S3 ENERGY PARTNERSHIP on MARINE RENEWABLE ENERGIES
27/03/2017
Since its launching in May 2015, the Smart Specialisation Platform on Energy (S3PEnergy) has supported interregional cooperation among its members around common Smart Specialisation Strategies (S3) priorities on energy. Many regions confirmed their interest to establish S3 interregional cooperation partnerships.

So far, four energy priorities have been identified, i.e. Bioenergy, Sustainable Construction, Marine Renewable Energy and Smart Grids. Accordingly, the S3PEnergy is currently facilitating the creation of four thematic interregional cooperation groups to foster the implementation of their S3 with the aim to facilitate interregional cooperation among EU regions having similar Smart Specialisation energy-related priorities.

The Basque Country and Scotland, as co-leaders of the Vanguard Initiative ADMA Energy pilot, have proposed the S3PEnergy to coordinate and start the reflections about the operational work of the Marine Renewable Energies (MRE) Partnership.
Vanguard initiative ADMA Energy pilot

- ADMA Energy “Advanced Manufacturing for Energy-Related Applications in Harsh Environments” is a pilot initiative backed by the Vanguard Initiative for New Growth through Smart Specialisation.

- The pilot initiative seeks to make the EU the global leader in manufacturing robust high integrity components for marine renewables and offshore energy applications.

- The initiative is led by the Basque Country (ES) and Scotland (UK), and 11 other European regions take part: Navarra (ES), Lombardia (IT), Norte (PT), Flanders (BE), Asturias (ES), Dalarna (SE), Syddanmark (DK), Skåne (SE), Ostrobothnia (FI), Andalucía (ES) and Emilia-Romagna (IT).
Vanguard initiative ADMA Energy pilot

The **ADMA Energy** Pilot relies on...

- The strong engagement of a **network of Policy and Technical Experts across 13 European regions** and clear interest from the **EC**
- An **inventory of around 120 organisations** across 23 regions
- A database of around **300 pivotal companies**
- 3 **background studies** and an **industry survey** on industrial challenges and technology needs
- A Workshop on **Industrial Challenges & Technology Roadmap** with over 130 participants (27 January 2016)
- A **Vanguard Initiative Matchmaking event** and a **report on the main outcomes of the panel sessions** (26 February 2016)
- A **Technology Roadmap report**
S3 ENERGY PARTNERSHIP ON MRE

Vanguard initiative ADMA Energy pilot

MAIN INDUSTRIAL CHALLENGE

ADDED VALUE AT COMPETITIVE COST

- Impact in investment costs
- Manufacturing of large components
- Power transfer and conversion
- Corrosion in water
- Testing and demonstration in real environment

TECHNOLOGY CHALLENGES

- Impact in operating costs
- Sensing, instrumentation and monitoring
- O&M optimisation

S3 MRE Partnership – web meeting 27/03/2017
S3 ENERGY PARTNERSHIP ON MRE

Regions involved

This strategic partnership is addressed to regions willing to join forces in an interregional cooperation framework that may lead to a better implementation of S3 Marine Renewable Energies related priorities. This means aligning regions with MRE priorities in their Thematic Objectives 1 and 4 of their ESIF Operative Program. Regional authorities and its related clusters/SME intermediaries are members of the partnership

**Co-leaders:** Basque Country and Scotland.

**Partners:**
Confirmed regions from VI ADMA Energy:
Navarra (ES), Lombardia (IT), Norte (PT), Flanders (BE), Asturias (ES), Dalarna (SE), Syddanmark (DK), Skåne (SE), Ostrobothnia (FI), Andalucía (ES) and Emilia-Romagna (IT)

Confirmed regions (questionnaire sent)
Cornwall and Isles of Scilly (UK)

Other interested regions:
Sogn og Fjordane (NO), Pomorskie (PL), Bretagne (FR), Zuid-Holland (NL)
Objectives

- Facilitating to European companies the best partnerships in order to address and solve specific challenges at the technological level in the different markets and segments:
  - For **offshore wind energy** the challenges include increased water depths, more remote and distant site locations, corrosion of towers and foundations and larger size of components, with a resultant increase in logistical challenges for installation, operation and maintenance.
  - For **ocean energy** (wave and tidal), the current biggest challenge is the survivability of the marine devices.
S3 ENERGY PARTNERSHIP ON MRE

Objectives

• Help companies and R&D organisations to establish a better understanding about the critical factors to succeed and develop a long-term vision in close partnership with the relevant stakeholders.

• Reveal visibility of the European industrial potential and help companies to identify their technological needs.

• Help policy makers understand the needs of actors and thus be in a better position to design effective policy responses.
The methodology proposed by the Vanguard Initiative is foreseen. The close collaboration between regional authorities and cluster organizations is required for an effective industry engagement.

