AIR POLLUTION ANALYSIS REPORT

SO_2 NO_2 PM_{10}

(All Years)

Across Indian Cities

What are this components(Pollutants):

SO_2 (Sulphur Dioxide)

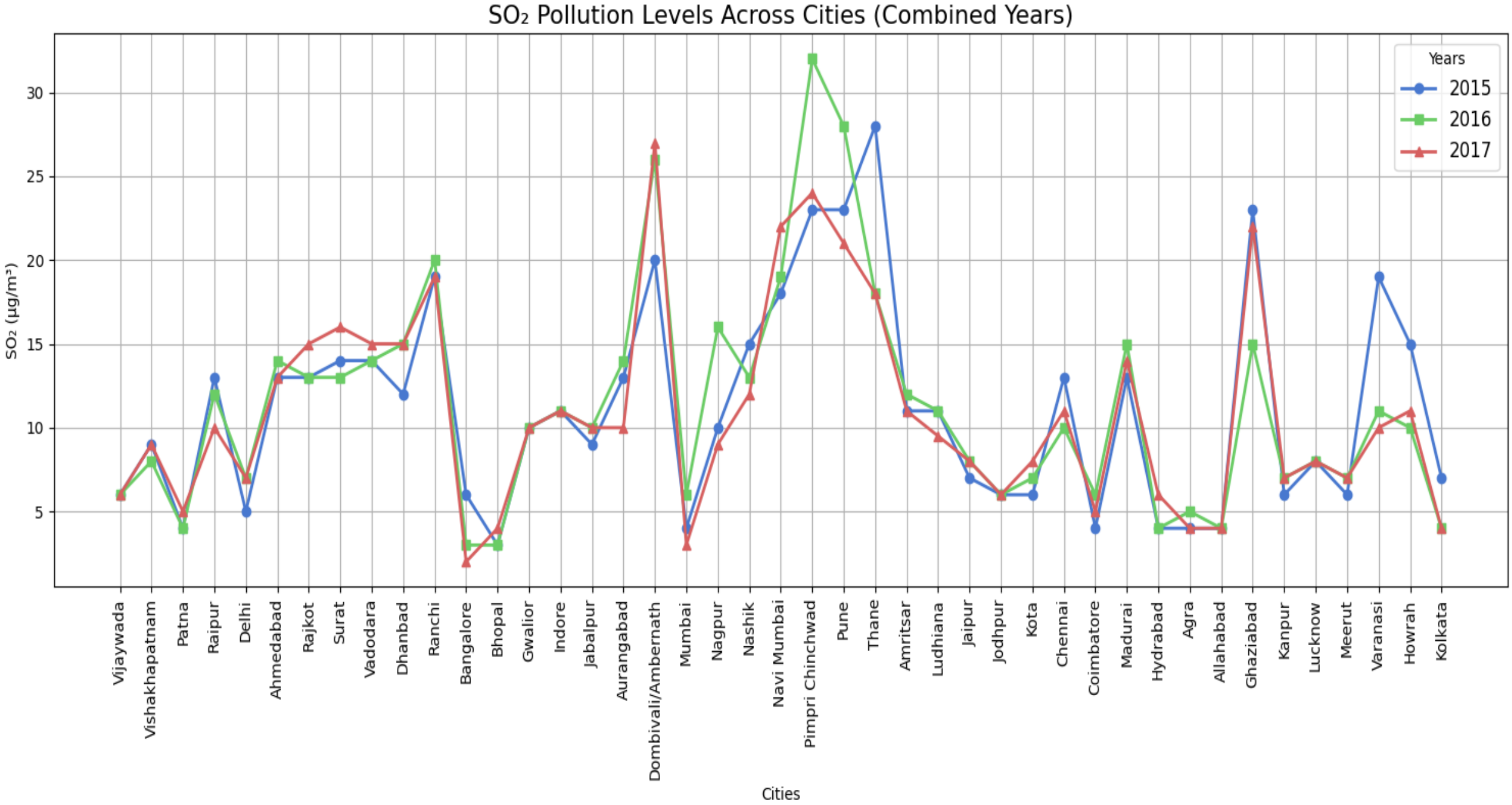
- Released mainly from **coal burning, industries, and power plants**.
- Causes **acid rain**, reduces visibility, and irritates the **lungs and throat**.
- High SO_2 levels can trigger **asthma attacks** and breathing problems.

