







### 2nd CALL FOR PROJECT PROPOSALS INTERREG IPA CROSS-BORDER COOPERATION PROGRAMME "GREECE - REPUBLIC OF NORTH MACEDONIA 2014 - 2020

# Stimulating Green Employment: Across Border Educational and Technological Innovation Hot – Spots (G.EM.S.)



G.EM.S. Consortium	Country
University of Western Macedonia (UOWM) - Research Committee	Greece
Centre for Research & Technology Hellas (CERTH) / Chemical Process & Energy Resources Institute (CPERI)	Greece
Business Academy Smilevski Skopje (BAS)	R.N.M.
Regional Chamber Bitola (RCB)	R.N.M.









#### EXCELLENCE, STATE-OF-THE-ART AND OBJECTIVES

### 1.1. Proposal objectives and challenges

The project proposed herein, entitled "Stimulating Green Employment: Across Border Educational and Technological Innovation Hot – Spots / G.EM.S.", aims to help the participating regions move away from their current 'brown-based' low economic approach (low job quality, low environmental protection, low skills), towards a 'high' green-based sustainable economy (high skills, high productivity, high environmental protection).

The project, using innovative education/training methods, will be based on subject and procedural knowledge in order to improve local populations relationship with nature, familiarize them with the Sustainable Development Goals, as defined by the United Nations in 2015, in their local expressions and dimensions, and develop human capital in the cross border region in state-of-the art energy and energy applications.

A great challenge arises for the knowledge / research community on how to meet local population's needs. Under a holistic approach, the partners of GEMS will unite their complementary know-how in a well-organised and demanding project. The University of Western Macedonia (UOWM, Partner 1) will act as Lead Partner. It comprises of 7 Faculties and 23 Departments located in the five main cities of the Region of Western Macedonia and is an internationally research oriented university with highly qualified academic staff, extensive international links and vast experience in managing projects (International, National and European). The Centre for Research & Technology Hellas / Chemical Process & Energy Resources Institute (CERTH / CPERI, Partner 2) is one of the leading research centres in Greece and listed among the TOP-20 EU research institutions with the highest participation in competitive research grants. Business Academy Smilevski (BAS Academy, Partner 3) is a higher education institution with an accredited program of professional studies in business and strategic management, which has implemented a number of projects financed by USAID for Organizational Capacity Building and projects financed by World Bank for Development of Competencies of Teachers and Students in Vocational High Schools aimed at more efficient employment in the business sector in the period from 2013 to 2019. The Regional Chamber of Bitola (RCB, Partner 4) is part of the Economic Chamber of the country which is the largest and oldest association of companies from R.N.M. With the experts of the member firms and in cooperation with the academic institutions, so far have been implemented a number of application projects to improve the performance of the member firms.

The suggested project will be best implemented under the IPA INTERREG CBC programme which gives the opportunity for a smooth cooperation and exchange of knowledge and experiences between Greece and R.N.M., in order to tackle two main challenges, i.e., **employment changes and skill requirements**. Meeting common needs and exploiting comparative advantages of the cross-border area, the proposed project will act as a vehicle for a smooth and just transition to the post-lignite period that both countries will have to face within the next years.

Moreover, ensuring the sustainability, durability and transferability of the main outputs delivered by GEMS, the training courses developed by the project, will be run by the Centre for Life Long Learning (KE.ΔI.BI.M., https://kedivim.UOWM.gr/) of UOWM for a period of at least three (3) years.

#### 1.2. State-of-the-art & Innovation

The European Union (EU) aims at achieving 32% of energy consumption from RES by 2030. Europe's energy transition is a challenge requiring a realistic energy policy and appropriate investment tools, especially if the twin goals of sustained and inclusive employment are to be met.

The **transition to a new national energy model** and the implications that this will have on the lignite based economy of the Region of Western Macedonia, Greece (and by extension, the Regional Unit of Florina), has been acknowledged and anticipated for years. As is well known, the Region supplies electricity mostly generated from locally mined lignite to the Greek interconnected system since 1960, acting for several decades as energy pillar for Greek economic growth. However, this one-dimensionality of the Region's economic model has left Western Macedonia extremely vulnerable to any decline of its lignite based electricity sector. The recently published National Strategy for Adaptation Measures to Climate Change (2019) has put the Region firmly on the post-lignite path.

The electric power production system in North Macedonia is very similar to that currently found in the Region of Western Macedonia, as its lignite burning thermal power plants produce 70 % of the country's electricity. As the Republic of North Macedonia has been on accession negotiations for becoming a member of the EU since 2009, the need to move towards a green energy system will become urgent in the near future.











The transition from high- to low-carbon production for both countries will <u>invariably bring structural shifts between and within occupations</u>, and will have profound implications on the life-cycle skills and training needs of future employees. Mainstreaming greening in employment and skills strategies requires strong partnerships between public, private and not-for-profit organisations to maximise innovation and to manage smoothly labour market transitions from brown to green energy and employment. It also requires national policy frameworks that are more conducive to the right outcomes on the ground. In this context, attention should be paid on education / training programmes that will allow educated graduates and future employers to develop the necessary mindset and skills for the switch to a green based economic model, in order to tackle the twin main challenges of changes in employment patterns and developing the green skills required for the transition of the regions into the 21st century.

#### 1.3. Scientific and/or social impact

The cross border area is plagued by unemployment and a deep, long-term economic crisis and despite producing educated scientists, the absence of job/career opportunities forces them to migrate away from the region. GEMS's holistic approach of the four basic pillars, i.e., *Education-Creativity-Action-Sustainability* means that the project will have a major socio-economic impact in the cross border region, as in addition to its environmental advantage, human resources training, the project's strategic target, will provide a significant contribution to economic development. More than 100 participants in both countries will be trained in cutting-edge technologies, providing them with the necessary 'green' high-skills and innovative vision. Thus, by giving graduates the necessary know-how, GEMS will turn them into competitive candidates in the job market, but also opens up their way of thinking to create job opportunities for self-employment.

There is a great need, and also a great challenge, to optimize graduates' skills in a level that they can be ready to influence policy makers in crucial issues concerning sustainability and circular economy advantages. The development of Technological and Innovation Hot-Spots is of prime importance as it will contribute to the creation of new jobs (by providing at least 15 individuals with indirect financial support for their start-up innovative business), and thus, stem the flow of migration.

#### 2. METHODOLOGY AND IMPLEMENTATION

#### 2.1. Project Methodology

The project is expected to educate, train and develop the human capital in sustainable development in the cross border region. In order to achieve this, GEMS will be developed in **five key Work Packages (WPs)**, with each including several Actions. **WP1-WP2 are focused on the successful management of the project and the wide dissemination** of its results while WPs 3-5 present the main activities through which GEMS's objectives will be implemented.

