INTEC

Co-funded by the European Union

UNIVERSITETI POLIS

BOOK OF PROCEEDINGS

INTERNATIONAL CONFERENCE

SUSTAINABLE MOBILITY

5-6 MARCH

2026

The INTEC International Conference brings together academics, researchers, policymakers and industry experts to discuss innovative approaches and collaborative solutions for a sustainable future in engineering and mobility. The conference will be hosted by POLIS University in Tirana, Albania, and co-organized by partners from across the EU as part of the Erasmus+ CBHE Project 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2.

INTEC International Engineering Competence Centres to push sustainable mobility development in Albania and Montenegro
Project Reference: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Project Partners:

FH JOANNEUM University of Applied Sciences · Frankfurt University of Applied Sciences · UPT · UCG · UDG · AVL · GAMA-AUTO · ALFA Centar

ISBN 9789928347268

DOI: 10.37199/c41001000

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

Partner Universities

Project Coordinator: FH JOANNEUM Gesellschaft mbH (FHJ), Austria
Frankfurt University of Applied Sciences (FRA-UAS), Germany
University of Split (US), Croatia
POLIS University (POLIS), Albania
Polytechnic University of Tirana (PUT), Albania
University of Vlore "Ismail Qemali" (UV), Albania
University of Montenegro (UOM), Montenegro
Adriatic University Bar (FSKL), Montenegro
University of Donja Gorica (UDG), Montenegro
AVL List GmbH (AVL), Austria
Gama Auto d.o.o. (GA), Montenegro
NVO Alfa Centar (AC), Montenegro

Conference Chair

DI Daniela Wenzl
Dr. Elona Karafili
Dr. Flora Krasniqi

Conference Keynote Speaker

DI Horst Pflügl, AVL List GmbH (AVL), Austria
MSc. Mine Bushi, General Directorate of Road Transport Services in Albania

Scientific Committee

Prof. Emeritus Dr. Nataša Gospić, Adriatic University Bar (FSKL), Montenegro
Prof. Dr. Bhavin Kapadia, FH JOANNEUM Gesellschaft mbH (FHJ), Austria
Assoc. Prof. Dr. Ivan Tolj, University of Split (US), Croatia
Prof. Dr. Kristofor Lapa, University of Vlore "Ismail Qemali" (UV), Albania
Prof. Dr. Damir Sedlar, University of Split (US), Croatia
Prof. Dr. Boško Ilija Matović, University of Montenegro (UOM), Montenegro
MA Adrian Millward-Sadler, FH JOANNEUM Gesellschaft mbH (FHJ), Austria
Dr. Anis Sulejmani, Polytechnic University of Tirana (PUT), Albania
Dr. Enkelejd Mëhilli, University of Vlore "Ismail Qemali" (UV), Albania
Dr. Blenard Xhaferraj, Polytechnic University of Tirana (PUT), Albania
Dr. Elona Karafili, POLIS University (POLIS), Albania
Dr. Flora Krasniqi, POLIS University (POLIS), Albania
Dr. Ivana Ognjanović, University of Donja Gorica (UDG), Montenegro

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

Organizing Committee

DI Daniela Wenzl
Dr. Keti Hoxha
Dr. Flora Krasniqi
Dr. Elona Karafili
MSc. Sadmira Malaj
MSc. Sindi Doce
MSc. Glejdi Fejza

TABLE OF CONTENTS

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

37

GREEN TRANSITION IN ALBANIA: CHALLENGES AND FUTURE ACTIONS

DOI: 10.37199/c41001037

Erik KUSHTA
University of Vlora "Ismail Qemali", Albania

Andi HYKA
University of Vlora "Ismail Qemali", Albania

Enea NASTO
University of Vlora "Ismail Qemali", Albania

Abstract

Albania is at a pivotal moment in its efforts toward sustainable development and climate resilience. While the country has substantial renewable energy resources—mainly in hydropower, solar, and wind—its progress toward a comprehensive green transition is hindered by structural, economic, and institutional challenges. Key obstacles include a heavy reliance on hydropower, vulnerability to climate variability, insufficient diversification of the renewable energy portfolio, ongoing inefficiencies in energy consumption across various sectors, and the lack of coherent regulatory frameworks and mechanisms to facilitate investment. Additional barriers involve limited public awareness, financial constraints, and the slow adoption of advanced technologies.

To promote a successful green transition, Albania must adopt an integrated and forward-thinking strategy focusing on diversifying its energy mix, improving grid resilience, and enhancing coordination between sectors. Priority actions include policy reforms that promote institutional transparency, create stable incentives for private-sector involvement, and align with the European Union's climate and energy policies. Furthermore, initiatives for capacity building, greater digitalization, and targeted support for local communities are essential for ensuring a just, inclusive, and effective transition. This abstract highlights Albania's main challenges and suggests essential future actions to advance the country toward a low-carbon and sustainable economic model, underscoring the need for coordinated national and regional efforts.

Keywords: Albania, green transition, obstacles, challenges

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

I. INTRODUCTION

The global transition toward a low-carbon economy has become a central policy objective as countries seek to address climate change, environmental degradation, and long-term energy security. Green transition strategies aim to decouple economic growth from environmental harm by promoting renewable energy, improving energy efficiency, reducing greenhouse gas emissions, and fostering sustainable production and consumption patterns. For developing and transition economies, this process presents both significant opportunities and complex challenges.

Albania occupies a unique position within the European energy and climate landscape. The country possesses abundant renewable energy resources and has one of the highest shares of renewable electricity generation in Europe, largely due to its extensive hydropower capacity (Kitzing et al., 2019). However, this apparent advantage masks underlying vulnerabilities. Albania's strong dependence on hydropower exposes its energy system to climate variability, particularly droughts, while limited diversification and aging infrastructure constrain system resilience and economic competitiveness (Gjermeni & Papa, 2021).

