FACT-SHEETS ABOUT SUCCESSFUL H2020 AND EU-FUNDEND PROJECTS

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Partner: Polytechnic University of Marche

UNIVERSITÀ POLITECNICA DELLE MARCHE

Dipartimento di Scienze e Ingegneria della Materia, dell'Ambiente ed Urbanistica **SIMAU**

Project title: Vison and Roadmap for European Raw materials - VERAM

Coordinator/Project Leader: European Technology Platform on Sustainable Mineral Resources ETP-SMR.
Source of funding: European Union's Horizon 2020 research and innovation programme under grant agreement No 690388. Coordination and Supporting Action (CSA).
Dates (start/end): 01-012-2015/31-05-2018.
Name of the Partners involved:
1 European Technology Platform on Sustainable Mineral Resources Belgium
2 Forest-Based Sector Technology Platform Belgium
3 VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V. Belgium
4 Conseil Européen de l'Industrie Chimique Belgium
5 UNIVERSITA POLITECNICA DELLE MARCHE Italy
6 CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE France
7 Fachagentur Nachwachsende Rohstoffe e.V. Germany
8 D'APPOLONIA SPA Italy
9 FORSCHUNGSZENTRUM JULICH GMBH Germany
10 FUNDACION TECNALIA RESEARCH & INNOVATION Spain
11 Teknologian tutkimuskeskus VTT Oy

A brief description of the project objectives:
The VERAM proposal aims to envelope all relevant aspects of non-food, non-energy raw materials related research and innovation. It will challenge the current compartmentalisation into scientific disciplines and fragmentation into industry sectors to increase synergies and facilitate uptake of research results. It will still respect the individual visions of each stakeholder group in recognition of the specific conditions that they have to comply to. The project will encourage capacity building as well as transfer of knowledge. It will provide an innovation reference point for the EIT Raw Materials (former KIC Raw MatTERS). It will coordinate the network of people involved in the EIP RM Commitments and the in proposals funded under Horizon 2020. It will provide a platform for identifying gaps and complementarities and bridge these. VERAM will also advise the European Commission and Member States on future research needs and policies to stimulate innovation and assist in overcoming the fragmentation in the implementation of the EIP RM Strategic Implementation Plan. VERAM will look for mutually beneficial information exchange, encourage cross-fertilization between actions undertaken by different raw material industries and will speed-up exploitation of breakthrough innovations. As one of the main deliverables of the proposal, a common long term 2050 Vision and Roadmap for the relevant raw materials, including metals, industrial minerals and aggregates and wood will be presented. The Vision and roadmap will also show the path to achieving the European Commission's ambitious target of 80% reduction in CO2 emissions by 2050.

A brief description of the role played in the project:

UNIVPM, being Co-Leader with Heidelberg Cement of Focus Area MATERIALS of the European Construction Technology Platform (ECTP), will represent ECTP and the building materials manufacturers in the Consortium, guaranteeing proper diffusion and information in the Roadmap and the project activities in general. UNIVPM will be deputy of WP2 Dissemination and Communication, taking care of important dissemination action, in particular in the construction sector (which is the largest raw materials consumer in the world) and will participate in WP3 Defining and exploring the playing field, WP4 Creating a vision 2030 and 2050 for raw materials, and WP5 Creating the raw materials roadmap 2050.

Project title: A Territorial Construction System for a Circular Low-Carbon Built Environment - RECONSTRUCT

Coordinator/Project Leader: INSTITUT DE TECNOLOGIA DE LA CONSTRUCCION DE CAT
Source of funding: Call: HORIZON-CL6-2022-CIRCBIO-02-two-stage, (Circular economy and bioeconomy sectors), Topic: HORIZON-CL6-2022-CIRCBIO-02-01-two-stage, Type of Action: HORIZON-IA, Proposal number: 101082265-2, Type of Model Grant Agreement: HORIZON Action Grant Budget-Based
Dates (start/end): 01-06-2023/31-05-2027
Name of the Partners involved:
1 INSTITUT DE TECNOLOGIA DE LA CONSTRUCCION DE CAT ES Coordinator
2 Holland Composites BV NL Partner
3 ASOCIACION EMPRESARIAL DE INVESTIGACION CENTRO T ES Partner
4 SIMBIOSY SIMBIOSI INDUSTRIAL SL ES Partner
5 UNIVERSITA POLITECNICA DELLE MARCHE IT Partner
6 COMSA SAU ES Partner
7 TEESSIDE UNIVERSITY UK Partner
8 IRIS TECHNOLOGY SOLUTIONS, SOCIEDAD LIMITADA ES Partner
9 ACSA OBRAS E INFRAESTRUCTURAS SAU ES Partner
10 BRUNEL UNIVERSITY LONDON UK Partner
11 VRIJE UNIVERSITEIT BRUSSEL BE Partner
12 Societat Orgànica + 10 SCCL ES Partner
13 INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMEL Partner
14 FONDAZIONE ICONS IT Partner
15 INSTITUT CATALA DEL SOL ES Partner
16 Green Energy Park

A brief description of the project objectives:
Globally, the Construction industry is responsible for over 30% of the extraction of natural resources, 25% of solid waste generated and 40% of GHG emissions. Around a third of these emissions come from embodied carbon in construction. Cement and Steel are responsible for most of the embodied GHGs, representing >80% of the total. With recycling of cement and steel having a limited potential for further improving material efficiency, the focus is on replacing them with low-carbon alternatives and/or embedding them in reusable construction components. RECONSTRUCT will (i) develop low-carbon alternatives to OPC, to be used in both renovations and new buildings, and incorporate CDW and other waste as much as possible, (ii) manufacture construction components that use such materials and are designed for modularity and dismantling so they can either be reused or easily disassembled and recycled, (iii) embed deconstruction in building design and construct circular low-carbon buildings that produce near-zero CDW across their lifecycle. These objectives will become possible through (i) the digitization of construction materials, products and buildings, (ii) the extensive use of digital tools to support the design, construction and deconstruction phases of the circular building and (iii) the regionalization of the construction value chain through the creation of regional ecosystems of stakeholders covering all the aspects of circular construction. The RECONSTRUCT concept will be demonstrated by setting up to Territorial Circular Clusters, in Brussels and Barcelona, and using RECONSTRUCT´s materials, components and innovative tools to design and construct two real-scale demonstrator buildings. By doing so, RECONSTRUCT aims to demonstrate its high impact potential (including a GHG reduction potential of 137,12 Mt CO2 per year, avoidance of 85 million tonnes of CDW per year and substitution of 197 Mt of OPC concrete per year) and its economic feasibility.

A brief description of the role played in the project:

UNIVPM will be involved in: Task 1.1 Data collection, design and validation of the AI-based sourcing modules; Task 1.3 CDW quantification via image processing of CCTV and drone data CDW characterisation using hyperspectral imaging techniques; Task 2.1 Development of circular alkali-activated cement-based concrete; Task 2.5 Recyclability studies for the materials and components

Project title: MULTI-faceted CLIMate adaptation ACTions to improve resilience, preparedness and responsiveness of the built environment against multiple hazards at multiple scales - MULTICLIMACT

Coordinator/Project Leader: RINA CONSULTING SPA
Source of funding: Call: HORIZON-CL5-2022-D4-02, Topic: HORIZON-CL5-2022-D4-02, Type of Action: HORIZON-IA, Proposal number: 101123538, Type of Model Grant Agreement: HORIZON Lump Sum Grant
Dates (start/end): 1-10-2023/31-04-2027.
Name of the Partners involved:
1 RINA CONSULTING SPA IT Coordinator
2 AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE, L'ENERIT Partner
3 UNIVERSITA POLITECNICA DELLE MARCHE IT Partner
4 UNIVERSITA DEGLI STUDI DI CAMERINO IT Partner
5 FONDAZIONE CENTRO EURO-MEDITERRANEOSUI CAMBIAIT Partner
6 COMUNE DI CAMERINO IT Partner
7 LIVE INFORMATION SYSTEM SRL IT Partner
8 ICLEI EUROPEAN SECRETARIAT GMBH (ICLEI EUROPASEKR DE Partner
9 UNIVERSITAETSKLINIKUM AACHEN DE Partner
10 STEINBEIS INNOVATION GGMBH DE Partner
11 fibrisTerre Systems GmbH DE Partner
12 TECHNISCHE UNIVERSITEIT DELFT NL Partner
13 FUNDACION TECNALIA RESEARCH & INNOVATION ES Partner
14 COMSA SAU ES Partner
15 CYPE SOFT SL Spain Partner
16 BRIGAID CONNECT ES Partner
17 NATURALEA CONSERVACIO, SL ES Partner
18 AJUNTAMENT DE BARCELONA ES Partner
19 KUNGLIGA TEKNISKA HOEGSKOLAN SE Partner
20 UPONOR OYJ FI Partner
21 UPONOR AB

A brief description of the project objectives:
The MULTICLIMACT project aims to develop a mainstreamed framework and a tool for supporting public stakeholders and citizens to assess the resilience of the built environment and its people at multiple scales (buildings – including cultural heritage, urban areas, infrastructures) against locally relevant natural and climatic hazards and supply-chains, as well as to support them to enhance their preparedness and responsiveness across their life cycle. The mainstreamed approach will include a resilience scorecard system specifically targeted for including several types of built environment assets, including human well-being, health, and quality of life as an essential scale of analysis and action. MULTICLIMACT will support natural and climate adaptation ACTions by implementing a toolkit of Design Practices, Materials, and Digital Solutions, enabling users to easily estimate the impact of their implementation on the resilience of the targeted asset, integrating a multidisciplinary approach integrating socio-economic, life, engineering, and climate disciplines. The MULTICLIMACT approach is integrated with relevant international and European initiatives, building upon existing knowledge and instruments, and demonstrating the proposed approach in four case studies that represent various geographical location, natural and climatic hazards, social and economic systems and scales of analysis, ranging from the single building (including cultural heritage) to the urban and territorial scales.

