



TerrAria

INFORMATICA | AMBIENTE | RICERCA

TECHNOLOGY FOR THE ENVIRONMENT

Innovation for Environment, Energy and the Territory

TerrAria integrates data, models and software to support the energy and environmental transition.



Technology and expertise for a more sustainable future.

Digital solutions, energy-environmental models and innovation for public administrations and businesses

TerrAria is an **innovative SME** based in Milan, established in 1999. It combines the solidity of a software house with the expertise of an environmental consultancy company, developing methodologies, tools and processes dedicated to the environment, energy and land management.



Certified quality

Since 2016, the company has been **ISO 9001:2015 certified** for the design, development and maintenance of **information systems** and for **consultancy** in the **energy and environmental field**. This ensures structured processes, continuous improvement and a constant focus on customer needs.

Expertise & Team

TerrAria combines **technical and multidisciplinary expertise** in the development of WebGIS, Decision Support Systems and energy-environmental models. The team comprises 25 professionals – IT specialists, engineers, physicists and planners – who are able to provide expert solutions to meet the needs of public entities, research centres and private operators.

The main **work areas** include:

- > **Air quality** and **air pollution**
- > **Energy efficiency** and **planning**
- > Strategic and impact **assessments**
- > Development of **customised digital applications** and **tools**



25

CONTRIBUTORS



2.1 M

TURNOVER



> 15

R&D PROJECTS



> 50

WEB APPLICATIONS

Know-how



WebGIS, Decision Support Systems (DSS) and Digital Twins

TerrAria offers **specialised** and **advanced IT solutions** and expertise for the development of web applications, tools and methodologies in the field of **environmental sustainability** and the **energy transition**.

It is a leading player in the development of over 30 **WebGIS** (georeferenced services for map visualisation) and around 20 **DSS** developed over the years.

It has also supported the creation of **advanced Digital Twins**, capable of combining environmental data, traffic models and AI algorithms to support spatial planning, such as **VERA**, the Emilia-Romagna Region's **Digital Twin for air quality**.

Air quality and environmental impact

TerrAria specialises in assessing the **impact** of human activities on air quality, noise and public health using advanced **modelling techniques**. Over the last three years, it has produced more than 7 **Environmental Impact Assessments** as part of the planning permission process, utilising international atmospheric dispersion models (CAMx, CALPUFF, AERMOD). The company also develops high-resolution models and software across **various spatial scales**, providing integrated support for **spatial planning** in relation to **air quality, climate** and **mobility** (the Regional Plan of Interventions for Air Quality of Lombardy Region and associated Strategic Environmental Assessment, the Emilia-Romagna Regional Integrated Air Plan 2030, and the Air and Climate Plan of the City of Brescia).





Energy management and efficiency

TerrAria supports public and private organisations in **energy management**, assisting them in **improving the efficiency** of **production processes** (energy audits and carbon footprint assessments), **enhancing the performance** of large energy-consuming buildings, and defining **energy efficiency** measures, assisting with the process of applying for incentives (Conto Termico). Over the years, it has acted as Energy Manager for **over 9 local authorities** across Italy.

