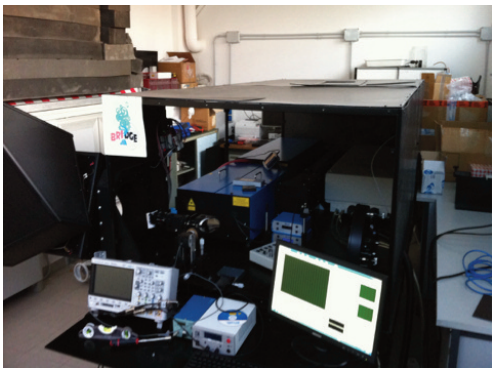
NACE CODE C26

ATMOSPHERIC LIDAR

Innovations and benefits - Possible remote, real-time mapping of natural and/or polluting gas substances, performed on vast areas to detect localized emission sources.
Early warning in case of industrial accident or natural catastrophe that can be associated with gas emissions (volcanoes).

Uses - Remote laser measurement of natural, polluting and explosive atmospheric components (gases, particles, vapours, etc.). Monitoring of industrial facilities and active volcanoes. Meteorological studies.
Security-specific applications for air traffic, both flying and taking off/landing, in the presence of particulate matter (volcanic eruptions, Sahara sands) and fog.

Past and present activities - Applications for measuring pollution associated with traffic and industrial emissions and, more recently, applications for monitoring volcanoes in collaboration with INGV. Further collaborations have been established with the Province of Brindisi, ILVA (Taranto) and companies like CSEM (CH), LDI Innovation (EW) and ONERA (F).



RESEARCH TO PROVE FEASIBILITY | TECHNOLOGY DEMONSTRATION | SYSTEM TEST, LAUNCH & OPERATIONS

BASIC TECHNOLOGY RESEARCH | TECHNOLOGY DEVELOPMENT | SYSTEM/SUBSYSTEM DEVELOPMENT

TRL 1 | TRL 2 | TRL 3 | TRL 4 | TRL 5 | TRL 6 | TRL 7 | TRL 8 | TRL 9

TECHNOLOGY READINESS LEVEL

Italian National Agency for New Technologies, Energy and Sustainable Economic Development
www.enea.it

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