WP3 ("Providing the Tools") will enhance the employment opportunities of at least 100 educated graduates, training them on cutting edge green technologies. Blended, innovative educational approaches such as cooperative workshops, focus groups, world café technics, fishbowl discussions and jigsaw groupworking will be employed to encourage the participants to think critically and come up with creative solutions to real cross-border problems. Moreover, all participants will be trained at using educational software tools in order to combine theory and simulation work.

WP4 ("Realising a Green Economy Future") will supply the trainees with the appropriate tools so as to conduct a full evaluation of the technologies studied in WP3. Specifically, the trainees will investigate successful circular economy case studies providing input for Cradle-to-Cradle LCA and identify the technological innovations, taking into account socio-economic factors. A comparative, in-depth study will give an insight into "which technology, in which area, for what purpose" is the most efficient and sustainable process for the cross-border region proposing real solutions. SWOT Analysis in addition to PEST and PESTLE analyses will be key tools that will help the trainees develop full awareness of all the factors involved in making a business decision. Sharing know-how and giving opportunities for an accurate and deep intuitive understanding of cutting-edge techniques, trainees will be able to identify not only the weaknesses and threats of an action plan, but also the strengths and opportunities it makes possible. All these analyses will set the basis for the development of innovative start-ups.

**WP5** ("Creating Green Employment") will create Innovation and Technological Hot – Spots (related to the Green Energy and Circular Economy concepts), in both participating regions. These hot-spots will also serve as working prototypes, demonstrating the feasibility of the studied green technologies. Moreover, at least 15 highly educated graduates will be provided with office space to start their own businesses, spanning the theory-practice gap. In Greece, a











business incubator capable of hosting up to ten (10) newly created highly innovative firms will be created at the campus of UOWM in Florina. The incubator will be open to both trainees and other applicants. Sole responsibility for the acceptance of entry applications will rest with the PSG. The accepted businesses will be provided with up to  $20m^2$  of office space which will be rent and utilities (electricity, water, internet) free for a period of up to three (3) years. In the Republic of North Macedonia (RNM), BAS will provide consulting and training support as needed in a business incubator that will be housed in an equipped room of 34 m². According to the mirror approach, the solutions developed in Greece will be reflected in a particular scope and form in RNM and vice versa.

Moreover, employment opportunities will be enhanced through the creation of a business hub (BAS and RCB) that will act as a vehicle for the cross-border region's move towards a low carbon economy. An information hot spot will be created in the facilities of both regions to enhance the consortium's networking capabilities. In order to match the needs of potential employers with the trainees a database of potential employers will be created for the cross-border regions by mapping the active economic entities, aiming to engage social and commercial partners to the adaptation of the transfer from classical to green energy production systems, as well as a business forum with the aim of exchanging experiences and developing their capacities for the post-lignite period. In addition, CERTH will create a green jobs platform (liaison office). This action will be an effort of combination, transformation and rationalization of the training courses concerning graduates career and connection with the labour market.

#### 2.2. Work Plan – Deliverables - Milestones

G.EM.S. project will be developed in five (5) Work Packages (WPs) and each one includes several Actions. Three (3) of the WPs relate to the development activities of GEMS objectives, while the other two (2) concern the management of the project and the dissemination of the results, as discussed in the following chapter. The Gantt Chart of all individual actions is also shown below.

#### G.EM.S. Gantt Chart

G.EM.S.	MONTH	DURATION	( <u>M</u> )	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10	M11	M12	M13	M14	M15	M16	M17	M18
WORK PACKAG	ES <sup>∑</sup>	na										<b>•</b> [	)elive	rables			✓	Mil	eston	es	
WP 1. Management and Coordination	1	l 1	.8	✓		$\checkmark$			✓			✓			✓			$\checkmark$			✓
D1.1 Preparation Activities	0	)	0																		
D1.2 Project Management and Coord	ination 1	1	8	-																	
D1.3 Quality Assurance / Quality Con	trol 1	1	8																		$\Diamond$
D1.4 Audit Costs	1	1	8						<b>•</b>				<b>•</b>				<b>\( \)</b>				<b>•</b>
WP 2. Dissemination and Exploitation	1	l 1	.8																		<b>✓</b>
D2.1 Communication and Disseminat	ion Plan 1	L	3			<b>*</b>															
D2.2 Trilingual Website Development	1	1	8																		
D2.3 Trilingual Communication Mater	ial 3	3 1	6				-														
D2.4 Info Days	3	3	4																		
D2.5 Conferences	16	5	3																		<b>\</b>
WP 3. Providing the Tools	1	l 1	.6						✓												
D3.1 Green Energy Educational Mate	rials 1	L	6						<b>•</b>												
D3.2 Circular Economy Educational N	laterials 1	L	6						$\diamond$												
D3.3 Green Management Educationa	l Materials 1	L	6						$\diamond$												
D3.4 Training Deliverance	1	1 1	6																<b>•</b>		
WP 4. Realising a Green Economy Futu	ire 6	5 1	.6																✓		
D4.1 Successful Case Studies	6	5	6																		
D4.2 Cradle-to-Cradle Life Cycle Analy	sis 7	7	6																		
D4.3 SWOT / PEST / PESTLE Analyses	- Business Plans 8	3	6																		
D4.4 Best Green Employment Practic	es 9	9	6																		
D4.5 Guide for Green Entrepreneush	ip 10	)	7																<b></b>		
WP 5. Creating Green Employment	6	5 1	.8																		$\checkmark$
D5.1 Green Energy Technological Hot		5 1	3																		
D5.2 Circular Economy Technological	Hot - Spot 6	5 1	3																		
D5.3 Information Hot - Spots	$\epsilon$	5 1	3																		
D5.4 Incubators	6	5 1	3	Ĭ																	











WP Number: 1	WP Title: Management	WP Title: Management and Coordination			
Starting Month: 01	<b>Ending Month:</b> 18	Lead: UOWM, Participants: CERTH, BAS Academy, RCB			

**Objectives:** The objective of this WP is to ensure that the project will meet its stated aims and objectives by providing a systemic management structure for the overall administrative, financial and legal management of the project, and the different technological/scientific tasks that have been assigned to the participants. The project's coordinator (**Prof E. Dimitriadou, UOWM**) combines significant scientific experience in the proposal's thematic area with experience as participant and coordinator in both national and European projects. She will be assisted by the **Project Steering Group** (**PSG**), which will be set up as a joint executive Board and will <u>include the Principal Investigators (PI's) of each participating organization</u>. The PSG will be responsible for the executive Science & Technology (S&T) management, as well as, for the decision-making and conflict resolution procedures. <u>Meetings of the PSG will be organised on a trimonthly basis</u>. In particular:

**Project Coordinator:** The Project Coordinator acts as chairwoman of the Project Steering Group (PSG). She manages the project on a day by day basis, and she is the contact point for all project related matters, both internal and external. The key responsibilities of the Project Coordinator can be summarized as follows:

- Act as the intermediary between all participants and the Managing Authority;
- Establish the contracts with all organizations involved;
- Monitor and control the project's progress and inform the PSG about deviations;
- Establish and operate the project secretariat;
- Update the project's web site, the contractors' address lists, etc.;
- Register and central deposit of all the documents prepared under the GEMS project;
- Prepare and submit the contractually required periodic activity and financial reports and supplementary reports as far as necessary;
- Prepare the annual management report of the PSG with the contributions on the project activities from the responsible Work Package (WP) Leaders;
- Prepare the Consortium Agreement which will regulate the internal organization and management of the consortium; Act as a focal point for all kinds of external and internal requests.