A brief description of the role played in the project:
UNIVPM will participate in: Task 1.2 – MULTICLIMACT toolkit assessment framework. Quantitative evaluation of resilience enabling DESIGN practices and methods; Task 3.3 – Design of materials and technologies for improving the resilience of buildings, including cultural heritage; Task 4.2 – Design of a digital solution for the multi-purpose monitoring of environmental and structural behaviour of buildings; WP9 (Lead) - Materials and Technologies for supporting the built environment preparedness and responsiveness to disrupting events; Task 10.2 – Digital solution for the multi-purpose monitoring of environmental and structural behaviour of buildings – development for the application to a real demo case; Task 11.1 – Demonstration of the MULTICLIMACT framework at the building scale; Task 15.1 – Deployment of the MULTICLIMACT framework at the building scale

Project title: New Environmental friendly and Durable conCrete, integrating industrial by-products and hybrid systems, for civil, industrial and offshore applications - ENDURCRETE

Coordinator/Project Leader: HEIDELBERG CEMENT AG
Source of funding: European Union's Horizon 2020 research and innovation programme under grant agreement No 760639. Research and Innovation Action (RIA)
Dates (start/end): 01-01-2018/31-12-2021

Name of the Partners involved:
1 HEIDELBERGCEMENT AG Germany
2 D'APPOLONIA SPA Italy
3 COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES France
4 ACCIONA CONSTRUCCION SA Spain
5 KVAERNER AS Norway
6 SIKA TECHNOLOGY AG Switzerland
7 ZAVOD ZA GRADBENISTVO SLOVENIJE Slovenia
8 VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V. Belgium
9 NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU Norway
10 UNIVERSITA POLITECNICA DELLE MARCHE Italy
11 FENIX TNT SRO Czech Republic
12 GEONARDO ENVIRONMENTAL TECHNOLOGIES LTD Hungary
13 PROIGMENES EREVNITIKES & DIAHIRISTIKES EFARMOGES Greece
14 NUOVA TESI SYSTEM SRL Italy
15 I-Box Create S.L. Spain

A brief description of the project objectives:
The main goal of the EnDurCrete project is to develop a NEW cost-effective sustainable reinforced concrete for long lasting and high impact applications. The concept is based on the integration of novel low-clinker cement including high-value industrial by-products, new nano and micro technologies and hybrid systems ensuring enhanced durability of sustainable concrete structures with high mechanical properties, self-healing and self-monitoring capacities. The functionality of the developed concrete structures will be proved under severe operating conditions supported by experimental and numerical tools to better understand, theoretically and in real application conditions, the factors affecting durability and to capture the multiscale evolution of damage as well as to enable service life prediction.

A brief description of the role played in the project:
UNIVPM will manage the calibration and testing of the self-sensing/monitoring properties of the new concretes obtained with low cost conductive additions from industrial by-products.

Partner: Alma Mater Studiorum – University of Bologna

ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA
DIPARTIMENTO DI
SCIENZE E TECNOLOGIE AGRO-ALIMENTARI

Project title: Production of functional innovative ingredients from paper and agro-food side-streams through sustainable and efficient tailor-made biotechnological processes for food, feed, pharma and cosmetics-INGREEN

Coordinator/Project Leader: Technical coordinator: INEUVO Ltd (UK) Scientific Coordinator: Alma Mater Studiorum, University of Bologna, DISTAL
Source of funding: H2020-BBI-JTI
Dates (start/end): June 2019-November 2022
Name of the Partners involved: University of Bologna, Barilla, Innoven, PIvetti, Mambelli, Techno Packaging, Smurfit Kappa Italy, Smurfit kappa France, Depofarma, Fachhochschule Nordwestschweiz (FHNW), Novaid, Avecom, EFFoST, Munster Technological University, Activatec, Isitec.

A brief description of the project objectives:
The project was aimed to valorize different agro-industrial waste and by-products throughout biotechnological processes and green approaches. In particular, whey, milling by-products and paper mill wastewaters were valorized into functional ingredients re-usable in different sectors such as food, feed, pharma, nutraceutical. cosmetic and packaging ones

A brief description of the role played in the project:
UNIBO DISTAL was involved in the set-up of the biotech processes, based on safe microorganisms, to valorise the whey into i) LBA enriched whey for nutraceutical product and cleanser, and ii) Y. lipolityca biomasses as adjunct for cheesemaking to reduce cheese ripening. Moreover, UNIBO was leader in the set-up of prefermented ingredients, using milling by-products and safe microbial consortia, for nutraceutical products and bakery ones. UNIBO DISTAL was also involved in the dissemination, exploitation and training activities.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
Possible aspects and case studies developed in INGREEN project to be enhanced in the contest of AMOCEAB deal with the set-up of sustainable and tailor made biotechnological processes, based on safe and well characterized UNIBO microorganisms, to valorize whey and milling-by-products into *Y.lipolytica* biomasses and prefermented ingredients, respectively, re-usable in food (cheesemaking and bakery) and nutraceutical products. These case studies involved also different SME and large industry since Mambelli made available whey that UNIBO valorise into Y. lipolitica biomass to be reused by Mambelli in cheesemaking, while Barilla and Pivetti made available milling by-products that UNIBO valorised into prefermented ingredients reusable by Barilla in bakery production and Depofarma in nutraceutical products. The industries involved in INGREEN could be exploitable for AMOCEAB internship. Moreover, the expertise of the UNIBO researchers involved in INGREEN can be exploited for the design of the MASTER teaching courses related to biotech and sustainable food processes.

Project title: Innovative mild processing tailored to ensure sustainable and high quality organic fruit product- MILDSUSFRUIT

Coordinator/Project Leader: Alma Mater Studiorum, University of Bologna, DISTAL
Source of funding: CoreOrganic/ SUSFOOD2
Dates (start/end): 01/11/2020- 31/10/2023
Name of the Partners involved: University of Reading, Universitatea de Stiinte Agronomice si Medicina Veterinara din Bucuresti, Warsaw University of Life Sciences, VTT Technical Research Centre of Finland Ltd, Central Research Institute of Food and Feed Control (Turkey), Gaziantep University(Turkey). Involvement of MACE fruit as stakeholder

A brief description of the project objectives: MILDSUSFRUIT is aimed to address the increased quality and sustainability of organic fruit processing, through the optimization of specific mild technologies that will allow to reduce the environmental impact and to preserve quality and nutritional characteristics of the final products. This activity is aimed to meet consumers expectations and favour a healthy life-style, but also to valorise by-products stimulating the development of a circular processing system.

A brief description of the role played in the project: UNIBO DISTAL is involved in the project to i) define and optimize mild technologies tailored to each organic raw material, in order to increase the stability and functionality of a wide range of organic processed fruit products, ii) define and optimize gentle and more sustainable technologies for the extraction and stabilization of functional ingredients, developing specific protocols aimed to reduce waste and valorise by-products.
UNIBO DISTAL is involved also in the dissemination of the obtained results.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
In the framework of MILDSUSFRUIT, the expertise of the UNIBO researchers is exploited for the design of several sustainable biotechnological processes based on safe and well characterized microorganisms and/or non- thermal technologies to produce organic fruit based ingredients and innovative products. This expertise can be exploited in AMOCEAB for the design of courses and teaching based on sustainable processes and solutions for the industries. The involvement of industries as stakeholder can be important for the foreseen AMOCEAB internship.

Project title: New Technologies tools and strategies for a sustainable, resilient and innovative European Aquaculture NEWTECHAQUA

Coordinator/Project Leader: Alma Mater Studiorum, University of Bologna, DIMEVET
Source of funding: H2020
Dates (start/end): 01/01/2020- 31/12/2023
Name of the Partners involved: ALMA MATER STUDIORUM-UNIVERSITY OF BOLOGNA (DIMEVET+DISTAL), UNIVERSITA CA' FOSCARI, INSTITUT DE RECERCA I TECNOLOGIA AGROALIMENTARIES, HELLENIC CENTRE FOR MARINE RESEARCH, UNIVERSITA DEGLI STUDI DI BARI ALDO MORO, NOFIMA AS, A.I.A. AGRICOLA ITALIANA ALIMENTARE S.P.A., AQUICULTURA BALEAR SA, CROMARIS DIONICKO DRUSTVO ZA MARIKULTURU, MARINE HARVEST ASA, IRIDA AE-PRODUCTS FOR ANIMAL PRODUCTION-SERVICES, RARA AVIS BIOTEC, S.L., AQUANETIX LIMITED, FÉDÉRATION EUROPÉENNE DES PRODUCTEURS AQUACOLES, CENTRE INTERNATIONAL DE HAUTES ETUDES AGRONOMIQUES MEDITERRANEENNES, IL VIGNETO SOC AGRICOLA ARL, GREENOVATE! EUROPE, INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER, SYNDICAT DES SELECTIONNEURS AVICOLES ET AQUACOLES FRANCAIS, ICHTHYOKALLIERGEIES ARGOSARONIKOU ANONYMI ETAIRIA, MINISTRY OF AGRICULTURE, RURAL DEVELOPMENT AND ENVIRONMENT OF CYPRUS, ECOMARE.

