

Introduction

150 million people exposed to air pollution levels exceeding WHO guidelines in Latin America

- With 80% of their residents living in cities, Latin American countries are challenged by accelerated motorization rates, urban sprawl and increased fuel consumption, associated to both air pollution and climate change.
- Comprehensive air quality management planning based on health considerations has proven to be an effective instrument to articulate large scale interventions to protect people from air pollution impacts. Regional examples of success have been Mexico City and Santiago, among others.
- However, most Latin American cities still provide scarce consideration to health impacts from air pollution on infrastructure and budget allocation decisions.
- Clean Air Institute (CAI) works with interested parties using state-of-the art tools and research to accelerate processes to abate air pollution.
- As a part of our work, CAI has collaborated with the Aburrá Valley (Medellin Metropolitan Area) to prepare the Comprehensive Air Quality Management Plan 2017-2030, officially adopted in late 2017.
- This experience is replicable to other cities in developing countries.

The Metropolitan Area of Aburrá Valley

- 3.7 million inhabitants within 10 municipalities (nucleus city: Medellin).
- 2nd largest economy in Colombia, most innovative city.
- ...and 2nd most polluted urban area in the nation.
- Population, motorization rates & freight are rising, and economic activities are expanding.

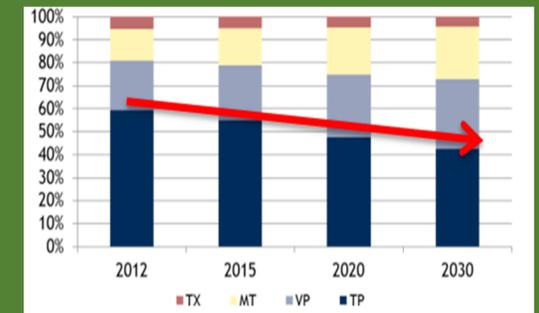
700,000



500,000



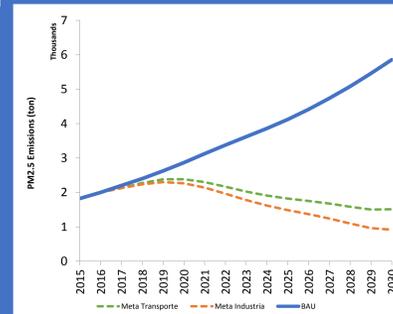
Public Transport Share is Declining



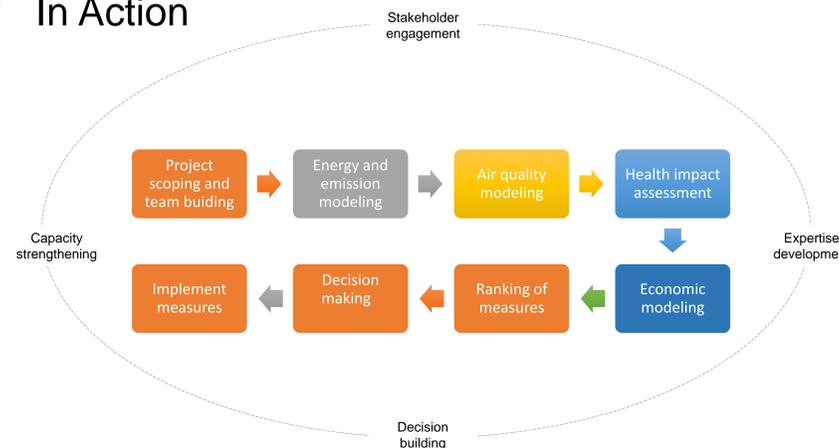
Designing an Air Quality Management Plan

- Multi-sectorial, multi-pollutant plan (including criteria pollutant, black carbon and GHG).
- Goal 2030: WHO Interim Objective 2 for PM_{2.5}
- Time frame: 2017-2030
- Strategies include: mobility, urban planning, industrial sources, others + crosscutting strategies.

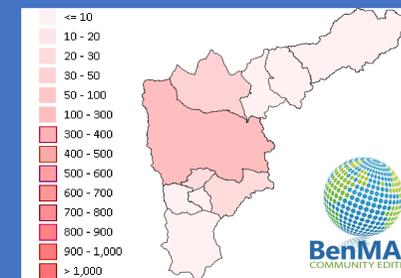
75% emission expected reduction as a result of the plan implementation



Integrated Environmental Strategies In Action



Focusing on Health



Attributable deaths to Air Pollution in the Aburrá Valley (2014)

Baseline

1,700 deaths/year
\$793 million (4% GDP)

With Plan (2030)

437 deaths/year
\$206 million

Building up informed decisions and stakeholder commitment

- Dissemination of results to the public, media and decision makers to support plan approval and implementation.
- International workshop about health effects of air pollution.
- Inclusion of a comprehensive strategy to enhance health response as a part of the Air Quality Management Plan.
- The metropolitan area joined Breathe Life Campaign as a part of the plan.



Conclusions

- The Integrated Environmental Strategies approach enables to mainstream health considerations to identify, evaluate and prioritize interventions for simultaneously addressing both air pollution and climate change.
- Health impact assessment establishes a strong foundation for collaboration between health, environment and other sectors, as well as to overcome barriers for strategy implementation.
- Effective communication of health benefits of air pollution abatement is key to build decisions and public support for high-impact interventions at the scale of the magnitude of challenges being faced by cities.

Acknowledgments

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