

EDIAQI | Evidence Driven Indoor Air Quality Improvement

Mario Lovric, scientific director
Lisbon Council

@ AI, Data and Robotics Forum (ADRF) 2024

The EDIAQI Consortium



18 partners from 11 countries

Integrators/data/allrounders

The Lisbon Council (BE)

Deda Next (IT)

TalTech (EE)

Know-Center (AT)

Tech SMEs

Ascalia (HR)

Wings ICT Solutions (EL)

Thinnect (EE)

Lab Service Analytica (IT)



RTOs Air Quality

Leibniz Institute for Tropospheric Research (DE)

FTMC (LT)

University of Seville (ES)

Institut Za Medicinska Istrazivanja I Medicinu Rada (HR)

Hospitals:

Region Hovedstaden (DK)

Srebrnjak Children's Hospital (HR)

Natural sciences RTOs

Institute for Anthropological Research (HR)

Technical University Graz (AT)

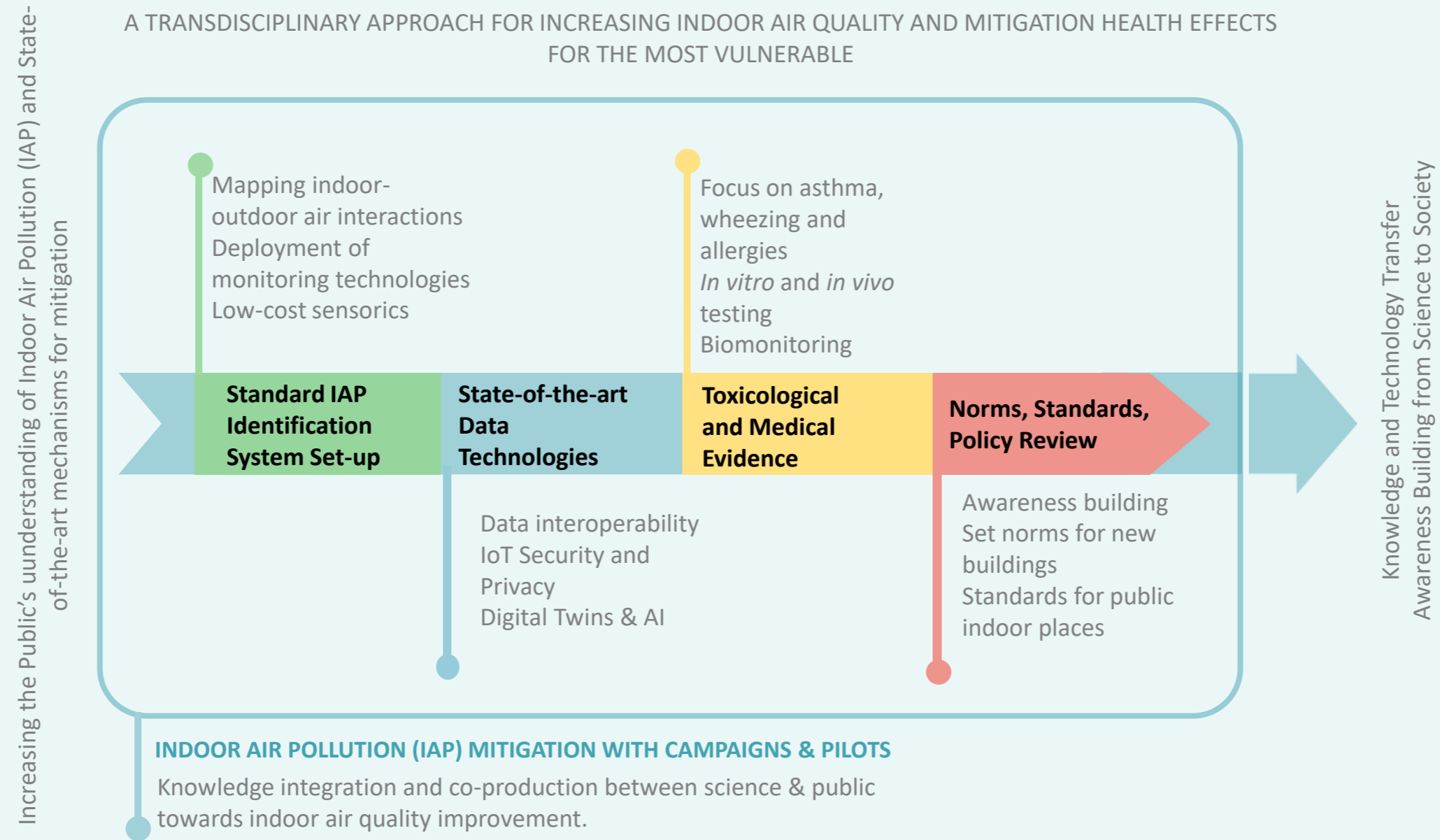
National Institute of Biology (SI)