A brief description of the project objectives:
NewTechAqua is aimed to expand and diversify EU production of finfish, molluscs and microalgae by developing and validating technologically-advanced, resilient and sustainable new solutions. The organizational approach of NewTechAqua is to group the solutions in 6 different categories: feed, Industry 4.0, sustainable farming, genetics, new species and new products.

A brief description of the role played in the project:
UNIBO DISTAL was involved in the production of High-quality seafood products by means of sustainable food non thermal processing (PEF, Cold Plasma, HP) and in the set-up of sustainable processes, based on safe microorganisms, to valorize fish by-products into innovative ingredients such as flavorings and antioxidants.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
One of the most important case study deals with the valorization of fish by-products, provided by an industrial partner ECOMARE, into flavoring and antioxidant ingredients, using biotechnological approaches based on *Y. lipolytica* strains and other well characterized and safe microorganisms, set-up by UNIBO DISTAL. The produced ingredients have been then validated by the industrial partner ECOMARE in food formulation, providing, thus, an example of circularity.
Moreover, the expertise of the UNIBO researchers involved in NEWTECHAQUA can be exploited for the design of the MASTER teaching courses related to biotech and sustainable food processes. Also, the participation of some industries in NEWTECHAQUA project can be involved for internship.

Project title: Future-proof bioactive peptides from food by-products: an eco-sustainable bioprocessing for tailored multifunctional foods-PROACTIVE

Coordinator/Project Leader: Libera Università di BOLZANO
Source of funding: PRIN
Dates (start/end): 08/05/2022-07/05/2025
Name of the Partners involved: Alma Mater Studiorum-University of Bologna, Università degli Studi di PADOVA, Università degli Studi di ROMA "La Sapienza", Università degli Studi di BARI ALDO MORO

A brief description of the project objectives: Main aim of PROACTIVE is the exploitation of five by-product categories (oil, cereal, legume, fruit, and vegetable by-Ps) to recover Bioactive peptides (BPs) for the fortification of new healthy foods intended for a wide population. Developing new tailored and eco-friendly biotechnological tools to enhance BPs release in by-Ps and obtaining multifunctional foods are the main PROACTIVE challenges. The production of BPs will be modulated and enhanced combining different biotechnologies. Fermentation driven by selected microbial strains or consortia, combined with enzymatic hydrolysis and/or optimised high-pressure homogenization (HPH) treatments will be used to enhance the release of BPs from plant by-Ps.

A brief description of the role played in the project:
UNIBO DISTAL is involved in the set-up of the biotechnological processes, based on safe microorganisms, to valorize several waste and by-products into functional biopeptides. UNIBO is also involved in the development of sustainable processes, based on the use of High Pressure Homogenization technology, to accelerate the fermentation process and release of BPs. UNIBO DISTAL is also involved in studies of product formulation and microbiological characterization.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
Within PROACTIVE, the possible aspects that can be enhanced in the context of AMOCEAB deal with the expertise of UNIBO on optimisation of biotechnological process to valorise agro-food residues into food ingredients, as well as the exploitation of the wide Microbial Culture Collection (belonging to DISTAL -UNIBO) of well characterized strains of bacteria and yeasts. Moreover, the availability at UNIBO of equipment and pilot plans related to the area of food science and technology can be exploited for the production of the innovative functional ingredients, from the agro-food by-products, for the formulation and production of innovative products.

Project title: SaFe and sustaInable soluTions FOR the integRatEd USE of non-conventional water resources in the Mediterranean agricultural sector (FIT4REUSE)

Coordinator/Project Leader: UNIBO
Source of funding: H2020 PRIMA
Dates (start/end): 1 July 2019 - 31 December 2022
Name of the Partners involved: UNIBO, UNIVPM, ISPRA, BIOAZUL, Ecofilae, NTUA, MEKOROT, ISSBAT, ITUNOVA

A brief description of the project objectives:
The main objective of FIT4REUSE was to provide safe, locally sustainable and accepted ways of water supply for the Mediterranean agricultural sector by exploiting non-conventional water resources, namely treated wastewater and desalted water. In particular, FIT4REUSE focused on innovative treatment technologies and on the use of non-conventional water resources in agriculture and for aquifer recharge.

A brief description of the role played in the project:
UNIBO worked on the treatment of domestic wastewater with NBS and on the use of treated effluent for irrigation, thus providing additional water resource and lowering the use of artificial fertilisers in agricultural production.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
UNIBO has constructed a pilot plant for domestic wastewater treatment and it used an experimental platform where the effects of irrigation with treated wastewater were monitored.

Project title: CO-creating sustainable and competitive FRuits and vEgetableS' value cHains in Europe (CO-FRESH)

Coordinator/Project Leader: CNTA - Centro Nacional De Tecnologia Y Seguridad Alimentaria (Spain)
Source of funding: H2020
Dates (start/end): 01/10/2020 – 31/03/2024
Name of the Partners involved: Alma Mater Studiorum-Univeristy of Bologna (UNIBO), Universitaet Hohenheim (UHOH), Tecnoalimenti s.c.p.a. (TCA), Ghent University (UGENT), Wageningen University and Research (WUR), Warsaw University of Life Sciences (WULS), Actalia association (ACTALIA), Le Terre di Zoè" Azienda Agricola Biologica) (ZOE), Florette Ibérica, S.L.U. (FLORETTE), Food Valley (The Protein Cluster -TPC), Chambre d'agriculture du Pays de la Loire (CRAPDL), PILZE Nagy Ltd (PILZE), Asociación de Organizaciones Productor de Frutas y Hortalizas Almería (COEXPHAL), Confagricoltura, FruitVegetablesEurope (EUCOFEL), European Community of Consumer Cooperatives (EUROCOOP), Cooperatives Europe (COOPSEU), Bioeconomy Cluster (BEC), Enco srl (ENCO), Future Intelligence Ltd. (FINT), Innogestiona Ambiental (IGA)

A brief description of the project objectives:
The overall aim of CO-FRESH is to promote more sustainable and efficient agri-food value chains through concrete actions and approaches. In particular, starting from the state of the art in technological and non-technological approaches as well as current best practices and key success factors analysed in innovative value chains, CO-FRESH proposes to develop techniques, tools and insights for the re-design of agri-food value chains. Through collaborative and systemic approaches, the tools and formats are applied in 7 pilot cases representing diverse fruit and vegetables agri-food value chains across Europe.

A brief description of the role played in the project:
UNIBO is involved in technological innovations aimed at improving the sustainability of 2 pilot cases: i) fresh cut salads, by testing at lab scale an emerging decontamination technology to allow reutilization and saving of the washing water of leafy vegetables; ii) organic fresh and preserved fruits, through biotechnological process to valorise clementine juice by-products into functional food ingredients.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
Within COFRESH, the Italian case study is a small agricultural farm located in Reggio Calabria which produces by-products from different processed fruit products (juices, jam, marmalade, compote) in addition to the clementine ones targeted within the CO-FRESH project. These can be valorised also thanks to the expertise available at UNIBO on optimisation of biotechnological process to valorise agro-food residues and surplus into food ingredients, as well as to the wide Microbial Culture Collection (belonging to DISTAL -UNIBO) of strains of bacteria and yeasts, which are safe and well characterised from a technological point of view. Also the availability at UNIBO of equipment and pilot plans related to the area of food science and technology can be exploited for the use of the innovative functional ingredients, derived from the agro-food by-products, for the formulation and production of innovative products or modification/enrichment of already available on the market.

Project title: WATER RETENTION AND NUTRIENT RECYCLING IN SOILS AND STREAMS FOR IMPROVED AGRICULTURAL PRODUCTION (WATERAGRI)

Coordinator/Project Leader: ULUND
Source of funding: H2020
Dates (start/end): 1 May 2020 – 30 April 2024
Name of the Partners involved: ULUND, EDEN, FZJ, VTT, UNIDEB, ALCHEMIA-NOVA, AGRO-GEO, BOKU, UNIBO, USAL, CER, CDR, INOSENS, WUELS, BZN, VULTUS, TUDELFT, UNINE, GN, OULU, AGRICOLUS, INRA, REGELSBERGER

A brief description of the project objectives:
The WATERAGRI vision is to solve agricultural water management and soil fertilisation challenges in a sustainable manner to secure affordable food production in Europe for the 21st century. The WATERAGRI concept aims to introduce a new framework for the use of small water retention approaches for managing excess and shortage of water as well as better recovery of nutrients from agricultural catchments applying a multi-actor approach.

A brief description of the role played in the project:
UNIBO is working on nature-based solutions for the treatment and storage of agricultural drainage water, including the topics of fertiliser removal and reuse, increasing the circularity of agricultural production.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
UNIBO case study in WATERAGRI is a small agricultural farm near Bologna that can collects and treats its agricultural drainage water.