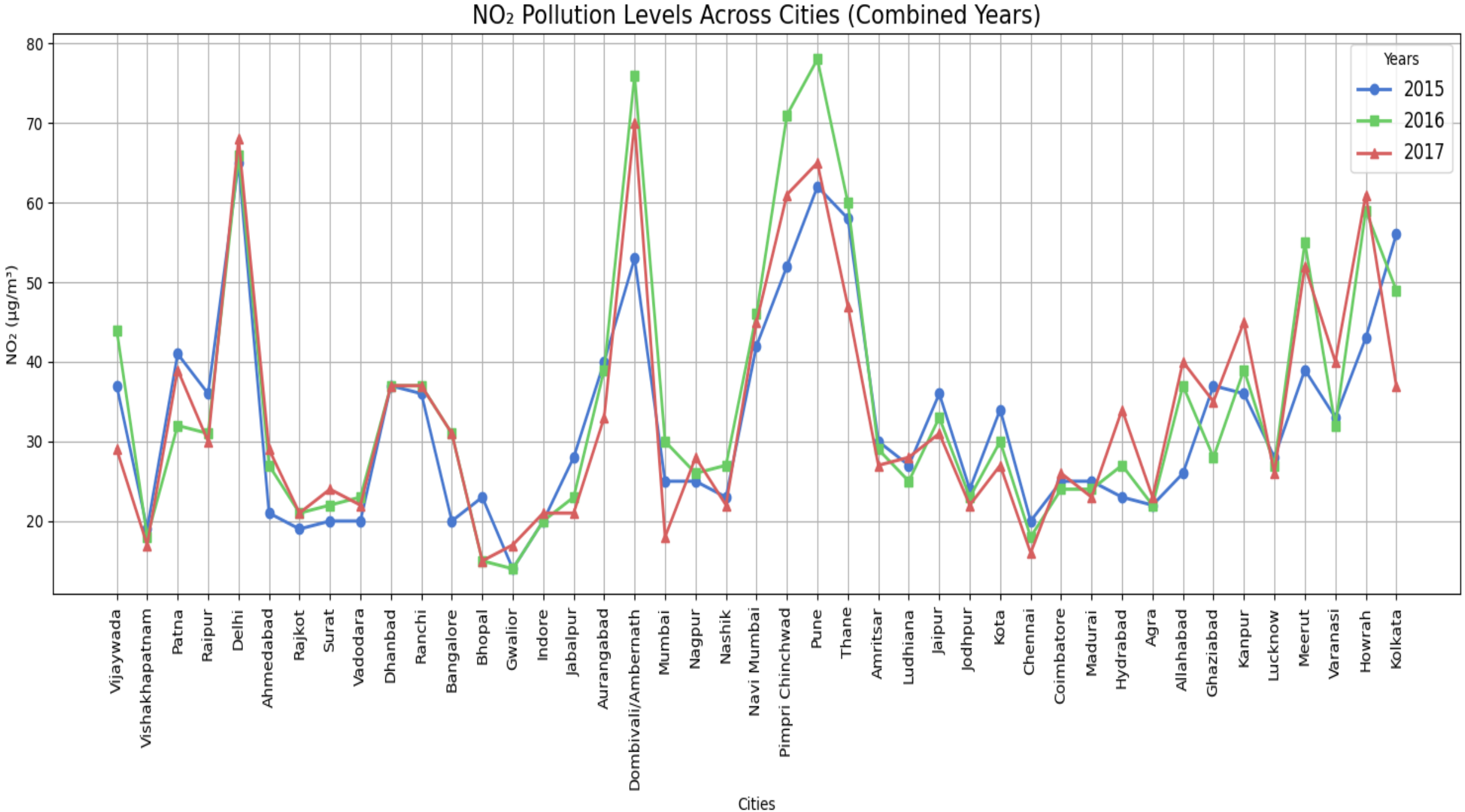
NO_2 (Nitrogen Dioxide)

