

Linking space to user needs

EnvAir360: street-level air quality forecasts

Smart City Expo World Congress · Barcelona, 3–5 November 2026



The urban challenge

What problem does the city face?

- Traffic pollution varies **street by street**, but monitoring stations are few
- Forecasts, where available, are **too coarse** to pinpoint problem streets
- Traffic restrictions and low-emission zones **need evidence** before they're imposed
- **Stricter EU limits from 2030** under the revised **Ambient Air Quality Directive**

95%

EU city dwellers breathing air above WHO guideline levels (EEA, 2025)

34,000

EU deaths in 2023 attributable to nitrogen dioxide above WHO levels (EEA, 2025)

The solution at a glance



What it does

Forecasts **tomorrow's air pollution street by street** and alerts cities before limits are exceeded.



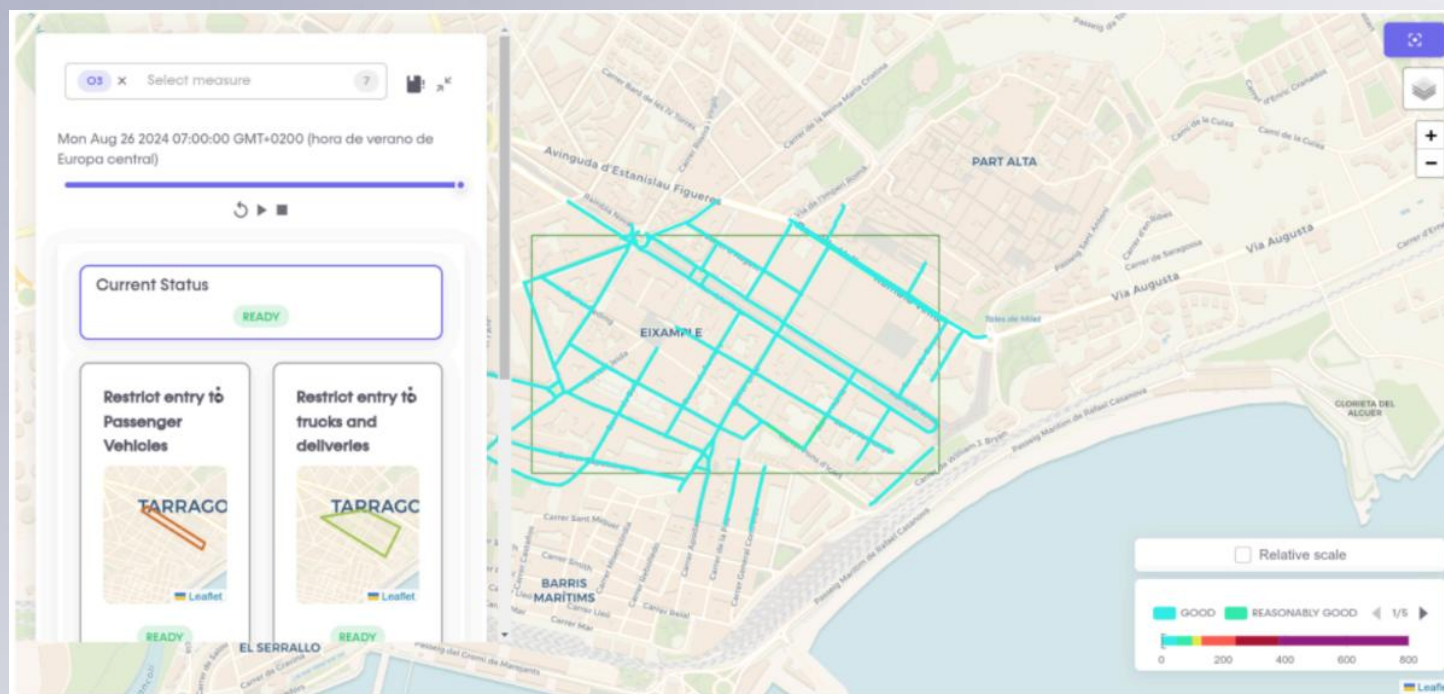
Who it is for

City environment and mobility departments, urban and transport planners



What users get

Hourly street-level forecast maps, scenario simulations, dashboards and alarms



EU Space inside



Copernicus

Data / services used

CAMS air quality data, with Sentinel-5P observations assimilated

Added value

Europe-wide pollution and weather inputs that drive every city forecast.



Galileo / EGNOS

Data / services used

Not used in this PoC

Added value

Positioning is not part of the forecast; traffic inputs come from city data.