Partner: Special Research Funds Account of Technical University of Crete

Project title: Plooto - Product Passport through Twinning of Circular Value Chains
Coordinator/Project Leader: Maggioli SPA (Italy)
Source of funding: Horizon 2020 (Horizon Action Grant Budget-Based), total budget: 7.652.750€
Dates (start/end): 1st January 2023 – 31 December 2025
Name of the Partners involved: Polytechneio Kritis (Technical University of Crete, Indigo Research Group, School of Production Engineering and Management), *Greece*
- Athens University of Economics and Business (AUEB) – Research Center, *Greece*
- Fundacio Eurecat, *Spain*
- IDC Italia SRL, *Italy*
- University of Oslo, *Norway*
- Aegis IT Research, *Germany*
- Institut Josef Stefan - JSI, *Slovenia*
- Entersoft Romania Software SRL, *Romania*
- Frontier Innovations EE, *Greece*
- Centro Di Ricerche Europeo Di Technologie Design E Materiali - CETMA, *Italy*
- TUV Austria Cyprus LTD, *Cyprus*
- ASPIS AE, Elliniki Viomichania Chymon, *Greece*
- BARNA Steel SA, *Spain*
- Fundacion IMDEA Nanociencia, *Spain*
- Ingenieria Magnetica Aplicada SL, *Spain*
- HP Composites SPA, *Italy*
- CETMA Composites SRL, *Italy*
- Acceligence LTD, *Cyprus*
- KPAD LTD, *Cyprus*

A brief description of the project objectives:
The constantly increasing demand of scarce resources and critical raw materials (CRMs), requires efficient usage of resources - reuse and recycling of materials- and responsible waste management and prevention. The circular economy's model establishes a virtuous cycle where products and resources can be reused, repurposed and recycled to maximize productivity of resources, to reduce waste and by products that can become raw materials (RMs) entering in other industrial processes, thus reducing the depletion of natural resources and the overall environmental effects on climate change.
Plooto aims to deliver a Circular and Resilient Information System (CRIS) to support manufacturers in their green, digital and circular transition. CRIS enables waste reduction and end-to-end traceability of Secondary Raw Materials (SRM) through interconnected digital services for real-time decision making, monitoring and certification of materials and products.
Plooto delivers: a) a transformation framework based on traceability strategies for materials/products per business case, with reference processes for SRM use from waste deposit to new products, and governance models for circular value chains; b) ICT tools for modelling product, production processes and supply chains, as an aggregation of individual component

Digital Twins with cognition capabilities (cognitive Digital Twins – CDTs); c) Data will feed RM-recovery and waste dataspaces allowing the provision of material certification and product passport; and d) A circular sustainability balanced scorecard (framework + toolkit) to assess impact of decision-making at CDT level based on various KPIs.
The solution will be piloted in three different circular supply chains demonstrating waste reduction, reusability of scrap and production by-products, operational improvement.

A brief description of the role played in the project:
TUC, as Work Package Leader, will coordinate the definition of the digital circular value chain framework and is responsible for the reference processes and the digital traceability strategies of the pilot use cases definition.
Exploiting the experience gained from other EU funded projects, TUC will lead and implement the Process Modelling and Simulation Processes, using the tailored PSM tool, aiming to develop accurate models of the process systems to allow a systemic view, encompassing the product value chains and its continuously monitoring and update in real-time for changes in source flows and process' states. To this end, a digital shadow of the physical system will be formed and developed, led by TUC, verified and validated.
Additionally, TUC is responsible for the Sustainability Assessment and the creation of the Sustainability Balanced Scorecard, a tool that will provide the circularity level and the tracing activities for selected products/processes. Therefore, a set of configurable and personalized visualisations to support monitoring and decision-making at different hierarchy levels will be available for the product lifecycle assessment, based on the core aspects of circular economy (reusing policies, scrap status, usage patterns, etc.)

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
Digital Product Passports (DPP) are a rather new tool aiming to create transparency and unlock the circularity in the circular value chains, running under the Policy of Digital Europe. As a part of the EU Green Deal, Digitalisation foresees to be the key to unlock the transformation of industries towards green, sustainable facilities, advancing the circularity. To this end, the enhancement of professionals' skills and knowledge in this topic through a focused Master in Circular Economy is rather critical and will enhance the project's overall objectives. Moreover, the innovative use cases of Plooto project can be exploited as real cases studies in AMOCEAB courses.

Project title: AquaSPICE - Advancing Sustainability of Process Industries through Digital and Circular Water Use Innovations

Coordinator/Project Leader: RTWH Aachen University (Germany)
Source of funding: Horizon 2020 (Horizon Action Grant Budget-Based), budget: 12.847.491,81€
Dates (start/end): 1st December 2020 – 30th November 2024
Name of the Partners involved:
- Dow Olefinverbund GmbH, *Germany*
- BASF Antwerpen NV, *Germany*
- Solvay Chimica Italia s.p.a., *Italy*
- Turkiye Petrol Rafinerileri Anonim Sirketi, *Turkey*
- JEMS, Energetska Druzba, *Slovenia*
- Agricola International SA Bacau, *Romania*
- ENGIE Laborelec, *Belgium*
- Water-Link, *Belgium*
- Consorzio ARETUSA, *Italy*
- KWR Water BV, *Netherlands*
- Fundacio Eurecat, *Spain*
- VITO, *Belgium*
- Water Europe, *Belgium*
- Maggioli SpA, *Italy*
- Ghent University, *Belgium*
- Universita Poliytecnica Delle Marche, *Italy*
- Polytechneio Kritis, *Greece*
- Institute of Communication and Computer Systems, *Greece*
- Athens University of Economics and Business, *Greece*
- University of Huddersfield, *UK*
- Business Development Group SRL, *Romania*
- Strane Innovation SAS, *France*
- Audencia Business School, *ABS*
- Qlector Razvoj Celovitih Resitev za Pametne Tovarne DOO, *Slovenia*
- Acceligence LTD, *Cyprus*
- Evides Industriewater, *Netherlands*
- HZ University of Applied Sciences, *Netherlands*

A brief description of the project objectives:
AquaSPICE aims at materializing circular water use in the European Process Industries, fostering awareness in resource-efficiency and delivering compact solutions for industrial applications. That challenging aim necessitates (i) multiple state-of-the-art water treatment and re-use technologies, (ii) diverse closer-loop practices regarding water, energy and substances, (iii) a cyber-physical-system controller in the form of a system for real-time monitoring, assessment and optimization of water (re-)use at different interconnected levels and (iv) an effective methodological, regulatory and business framework. AquaSPICE not only offers these but claims their sufficiency, as also supported by the breadth of European process industries who are here to evaluate (i)-(iv).
AquaSPICE follows a systemic approach in water management where optimal efficiency can be achieved through an adaptation of appropriate technologies and practices in different levels, from a single industrial process (unit operation) to an entire factory, to other collaborating industries (industrial symbiosis) or other sectors (e.g., domestic and/or agriculture).
AquaSPICE enables and facilitates the immediate uptake, replication and up-scaling of innovations, by providing comprehensive strategic, business and organizational plans that offer a range of well-defined and pre-packaged solutions, suitable for various cases with quite different

characteristics.

A brief description of the role played in the project:
TUC is the Technical Coordinator of AquaSPICE and leads the Workpackage of Digital Twin with Smart Analytics and Cognitive Services for Water Efficiency, developing the Cyber part of WaterCPS, aiming at the holistic virtualization of all water-related processes of the entire physical system. The analysis of production lines and value chains of the industries, and its virtual representation through an integrated model, will allow for a systemic view, encompassing the product value chains, external water reuse, the nexus between water and energy or material resources and environmental processes and impacts, focusing alternatively on various systemic levels (process, machine, production line, factory, value chain or even larger industrial /symbiotic/ CE structures).

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
The digitalisation of value chains towards their circularity and sustainability is in the frontline also in AquaSPICE project. The use of new technologies to address the challenges of decoupling the economic growth from increased CO_2 emissions and resource consumption thrives globally. The integration of these knowledge into a robust Master program will provide the essential information to professionals and researchers to further advance their skills and expertise in these fields. Moreover, the innovative 5 use cases of AquaSPICE project can be exploited as real cases studies in AMOCEAB courses.

Project title: FACTLOG - Energy-aware Factory Analytics for Process Industries

Coordinator/Project Leader: RTWH Aachen University (Germany)
Source of funding: Horizon 2020 (Horizon Action Grant Budget-Based), total budget: 7.089.837€
Dates (start/end): 1st November 2019 – 30th April 2023
Name of the Partners involved:
- Dow Olefinverbund GmbH, *Germany*
- BASF Antwerpen NV, *Germany*
- Solvay Chimica Italia s.p.a., *Italy*
- Turkiye Petrol Rafinerileri Anonim Sirketi, *Turkey*
- JEMS, Energetska Druzba, *Slovenia*
- Agricola International SA Bacau, *Romania*
- ENGIE Laborelec, *Belgium*
- Water-Link, *Belgium*
- Consorzio ARETUSA, *Italy*
- KWR Water BV, *Netherlands*
- Fundacio Eurecat, *Spain*
- VITO, *Belgium*
- Water Europe, *Belgium*
- Maggioli SpA, *Italy*
- Ghent University, *Belgium*
- Universita Poliytecnica Delle Marche, *Italy*
- Polytechneio Kritis, *Greece*
- Institute of Communication and Computer Systems, *Greece*
- Athens University of Economics and Business, *Greece*
- University of Huddersfield, *UK*
- Business Development Group SRL, *Romania*
- Strane Innovation SAS, *France*
- Audencia Business School, *ABS*
- Qlector Razvoj Celovitih Resitev za Pametne Tovarne DOO, *Slovenia*
- Acceligence LTD, *Cyprus*
- Evides Industriewater, *Netherlands*
- HZ University of Applied Sciences, *Netherlands*

A brief description of the project objectives:
It becomes apparent particularly in process industries that cognition can improve the behaviour of a complex process system. One of the main expectations of the use of digital twins is to give us the capability to observe and monitor the behaviour of their respective physical twins. In order to make it happen, we need to combine digital twins, which are driven by domain models (i.e. knowledge), with the models derived from data (i.e. experience). In order to realize it, we need a real-time processing layer where observations (i.e. events), knowledge and experience interoperate to understand and control the behaviour of a complex system (i.e. cognition).
FACTLOG is driven by several specific, yet indicative, business cases in the process industry and focuses its innovation regarding analytics, AI and optimization on the deployment. Technology and scientific contributors from leading academic institutes and focused ICT vendors (mostly SMEs) bring in all necessary knowledge and innovation.

