Report view

AIRPURE INNOVATIONS

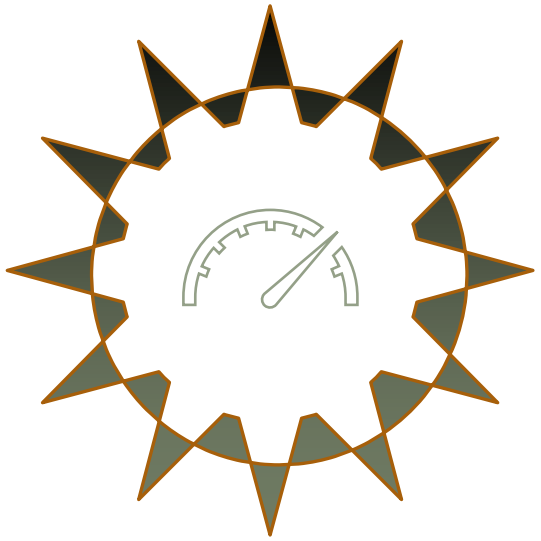
PRODUCT MARKET RESEARCH

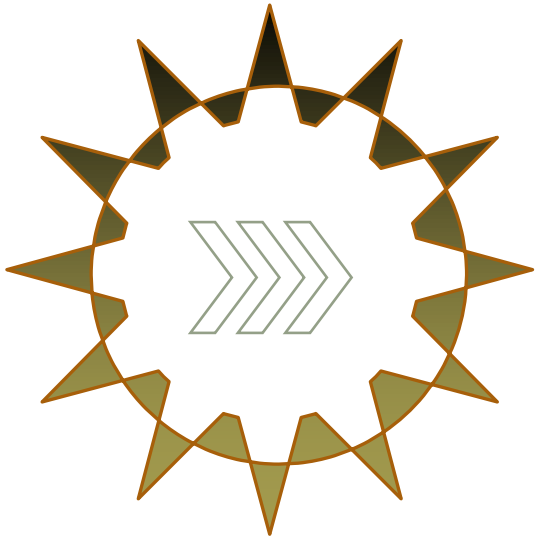
- Post Covid Reported Illness & Prominent Pollutants
- Electric Vehicles Adoption Analysis
- City Wise Air Quality Analysis
- Population Projection

- Last 6 Months AQI Analysis for Areas
- Top 10 states with distinct areas
- Last Year Weekend & Weekday AQI Analysis for Metro Cities
- Air Quality Analysis for Metro Cities

