TECHNICAL DESCRIPTION (PART B)

COVER PAGE

Part B of the Application Form must be downloaded from the Portal Submission System, completed and then assembled and re-uploaded as PDF in the system. Page 1 with the grey IMPORTANT NOTICE box should be deleted before uploading.

***Note:** Please read carefully the conditions set out in the Call document (for open calls: published on the Portal). Pay particular attention to the award criteria; they explain how the application will be evaluated.*

PROJECT	
Project name:	Green transition in Central Europe
Project acronym:	Greet CE
Coordinator contact:	Energy Agency of Savinjska, Šaleška and Koroška region (acronym: KSSENA)

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#@APP-FORM-I3@#
#@PRJ-SUM-PS@# [This document is tagged. Do not delete the tags; they are needed for the processing.]

PROJECT SUMMARY

Project summary
Greet CE will increase the capacity of regional innovation ecosystems, especially SMEs in certain less developed Central European regions and in an outermost region of Portugal. It focuses primarily on Green Transition, within that on bioeconomy, energy and four niche pilots in these fields, in line with the specific domains and niches, needs of the target regions. Its project consortium has seasoned thematic and territorial experts with complementary strengths and roles in the project. They combine unique expertise in innovation ecosystems, innovation management and commercialisation, sustainability and innovation policies, start-up, SME and sustainable energy finance as well as in developing successful European networks, initiatives and technology companies.

#§PRJ-SUM-PS§# #@REL-EVA-RE@# #@PRJ-OBJ-PO@#

1. RELEVANCE

1.1 Background and general objectives

Background and general objectives

Describe the background and rationale of the project.

How is the project relevant to the scope of the call? How does the project address the general objectives of the call? What is the project's contribution to the priorities of the call?

The project aims to increase the capacity of regional innovation ecosystems, especially SMEs in less developed **Central European regions** in multiple countries to connect and interoperate in EU value chains, participate in partnerships with other regions. The goal is to unlock the innovation potential, facilitating the subsequent participation of SMEs among others in calls for proposals under **I3** Strand 1 and Strand 2a. We also ambition to assist in creating **ERDF, Interreg & crowdfunding** opportunities.

Primary target regions	- Less developed Central European regions in Croatia (HR), Hungary (HU), Poland (PL), Romania (RO), Slovakia (SK) and Slovenia (SI) - Portuguese Outermost Regions (Madeira, Azores)
Thematic area, niches	**Green Transition** 4 Green Transition bioeconomy and energy **niche pilots**: Eco-construction, Digital (sustainable) energy, Regenerative Farming and Renewable gases **Business and social innovation**: Green Transition **crowdfunding** (crowdlending) and **energy efficiency project bundling**
Specialist skills in the team	Innovation management, innovation policy, sustainable energy, bioeconomy, international technology commercialisation, innovation education & training, financial and business advisory services, start-up finance, venture capital, crowdfunding, European sustainability policies, networking, bioeconomy ecosystems innovation
Project partners	- **8** project partners from **7** regions of **6** Central European countries - (HR, HU, PL, RO, SI, SK) including **4** less developed regions (from HR, RO, SI, SK) and 4 capitals: Budapest, Ljubljana, Zagreb and Warsaw - 1 research institution, 2 municipal energy agencies, 1 business association, 2 clusters, 2 SMEs - innovation commercialisation, financing, energy, sustainability policies & communications specialists - proven track record in business, social, technology innovation, EU projects and financing, sustainability policy innovation
Associate partners	Altogether **21** Letters of Support received from 5 universities (from 4 countries), 9 industry associations / clusters, 2 public bodies, 1 research institute and 4 SMEs from 6 countries

	Two relevant letters of support have been received from relevant Portuguese industry associations focusing on innovation. Another important letter of support has been received from a key research agency in **Madeira**, (an outermost region) indicating specific interest in all four of our niche pilots. (MARE-Madeira, Madeira Regional Research Unit of MARE – Marine and Environmental Sciences Centre)
Unique financing offer	**Crowdlending** marketing services to selected SMEs
Common specific challenges	Bioeconomy innovation challenges of high mountainous areas in less developed regions of RO, SI, SK and in the outermost region of Madeira. Climate change, energy, population issues faced. Less developed Central European regions: Difficulty in financing small scale energy efficiency projects, utilising bioeconomy opportunities, retaining and attracting talent. Laggards in citizen finance of sustainable energy, green transition investments.

Four **less developed regions** facing **specific challenges** are represented in our consortium. Experienced **specialist partners** provide specific – policy, dissemination, innovation capacity building, financing - expertise in assisting innovation ecosystems.

Given the cultural and situational similarities of several Central European regions, there is significant potential to develop **mutual trust and cross-border cooperation**. There is a strong **European dimension**, not only within **Central Europe**, but developing cooperation with Portuguese entities too, strengthening traditionally very weak **Portuguese-Central European ties**. New dimensions, major untapped potential can be identified given the current low level of mutual knowledge.

Greet CE aims to create the preconditions for successful interregional cooperation and investments in shared smart specialisation areas, especially in **Green Transition** having a specific focus on the **bioeconomy** and **energy** sector. Complementary horizontal measures aimed at improving framework conditions for entrepreneurship, developing interregional, cross-sectoral and cross-border collaborations, actions, policies, investments contributing to resource-efficiency using circular-economy solutions, digitalisation will be fostered. **Stakeholder engagement,** co-creation is essential in actions.

The project shall deliver **concrete potential interregional investments** and related business and investment plans along certain S3 priorities, in line with national and regional strategies, domains and niches. It shall support regions **addressing specific challenges** (e.g. retaining and attracting talent) and contribute to the **capacity building** of the targeted less developed regions. It will also assist public authorities and agencies to design evidence-based and targeted **policy interventions** in the long-term.

New approaches, solutions and best practices will be demonstrated to achieve our goals. The project will facilitate the validation process of investment ideas through improved knowledge of business and investment planning involving actors of the quadruple-helix ecosystem, in particular SMEs. Technological as well as practice-based and social innovation will be supported to assist exploiting niches through applying new technology, business or organizational models and adapting innovations.

Beyond measures aimed at increasing capacity on a systematic level, of the I3 focus areas Green Transition and within that especially bioeconomy is in the focus of the Greet CE project.

Capacity building and **investment project piloting** actions:

- Supporting the identification of (SME) **investment projects**: identification of an investment projects pipeline, increasing the investment readiness of regional SMEs and their capacity to build interregional business and investment plans.
- **Ecosystem development**: Reinforcing connections of less developed regions with relevant platforms and EU networks, their integration in EU value chains and building capacities to understand value chains articulation and implementation. Exploring the use of technical assistance from the mainstream programmes to structure and reinforce local ecosystems to develop the capacities to connect regional ecosystems.

Mapping, benchmarking and **networking** activities will support the core actions. The project will facilitate collaboration with the EEN Sector groups, European Innovation Ecosystem stakeholders, Horizon Europe partnerships, S3 CoP and other relevant networks or partnerships.

Core project outputs and impact:

1. **Policy, ecosystems**: New specific policy measures, more active innovation support intermediaries resulting in improved business climate, innovation environment, capacity, infrastructure, innovation ecosystem capacity, potentially, in the longer term in updated regional action plans, S3 based roadmaps in place
2. **Projects, niche value-chains, SME investment**: Identification of competitive regional products and services, increased SME capacity to participate in I3 Instrument projects (e.g. using tested tools for mapping supply-side competencies and matching them with demand-driven business opportunities, preparation and dissemination of best practice examples), developed business cases (of more mature project consortia) ready to apply for the I3 Instrument calls, resulting in identified I3 Instrument related value chains & investment pipelines.

1.2 Needs analysis and specific objectives

Needs analysis and specific objectives

Describe how the objectives of the project are based on a sound needs analysis in line with the specific objectives of the call. What issue/challenge/gap does the project aim to address?

The objectives should be clear, measureable, realistic and achievable within the duration of the project. For each objective, define appropriate indicators for measuring achievement (including a unit of measurement, baseline value and target value).

NEEDS AND GAP ANALYSIS

Innovation related statistics and feedback from the ground indicate that less developed regions in Central Europe need to be much better integrated in innovative European value chains, in line with the S3 strategy. From among the countries represented in the Greet CE project, according to the EU's **Innovation Scoreboard**, Croatia, Hungary, Poland, Romania and Slovakia are Emerging Innovators, which is the weakest of four performance groups. Croatia, Hungary, Poland and Slovakia had between 60-70% of the average EU performance in 2022, while Romania was the least innovative country, with 33% of the average EU performance. Slovenia and Portugal are Moderate innovators, which is the third group.

Less developed regions in the five above Member States share several **key common challenges** in Green Transition, bioeconomy, digitalisation, talent attraction and retention, energy security and energy poverty. More effective and efficient in integration in European value chains could be achieved with more interregional understanding and cooperation among them. Less developed rural areas typically experience depopulation, ageing, scepticism towards innovation, limited project development, investment and market absorption capacity.

Europe is short on energy carriers and raw materials and heavily reliant on imports of these as well as of manufactured goods imports from Asia. European energy cost levels will be at multiple times of those in North America or Asia for the foreseeable future. Europe has a **major issue with accessing environmentally friendly, cost efficient and secure energy** – that needs to be achieved without Russia and Iran, the two countries with the largest proven natural gas reserves.

The **Green Transition,** moving towards a circular economy, developing **bioeconomy,** dramatically reducing (energy, raw materials, chemicals, other energy intensive goods, etc.) imports **is not only an environmental necessity, but essential from an economic, security, sovereignty and social stability point of view as well.** Multi-sectoral **soil, water and biomass challenges** can be tackled and mitigated more effectively with increased innovation capacities.

Innovation is a matter of competitiveness, health, environmental, financial sustainability, social cohesion, national (energy and food) security and decoupling from Russian fossil fuels (natural gas, oil) and key fossil fuel-based goods (e.g. fertiliser) – a paramount issue in Central Europe.

There is a dire need for circular green economy innovation. In 2022, an **unprecedented series of geopolitical and environmental events** resulted in complex challenges for Central European (CE) regions. These created an **energy crisis** and an **overuse of forest resources for fuel**. Summer **drought** resulted in **record low yields** and historical lows in the stocks to use ratio in grain markets. Natural gas price hikes resulted in **fertiliser plants shutting down**, disrupting agri-food value chains and increasing future risks. These impacts are overshadowed by other factors including global climate change and the **loss of soil fertility**.

From erratic rainfall to severe droughts, global warming is creating a **water** stress that will fuel inflation, product shortages, conflict, political instability, social unrest, and migration. Agriculture absorbs 70% of

the water used, therefore water management is critical. Water is also critical to the energy industry in certain European countries, including some of the countries represented in the project.

Transition to a circular and sustainable (bio)economy allows economic **growth decoupled from resource use and greenhouse gas emissions**, the cornerstones of the European Green Deal. Regions with biomass based territorial capital – from biomass availability over biomass processing and research, development & innovation infrastructure and knowledge carriers – gain a competitive advantage for sustainable growth by increasing material efficiency of already engaged and sustainably sourced biomass. Complicated, uncoherent and often non-existing legal framework for bioeconomy, the failure to recognize cross-sectorial opportunities and the fragmentation of available sources of financing hinder the development of the bioeconomy sectors.

The **education systems** of the CE region **have strong foundations** and have good standing in global rankings. However, the regional **innovation ecosystems are insufficient** to achieve a good market penetration of local ideas, products and technologies and generally are **laggards when it comes to adopting** global **best practices**. A good understanding of international trends, best practices and networks is often lacking, ecosystems are often not conducive to development and adoption of innovations. Several landmark figures of American science and technology were born in our target countries – e.g. Nikola Tesla, John Von Neumann, etc. - and left Europe to achieve their dreams.

The concept of circular and sustainable bioeconomy and in general the awareness of global climate change and the challenges and opportunities these bring to the CE regions were acknowledged, sometimes with considerable delay relative to other EU regions. Although drafting and adopting bioeconomy-related **policies** in these countries has begun, there is still a strong need to build and empower an interregional innovative and resilient ecosystem to maximise benefits.

These benefits include but are not limited to an **increase in food security, afforestation, economic stability, national security, retention of talents and a decrease in fossil fuel and chemical imports, poverty, energy consumption, carbon footprint**.

Decreasing waste and improving the use and maintenance of scarce resources is critical for environmental, societal, financial, macroeconomic and (energy) security reasons. In the current crisis, implementation, tangible results are urgently needed. There is a need for exploring new paths to govern the green transition process, in particular by making information and knowledge available and accessible, fostering collaboration among various stakeholders considering regional specifics as well.

