	Construction	Landfills	Aviation	Industry
Lucknow	19.8%	72.2%	0.1%	0.0%	0.0%	0.0%	0.4%	3.3%	0.2%	0.0%	4.0%

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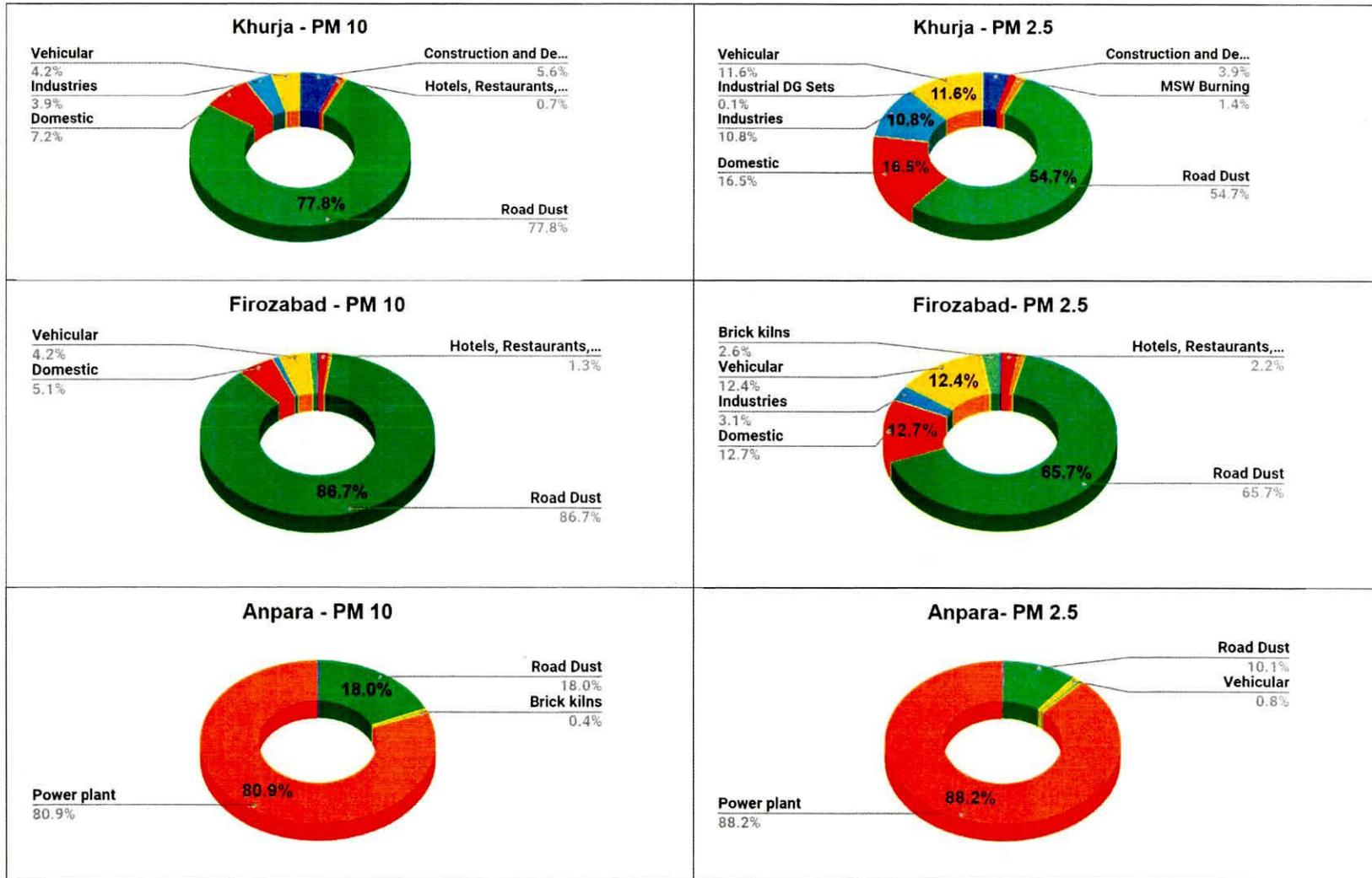
City-wise PM 10 and PM 2.5 percentage contribution of Pollutant sources as per Source Apportionment Study in Graphical form -



