

CASE STUDY

Air Quality and Health City Outlook

City: San Jose

1. Air Quality Management and Health Indicators

Indicator	Value	Units	Reference
Annual mean concentration of fine particulate matter (PM _{2.5}) in urban areas (µg/m ³). Year: 2019	18.7	µg/m ³	Not available
Annual mean concentration of particulate matter (PM ₁₀) in urban areas (µg/m ³). Year: 2019	Not available	µg/m ³	Not available
Total number of air quality monitoring stations	13	Units	Ministry of the Environment and Sustainable Development
Number of fine particulate matter (PM _{2.5}) monitoring stations	4	Units	
Number of particulate matter (PM ₁₀) monitoring stations	9	Units	
Emissions Inventories Year 2018	Yes	NA	Not available
Regulatory Framework Based on WHO Guidelines	Yes	NA	Not available
Health Sector Involvement on AQ Management	Yes	NA	Not available
Total Population	344,000	inhabitants	Not available
Urban Population	Not Available	inhabitants	
Rural Population	Not Available	inhabitants	
Population over 25 years	236,222	inhabitants	Calculated

Indicator	Value	Units	Reference
Natural mortality excludes accidental A00 R99	172	deaths	Estimated in this project
Ischemic heart disease mortality I20-I25 IHD	42	deaths	
Mortality due to cerebrovascular disease I60-I69	33	deaths	
Mortality due to Chronic Obstructive Pulmonary Disease COPD J40-J44, J47	27	deaths	
Lung Cancer Mortality C30-C39	25	deaths	

2. Advances in Air Quality Management

- Improvement in fuel quality.
- There is RTV, where there have been introduced improvements in the revision related to emissions measurement.
- Vehicle import restrictions used.
- The National Decarbonization Plan promotes the use of cleaner technologies.
- Incentives for the purchase of electrical vehicles.

3. Main Challenges and Opportunities

- The integration of other actors in air quality management is required.
- It is necessary to consolidate a mechanism for financing and supporting the air quality monitoring network.
- The RTV does not yet include NOx measurement.
- Using the AirQ+ tool will help convince authorities and the population about the importance of continuing to work on the management of air quality.

- Work is needed to update and implement a new Air Quality Improvement Plan.
- Air Quality modeling is the next step in the management of the Costa Rican model.

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