

Airparif

March 27th 2023

APFSD SIDE EVENT - ACTIONS TO HARNESSING SYNERGIES BETWEEN PARIS AGREEMENT AND SUSTAINABLE DEVELOPMENT GOALS:

Enhancing cities to city cooperation in the Asia-Pacific region.
Paris examples





01

AIRPARIF

Air pollution monitoring and public information

Airparif and air pollution monitoring organisations in France

Act for a healthy air in a more sustainable world

► According to the French air Act (1996), air pollution is monitored

- By **independent regional organizations**

Agreed by the french Ministry of Environment

→ Airparif for Paris Region

- gathering the **stakeholders in their administration board**

¼ **State**

¼ **local authorities** including Paris Region and Paris municipality

¼ industries and **economical players**

¼ **experts and NGOs** (environmental & consumer protection)

→ 156 members



Focus : Air, climate, energy and health

Our missions



MONITOR air and climate pollutants in Ile-de-France, forecast pollution episodes



UNDERSTAND : air pollution and its impacts, and contribute to the improvement of knowledge and better understanding of the links with climate/energy/health



SUPPORT : citizens, decision-makers and the media by informing and raising awareness, evaluating policies and facilitating dialogue among stakeholders



INNOVATE : by facilitating the emergence of new solutions to improve air quality



02

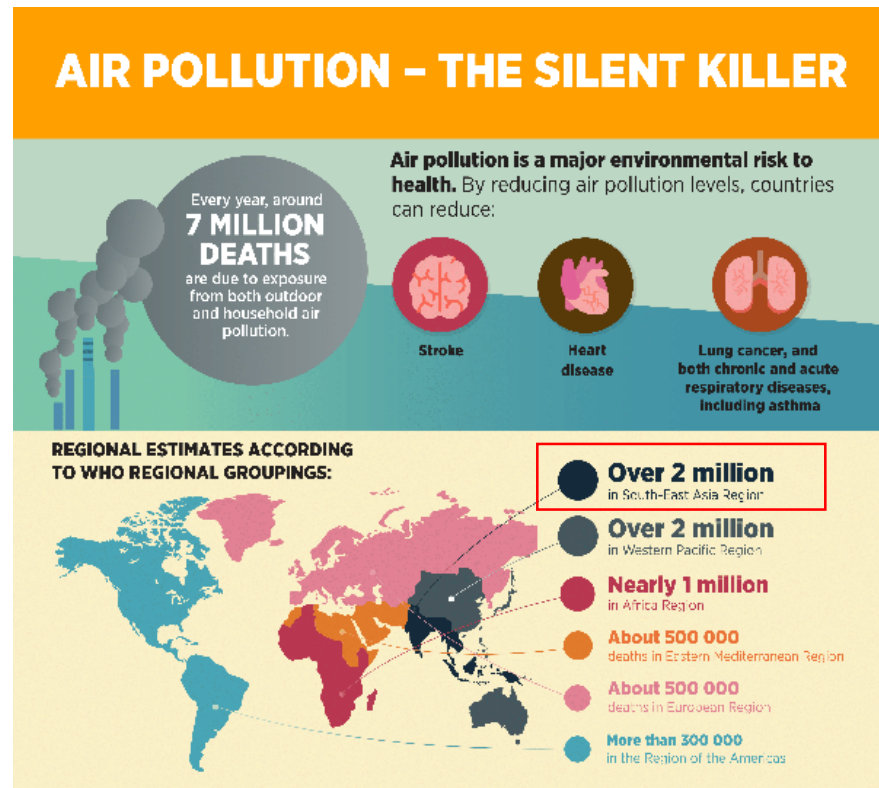
AIR POLLUTION AND CLIMATE CHANGE

Global challenges, local issues

Air pollution : multiple issues, multiple scales

- ▶ **Health** (WHO):
7 millions anticipated deaths/ year
2 millions in the SE Asia region
ambient + indoor air pollution
- ▶ **Economy** (World Bank) :
health cost, tourism, attractiveness
Productivity losses : US\$ 225 billion in 2013
55% % in low and middle income countries
- ▶ **Climate change** : air & climate pollutants
- ▶ **Food safety**
- ▶ **Biodiversity**
- ▶ **Relationships between the countries**
transboundary pollution
- ▶ **Cultural heritage**

⇒ **mediatised and political issues**



Air pollution and Climate change

► Pollutants

Common pollutants for

Climate and air :

Short lived compounds (SLCs)

Impact of Climate change on air pollution and vice-versa

Eg Increased ozone levels

► Sources (emissions)

Same sources

With different contributions :

Traffic, heating, industries, agriculture...