VI’s methodology is structured around 4 core functions:

- **Learn.** This function includes activities such as data sharing, value chain mapping, exchange of good practices, workshops and study visits, and the development of guidebooks and manuals for business intelligence.

- **Connect.** This refers to activities such as industry brokerage, matchmaking events (including virtually), the development of demonstrator ideas, and broadly using the pilot as a collaboration space.

- **Demonstrate.** Under this function, the pilot would serve as a virtual incubator, providing start-up space for demonstrators, serve as a structure for leveraging public and private funds, provide ideas and mobilize inter-regional infrastructure pooling, and deliver projects related to identified common challenges and technology needs.

- **Commercialize.** This relates to the use of the learn / connect / demonstrate functions and services to promote demonstrators, agenda setting and policy outreach at EU, national and regional levels.
The S3PE proposes the following activities for the development of these phases:

**PHASE 1: LEARN**

- Elaboration of a concept note with feedback of European Commission and validation of participant regions, including information such as: objective, mission and priorities of smart specialisation.
- Definition of governance structure (e.g. leaders, co-leaders and responsible of thematic lines) and rules of functioning.
- Identification of new members and establish a protocol to invite them to join the partnerships.
- Identify strategic synergies with related initiatives (e.g. networks, associations, clusters, programmes, projects, platforms) in order to build operational synergies.
- Background analysis (e.g. results from previous studies, analysis)
- Head towards Political commitment / institutional agreement
Methodology

**PHASE 2: CONNECT**

- Definition and agreement of Partnerships' joint work plan: milestones, share of tasks, expected impact: *ex ante* setting-up of clear and measurable targets and corresponding indicators, etc.
- Establish collaborative synergies with related initiative in the thematic of reference
- Elaborate joint mapping of capacities and resources available in the regions (e.g. industry, technologies, patents, resource availability)
- Identification and agreement on Pilot activities according to the thematic of reference and leading to establish key frameworks of cooperation (E.g. European Value Chains, Investments Pipeline, Private engagement, Joint Investments, joint large-scale demonstrators, shared technology centres, other cross-regional projects, small projects bundled together in 'investment platforms', single cross-regional large scale projects, or large-scale individual projects to be developed across European industrial value chains, Monitoring and Evaluation S3)
- Identification of external support needs and communicate it to the European Commission.
S3 ENERGY PARTNERSHIP ON MRE

Methodology

PHASE 3: DEMONSTRATE

- Pilot activities implementation (according to action lines to be developed within each partnership)
- Evidencing results derived from pilot joint projects
- Elaboration of a dissemination results strategy (including evidences for regional policy)
- Monitoring and evaluation (indicators)

PHASE 4: UPSCALE

- Definition of business plan: cost estimates, identification of available funds, exploration of funding possibilities, design of co-investment projects (e.g. joint calls) integrating several sources of financing and addressing common thematic objectives.
- Deployment of real joint investments (evidence-based found in pilots)
- Stimulation industrial cooperation at higher scale
- Strategic engagement of private sector as counter-part of big projects
- Development of bankable and autonomous projects, less dependent on public funds
- Monitoring and evaluation (regional growth, economic and social indicators)
And the following key milestones:

- Participation in the European Smart Specialisation Conference (1-2 June 2017, Helsinki)
- Participation in the European Sustainable Energy Weeks (21 June 2017, Brussels) to show main achievements of this cooperation (e.g. framework of the first conference of managing authorities in charge of TO4).
- Participation in S3PEnergy partnerships Assembly (4 partnerships), discussion state of play and networking. European Week of Regions and Cities (October 2017, Brussels)
- Participation in the S3PEnergy "final" conference (foreseen end of 2017)
1. Learn

- Concept note
- Responses to questionnaire
- Joint meeting ADMA Energy & MRE: 16th May, Basque Country
- Mapping exercise
2. Connect

• The critical challenges pointed out by the ADMA Energy value chain stakeholders can be summarised as follows:
  • **Few established and systematic relationships** exist between companies and organizations.
  • Access to a broad and competitive offer of **testing and demonstration infrastructures** available in Europe is complex.
  • **Access to key persons in big customers** (facility owners, EPC developers, OEMs) in order to fully understand their core needs and challenges is difficult and limited in time and subjects
  • The process of **searching well-matched partners** outside their home regions and discussing collaboration agreements is challenging for most companies
  • **Information deficiency** acts as a barrier to foster any kind of partnering opportunities.
As a consequence, the ADMA Energy Pilot proposes activities along three Connecting action lines:

- **Connecting Facilities**: Develop an inter-regional open access platform for test & demonstration facilities.
- **Connecting Customers**: Opening up supply chains and encouraging OEM-SMEs collaboration.
- **Connecting Partners**: Inter-regional industrial consortia to develop added-value product/service proposals for global markets.
Plan to boost industrial engagement through “Connecting Journeys”