Project Summary

Data Model





Charts & Insights

Dashboard

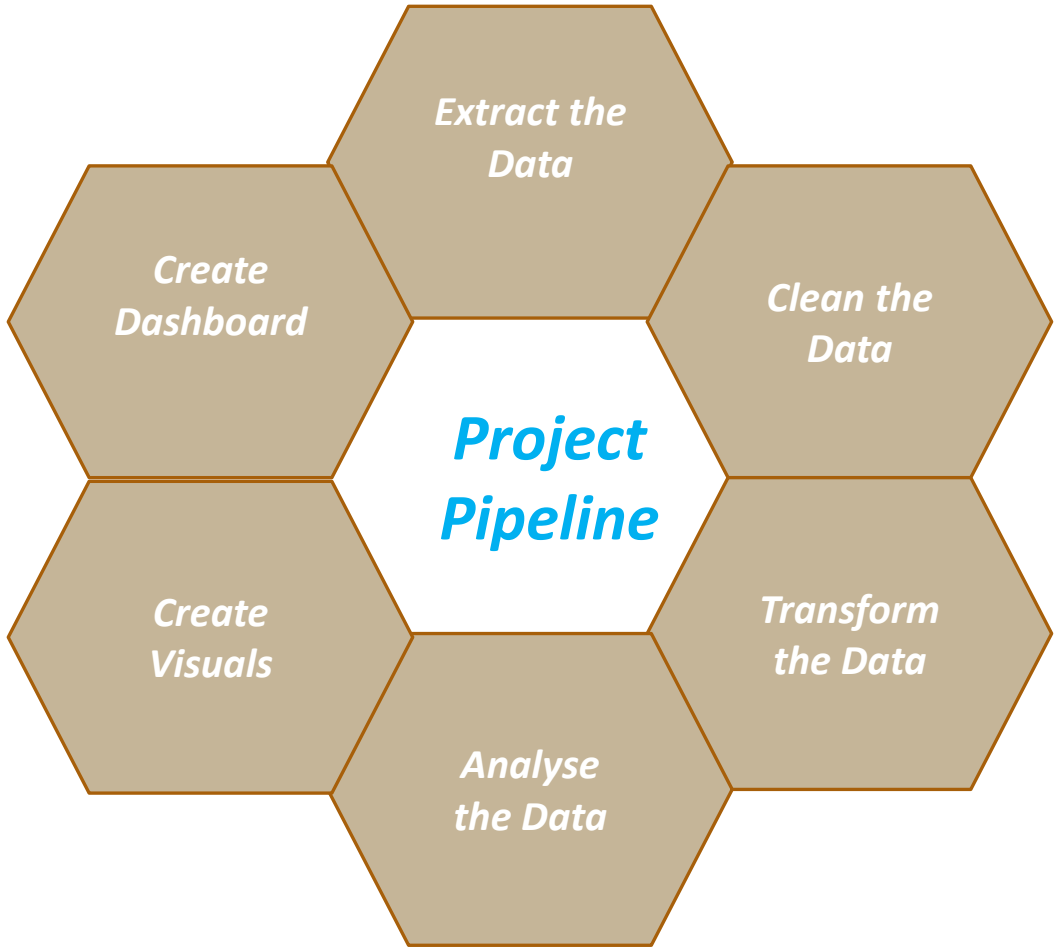
Project Summary

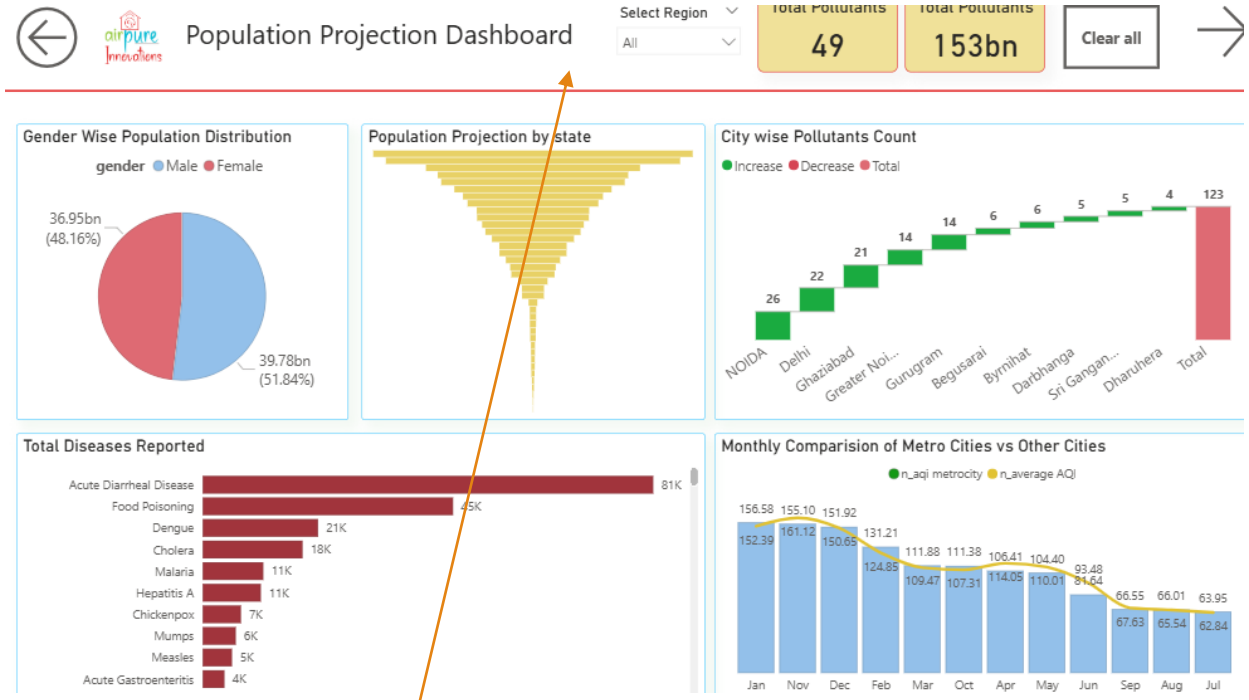
"AirPure Innovations" is a startup born out of the air quality crisis in India, with 14 cities ranking among the world's top 20 most polluted urban centers. The company is in the early stages of product development and is unsure whether there is a strong, sustained demand for its air purifier product.

Before committing to production and R&D, they want to study the market before they launch their product.

Key Questions AirPure Innovations is seeking answers for are

1. pollutants or particles their air purifier should target
2. Cities that have the highest demand for air purifiers
3. How EV adoption is affecting the Air Quality Index
4. Weekend & Weekday is their any difference in Air Quality Index
5. Corelation of AQI with respiratory diseases.