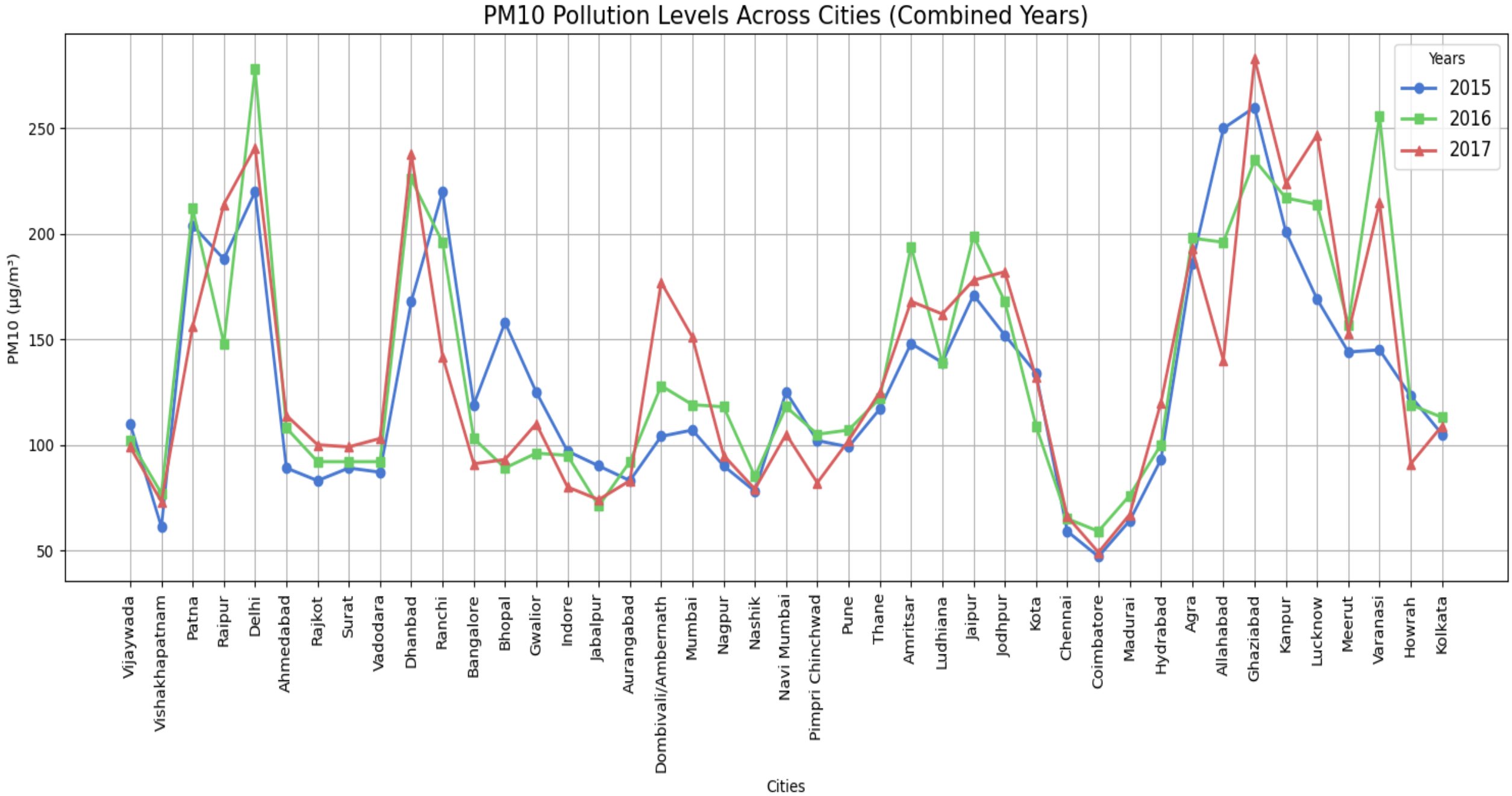
- Comes mostly from **vehicle emissions**, diesel engines, and industrial combustion.
- Reacts in the air to form **ground-level ozone** and **smog**.
- Damages the lungs, decreases immunity, and increases **respiratory infections**.

PM10 (Particulate Matter ≤10 microns)

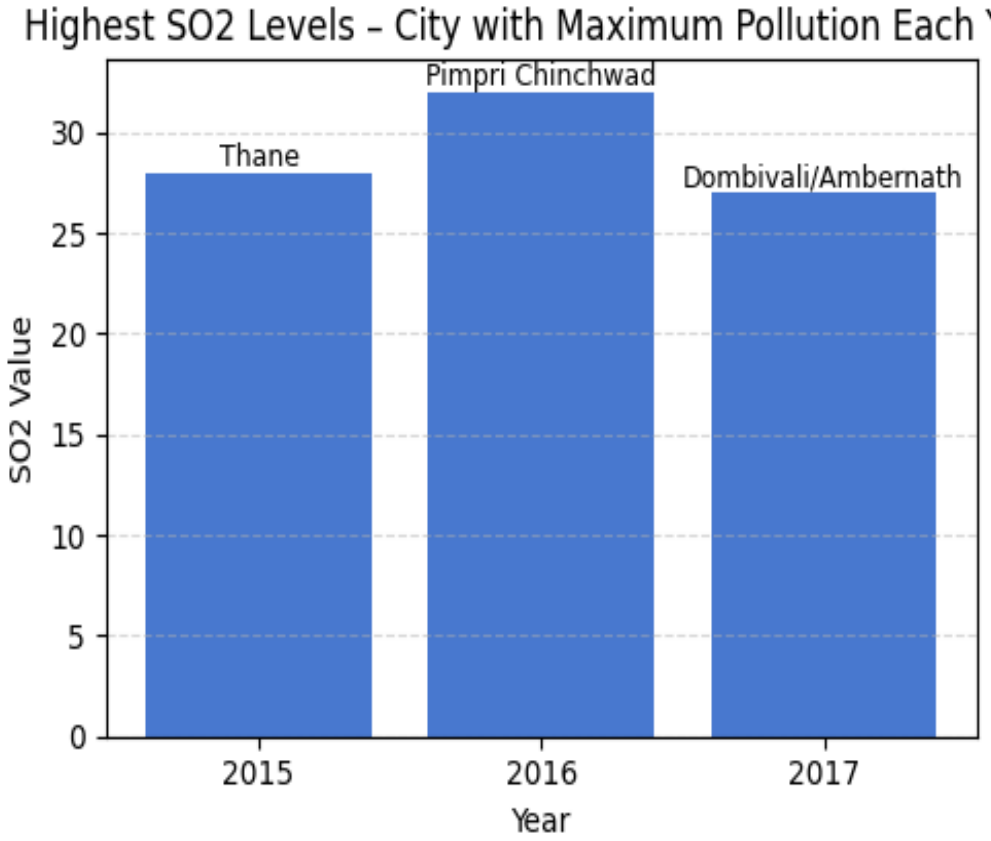
- Tiny dust particles from **roads, construction, burning, industries**.
- Can enter the **lungs deeply**, causing coughing, asthma, heart disease, and even lung damage.
- Higher PM10 makes the air look **dusty, hazy**, and reduces visibility.