**Project Steering Group (PSG):** The Project Steering Group (PSG) has been set up as a **Joint Executive Board**, and will be responsible for the **Science & Technology (S&T) management**, as well as, for the decision-making and conflict resolution procedures. The PSG consists of the Project Coordinator the Principal Investigators (PI's) of each participating organization. The PSG will meet on a three-month basis (seven meetings in total), alternating locations between the consortium's members. Exceptionally, in the case of non-availability, the members of the PSG can appoint replacements to participate in the PSG meetings. The PSG, as the kernel of the GEMS management and the **principle decision-making body of the project**, will control the working programme, and if necessary take actions to remediate a problem. The responsibilities of the PSG include:

- Monitoring and review progress, resource allocation and costs of research activities, initiation of actions in case of failure of individual contractors;
- Review and establishment of measures of success;
- Review of the contributions to the annual management report of the PSG;
- Acceptance of new partners as well as exclusion of partners;
- Schedule meetings of all or groups of partners for supporting the effective conduct of the work programme, in particular ensuring appropriate participation from relevant institutions and the preparation of agendas and minutes in accordance with the procedures specified for the project;
- Review and approve the contractually required reports;
- Resolve issues referred to the PSG by the partners.

As far as the decision-making and conflict resolution procedures, the PSG will not deliberate and decide validly unless a qualified majority (80%) of their respective members is present or represented (quorum). **Decisions are expected to be taken by consensus**. If such a consensus cannot be reached, decisions will be taken by a majority vote. In the event of tie, the vote of the Project Coordinator will be the decisive one. In general, it is expected that possible conflicts will be solved bilaterally within the WPs, where they may emerge. In the exceptional case that conflicts cannot be solved in this











way, the PSG may be called to make a final binding decision, if necessary, by voting. All pending conflicts will be solved within reasonable time frames (within 20 working days).

**Project meetings:** Project meetings will alternate between Florina and Bitola, as follows: Two (2) days kick off meeting in Florina (M01), One (1) day meeting in Bitola (Month 03), One (1) day meeting in Florina (Month 06), One (1) day meeting in Bitola (Month 09), One (1) day meeting in Florina (Month 12), One (1) day meeting in Bitola (Month 15), Two (2) days final meeting in Florina.

**Quality Assurance Plan**: GEMS has placed particular emphasis on quality assurance (QA) / quality control (QC) procedures. These procedures will be integrated in deliverable 1.2, based on the following concepts: quality requirements of the project; planning and control; organizational structure; quality control of regular deliverables; quality control of key deliverables (key DLV); quality control of communication materials; quality control of the project. To assure that GEMS QA/QC procedures will remain robust throughout the course of the project, an independent, external expert will carry out their development and monitoring. Moreover, specific instructions related to quality control will also be included in the Project's Management Guide.

**Milestones/deliverables:** Please see Tables 1 & 2 below, where Deliverables and Milestones are presented in a compact manner.

WP Number: 2	WP Title: Dissemination	WP Title: Dissemination and exploitation			
Starting Month: 01	Ending Month: 18	Lead: UOWM, Participants: CERTH, BAS Academy, RCB			

**Objectives:** The objective of WP2 is to provide a well-designed communication strategy which covers all dissemination actions via a strong communication plan, an instrument of activating interest, with a clear definition of targets and key messages; a crucial strategic action since that it will incorporate the vision, needs and synergies captured during the project. The use of technology, internet and social media will spread GEMS targets and outputs to a wide audience, in addition with the dissemination of results by publishing in recognized scientific journals, participating to relevant international conferences, workshops etc., will proceed continuous feedback in the context of extrovert communication of the research effort at high international requirements. A dynamic, tri-lingual website (Greek, Macedonian and English), will be developed providing updates of the project, most relevant news and results. Continuous feedback will be provided in the context of extrovert communication of the research effort at high international requirements. Two (2) information events (each for 2 days) will be organized in Florina and Bitola for the publication of the results to the stakeholders. The aim for increased public awareness on the activities and the achievements of the project will be ensured through the development of an impact oriented public communication strategy, and through the intensive distribution of project contents to online information multipliers, the press, dedicated renewable energy/circular economy/environmental awareness/sustainability portals and social media.

Communication and Dissemination Strategy (M01 – M18): A detailed and agile Communication and Dissemination (C&D) plan will be developed at the beginning of the project (M03), being periodically updated and deployed along the project life cycle. The different updates of the Plan will include the activities already developed in the project according to the previous releases, as well as the foreseen ones planned for the next period. The plan will identify: WHO (target audiences) will receive WHAT (key messages), HOW (communication channels) and WHEN (implementation and schedule).

Web presence: Website & Social Media (M01 – M18): The development of a dynamic project website linking all generated knowledge is essential to disseminate & communicate the project results reaching as many people as possible. The initial design of the webpage will be made by an external expert and will be submitted for approval to the GEMS PSG. The website will be operational from the beginning of the project (M03) at Greek. Macedonian and English. It will be the main communication tool for the project, where all the dissemination materials will be published in a timely manner. The website will be an interactive environment that will give access to all the publishable developments of GEMS, including videos, deliverables and useful information to maintain the targeted audience informed along the whole project life, the status of the project and its final results. It will also include highlighted links.











In addition, a social media strategy will be developed to assess specific social networks to exploit for the project, such as Twitter, Facebook and LinkedIn; social media which are increasingly important and can be a useful tool to reach some target groups like general public. Personal accounts of the research team will also be used to increase outreach.

Communication Activities (M04 - M18): This task aims at increasing awareness, acceptance and replication through dedicated tools supporting knowledge transfer towards all stakeholders. The different dissemination formats will also support the project's sustainability beyond its end. They include:

- Publications in scientific journals and conferences -workshops proceedings
- Public deliverables will be widely disseminated at national / EU / global level. Each deliverable will be introduced by a short abstract focusing on the key results and the conclusions
- Project brochures: a first brochure focusing on the project objectives and expected impacts will be produced in M06. A second dissemination oriented brochure focusing on GEMS results will be produced at the end of the project (M18). The brochures will be widely distributed during workshops and events.
- Posters and banner: Two (2) posters will be created in order to briefly show project's objectives (M06) and key results found at project's midterm (M12). At least one (1) banner with an impacting message will be created. It will serve to be placed in the front of stands or speakers table in conferences
- Two (2) information events (each for 2 days) will be organized in Florina and Bitola for the publication of the results to the stakeholders.