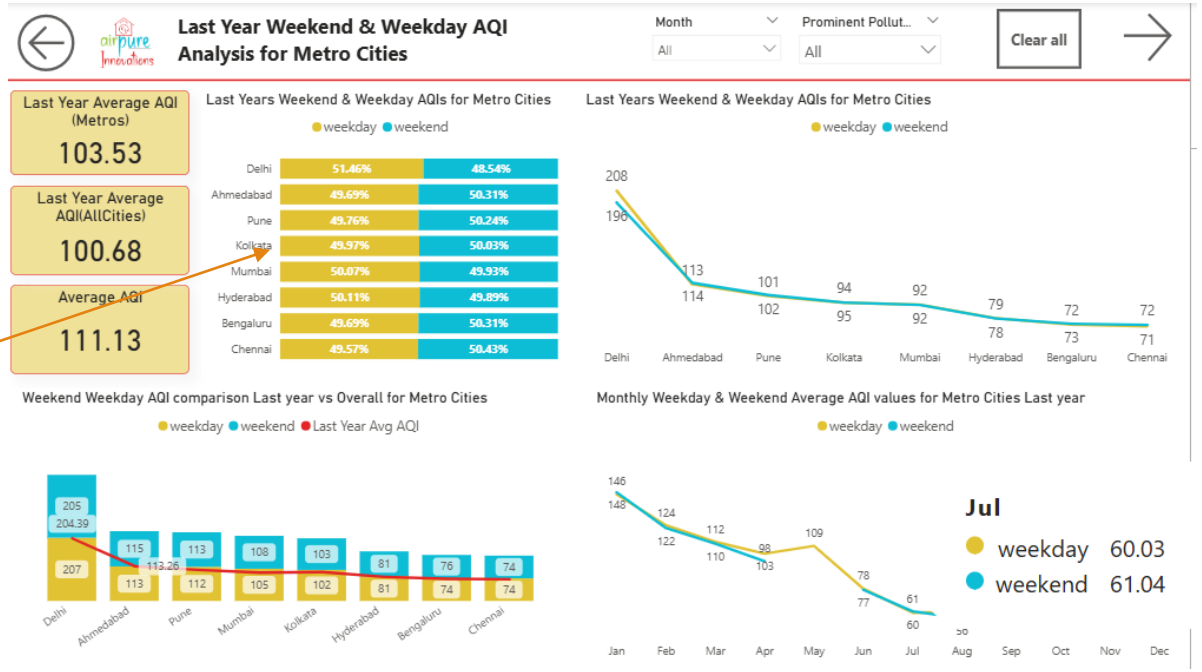




Population Projection

Weekday & Weekend Analysis

Dashboards



Charts & Insights

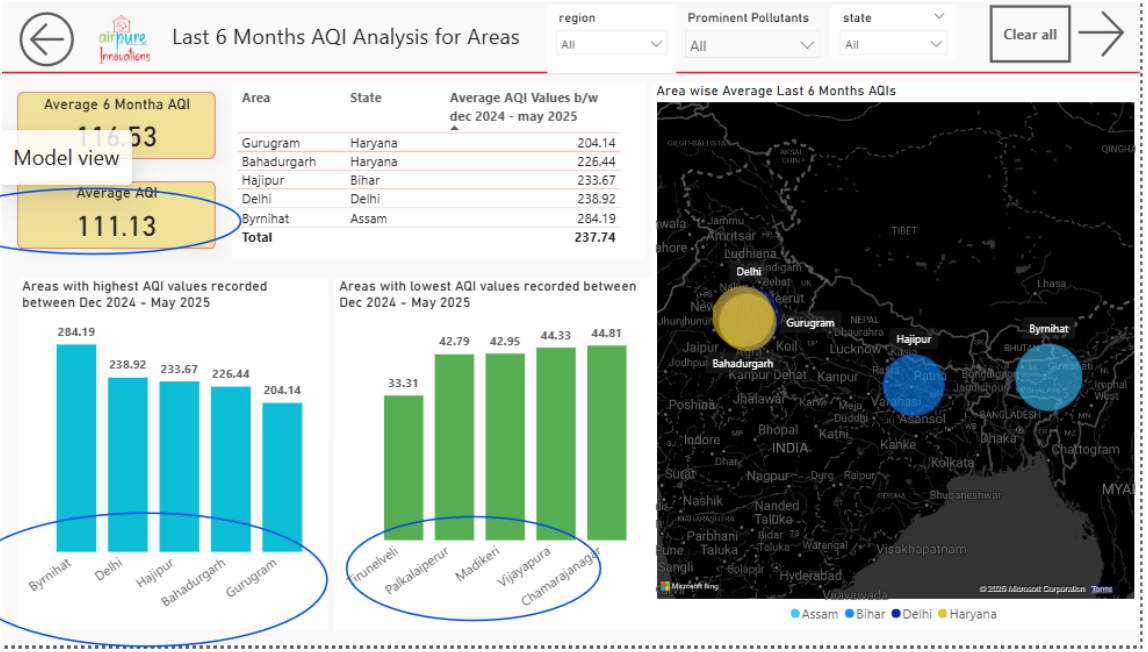
AREA WISE AQI ANALYSIS(LAST 6 MONTHS)