Often : common locations

- **Urban areas** = key emitters
50% of the population (2/3 by 2050)
70% of CO2 emissions + Air pollutants

EG Paris Region

► Action plans

Look for **Synergies**

- **Energy saving**
- Change in **behavior**

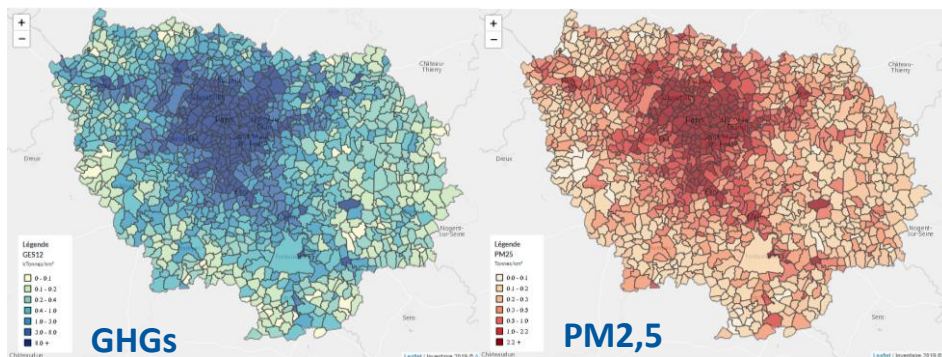
Beware of **antagonisms**:

Change in energies (diesel, wood burning...)

key role of large **cities** : **efficient bottom up initiatives**

- Local action = **local + global benefits**
- **Short term benefits** : health + economy

Room for cooperation



Why harnessing climate and SDGs synergies when dealing on air pollution issues ?

Global issues addressed

- **Triple global crisis:** climate / biodiversity and pollution
→ Cities can contribute locally to those global issues
- Recognition of a **universal right to a healthy environment**
→ **Eg New WHO's air quality guidelines aim to save million of lives :**

"Since WHO's last 2005 global update, there has been a marked increase of evidence that shows how air pollution affects different aspects of health. For that reason, (...) WHO has adjusted almost all the AQGs levels downwards, warning that exceeding the new air quality guideline levels is associated with significant risks to health. At the same time, however, adhering to them could save millions of lives"

- **Sustainable development goals**
→ Eg social and environmental inequalities

Expected short term impact on health
and co benefits on Climate and Biodiversity



Reducing Short-Lived Climate Pollutants is the Last, Best Hope At Stemming Loss and Damage

Cutting SLCPs could reduce the rate of sea level rise by 20 percent in the first half of the century, a significant number for the 800 million people living in cities vulnerable to sea level rise.

by CCAC Secretariat - 7 February, 2023



Good for people, good for planet

Slicing SLCPs is a nature-positive way to keep humans and the earth healthy

by CCAC Secretariat - 3 March, 2023





03

3 EXAMPLES OF LOCAL COOPERATIONS IN SE ASIA WITH PARIS AREA

Hanoi (finished),
French and Thai international microsensors challenge (in progress),
Air quality implementation program in Thailand (to be launched)

Strengthening the monitoring network: Cooperation with HANOI



■ Diagnosis and Recommendations for the Hanoi Air Monitoring Network

- Diagnosis of the possible monitoring sites considered by the DONRE (traffic and background sites, pollutants to be measured depending on the sources)
- Optimal size of the network to be recommended
- Complementary use of different monitoring tools (fixed stations, diffusion tubes, monitoring campaign, modeling tools ...)