**Milestones/deliverables:** Please see Tables 1 & 2 below, where Deliverables and Milestones are presented in a compact manner.

WP Number: 3	WP Title: Providing the Tools			
Starting Month: 01	Ending Month: 16	Lead: UOWM, Participants: CERTH, BAS Academy		

Objectives: Focusing on cutting edge green technologies, the objective of this WP is to provide the trainees with the tools required in order to encourage them to think critically and come up with creative solutions to real cross-border problems. Blended, innovative training approaches will be implemented such as cooperative workshops, focus groups, world café technics, fishbowl discussions and jigsaw groupworking, integrating Science, Technology, Engineering, Arts and Mathematics (STEAM) through the prism on Responsible Research Innovation (RRI). All participants will also be trained at using educational software tools in order to combine theory and simulation work. **Trainees will be able to choose to follow between five (5) training courses (Actions 3.1 - 3.5). Each course will run for a total of 300 hours over a six-month period, which will be broken up as 150 hours of contact time (e.g. lectures) and 150 hours of home work. Additional actions (Action 3.6) are also envisaged. Ensuring the sustainability, durability and transferability of the main outputs delivered by GEMS, the training courses developed by the project will be run by the Centre for Life Long Learning (KE.ΔI.BI.M., https://kedivim.UOWM.gr/) of UOWM for a period of at least three (3) years.** 

Action 3.1. RES Electricity Production for a Post-Lignite Future (M01 – M16): Courses will focus on the following topics: (i) Solar photovoltaics, (ii) Wind power, (iii) Solar water heating, (iv) Combined Heat and Power (CHP), (v) Biomass and (vi) Hydropower, (vii) Geothermal energy, (viii) Heating pumps (ix) Fuel cells - Hydrogen, (xi) Software training: Aspen Plus for RES, (xi) Critical thinking, (xii) Scientific writing.

Action 3.2. Green Mobility and Transport (M01 – M16): Courses will focus on: (i) Electric vehicles, (ii) Hydrogen vehicles, (iii) Energy storage, (iv) Bio-Energy with CO<sub>2</sub> capture and storage, (v) Software training: Dymola for green mobility, (vi) Critical thinking, (vii) Scientific writing.

Action 3.3. Smart Buildings (M01 – M16): Courses will focus on: (i) Building Management Systems (BMS), (ii) Automations / Sensors, (iii) Recycled and reused grey waters. (iv) Software training: Autodesk Revit for smart buildings, (v) Critical thinking, (vi) Scientific writing.

Action 3.4. Circular Economy (M01 – M16): Courses will focus on: (i) Waste management – Composting and particularly on Innovative molecular technologies for microbiota estimation helpful in anaerobic digestion, (ii)











Recycling - Green manufacturing methods (3d printing of wildlife flora and fauna), (iii) Green city / roof, botanical gardens, Eco-cultivation, (iv) Estimation of carbon footprint in agricultural products (v) Aquaponics (simultaneous production of vegetables and fish in an autonomous system), (vi) Software training: SimaPro for circular economy, (vii) Critical thinking, (viii) Scientific writing.

Action 3.5. Strategic Environmental Management (M01 – M16): Courses will focus on: (i) Strategic environmental management (European legislation, environmental management system), (ii) Strategic alignment between organization and its environment (strategic plan, strategic formulation and implementation), (iii) Strategic management as an ongoing process for sustainable development (including not only team of the organizations, but also their stakeholders, strategic environmental management at state, regional and company level).

Action 3.6. Entrepreneurship, innovation and Intrapreneurship (M01 – M16): To enhance the employment opportunities of educated graduates, Business Academy Smilevski will train 15 - 20 unemployed individuals to develop their individual entrepreneurship and start-up capacities. Five of them will be selected and be included in the next step business incubator support for business plan preparation for innovative firms in green energy. Entrepreneurship is NOT just about start-ups, it's also about internal innovation at larger organizations. Pilot selected companies will receive training for intrapreneuership and innovation linked with green energy and business opportunities in renewable energy. Five of them will receive consulting support for application development to the Fund for Innovations and Technology Development and IPARD for Elaborates on renewable energy sources.

**Milestones/deliverables:** Please see Tables 1 & 2 below, where Deliverables and Milestones are presented in a compact manner.

WP Number: 4	WP Title: Realizing a G	WP Title: Realizing a Green Economy Future				
Starting Month: 06	Ending Month: 16	Lead: CERTH, Participants: UOWM, BAS Academy, RCB				

**Objectives:** WP 4 **will continue and complete the work** undertaken at WP3. Specifically, at WP4, the trainees will be required to apply cradle-to-cradle life-cycle techniques, ISO 14044 standards and business analysis tools, so to perform a full evaluation of the technologies studied in WP3 and to identify the most promising systems to be implemented in the cross-border area. To augment the learning experience, groups will interact to each other by presenting their own demo models/projects. **Trainees will be able to choose to follow between three (3) training courses (Actions 4.1 - 4.3). Each course will run for a total of 100 hours over a two-month period, which will be broken up as 50 hours of contact time (e.g., lectures) and 50 hours of home work. Additional actions (Action 4.5 & Action 4.6) are also envisaged.** 

Action 4.1. Successful Case Studies (M06 – M11): Experts from both UOWM and CERTH will investigate successful National and European case studies best suited to the cross-border region while supporting the trainees and providing them with all the necessary tools in order to conduct comparative studies on the topics of: a) RES Electricity Production for a Post-Lignite Future, b) Green Mobility and Transport, c) Smart Buildings and d) Circular Economy.

Action 4.2. Cradle-to-Cradle Life Cycle Analysis (M07 – M12): CERTH's experts will conduct one (1) LCA/LCCs study for the most promising green technologies in the cross-border region in terms of circular economy. This study will provide the trainees with all the necessary input in order to conduct a comparative, in-depth study for "which technology, in which area, for what purpose?" is the most efficient and sustainable process in terms of circular bioeconomy.

Action 4.3. SWOT / PEST / PESTLE Analyses - Business Plans (M08 – M13): SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats) in addition to PEST (Political, Economic, Social and Technological) and PESTLE analyses (two more factors: Legal and Environmental) will be the key tools to help trainees develop a full awareness of all the factors involved in making a business decision. Sharing know-how and giving opportunities for an accurate and deep intuitive understanding of cutting-edge techniques, trainees will be able to identify not only the weaknesses and threats of an action plan, but also the strengths and opportunities it makes possible. All these analyses will set the basis for the development of innovative start-ups. BAS's and RCB's staff will preparing SWOT / PEST / PESTLE Analyses - Business Plans for the cross-border region, while supporting the trainees and providing them with











all the necessary tools in order to conduct SWOT / PEST / PESTLE Analyses and prepare of <u>complete 10 Business</u> <u>Plans for the cross-border region.</u>

Action 4.4 Best Green Employment Practices (M09 – M14): A study for the best green employment practices in creating and executing a green-collar job training program, as well as important challenges to learn from when establishing a new program will be conducting by the technical staff of CERTH and BAS for both regions. Moreover, BAS will prepare a joint plan with the activities that will be realized by the external expert, which will coordinate all stakeholders. An external expert's training of 200 participants (companies, startups, SMEs) for financial facilitating will take place. As a result, five (5) companies will be supported with the development of applications document package for green loan, five (5) companies for Innovation and technology development and co-financing five (5) companies for green energies investments - programs for IPARD. RCB will also develop:

- ✓ Communication and Dissemination Plan for External expert for green employment plan development for companies, startups, SMEs.
- ✓ Internal systems for job positioning incorporating environmental techniques and technologies (analysis of the European legislation on environmental issues, with particular attention to environmental impacts, IPPC, SEA), in two (2) chamber member companies.
- ✓ Redesign of existing internal systems for job positioning incorporating environmental techniques and technologies (analysis of the European legislation on environmental issues, with particular attention to environmental impacts, IPPC, SEA), in two (2) chamber member companies.