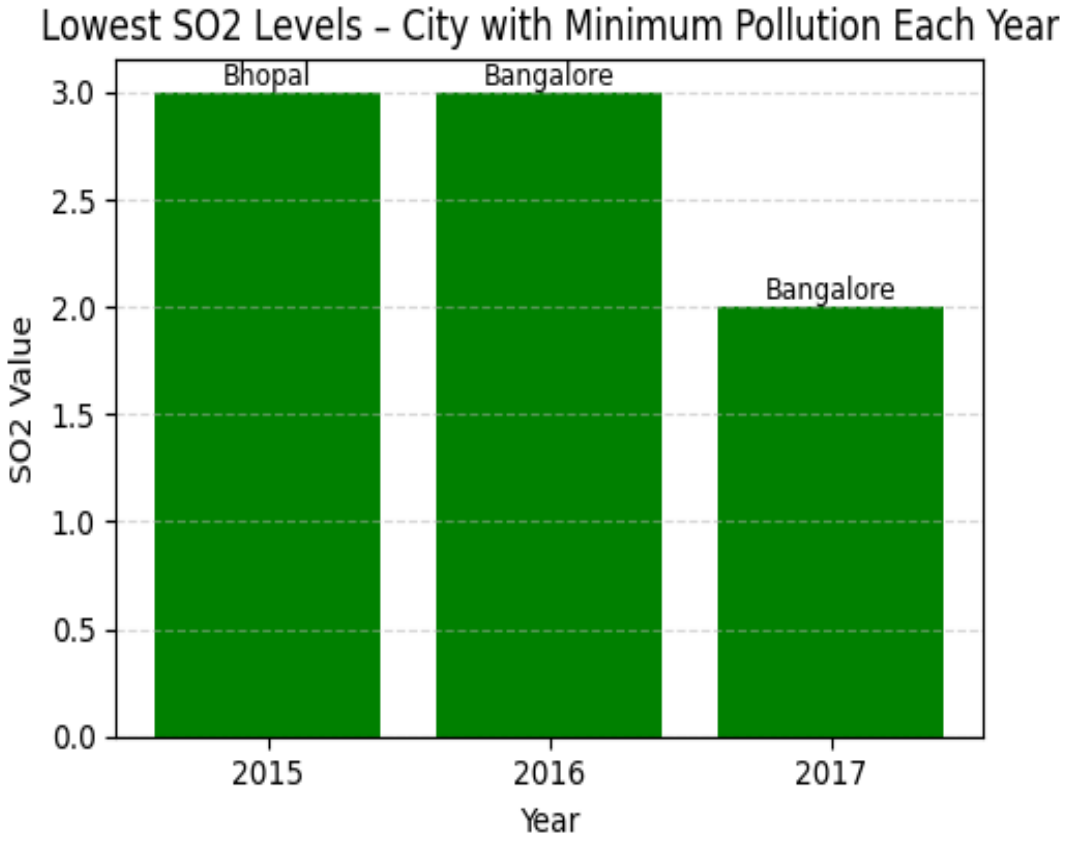

SO₂ Pollution Levels Across Cities (Combined Years)
Years
2015
2016
2017
SO₂ (µg/m³)
30
25
20
15
10
5
Vijaywada
Vishakhapatnam
Patna
Raipur
Delhi
Ahmedabad
Rajkot
Surat
Vadodara
Dhanbad
Ranchi
Bangalore
Bhopal
Gwalior
Indore
Jabalpur
Aurangabad
Dombivali/Ambernath
Mumbai
Nagpur
Nashik
Navi Mumbai
Pimpri Chinchwad
Pune
Thane
Amritsar
Ludhiana
Jaipur
Jodhpur
Kota
Chennai
Coimbatore
Madurai
Hydrabad
Agra
Allahabad
Ghaziabad
Kanpur
Lucknow
Meerut
Varanasi
Howrah
Kolkata
Cities