SPECIFIC OBJECTIVES, INDICATORS

We aim to foster **sustainable** regional and inter-regional **value-chains,** improving capacity, dialogue, co-operation and policies engaging quadruple helix stakeholders. We specifically aim to strengthen cohesion among less developed and developed regions in **Central Europe** and their integration into selected European value chains, in particular in the Green Transition, circular economy, bioeconomy, energy areas targeted by the pilots in the project.

We also aim to foster linkages between outermost and less developed regions of **Portugal** and Central Europe as currently there is an extremely low level of cooperation while both parties have proven (identified) innovative solutions that could be of interest in the other regions. **Algae (blue bioeconomy**) expertise of Portugal is very relevant for Central European countries in the quest to replace (traditionally often imported Russian gas based) natural gas-based fertilisers with **bio-fertilisers**. Portugal has also very relevant best practices in renewable energy (e.g. producing **biomethane** for the natural gas grid) and bundling of small energy efficiency projects for financing (lowering transaction costs and risks).

Mandatory and non-mandatory Key Performance Indicators

Objective	Indicator	Baseline value	Target value
Ecosystems development	Number of less and more developed regions involved in the project, number of countries these are from	0	4,3,6
Ecosystems development	Number of S3 based roadmaps developed contributing to European Strategic Innovation agendas	0	4
Ecosystems development	Number of S3 Partnerships (or other relevant interregional working groups in networks and platforms) in which regions are actively participating	unknown	4
Ecosystems development	Number of policy measures conceived to engage the ecosystems externally	0	12
Ecosystems development	Number of value chain analyses based on mapping and benchmarking activities	0	10

Ecosystems development	Number of intermediaries engaged in interregional activities	unknown	15
SME innovation business cases	Number of business cases identified in the framework of the given value chain developed	0	20
SME innovation business cases	Number of companies involved in the business cases	0	35
SME innovation business cases	Number of interregional alliances established or in preparation	0	15
	Gender dimension/persons reached	0	fair 5,000
	Non-mandatory KPIs		
SME innovation business cases	Number of companies promoted (online) for crowdfunding	0	10
Communication, dissemination	Number of website users, page views	0	5000; 25,000
Communication, dissemination	Social media (Linkedin, Twitter, Instagram) number of followers, number of posts	0	400, 300
Implementation	Number of online or hybrid or offline events, trainings	0	50
Communication, dissemination	Number of external events attended (representations) as participant or speaker	0	14
Communication, dissemination	Number of digital newsletters; press releases; newsletter recipients	0	6, 6, 500
Engagement	Number of innovation intermediaries, industry associations and clusters; innovative SMEs surveyed	0	50, 400
EU synergies	Number of EU projects, platforms, hubs, institutions synergies realised with	0	20
I3 proposals	Number of potential I3 Instrument proposals assisted	0	20

An important type of deliverable, **industry value chain analysis** involves examining the various stages of a product's / service production, from procurement all the way through the final purchase by end-users. In Porter's value chains, Inbound Logistics, Operations, Outbound Logistics, Marketing and Sales, and Service are categorized as primary activities with several supporting activities as well.

Within value chains, a **business case** provides justification for undertaking a project, programme or portfolio. It evaluates the benefit, cost and risk of alternative options and provides a rationale for the preferred solution. A business case captures the reasoning for initiating a project, presented in a well-structured document.

Roadmap is another important type of deliverable. It is a strategic plan that defines a goal or desired outcome and includes the major steps or milestones needed to reach it. It also serves as a communication tool, a high-level document that helps articulate strategic thinking—the why—behind both the goal and the plan for getting there. Localised Science, Technology and Innovation Roadmaps can be created for transformation and development. Smart Specialisation Strategies (S3) is one of the global methodologies for Science, Technology and Innovation (STI) Roadmaps for the achievement of Sustainable Development Goals. It uses participative bottom-up processes.

Our objectives will be achieved partly by **events** gathering relevant stakeholders, targeting both demand and supply by bringing policy makers, project developers, innovation intermediaries at the same table to find common solutions. Key **goals** are an increased level of innovation investment and high-value policy advice. Events (online, hybrid, offline), stakeholders' dialogue assist in developing strategies, roadmaps and action plans, developing business cases, alliances, joint actions. Our key event objectives:

- Create an environment for sharing stakeholder experiences, knowledge and expertise. Ensure active participation and knowledge sharing of the participants.
- Address good practices, challenges and develop common solutions. Enhance stakeholder knowledge and skills by peer-to-peer learning.
- Consolidate and communicate lessons learned. Develop high quality, meaningful and useful documents for appropriate dissemination.
- Ensure clear reporting of the outcomes of the events and proper storage of results.

Public **reports** will be prepared and published online. Private documents concerning business cases will be kept confidential as appropriate and shared only with the target audience. The types of documents prepared may include strategies, roadmaps, action plans, policy measures prepared, as well as template documents prepared for business uses.

1.3 Complementarity with other actions and innovation — European added value

Complementarity with other actions and innovation

Explain how the project builds on the results of past activities carried out in the field and describe its innovative aspects. Explain how the activities are complementary to other activities carried out by other organisations.

Illustrate the European dimension of the activities: trans-national dimension of the project; impact/interest for a number of EU countries; possibility to use the results in other countries, potential to develop mutual trust/cross-border cooperation among EU countries, etc.

Which countries will benefit from the project (directly and indirectly)? Where will the activities take place?

The European Bioeconomy Strategy aims to accelerate the deployment of a sustainable European bioeconomy, which includes food security, the sustainability of natural resources, and reduced dependence on non-renewables.

All proposed actions will capitalise on already available information avoid duplicating what already exists. A specific analysis of relevant EU projects, initiatives, platform to leverage, build on is included. The **results of relevant projects** supported by other EU funding programmes will be taken into account, ensuring **complementarity**. Stakeholder lists, training materials and other tools, analyses created by other projects, grants will be utilised, avoiding industry stakeholder research "from scratch". A number of EU funded projects, initiatives, platforms have created results to build on. These include for instance industry and stakeholder mapping, training methodologies and policy measures.

LEVERAGING AND UP-SCALING THE RESULTS OF OTHER EU FUNDED PROJECTS

The project will build on the results of previous EU funded projects, especially considering best practices, barriers, solutions, tools identified, solutions and tools, policies, relevant databases developed. At the same time, **existing databases** (of best practices, relevant data, etc.) are to be **enriched** with information collected in the project. Our **results will be communicated in an integrated fashion** with the results of other relevant projects. An illustrative list of relevant EU funded projects, initiative, tools identified and main ways of building upon these, up-scaling their results (projects in which at least one of our consortium members were /are partners are marked with an *):

Thematic field, examples	Utilisation, up-scaling results
***Bioeconomy & circular economy innovation in Central Europe*:** Celebio*, Bioloc*, Biomodel4Regions*, Made in Danube*, DanubioValnet*, BIOEASTsUP*, CEE2ACT*, Circe2020, Tebice, Biogas Action*, DanuP-2-Gas*, EcoInn*, Bioenergy4Business*	Utilise identified best practices, issues, lessons, existing quality solutions, stakeholder databases to tackle challenges and target the right stakeholder groups with the right messages.
Bioeconomy innovation in Europe (tools, methodology, platforms, financing, innovative products, innovative firms identified): AgroBioHeat*, Agro2Circular, Bike, BioRural*, Biobec, Biopen, Biobesticide, Biogov.net, Bioeconomy Ventures, Bio-based Industries Consortium, BioEnergyTrain, BioEco-Platform, BBTwins, BioRefine, BioVoices, Ce-Force, Cicerone, Dealflow.eu, Digicirc, Enabling, Engage4Bio, European Cluster Collaboration Platform, European Circular Bioeconomy Fund, Foresda, Innovation Radar Prize, EIT Circular Economy Prize, Herewear, Hoop, MPowerBio, Power4Bio, RoseWood4.0 Hubs, Scalibur, Smart4All, WaterAgri, Vivaldi, relevant European Digital Innovation Hubs (e.g. EDIH ADRIA Rijeka HR, Agricultural EDIH Gödöllő HU, Andalusia Agrotech Sevilla ES, Crobohub Zagreb HR)	Utilise identified best practices, issues, barriers, patterns, lessons, existing quality solutions, stakeholder databases. Integrate outcomes to tackle a complete scope of challenges and target the right stakeholder groups. Increase participation from the targeted regions in relevant projects, initiatives, value-chains, develop policy documents.
Eco-Construction (niche) Green Growth*, INTERREG projects: Danubiovalnet, Cluster Eco-Construction, Build2LC, Eco Build, IMIP, H2020 SME Instrument: M Sora Trgovina, Mizarstvo, CINEA: Criaterra, Honext	Foster niche linkages, alliances, joint value-chain propositions including those in the form of potential future I3 proposals.

Within regenerative farming ***Protein recovery in the food industry (niche)*** H2020 SME Instrument: Acies Bio (SI), Arhel (SI), companies identified in other EU projects: Meotis (RO), Alföld Tej (HU), Smiltenes Piens (Latvia) EU Projects: Agrichemwhey, Whey2Value	Foster niche linkages, alliances, joint value-chain propositions including those in the form of potential future I3 proposals.
Within regenerative farming ***Biological / circular fertilisers (niche)*** H2020 SME Instrument projects: UTB Envirotech, Multisense, Zoldsegcentrum, EU funded projects: Platform on Integrated Water Cooperation and IWAMA (Interreg Baltic Sea Region), CircRural4.0 (Interreg Sudoe), Step (Interreg South Baltic), ReNu2Farm and Phos4Your (both Interreg North-West Europe), Neptun (Interreg Germany-Denmark), Inteko (Interreg Austria-Czech), Smart-Plant (H2020), B-Ferst, Rustica, Walnut, Fertimanure, Neosuccess, KET4CP: ekolive s.r.o (SK)	Foster niche linkages, alliances, joint value-chain propositions including those in the form of potential future I3 proposals.
Citizen finance CitizEE*, ENES-CE, SCCALE203050, Bundle Up*, Bundle Up Next*	Raise awareness of citizen finance opportunities in Central Europe.
INTERREG Europe policy-oriented projects Agrirenaissance, Aquares, Bridges, Foodchains4eu, Iwatermap, Niche, P-Iris, Regions4food, Replace, Since-Afc, SmePower, String, Super	Raise awareness of successful policies, among policy-makers. Utilise in policy discussions, aimed at preparing policy recommendations.
Digital tools of sustainable energy: COME EASY, E-CREW, e-Central, DEEP, eTEACHER, Feedback, Sphere, TARGET-CE, TRIIPLEA-reno, EFIX	Sophisticated digital tools, training materials and guides of innovative financing models can be promoted.
Policies, public authorities in sustainable energy: CA-EED, CA-EPBD, CA-RES, C-Track50, DEESME, E-FIX, EuroPACE, ENSMOV, Covenant of Mayors (Investment Forum) initiative, IncorporatEE, NetZeroCities, CEESEU, PROSPECT2030	Key outcomes, lessons considering policies can be utilised in policy discussions, aimed at preparing policy recommendations.

There are various complementary private and public sector events facilitating discussions focused on Green Transition innovation financing and international initiatives focusing on policy analysis. Insights from these actions will be utilised, certain relevant speakers, attendees may be invited to events and we also aim at engaging these events in communication on project results and building a community.

INNOVATIVE ASPECTS, COMPLEMENTARY NATURE OF ACTIVITIES

Rather than creating “phone books” of sectoral stakeholders and generic training materials, starting policy measures development “from scratch”, creating matchmaking platforms, hubs, we will use already available results, tools, platforms to achieve the goals of the project. Our time will be spent on value-added activities focusing on enabling pre-qualified SMEs and provide evidence-based policy advice. When identifying relevant SMEs, potential business cases, value-chains we will rely on the analysis of several types of databases, innovation intermediaries’ feedback:

1. Stakeholder **databases** and SME best practices compiled by other EU-funded projects and SMEs in various EU matchmaking databases,
2. Innovative SMEs with successful operations in less developed regions or Portuguese **Outermost Regions** (Madeira, Azores) or acknowledged bioeconomy applied research projects. Examples:
    a. Buggy Power (a biotechnological company producing marine microalgae containing high nutritional products with a microalgae plant in Madeira, Portugal, an Outermost Region, project partner in Enhance Microalgae Interreg Atlantic Area project)
    b. Phytoalgae (a producer of microalgae biomass in Madeira, beneficiary - in partnership with the University of Madeira - in the PhytoBlueFrac, Development of nutraceutical products for human health application EEA grant). Background information: Portugal has a strong algae sector. For instance, A4F is supported by several EU grants. A4F is specialized in the design, build, operation and transfer (DBOT) of commercial-scale algae production units, using different technologies.

c. EUCYS 2022 bioeconomy prize given by Circular Bio-Based Europe Joint Undertaking to young Madeira scientists for their research on using the banana pulp to remove microplastic pollution from wastewater.