University of Molise (IT)

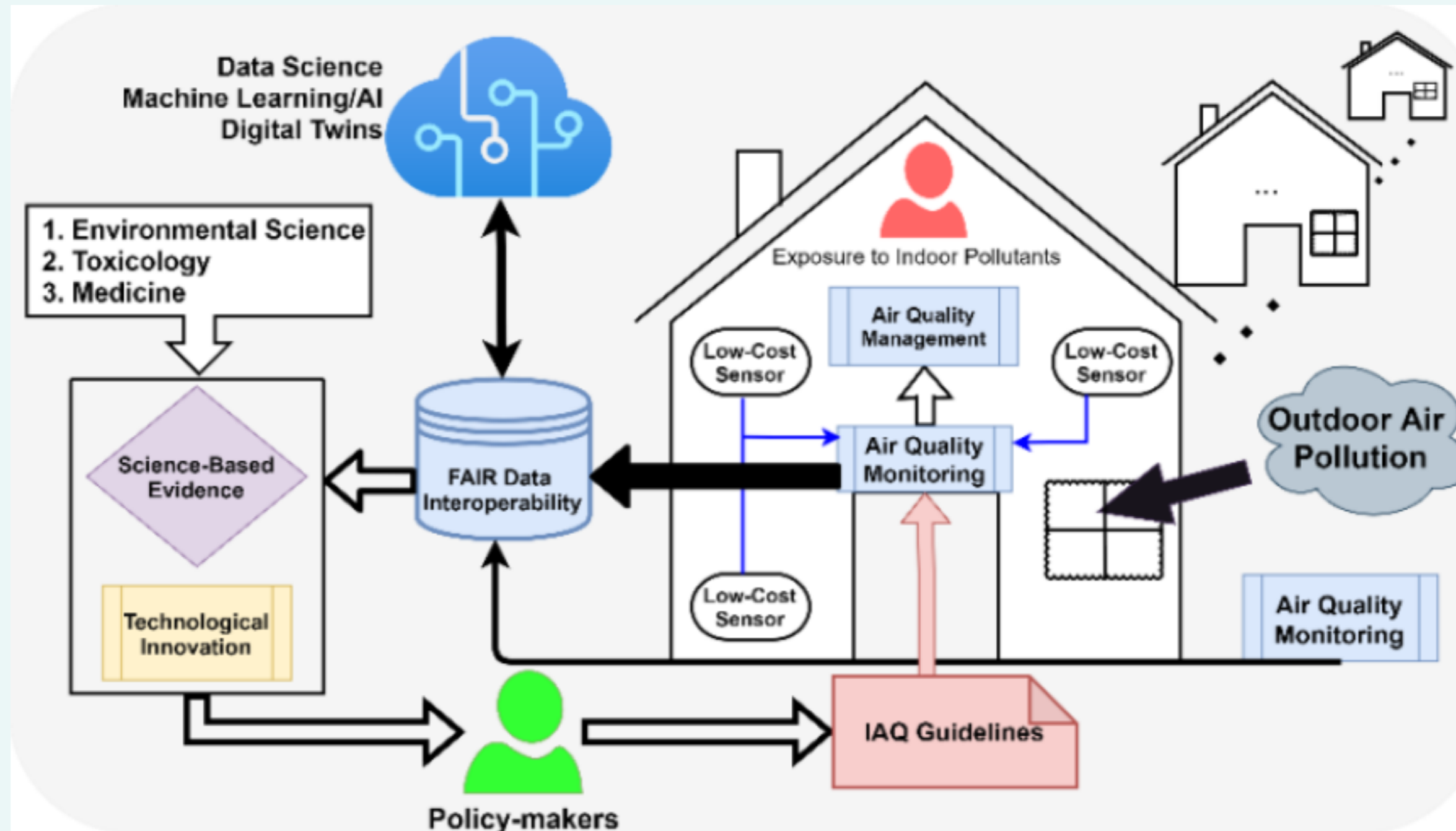


Funded by the
European Union

The EDIAQI approach



The EDIAQI approach



EDIAQI's promise to deliver the data

