

CASE STUDY REPORT

1. Title Page

- **Title:** Reduction of PM2.5, PM10, and AQI by 90% in [District Name] Using Entropy Modification Technology: A Case Study
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- **Date:** January/2026
- **Logo:**



2. Executive Summary

- Briefly describe the problem (air pollution levels before intervention).
- Introduce the solution (Entropy Modification Technology/Air Balance).
- Highlight the results (90% reduction in PM2.5, PM10, AQI).
- Mention the methodology and key findings.

3. Introduction

- **Background:** Discuss the air pollution crisis in [District Name], citing pre-intervention data.
- **Objectives:** State the goal of the case study (to demonstrate the effectiveness of your technology).
- **Scope:** Specify the time period, area covered, and parameters measured (PM2.5, PM10, AQI).

4. Methodology

4.1 Technology Description

- Explain “Entropy Modification Technology” and how “Air Balance” works.
- Include a **diagram** of the technology (flowchart or schematic).

4.2 Data Collection

- **Parameters Measured:** PM2.5, PM10, AQI, and any other relevant pollutants.
- **Tools Used:** Mention the devices (e.g., air quality monitors, sensors).
- **Data Points:** Number of monitoring stations, frequency of data collection.

4.3 Implementation

- Describe how the technology was deployed in the district.
- Timeline of implementation.

5. Results

5.1 Pre- and Post-Intervention Data

Table 1: Air Quality Parameters Before and After Implementation

Air Quality Parameters Before and After Implementation

Parameter	Pre-Intervention ($\mu\text{g}/\text{m}^3$)	Post-Intervention ($\mu\text{g}/\text{m}^3$)	% Reduction
PM2.5	[Value]	[Value]	90%
PM10	[Value]	[Value]	90%
AQI	[Value]	[Value]	90%

5.2 Graphical Representation

- **Line/Bar Graph:** Show the reduction in PM2.5, PM10, and AQI over time.
- **Map:** Highlight the district and mark monitoring stations.

6. Discussion

- Analyze the results: Why was the reduction so significant?
- Compare with other technologies or previous attempts.
- Discuss any challenges faced during implementation.

7. Conclusion

- Summarize the success of the project.
- Emphasize the potential for scaling up the technology.
- Call to action for policymakers or other districts.

8. References

- Cite any studies, reports, or data sources used.

9. Appendices

- Raw data tables
- Additional diagrams or photos of the technology in action