

# GEOSTUD'S APPROACH TO DIGITALIZATION AND SUSTAINABLE SOLUTIONS

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Energy Forum - Digitalization and Energy Efficiency/Bucharest - 19th November 2024

With over 23 years of experience, **Geostud** is a leading environmental studies and consulting company dedicated to providing innovative, sustainable solutions that align with the latest advances in biodiversity protection, green, energy efficiency and digitalisation.

Our comprehensive services encompass environmental impact assessments, climate change studies, solutions for sustainable infrastructure, and laboratory analysis for projects in sectors ranging from renewable energy to urban development.









### **KEY AREAS OF EXPERTISE**

#### In field and laboratory tests

Biodiversity monitoring, soil decontamination, abiotic factor analysis (water, air, soil, noise), pollutant dispersion modelling, and microplastics analysis

#### Studies, consultancy and modelling

Environmental studies, climate change adaptation and mitigation analysis, impact assessments, DNSH (Do No Significant Harm) studies, circular economy strategies, and GHG emissions calculations

#### **Commitment to sustainability**

Supporting resilient, nature-based solutions, aiming to enhance resource efficiency, minimise environmental impact, and promote carbon-neutral goals across all projects

## CORE COMPETENCIES: ENVIRONMENTAL EXPERTISE

#### Comprehensive environmental studies and consultancy

Geostud provides a wide range of environmental services, leveraging advanced modelling, design, and consulting expertise. Our goals are to ensure the projects compliance and sustainability across all their lifecycles.

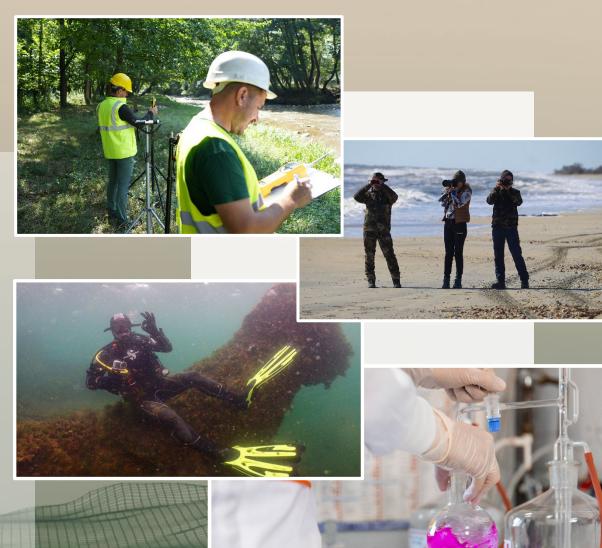
#### **Specialised Services**

Climate resilience: assessments focused on vulnerability, risk analysis, and adaptation strategies to build climate-resilient infrastructure; Circular economy and decarbonisation: strategic guidance on reducing carbon footprints, improving resource efficiency, and implementing circular economy practices;

**GHG emissions and carbon sequestration:** comprehensive analyses to measure greenhouse gas emissions and assess carbon sequestration potential, supporting sustainable energy goals.

#### **Laboratory capabilities:**

Our accredited laboratories offer extensive testing services, including analyses of water, air, soil, and noise, to support informed, data-driven environmental solutions.





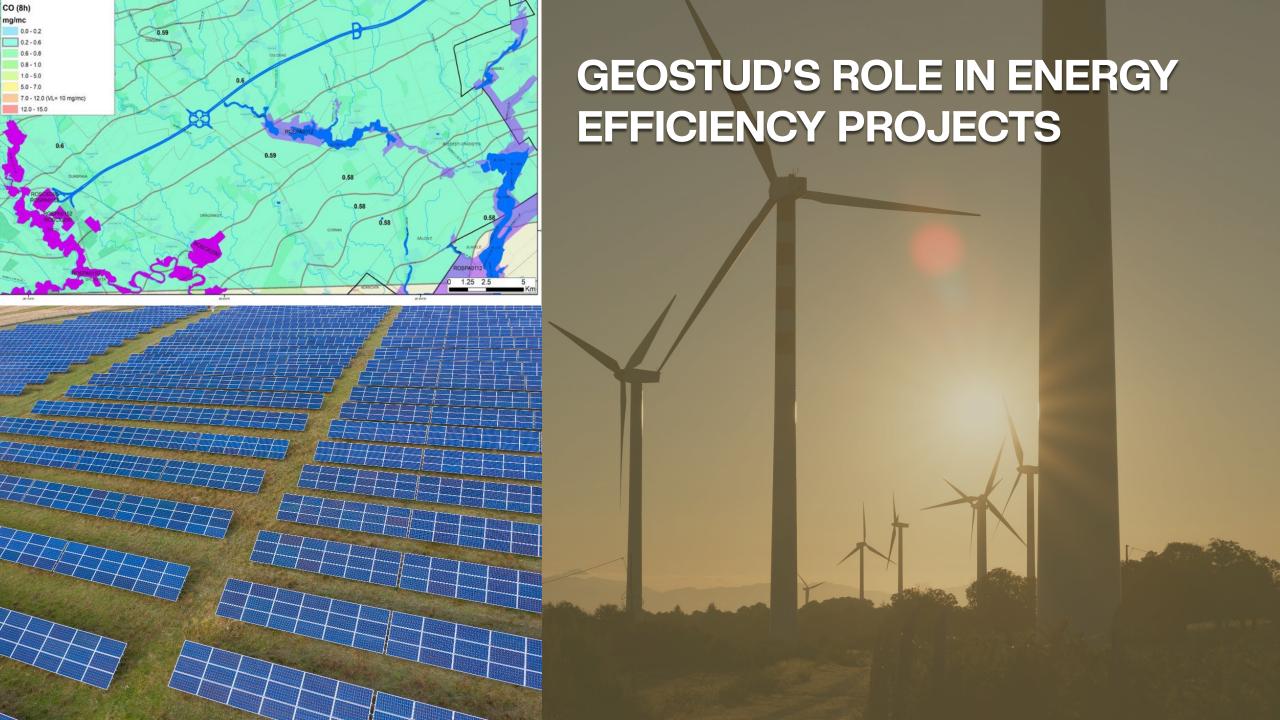
# CORE COMPETENCIES: GEOTECHNICAL EXPERTISE

