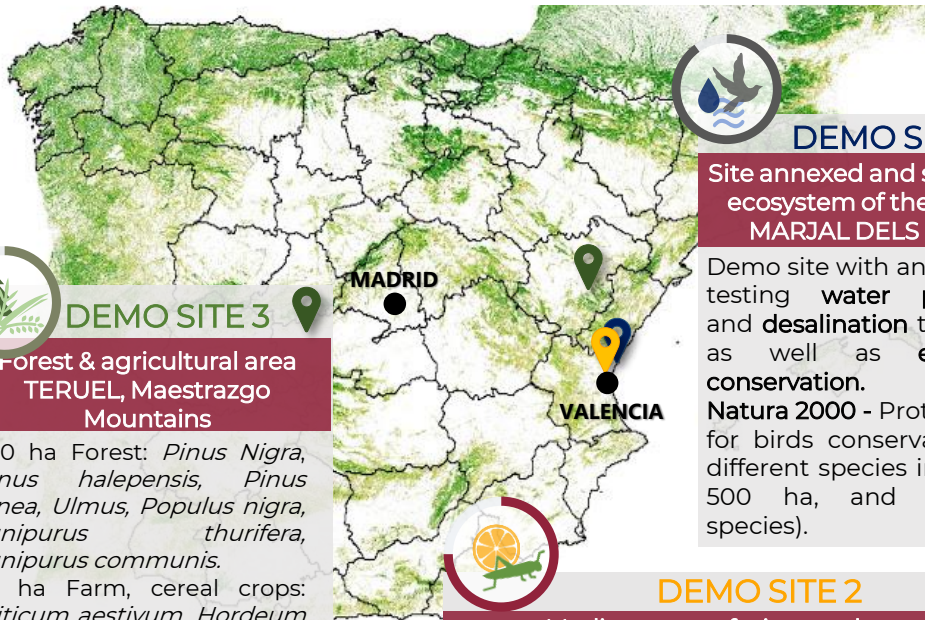




Environmental Management

Agriculture | Forest | Water

Ownership of 3 demo sites for data collection & testing new technologies & innovative sustainable solutions.



DEMO SITE 1

Site annexed and sharing the ecosystem of the Wetland **MARJAL DELS MOROS**

Demo site with an aquifer for testing **water purification** and **desalination** techniques, as well as **ecosystems conservation**.

Natura 2000 - Protected area for birds conservation (+150 different species in less than 500 ha, and vegetation species).



DEMO SITE 3

Forest & agricultural area **TERUEL, Maestrazgo Mountains**

200 ha Forest: *Pinus Nigra*, *Pinus halepensis*, *Pinus pinea*, *Ulmus*, *Populus nigra*, *Junipurus thurifera*, *Junipurus communis*.

25 ha Farm, cereal crops: *Triticum aestivum*, *Hordeum vulgare*, *Onobrychis viciifolia Scop.*

Demo sites for data collection, experiments of innovative technologies for sustainable agricultural and forestry management.



DEMO SITE 2

Mediterranean fruit tree plantations **MARJAL DELS MOROS**

12 ha nearby the wetland, with cultivated trees: *Citrus reticulata*, *Clemenules*, *Citrus sinensis*.

Testing plagues control, new harvesting technologies and collecting data for soil properties.



DEMO SITE 3 | 3 Targeted Areas



Cedrillas



El Castellar



Fortanete

Our main goal is to support companies and innovative projects becoming more sustainable, mitigating and balancing their daily impact on our planet and resources, ensuring at the same time a safe and successful market uptake of innovative technologies, with a high impact potential for our economies and societies.

Our *Sustainable Solutions* branch is working actively in environmental management, *Sustainable Forest Management* (SFM) and *water technology*. Within this purpose, we have set up 3 demo sites to guide environmental studies and test new technologies and management procedures for the primary sector.



Wetland sharing ecosystem with NATURA 2000



Mediterranean fruit tree plantation



Maestrazgo Mountains Forest and Farm pilot

How can our demo sites be used?

Demos sites for Digital Twin solutions

Digital representation of the physical world and its dynamics - visualisation, simulation, planning, optimisation and decision making - for optimising the forest/agriculture-based supply chain. Outcomes can be tested and optimised at a much lower cost.

Facilitation of Activities and Technology testing

- Digital cartography and land planning.
- Installing advanced detection sensors (fires & other events).
- Integrating ICT / IoT solutions to map and match satellite information.

Studies and reporting

- Optimisation of the agricultural and forestry management procedures, within a circular economy approach.
- Support data collection on e.g. forest land degradation, fragmentation, soil properties, forest wildfire protection, ecosystems conservation, soil & biomass carbon sequestration and regeneration.
- Monitoring, assessing and reporting on implementation of SFM, as well as scientific analysis.
- Management and monitoring of changes in land use.

Stakeholders' involvement

- Sound knowledge of the ecosystem of the pilots including Public Authorities.
- Possibilities of a large-scale demo (90.000 ha) in cooperation with municipality associations, regional government & other private owners in the Maestrazgo Mountains.