3. **Innovation prizes** by EU, national and sectoral organisations, initiatives or other relevant excellent innovative companies known to us, such as Fonaterm (SI) or Soven (SI).

4. **SMEs that** have **received EU funding for the commercialisation of technologies** in Horizon 2020 SME Instrument, EIC Accelerator, CINEA programs or various EU (competitiveness) funding programs run by national governments, for instance

    a. Hungary: Multisense, UTB Envirotec, Zoldsegcentrum, Új Champignons, Pilze-Nagy, Róna
    b. Slovenia: Arhel, Atech, M Sora Trgovina, Melu, GIC GRADNJE, SRC, Robotina, Sunesis
    c. Slovakia: Saftra Photonics

5. SMEs, entities that have received **start-up financing, venture capital, capital market financing, European Innovation Council Fund, EIC Accelerator financing** originating from the targeted regions / countries or are actively seeking export opportunities with the assistance of public export promotion agencies, for instance

    a. Hungary: SMARTKAS, Poliloop, Inwatech, Green Drops Farm (Rotower), Greensect, Vilhemp, Aquajet
    b. Slovenia: Lixea, Efos/Trapview, Institute of Environmental Protection and Sensors
    c. Slovakia: Nitroterra, Veles Farming
    d. Romania: AgroGPS, Agrokultura, Bioconversia, BioMass, Caminota, Sera Aquaponica Bio
    e. Portugal: Agristarbio

Considering policy advice, we shall look at proven best practices and the opportunity to spread them, for instance considering Eco-labels, standardisation, certification schemes and green public procurement.

EUROPEAN DIMENSION: TRANS-NATIONAL, CROSS-BORDER IMPACT, REPLICATION POTENTIAL IN OTHER COUNTRIES

The project has consortium partners from 6 Central European countries that are physically relatively close to each other and have significant common traditions, history that can assist in developing mutual trust and cross-border cooperation. Most Central European regions have a lot of similar Green Transition challenges. Results achieved can be well used in **other Member States sharing similar bioeconomy, water, soil, biomass, circular economy challenges**.

Facilitating cooperation, alliances with relevant European firms, legal entities, technology offering and requests **is an important part of improving the maturity of investment ideas**. **In this** activity **relevant EU funded projects, initiatives, platforms** shall be leveraged. Examples:

- Dealflow, Bioeconomy Ventures and Smart4All projects,
- BioHorizon,
- Bioregions Facility,
- European Cluster Collaboration Platform,
- European Bioeconomy Network,
- EIT Food Virtual Matchmaking,
- EEA Grants Green opportunities matchmaking event,
- Innovation Radar,
- EIC Accelerator,
- EU annual BioEconomy Conference,
- Pitch Perfect and Boost the European Bioeconomy event co-organised by 7 bioeconomy platforms,
- Horizon Europe Info Days,
- Covenant of Mayors initiative (DG ENERGY),
- Circular Cities and Regions Initiative
- Partnerships for Regional Innovation Pilot Action initiated in 2022 by the Commission (CoR)
- Big Buyers for Climate and Environment initiative (DG GROW)

Hungary, Slovakia and Slovenia are 3 of the 4 member states, **Vukovar-Srijem County** (HR) is one of the regions that participate in **Partnerships for Regional Innovation Pilot Action**. These were selected in 2022 (by the European Committee of the Regions and the European Commission's Joint Research Centre (JRC) based on their willingness (demonstrated in their application) to further develop their own strategic policy framework dealing with innovation, industrial development, sustainability transitions and broader economic and social development. Particular attention is placed on tools and governance mechanisms that mobilise multiple sources of funding and policies to amplify impact and that can help connect regional and national initiatives to EU initiatives for the twin transition. Given that 3 of the 6 countries represented in the Greet CE project participate in this pilot action, **creating synergies**

with it **is a key part of our policy related work**.

According to a pan-European survey of 129,000 European citizens in 208 NUTS regions of the 27 Member States (to compile the European Quality of Government Index), of all the EU regions, Budapest was the sole region whose citizens felt more attached to the EU than to their nation states or region, the EU being their primary attachment.

#§COM-PLE-CP§# #§PRJ-OBJ-PO§# #§REL-EVA-RE§# #@QUA-LIT-QL@# #@CON-MET-CM@#

2. QUALITY

2.1 Concept and methodology

Concept and methodology

Outline the approach and methodology behind the project. Explain why they are the most suitable for achieving the project's objectives.

INTERVENTION LOGIC

Based on identified capacities, needs, best practices, results of prior relevant EU funded projects, networking, peer-to-peer learning, engaging industry associations, coaching key stakeholders the project will provide support for building, structuring and connecting innovation ecosystems, focusing on **circular economy opportunities, value-chains in the soil-water-food-energy-wood nexus**. Natural science, digitalisation and social, business innovation will be fostered. Industry driven value chain initiatives will be designed.

The capacity of the quadruple-helix ecosystem actors to develop business ideas will be reinforced. The identification of investment projects will be supported by capacity building and networking. The evolution of more investment-grade innovative regional bioeconomy SMEs, more mature business cases will be fostered. Investment ideas under development will be pre-piloted to increase project feasibility, maturity and bankability, including financial advisory assistance. The project will facilitate cooperation, preparation to **access EU funding** (I3, Interreg, etc.) and **technical assistance** from EU programmes.

Creating linkages among less developed and leading regions fosters **cohesion**, an interregional innovative and resilient ecosystem. Targeted stakeholders will be assisted in areas of common interest to **join forces** in order to avoid duplication, exploit complementary strengths, increase critical mass and **build synergies** with regional, national, and EU networks and initiatives, develop a quadruple helix **dialogue** and **collaborate** with relevant entities at the European level. Innovation support system intermediaries will be engaged to foster interregional investments.

Our goal is to mobilise public and private finance for investments in SME innovation, develop regional innovation ecosystems and their integration in European value-chains focusing on selected bioeconomy, circular economy niches within Green Transition. The project builds on the principles of S3 and on prior relevant activities and cooperate with relevant projects, ensuring **complementarity and additionality**.

Capacity building and impact is **achieved through** awareness raising of best practices, experience, tools and opportunities as well as peer-to-peer learning, interactive discussions, matchmaking and promotional activities aimed at producing good quality and well accepted policy documents and increased public and private financing of SME innovation in certain less developed regions. We will focus on stakeholders' dialogue to identify possible areas of joint actions aimed at implementing effective measures. These methods are proven to foster changes targeted by I3 2b.

To overcome inertia, the **information gap** needs to be bridged by creating transparency, increasing awareness, lowering transaction costs, easing the decision-making process and enhancing motivation. To **overcome innovation investment barriers**, financial feasibility, awareness and motivation need to be ensured by multiple measures like proper competitive analysis, self-assessment, designing and applying appropriate business / financial models, increasing organisational capacities and the level of collaboration among various stakeholders.

Our **approach** is based on interlinked steps:

1. Analysis of the innovation ecosystem, project planning.
2. Preparation, organisation and follow-up activities aimed at identifying value-chain development, capacity building and policy measures development, enabling actions.
3. Evaluation and recalibration

A logical and effective structure of the activities and proper methodology used are required for an appropriate intervention logic. Therefore, the research and analysis, stakeholder engagement, capacity building activities and the format of the events, activities are carefully designed. Increased capacity of companies to participate in I3 Instrument projects (through learning and exchange activities) is ambitioned.

METHODOLOGY – RESEARCH AND ANALYSIS

A good understanding of the actual situation, performance metrics is a prerequisite for tackling issues. Proper research and analysis, project planning lay the groundwork for project activities. It is also required to enable future cooperation and thereby an increased and lasting impact of the project, upscaling.

- A secondary and primary research-based **analysis** of relevant **European** public initiatives, funding opportunities, hubs, platforms covering their activities, goals, methods, as well as potential **linkages and synergies** will be carried out.
- A joint **methodology for stakeholder survey and analysis**, including procedures used (e.g. thematic questionnaires, interviews, data processing aspects - especially considering different types of knowledge and perspectives of stakeholder groups), stakeholder group-specific survey concepts, thematic questionnaire templates, interview questions will be applied.
- A standardised **survey of** selected regional **innovation intermediaries,** umbrella organisations will focus on relevant policy and SME support, market domain and niche issues, including value chains & investment pipelines, competitive regional products and services for interregional and European level value chains.
- A **survey** of a carefully selected group of **qualified SMEs** (with innovation commercialisation potential, especially in Green Transition, bioeconomy, project pilot fields), regional ecosystems with European market potential in I3 Instrument related interregional and European level value chains will aim engagement and building investment pipelines. Includes identification and profiling (by the team) of relevant SMEs (in HR, HU, RO, SI, SK, PL) that have received public funding or venture capital, start-up financing for innovation commercialisation, innovation prizes. Consortium partners will be requested to perform secondary and primary research of at least 50 qualified (e.g. received grants for innovation commercialisation, prizes, venture capital, has other achievements or strong image, etc. in a field relevant to the Green Transition) SMEs in each of the six countries represented in the project. There will be a **standardised methodology for the minimum** (content) **requirements of** this **SME survey**.
- In **mapping and benchmarking reports** beyond domains and niches, abilities and needs, influence, stakeholders will also be profiled by their capacity and motivation to engage.
- A **matchmaking database of** relevant entities offering or seeking innovative solutions concerning **the target regions** will serve as basis for project development assistance and peer-to-peer training, networking activities. The emphasis will be on leveraging and enriching existing European databases, facilitating a more intensive engagement of legal entities from the target regions.

A structured interregional **analysis** of selected **value-chains, innovation niches and domains, policies** will be one of the foundations of developing the pilots. Business cases, interregional and cross sectoral, European linkages and opportunities, gaps, potential synergies will be identified in the framework of certain value chains. Greet CE will use **standard templates for value-chain analyses and business cases**.

In business intelligence, value chains analysis specific attention will be paid to **key bioeconomy challenges** like the raw material basis, technical innovative elements, multi-stakeholder linkages, sustainable and cost-efficient feedstock supply, conversion processes' cost and quality challenges and market uptake issues, green public procurement, certification systems, eco-design and market development. It will allow to identify challenges, opportunities, and barriers to the participation of the regional ecosystems in identified niches.

An analysis of relevant bioeconomy, **green transition** technologies and business, social **innovation**s **developed with EU funding without current penetration in certain Central European regions** can assist in identifying innovation potential related to these. There will be a special focus on realising synergies with EU funded projects in the bioeconomy sector.

Research and analysis will be **most intensive in the first half of the project**, providing quality **inputs to WP3 and WP4 activities**. It will continue with much less intensity in the second year, performing two main functions:

- Doing research on the basis of stakeholder feedback, resulting information need.

- Continuous monitoring of relevant main current developments

METHODOLOGY – BEST PRACTICES

The project will strive to facilitate the adoption of European **best practice solutions** and initiatives, developing relevant strategies, roadmaps and action plans. Opportunities to upscale existing best practices from the regional, national and European level will be analysed.

Best practices to be shared will be selected, **evaluated by** four **key attributes**:

1. significant - demonstrated, quantifiable outcome
2. marketable – how attractive it can be to targeted decision-makers in a given country
3. politically aligned - governance and accountability features can ensure that policies work
4. complementary – how it fits with regional, national efforts

Relevant best practices especially from EU Member States that joined in 2004 or later will be used as well to catalyse progress, show the ability of peers to implement successful innovation policies.

Best practices of encouraging optimal integration within existing industrial infrastructures of agro-food, pulp / paper, chemical and energy companies as well as local agricultural practices and logistics will receive special attention.

METHODOLOGY – POLICY DEVELOPMENT

In our **policy measures development** methodology, we aim to address the following main questions:

- What are the most important challenges to overcome?
- What are key (supply and demand) drivers, their priorities?
- Who would be the right party to address them?
- Which should be policy led and market led activities?
- What should policy makers do?

Policy development is planned to be through **co-creation**, co-development, based on the assessment of gaps, best practices, not in a linear process. It may go through several **iterations with local stakeholders to find shared solutions** to fill the gaps and elaborate on them. The aim is not to present academic solutions, but to combine academic efforts and local feedback and peer-to-peer learning. Stakeholder workshops for co-creation then share results at higher level, resulting in a shared multi-actor approach. Finally, there will be a (hybrid) policy event (in a well accessible central location) covering the participating Central European countries, potentially inviting relevant representatives from neighbouring countries too. List of policy measures are to be proposed, brought to a higher level where needed, for instance when it has to do with access to finance.

S3 based roadmaps are planned to be developed contributing to European Strategic Innovation agendas aiming at connecting the companies to EU/global value chains contributing to increased competitiveness and resilience of EU value chains and fostering S3 Partnerships (or other relevant interregional working groups in networks and platforms) in which regions are actively participating.

