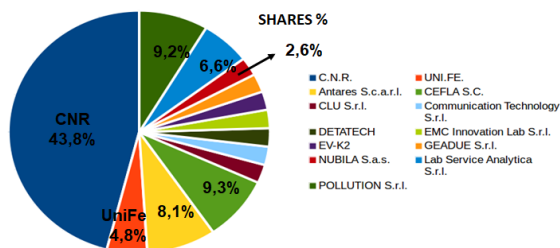


PROAMBIENTE is a private-public consortium

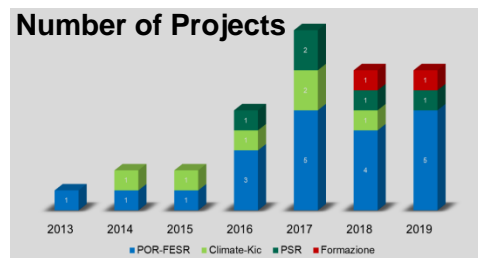
- Private part: (56.2%)
- Public part: (43.8%)

11 SME with Head Offices in Emilia-Romagna Region.
National Research Council (CNR) - the largest public research institution in Italy and the University of Ferrara



The mission of the consortium is oriented towards technological transfer of research products regarding large issues of sustainable development, e.g:

- atmospheric pollutions and air quality
- aquatic environments
- treatment of wastewater
- precise agriculture



The team: electronic engineers, computer scientists, marine geologists, physicists, chemists, agronomists, environmental scientists.

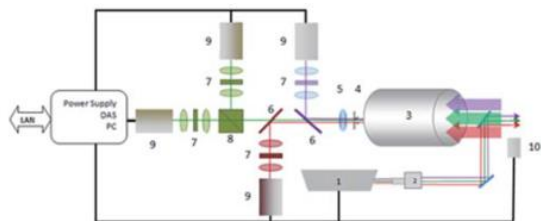
Development and implementation of innovative methods and systems TRL- low → TRL-high

Facilities: modern laboratories and equipment

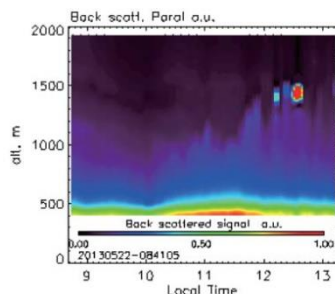
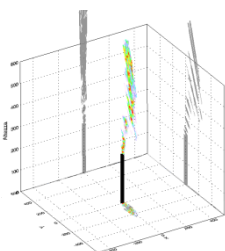
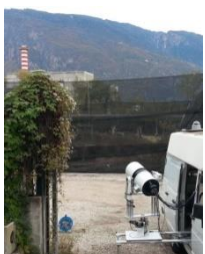


Remote sensing

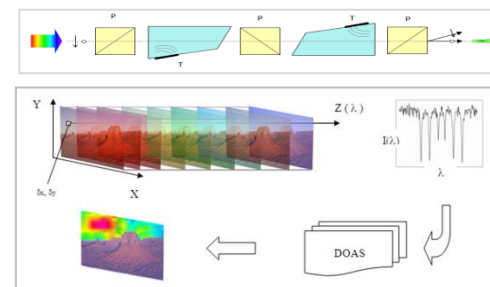
3-wavelength miniLidar for 3D stack plume reconstruction and atmospheric backscattered profiling



Pulse width: 10ns
 Pulse energy: @532nm 40mJ
 RR: 0.20-10.0 kHz
 WVL: 355, 532, 1064 nm
 SR: 80 MHz
 Cassagrain objective: 200 mm



Acusto-Optical Hyperspectral Imager



Spectral Unit

Full FoV: 60°	Pix FoV	0.5 mrad
Number of AO Cells : 2	Active Aperture	1 cm ²
Crystal type: TeO2	Power Consumption:	< 5W
Spectral range: 390 ÷ 600 nm		
Spectral resolution: <1.2 ÷ 2.2 nm		
Spectral Contrast: > 20 000		
Optical Polarization: Linear		

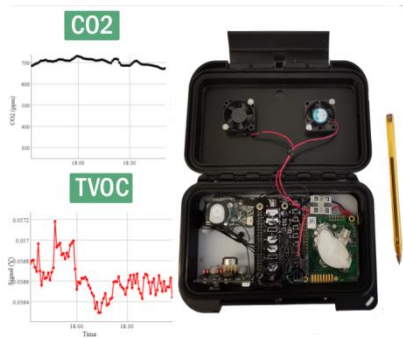
Applications:

- hyperspectral imaging
- crops health
- state of the fruit maturity
- land characterization
- culture heritage

CCD Camera

Array, pix	2184 x 1472
Pix size, um	6.8 x 6.8
D.C., e/pix.s @ 5°C	0.5

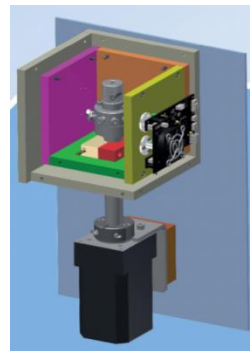
In-situ measurements and information systems



I-AQM: Indoor Air Quality and comfort monitoring



INFORMARE: multi-platform tool for the tourism industry



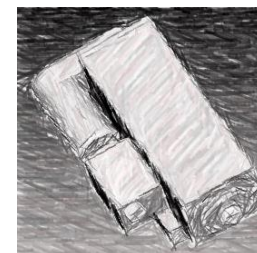
IPA/BC: monitoring of particulate matter and micro pollutants (polycyclic aromatic hydrocarbons)



SWAP: Aquatic drone for integrated monitoring of marine and lagoon ecosystems

Public health

Soon: Hyperspectral microscope for Lipidomic Analysis of the Red Blood Cell Membrane



For more details: i.kostadinov@consorzioproambiente
www.consorzioproambiente.it

MANY THANKS for YOUR KIND ATTENTION