NO₂ Pollution Levels Across Cities (Combined Years)
NO₂ (µg/m³)
Cities
Years
2015
2016
2017
80
70
60
50
40
30
20
Vijaywada
Vishakhapatnam
Patna
Raipur
Delhi
Ahmedabad
Rajkot
Surat
Vadodara
Dhanbad
Ranchi
Bangalore
Bhopal
Gwalior
Indore
Jabalpur
Aurangabad
Dombivali/Ambernath
Mumbai
Nagpur
Nashik
Navi Mumbai
Pimpri Chinchwad
Pune
Thane
Amritsar
Ludhiana
Jaipur
Jodhpur
Kota
Chennai
Coimbatore
Madurai
Hydrabad
Agra
Allahabad
Ghaziabad
Kanpur
Lucknow
Meerut
Varanasi
Howrah
Kolkata

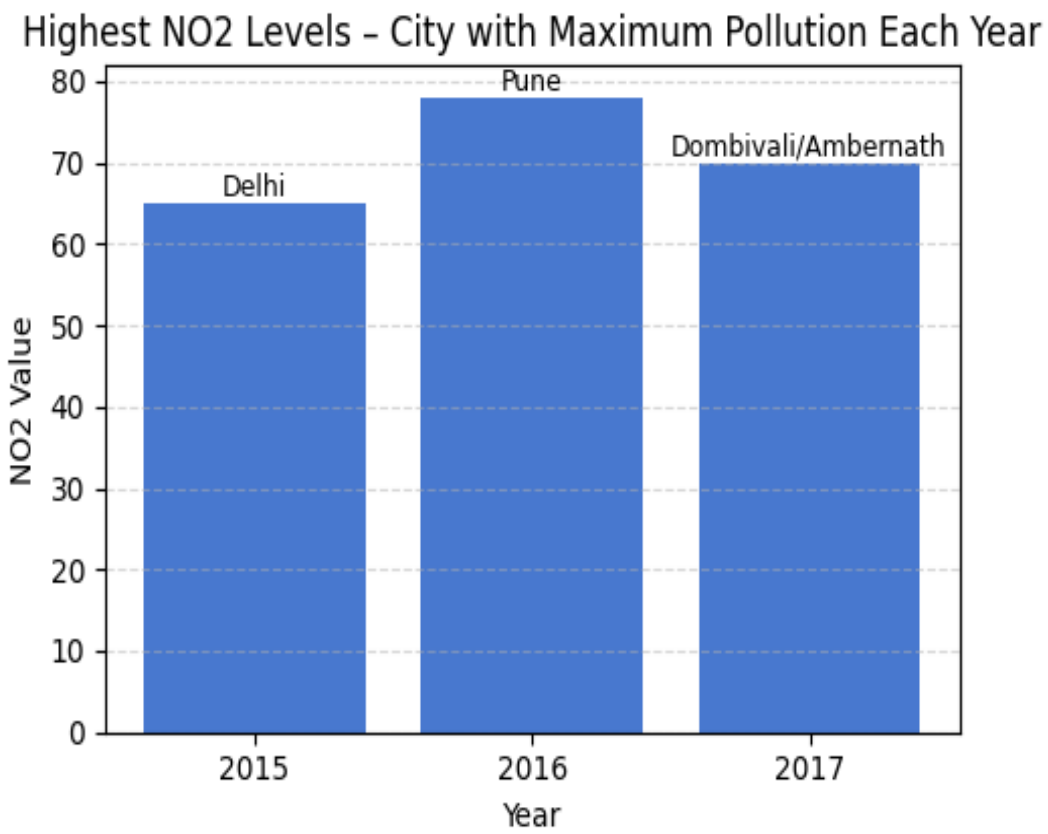

PM10 Pollution Levels Across Cities (Combined Years)
PM10 (µg/m³)
Cities
Years
2015
2016
2017
50
100
150
200
250
Vijaywada
Vishakhapatnam
Patna
Raipur
Delhi
Ahmedabad
Rajkot
Surat
Vadodara
Dhanbad
Ranchi
Bangalore
Bhopal
Gwalior
Indore
Jabalpur
Aurangabad
Dombivali/Ambernath
Mumbai
Nagpur
Nashik
Navi Mumbai
Pimpri Chinchwad
Pune
Thane
Amritsar
Ludhiana
Jaipur
Jodhpur
Kota
Chennai
Coimbatore
Madurai
Hydrabad
Agra
Allahabad
Ghaziabad
Kanpur
Lucknow
Meerut
Varanasi
Howrah
Kolkata