Last 6 months Average AQI's

For all Areas: **116.53**

vs

Top 5 Areas : **237.74**



TOP 5 AREAS (High Air Quality Index)

	Areas
1.	Byrnihat
2.	Delhi
3.	Hajpur
4.	Bahadurgarh
5.	Gurugram

TOP 5 AREAS (High Air Quality Index)

	Areas
1.	Tirunelveli
2.	Palkalaiperur
3.	Madkeri
4.	Vijayapura
5.	Chamarajnagar

with such a huge difference between the Average AQI's recorded for all areas and the top 5 Areas

Airpure Innovations has a huge market in these Top 5 Areas with high AQIs

All **top 5 Areas with high Air Quality Index** values fall in **North** and **North-East** regions.

2 of these Areas **Bahadurgarh** & **Gurugram** comes from the same state - **Haryana**

Charts & Insights

Electric Vehicles Analysis

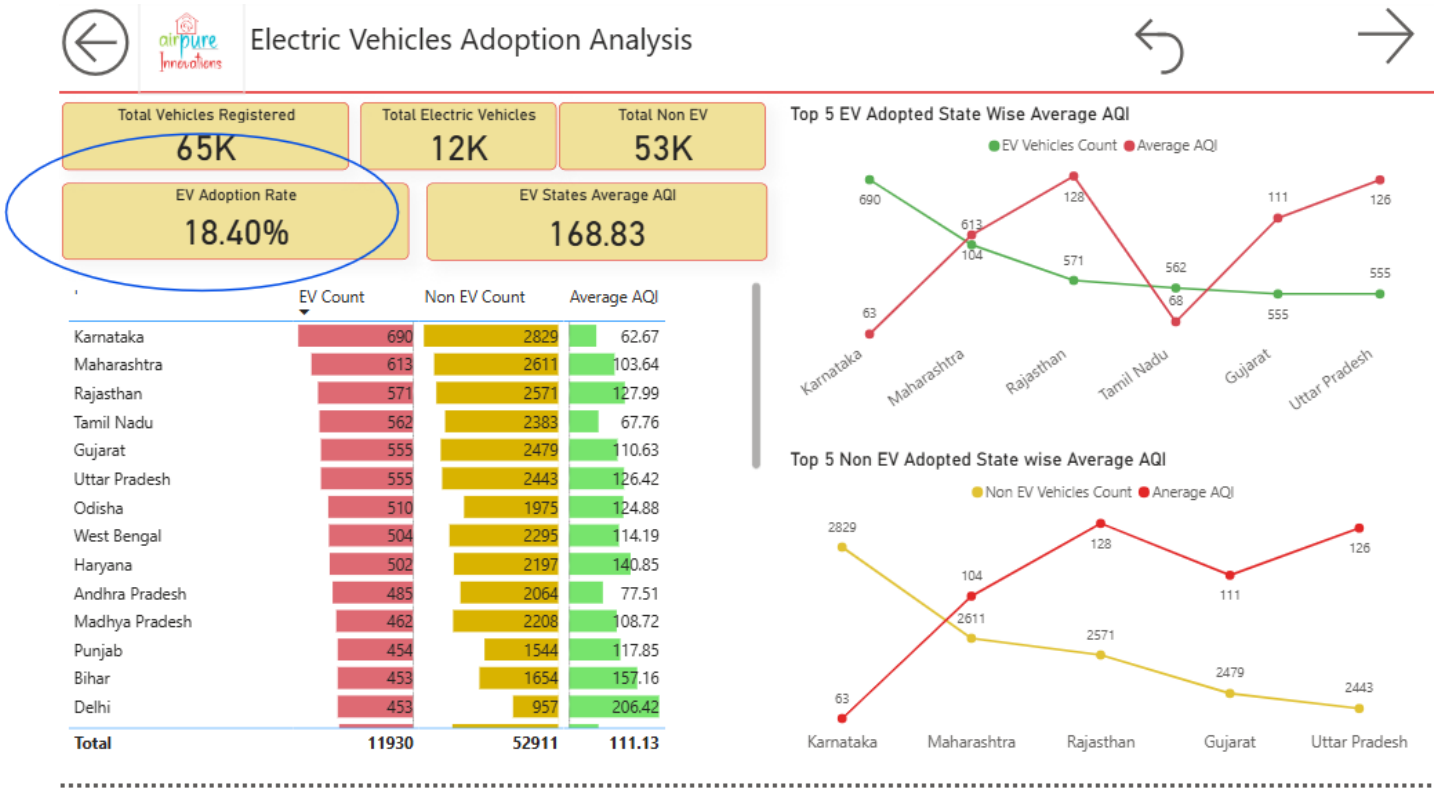
EV Adoption Rate - **18.40 %**