An overview of the current status of Central European and Portugese regions in selected relevant S3 partnerships, based on the https://s3platform.jrc.ec.europa.eu/ site:

Name of S3 partnership	*Leading region*	*Participating region*	*Interested region*
Bio-Economy	none	Slovenia, 1 Polish region	none
Bioenergy (including renewable gases)	None	1 of Romania	none
Sustainable buildings (including eco-construction)	Croatian	Slovenian, Polish, including Slovenian region represented in the project.	Slovenian, Polish, Hungarian
Smart Grid	None	Polish, Slovenia as a country	Croatian
High Tech Farming	None	SI region represented in the project + PT, RO, HR	
Smart Sensors4 Agri Food	None	Slovenia, 1 region from Hungary	
Sustainable Blue Economy*			

* *launched during in March 2022, no network yet*

Specific themes of potential analysis and development may include enabling, catalytical fields such as standardisation, certification, Eco-Label, green public procurement, permitting, EU funds utilisation, price regulation and (fossil fuel, water, etc.) subsidies and taxation, educational and public awareness efforts,

measures to support human talent mobility and waste management policies.

Regional policymakers will be supported in taking advantage of European initiatives to understand strengths and weaknesses of their territories in different value chains, promoting public-private partnerships and supporting long-term strategic alignment around regional scientific and innovative capacities. According to bioeconomy project promoters surveyed (EIB study), regulation and market and demand framework conditions can act as the most important drivers and incentives for more sponsor and private sector investments. Sustainability of project results will be an important goal.

A sound enabling legal, financial and operational environment will be promoted, aimed at: (i) making a more efficient use of public funds (ii) mitigating risks, (iii) closing financing gaps, (iv) reducing transaction costs and (v) stimulating investment. This shall support the demonstration, commercialization and scale-up of interregional investments, combining bottom-up S3 priorities with EU strategic priorities and creating synergies and complementarities with EU Programmes.

STREAMLINED, COMPARABLE AND MULTILATERALLY RELEVANT PILOTS WITH HIGH IMPACT POTENTIAL

Within the Green Transition thematic area and bioeconomy, specific domains and niches will be addressed in pilots. The selection of niches is based on the analysis of prior EU funded SME innovation (commercialisation) projects in the target regions and elsewhere in Europe and an understanding of regional needs and potential as well as on our specific knowledge and skills. Streamlined, comparable and multilaterally relevant pilots with high impact and demonstration potential will strengthen the network of supportive policy makers and other relevant stakeholders and will contribute to an improved business climate for competitive ecosystems to encourage investment. There will be **four pilots**:

1. **Digital** (sustainable) **energy** with a focus on building energy management and smart grids. Digitalisation can help integrate the growing share of renewable energy by delivering flexible electricity systems that provide demand-side solutions and energy storage. In October 2022, the Commission adopted the 'Digitalising the energy system - EU action plan'.
2. **Eco-construction** using various materials. The construction sector is responsible for over 35% of the EU's total waste generation. Greenhouse gas emissions from material extraction, manufacturing of construction products, as well as construction and renovation of buildings are estimated at 5-12% of total national GHG emissions. Greater material efficiency could save 80% of those emissions.
3. **Regenerative farming**: decreased fresh water and chemicals need, soil and biodiversity protection. Transitioning to a circular and regenerative local food system means growing food in ways that restore soil, water and biodiversity; while distributing and supplying food in improved ways. A holistic redesign of regional food production, markets and retailing systems is therefore needed. Food and nutrients should not go to waste. Some specific areas analysed in more detail:
    a. Bio-fertilisers (from various sustainable inputs). In the case of algae production learning from one of the leading countries in this field in Europe, Portugal (and within that Madeira). Algae represent a largely untapped resource that can be used – with a limited carbon and environmental footprint – to produce food, feed, pharmaceuticals, bioplastics, fertilisers and biofuels. Microalgae can be produced far from the sea as well. Algae biomass can serve as an alternative to raw materials that now are usually fossil-fuel-based, in line with the European Green Deal.
    b. Environmentally friendly irrigation technologies and management methods for improved agricultural production with less water.
    c. Nutrients utilisation. For instance, protein recovery in the food industry.
    d. Digital solutions, precision farming.
4. **Renewable gases** - biogas, biomethane, hydrogen - for waste utilisation and energy generation. In September 2022, the European Commission and industry leaders launched the Biomethane Industrial Partnership (BIP) targeting an increase in increase in annual biomethane production to 35 billion cubic metres by 2030. Renewable gases is also interlinked with regenerative farming given to co-production opportunities of biogas and biofertilisers. Major problems in the Central European natural gas market necessitate major increases in biomethane production. This is one of the common problems of Central European regions.

Standard **features of the pilots**:

- Market and policy research and analysis, feedback, surveys of SMEs, innovation intermediaries will feed into pilots.
- In each country represented in the project, there will be a pre-set number of innovative firms (at least 50 country in total) to be approached directly (following appropriate secondary market research, possibly collaborating with innovation intermediaries) by the local partners to inquire

about their situation and potential interest in I3 or other cooperation. Local project partners will assist the primary research process by the identification and pre-screening of domestic SMEs, including an analysis of their unique selling proposition, technology TRL level, markets, financial position and interest in interregional cooperation, EU funding and technical assistance opportunities, crowdfunding and other issues relevant to the project. A standard set of questions will be provided to the partners for assistance. These local partners also contribute to the secondary research of regional innovation intermediaries, SMEs, market analysis, analysis of policy environment in terms of materials digitally available in local languages. The secondary research of English or other language materials is performed by the leader of the pilot.

- Each partners leading a pilot will be asked to present documentary outputs of the pilot (value chain analyses, business cases, policy measures, etc.) based on activities including the primary research of at least a pre-set number of firms, innovation intermediaries and company associations or clusters, organisations providing financing and public sector and university or research representatives.
- Coordinated methodologies will be applied in the regions, countries where research is carried out. The results of prior projects will be built upon to compile lists of target SMEs, in addition to other information sources referred to in Point 1.3.
- Primary and secondary research is expected to result in the identification of a pre-set number of potential I3 consortium members (in the given pilot niche), including contact data (of English-speaking personnel), website and a brief profile (using a standardised template) and feedback from these firms concerning their interest in potential cooperation.
- Each pilot action leader will be asked to engage entities from at least 3 regions or countries.
- Each pilot shall create at least 3 press releases and 10 news items (for website, newsletter, social media, etc.) and shall include at least one online (digital) and one offline or hybrid event as well as synergies realised with at least 3 European projects, bodies, platforms, hubs or initiatives.
- Policy analysis will have special emphasis on potential policy measures relevant to the pilots. Pilot action reports include an analysis of sectoral, business, cross-sectoral and interregional cooperation and policy issues (e.g. Eco-design, certification standardisation and other opportunities and barriers).
- Each pilot action report shall contain at least one outline of a potential I3 and other EU call proposal including consortium, including value-chain, business case, issues, synergies, domain and niche (SWOT) analysis and altogether at least 2 value chain analyses and 2 business cases with at least 6 companies involved. Standardised criteria for value chain and business case analyses will be provided.
- The Renewable Gases pilot action reports includes an analysis of the biogas & biomethane policies and landscape of Croatia, Hungary, Romania, Poland, Slovakia and Romania in light of replacing natural gas and LNG imports, in line with the EU Biomethane Strategy using inputs provided by project partners in these countries. This is prepared in **close coordination with the policy development related activities of the project, sustainable energy** being a focus area.

Pilots will strengthen the network of supportive policy makers and other relevant stakeholders and will contribute to an improved business climate for competitive ecosystems to encourage investment.

METHODOLOGY – EVENTS, NETWORKING, CAPACITY BUILDING

Various types of hybrid, online and offline capacity building events, activities aimed at matchmaking and training including peer-to-peer learning and study visits (physical or digital) twinning are among the tools to be considered both in the public and in the business sector to facilitate, support:

1. Platform participation: S3 Thematic, European Technology and EU Cluster Collaboration Platform
2. Collaboration with the Enterprise Europe Network, European Innovation Ecosystem stakeholders, Horizon Europe partnerships, S3 Community of Practice and other relevant networks
3. The development of effective, result-oriented and sustainable cooperation mechanisms.

Events will cover key obstacles, best practices and tools and allow stakeholders to provide input into the policy making process, focused on specific issues. Strategies, roadmaps and action plans, policy framework and measures improvements, proposals for enabling actions are developed, their implementation is monitored. Special emphasis shall be on innovative approaches that decrease risks, costs, workload, frustration and contribute to organisational and personal goals of stakeholders.

An interactive exchange of (good and bad) experience shall be instrumental. This can be fostered by some proven group facilitation and creativity methods. **Structured stakeholder dialogue** (into specific

groups finalised after initial surveys) focusing on (topics, issues relevant to) engaging key stakeholder groups and targets shall take place. Key themes focusing on selected Green Transition topics:

1. Policy instruments, measures, roadmaps, inter-regional cooperation models
2. Innovation capacity building, particularly in business plan development, financing
3. Value-chain development, alliances, networking, cross-sectoral cooperation

An interactive exchange of (good and bad) experience shall be instrumental. This can be fostered by some proven methods such as Edward de Bono's Six Thinking Hat Method to explore various aspects. **Events** will follow the principles **Participatory Leadership** methods when appropriate in order to guarantee participants a free environment to express opinions, criticisms and proposals. We plan measures to build a safe space for discussions encouraging people to speak their minds. Our approach entails the moderator, meeting rules, preparation and follow-up. Active listening shall be encouraged.

Sharing experience, **peer-to-peer exchanges** are emphasized. Due to **physical and cultural proximity**, interactions among the Central European target regions can be of high interest and use.

Increased implementation of **digital tools** to collect and analyse data and ensure adequate controls, foster collaboration and sustainable behaviour is of interest. Synergies with relevant **EDIH-s and innovation intermediaries** are important.

Liaisons with EU-funded actions, industry associations and other key players will foster enhanced cooperation. Connections within the **quadruple-helix**, interregional alliances will be strengthened, enabling discussions on needs and goals, points of mutual interest. Realising synergies with EU funded projects aimed at developing bioeconomy hubs, clusters, networks will contribute to enhancing interregional investment capacities of business developers or innovation managers.

In order to increase impact, we intend to provide **company level support to selected ventures**. The maturity level of selected projects will be assessed (using a structured approach). We will strive to harmonize projects to the same stage of development by providing technical support, financial and business expertise. The maturity of partnerships, business cases and investment concepts will be assessed including market and feasibility analyses as steps towards validating the initial business idea and draft business planning. Supply-side competencies will be mapped and matched with demand-driven business opportunities. Barriers faced by innovators moving to market will be addressed.

There will be developed **business cases** ready to apply for the I3 Instrument calls. This will be assisted by advisory support for investment facilitating improved "go to market" business & investment plans in value chains for new / altered / improved products, processes or services. Projects' content may include for instance testing, demonstration, piloting, large-scale product validation and market replication (connecting or making complementary use).

We aim to create opportunities for further funding under the European Regional Development Fund (ERDF) and to explore synergies with EU funding programmes and instruments, like ERDF and Interreg.

In communication, **dissemination** we will ensure complementarity and additionality with EU-funded projects, initiatives, platforms, bodies, lasting impact.

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2.2 Consortium set-up

Consortium cooperation and division of roles (if applicable)

Describe the participants (Beneficiaries, Affiliated Entities and Associated Partners, if any) and explain how they will work together to implement the project. How will they bring together the necessary expertise? How will they complement each other?

In what way does each of the participants contribute to the project? Show that each has a valid role and adequate resources to fulfil that role.

***Note:** When building your consortium you should think of organisations that can help you reach objectives and solve problems.*

Our consortium combines thematic knowledge and expertise with communications and networking capabilities, strong and long-standing relations with policy and decision makers. It includes 10 highly regarded legal entities with complementary skills, network, background and focus, with complementary skills, network, background and focus, forming a strong team sharing the same vision.

