

Co-funded by the European Union



IOT-ECO IS AN ERASMUS + CAPACITY BUILDING IN HIGHER EDUCATION AND WILL SUPPORT WB HEI TO:



- Assist academic staff improving their knowledge and expertise in the field of green ecosystem energy efficiency, air pollution, Industrial IoT.
 - Introduce IoT to society and raise awareness of its potential for green transformation.
 - Establish IoT-ECO hub in the WB HEIs network to facilitate creative projects, design, and technology transfer with a focus on resilient solutions.
 - · Develop a virtual prototype of Green transformation ecosystem model of the Port of Durres and make it available at the IoT-ECO hub.
 - · Integrate and harmonize study programs with the needs of the industry in relation to IoT and green transformation. Develop new and updated courses and integrate them in the syllabi for providing the skills and competences that future engineers need.

The main target beneficiary with mobilities courses and trainings are the students in the WB HEIs. Larger impact on society will be obtained through networking and dissemination activities with focus to younger students, people with disabilities, business representatives and governmental institutions

>>> PROJECT AIM

CONSORTIUM

P1 - TECHNICAL UNIVERSITY OF SOFIA (COORDINATOR)
P2- ALEKSANDER MOISIU UNIVERSITY (BENEFICIARY)
P3 - POLYTECHNIC UNIVERSITY OF TIRANA (BENEFICIARY)
P4 - UNIVERSITY OF PRISHTINA (BENEFICIARY)
P5 - UNIVERSITY FOR BUSINESS AND TECHNOLOGY (BENEFICIARY
P6 - UNIVERSITY OF MONTENEGRO (BENEFICIARY)
P7 - MEDITERREAN UNIVERSITY PODGORICA (BENEFICIARY)
P8 - UNIVERSITY OF PATRAS (BENEFICIARY)
P9 - TECHNICAL UNIVERSITY OF GRAZ (BENEFICIARY)
P10 - FOND ZA INOVACIJE CRNE GORE DOO (ASSOCIATED)
P11 - CREA-KO (ASSOCIATED)
P12 - DURRES PORT AUTHORITY (ASSOCIATED)
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ASSOCIATED PARTNERS INNOVATION FUND **OF MONTENEGRO**

- DURRES PORT **AUTHORITY**
- CREA-KO SHPK

This project aims to address these specific needs by proposing opportunities for intelligent solutions based on Internet of Things (IoT)/Internet of Everything (IoE) technology, their implementation for green transformation and development of institutional and academic capacities towards national and regional cooperation between Higher Education Institutions (HEIs) in the WBs. The feasibility study of a human capacity building and infrastructure initiative is one of the pillars of this project. In addition to the academic dimension, this project aims to achieve the business and social dimensions. This joint project uses IoT to upgrade technology in higher education to address the needs identified in each partner country. Since we are in Industrial 4.0, preparing and informing IoT-related individuals will help them access these futuristic technologies.

Each WBs HEIs vision is to build capacity, create an innovative ecosystem that, firstly, will allow the institution to grow and secondly, provide the community and society with IoT/IoE solutions. According to various studies IoT/IoE can help developing countries grow and achieve sustainable economics and green transformation. Albania's main economic sectors include agriculture, tourism, and energy. In all these sectors the IoT has been seen as a tool for innovation and change towards sustainable growth especially in achieving the Sustainable Development Goals of Agenda 2030 (Bitri, Aida; Marinova, Galia; and Hajrizi, Edmond, "The Internet of Things". to assist in the implementation of SDGs: A case of Albania and Kosovo, opportunities and challenges "(2019). UBT International Conference. 331.). Six WB HEIs from Albania, Kosovo and Montenegro want through this proposal to build the necessary capacity and invest in knowledge and practical application in the field of IoT and green transformation. Trainings and knowledge exchange with the 3 EU HEIs from Bulgaria, Greece and Austria will be a founding step towards a green future in WB HEIs and region. Three associate partners - an innovation fund, a port and an ICT company are here to model the academic society and business oriented innovative ecosystem. IoT-ECO hub will be developed since IoT hubs are utilized for energy efficiency (power management), air pollution (e-health). Furthermore, WB HEIs will create a network with each other to collaborate on common projects for green transformation.

PROJECT ACTIVITIES:

>>> 1. EXPERIENCE AND SHARING KNOW-HOW WITH EU PARTNERS ON THE ESTABLISHMENT OF THE IOT-ECO HUB

1. DURING THE MEETING THE CONSORTIUM HAD THE OPPORTUNITY TO LISTEN MANY INTERESTING PRESENTATION FROM EU PARTNERS GRAZ, AUSTRIA, SOFIA, BULGARIA AND PATRAS, GREECE FOR TEACHERS AND STUDENTS FROM BALKAN ON TOPICS LISTED BELOW:

- to develop and launch the new courses on IoT for Green transformation
- to develop the IoT-ECO hub
- to develop 3 virtual prototypes for studying IoT scenarios from Western Balkan partners
- Experience and share know-how with EU partners on the establishment of the IoT ECO hub.
- Besides TU GRAZ will take part in advising, knowledge sharing, teaching, training.
- Further more will be meetings of the Project Managers Board and Quality Board .



From 15-18 November , 2023 was held the 1st EU Study visit at TU Graz, Austria

2. FROM OUR TU GRAZ PARTNERS WAS ORGANIZED A VISIT AT JOANNEUM RESEARCH (RESEARCH ORGANIZATION)



3.0UR TEACHING SESSIONS





Meeting on administrative works discussing with the coordinator of the project Prof. Galia Marinova on the future project tasks, reporting procedures and future activities.



>>> 2-SECOND EU STUDY VISIT WORKSHOP ON "ESTABLISHING THE IOT-ECO HUB



Dates: June 12-16, 2024, Venue: University of Patras, Greece

The main activities during this meeting were:

- Presentation on IoT-ECO hub development.
- Discussions on managing and regulating the IoT hub. Defining the mission and vision
- Administration and registration of the IoT-ECO hub.
- Academic staff training on IoT green applications.
- Reporting from all the partners on the tendering procedure for the license procurement
- · Session of presentations from invited speakers from industry and research labs







OUR NEXT ACTIVITY: WP 5-IOT-ECO HUB FOR TEACHING MATERIALS, NEW AND UPDATED COURSES AND RESEARCH

SOME DISSEMINATION ACTIVITIES

@BULGARIA



@CROATIA



@MONTENEGRO



@KOSOVO



ERASMUS+ Capacity Building In Higher Education

Communication #hashtags

IOT Green Transformation for Academic Society and Business Oriented Ecosystem in Western Balkans

#GreenTechInnovation #ioteco #IoTRevolution #DigitalTwinSolutions #SustainableTech #SmartCities #GreenIoT #EcoInnovation #DigitalTwinning #Tech4Environment #CleanTechFuture #IoTGreenRevolution #SmartSustainability #researchwithimpact





PROMOTIONAL MATERIALS