- Organisation of Connecting Journeys in the different partner regions with the following agenda:
  - Meetings with pivotal companies (at least 2):
    - Utility
    - Oil company/Operator
    - Windfarm developer
    - OEM (wind turbines, wave/tidal converters)
    - Main contractors for EPC/Turnkey projects
  - Visit to Research Center/Testing facility in offshore energy components/subsystems (1 or 2)
  - Matchmaking session with local companies, preferably SMEs (at least 6)
Plan to boost industrial engagement through “Connecting Journeys”

- Duration of each Connecting Journeys: 2,5 days.
- 2 Connecting Journeys/year
- Minimum number of guest attendants: 20 companies (not including public entities and research organisations). To be confirmed at least 1 month before the planned date
- Costs:
  - Organisation costs: meeting rooms, coffee breaks/catering during working sessions, transport from hotel to venues,... – to be covered by the host organisations
  - Travel costs: flight, hotel,... - to be covered by each guest
Basque Country “Connecting Journey”
17th – 19th May 2017

Basque Country offers to be host region for the first Connecting Journey 2017
Proposed date: 17th – 19th May - during S34GROWTH Study Visit

17th morning – S34GROWTH Interreg and MANUNET joint event (optional)
17th afternoon: Marine Renewables Testing Facility visit
17th evening: Guggenheim visit and dinner with Interreg participants (optional)
18th morning: Meeting with pivotal companies
18th afternoon: Matchmaking event
19th morning: Offshore Wind Testing Facility and Research Centre visit
Basque Country “Connecting Journey”
17th May


9:00 – 9:30 Institutional Opening. Basque Minister for Economic Development, EC representative
10:00 – 13:00 S34GROWTH Study Visit: Basque Advanced Manufacturing Strategy, Basque R&D Funding Programmes, Cluster Policy, MANUNET


13:00 – 15:00 Bus to Lemoiz and lunch
15:00 – 17:00 Presentation of research activities on Wave Energy by Tecnalia and BIMEP on-site visit
17:00 – 17:30 Bus to Bilbao


19:00 – 23:00 Together with S34GROWTH and MANUNET partners
ADMA for Energy Related Application in Harsh Env. –

Basque Country “Connecting Journey”
18th May

Meeting with pivotal companies. Venue to be decided

9:00 – 11:00 Pivotal companies presentations
   IBERDROLA – utility and offshore windfarm developer [https://www.iberdrola.com](https://www.iberdrola.com) (TBC)
11:00 – 11:30 Networking coffee
11:30 – 13:00 Presentations of other relevant companies in the offshore value chains

Matchmaking event. Venue to be decided

13:00 – 14:00 Lunch
14:00 – 17:00 Matchmaking event with Basque companies from Offshore Wind Energy, Wave Energy, Oil&Gas and value chains

S3 MRE Partnership – web meeting 27/03/2017
Basque Country “Connecting Journey”
19th May

Offshore Wind Testing Facility and Research Centre visit

9:00 – 10:00 Bus to Research Center IK4 Tekniker, Eibar http://www.tekniker.es/en
10:00 – 11:00 Coffee and presentation of research activities related to Offshore Wind
11:00 – 12:00 Visit to research facilities and Offshore Wind Testing Facility WINDBOX http://www.clusterenergia.com/windbox-2
12:00 – 13:00 Bus to Bilbao (possibility to stop at airport)
Basque Country “Connecting Journey”
17th – 19th May

CONFIRMATIONS TO cristina@spri.es BY 31ST MARCH

Region representative (ADMA Energy partner) + companies

(Minimum 20 guest companies)
Next steps

- **Responses to the questionnaire.**
  Deadline 31\textsuperscript{st} March, to be sent to María Pestaña: mpestana@spri.es.

- **Meeting in Bilbao on the 16\textsuperscript{th} May.**
  Deadline 7\textsuperscript{th} April
  MRE partner: regional authority representative and/or technical expert (Cluster, RTO,...)

- **Connecting Journey 17\textsuperscript{th} - 19\textsuperscript{th} May in Bilbao.**
  Deadline 7\textsuperscript{th} April
  MRE partners + at least 2 companies
  + participation in:
    - **SMART Regions II Conference and Exhibition – High Level Event: 1-2 June 2017, Helsinki**
    - European Sustainable Energy Week (EUSEW): 21 June 2017, Brussels
    - European Week of Regions and Cities: October 2017, Brussels
Contact

- Contact details of the leading regions
  - Cristina OYÓN, Basque country, Head of strategic initiatives, SPRI
    cristina@spri.eus
  - Charles ABBOTT, Scottish Enterprise (delegation in Brussels: Scotland Europa)
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- Contact details of JRC
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