There are 4 pilots and 4 campaigns in EDIAQI tasked with understanding:

Buildings



Households

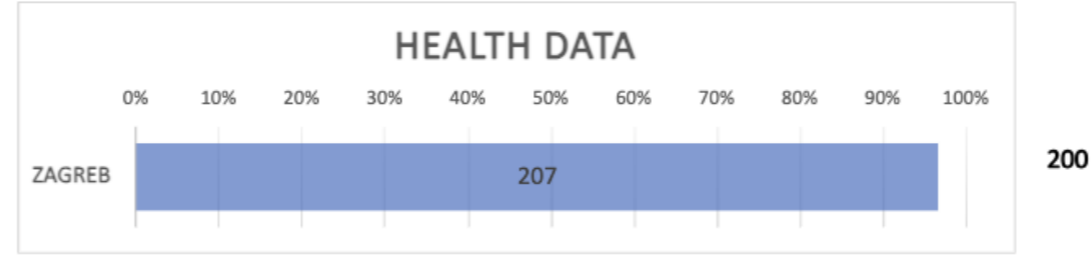
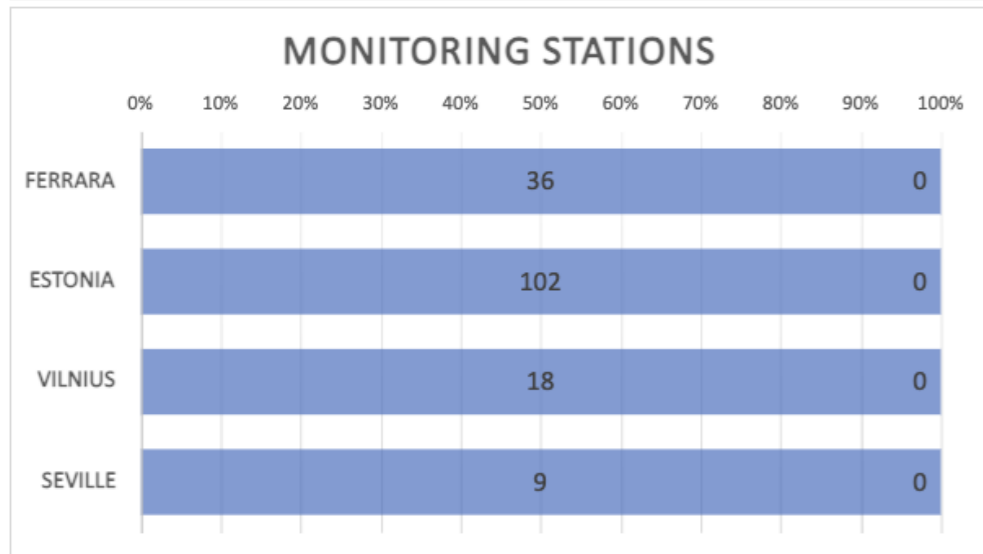
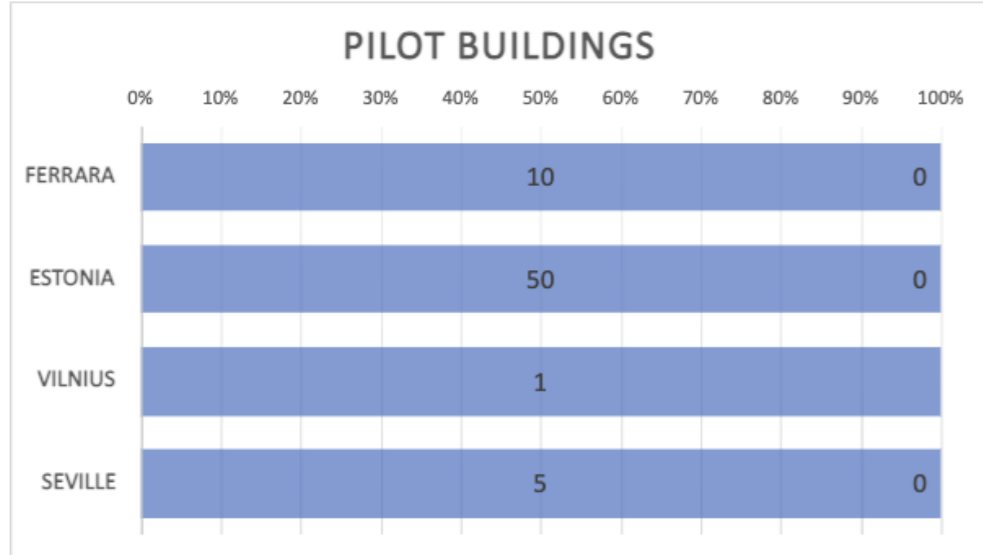