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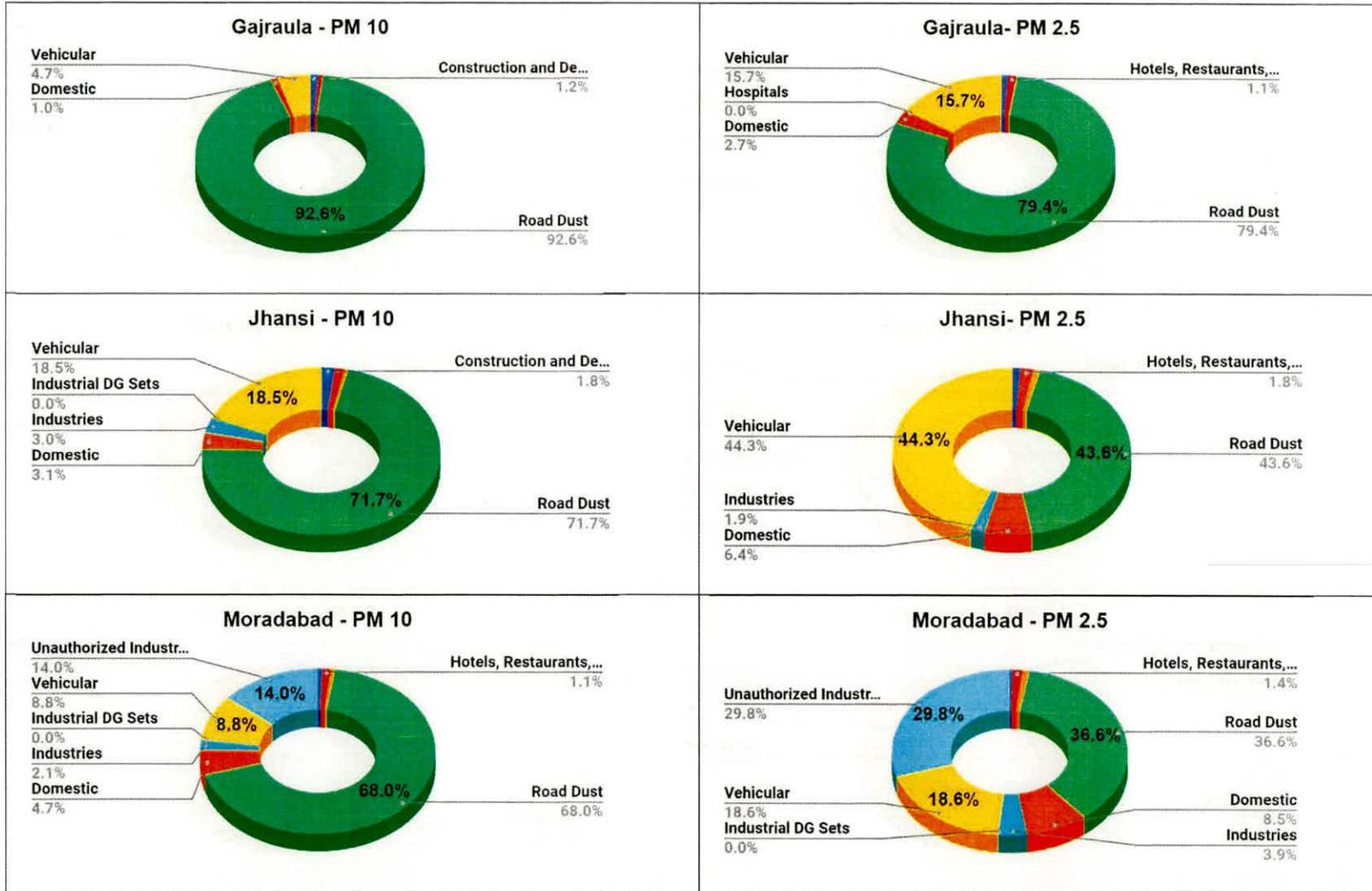
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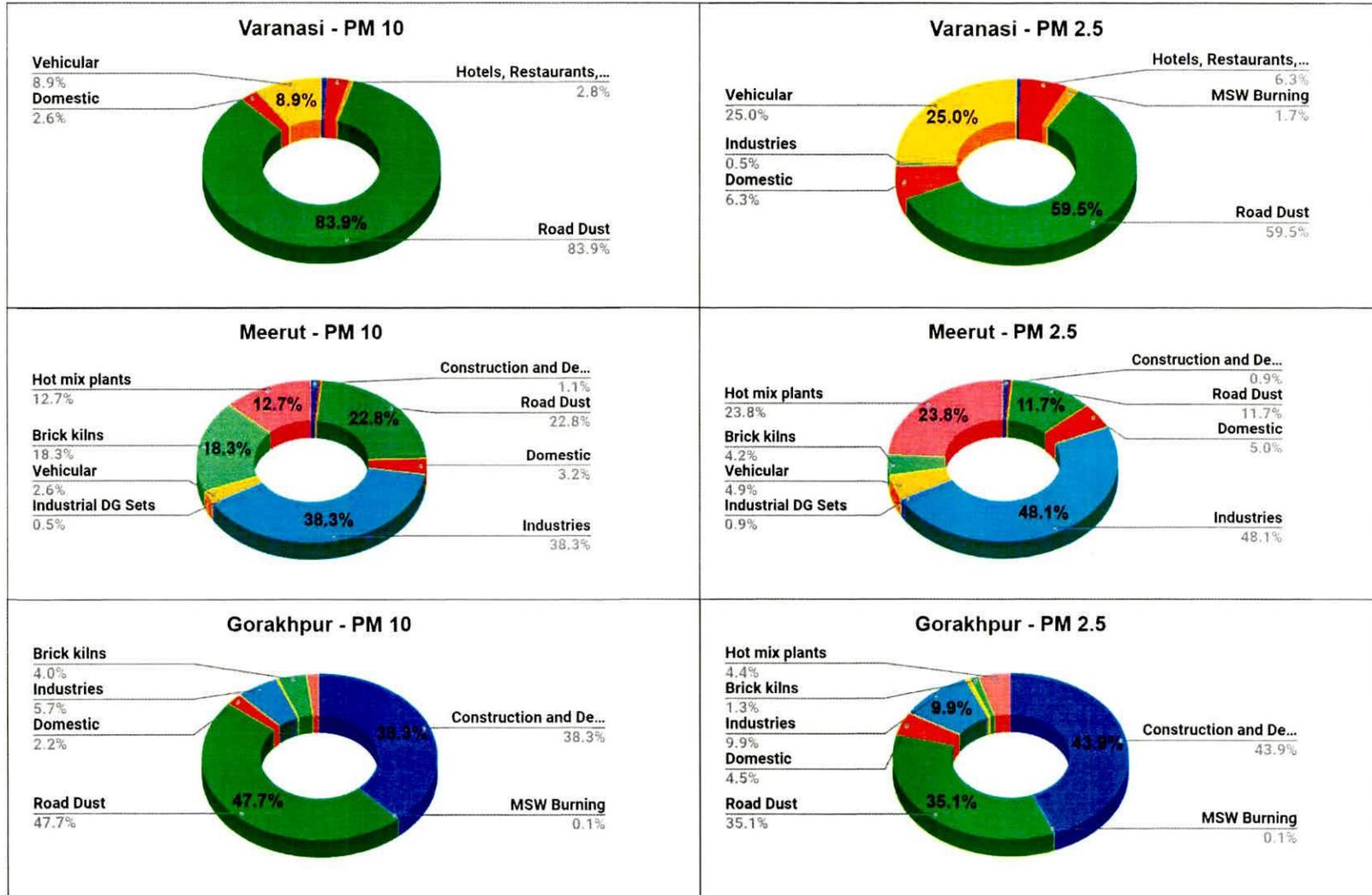