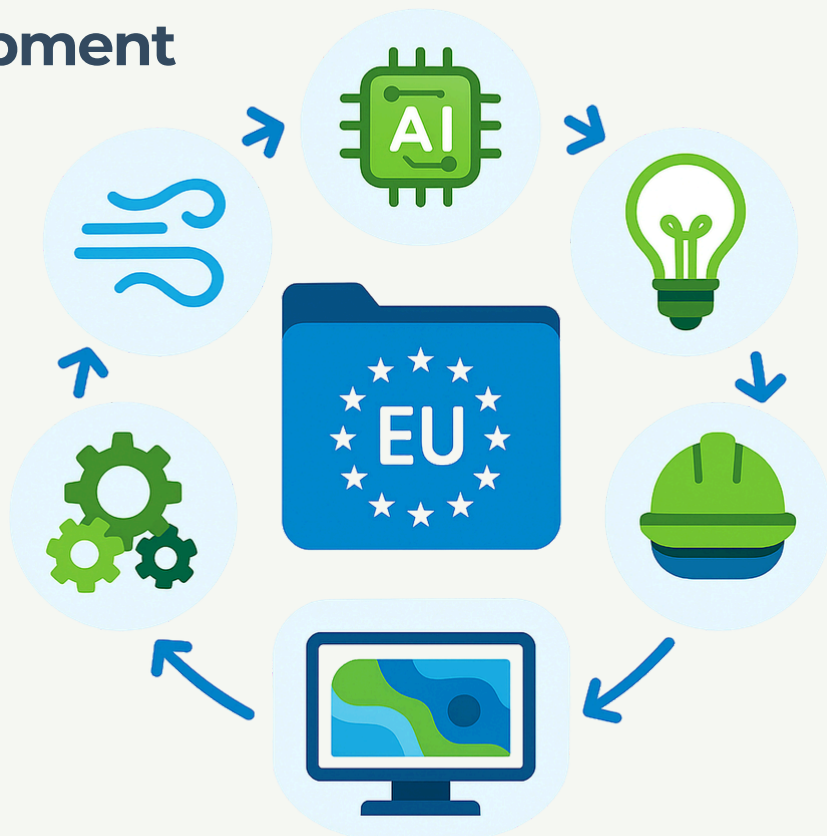
Using ad hoc software, the company assists public administrations with **energy planning** (SECAP – Sustainable Energy and Climate Action Plan, Climate Transition Strategies and Air and Climate Plans).

Furthermore, TerrAria promotes the establishment of Self-Consumption Configurations for the Sharing of **Renewable Energy**, coordinating applications for incentives and operational management.

Research and Development

TerrAria continuously invests in **innovation** and **research and development**, actively building partnerships at both national and international levels. The company has been awarded **over 15 regional, national and European projects** (including LIFE, ESA, ECMWF, UIA, IEE, Interreg and FP7), contributing to the development of cutting-edge methodologies and tools for **environmental applications**.

Key areas of focus include **air quality**, **energy efficiency**, the assessment of **natural** and **industrial risks**, and adaptation to **climate change**, also through the use of **artificial intelligence** and **satellite data**.



Where data becomes solutions

From digital systems to energy and environmental models, our products are designed to support organisations and businesses in their strategic decision-making, with reliable, scalable tools tailored to actual needs.

CO₂₀ & ERGAPP

Optimise local energy planning with **CO₂₀** and corporate energy planning with **ERGapp**.

CO₂₀ helps local authorities to calculate **energy and emissions balances**, whereas **ERGapp** supports **Energy Managers** in carrying out energy audits and meeting ISO 50001 requirements: ex-ante assessment of **energy efficiency** measures and long-term monitoring of consumption.



UTAQ

Try UTAQ: air quality at 25 m resolution

A model that generates **high-resolution air quality maps**, including in **forecast mode**. UTAQ is scalable to different geographical contexts and has been applied in over 8 regions.



VIGIS

Explore **ViGIS:** over 39K fields already monitored

A WebGIS that integrates satellite and site-specific data to support, manage and monitor agricultural fields throughout the entire **crop lifecycle**.



MASAI

Assess and evaluate damage to buildings and infrastructure with **MASAI**

An advanced tool combining **AI** and **satellite data** for humanitarian emergencies and civil protection, using very-high-resolution radar and optical satellite imagery.



RIAT+

Discover **RIAT+** now to support **air quality policies**. A tool for simulating **scenarios** to assess the impact of measures aimed at reducing air pollution, already in use in 13 EU regions.



Request a demo and discover all our software

terraria.com/products





TerrAria is an innovative SME based in Milan, founded in 1999, which combines information technology with expertise in sustainability, decarbonisation and the climate transition.

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