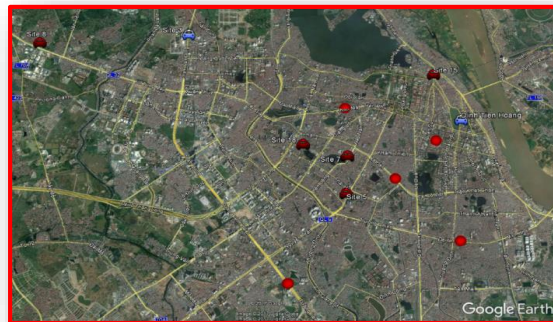
■ Building capacity :

- station maintenance procedures, data validation, quality control
- impact assessment method for a given mitigation measure: eg traffic ban along the Hoan Kiem lake
- communication tool



France funds Hanoi's air environment assessment

The French embassy and the French Development Agency (AFD) will provide a funding worth 120,000 EUR for a technical assistance project on assessing the status of the air environment in Hanoi.



Monitoring technologies : providing guidance to potential users

4th International microsensors challenge

- **Reliable measurements** as a key to sustainable development monitoring and planning + citizen's information
 - **Microsensors: a rapidly developing market**, esp. in SE Asia,
 - **Increasing demands for independent information on the performance of microsensors**
 - **Promote innovation** through feedbacks to manufacturers
- **Provide guidance to any potential users** (authorities, private sector, citizens) to help them find the sensor most suited to their needs;



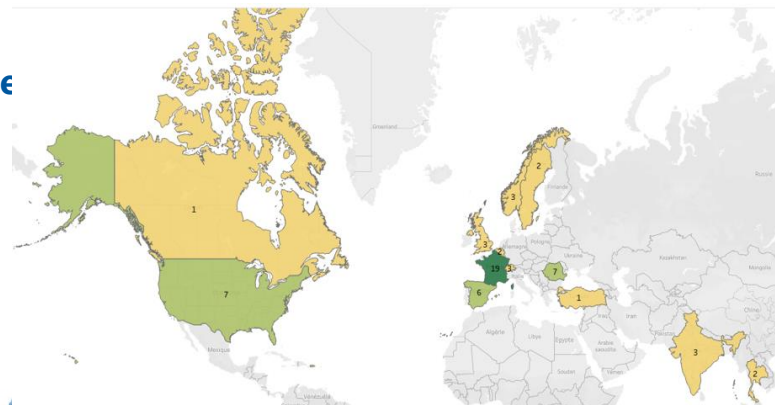
- **2023 : 4th edition : French - Thai edition within the "year of innovation" with the French embassy**
evaluations will be performed at the same time in Paris and Bangkok with different "cocktail of pollution" and meteorological conditions



Monitoring technologies : providing guidance to potential users

- **AIRLAB**: Airparif's open innovation lab
- Objective: **evaluate the performance of microsensors**
 - for different pollutants
 - by category of use (indoor/outdoor air, stationary/mobile monitoring, awareness raising,
 - in different environments (indoor/outdoor, France/Thailand)
- Thorough an **independent evaluation, in realistic conditions**, by an **international expert jury**
- Challenge **open to all manufacturers** :
2023 edition: 59 solutions, 33 companies, 68% international
- **Provide guidance and decision-support tool for potential users**
public/private/NOGs/citizens
Interactive platform
[Challenge AIRLAB Microcapteurs 2021 \(shinyapps.io\)](#)