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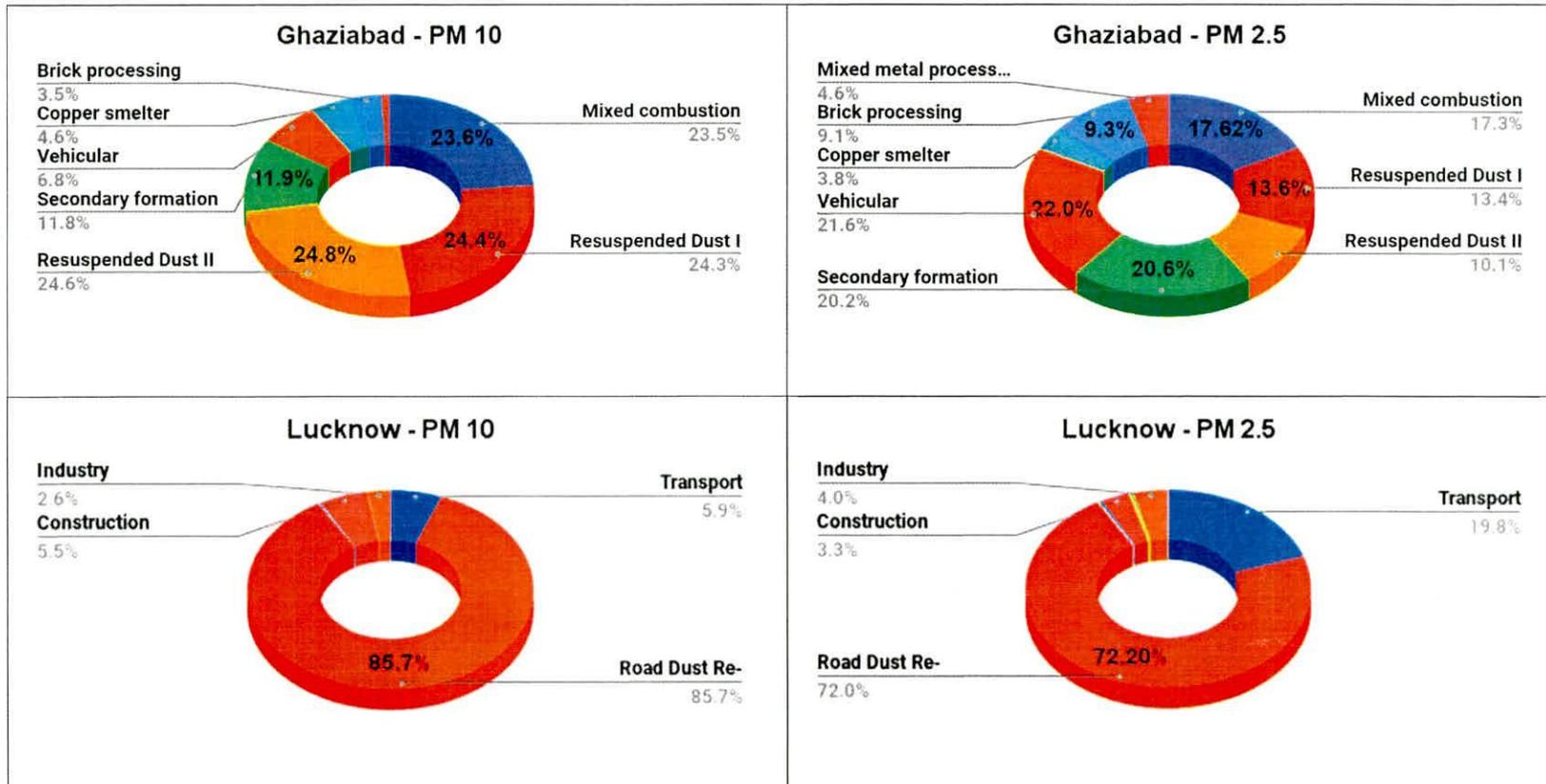
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