A brief description of the role played in the project:
Prior to AquaSPICE project, the TUC team has applied its expertise in process modelling and value chains digital transformation in Factlog project. The accurate, representative virtual models of the industrial value chains that created through the Digital Twins technology, provide the opportunity to manage and sustain the industrial processes under the scopes of sustainability

and circularity (water and materials reuse, recycling, energy saving, energy efficiency), leading to a new era of industries and SMEs in EU, promoting the economic growth, the environmental protection and the sustainable development.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:

Similarty to AquaSPICE and Plooto, Factlog aspires to be a breakthrough EU-funded project that will effectively support the green and digital transition of value chains, enhancing the aspects of circularity and sustainability in industrial process. Nevertheless, the research projects exploit the experience and knowledge of the dedicated and highly experienced consortiums to implement their innovative concepts and activities. Advanced Educational programs such as the AMOCEAB Master, can exploit this knowledge occurring from the EU-funded projects and deliver it to students and professionals that aspire to enhance their knowledge in this topic. To this end, the outcomes of the projects will be applied in practice, delivering the knowledge gained in handy.

TUC is the found and coordination of an Innovation Alliance about the Circular Economy in the region of Crete. It's not an EU or national funded project, however we consider it useful to be exploited under the framework of AMOCEAB Master, as we noted in the Next Elaborations file.

Project title: IN-CRETE, Empowering Circular Economy and Social Innovation

Joint Initiative of:
- Technical University of Crete, *Greece*
- Maggioli S.P.A., *Italy,*
- CIHEAM MAICh, *Greece*
- Foundation for Research and Technology Hellas, *Greece*
- University of Crete, *Greece*
- Hellenic Mediterranean University, *Greece*
- Advanced School of Tourism Education of Crete, *Greece*

A brief description of the project objectives:
IN-CRETE Innovation Alliance is an open community aiming at connecting and prepare cooperation & transfer of knowledge among various entities. The IN-CRETE vision is to promote new models, best practices, social innovation, and tools that support Crete's transition to a sustainable and circular economy. IN-CRETE Innovation Alliance focuses on:

- ✓ Create innovation demos and real-life experimental test-beds.
- ✓ Bridge the gap between research and the industry and market.
- ✓ Bring together all stakeholders through workshops and training sessions to exchange knowledge, challenges and needs to better understand the dynamics and particularities of the Cretan region in different domains.
- ✓ Implement specific projects and actions demonstrating innovation towards circular transition.

The Innovation Alliance efforts can be summarized in 5 working groups, Sustainable Agriculture, Sustainable Tourism, Circular Manufacturing, Circular Communities and Industrial Symbiosis. Browse the various working groups to find out more about each one, each focus and the proposed actions.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
IN-CRETE foresees to connect, to provide collaborations and to transfer knowledge among Universities, Research Centers and Industry partners in the Mediterranean Area, aiming to promote circular innovation. The five already developed working groups have defined the priority areas, in which knowledge and skills transfer can be a valuable and powerful tool towards the establishment of robust connections and collaborations between educational institutions, the industries and the local societies.

Partner: University of Sarajevo

Project title: SMARTWATER

Coordinator/Project Leader: University of Banja Luka, Faculty of Agriculture, Bosnia and Herzegovina
Source of funding: European Union, European Commission. WIDESPREAD-05-2020 – Twinning - Coordination and Support Action (CSA)
Dates (start/end): 2021 - 2023
Name of the Partners involved: University of Banja Luka, University of Sarajevo, CSIC from Spain, ISA from Portugal, CIHEAM -IAMB and SYSMAN P&S from Italy.

A brief description of the project objectives:
The main objectives of SMARTWATER are: 1) to reinforce the networking, research and innovation capacities of the University of Banja Luka (UNI-BL), University of Sarajevo (UNSA) and other institutions from Bosnia and Herzegovina in the field of sustainable agricultural water management; and 2) to increase their competences and fund-rising skills for a successful participation in the EU Research and Innovation Programs. The project will develop a large set of joint activities promoting networking, joint experimental fields, research cooperation and the exchange of knowledge and experts on specific topics, which are compatible with the overall national research strategy and include the application of smart technologies (cloud-based and remote sensing) in agricultural water management, optimization of water-energy-food nexus and climate change impact and adaptation measures. SMARTWATER foresees the publication of joint research documents in international conferences and peer-reviewed journals. The project will provide technical assistance and expertise to improve research and innovation capacities of BH institutions and delineate adequate national research strategies and policies for the future. The project will boost the S&T capacity through a series of capacity building actions focusing mainly on the early stage researchers. These include advanced training courses, participation in a joint MSc program, summer schools and hands-on workshops on R&I funding. A modern scientific strategy for stepping up and stimulating scientific excellence and innovation capacity will be outlined following a multi-stakeholder participatory approach.

A brief description of the role played in the project:
The University of Sarajevo was involved in the project as Project partner.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
The SMARTWATER project pursues sustainable agricultural water management strategies based on smart technological solutions and integration of technical (agronomic and engineering), socioeconomic and environmental issues. On one side, irrigation performance can be improved by adopting proper agronomic practices, such as the selection of crops/varieties and the cropping pattern, planning of sowing/planting date and growing cycle period, land/soil preparation, application of fertilizers and plant protection measures. On the other side, the performance of irrigation structures can be enhanced by implementing several engineering

measures including reduction of water conveyance losses from withdrawal/storage to irrigation district/farm, on-demand-based design of water distribution network and adequate selection and design of on-farm/plot irrigation systems.

Partner: School of Advanced Social Studies in Nova Gorica

SCHOOL OF ADVANCED SOCIAL STUDIES

Project title: Research and anticipation of responsible action in Slovenia (Project J5-1788)
Coordinator/Project Leader: SASS
Source of funding: Slovenian Research Agency
Dates (start/end): 2019 – 2022
Name of the Partners involved: Faculty of information studies (Slovenia)

A brief description of the project objectives:
The project focuses on the micro level of responsible action in the Slovenian national environment, which is also embedded in the EU and global context. The central research problem is related to the identification of factors influencing responsible action in the Slovenian population, thus addressing the broader societal challenges of sustainable development and contributing to the upgrading of scientific approaches and knowledge. In this context, environmental responsibility is only one component of responsible action alongside social and individual responsibility.
In order to explore responsible action in a sociological context, the project seeks new approaches to understanding the ways of participation at all levels of society. At the forefront is an innovative theoretical concept - the relational subject - which refers to a specific form of social differentiation that represents an alternative to the functional one and implies a greater importance of the third sector, the public-private sphere and the new civil society. The concept emphasizes the importance of reflexivity of individuals who, while taking into account their relationships with significant others, also act through these relationships. It is a second-order reflexivity that goes beyond the contributions of individual actors. While individuals are reflexively involved in social relations as relational subjects, as individual or collective actors they can generate their own emergent properties through these relations, leading to social morphogenesis.

A brief description of the role played in the project:
The project team is highly interdisciplinary and excels in terms of scientific professionalism and publications, ensuring the successful implementation of the project. The lead research organization is the Faculty of Applied Social Studies in Nova Gorica, working together with the Faculty of Information Studies.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
The results of the project are based on the use of a wide range of methods, including a) analysis of secondary sources, discursive analysis of the broader media and expert opinions of a triple helix of actors (politicians, business, NGOs); b) survey data for the general population, based on an original battery of questions, with the development of new indicators and accountability factors; c) qualitative research, which allows for an in-depth understanding of the relationship between macro narratives and the individual level of accountable action; d) a structural equation model that allows the identification of relationships between aspects of responsible action, as well as an understanding of how these aspects and their interrelations are influenced by latent macro variables (structural and discursive); e) a prediction of future conditions of accountability based on possible scenarios of change in technology, the social and natural

environment. This provides a broader picture of the interconnectedness of these concepts, which lead to the development of scientific knowledge and also have strong application potential.

Recommendations for social action and "policy" interventions at the macro level have been developed to strengthen responsible action at the individual level. Based on our critical analyses and predictions (from DPs 1-4), we have developed a range of policy recommendations for policy makers and civil society, identifying the mechanisms key to fostering support for responsible action. The latter is a priority of the Slovenian Development Strategy 2030, which emphasizes: (a) an inclusive, healthy, safe and responsible society; (b) a preserved healthy natural environment; (c) learning for and throughout life and a highly productive economy that creates added value for all. Our recommendations identified the discursive strategies needed to increase support for sustainable development and to enable effective strategic guidance.

Project title: Sustainable Industry 4.0 for European union (SI4.0forEU)

Coordinator/Project Leader: SASS
Source of funding: Co-funded by European Union
Dates (start/end): 1. 1. 2022 - 31. 12. 2024
Name of the Partners involved: /

A brief description of the project objectives:
Jean Monnet Module titled Sustainable Industry 4.0 for European union (SI4.0forEU) is dedicated:
a) to establish the academic core to improving the awareness of EU challenges referring to new EU industrial change and support through its industrial policy and research and infrastructure. Dealing with the phenomena of Sustainable Industry, outline forthcoming interdisciplinary research program and related materials as a mechanism for improving the implementation of the EU grand strategy Europe 2050 and
b) student-focused education to develop independence and critical thinking of the student but also contribute to social cohesion and local environmental sustainability. As advanced interdisciplinary EU studies, the Module is attempted to offer learning tools that could be utilized in other environments throughout Europe, to contribute to awareness of EU grand strategies and their implementation through other programmatic documents.