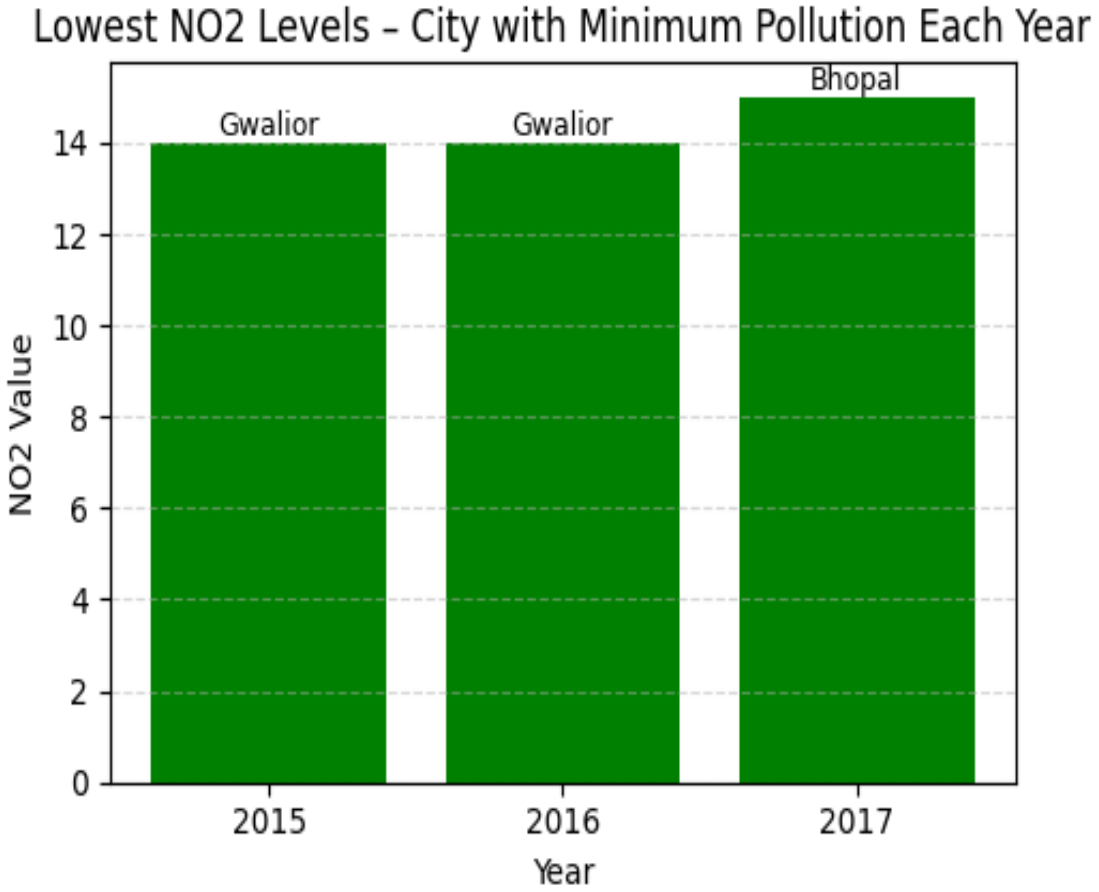
MOST & least Polluted cities due to SO_2