REGISTRATION PER COUNTRY



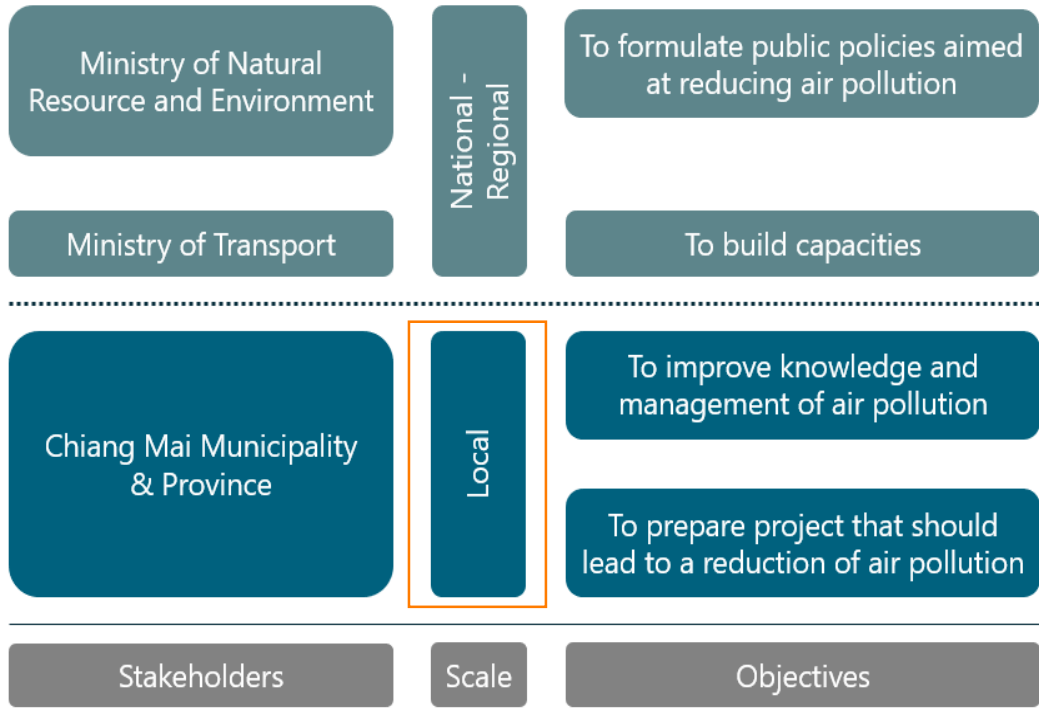
Strengthening collaboration to address air pollution in SE Asia

Strong consortium

- ❑ Support from the **French Ambassador and the Governor of Bangkok**,
 - ❑ Involvement of **Thai (BMA, NIMT, AIT)**, International and French **experts**
 - **build a reference station** with the support of **Alliance Française Bangkok**
 - **deploy the sensors** with support from **NIMT**
 - **data analysis** with support from **AIT** and **BMA** (data from the reference network)
 - ❑ Financial support from organizations involved in air pollution improvement
 - **CAF, Bloomberg philanthropies, Ademe**
 - **AFD** : in conjunction with common projects aiming at strengthening cooperation in SE Asia at regional (with Asean), national (with Thailand, Cambodia ...) and city level (Bangkok and Hanoi)
- Evaluation campaigns : **in progress**
- Workshop: feedbacks and lessons learned
- + awards ceremony : **Nov.2023**



Thailand : Air quality implementation program



To improve air quality of the territory

- Specific objectives**
1. To improve knowledge and monitoring of air quality
 2. To strengthen the local capacities
 3. To prepare project and formulation of public policies

Key issue: Data quality and Air pollution expertise

Data must be trusted and indisputable

► used by all the stakeholders :

- **Authorities**

For the mitigation plans

In case of court cases

- **The general public and the media**

To be informed, to raise awareness

For comparison

Or legal issue

- **Researchers**

- **Economic players** developing products and services

....

► In a context where **Air pollution is a sensitive issue** :

health (+ COVID enhanced effect), environmental (+link with climate change),

economical (labor cost, cities attractiveness, « air pollution » market ...),

regulatory framework and legal disputes, transboundary relationships ...

→ mediatised and political issue where every $\mu\text{g}/\text{m}^3$ and persons exposed count !

calibration lab



Credit : JB Gurliat

Karine.leger@airparif.fr / managing director

« Act for a healthy air in a more sustainable world »



7 rue Crillon
75004 Paris

airparif.fr

 [@Airparif](https://twitter.com/Airparif)

 facebook.com/Airparif.asso

 [Airparif](https://in.linkedin.com/company/Airparif)

 [airparif](https://airparif.instagram.com)