This KPI gives us the ratio of number of Electric Vehicle registered to the total Vehicles registered**.**

Total Vehicles : 65 K
Non EV : 53 K
EV: 12k

Looking at the charts provided

States with huge market for Electric Vehicles are also the states
with higher demand for the vehicles (irrespective of EV or Non EV)
hence **average AQI's are not affected based of high demand of EV.**



Charts & Insights

Monthly AQI Report for Top 10 States with Distinct Area Count

Top 3 States with distinct areas are

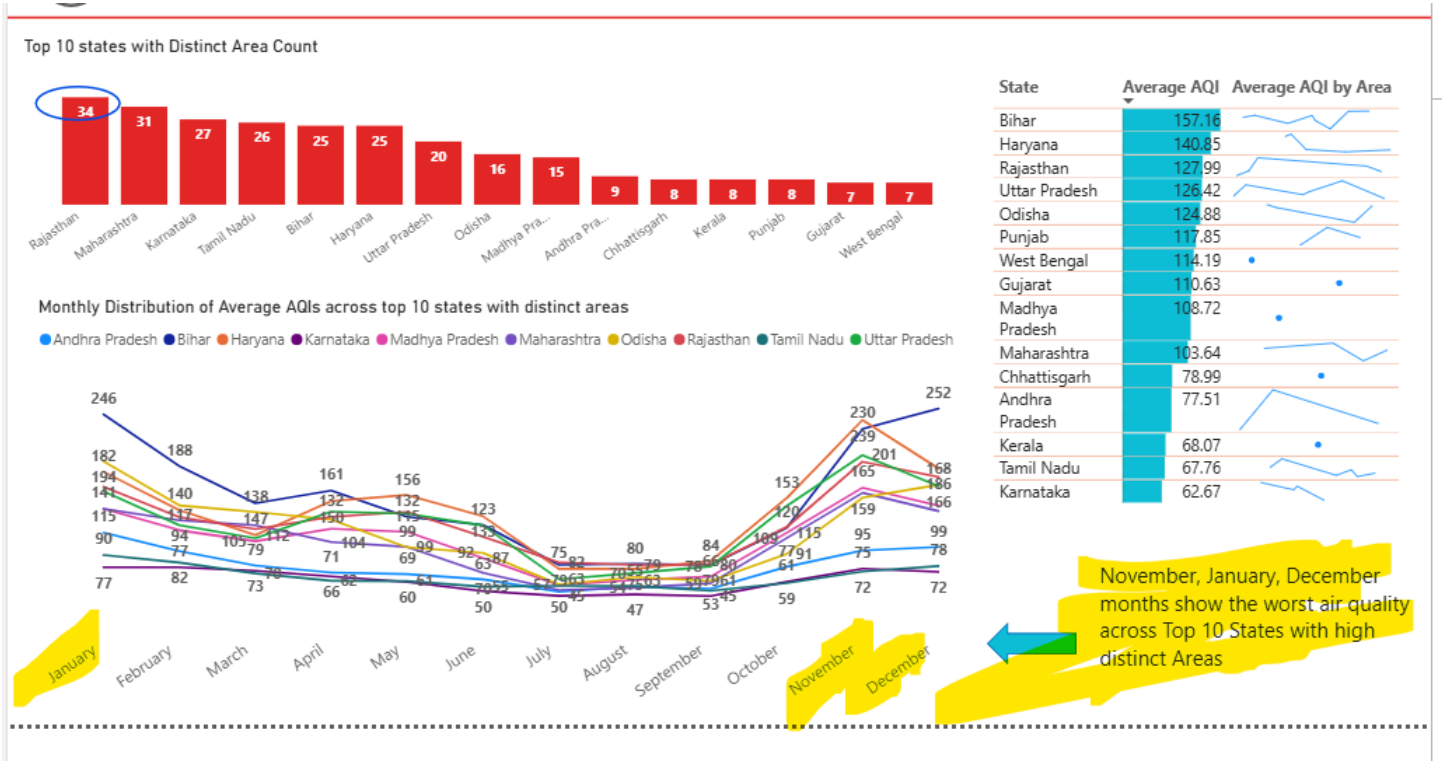
- Rajasthan
- Maharashtra
- Karnataka

Top 3 Months recording high AQI in these states

- December
- January
- November

Since winter months are prone to cold flu, “Airpure Innovations” can focus promoting their product in these months.