In-situ / other data

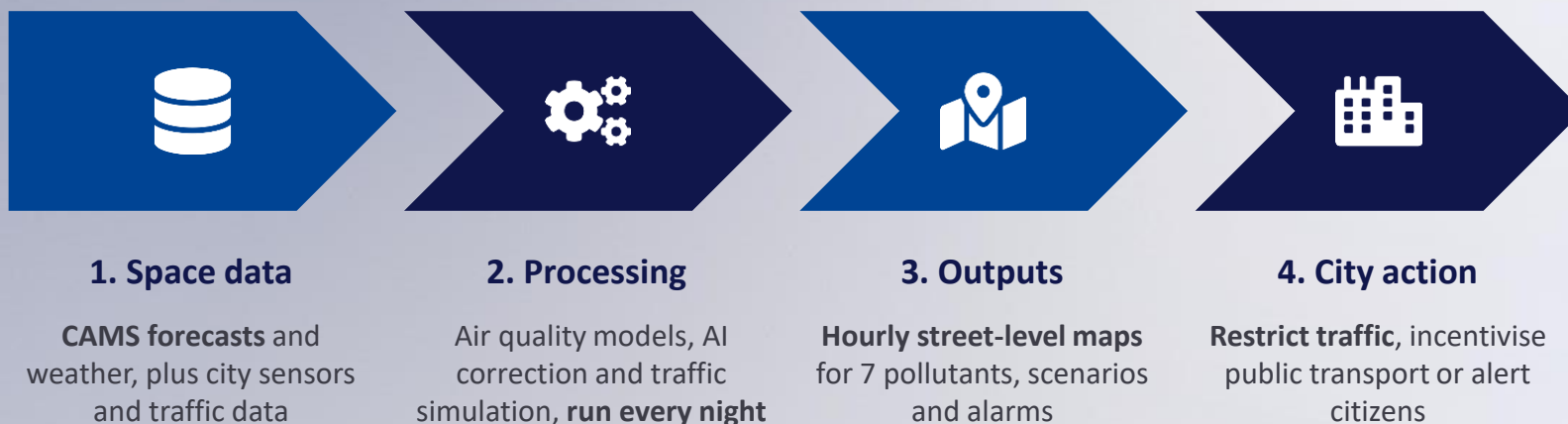
Data / services used

City air quality sensors, traffic counts and SUMO traffic simulation

Added value

Sensors correct the forecast; traffic data sharpens it to street level.

How it works



Curious how it works? Watch the platform in action, from satellite data to street-level forecast: [here](#)

The pilot in practice

Stakeholders involved

7 municipalities: Valencia, Athens, Piraeus, Naples, Almada, Rzeszów, Miskolc

Period

December 2024 – July 2025

Partners

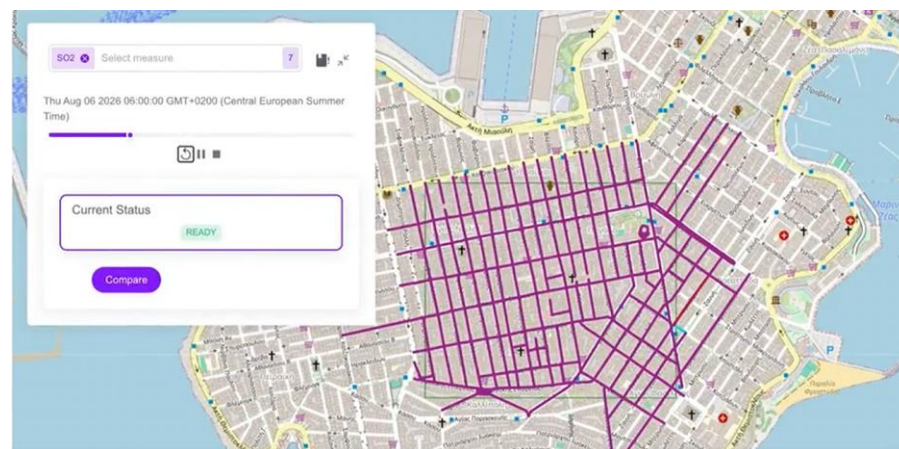
EY · Libelium · Factual

End users involved

Municipal teams in Valencia, Almada, Rzeszów, Piraeus and Naples

Framework

EUSPA-OP-21-21 Lot 5 – SC7



Results and benefits

12

Cities and companies
interested in using EnvAir360

4 of 5

Testing cities rated the custom
alarms 4–5 out of 5

20–50 m

Street-level forecasts, down
from 10 km in the source data

EnvAir360 turns Copernicus data into street-level forecasts so cities can act before pollution peaks.

Who can benefit and what's next



Who can use it

- City **environment and mobility departments**
- **Transport planners** and low-emission zone managers
- **Mobility and routing app** providers



Lessons learned & next steps

- Works best **alongside city sensors** and traffic data
- **API links alerts to city systems**, so it scales to new cities
- **Next: open-access version** on the EUSPA website

Interested in testing it in your city? Talk to us at the EUSPA booth.

Find out more



Download all PoC material

Presentations, factsheets and the brochure 'EU Space for smart cities' are available via the QR code.

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