Low Cost Air Quality Sensor Challenges & Hopes: What’s happening with Air Sensors and What’s Needed

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A globally-adopted air quality measurement solution deployed in 60+ countries.
Addressing a wide range of use cases

- Bay Area, California: 100+ community sensors funded by AB 617
- London, United Kingdom: 300+ sensors to optimize air quality policies
- Bishkek, Kyrgyzstan: 50+ sensors to evaluate impact of green infrastructure investment
- Kampala, Uganda: Clarity used to establish the first official air quality monitoring network
- Jundiaí, Brazil: Smart City pilot program
- Manila, Philippines: Citywide network supports improved air quality management practices
- Sydney, Australia: UNSW Clean Air Schools Program
Pilots are transforming into full-scale networks

Technology Adoption Curve
Data are starting to inform action

- Breathe London: The community sensing network
  - ~300 device network (and growing!)

- 200 device network across Los Angeles Unified schools

- 25 devices for 20+ municipalities

- Monterey Bay Air Resources District
Opportunity 1: How to build, evaluate, & maintain trust in the data

Calibrations?

QA/QC?
Opportunity 2: Take a programmatic approach to effective air quality management

Air Monitoring alone is not enough...
Opportunity 2: Take a programmatic approach to effective air quality management

Data Analysis & Policy Insights

Community Engagement

Regulatory Engagement

Effective AQ Management

Air Monitoring

Data can be an important tool, but not the entire solution