An integrated and holistic approach is reflected in the composition of the partnership, with **each partner covering different thematic or specific regional aspects**. They will work closely with key private and public sector stakeholders having the ability to act as facilitators among various targeted stakeholder groups. Consortium partners have been part of over a dozen directly relevant European projects. Our

team has **unique experience in** actually **mobilising public and private innovation financing** and a wide network of connections. Consortium members:

Partner	*Background, key (leadership) roles in the project*
KSSENA	Municipal energy agency, project coordination, leading Digital Energy pilot
EIHP	Public research institution, leading research & analysis, Renewable Gases pilot
CCIS	Company association, leading value-chain development, policy development, communications and dissemination and Eco-Construction pilot
FV	Private technology business, leading SME capacity building, investment screening
BEC	Bioeconomy cluster, leading Regenerative Farming pilot
GEA	Green Energy Association, contributing to various tasks
MAE	Municipal energy agency, focus on energy and financing
DELFY	Private advisory business, focus on European municipal synergies, communications

Expertise, contribution to the project (core team and organisation of project

	1	2	3	4	5	6	7	8
KSSENA								
EIHP	WP2 leader							
CCIS			WP3 leader					
FV					WP4 leader			
BEC								
GEA								
DELFY								
MAE								

Relevant fields of competence, experience (codes in the above table):

1. bioeconomy analysis, networking, building alliances
2. other Green Transition related analysis, networking, partnership development
3. innovation policy related activities (preparation of policies, action plans)
4. facilitating the adoption of Green Transition, bioeconomy best practices in Central Europe
5. commercializing technology / know how internationally
6. business education relevant to start-ups
7. market analysis, research, advisory services, finance raising (equity, debt, grants, etc.)
8. Europe-wide municipal networking, liaisons, social innovation in the public sector

Illustrative project references of our consortium are listed and described in the annex. These include a number of major EU funded Green Transition innovation related activities including **EIB ELENA,** various relevant **INTERREG, Horizon, LIFE and Interregional Innovation Investment (I3) projects**.

A Greet CE consortium member, FV is one of the few firms that could penetrate global markets with internally developed technology, acquiring major multinational clients – demonstrating what can be achieved.

Summary of time spent on the project (person-months)

The **Consortium Leader and the leader of the Digital Energy pilot**, KSSENA KSSENA has been successfully participating in multiple EU programs like Interreg Europe, Interreg Central Europe, Interreg Alpine Space, Interreg Danube Transnational, Interreg Mediterranean, Horizon Europe, LIFE, European Climate Initiative (EUKI) and Intelligent Energy Europe. It has led several Horizon, LIFE, Interreg projects. KSSENA is a highly respected municipal energy agency, a member of FEDERANE, the European Association of Energy Agencies. In 2020, REGIOSTARS announced the six EU funded projects who convinced the jury of their contribution to regional development. Energy@School, a project of junior energy guardians (of which KSSENA was a part of), won in the category "Youth empowerment for cooperation across borders – 30 years of Interreg".

The **leader of WP2 and of the Renewable gases pilot** is Energy Institute Hrvoje Požar (EIHP). It is a state-owned institution focusing on scientific research in the energy sector and providing professional support and advisory services in Croatia and internationally. EIHP is a pioneer in setting up an evidence-based framework for bioeconomy development in Croatia. It is the chair of Thematic Working Group Bioenergy and New Value-added Materials (NVAM) under the BIOEAST Initiative and BIOEASTsUP H2020 project. One of the main objectives is to develop SRIA for 11 BIOEAST countries, to help overcome gaps and develop national bioeconomy strategies.

The **leader of WP3 and of the Eco-Construction pilot**, CCIS coordinates 2 national SRIPs in Slovenia (Strategic development and innovation partnerships). It will be a be a partner in next S5 (Slovenian Sustainable Smart Specialisation Strategy) partnerships as well. Slovenia is a frontrunner in S3 in Central Europe. CCIS has been a consortium partner in a number of relevant EU funded innovation, bioeconomy and other projects. It has over 5,000 member companies that contribute about 50% of gross value added of the Slovenian economy and generate 2/3 of exports. The Chamber of Commerce and Industry of Slovenia Innovation Awards are awards have a long tradition.

The **leader of WP4**, Falcon-Vision is a Central-European SME that created a cross sectoral (mechanics-optics-measurement-software) niche market technology innovation and brought is successfully to the global markets, on three continents (Europe, Asia, America), as mission-critical application for major manufacturing multinationals, such as Mercedes, BMW, Volkswagen, Toyota, Nissan, General Electric, Continental and Nemak. Its innovation requires an interdisciplinary in-depth understanding of optics, mechanics, software engineering and measurement technologies. It was awarded a Horizon 2020 SME Instrument Phase 2 grant and raised private venture capital. The leader of WP4, Tamas Solymosi was its business development director when it started the penetration of international markets. He also has an extensive background in venture financing, innovation and sustainable energy.

European (local and regional) **municipal communications, outreach, engagement activities** will be led by Delfy. Delfy has unique qualifications in this area as its managing director led the the Covenant of Mayors (CoM) Office in Brussels in the first six years of the CoM initiative. In this period, CoM became a flagship European sustainable energy initiative. The CoM supports over 10,000 signatory cities in the development and implementation of their Sustainable energy & climate action plans (SECAPs). Signatories represent significant potential partners in certain innovation value-chains, business cases.

The **leader of the Regenerative farming pilot** is BEC. It participates in the development and implementation of the RoadMap for Bioeconomy in Slovakia. BEC is also collaborating on development of Bioeconomy strategy in Slovakia. Strategic members of BEC include the National Agricultural and Food Centre, the Slovak University of Agriculture in Nitra and Agroinstitut Nitra.

There will be **significant contribution to the Digital energy and Renewable gases pilots as well as to the financial capacity building of stakeholders** by MAE. Mazovia Energy Cluster, established by MAE as a platform for connecting about 50 government, local government, business and R&D institutions. Together with BGK, MAE was responsible for EIB JESSICA loan fund management and utilization of funds in energy projects in the region. Fund were reinvested in a financial instrument called Energy Loan Fund in which MAE took a major coordinating part. MAE supported Piastów municipality in receiving EIB ELENA funding for its investment programme. MAE is finalizing its own ELENA project called Mazovia4EEWave that includes improvement of energy efficiency and integration of renewable energy sources in public buildings in the Mazovian Voivodeship. Over the last 3 years, MAE has been involved in the preparation of about EUR 40 million investments related to energy and renewable energy in buildings. MAE has built strong partnerships with financing institutions.

GEA will contribute to selected project activities. It has a deep understanding of regional green transition and bioeconomy issues, the regional innovation ecosystem. It has members from various sectors including firms, municipal institutions and Romanian universities and research institutes like the Organic Chemistry Center of the Romanian Academy, Transylvania University Braşov, Politehnica University of Bucharest, Technical University of Cluj-Napoca and University of Bucharest.

Illustrative consortium EU funded project experience

Consortium members have very significant relevant EU project experience in their respective fields as indicated by their reference list in the Annex to Part B. It contains a number of relevant European project references from the past four years.

The Greet CE project has received support letters from **21 associate partners** from six countries: Croatia, Hungary, Portugal, Romania, Slovakia and Slovenia). These include multiple industry associations & clusters (Croatia, Hungary, Romania, Slovenia, Portugal), universities (Ljubljana, Maribor, Nitra, Budapest, Zagreb), SMEs as well as development agency, research institution and educational institute. These associate partners have specific interests related to one or more of the pilots in the project.

Universities & research	*Industry associations*	*SMEs and institutes*
Ljubljana - Faculty of Civil and Geodetic Engineering	Croatian Chamber of Agriculture	Vukovar-Srijem County Development Agency
Maribor - Faculty of Civil Engineering, Transportation Engineering and Architecture	Association of SMEs in Covasna County (Romania)	Institute of Slovenia for Vocational Education and Training
Nitra – Slovak University of Agriculture	Association of Industrialists in Vas County (Hungary)	Pedal Consulting (innovation management firm, Slovakia)
Budapest Technical University - Z10 Incubator	Vas County Directorate of the Hungarian Chamber of Agriculture	EMEF Ltd. (Energy service company, SME, Hungary)
Zagreb – Faculty of Civil Engineering	Construction Cluster of Slovenia	ABE Ltd (biotechnology SME, Hungary)
Marine and Environmental Sciences Centre, **Madeira**	ARBOR – association of woodworking SMEs, Romania	Pomurski Sejem (fair organiser) Slovenia

Sandor Bartha	GEA	Senior researcher, contributes to WP2 and WP3.
Bartosz Dubiński	MAE	Project manager, contributes to all WPs.
Aleksandra Luks	MAE	Senior expert, contributes to WP2, WP3 and WP4.

Outside resources (subcontracting, seconded staff, etc)

If you do not have all skills/resources in-house, describe how you intend to get them (contributions of members, partner organisations, subcontracting, etc).

If there is subcontracting, please also complete the table in section 4.

Engagement of Madeira and Portugal in Greet CE niche pilots for mutual benefits

Skills we intend to include in the project via outside resources include those of a Portuguese organisation able to facilitate linkages, potential synergies with Portuguese entities, primarily in the outermost regions of Madeira (and possibly Azores) and in specific green transition niches – sustainable energy and blue-bioeconomy, with a focus on algae (mainly as a biofertilizer to be used in regenerative farming). The goal is to realise synergies with Portuguese SMEs in at least three pilots of the Greet CE project: regenerative farming, renewable gases and digital energy.

Key tasks: Facilitation of innovation intermediaries, associations, clusters, research institutes, relevant innovative SME engagement, co-organisation of events, contribution to the development of selected value-chains, provision of Portuguese algae and renewable gases policy insights, best practices, identification of potential synergies (Central European-Portuguese, in selected value-chains, clusters). Relevant Portuguese SMEs and industry associations or clusters shall be engaged (via survey, events, communications, capacity building, matchmaking) in selected value-chains and cluster development by a subcontractor with demonstrated contacts, network.

Reasons for engaging Madeira (outermost region) and Portugal:

Blue-bioeconomy is a **regional strength in Madeira** (and Portugal), with a specific focus on **algae**. Algae can be used in many ways, including as bio-fertiliser in **regenerative farming**, one of the four thematic pilots of the Greet CE project. Algae (and **blue-bioeconomy**) is an underdeveloped but big opportunity field for the EU (reflected also in recent EU strategy created and recently established thematic S3 partnership as well) for instance tackling missing **fertiliser** (previously from Russian natural gas) issues. Not only can blue-bioeconomy solutions be of interest in certain **Croatia and Slovenia**, microalgae production is already starting for instance in Hungary as well. Madeira (an outermost region) and the Portuguese algae industry, technology companies could be engaged in our project activities.

Three letters of support have been received from Madeira and Portuguese innovative industry networks. Two relevant letters of support have been received from relevant Portuguese industry associations focusing on innovation. Another important letter of support has been received from a key research agency in **Madeira, indicating specific interest in all four of our niche pilots**. (MARE-Madeira, Madeira Regional Research Unit of MARE – Marine and Environmental Sciences Centre)

Given its similar level of economic development and energy sector best practices, Portuguese engagement could strengthen the two **energy related pilots** as well. In 2020, Portugal had the fourth largest **share of renewables in the electricity sector (>50%)**, well over the EU average. Except for Romania, all Central European countries represented in the project had a smaller ratio than EU average. Portugal has strengths in renewable energy integration in the electricity grid - a major digital energy challenge. Renewable energy sources have over 30% share in total domestic gross final energy consumption in Portugal – well above the EU average. This is much higher than in most targeted Central European regions and countries.

There is already Portuguese facility injecting **biomethane in the natural gas grid**. This is relevant for the Greet CE renewable gases pilot.

In addition, given the very low level of information flow, relationship between Central Europe and Portugal there is a high likelihood of good cooperation opportunities that have not been identified before and could be capitalised on. This can be a significant European **added value**, **European dimension** too. The fact that Portuguese inclusion of renewables into the electricity sector is over 50%, 4th highest

in the EU, after Austria, Sweden and Denmark (and over twice as high as this ratio in Hungary, Poland, or Slovakia) or Portuguese excellence of Portugal in algae production is largely unknown in Central Europe, due to the low level of understanding of Portuguese strengths in the Green Transition fields.

Business and social innovations working with a specialist firm

We also intend to engage an appropriate **crowdlending** firm (with **sustainability** projects **focus** and track record) that can assist Central-European entities in acquiring crowdfunding and potentially strengthen crowdfunding as a social and business innovation to finance sustainability, green transition projects in Central Europe. Ideally, the subcontractor also has experience in **aggregating small-scale energy efficiency projects** in similarly developed territories (to Central Europe) and **access EU funding** for citizen finance and energy efficiency project bundling activities.

Our team has such experience in ELENA, which focuses on larger project portfolios, we are interested specifically in Horizon PDA experience related to creating smaller portfolio, preferable in a country with similar GDP levels as Central European countries in the project. This could be another significant business and social innovation in Central Europe, beyond crowdfunding.

2.4 Consortium management and decision-making

Consortium management and decision-making (if applicable)

Explain the management structures and decision-making mechanisms within the consortium. Describe how decisions will be taken and how regular and effective communication will be ensured. Describe methods to ensure planning and control.