Action 4.5 Guide for Green Entrepreneurship (M09 – M14): CERTH's and BAS's experts will design a guide in order to help prospective entrepreneurs develop green business ideas and assist other potential green entrepreneurs in developing new, innovative green business ideas that will help both countries meet their environmental and developmental goals and ensure a clean, prosperous future. In addition, RCB will develop guidelines for companies with analysis of regulation obligations for green energies and ecology and navigation of financial facilitation of investments in ecology protection and green energies (PART-1 Regulation/policy guidelines). RCB will also develop guidelines for companies with analysis of regulation obligations for green energies and ecology and navigation of financial facilitation of investments in ecology protection and green energies (PART-2 Financial possibilities, subsidies and grants from national and EU programs and funds).

**Milestones/deliverables:** Please see Tables 1 & 2 below, where Deliverables and Milestones are presented in a compact manner.

WP Number: 5	WP Title: Creating Green Employment				
Starting Month: 06	Ending Month: 18	Lead: UOWM, Participants: CERTH, BAS Academy, RCB			

**Objectives:** Employment opportunities will be enhanced through the creation of business/innovation hubs (1 in each region) that will act as vehicles for the cross-border region's move towards a low carbon economy. An information hot spot will be created in the facilities of both regions to enhance the consortium's networking capabilities. The training experience of the participants will be augmented via the creation of Technological Hot – Spots related to the Green Energy and Circular Economy concepts. These Hot – Spots will serve as working prototypes that will demonstrate the feasibility of the technologies under consideration in WP3.

Action 5.1. Green Energy Technological Hot - Spot (M06 – M18): CERTH's experts in cooperation with the technical staff of UOWM will conduct an energy audit for each building of the campuses of UOWM in Florina (1. Social Sciences and Humanities (SSH) campus and 2. Agricultural Sciences (AS) campus) calculating the properties' energy rating using TEE KENAK and 4M-KENAK software by the energy inspector, in order to issue the Energy Performance Certificates. In addition, more interventions will be proposed aiming to produce autonomous buildings. Moreover, tender documents will be prepared for one (1) 20kW solar Photovoltaic (PV) sun shaded parking area, one (1) autonomous electric bicycle charging system with five (5) electric bicycles and 10 led outdoor lights (50W/light) that will be installed at the SSH campus. Moreover, a fixed bed reactor for the production of hydrogen and electricity using methane and / or biogas as feed will also be procured and installed as prototype in the SSH campus. In R.N.M., there will also be install according to all legislations of the country, one (1) 20kW photovoltaic plant on the roof of the BAS building in Bitola and electric bicycles (and the charging station) in the premises of RCB.











Action 5.2. Circular Economy Technological Hot - Spot (M06 – M18): This action includes the preparation of tender documents for: i) One (1) 20kW solar Photovoltaic (PV) sun shaded parking area, ii). One (1) autonomous electric bicycle charging system with five (5) electric bicycles, iii) 10 led outdoor lights (50W/light), iv) 400lt composting units, v) One (1) 3D-printer to create 3D models of animal and plant species for educational purposes in a biodiversity conservation point of view and vi) an aquaponics system for the combined rearing of red Tilapia and tomato or lettuce plants, for educational and exhibition purposes, that will be installed at the Agricultural Sciences (AS) campus of UOWM located in the city of Florina.

Action 5.3. Bridging the Gap: Information Hot - Spots (M06 - M18): In order to match the needs of potential employers with the trainees the following actions will be carried out:

- Creation of a green jobs platform (liaison office): This action will combine, transform and rationalize the training courses concerning graduates career and connections with the labour market. The platform will host a wide range of green job listings and will provide career resources and information on the green-jobs sector (Energy auditors, Waste-recycling operators, Smart-energy experts, etc.).
- Carrying out of field research with the purpose of analysing the importance and possibilities of green business in the current market and its future projections. This sub-action will help reveal the state of green business in the cross border area, using quantitative research methods (e.g., online questionnaires related to green business).
- A database of potential employers will be created for the cross-border region by mapping the active economic entities, aiming to engage social and commercial partners to the adaptation of the transfer from classical to green energy production systems.
- A business forum will be created with potential employers from both participating countries with the aim of exchanging experiences and developing their capacities for the post-lignite period. It is noted that this is foreseen as a permanent cross-border annual forum for the exchange of these experiences and new ideas, as well as a trilingual knowledge management portal generated by this project and its implementation.
- Two (2) annual forums will take for the exchange of experiences and new ideas one in Florina (AFF) and one (1) in Bitola (AFB).

#### Action 5.4. Connecting the Dots: Incubators

<u>Greece:</u> A business incubator capable of hosting up to <u>ten (10) newly created highly innovative firms</u> will be created at the SSH/UOWM campus. The incubator will be open to both trainees and other applicants. Sole responsibility for the acceptance of entry applications will rest with the PSG. The accepted businesses will be provided with up to 30m<sup>2</sup> of office space which will be rent free for a period of up to two (2) years.

<u>R.N.M.</u>: BAS will provide consulting and training support as needed in a business incubator that will be housed in an equipped room of  $34 \text{ m}^2$ .

According to the mirror approach, the solutions developed in Greece will be reflected in a particular scope and form in the R.N.M. and vice versa.

**Milestones/deliverables:** Please see Tables 1 & 2 below, where Deliverables and Milestones are presented in a compact manner.

#### 3. DELIVERABLES & MILESTONES

GEMS will meet its stated aims and objectives through a series of well thought, interlinked set of deliverables, which are presented in detail in Table 1. Moreover, the milestones set (Table 2) have been scheduled using the Program Evaluation and Review Technique (PERT) in order to determine the critical path for major schedule intervals in addition to the entire project.