Mainly focussing on the features such as air purifiers can filter viruses causing these ailments and help you be better prepared for winters.



Charts & Insights

Weekend & Weekday AQI's

This reports looks into Weekend & Weekday AQI's recorded across Metro Cities last year

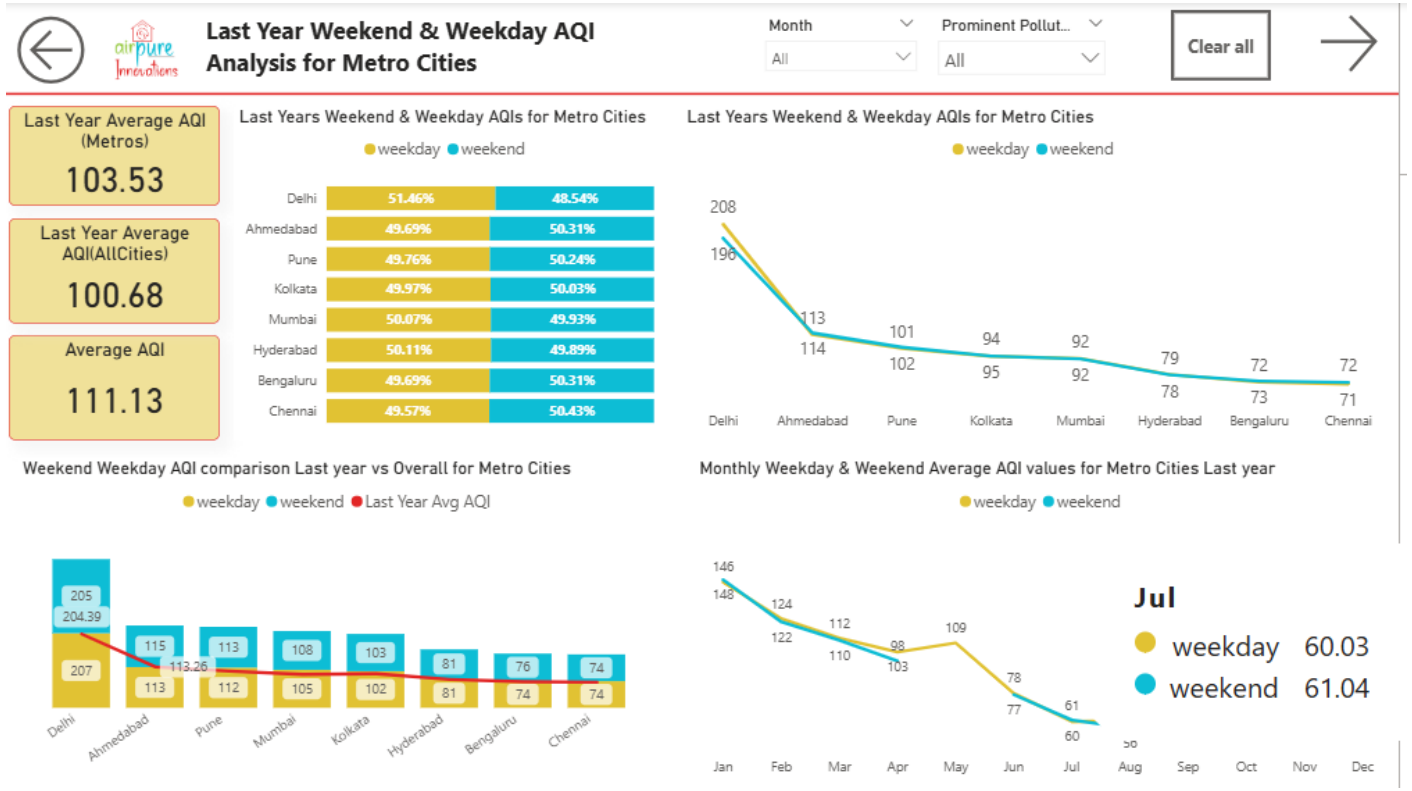
These 3 cities had the highest AQI values