Note: *The concept (including organisational structure and decision-making mechanisms) must be adapted to the complexity and scale of the project.*

PROJECT MANAGEMENT STRUCTURES, DECISION-MAKING MECHANISMS, COMMUNICATIONS

Overall coordination is the responsibility of KSSENA, the Consortium leader. A Steering Committee (SC) will be established. It shall meet (online or offline) at least 4 times a year. It will be comprised of the representatives of the four consortium members leading the four work packages: KSSENA, EIHP, SCCI and Falcon-Vision.

There will be a project manager (PM) nominated by KSSENA, the consortium leader who will also be the Central Point of Contact (CPOC) with EISMEA, responsible for ensuring adequate, efficient regular communications, coordination with EISMEA. Direct contact between the contact points will ensure that a quick response is provided to the EC following any incoming requests. The Project Manager will store all relevant information in the (digital) management system, thus ensuring consistency and (shared) access to it by relevant team members. The Project Manager will be supported by a Project Administrator.

Each work package (WP) will have a leader. Within each WP, roles and contributions of each partner have been identified, and the corresponding resources allocated in detail (See detailed description of each WP and Workplan).

WP leaders are: WP 1: Niko Natek (KSSENA), WP2: Ivona Hulenic (EIHP), WP3: Valentina Kuzma (CCIS), WP4: Tamas Solymosi (FV). Their short CVs are in an Annex to Part B.

REPORTING, REGULAR CONTACT WITH THE COMMISSION

Progress reports will be prepared in line with contractual and project management expectations. Reports shall be prepared and delivered in high quality, on time, in line with the Grant Agreement. These reports will also provide also an overview of the implementation and an insight of key successes and challenges. Co-ordination meetings with the Commission will allow to monitor progress regularly, and to adjust the work program if needed.

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2.5 Project management, quality assurance and monitoring and evaluation strategy

Project management, quality assurance and monitoring and evaluation strategy

Describe the measures planned to ensure that the project implementation is of high quality and completed in time.

Describe the methods to ensure good quality, monitoring, planning and control.

Describe the evaluation methods and indicators (quantitative and qualitative) to monitor and verify the outreach and coverage of the activities and results (including unit of measurement, baseline and target values). The indicators proposed to measure progress should be relevant, realistic and measurable.

PROPOSED APPROACH: ORGANISATION AND MANAGEMENT

A right balance between a bottom-up, democratic program with multiple stakeholders, and a professional, efficient, result oriented project organisation is proposed.

Consortium members provide appropriate coverage, skills, networking, capacity building and policy resources as well as an in-depth understanding of EU matters and a broad European network outside the regions too. Consortium members bring complementary skills and knowledge. Responsibilities are clearly shared and agreed within the Consortium. There are regular progress meetings and other internal communications and control activities to identify and tackle issues, risks, and problems based on monitoring results, activities, documentation and stakeholder feedback. In terms of organisation and management, striving for effectiveness and efficiency, we keep the following objectives in our focus:

- **Standardised methodologies** applied for research activities and the preparation of certain specific types of outputs, the definition of **minimum content requirements** and **presentation guidelines** have an important role in ensuring uniform high-quality activities.
- **Clarity of processes and responsibilities:** Clear roles and responsibilities with appropriate capacities and motivation, well-defined accountability
- ***A central project management system*** based on a clear set of objectives, priorities and (measurable) performance indicators, supported by tools shall ensure overall focus to the strategic goals in everyday operations. This is needed to ensure the best use of resources.
- ***Delegated roles and responsibilities*** – in order to enhance reactivity and diminish co-ordination needs, each WP leader will bear full responsibility for the **implementation** of the central type of activities in their work-package activities and mandated to communicate with the relevant stakeholders.
- **Transparent, highly automatised processes enabling collaboration:** Carefully designed and well communicated, integrated operational processes, collaboration schemes, geared towards well-articulated overall goals
- **Effective communication:** Choosing the best adapted tools for communication and management for each target group. Leverage on existing information to target the right stakeholders with the right type of information.
- A **hierarchy of goals**, deriving individual task goals and priorities from overall project goals. These are introduced below.
- **Continuous improvement**: Regular review and adaptation of processes – based on continuous feedback from stakeholders.

HIERARCHY OF GOALS, PERFORMANCE INDICATORS

A clear set of goals and performance metrics are needed to ensure appropriate quality, effectiveness and efficiency of delivery. Goals and objectives of individual work packages need to be aligned with the overall strategic goals and performance indicators of the project. Specific S3 and I3 objectives and the objectives defined in the call are considered. Key objectives of I3 2b:

Call objectives	**Expected impact**
Complement support to the capacity building of less developed regions to enable interregional ecosystems to deliver concrete interregional innovation investments along the S3 priorities in EU value chains and capacity to participate in inter-regional partnerships with other regions	Improved business climate, innovation infrastructure and innovation environment, increased innovation capacity of the ecosystems. Assist public authorities and agencies to design evidence-based and targeted policy interventions in the long-term.
Build capacities for a successful participation in I3 calls, enhancing interregional cooperation. Deliver concrete potential interregional investments and related business and investment plans along the S3 priorities.	I3 Instrument related value chains & investment pipelines, competitive regional products and services identified, business cases ready to apply for the I3 Instrument calls, increased capacities of companies to participate in I3 Instrument projects.
Projects can also offer an added value when supporting regions with specific challenges, such as difficulties in retaining and attracting talents.	Provision of effective assistance to less developed regions with specific challenges or to outermost regions.

Key performance indicators (KPIs, analysed in 1.2) will be used to measure progress, will be reported. The coordinator will be in charge of monitoring the performance indicators set for all project activities. PPs will be responsible for providing required data for the monitoring.

QUALITY CONTROL MEASURES

Our key quality goals include customer satisfaction (external, internal), staff performance, efficiency and ongoing improvement. High quality delivery will be ensured by mobilising the right resources for the right objectives via the following:

1. **Capacity** – to ensure the competences required for reaching the objectives
2. **Ownership** – to make the dialogue owned by key stakeholders
3. **Alignment and coherence** – with existing tools, methods and relevant ongoing initiatives and leveraging outputs of various EU funded projects and organisations
4. **Provision of strategic insights and practical tools for further innovation**--leveraging upon existing knowledge and feedback of stakeholders, with special emphasis on the financial sector

Key consortium project targets having an impact on the output of the processes:

1. Reliability of output: delivering services that consistently meet or exceed the customer's expectations at lowest cost – this assumes an in depth understanding of customer expectations and needs as well as perceptions
2. Efficiency: optimally used resources to achieve objectives with a minimum in errors or iterations
3. Processes and workflows: designed to ensure reliable quality output without a duplication of efforts
4. Support processes: allows to produce and deliver with as little administrative red tape as possible

We will apply the Plan-Do-Check-Act (PDCA) cycle, which is also the basis for the ISO 9001 standard.

Risk assessment and management is an integral part of assuring quality. Options to address risks include avoiding risk, changing the likelihood or consequences, or sharing the risk. The project manager's responsibility includes communicating any issues that might be negatively affecting our performance, that could lead to customers not being satisfied or that, in general, might require the assistance of the management of consortium partners.

Our organization ensures that he project functions smoothly and achieves its goals. It ensures the availability of (human, physical and information) resources via planning and scheduling of resources to avoid bottlenecks and anticipate intensive periods and efficient communications among all parties.

Resources shall be planned on a monthly base for the next three months and on a quarterly base for later project periods. Human resources are identified in working days per staff member. Appropriate time records are kept and regular individual performance assessment is performed. Adequate ICT infrastructure is provided for staff members.

Communication aims at making the necessary information easily available to all parties that need it and when they need it. Appropriate communications ensure project quality to

- Work closely with internal, external partners to build schedules, coordinate discussions, communicate status, and manage expectations.
- Identify risks, and work with stakeholders to remove roadblocks.
- Define and implement regular, efficient, and effective tracking of projects for all stakeholders.
- Oversee and maintain community connections and respond to public interest.

Provide leadership in driving cross-functional integration in a matrix organization. Identify issues, trouble shoot and facilitate contingency planning, and decision-making.

When creating and updating documents, we ensure that the latest valid version is easily recognisable in terms of content; and date or version. Relevant project documents, including incoming or outgoing mails that are contractually relevant and meeting memos have to be copied into the project folder. We shall put special emphasis on the quality control of documents issued for consultation or other purposes.

Secure and structured archiving (structured storage of documentation after the end of a project) of all relevant documentation is not only an obligation but is also an essential element of quality management. Standardised filing and archiving facilitate the hand-over of projects to new people and any search for information. The filing system is arranged in a logical order which can be easily understood by others and individual documents can be retrieved with minimum effort, while the latest version of a document can easily be distinguished from older versions.

EVALUATION METHODS AND INDICATORS (QUANTITATIVE AND QUALITATIVE)

Certain key indicators to monitor and verify the outreach and coverage of the activities and results measure progress will be relevant, realistic and measurable. KPIs are listed in Point 1.2.

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3. COST EFFECTIVENESS AND FINANCIAL MANAGEMENT

3.1 Cost effectiveness and financial management

Cost effectiveness and financial management

Describe the measures adopted to ensure that the proposed results and objectives will be achieved in the most cost-effective way.

Indicate the arrangements adopted for the financial management of the project and, in particular, how the financial resources will be allocated and managed within the consortium.

⚠ *Do NOT compare and justify the costs of each work package, but summarize briefly why your budget is cost effective.*

COST EFFECTIVENESS

An optimal balance of value-added activities, impact and costs results in a cost-effective project. This is achieved by multiple means:

1. An in-depth analysis defining a **cost-effective work program** delivering high value-added activities, useful outputs and lasting impact
2. Optimal **resource planning** ensuring a project partnerships and experts bringing complementary skills, knowledge, networks, abilities, background to the project
3. A careful **division of work** in line with the specific background of the project partners – not everyone participates in every task (to the same extent)
4. **Well-defined**, useful **outputs** and deliverables produced by capable teams
5. Activities **tailored to regional needs** (not everything everywhere, not one size fits all)
6. A **moderate size consortium** resulting in less coordination (time, resources) need, more transparent workplan, clearer responsibilities is performance indicators, less parallel or low value-added activities
7. Careful analysis and proper **utilisation of existing results** (of prior and parallel EU projects, platforms, hubs, etc.) rather than recreating those results
8. A **delegation of proper**, qualified **experts, managers to the team** by the project partners with relevant background, experience, skills, leveraging these in the project
9. A **careful planning of travel and event costs**, utilising the selection of mostly neighbouring countries represented by regions in the project, avoiding air travel where possible, no five star hotels accepted as cost items, using internal existing events facilities where possible
10. Utilisation of **digital** communications, data management **opportunities** (e.g. digital twinning,

webinars, online platforms, digital databases

11. **Synergies** realised with ongoing projects, initiatives, upcoming events **in organising events**.
12. Definition of **appropriate performance measurement metrics** and KPIs.
13. **Standardised methodologies** for primary research (data management) and for creating certain outputs ensuring proper quality with optimal information processing (administrative) workload.
14. Beyond physical encounters, we will facilitate online communication, peer learning, teamwork of specific SMEs engaged - and motivated to collaborate - to ensure cost-effectiveness.
15. English language skills often represent a barrier among the target groups. Therefore, we plan to have adequate translation and interpretation to engage stakeholders, achieve strong impact and thereby cost efficiency. In order to lower costs, we also want to avoid hiring personnel needed only for organising occasional events or special, directly project related digital tasks. The latter may include digital marketing solutions for better business cases and consortia too, aiming for high quality I3 Instrument and other investment proposals. The costs of these activities are (where there is no available in-house capacity) among other costs.
16. In order to facilitate the engagement of innovative SMEs and other key innovation ecosystems stakeholders, a significant amount has been budgeted for cost of other goods, works and services a large part of which is for speaker, expert, stakeholder travel to enable a more effective engagement, mobilisation of the key target groups. There will be an appropriate control on how these external travel opportunities are allocated, considering potential impact, the cost-benefit ratio, risks and other key factors.

FINANCIAL MANAGEMENT – SUFFICIENT BUDGET FOR PROPER IMPLEMENTATION, BEST VALUE FOR MONEY

Sufficient budget for proper implementation is ensured while providing the best value for money. This is based on a careful design of activities, division of work, coordination and communication methods, harnessing digital solutions and tailoring activities to the needs and capabilities of regions.

Consortium partner budgets are allocated based on the content, nature and scope of their activities, deliverables, using a **bottom-up budgeting** approach. **Clear expectations** concerning responsibilities – for **well-defined tasks**, work packages **deliverables** – and contributions to given activities by various partners enable bottom-up budgeting.

Personnel costs represent the most important cost item, followed by travel and event costs.

Given the complex and innovative nature of the project, a high-ratio of senior experts is required for proper planning and implementation. Average **personnel costs** partly reflect the seniority mix of the teams of the various project partners.