Table 1. Deliverables List

Deliverable Number	Deliverable Name	Related WP	Type <sup>1</sup>	Dissemination Level <sup>2</sup>	<b>Due Date</b> (in months) <sup>3</sup>
D1.1	Preparation activities			n/a	
D1.2	Project Management and Coordination (includes Project's Management Guide, Project Meetings in Bitola, Project Meetings in Florina, Midterm Scientific Report, Final Scientific Report)	1	R	СО	03, 06, 09, 12, 15, 18
D1.3	Quality Assurance / Quality Control	1	R	CO	03, 18
D1.4	Audits	1	R	CO	18
D2.1	Communication and Dissemination Plan	2	R	PU	03
D2.2	Trilingual Website Development	2	DEC	PU	03
D2.3	Trilingual Communication Material	2	R, DEC	PU	04, 12, 18
D2.4	Info Days	2	Other	PU	04, 12
D2.5	Conferences	2	Other	PU	18
D3.1	Green Energy Educational Materials	3	R, DEM	PU	06
D3.2	Circular Economy Educational Materials	3	R, DEM	PU	06
D3.3	Green Management Educational Materials	3	R, DEM	PU	06
D3.4	Training Deliverance	3	DEM, DEC	PU	16
D4.1	Successful Case Studies	4	R	PU	11
D4.2	Cradle-to-Cradle Life Cycle Analysis	4	R	PU	12
D4.3	SWOT / PEST / PESTLE Analyses - Business Plans	4	R	PU	13
D4.4	Best Green Employment Practices	4	R	PU	14
D4.5	Guide for Green Entrepreneurship	4	R	PU	16
D5.1	D5.1 Green Energy Technological Hot - Spot		R	PU	18
D5.2	D5.2 Circular Economy Technological Hot - Spot		R	PU	18
D5.3	Information Hot - Spots	5	R	PU	18
D5.4	Incubators	5	R	PU	18

Notes: <sup>1</sup> **R** = Report, Document, **DEM** = Demonstrator, pilot, prototype, **DEC** = Websites, patents, videos etc., **Other**; <sup>2</sup> **PU** = PUBLIC, **CO** = CONFIDENTIAL (only Research Team and H.F.R.I.); <sup>3</sup> Month in which the deliverables will be available, month 01 marking the start date of the project, and all delivery dates being relative to this start date.

Table 2. Milestones List

Milestone Number	Milestone Name	Related WP	Due Date (in months)	Means of Verification
MS1	Kick-off Meeting	WP1	01	Minutes of meeting delivered
MS2	Project Meetings in Bitola and in Florina	WP1	03, 06, 09, 12, 15, 18	D1.2 delivered











MS3	Website and Promotional Material	WP2	03, 04, 12, 18	D2.2 - D2.3 delivered
MS4	Green Energy Educational Materials	WP3	06	D3.1 delivered
MS5	Circular Economy Educational Materials	WP3	06	D3.2 delivered
MS6	Green Management Educational Materials	WP3	06	D3.3 delivered
MS7	Training Deliverance	WP3	16	D3.4 delivered
MS8	Evaluation of Proposed Technologies by LCA/SWOT/PESTLE Analysis	WP4	16	D4.1 – D4.5 delivered
MS9	Green Energy Technological Hot - Spot	WP5	18	D5.1 delivered
MS10	Circular Economy Technological Hot - Spot	WP5	18	D5.2 delivered
MS11	Information Hot - Spots	WP5	18	D5.3 delivered
MS12	Incubators	WP5	18	D5.4 delivered
MS13	Final Report	WP1	18	All reports issued

 Table 3. Risks and Contingency Plans (Mitigation Measures)

<b>Description of risk</b> (level of likelihood: Low/Medium/High)	WPs involved	Proposed risk –Mitigation measures
Error in the Estimation of the Actions' Duration (L)	WP 1	Steering of the project will be frequent. Milestones, deliverables and the midterm Scientific Report have been placed for control.  If delays are detected, the PSG will encourage a review of actions procedure.
Delay of Providing Deliverables (L)	All WPs	The estimation of the duration of actions has been made under a well-designed planning. In case of delay, an adjustment on the actions duration will be made, aiming at accomplishing the time targets established in the project, asking for additional effort from the member that is responsible for the delay.
Quality and Delay of Research's Team Work (L)	All WPs	A management guide, as well as a quality action plan, will be prepared and included in the project's handbook and clearly define roles and responsibilities in order to avoid low quality, loss of direction or too overload actions. In case this is detected, the LB will come in contact with the Research Team to revise.
Weak internal Communication (L)	All WPs	Weak communication among members of the Research Team makes it difficult to disseminate and promote the results of the project. The LB will set teleconferences, when face-to-face meetings are not possible, to strengthen internal communication and to ensure the flow of information that will be then transformed into press releases, website content etc.
Unexpected and unpredictable issues with the equipment (M)	All WPs	The LB and the PSG have an extensive list of accurately accomplished projects. With a high commitment to quality and achievement of goals, their experience guarantees the immediate application of appropriate corrective measures.
Low Participation in Dissemination Activities (L)	WP2	Counting on the participation of members experienced in EU collaborative project dissemination activities, as well as on their high skills on mass media operation, make this risk low. In any case, causes will be evaluated and dissemination strategy will be restructured and re-evaluated asap
Lower Number of Visits to the Website than expected (L)	WP2	Wide dissemination of the URL will be planned and updated to avoid this risk, while it will be included in the brochures, poster(s) and banner(s). In addition, the website will be promoted at all events that members of the Research Team are going to attend, as well as in any face-to-face communications.









		UOWM and BAS, being well know education institutes will tap in into their
Low trainee	WP3 &	extensive alumni networks, contact other universities about making
participation (L)	WP4	appropriate announcements in order to stimulate interest amongst educated
		graduates.

#### 3.1. Research teams

**UOWM** will bring about the full weight of its Schools/Departments as it participates through the School of Humanities and Social Sciences, School of Fine Arts, School of Agriculture (all located in the city of Florina), but also its Chemical Engineering and Mechanical Engineering Departments. The Project Leader is Prof. C. Dimitriadou (Dean of the School Humanities) and the team also comprises of Prof. A. Spyrtou (Vice rector of UOWM), Prof. A. Melfou (Dean of School of Agriculture), Prof. M.A. Goula (Chemical Engineering Department), other permanent academic staff members, experienced post-docs, PhD students and technical and administrative staff. The team combines significant scientific experience in the proposal's thematic area with experience as participant and coordinator in both national and European projects.

CERTH's main department established at Thessaloniki, Central Macedonia is one of the leading Research Centers in Greece and listed among the TOP-20 EU research institutions with the highest participation in competitive research grants. CERTH participates through Dr P. Grammelis (Director of Research at the Chemical Process & Energy Resources Institute), experienced post-docs and other members of technical and administrative staff. The team combines significant scientific experience in the proposal's thematic area with experience as participant and coordinator in both national and European projects.

**BAS**, which has implemented a number of projects financed by USAID for Organizational Capacity Building and projects financed by World Bank for Development of Competencies of Teachers and Students in Vocational High Schools, participates through its Bitola Department. BAS participates through Prof. T. Soklevski, Prof. L. Stafanovska, Dr V. Stojanovska and other members of technical and administrative staff. The team combines significant scientific experience in the proposal's thematic area with experience as participant and coordinator in both national and European projects.