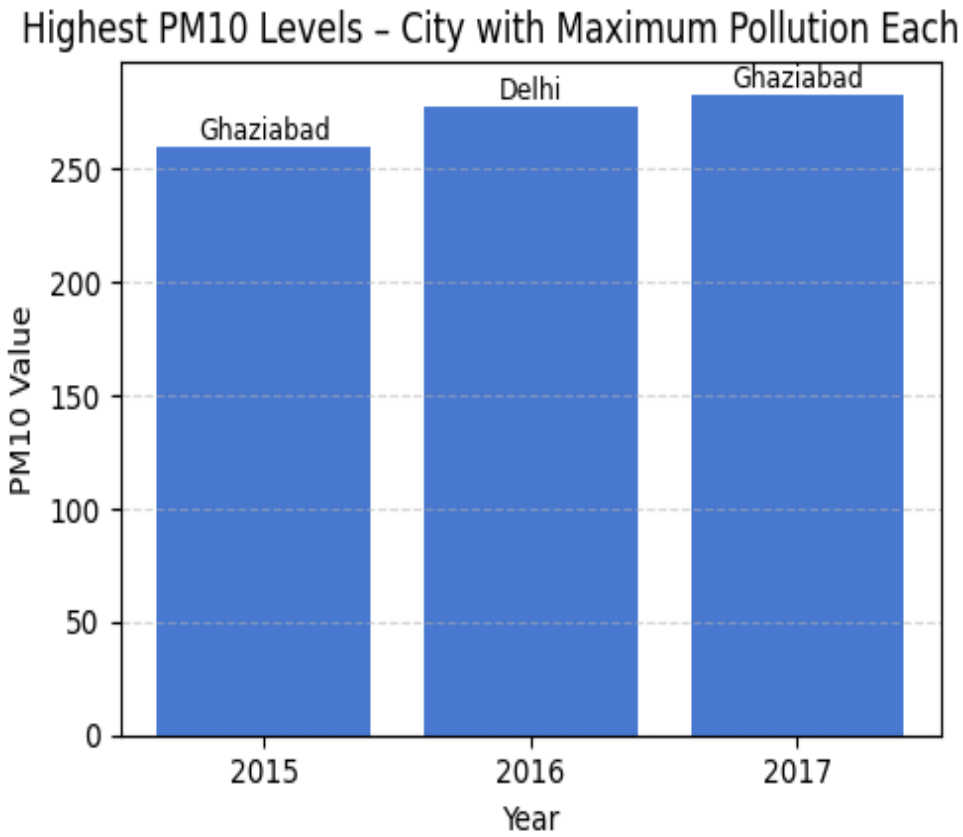


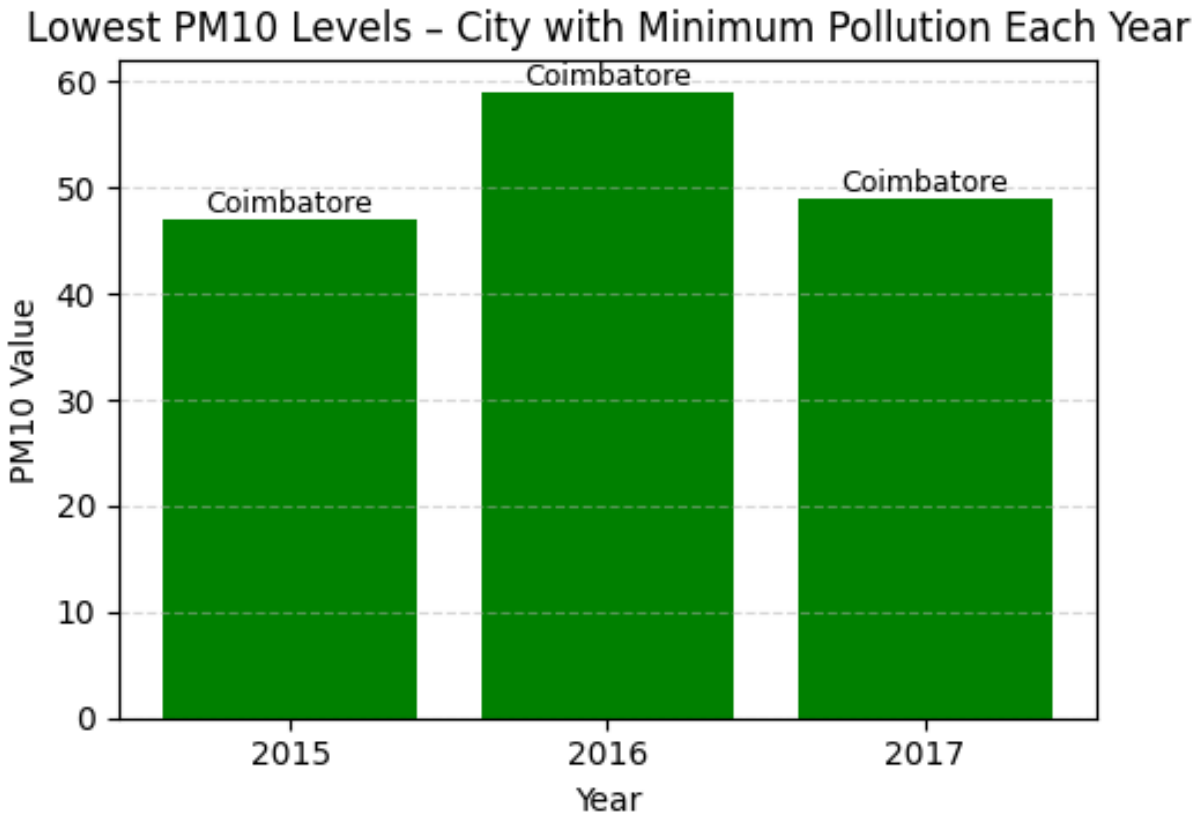
MOST & least Polluted cities due to NO_2