A brief description of the role played in the project:
The SI4.0forEU project, which focuses on Sustainable Industry 4.0 for the European Union, has the potential to play a key role in the AMOCEAB initiative. Here is how SI4.0forEU may contribute to and fit with AMOCEAB's objectives:
SI4.0forEU may forge a strong thematic link between Sustainable Industry 4.0, Circular Economy, and Bioeconomy, which are AMOCEAB's primary priority areas. SI4.0forEU may give vital insights, research, and expertise to the development of Circular and Bio-Economy competencies within the AMOCEAB project by supporting sustainable practices in the industrial sector. SI4.0forEU's emphasis on research and infrastructure development can help AMOCEAB's goal of increasing university capacity and assisting commercial groups in the Circular and Bioeconomy. SI4.0forEU may give useful research findings, resources, and infrastructural suggestions linked to sustainable industrial practices that can be implemented into the AMOCEAB Master's Degree Programme's curriculum and learning materials.
SI4.0forEU's multidisciplinary approach corresponds with AMOCEAB's aims of developing a common academic route that combines knowledge from diverse sectors relevant to the Circular and Bioeconomy. SI4.0forEU may provide knowledge and learning tools that cover the junction of sustainable industrial practices, Circular Economy, and Bioeconomy, enriching the curriculum and guaranteeing a thorough comprehension of the subject area. SI4.0forEU's goal of raising awareness of EU grand plans and their execution through programmatic papers aligns with AMOCEAB's goal of promoting and disseminating the new academic route. SI4.0forEU may offer significant insights, recommendations, and best practices on sustainable industry and EU policies that can be included in AMOCEAB's Strategy and Action Plan. This partnership can help universities and business support organizations create knowledge in Circular and Bioeconomy solutions and successfully communicate the significance of these concepts to the general public. The AMOCEAB project may benefit from a greater understanding of sustainable industrial practices and the integration of Circular Economy and Bioeconomy concepts by using the experience, research, and resources of SI4.0forEU. In accordance with the aims of both projects, this partnership can improve the quality of the Master's Degree Programme, stimulate innovation and information exchange, and eventually contribute to the development of individuals specializing in Circular and Bioeconomy.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:

As advanced interdisciplinary EU studies, SI4.0for EU is attempted to offer learning tools, documents, valuable events, and free source online materials, that could be utilized in other environments throughout Europe, to contribute to awareness of EU grand strategies and their implementation through other programmatic documents and bring the EU closer to the wider public in Slovenia and beyond the borders.

Project title: JM Chair European Transnational Governance for Sustainable Development

Coordinator/Project Leader: SASS
Source of funding: Co-funded by the European Union
Dates (start/end): 1. 9. 2019 - 31. 8. 2022
Name of the Partners involved: /

A brief description of the project objectives:
European Transnational Governance for Sustainable Development – SUSTAIN aims to promote EU studies through a new combination of open teaching, virtual classroom, co-creative public debates, action research, and policy recommendations. It is based on the recent academic debates in sociology and political science recognizing the contested relation between transnational governance, based on international treaties and organizations, and territorial segmentation of the political system into nation-states, which has been exploited and encouraged by a wide variety of populisms. The rationale is derived from our research confirming that the support for European transnational governance towards sustainable development is significantly more typical for the active participants in the European transnational social sphere and the elites, while others find it more difficult to see the significance and legitimacy of transnationally coordinated sustainable development. Maintaining, strengthening, and legitimizing European governance for sustainable development requires bridging the gap between those included in the European transnational social sphere and those who feel to be "left behind" (typically confined to local and national contexts). This calls for a clear social, economic, and environmental sustainability link. In that regard, the Chair intends to bring closer the role of the EU in sustainable development by integrating the main priorities of the documents such as the EU Sustainable Development Strategy into Chair curricula and by connecting academic staff and students with the international academic environment and the local and national stakeholders, including the local communities, civil society and decision-makers with corresponding activities encouraging public debates on local, national and transnational level, and between different stakeholders on the topic.

A brief description of the role played in the project:
By addressing sustainable development's social, economic, and environmental sustainability components and bridging the gap between diverse stakeholders, the project "European Transnational Governance for Sustainable Development - SUSTAIN" can complement the AMOCEAB initiative. SUSTAIN aspires to bring closer the European Union's role in sustainable development by incorporating the primary themes of documents such as the EU Sustainable Development Strategy into the Chair's curriculum. This integration can give AMOCEAB students a thorough grasp of the EU's sustainability aims and policies, allowing them to apply these ideas in the context of Circular Economy and Bioeconomy; SUSTAIN promotes linking academic staff and students with local and national stakeholders, including local communities, civil society, and decision-makers. This strategy is consistent with AMOCEAB's purpose of encouraging partnerships between academic institutions and business support groups. AMOCEAB may benefit from stakeholders' knowledge, views, and real-world experiences in sustainable development by interacting with them, expanding the learning experience, and strengthening the practical relevance of the Master's Degree Programme; Co-Creative Public Debates and Action Research: SUSTAIN's strategy of co-creative public debates and action research can bring vital insights and answers to transnational governance and sustainable development concerns. This technique may be used in AMOCEAB to stimulate critical thinking, innovative problem-solving, and the formulation of policy suggestions. AMOCEAB may enable students to actively contribute to the sustainable development agenda and become agents of change in their chosen areas by embracing the ideas of co-creation and action research. SUSTAIN acknowledges the disputed relationship between transnational governance and nation-states and seeks to preserve,

strengthen, and legitimate European governance for long-term development. SUSTAIN may help to raise knowledge and acceptance of European efforts like AMOCEAB by bridging this gap and highlighting the relevance and validity of transnationally coordinated sustainable development. This can lead to a better knowledge of and support for Circular Economy and Bioeconomy ideas across a wide range of stakeholders, including those who feel "left behind" in local and national contexts.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:

The project JM Chair European Transnational Governance for Sustainable Development intends to bring closer the role of the EU in sustainable development by integrating the main priorities of the documents such as the EU Sustainable Development Strategy into Chair Curricula.

Project title: Smart, Resilient, & Sustainable Communities–European Digital Innovation Hub (DIGITAL-2021-EDIH-01)

Coordinator/Project Leader: SASS
Source of funding: Co-funded by The European Commission and the Digital Europe DIGITAL Program
Dates (start/end): 01. 09. 2022 - 31. 08. 2025
Name of the Partners involved:
Development Center Novo mesto, Faculty of Information Studies in Novo mesto, Municipality of Novo mesto, Faculty of Industrial Engineering Novo mesto, University of Primorska, Chamber of Commerce of Dolenjska and Bela Krajina, Faculty of Applied Social Studies in Nova Gorica, University of Nova Gorici, Municipality of Ajdovščina, RIC Bela krajina, CADCAM Lab d.o.o., Koofr d.o.o., Mikrografija d.o.o. and associated partners: Association of Employers of Slovenia, RRA GIZ and Regional Development Agency ROD Ajdovščina.

A brief description of the project objectives:
The purpose of the project is to promote Europe's global competitiveness, ensure Europe's technological sovereignty and the wide use of digital technologies in all member states, better address Europe's economic and social challenges, and support micro, small, and medium-sized enterprises in acquiring and accessing the latest technologies, skills, and knowledge.
EDIHs will play a central role in promoting the wider use of artificial intelligence and super-computing (HPC), cyber security, and other digital technologies used in the economy and public sector.
The purpose of EDIHs is to ensure the international competitiveness of the European area in the introduction of digital transformation. EDIHs provide support to many companies, small independent entrepreneurs, public administration, and others who gradually introduce new processes and procedures using advanced technologies. At the same time, EDIH offers support to all users who want to test their advanced solutions, upgrade existing knowledge and acquire competencies by participating in developing advanced solutions, connecting to partnerships, and learning about good practices from the European area. EDIH also offers advice and guidance to actors regarding digital transformation.

A brief description of the role played in the project:
SASS will play the role of supporting SMEs in establishing a healthy working environment in cases where major organizational changes are being implemented in companies. SMEs undergoing digital transformations will be able to receive service in monitoring the psycho-physical reaction to novel technologies. Based on data collected managers will be able to decide better and tailor the process of organizational change in accordance with employee' needs to ensure smooth transformation, better adoption of novel technologies and ensuring healthy working and stress-free working environment.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
Special attention of the whole SRC-EDIH is circularity and sustainability, so digital transformation in this regard is used for improvement of environments of the SMEs.

Partner: University of Zagabria

prehrambeno biotehnološki fakultet
Sveučilište u Zagrebu

faculty of food technology and biotechnology
University of Zagreb

Project title: Sustainable waste management of winery by-product
Coordinator/Project Leader: University of Zagreb Faculty of Food Technology and Biotechnology
Source of funding: European Regional Development Fund
Dates (start/end): 12.01.2021. - 31.12.2023
Name of the Partners involved: Kutjevo d.d.

A brief description of the project objectives: The aim of the project is development process for sustainable management of winery by-product, which includes the development of environmentally friendly methods for biologically active compounds isolation according to the principles of green extraction and obtaining preparations of defined composition, as well as waste residues disposal as compost and/or animal feed. The extracts will be used as functional supplements to new and/or existing products (partners range of products) with the aim of creating value-added products. The knowledge gained from this project will be used for the construction of a pilot plant for sustainable waste management of winery by-product.