The **Economic chamber of Macedonia** participates through the Regional Chamber Bitola (RCB), an organization which combines all active local organization of businesses and companies in Bitola R.N.M. RCB participates through Mr Nikola Dimkovski who will be supported by other members of technical and administrative staff.

#### 4. BUDGET

It is kindly noted that a detailed description of each cost category can be found on the JoB file, submitted as a separate file, alongside the proposal and all necessary documents. The following Tables are simply providing an overview of costs envisioned for the GEMS project.

**Table 4.** GEMS costs per different category and WP

WPs	Staff Costs	Office and Administration	Travel and accommodation	External Expertise and Services	Equipment	Infrastructure and Works	Total
WP1	48,922.24€	2,958.73 €	6,165.90 €	18,880.00€	0.00 €	0.00 €	76,926.87 €
WP2	70,920.00 €	5,029.91 €	25,127.80 €	27,500.00€	2,200.00 €	0.00 €	130,777.71 €
WP3	160,658.75 €	11,654.11 €	4,250.00 €	17,040.00 €	109,404.00 €	0.00 €	303,006.86 €
WP4	103,325.54 €	6,053.02 €	0.00 €	48,000.00€	0.00 €	0.00 €	157,378.56 €
WP5	51,287.53 €	12,763.77 €	496.80 €	16,900.00€	246,410.00 €	4,000.00€	331,858.11 €
Total	435,114.07 €	38,459.54 €	36,040.50 €	128,320.00 €	358,014.00 €	4,000.00 €	999,948.11 €











Table 5. GEMS costs per different category and PP

PP	Staff Costs	Office and Administration	Travel and accommodation	External Expertise and Services	Equipment	Infrastructure and Works	Total
LB (PP1)	191,159.66 €	16,153.10 €	7,527.80 €	8,000.00€	193,140.00 €	4,000.00€	419,980.56 €
PP2	128,204.91 €	11,537.41 €	16,116.30 €	43,040.00 €	101,074.00€	0.00 €	299,972.62 €
PP3	74,200.00 €	6,921.33 €	6,303.20 €	49,280.00 €	43,250.00 €	0.00 €	179,954.53 €
PP4	41,549.50 €	3,847.71 €	6,093.20 €	28,000.00 €	20,550.00 €	0.00 €	100,040.41 €
Total	435,114.07 €	38,459.54 €	36,040.50 €	128,320.00 €	358,014.00 €	4,000.00 €	999,948.11 €

Table 6. GEMS costs per different category and country

Country	Staff Costs	Office and Administration	Travel and accommodation	External Expertise and Services	Equipment	Infrastructure and Works	Total
Greece	319,364.57 €	27,690.51 €	23,644.10 €	51,040.00 €	294,214.00 €	4,000.00 €	719,953.18 €
RNM	115,749.50 €	10,769.04 €	12,396.40 €	77,280.00 €	63,800.00€	0.00 €	279,994.94 €
Total	435,114.07 €	38,459.54 €	36,040.50 €	128,320.00 €	358,014.00 €	4,000.00 €	999,948.11 €

Table 7. GEMS costs per different country and WP

Country	WP1	WP2	WP3	WP4	WP5	Total
Greece	61,924.03 €	93,219.89 €	238,308.46 €	78,726.99 €	247,773.80 €	719,953.18 €
RNM	14,282.84 €	38,277.82 €	64,698.40 €	93,641.60 €	69,094.27 €	279,994.94 €
Total	76,206.87 €	131,497.71 €	303,006.86 €	172,368.59 €	316,868.08 €	999,948.11 €

**Table 7.** GEMS costs per PP and WP

PP	WP1	WP2	WP3	WP4	WP5	Total
LB (PP1)	40,352.51 €	47,722.80 €	82,658.32 €	23,616.32 €	225,630.60€	419,980.56 €
PP2	21,571.51 €	45,497.09 €	155,650.14€	55,110.67€	22,143.20 €	299,972.62 €
PP3	10,017.28 €	22,362.91 €	48,734.40 €	48,526.40€	50,313.54 €	179,954.53 €
PP4	4,265.56 €	15,914.91 €	15,964.00 €	45,115.20 €	18,780.74 €	100,040.41 €
Total	76,206.87 €	131,497.71 €	303,006.86 €	172,368.59 €	316,868.08 €	999,948.11 €







# СЕКРЕТАРИЈАТ ЗА ЕВРОПСКИ ПРАШАЊА

Постапувајќи по Барањето за регистрација на проект бр. 20-1566/1 од 12.10.2022 година, а согласно член 2 став 2 од "Правилникот за начинот на спроведување на даночното ослободување од плаќање на данок на додадена вредност на промет на добра и услуги наменети за реализација на проект кој е финансиран со парични средства добиени врз основа на договор за донација склучен помеѓу Република Северна Македонија и странски донатор во кој е предвидено дека со добиените парични средства нема да се плаќаат даноци" на Министерството за финансии, ("Службен Весник на РМ" бр.98/2014 од 30 јуни 2014 година) и член 3 став 1 од "Правилникот за начинот на спроведување на ослободување од плаќање на увозни давачки, данок на додадена вредност и акцизи при увоз на добра - стоки наменети за реализација на проект кој се финансира со парични средства добиени врз основа на договор за донација, склучен меѓу Република Северна Македонија и странски донатори, во кој договор е предвидено дека со добиените парични средства нема да се плаќаат увозни давачки, даноци и акцизи како и формата и содржината на Барањето за остварување на ослободувањето како и потребната документација" на Министерството за финансии ("Службен Весник на РСМ" бр. 312 од 29 декември 2020 година), како и согласно договорот помеѓу <u>Владата на Република</u> <u>Македонија</u> и <u>Европската Комисија</u> од <u>27.03.2015</u> година во кој стои одредбата дека донираните средства не можат да се користат за плаќање на јавни давачки во Република Северна Македонија и Упатството за регистрација на проекти во Централната база на податоци за странска помош на Владата на Република Северна Македонија бр.20-1231/1 од 01.07.2022 година, Секретаријатот за европски прашања на Владата на Република Северна Македонија ја издава следната

### ПОТВРДА

за регистрација на проект во Централната база на податоци за странска помош

Се потврдува се дека проектот со следниот назив и параметри:

- назив на македонски јазик: "Стимулирање на зелени вработувања: Клучни точки за прекугранични образовни и технолошки иновации (Г.ЕМ.С)"
- назив на англиски јазик: "Stimulations Greens Employment: Across Border Educational and Technological Innovation Hot Spots (G.EM.S)"
- вредноста на донацијата /странска помош: <u>267.915.19</u> евра
- датум на започнување: <u>06.09</u>.<u>2022</u> година
- датум на завршување: <u>15.12.2023</u> година
- донација од: Европска Комисија
- име на спроведувачот (имплементатор) на проектот:
  - Research Committee (ELKE) of the University of Western Macedonia (UoWM) -Greece



### Влада на Република Северна Македонија СЕКРЕТАРИЈАТ ЗА ЕВРОПСКИ ПРАШАЊА

- 2) Бизнис Академија БАС Скопје
- Стопанска Комора на Северна Македонија Регионална комора со седиште во Битола
- име на одговорно лице за реализација на проектот: Тони Соклевски Проект менаџер
  - Бизнис Академија БАС Скопје
- краен корисник:
  - 1) Бизнис Академија БАС Скопје
- износ на доделени средства од Проектот во висина од: 167.455.36 евра
  - 2) Стопанска Комора на Северна Македонија Регионална комора со седиште во Битола
- износ на доделени средства од Проектот во висина од: 100.519.83 евра
- е <u>примен за регистрација</u> во Централната база на податоци за странска помош на Владата на Република Северна Македонија (ЦДАД).