- Delhi
- Ahmedabad
- Pune

Month of July has recorded the least AQI's

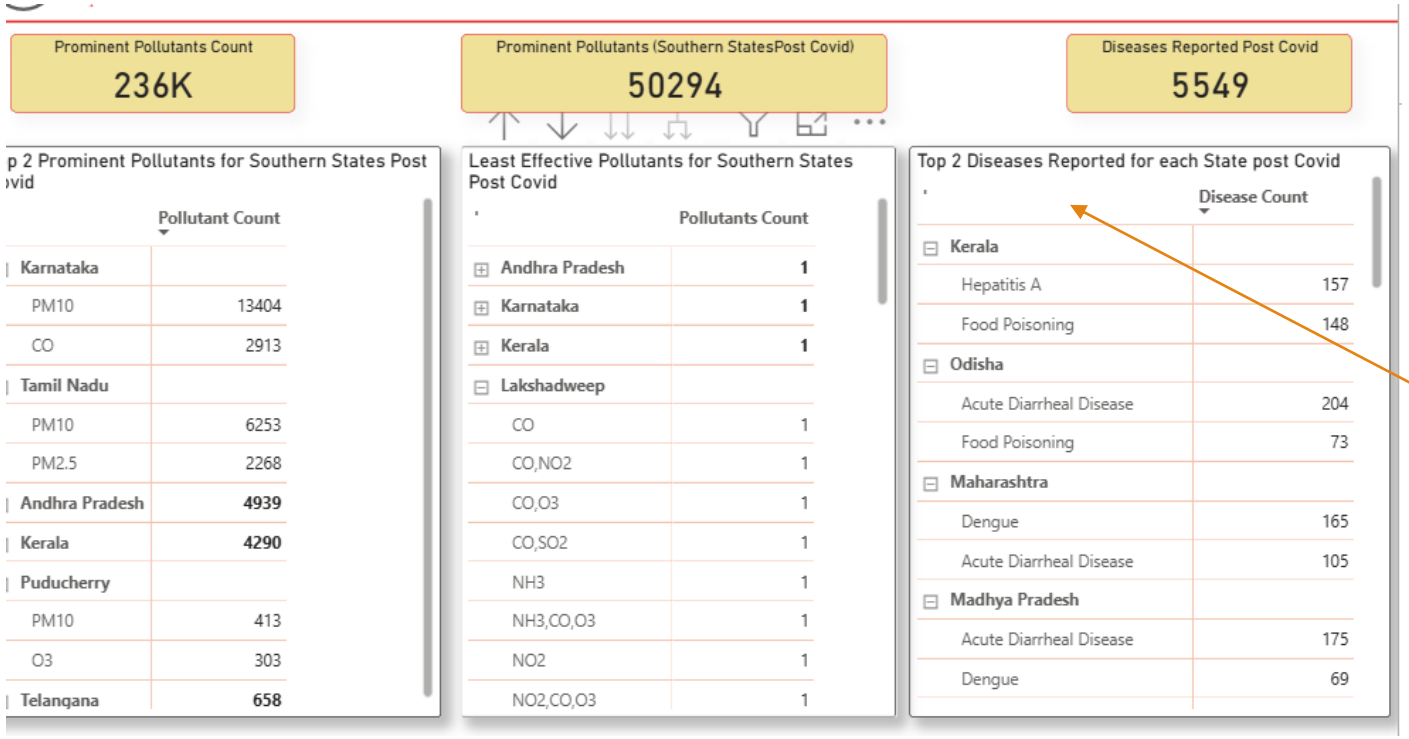
However irrespective of High & Low AQI values the weekend & weekday AQIs have been consistent and there is very less significant difference noticed.

Weekend AQIs are slightly less compared to weekdays



Charts & Insights

Top 2 Prominent Pollutants & Diseases Reported Post Covid



The Charts here present a detailed report for Prominent Pollutants & Diseases reported per state.

Post Covid Total Number of Diseases reported across Country is 5,549.

- This table shows the top 2 diseases reported for each state.
- Top 3 states with highest number of diseases reported being
- Kerala
- Odisha
- Maharashtra

These tables shows the top 2 & bottom 2 pollutants found each South Indian State

- PM 10 was recorded as highest pollutant.

Charts & Insights

AIR QUALITY STATUS

- This is the Monthly Performance Analysis for Top 10 Cities recording the Average AQIs.
- AQI's can be checked based on the air quality status (Good, Moderate, Severe etc.)