Travel and event budgets consider geographical and travel realities, internal resources of project partners, catering, venue and organisation costs, potential synergies with other events, projects and the need for effective relationship building while utilising digital, environmentally friendly opportunities too. Certain travel and event related activity and cost standards are applied for budgeting and control. For instance, for instance while there shall be no air travel between Slovakia, Hungary, Slovenia and Croatia, air travel is required considering Portugal. No five-star hotels should be used. Digital communications opportunities should be fully utilised for recurring, regular communications and when possible, replacing polluting and expensive travel. Well-planned and managed events shall also facilitate appropriate budgeting and control.

Clear focus on certain relevant, **high-potential themes**, areas, domains and niches – in line with the objectives of the call - contributes to a cost-effective and high impact project, **best value for money**. The budget has been prepared in a way not to lower quality and hamper impact but at the same time ensure best value for money considering the objective of the call and KPIs.

In line with the call, 70% **prefinancing** is expected to be paid within 30 days **to the coordinator**, the balance being paid at the end of the project. It is understood that the final grant amount is calculated at the end of the project and if prefinancing is higher than the final grant amount, the coordinator will be asked to pay back the difference (recovery). One or more progress reports are required, not linked to payments. This system necessitates prudent financial management within the consortium.

There will be appropriate **financial planning, risk management and quality control** of **personnel costs** (linked to activities, project deliverables and KPIs**)** and **travel and subsistence costs**, which represent a significant part of the budget.

A documented methodology will be defined in the initial planning period linking activities, deliverables and KPIs met to eligible personnel costs. There will be a **peer review** of those deliverables that are reports by the work package leaders prior to these being accepted after quality is assured. Internal rules

will be agreed on **standard days** that can be charged related to the delivery of standardised types of events (e.g. webinar, standard representation) and on **standardised minimum event criteria** for these to be accepted. Human resource requirements of tailor-made events, activities shall be approved by the leader of the relevant work package (in which these are to be cost).

A **prior approval of** all expert **travel** and subsistence **costs** (of people not working for consortium members), any travel costs related to project meetings after the first project meeting and any travel costs of standard representations over EUR 300 cost /travel made by consortium members is needed from the **consortium leader**. Proposed, approved, planned and performed **events, travels** will be centrally (digitally) documented, analysed with a **monthly status review by the WP leaders**. Proper rules to ensure the quality of cost documentation by the project partners will be set up.

The coordinator will **disburse a part of the prefinancing received** to consortium members upon the acceptance of the consortium agreement and any other document prepared in the initial planning period, such as inception report defining tasks, procedures, expectations, etc. in more detail. A **part of the prefinancing will be withheld** by the coordinator to allocate it according to approved actual travel and subsistence cost and after meeting semi-annual projects plans of individual project partners. The coordinator will also ask information on any potential debts of project partners towards the EU and will discuss with them how they finance the 30% of total costs not covered by prefinancing. These steps will strengthen financial (risk) management and decrease the financial risks of the coordinator.

All partners organising **events** have to **look systematically for synergetic opportunities** considering relevant ongoing EU funded projects, initiatives, platforms, etc. as well as private events. Falcon-Vision will be the **central contact point** considering ongoing EU funded industry, sectoral projects and initiatives, hubs relevant for SME investment related activities, Delfy will be the same for European municipal activities. These organisations need to be consulted before any event involving any such collaboration. Back-to-back event organisation opportunities shall be explored to achieve optimal impact with optimal costs, reach relevant stakeholders who are often difficult to meet.

Special effort will be made to **collaborate with the other projects funded under the I3 2b call** in 2023 and other relevant I3 projects, such as the Highfive project focusing on the food sector in which one of our consortium members is a partner. This shall include among others consulting them in the planning period of the project to identify potential synergies and also regularly through the project to **deliver the best value for money for EASME on a (I3 2b) call level**. Our consortium members are part of several relevant ongoing bioeconomy projects synergies with which will also be sought.

We aim for a flexible approach enabling the utilisation of potential event and other synergies, opportunities to increase project impact identified during the project.

Concerning eligible daily subsistence allowances (DSA) and hotel prices, the limits in the relevant EU Financial Guidelines will be adhered to. We will consider using certain parts of the “Financial Management Toolkit for recipients of EU funds for external actions”.

Regular monitoring of performance indicators, stakeholder feedback and documentation, risk analysis supports the financial management of the project. Management by objectives will be performed.

General best practices will be applied in financial management areas like Internal Controls, Documentation, Filing and Record Keeping, Procurement, Asset Management, Payroll and Time Management, Cash and Bank Management, Accounting and Financial Reporting.

The consortium is responsible for keeping records on all the work done and the costs declared. Care shall be taken for amounts in financial statements to reconcile with amounts booked and actual costs incurred. Actual amounts spent will be declared, not estimate budgets. Costs incurred will be substantiated with supporting documents and only costs incurred within the eligibility period will be declared. Purchasing will be carried out at reasonable cost. There will be no subcontracting with related parties. There will be timesheets – in compliance with the requirements set in the grant agreement - to record the time worked on the project. Actual costs will be charged, not “billable hours”.

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4. IMPACT

4.1 Impact and ambition

Impact and ambition — Progress beyond the state-of-the-art

Define the short, medium and long-term effects of the project.

Who are the target groups? How will the target groups benefit concretely from the project and what would change for them?

Does the project aim to trigger change/innovation? If so, describe them and the degree of ambition (progress beyond the status quo/state-of-the-art).

SHORT, MEDIUM AND LONG-TERM EFFECTS

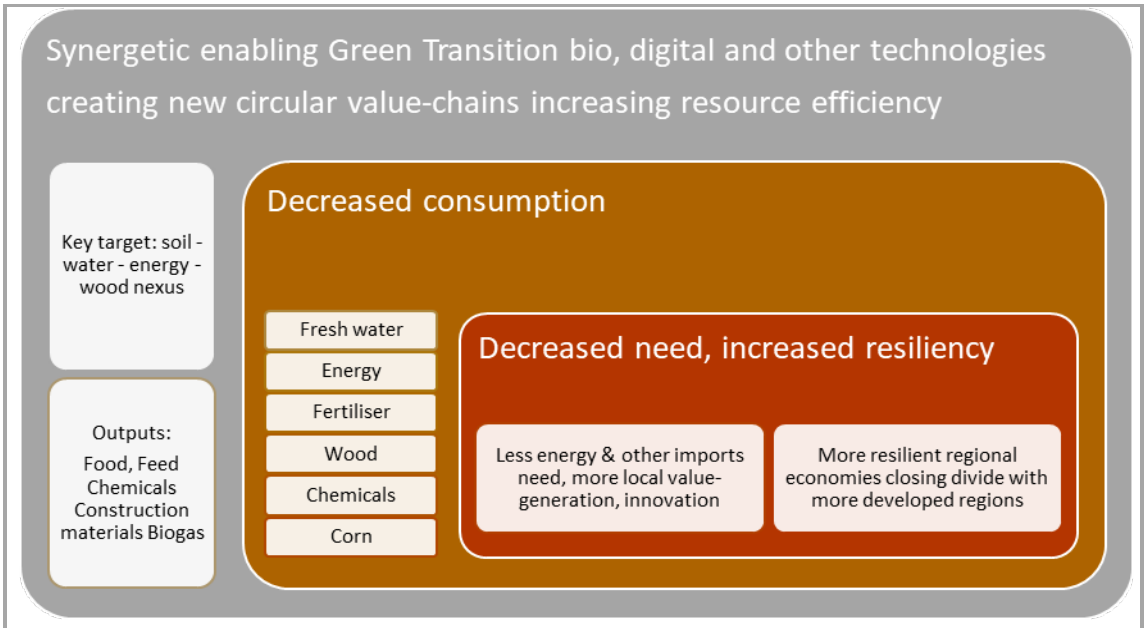
There will be increased maturity of I3 Instrument projects consortia to cooperate in the framework of globally competitive European value chains. Short-medium- and long-term impact achieved:

- In the **short-term** by the implementation of reliable and viable solutions. We ambition to have competitive **consortia ready to apply for I3 calls already in the second year of the project**.
- In the medium-term by creating new market opportunities and interregional cooperation.
- In the **long-term** by unlocking regional innovation potential, contributing to the European Green Deal, with positive economic, environmental, climate, social, health impact. Core activities and support to the capacity building of less developed regions shall also assist public authorities and agencies to design evidence-based and targeted **policy interventions** roadmaps, policy measures in the long-term. Longer term impact includes:
- Reinforced quadruple-helix innovation ecosystem interregional investments co-operation capacity, improved connection of innovation infrastructure, implemented support measures for innovation diffusion and investment identification, value chain participation
- Increased maturity of I3 Instrument projects consortia to cooperate in competitive value chains
- S3 based roadmaps in place contributing to European Strategic Innovation agendas

An appropriate dissemination strategy is needed for ensuring sustainability, long-term impact.

BENEFITS REALISED BY TARGET GROUPS AND CHANGES EXPERIENCED

Target groups	*Short-term benefits*	*Medium-long-term benefits*
SMEs, start-ups	New business, funding and partnership opportunities	Increased capacities, growth potential
EASME, EU bodies, programs providing innovation funding	Additional quality applicants	Increased interest from Central Europe
Innovation intermediaries, industry associations	Networking opportunities	Additional business or development opportunities
Regional innovation policy-making bodies and public authorities	Awareness of best practices potentially applicable	Implementation of new policies for more sustainability, security, wellbeing, social cohesion, jobs
Universities, RTOs	Improved SME links	Additional research and innovation opportunities
End-users, citizens		Healthier, lower cost, more secure products, stronger local socio-economic environment
Organisations, private persons providing private funding	New financing opportunities	New financing opportunities
Other relevant EU projects, initiatives, cluster, etc.	Synergies, uptake of their results	Synergies, uptake of Greet CE results



Commodity prices are often defined on a global or European level. Europe is a major net importer of (fossil) energy, various base chemicals and mass-manufactured industrial products. The significant increase in European energy and other prices is a **particularly big blow to less developed regions** as people, companies, authorities have to pay the same prices as elsewhere, from much less money available. Central government subsidies – most importantly for fossil energy – seem to be the easiest political way out, however these are not (financially and environmentally) sustainable in the medium term. This means that **demand for fossil energy and products with an extremely large volume of fossil energy** (or other natural resources) **embedded in them** (e.g. fertilisers) **have to be cut**. Two ways to achieve this are to decrease demand and produce environmentally friendly alternatives – in a truly circular fashion, not depleting natural resources. Facilitating these type of projects addresses key common challenges of the targeted Central European less developed regions. **Developing innovative regional circular economy systems is the only way out** – financially, environmentally, socially as well. **Facilitating this can be a key impact of the project.**

A special aspect of the above circular economy issue is that three of the less developed Central European regions represented in the project (by project partners) are partly **mountainous areas**, two of them covered partially by the Carpathian Mountains. These Romanian, Slovakian and Slovenian regions will be assisted to exchange views on **common** issues, **challenges** and solutions. This can enable peer-to-peer learning, policy development and the adaptation of best practices. High mountainous areas face certain similar challenges **due to geography and** the effects of **climate change** – for instance on the water cycle.

Policy impact requires the engagement of relevant institutions and stakeholders. Beyond abilities, networks of the consortium partners and associate partners, Greet CE may also use specialised consultants when needed.

We consider appointing a **Project Advisory Board** (PAB) to steer the project in the right direction using their expertise and networks potentially providing compensation of travel costs.

Five of the seven EU Member States are in the worst performing group (“Emerging Innovators”) **on the EU's Innovation Scoreboard** - all being below 70% of the average EU performance – are represented in the project. This shows the need and the room for improvement, impact. In its **“Innovators” evaluation category** that evaluates product and business process innovator SMEs, some countries represented in the project have the following value relative to the EU: Romania **5%,** Poland 41%, Slovakia 42%, Hungary 49%, Portugal 99%, Croatia **127%** and Slovenia **116%**. Differences show major potential for (policy, innovation ecosystems) improvement, impact.

Greet CE **addresses burning issues that are relevant all over Europe**. Business case **examples**:

- There is severe draught in France, Spain, Italy, Germany and other countries, with mandatory water saving measures introduced. Therefore, any innovative technologies, measures resulting decreasing water need – especially irrigation as it represents the majority of water consumption – are in great demand. We are aware for instance a scientifically (field) tested cost efficient Central European SME technology that uses no chemicals and increases yields (of various plants tested) typically by over 30% while decreasing water need by about 20%. The SME

lacks funds and capacity to commercialise it internationally. This type of firm can make significant impact when receiving I3 Instrument support.