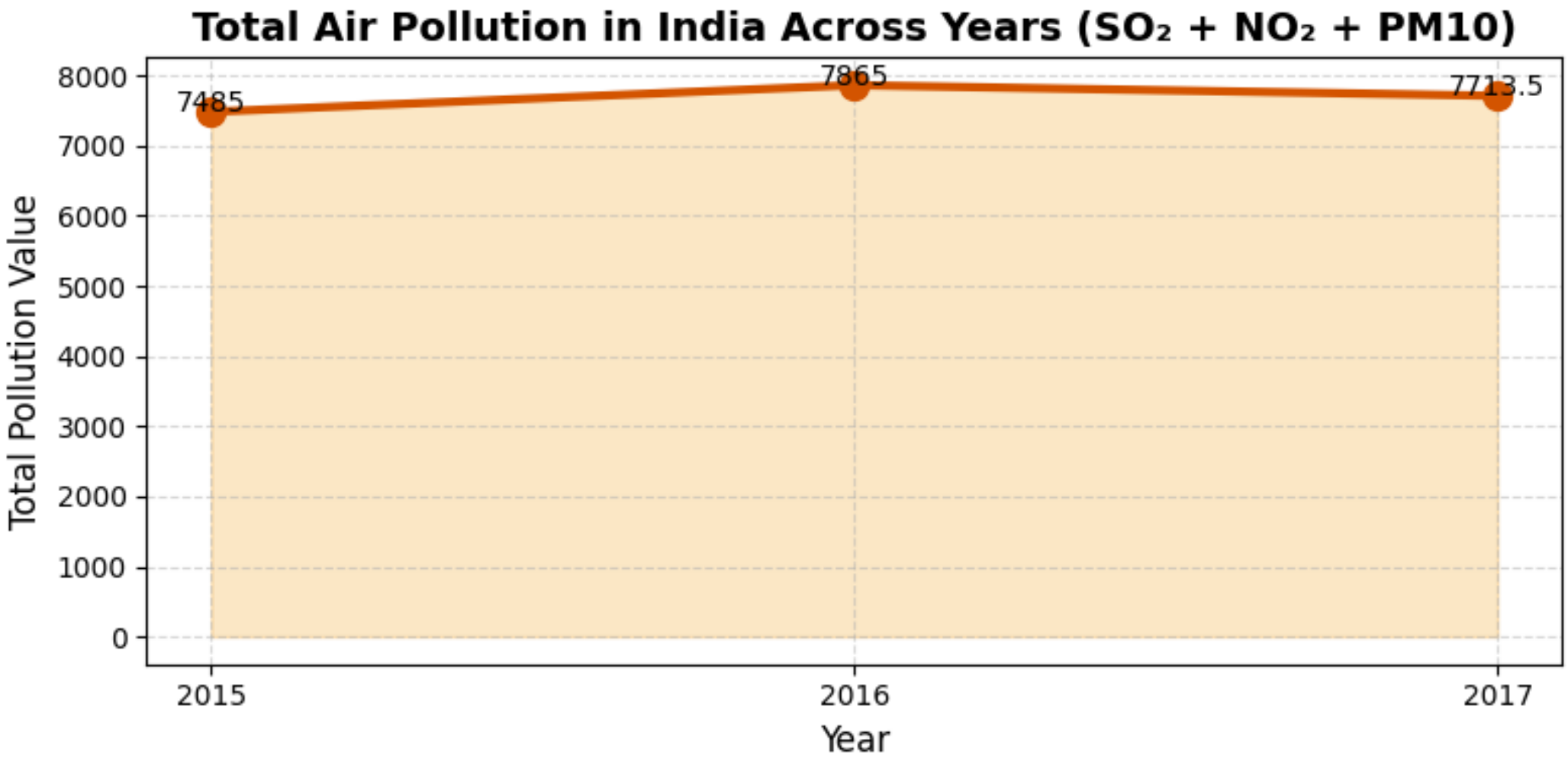
MOST & least Polluted cities due to PM_{10}






Pollution Heatmap Across Indian Cities (SO_2, NO_2, PM_{10}, All Years)
Cities
Vijaywada
Vishakhapatnam
Patna
Raipur
Delhi
Ahmedabad
Rajkot
Surat
Vadodara
Dhanbad
Ranchi
Bangalore
Bhopal
Gwalior
Indore
Jabalpur
Aurangabad
Dombivali/Ambernath
Mumbai
Nagpur
Nashik
Navi Mumbai
Pimpri Chinchwad
Pune
Thane
Amritsar
Ludhiana
Jaipur
Jodhpur
Kota
Chennai
Coimbatore
Madurai
Hydrabad
Agra
Allahabad
Ghaziabad
Kanpur
Lucknow
Meerut
Varanasi
Howrah
Kolkata
2015 - SO2
2015 - NO2
2015 - PM10
2016 - SO2
2016 - NO2
2016 - PM10
2017 - SO2
2017 - NO2
2017 - PM10
Pollution Level (µg/m³)
250
200
150
100
50

Summary:


Total Air Pollution in India Across Years (SO_2 + NO_2 + PM10)
Total Pollution Value
8000
7000
6000
5000
4000
3000
2000
1000
0
7485
7865
7713.5
2015
2016
2017
Year