#### **Geotechnical studies and consultancy**

Geostud offers complete geotechnical services, including geotechnical studies, field investigations, in situ testing, modelling, design, engineering technical expertises.

**Geotechnical Laboratories** where we conduct specific tests on soil/rock samples, water, and topsoil.





# INNOVATIVE PROJECTS AND CASE STUDIES

Climate change impact study and DNSH analysis for REPowerEU project Geostud conducted an extensive climate change impact study and Do No Significant Harm (DNSH) analysis as part of the REPowerEU initiative. This project aims to decarbonise irrigation infrastructure by enhancing energy efficiency and generating renewable energy through the installation of floating photovoltaic panels (floatovoltaics) on existing irrigation canals.

#### **Project objectives and benefits**

The primary objective is to produce renewable energy, thereby reducing reliance on fossil fuels and optimising energy use for the operation of the Giurgiu – Răsmirești hydro-improvement system. Additionally, the project brings indirect benefits by improving water efficiency through canal impermeabilisation and implementing an advanced water distribution system for end-users.

#### Digitalisation for enhanced energy efficiency

The floatovoltaic system promotes digitalisation by integrating advanced digital technologies, including real-time monitoring, automated energy management, and predictive maintenance systems. These digital components enable optimised performance and efficiency, supporting both energy and water conservation goals.























# SUSTAINABILITY AND DIGITAL TRANSFORMATION

#### **ALIGNMENT WITH UN SUSTAINABLE DEVELOPMENT GOALS (SDGs)**

Geostud's projects are firmly aligned with 9 global Sustainable Development Goals. By integrating sustainable practices into each project, we reinforce our commitment to creating resilient, eco-friendly infrastructure solutions.

#### DRIVING DIGITAL TRANSFORMATION FOR ENVIRONMENTAL IMPACT

Geostud leverages digital tools to enhance project efficiency, improve data accuracy, and support informed decision-making. From modelling and predictive analytics to remote monitoring, digitalisation strengthens our capacity to meet sustainability goals while reducing resource consumption.

#### **VISION FOR A SUSTAINABLE FUTURE**

Geostud is committed to ongoing advancements in digital and environmental innovation, positioning us as leaders in delivering climate-resilient and energy-efficient solutions that contribute to a sustainable future.

### PARTNERSHIPS AND GLOBAL COLLABORATION

### COLLABORATIVE APPROACH FOR SUSTAINABLE SOLUTIONS

Geostud believes in the power of collaboration to drive impactful and sustainable change. We work closely with a diverse network of stakeholders, including government bodies, NGOs, private sector, and research institutions, ensuring that our projects align with both local needs and international standards.















#### **International projects and Horizon Europe Missions:**

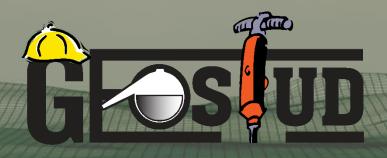
**DaWetRest project:** Focused on restoring Danube wetlands to enhance biodiversity, water quality, and climate resilience;

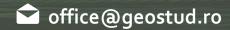
**DANSER project:** Aiming to restore sediment balance across the Danube River basin, improving sediment quality and supporting ecological sustainability.

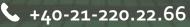
**Geostud** has been recognized by the European Commission as part of the EU Mission 'Restore Our Ocean and Waters by 2030'.

### **PROVEN EXPERTISE COMPREHENSIVE CAPABILITIES COMMITMENT TO EXCELLENCE**

Thank you for your attention!









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