A brief description of the role played in the project: In order to achieve all the goals of the proposed project, a multidisciplinary team of 22 researchers from the University of Zagreb Faculty of Food Technology and Biotechnology and Kutjevo d.d. was assembled. The project team leads Professor Ivana Radojčić Redovniković, PhD, as the main researcher, who bears the responsibility for the realization of the project.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB: Upon completion of the project, the University of Zagreb Faculty of Food Technology and Biotechnology, in cooperation with partner institutions, as well as other interested stakeholders, will continue to spread knowledge and educate wine producers about the use of waste from wine production and their application in various industrial branches such as the food, pharmaceutical and cosmetic industries as well as the production of compost and animal feed. By improving scientific and research capacities through the acquisition of the necessary equipment will create an excellent platform for the systematic development and upgrading of the concept of processing waste from wine production, implementation and transfer of technology into semi-industrial frameworks, but also conditions for testing the possibility of processing and using other organic waste from the food industry. Sustainability of the project will be ensured through cooperation with other components of the University and Institutes in the Republic of Croatia in the field of biotechnical sciences. In the post-implementation period, the goal is to position ourselves as leading Faculty at the regional and national level that will improve and develop competences for efficient utilization of waste from the food industry, create a base of scientific research on which future joint projects with industry stakeholders will be based, as well as projects with scientific research organizations and partners at the level of the Republic of Croatia, countries in the region and eminent research centers of EU countries. Furthermore, this waste utilization approach is a trend in the world, and the knowledge gained through this project will be applicable in the industry and for some other forms of waste utilization (bioplastics, insulation of fibers and other biologically active compounds) and analysis of solid fuels from grape pomace as alternative sources of energy. Furthermore, the project application itself clearly states specific goals that are oriented towards a more economically and environmentally acceptable process of isolation of bioactive

compounds according to the principles of green extraction and disposal of waste residues after isolation of the mentioned compounds, either as compost and/or preparations for feeding livestock, which will contribute to the environmental sustainability of the project. Also, in process development includes the aspect of mathematical modeling and optimization, which aims to enable lower consumption of energy, time and raw materials necessary for the production of quality products.

Project title: Development of innovative products to increase food quality

Coordinator/Project Leader: Procesteh d.o.o.
Source of funding: European Regional Development Fund
Dates (start/end): 29.09.2020.-29.09.2023
Name of the Partners involved: University of Zagreb Faculty of Food Technology and Biotechnology, Glazir d.o.o.

A brief description of the project objectives:
The project contributes to solving the specific development challenges of the Croatian economy in the form of encouraging the industrialization and development of the food industry based on new technologies, innovations and production, oriented towards larger markets and exports in order to strengthen the excellence of the food processing sector and encourage investment in the activities of manufacturing machinery for the food industry. The project solves the problem of the non-existence of a sterile valve for various markets of the process industry of the confectionery industry and the non-existence of high sterility, which will affect the reduction of product perishability, and thus the reduction of customer complaints. To realize the idea, collaboration with the partner Glazir d.o.o. and a scientific institution (University of Zagreb Faculty of Food Technology and Biotechnology) is required to develop an innovative valve for the B2B and B2C sector and a filling machine that is a key element in the production line for filling fruit fillings, jams and glazes into different containers and packages.
General goal: Development of a new product within the IRI theme by strengthening the capacity of companies for research, development and innovation and encouraging cooperation between entrepreneurs and institutions for research and development.
Specific goal: Increase the competitiveness of the PROCESTEH company by investing in research and development of new products - a machine for fruit fillings, jams and glazes with an innovative valve for the B2B and B2C sector, collaborative research between industry and the scientific-research sector, protection of intellectual property and an increase in employment.

A brief description of the role played in the project:
The partnership and corresponding roles on the project with the University of Zagreb Faculty of Food Technology and Biotechnology and the company Glazir d.o.o., where in the implementation of the project the role of the Procesteh d.o.o. company is in the development of the valve and the filling machine, the role of University of Zagreb Faculty of Food Technology and Biotechnology in the area microbiological analysis of packaging and filling, monitoring of the packaging process and quality control of sterilized samples, and Glazir d.o.o. in the part of controlling the success of sterilization, monitoring the texture and comparing with known data.
Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
Through the implementation of the project, recognized problems will be directly addressed through strengthening domestic and international competitiveness and increasing the scope of business with foreign clients, which will result in new employment, an increase in income, an increase in exports and an increase in further investments in the competitiveness of entrepreneurship. The target groups of the project are the company Procesteh d.o.o., partner organizations, existing and potential clients from the process industry oriented towards confectionary activities, and the narrow and wider community.
The result of the project – a machine for fruit fillings, jams and glazes with an innovative valve for the B2B and B2C sector will have an area of application in S3 TPP Food and bio-economy; PTPP Sustainable production and food processing, within the framework of selected IRI topics: 5. innovative technologies and processes for processing and packaging food of high quality, added value and practicality of use; 6. food safety, with a positive indirect effect on TPP Energy and sustainable environment, PTPP Environmentally acceptable technologies, equipment and

advanced materials: 1. technologies and solutions related to reducing consumption resources, reducing waste production and increasing efficiency and production capacity; 4. New technologies and solutions for reducing emissions of harmful substances, saving energy, efficiently the use of renewable energy sources, including the storage of energy from renewable sources.

Project title: Flat Bread of Mediterranean area; INnovation & Emerging process & technology (FLAT BREAD MINE)

Coordinator/Project Leader: The National Institute for Agricultural Research, Food and Environment (INRAE), France
Source of funding: Partnership for Research and Innovation in the Mediterranean Area (the PRIMA Foundation)
Dates (start/end): 01.09.2021.-28.02.2025.
Name of the Partners involved: University of Zagreb Faculty of Food Technology and Biotechnology (Croatia), The Nantes-Atlantic National College of Veterinary Medicine Food Science and Engineering (Oniris) (France), Agencia Estatal Consejo Superior de Investigaciones Científicas (CSIC-IATA) (Spain), University of Bari Aldo Moro (UNIBA) (Italy), Scientific Food Center (SFC) (Jordan), L-Università ta' Malta (UM), Université Saint-Joseph de Beyrouth (USJ) (Lebanon), International Hellenic University (IHU) (Greece), Bakery Iberian Investments SL (BIMBO) (Spain), Matarrese Srl (MAT) (Italy), Better bread d.o.o. (Krostula) (Croatia), Food Technology Research Institute (FTRI) (Egypt), Crown Flour Mills SAL (Crown Flour Mills) (Lebanon), SAS Bretagne BIO MALT (YEC'HED MALT) (France), Ramalhos, SA (Ramalhos) (Portugal), Funding Support - MS Advisory Services Ltd (Funding Support) (Malta), Vendée Mécanique Industrie (VMI) (France)

A brief description of the project objectives:
FLAT BREAD MINE aims at establishing a mine (or source) of information to develop healthier and safe flat bread while optimizing the flat-bread formulation to a flat bread adapted to each consumer so they're able to obtain nutritionally-enriched, gluten free, and sustainable foods.
FBM project's main impacts include:

- bringing attention to the innovation phase by detecting possible innovation that could yield the know-how or patents;
- improving the Science & Technology capabilities, the innovation potential, and the competitiveness of the industries taking part of the project;
- stimulating the leverage effect on private investment as the added-value to develop new equipment and markets;
- stimulation of the cooperation of the companies of academic partners & technical canters at the national and the Mediterranean area levels;
- reduction of the commercial risk by making existing research results applicable across the MA and beyond.

A brief description of the role played in the project:
Most of the activities will be conducted in the Laboratory of Cereal Chemistry & Technology that possesses different types of equipment needed for bran pre-treatment and baking equipment. Different tests for dough rheology & bread quality will be used for assessment of the impact of alternative ingredients & innovative processes on bread quality & nutritive value.
Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
One of the objectives is to develop sustainable and marketable fb solutions by the LCA (life cycle analysis) and LCC (life cycle costing).

Project title: Functionalized Tomato Products (FunTomP)

Coordinator/Project Leader: Middle East Technical Universiy (METU), Turkey
Source of funding: Partnership for Research and Innovation in the Mediterranean Area (the PRIMA Foundation)
Dates (start/end): 01.05.2021. - 30.04.2025.
Name of the Partners involved: University of Zagreb Faculty of Food Technology and Biotechnology (Croatia), Ege University (EU) (Turkey), Turkish Accelerator and Radiation Laboratory (TARLA) (Turkey), American University of Beirut (AUB) (Lebanon), Lomartov, S.L. (LOM) (Spain), Assan Foods (AF) (Turkey), Universidade do Algarve (UALG) (Portugal), University of Zagreb Faculty of Eletrical Engineering and Computing) (UNIZG-FER), Sfax University, High Institute of Biotechnology (US.ISBS) (Tunisia), ARISTOTELIO PANEPISTIMIO THESSALONIKIS - EIDIKOS LOGARIASMOS KONDILION EREVNAS (Aristotle University of Thessaloniki - Special Account for Research Funds) (ELKE A.P.TH.) (Greece), Ruđer Bošković Institute (RBI) (Croatia), CNR-Instituto di Biologia e Biotecnologia Agraria Sede Sec. Pisa (CNR-IBBA) (Italy), Van Yuzuncu Yil University (VYYU) (Turkey), Asociación de Investigación de la Industria del Juguete, Conexas y Afines (AIJU) (Spain), Seluz Fragrance & Flavor Company (Seluz) (Turkey)

A brief description of the project objectives:
The objective of FunTomP is to reformulate traditional Mediterranean tomato products considering the current consumer trend of 'functional foods', using leaf proteins (by-products of sugar beet processing) and olive powder by using novel and eco-friendly processing technologies that will impact the nutrients minimally. Tomato will be transformed to different functional foods (juices, sauces, leather, bars, powder mixes) offering extra health benefits to satisfy the consumer demand while keeping a sustainable product and process cycle with the valorization of agricultural waste.

