

## Emilia – Romagna Region: collaboration and opportunities for the offshore wind and carbon capture and Storage”

### *EU collaboration opportunities for the offshore wind: ADMA pilot - Vanguard - Stefano Valentini - ART-ER Blue Economy Expert*

ART-ER Attractiveness Research Territory is the Emilia-Romagna Joint Stock Consortium born with the purpose of fostering the region’s sustainable growth by developing innovation and knowledge, attractiveness and internationalisation of the territory. Within the Vanguard Initiative established in 2013, ART-ER together Scotland, Basque Country, Asturias and Lombardy collaborate for the decarbonisation of the off-shore industry by promoting the transition towards marine renewable energies.

In particular The ADMA PILOT is being developed across some of the most advanced European regions in this sector, to pool resources and expertise for the benefit of industry. These regions host a number of companies with particular expertise in the off-shore technologies, including cluster organisations, research and technology organisations, universities, and above all a large, established industrial and advanced manufacturing base in marine renewable energy technologies and wider offshore energy and subsea applications.

The PILOT ADMA is an open community where to Exchange ideas, connect, develop International exchanges and collaborate for developments of demonstrative projects for the off-shore industry.

### *Cluster Greentech - Carbon Capture and Storage (CCU) initiatives - Elisa Guasti - International Project Officer Clust-ER GreenTech*

The **Energy and Sustainable development Clust-ER GREENTECH** is one of the key actors of the innovation ecosystem of the Emilia-Romagna region (Italy); it is an association of public and private bodies: companies, research centers and training institutions that share skills, ideas and resources to support the competitiveness of the sector. The Emilia-Romagna Region has found in the Clust-ERs the subjects capable of multiplying innovation opportunities through a collaborative approach, as they focus their activity in R&D strategic sectors. Together with the Technopoles and the High Technology Network laboratories, they are one of the key players in the regional innovation ecosystem coordinated by ART-ER. Strengthening innovation in the energy-environmental field contributes to the competitiveness and the wellness of the Emilia-Romagna region through the development of knowledge, new products, advanced services and

innovative business models. Currently **Clust-ER GREENTECH** is one of the partners of two European Horizon projects related to Carbon Capture Utilization and Storage: HERCCULES and ENCASE.

**HERCCULES** - Decarbonising with CCUS ([www.herccules.eu](http://www.herccules.eu)) aims to accelerate the application of the CCUS in Mediterranean Europe, leveraging on the transport and storage initiatives already under construction in Italy and Greece and developing innovative capture technologies. The aim of the project is to demonstrate the feasibility of the entire CO<sub>2</sub> capture, transport, storage and utilization chain, in particular in Italy (Po Valley region) and Greece initiating concrete actions for the containment of CO<sub>2</sub> emissions with an innovative, integrated and replicable approach. The project is led by LEAP Laboratory (a consortium participated by Politecnico di Milano, that belongs to the High Technology Network and is a member of the Clust-ER Greentech), in cooperation with 23 European partners including 13 companies.

**ENCASE - A European Network of Research Infrastructures for CO<sub>2</sub> Transport and Injection** ([www.encase-eu.com](http://www.encase-eu.com)) aims at advancing CCS research and technology in Europe. It brings together 20 partners from 6 countries, including research institutions, operators, manufactures, academia and small/medium-sized enterprises (SMEs), with the goal of enhancing competitiveness in the CCS industry. The success will improve the design and operation of CCS infrastructures. Thus, the enhanced research capacity built by ENCASE will benefit the scientific community, industry, policymakers, environment, communities by improving 7 world-leading CCS-research infrastructures with state-of-the-art scientific instruments, tools and methods to be the backbone for research and development of CCS technologies. ENCASE will contribute to a safer, more cost-effective, and environmentally friendly CO<sub>2</sub> transport and injection.

The role of **Clust-ER GREENTECH** in these projects involves social acceptance and dissemination. In particular, together with partners expert in social sciences and communication, it is involved in community engagement strategy and social perceptions analysis, in communication actions of the results at different societal levels, knowledge sharing between the stakeholders and in drawing up recommendations to policy makers.