

3rd edition of European Symposium by NEREUS Regions - Space solutions for water and energy

Home of Airbus Defense and Space, the CNES Toulouse Space Center, and the NATO space center of excellence to name a few, the Occitanie Region will welcome NEREUS members and guests to Toulouse on October 2 and 3, 2024 for the 3rd annual European Symposium by NEREUS regions. The symposium is designed by and for the NEREUS Members, assembled by the call for best practices. Pending these contributions, this concept note aims to provide guidance on possible topics and approaches.

A symposium dedicated to the themes of water and energy: To support the Green Deal Going Local Agenda and its regional “New Green Deal”, the Occitanie Region proposed water and energy as the two themes for the 2024 Symposium. It is in line with the UN's Sustainable Development Goals 6 (clean water and sanitation) and 7 (clean and affordable energy). Both water and energy management play significant roles in the green and climate transitions, while also being impacted themselves by climate change with distressing consequences to the territory, biodiversity and economy. These are global challenges affecting each of the diverse economies and territories that make up the NEREUS membership. The symposium aims to present innovative solutions for the development and management of water and energy policies, presented by you, the members of NEREUS. The aim is to bring together the public policy administrators (responsible authorities in both water and energy from regional and local administrations) and service providers (companies, start-ups, research organisations and universities) to discuss space solutions.

Space Applications for Water: Flood prevention, droughts, irrigated cultures, aquatic environment, water quality, leaks: the challenges faced by regional administrators in the field of water management are plural. Data can contribute to a better understanding and more efficient management of this vital and strategic resource. Many space technology solutions exist or are being developed to support this critical public service. For example, Earth observation, satellite-based positioning, and satellite telecommunications are currently being used to gain a better understanding of the water cycle on a global scale and to observe river basins in the mitigating of flood risks.

Space Applications for Energy: The management of energy is a crucial task for public administrators, from reducing energy consumption to decarbonizing the energy-mix and maintaining energy infrastructures. As proven by the smart city movement, the analysis and use of data can help make informed decisions. Earth observation data can also contribute to territorial management (for example identifying heat islands and heat loss), to critical energy infrastructure monitoring, and to identifying optimal sites for renewable energy production.

Field trips: As the cradle of the European space industry, the Occitanie Region looks forward to presenting its unique ecosystem and to discuss together the future of the space industry.

Provisional programme

Wednesday October 2

9 am: Welcome addresses

10 am: Global challenges: The future of space policy has already begun

11:30 am: Water management challenges faced by public administrators

12:45 pm: Lunch break

2:45 pm: Innovative solutions for water management

5:15 pm: Energy management introduction

8:00 pm: Gala Dinner

Thursday October 3

9:30 am: Energy management challenges faced by public administrators

10:45 am: Innovative solutions for energy management

12:30 pm: Lunch

2:00 pm: Field trips