Оваа потврда се издава во 3 (три) идентични примероци од кои по еден примерок им се издава на секој корисник на проектот, а два примероци за Секретаријатот за европски прашања.

ЦДАД бр. 07/10-22/7542

Благица Митковска Овластено лице

Подготвил/а: Блаженка Митовска Контролирал/а: Благица Митковска Private non-profit higher-educational institution independent higher vocational school Business Academy Smilevski - BAS Skopje

Adress in Skopje: Boul. Jane Sandanski br.111/2 Skopje, Aerodrom

Adress in Bitola: St. Herceg Novi 6, Bitola

Skopje, 19<sup>th</sup> of May 2020

Subject: Approval of Proposal submission in the frame of INTERREG IPA Cross Border Cooperation Programme "Greece - Republic of North Macedonia 2014-2020"

The participation of the Business Academy Smilevski Skopje (BAS Skopje) as Beneficiary 3 to the **INTERREG IPA Cross Border Cooperation Programme** "Greece - Republic of North Macedonia 2014-2020" (Ref. No: 300877/MA 1891/07/04/2020) is approved for the following proposal:

Project Title: Stimulating Green Employment: Across Border Educational and Technological Innovation Hot - Spots /

Project Acronym:

G.EM.S.

Priority Axis:

1: Development and Support of Local Economy

Thematic Priority: a. Promoting employment, labour mobility and social and cultural inclusion across borders, does

Specific Objective: 1.1 Create employment opportunities for educated graduates by exploiting comparative advantages of the cross-border area, preferably with the use of innovative tools and practices

Total Budget for BAS Skopje: 179,954.53 €

Scientific Responsible: Prof. Toni Soklevski, PhD

Body of the Founders of Business Academy Smilevski – BAS (The Highest Managing Body)

Gorazd Smilevski

President of the Body of Founders

Cvetko Smilevski

Member of the Founding Body

Cena Smilevska

Member of the Founding Body

Official stamp of the Beneficiary

### почватна непрофитна високообразовна установа самостојна висока стручна штома ЗПИС АКАДЕМИЈА СМИЛЕВСКИ - БАС CKODJE

_			3113	
	т плено:	24.01.	2023	
	LANH.	5poj	Dienor;	bрз4-о:т:
	0302	53/1		



# Republic of North Macedonia

# Ministry of Local Self Government



To: Business Academy Smilevski Skopje Bul. Jane Sandanski no.111/2 1000 Skopje Republic of North Macedonia

Република Северна Маке Republika e Maqedonise se МИНИСТЕРСТВО ЗА ЛОКАЛНА САМС, MINISTRIA E VETEQEVERIS JES LOKALE

BD. Nr. 11-240 год -vio Скопје Shkup

Letter of guarantee for the pre financing of the EU contribution

Following the request by the legal representative of Business Academy Smilevski Skopje, Skopje to the Ministry of the Local Self Government no. 11-2707/1 from 26.12.2022 and pursuant to Article 4 Paragraph 4 of the Bilateral Agreement of the Interreg IPA II Cross Border Cooperation Programme with Greece 2014-2020, the Ministry of Local Self Government, being legally responsible to act as a guarantor for the beneficiaries located in its country, issues this Letter of guarantee, regarding the pre-financing payment (20% of the EU contribution), for the project titled "Stimulating Green Employment: Across Border Educational and Technological Innovation Hot - Spots" (GE.M.S).

Respectively, pursuant to Article 4 Paragraph 1 of the Subsidy Contract no. CN2 - SO1.1 -SC058, the amount for which this Letter of guarantee is issued, to the legal representative for the above mention project, is presented in the following table:

Union support (85%)	142 337,00 Euro
Requested Pre-Financing amount by the Beneficiary (representing 20% of the Union	28 467,41 Euro
support)	

MINISTER OF LOCAL SELF

Managing Authority of European Territorial Cooperation Programmes 65, Georgikis Scholis Av. Zeda Building, Entrance 2, 2nd floor 57001 Thessaloniki, Greece

Interreg IPA II Cross-border Cooperation Programme "Greece - Republic of North Macedonia 2014-2020"

# GE.M.S - CN2 - SO1.1 - SC058

- 24.2 Conflict of Interest might arise when the impartial and objective implementation of the project is compromised for family or emotional reasons, political or national relationship, economic interest or any
- 24.3 The LB and all beneficiaries commit themselves to immediately solve any situation constituting a conflict of interest or likely to lead to a conflict of interest and to inform the MA accordingly.
- 24.4 The LB and all beneficiaries commit to comply with the principle of "zero tolerance" in terms of fraud prevention and corruption and to be especially vigilant on this subject. They also undertake to denounce any conduct likely to be considered as suspicion of fraud to the competent national authorities and to inform the MA of this.

### Article 25: Domicile

To the effect of this agreement, the project beneficiaries shall irrevocably choose their domicile at the address stated in their letterhead where any official notifications can be lawfully served.

Any change of domicile shall be forwarded to the Lead Beneficiary within 15 days following the change of

Written in Kozani in five original copies, on the 21st of March 2022

Research Cammittee (ELKE) of the University of Western Macedonia (UoWM)

Prof. Stergios Mar

Signature/Sta

consule

residents of his hospital and to

Partnership Agreement

20/23

# Gocan Ropublic of North Macedonia

Centre for Research & Technology Hellas (CERTH) / Chemical Process & Energy Resources Institute (CPERI)

Dr Dimitrios Tzovaras

Director of Central Directorate & Chairman of the Board of Directors

Signature/Stamp



# Interrey-IPA CBC

Project Beneficiary No. 3:

Business Academy Smilevski – BAS, St. Herceg Novi 6, Bitola, Republic of North Macedonia

Name and title of legal representatives: Gorazd Smilevski

Signature/Stamp





Economic Chamber of North Macedonia - Regional Chamber Bitola (RCB) Antoni Peshev, Executive Director CKA KOM

Signature/Stamp