A brief description of the role played in the project:
In order to achieve all the goals of the proposed project, the University of Zagreb Faculty of Food Technology and Biotechnology is the lead beneficiary of WP 6 - Production and characterization of bioactives from tomato skin & beet leaves residues. Objectives:

- To valorize the waste generated in FunTomP products for the production of bioactives,
- To conduct OMICs analysis for the extracts,
- To identify the most efficient extraction techniques for isolat

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB: In FunTomP, considering the changing expectations of consumers and the observation on less adherence to MedD by young populations; traditional Mediterranean foods that are proven to have significant health effects will be reformulated, produced, and tested for consumer acceptability with the inclusion of plant proteins obtained from agricultural waste (sugar beet leaves). The inclusion of plant proteins will not be the only extra feature of the products developed in FunTomP. Besides this, olive, another characteristic food of the Mediterranean basin will be converted to a powder form by a special technology that will keep its healthy content at a high level and that will integrate much better with the tomato products developed in the project. Sustainable production technologies will be preferentially selected for the production of the different products and sustainability approaches will be integrated into the processes following the 2030 Agenda for Sustainable Development Goals (SDGs). The selection of most environmentally friendly techniques will be assisted by Life Cycle Assessment tools. Waste of the tomato processing and beet extraction products will also be utilized to produce bioactive substances in a zero-waste frame. Green technologies will be implemented during these stages. Consumer and market analysis accompanied by sensory analysis will be conducted at a country specific level. Open discussion forums and living labs between multiple stakeholders including consumer's policymakers, farming industry, manufacturers, food

distributors (supermarkets and other food traders) and nutritionists, will be organized at the European level for discussing how the FunTomP project results will contribute to increasing the adherence of the consumers to the Mediterranean diet and lifestyle.

Project title: People for tHe eurOpean bioENergy mIX – Phoenix

Coordinator/Project Leader: EUROPEAN SUSTAINABLE ENERGY INNOVATION ALLIANCE - ESEIA, VEREIN FUR FORDERUNG DER EUROPAIESCHEN INNOVATION FUR ERNEUERBARE ENERGIEN (ESEIA) (Austria)
Source of funding: Research Executive Agency (REA) under the power delegated by the European Commission
Dates (start/end): 01.12.2015.-30.11.2019.
Name of the Partners involved: University of Zagreb Faculty of Food Technology and Biotechnology (Croatia), BRP-POWERTRAIN GMBH & CO KG (BRP) (Austria), ENERGIE AGENTUR STEIERMARK GEMEINNUTZIGE GMBH (EAS) (Austria), TECHNISCHE UNIVERSITAET GRAZ (TU GRAZ) (Austria), UNIVERSITE DE LIEGE (ULG) (Belgium), SVEUCILISTE U ZAGREBU, FAKULTET STROJARSTVA I BRODOGRADNJE (UNIZAG - FSB) (Croatia), LAPPEENRANNAN TEKNILLINEN YLIOPISTO (LUT) (Finland), INSTITUT POLYTECHNIQUE DE GRENOBLE (INP GRENOBLE) (France), BERGISCHER ABFALLWIRTSCHAFTSVERBAND (BAV) (Germany), UNIVERSITEIT TWENTE (UT) (Netherlands), Laboratorio Nacional de Energia e Geologia I.P. (LNEG) (Portugal), TORRES & BELO SA (TORBEL) (Portugal), ASOCIATIA GREEN ENERGY (BIOC) (Romania).

A brief description of the project objectives:
Three main objectives:
1. To address identified knowledge gaps (WP 1-3) through international and inter-sector research collaboration and by clearly identifying the technology and knowledge chain for the development and leverage of European expertise.
2. To bridge the gap between industrial innovation and education (WP 4-5) in order to enable the conversion of creative ideas into innovative products, services or processes in the area of bioenergy.
3. To create a network of integrated research and industrial infrastructures (WP 6) and develop programmes for collaborative post-graduate research, building on the curricula developed in the EU-funded BioEnergyTrain project.
These three main objectives can be broken down into specific research and innovation challenges that were addressed by the Phoenix project:
A. Addressing identified knowledge gaps in the use of non-conventional bio-resources;
B. Bridging the gap between industrial innovation and education;
C. Creating a network of integrated research and industrial infrastructures and developing programmes for collaborative research training.

A brief description of the role played in the project: In order to achieve all the goals of the proposed project, the University of Zagreb Faculty of Food Technology and Biotechnology was assigned to deliver progress report on non-conventional bio-resource based bio-refineries.
Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB:
The field of utilizing non-conventional bio-resources is very much at the starting point, and so it necessarily requires a very strong innovation development. At this critical point in the evolution of the field the Phoenix project creates a viable interdisciplinary and trans-sectorial, developing "innovation community" that shares a common agenda as well as a synergetic use of infrastructure and knowledge. The advantages of remaining within such a network – or indeed of joining it – will increase as the progressively important use of renewable resources becomes ever more central and the idea of an overall European bio-economy really starts to evolve.

Partner: Chamber of Economy of the Federation of Bosnia and Herzegovina

BOSNA I HERCEGOVINA
FEDERACIJA BOSNE I HERCEGOVINE
PRIVREDNA/GOSPODARSKA KOMORA FEDERACIJE BOSNE I HERCEGOVINE

BOSNIA AND HERZEGOVINA
FEDERATION OF BOSNIA AND HERZEGOVINA
CHAMBER OF ECONOMY OF FEDERATION OF BOSNIA AND HERZEGOVINA

Project title: BLUE AIR

Coordinator/Project Leader: Area Science Park
Source of funding: European Fund for regional development and IPA II Fund
Dates (start/end): 01.12.2020. – 31.07.2023.
Name of the Partners involved: Area Science Park, Croatian Chamber of Economy, Technology Park Ljubljana Ltd., Municipality of Izola, University of Piraeus research center, Region of Central Macedonia, National Agency for Scientific Research and Innovation, Innovation and Entrepreneurship Centre Tehnopolis, The Chamber of Economy of Montenegro, University of Belgrade – Faculty of Transport and Traffic Engineering, Chamber of Economy of the Federation of Bosnia and Herzegovina.

A brief description of the project objectives: The main goal of BLUE AIR project is enhancing institutional capacities of ADRION countries/regions in the definition of a common approach towards the implementation of the S3 policy on Blue Growth (BG) at macro-regional level.
Specific objectives are related to improving the competences of the quadruple helix actors on blue growth, identifying blue growth sectors of macro-regional interest and exploitation of potentials for transnational cooperation, and supporting the development of a macro-regional S3 on blue growth in the Adriatic-Ionian area.

A brief description of the role played in the project: Chamber of Economy of the Federation of Bosnia and Herzegovina is project partner in BLUEAIR project. The Chamber has a great knowledge of development and application of innovations, organization of workshops, identification of best business practices and pilot analysis, creating and implementing various national and international strategies. Activities assigned to the Chamber are related for blue economy of Bosnia and Herzegovina and its cooperation with other countries. The Chamber carried out analysis, research, information gathering, various events and other important project activities.

Possible aspects/cases of study/infrastructure of the project/projects to be enhanced in the context of AMOCEAB: BLUEAIR is about blue economy that should be fostered to increase sustainability and environmental protection. Blue economy is related to green economy. Research and analysis from BLUEAIR could be useful for designing Master Study on Circular Economy and Bioeconomy within the AMOCEAB.

Partner: CNA Emilia-Romagna

SIMPLER - Support services to IMProve innovation and competitiveness of businesses in Lombardia and Emilia-Romagna

Coordinator/Project Leader: Finlombarda Spa
Source of funding: SMP-COSME-2021-EEN — Enterprise Europe Network
Dates (start/end): 1/2/2022-30/6/2025
Name of the Partners involved: ART-ER, Azienda Speciale INNOVHUB, PROMOS Ravenna, FAST - Federazione delle Associazioni Scientifiche e Tecniche, Unioncamere Emilia-Romagna, Unioncamere Lombardia, Confindustria Lombardia, Confindustria Emilia Romagna, CNA Emilia-Romagna, CNA Lombardia, Finlombarda Spa.

A brief description of the project objectives:
The main objective of the project is to strengthen competitiveness, sustainability and resilience, and encourage the growth of SMEs in Lombardy and Emilia-Romagna, supporting them in order to improve their growth and ability to compete internationally, also with the support of digital technologies and access to regional and European financing. The integration with regional innovation and business support policies will be ensured by the participation of the institutions in the project, both as partners, and with a direct presence at regional, national and international meetings. At an operational level, the Simpler Consortium will improve the existing collaborations and initiate new cooperation with the main local stakeholders (business associations, universities, clusters, incubators, accelerators, innovation centers, etc.), in order to promote the Net and its services. This ambitious path is based on a rich research and innovation ecosystem, that hinges on public and private entities, capable of cooperating together with companies, with the aim of facilitating new innovation activities, and thus enriching the infrastructures and networks supporting SMEs, which can thus take advantage of interesting national and European opportunities and make use of international talent.

A brief description of the role played in the project:
CNA Emilia-Romagna has been part of the Enterprise Europe Network (EEN) since 2015 and supports companies, through EEN and the SIMPLER Consortium, in seizing the opportunities and advantages of the European market, through the promotion of innovation, sustainability, digitalisation and technological transfer to all the SMEs in the area interested in growing and improving. The approach adopted by the Consortium towards companies is customer-centric, which exploits the hub and spoke model to provide a systemic and integrated service, in which the attention is focused on the specific needs of companies.

Project Partners:

UNIVERSITÀ POLITECNICA DELLE MARCHE

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faculty of food technology and biotechnology
University of Zagreb

Faculty of Technology and Metallurgy
University of Belgrade

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CNA Emilia-Romagna

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