- Exposure to chemical imports from China, decreasing soil fertility and major fertiliser manufacturing and imports problems upon the natural gas crisis. Wastewater sludge treatment and deposit is also an issue. A Central European company has commercially proven technology to manufacture a base chemical and soil improver from wastewater sludge. The EU imports about EUR 1 billion p.a. of this base chemical. Still, multinationals have little interest in this circular product due to their completely different nature and method of operation. In this case appropriate circular economy regulatory changes (for instance Eco-label for household chemicals) and EU funding support could make a significant difference on the EU level.
- Deforestation is becoming a major issue due to significantly increased use of wood for heating and power generation, various results of climate change including insect, water and heat issues and other reasons. There is technically proven opportunity to replace wood in certain applications with another type biomass that is environmentally friendly, water stress resistant, can be grown on poor quality soil at low cost. Potential purchasers are large firms that need large input quantities. Without social and business innovation supported by proper policy measures this is unlike to be available and this opportunity is unlikely to be utilised.
- Integrating renewable energy in the electricity grid is a key barrier to using more renewable electricity. Much more precise automatic prediction of demand at various points of the network is one of the prerequisites. A Central European SME developed and implemented a software at a national railway that has been able to decrease the difference between predicted and actual electricity consumption at the over 3,500 meters on the railway network to less than one third of the previous level. This does not only save much cost but assists the integration of solar and wind energy in the grid. The SME does not have the capacity to enter foreign markets, EU assistance, value-chain collaboration could change that.
- Rubber waste is a major environmental, circular economy issue. A Central European SME built a pilot plant that is able to produce chemical raw material from waste tyres. This material meets the quality requirements of one the largest European chemical companies that has been purchasing the output for years. With EU financial and technical assistance, the SME would have a good chance of upscaling, including entering other markets in Europe.

TRIGGERING CHANGE/INNOVATION, DEGREE OF AMBITION – INNOVATION ASPECTS

The project supports interregional portfolios of companies' innovation commercialisation investments at high technology readiness levels (TRL 6-9) reshaping EU interregional value chains. A unique feature of the financing approach is testing **crowdfunding** to promote these goals. We intend to assist in increasing the number and quality of I3 2a project proposals already in the **second year** of the project.

Efforts will be made to optimise the level of stakeholders' engagement, by not merely informing or consulting them, but to move beyond to **mutual learning, potential joint decisions**. Beyond website, social media, public speeches, emails, secondary market research this requires survey, meetings and other engagement tools, utilising inputs of other tasks of the project.

Greet CE will significantly foster organisational capacity to participate in future interregional innovation investment projects for instance by value chain analysis, identification of cooperating regions, business cases, companies, intermediaries, advisory services to selected high potential stakeholders.

One of the innovative aspects of Greet CE is to develop innovation links between Central European countries and Portugal. These relations are traditionally very weak, therefore there is significant potential of identifying major opportunities to capitalise on. Algae production is one of these. Portuguese firms are strong in this and there is a growing interest in Central Europe with some already flourishing SMEs.

Our **degree of ambition in numbers** are shown by the KPIs presented in Point 1.2 of the proposal.

Environmental, territorial and social impact

Explain the main social, territorial and environmental impacts of the project (if relevant).

Describe the measures proposed to reduce the environmental footprint of your project, for example through the use of green procurement, environmental management systems, etc.

SOCIAL, TERRITORIAL AND ENVIRONMENTAL IMPACTS

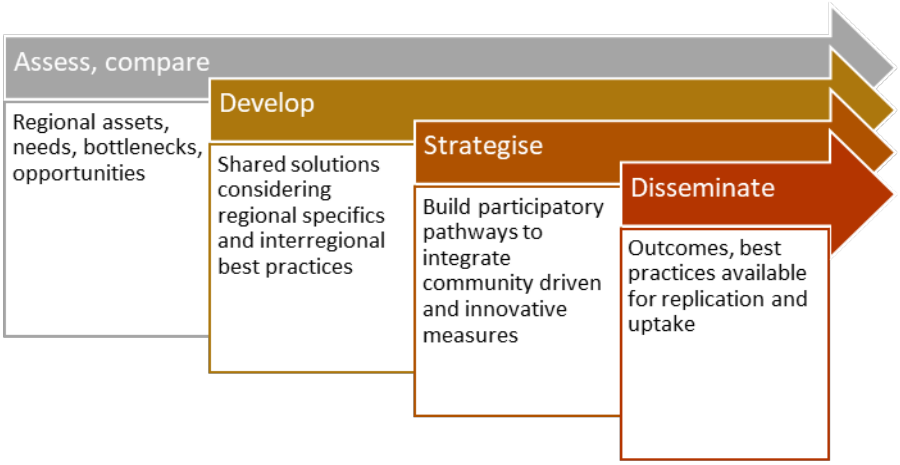
The project addresses specific bioeconomy, circular economy needs and challenges of one **outermost region** (Madeira) and **specific** multi-sectoral bioeconomy, soil fertility, water stress and biomass availability, deforestation, biowaste utilisation, energy and fertiliser supply, energy security and energy poverty, human talent attraction and retention **challenges**, human decapitalisation issues **of targeted Central European less developed regions**.

Regional quadruple helix debate on the social impacts of the circular economy transition will be promoted demonstrating the need for pro-active and consistent multi-level territorial governance to enhance sustainable and inclusive local development.

There is currently a concentration of bioeconomy, circular economy technological know-how, financial resources and capacities in areas that are forerunning the transition. This may further increase the divide with other European regions. However, this may change when the market matures and regional decision-makers realise untapped potentials of their territories. Increased awareness is expected to prioritise green transition on local policymakers' agendas and motivate SMEs to act and invest in product and process innovation. There is also a growing understanding that communities with higher degree of participation and cohesion are happier.

- Social impact: Inclusive development, decreasing energy poverty and malnutrition, generate local income in less developed regions, assist in preserving their natural values for a better quality of life.
- Territorial impact: Decrease the (innovation) gap between less developed and other regions, assist in tackling critical threats of climate change, geopolitical conflicts and depletion of natural resources.
- Environmental impact: Decrease of environmental and climate footprint of fossil energy, chemicals, other materials use, waste generation, deforestation

Interlinked steps will be taken to assure impact



ENVIRONMENTAL FOOTPRINT

We aim to **minimise the environmental impact of travel** related to all project activities, especially various events, such national financial roundtables, workshops, project consortium meetings and bilateral meetings with stakeholders. Therefore, we seek to

- Digitalise communication to optimise travel needs
- In the case of physical (offline) meetings, avoid air travel and promote train travel among cities in the target countries of the project. We nudge stakeholders not to use air travel on routes between Croatia, Slovakia, Slovenia, Romania, Trieste and Hungary.

For physical events, we aim to select premises demonstrating a high level of environmental consciousness. We seek to avoid beef and pork in event menus, avoid the use of plastics packaging, single use plastics and food imported from other continents.

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TARGET AUDIENCE(S)

Our primary target audiences are relevant regional stakeholders in the targeted countries and other stakeholders who can significantly contribute to achieving impact – for instance carefully selected European bodies and initiatives. The most important type of stakeholders targeted are:

- innovation intermediaries
- relevant clusters, platforms, associations
- qualified innovative SMEs in the target (Green Transition) sectors
- specialised investors
- policy makers in the targeted fields
- media, general public

COMMUNICATION AND DISSEMINATION ACTIVITIES AND CHANNELS

Communication activities will use both direct outreach and the media. This will allow maximising impact by disseminating information on the potential socio-economic benefits and on EU opportunities and mobilizing stakeholders through workshops and matchmaking events. Regional partners will have a key role in fine-tuning the regional / national communication strategy reflecting the characteristics and needs of the target groups in the respective region / country, as well as in facilitating the delivery of key messages in the national languages.

We select **communication channels** primarily to reach out to a selected professional target audience and enable effective, efficient and environmentally friendly communications and dissemination and an optimised and lasting impact.

We will **primarily** rely on **direct contacts and digital tools** – most importantly website and selected social media appropriate for reaching the targeted professional groups (primarily Twitter and LinkedIn), in our communication activities. We may also use (primarily digital) leaflets with infographics to convey key messages.

We will **also maintain press contacts** to achieve coverage primarily in **professional online publications**. Press relations will be aiming at building a long-term relationship with journalists and the media ensuring that they get quality, relevant and fault-proof materials that they can use for their own publications. We shall collaborate with relevant stakeholders to achieve optimal press coverage.

There will be a regularly updated user-friendly project **website** with a user-oriented design to publish project-related activities, publications, news and events. The website will have an online knowledge hub of best practices, policies, tools, project results and other relevant information. Outputs of other EU-funded projects will be built-on, providing visibility and ensuring synergies, complementarity and additionality. Public authorities can find practical information for supporting relevant to policy, regulatory and organisational actions. SMEs can find relevant information for accessing EU and private funding. The website will also contain best practice examples, showcases, fostering up taking and replication.

The **website** shall be responsive, optimized for search engines and visually attractive including various images or videos, updated regularly. Basic sections include project description, consortium presentation, news and contact section. We will make sure not to publish any confidential information. We will maintain the website for at least 4 years after the project ends.

Infographics will be used as these are very useful in order to communicate in a simple and appealing way. Beyond the website these can be used in documents and presentations too.

The homepage / start page (main page) of the website will be available in English and some Central European local languages (HR, SI, RO, SK) as well.

Social media, primarily Twitter and Linkedin will be used as an amplification channel to reach news audiences, interact and convey simple and informal messages. Both of these social media platforms have a lot of active users and allow for great flexibility in terms of the content posted. Twitter is for the larger public and is more informal than LinkedIn, that is more professional, stimulating best-practice transfers and expert engagement.

E-newsletters will be distributed mainly through e-mail to key stakeholders. These aim to summarize project developments and results and nurture stakeholder relationships. Interested stakeholders can subscribe to the newsletter online, through the project website.

Printed or digital – not public - documents may be sent primarily to regulatory bodies, with some printed material also used at events.

MONITORING AND EVALUATION OF COMMUNICATION AND DISSEMINATION ACTIVITIES AND RESULTS

Key methods and indicators to monitor and evaluate the outreach and coverage of the communication and dissemination activities and results are quantitative website, social media and event indicators and qualitative evaluation received from EU bodies and regional stakeholders. We will periodically review and evaluate indicators and take corrective action if needed.

WAYS TO ENSURE THE VISIBILITY OF EU FUNDING

All communication items shall have the EU emblem, sources of funds and disclaimer. Communication and promotional activities will comply with EU visibility requirements and expectations.

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4.3 Sustainability and continuation

Sustainability, long-term impact and continuation

Describe the follow-up of the project after the EU funding ends. How will the project impact be ensured and sustained?

What will need to be done? Which parts of the project should be continued or maintained? How will this be achieved? Which resources will be necessary to continue the project? How will the results be used?

Are there any possible synergies/complementarities with other (EU funded) activities that can build on the project results?

ACTIONS ENSURING AND SUSTAINING PROJECT IMPACT

The **dissemination** strategy for ensuring sustainability and long-term impact includes efforts to:

- **Integrate** certain results, activities in the future operation of some relevant consortium partners (KSSENA, CCIS, EIHP, BEC, GEA) and associate partners.
- Integrate, embed certain results, activities, goals in the regular activities, events of relevant permanent regional, national, interregional, European organisations, platforms, hubs and European policy initiatives (e.g. Concerted Action). Synergies can be realised based on **complementarity**.

Specific opportunities (illustrative):

- **Influence** standards, regulations and public procurement practices, strengthening informal national and regional professional networks.
- **Strengthen communities**, build on the self-interests of various relevant stakeholders and lowering the barriers to keep the momentum
- Offer proven **practical tools** already used in similar countries, regions. Promote digital communications.
- Have a **special section of the final event** of the project **reaching out to** relevant previous and

current projects, relevant initiatives, bodies, platforms, hubs, networks, associations in **Central-Europe**. This section could focus on a CE-wide exchange of best practices, solutions and peer-to-peer learning as well as professional network development.

PARTS OF THE PROJECT TO BE CONTINUED OR MAINTAINED, RESOURCE NEED AND ACTIONS

We will seek to ensure that national and regional dialogue among key stakeholders continues after the project realising synergies with entities, initiatives, platforms, associations, hubs, networks with complementary objectives.

Practical, easy-to-use tools, methods, approaches promoted in the project could also be continued to be up-scaled. Collected and published best practices, methods, other inputs in the capacity building process can be used elsewhere as well, for similar activities.

Publicly available policies resulting from project interventions can serve as references for legislative and regulatory bodies in other countries, regions and cities as well.

USING RESULTS, POSSIBLE SYNERGIES WITH OTHER ACTIVITIES THAT CAN BUILD ON THE PROJECT RESULTS

In 1.3, 4.2 and 4.3 we have listed illustrative European and other entities, activities, networks that have complementary interests and could be partners in utilising project results – e.g. business cases, policy measures, best practices - realising synergies.

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