Public spaces



EDIAQI's pilots and campaigns

COMPLETED:		Pilot buildings	66	100%	Installed sensors	165	100%	Recruited patients	207	104%
TO DO:		Pilot buildings	0		Sensor installation	0		Patients recruitment	-7	
			66			165			200	



Chemical sampling

Buildings	Points	(chemical composition of TVOCs and concentration of formaldehyde)
FERRARA	9	29 (22 indoor, 7 outdoor) - measurements July and October 2023
TALLINN	3	6 (3 indoor, 3 outdoor) - measurements 2024
VILNIUS	1	2 (1 indoor, 1 outdoor) - measurements 2024
SEVILLE	2	4 (2 indoor, 2 outdoor) - measurements 2024
	15	41

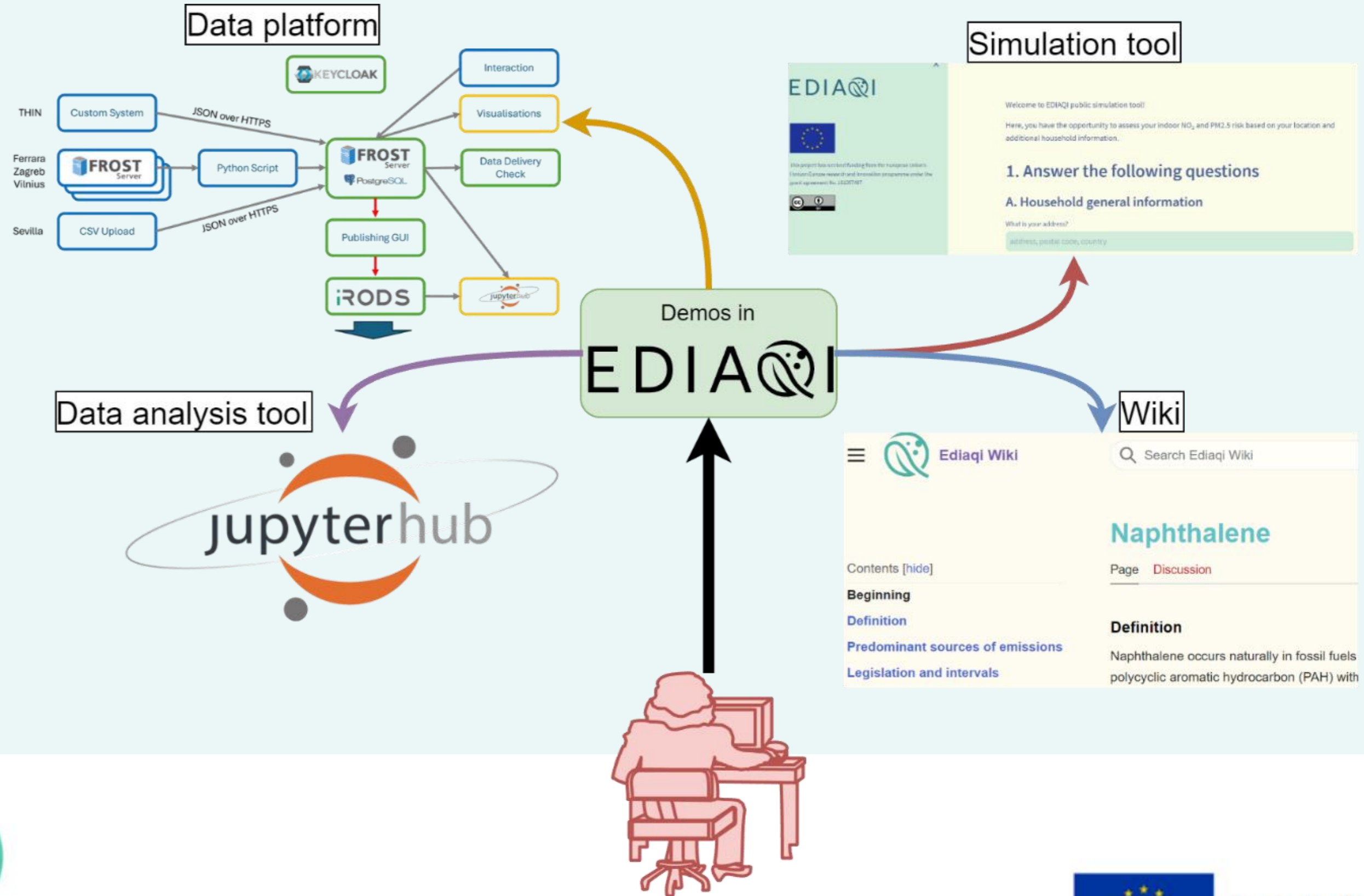
- #### VILNIUS
- aerosol particles number concentration and size distribution
 - black carbon mass concentration measurements and source apportionment
 - microplastics
- | | |
|-----|---|
| 36 | LAS - T°, RH, PM2.5, PM10, CO2, CO, NO2, O3, TVOC, Aromatics (10/50) |
| 102 | THIN - T°, RH, CO2, PM1.0, PM2.5, PM10, NO2, O3, TVOC |
| 18 | WINGS - T°, RH, CO2, PM1, PM2.5, PM10 / LAS - To, RH, PM2.5, PM10, CO2, CO, NO2, O3, TVOC |
| 9 | T°, RH, CO2, PM2.5, TVOC, O3, NO2, CH2O |

TYPOLOGY OF BUILDINGS

SCHOOLS	29	
FERRARA	3	
ESTONIA	24	
VILNIUS	1	
SEVILLE	1	
KINDERGARTENS	11	
ESTONIA	10	
SEVILLE	1	
OFFICES	18	
FERRARA	3	
ESTONIA	15	
RESIDENTIAL	3	
FERRARA	2	
SEVILLE	1	
VARIA	5	
Entertainment (Ferrara)	1	
Gym (Ferrara)	1	
Day care (Seville)	1	
Subway (Seville)	1	
Conference (Estonia)	1	

Data integration

- Data interoperability is key



European research and the IDEAL cluster

Cluster of research projects funded by a Call by EU Commission Destination 2 ('Living and working in a health-promoting environment').

7

European projects

121

Organizations and partners



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