- Air quality status recorded for Bengaluru in the time- period March2025- May 2025 falls in only two categories.
- 48% : Satisfactory
- 13% : Moderate

	Good	Moderate	Poor	Satisfactory	Severe	Very Poor
Ahmedabad	42.77	134.59	218.55	78.98		
Bengaluru	45.05	119.29		73.28		
Chennai	44.25	122.56	223.00	70.07		
Delhi	46.00	150.45	244.50	77.13	427.29	347.01
Hyderabad	46.04	112.78		75.91		
Kolkata	40.42	141.37	239.54	71.88		307.00
Mumbai	41.73	141.87	229.79	72.68		
Pune	46.58	133.59	220.82	78.86		345.50

Average AQIs recorded across all metro cities based on Air Quality Status

Key Insights

Using Weekend weekday Analysis, we can say that there is only a slight difference in AQI values this can suggest pollution sources are consistent year-round (e.g., industrial emissions, construction dust, traffic that doesn't drop much on weekends).

What does this mean to Airpure Innovations

This finding tells them they should **sell on consistency. Targeting Corporates & residential alike.** A broader sales focus is needed.

Year-round marketing & inventory → no seasonal weekday/weekend targeting instead, maintain steady supply.

Indoor air quality awareness → since exposure is constant, highlight how indoor purifiers protect 24/7, not just during peak traffic days.

Features to be implemented in their product
→ promote continuous filtration modes, energy-efficient operation, and automatic AQI sensors.

Top 2 Pollutants are PM10 & PM2.5

What does this mean to Airpure Innovations

This could be due to heavy construction, dust etc. hence focus on

→ developing filters optimized for dust-heavy environments and design units that are easy to maintain in dusty climates.
→ emphasize CADR (Clean Air Delivery Rate) for particulate matter, real-time PM2.5/PM10 sensors, and auto-adjust modes.

Prioritize Filtration Technology → highlight **HEPA H13 or higher** and **multi-stage filtration** that can effectively trap particles as small as 0.3 microns (for PM2.5) and larger coarse particles (for PM10).

Strategies to follow

Consumer Education → run campaigns explaining the difference between PM10 & PM2.5, and their health effects (respiratory, cardiovascular). This builds trust and urgency.

Market Messaging → position the product as *"Designed for India's Dust & Fine Particle Pollution"* — targeting both urban and semi-urban consumers.

The EV Analysis report shows AQIs are not affected even in the EV Adopted states

This could be because EV adopted states are also the states with high demand for vehicles

What does this mean to Airpure Innovations

→ Since EVs aren't moving the AQI needle, prioritize pollutants from non-vehicular sources (PM2.5, PM10 from dust, industry, crop burning).

→ Develop filtration solutions specifically for regions with heavy industrial particulate emissions and seasonal dust events.

Incorporate this feature → High-efficiency particulate filters with dust and smoke modes, and AQI display to make invisible pollution visible to consumers.

Strategies to follow

→ Educate customers that even in "green transport" states, indoor air pollution remains harmful, so air purifiers are still essential.

Seasonal Campaigns → Target sales peaks during known pollution seasons (e.g., post-harvest stubble burning in North India, construction booms).

Key Insights

Since Top 3 states with highest distinct area counts are Rajasthan, Maharashtra, Karnataka & Peak AQI months being December, January, November
Highest AQI areas:** North & North-East regions

Airpure Innovations should focus these things in their product

Feature	Target Pollutant / Region Insight	Expected Benefit
Pre-filter + HEPA H13/H14	PM10 & PM2.5 (top pollutants)	Captures >99.97% of fine and coarse particles, improving indoor air quality significantly
Activated Carbon Layer	VOCs, smoke (North & North-East winter smog)	Removes odors, chemicals, and smoke from stubble burning/festive fireworks
Auto AQI Sensor & Adaptive Mode	High AQI spikes in Nov, Dec, Jan	Dynamically adjusts performance during peak pollution hours without manual intervention
Winter Smog Mode	Seasonal high AQI (North & North-East)	Boosts filtration efficiency in smog-heavy months, reduces exposure during worst days
Dust storm Mode	Rajasthan & dry regions	Prevents filter clogging from coarse dust, improves performance in desert climates
Pollen & Allergy Protection Mode	Karnataka, South regions (allergen-prone)	Reduces pollen-related allergies, improves well-being for sensitive users
UV-C Sterilization	Bacteria/mold on filters in humid areas	Ensures filters remain hygienic, reduces spread of microbes indoors
Whisper Night Mode	All regions	Enables 24/7 use in bedrooms without noise disturbance
Mobile App Integration	Urban consumers (tech-savvy markets)	Enables AQI tracking, filter alerts, remote operation, and education on pollution
Washable Pre-Filters	All regions	Reduces recurring costs, improves sustainability, and extends filter life

THANK YOU