

## Keynote

*Connecting regional Innovation valleys through circular industries.* Laboral Centro de Arte. 21-22 June 2023

Asturias is a region of one million inhabitants located on the northern coast of Spain. We are highly specialised in process industry with a major concentration of its activity in the basic materials sector, which accounts for 40% of regional industrial employment. Unique companies producing materials such as steel, zinc, pulp, fibre, cement or glass are all located in the central area of the region, with just a few kilometres separating them, as well as two important ports in Avilés and Gijón.

Furthermore, it boasts an extraordinary natural beauty, where a third of the territory has been declared as a protected natural area making Asturias a "Natural Paradise". Therefore, the coexistence of both industrial and natural models is a major challenge for our region.

As we consider circularity to be a territorial issue, some of our key stakeholders have participated in this event, accompanying the government of Asturias: the academy represented by the University of Oviedo, the science represented by the Carbon Science and Technology Institute, as well as some of the most relevant representatives of process industries of our region. We are also counting on the public company in charge of all the regional urban waste management which is currently undertaking an ambitious project to search for alternatives to landfills.

The Smart Specialisation Strategy S3 Asturias 2021-2027 has emerged in response to the specialisation of the region's economic model and it focuses on circular and carbon neutral industry. With an average annual budget of €43 million, it is expected to allocate 25% of its funds to the field of Energy and Circularity, thanks to the funding it will receive from the ERDF together with the Just Transition Fund.

For its implementation, the Asturias Paradise Hub 4 Circularity work programme has been developed since 2016, helping to deploy the carbon neutral and circular industry ecosystem. Two initiatives have been designed to support the Hub's goals: R&D grants for Circular and Carbon Neutral Industry and a new investment aid programme.

Moreover, a regional network of public and private R&D infrastructures facilitates territorial collaboration. This network is considered as the technological node of the Asturias Paradise Hub 4 Circularity, and it is currently made up of 39 pilot plants which can collaborate to form Comprehensive Valorisation Circuits. Our goal is to scale the network to achieve higher levels of demonstration.

All of this is in line with the recently approved Circular Economy Strategy for Asturias 2023-2030, referred to by our deputy minister of the environment.



In Asturias, we believe that sustainability is a value developed by Europe. For long time, through our participation in different European projects and associations, Asturias has accessed knowledge but also transferred its good practices, in particular with regard to circularity as this issue is closely related to competitiveness. As a result, the European dimension has been incorporated into Asturian strategies.

Below we have provided some examples of our participation in European initiatives:

- Our relationship with Interreg dates back to 2005, when we started leading projects. We are about to finish the S3Chem project focused on sustainable materials.
- Asturias is partner of SPIRE since 2019, helping us to develop the concept of industrialurban symbiosis and deploy Asturias Paradise HUB for Circularity (AsPH4C).
- Members of Vanguard Initiative since 2014, we were also members of its board from 2018 to 2020.
- Finally, our experience in different ERANET supports us in terms of entities with experience in managing joint interregional tenders.

Moreover, the first time we collaborated with JRC was in 2019 when we co-organised in the Covadonga National Park in Asturias an Innovation Camp under the title: Currently, we are participating in the Pilot Action on Partnership for Regional Innovation and as part of the latter we are today co-organising this event with the Joint Research Centre and we would like to take this opportunity to thank them for its support.

We have identified our interests for medium and long-term Interregional collaboration summarised by the driving idea which is that circularity is built with technology and in society.

To this end, we have analysed our circular R&D grant programme to see how our industry is oriented in terms of technological trends and business models.

In this way, we can firstly conclude that Asturias recognises the specialisation in waste valorisation technologies as a fundamental axis for the implementation of the circular economy in its industry. It is proposed, for discussion, to identify DeepTechs to address this challenge and to determine the role of R&D infrastructures to speed up the uptake of these technologies by industry.

At the same time, we would like to work on the deployment of value chains that make business sense in which the process industry play a dual role, by leading on the demand side, identifying available waste streams as an attractive feedstock, and on the supply side, looking for alternatives for their own waste.

Moreover, we are aware that the technology should be reinforced by framework conditions such as developing skills and introducing regulatory improvements. Finally, we also think it is crucial for authorities to be able to evaluate the impact of the circular activity on their ecosystem in order to align with society's expectations, thus preventing negative social reactions.

Counting on broad support from our government (represented by our minister for science, innovation, and universities), we believe that during these two working days we will find interregional common interest. We are excited about working together with you.