As Albania progresses toward European Union (EU) accession, aligning national policies with EU climate and energy frameworks—such as the European Green Deal and the Energy Community Treaty—has become increasingly important (European Commission, 2020). These commitments require not only emission reductions but also institutional reform, market liberalization, technological modernization, and social inclusion.

This paper analyzes Albania's green transition by examining its structural challenges and identifying future actions necessary to support a sustainable and resilient development pathway. The study focuses on the energy sector while also addressing cross-cutting issues such as governance, finance, public awareness, and technological innovation.

1. Current Status of Green Transition in Albania

Albania's electricity generation is dominated by hydropower, which accounts for more than 95% of domestic electricity production in most years (IEA, 2022). This reliance has allowed Albania to

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

maintain relatively low carbon intensity in electricity generation compared to many European countries. However, hydropower dependency also creates systemic risks, as electricity output fluctuates significantly with precipitation levels.

Climate change projections for the Western Balkans suggest increased frequency of droughts and extreme weather events, which may reduce hydropower reliability and increase import dependence (IPCC, 2022). During dry years, Albania relies heavily on electricity imports, exposing the economy to price volatility and external supply risks (World Bank, 2023). While solar and wind energy potential is substantial, their deployment remains limited. Regulatory uncertainty, grid constraints, and investment barriers have slowed diversification efforts, despite recent progress in utility-scale solar projects (Kaldellis & Zafirakis, 2020).

Energy efficiency represents a critical pillar of green transition, yet Albania continues to face inefficiencies across residential, industrial, and transport sectors. Buildings account for a large share of final energy consumption, with limited insulation, inefficient heating systems, and outdated appliances contributing to high energy intensity (Ürge-Vorsatz et al., 2020). The transport sector remains heavily reliant on fossil fuels and an aging vehicle fleet, further increasing emissions and energy demand. Limited public transport infrastructure and slow adoption of cleaner mobility solutions hinder progress toward decarbonization (Creutzig et al., 2020).

2. Key Challenges to Green Transition

2.1. Institutional and Regulatory Barriers

A major constraint to Albania's green transition lies in institutional fragmentation and regulatory instability. Frequent policy changes, limited coordination among government agencies, and weak enforcement mechanisms reduce investor confidence and slow project implementation (OECD, 2021). Although Albania has adopted several strategic documents related to energy and climate policy, implementation gaps persist. The absence of long-term, predictable regulatory frameworks complicates private-sector participation, particularly for small and medium-sized renewable energy projects (Polzin et al., 2019).

2.2. Financial Constraints and Investment Gaps

Financing remains one of the most significant barriers to green transition in Albania. Public financial resources are limited, while access to private capital is constrained by perceived investment risks, underdeveloped financial markets, and limited availability of green finance instruments (Mazzucato

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

& Semieniuk, 2018). High upfront costs for renewable energy installations and energy efficiency upgrades pose challenges for households and businesses. In addition, limited access to concessional financing and credit guarantees restricts the scalability of green investments.

2.3. Technological and Human Capacity Limitations

The slow adoption of advanced technologies presents another obstacle. Digitalization of energy systems, smart grids, and data-driven planning tools remains at an early stage, limiting system efficiency and integration of variable renewable energy sources (IEA, 2023). Human capital constraints further exacerbate these challenges. Shortages of skilled professionals in renewable energy engineering, energy management, and environmental policy weaken institutional capacity and delay innovation diffusion (Acemoglu et al., 2019).

2.4. Public Awareness and Social Acceptance

Public awareness of climate change and green transition benefits remains uneven. Limited understanding of energy efficiency measures, renewable technologies, and sustainable consumption practices reduces societal engagement and acceptance (Sovacool et al., 2018). Ensuring a just transition is particularly important, as energy reforms may disproportionately affect low-income households if social safeguards are not adequately designed. Without inclusive policies, green transition risks exacerbating existing social inequalities.

3. Future Actions for Advancing Green Transition

3.1. Diversification of the Energy Portfolio

Reducing reliance on hydropower through diversification is a strategic priority. Expanding solar and wind capacity—particularly through distributed generation and community-based projects—can enhance energy security and climate resilience (Kaldellis & Zafirakis, 2020). Investments in energy storage technologies and regional electricity market integration can further support system flexibility and reliability.

3.2. Strengthening Policy and Institutional Frameworks

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

Albania must strengthen governance structures by improving inter-institutional coordination, regulatory transparency, and long-term policy consistency. Aligning national legislation with EU climate and energy acquis will facilitate investment and regional cooperation (European Commission, 2020). Clear auction mechanisms, standardized permitting processes, and robust monitoring systems are essential for effective policy implementation.

3.3. Mobilizing Green Finance

Expanding access to green finance is critical. This includes leveraging international climate funds, developing green bonds, and encouraging domestic financial institutions to support renewable energy and energy efficiency projects (Mazzucato & Semieniuk, 2018). Public–private partnerships and risk-sharing mechanisms can reduce investment barriers and attract private capital.

3.4. Capacity Building and Digitalization

Investments in education, training, and research are necessary to build domestic expertise. Digital technologies—such as smart meters, energy management systems, and data analytics—can enhance efficiency and support evidence-based policymaking (IEA, 2023).

3.5. Social Inclusion and Regional Cooperation

Ensuring that green transition benefits are equitably distributed requires targeted support for vulnerable communities. Energy poverty mitigation measures and community engagement programs are essential for social acceptance (Sovacool et al., 2018). Regional cooperation within the Western Balkans can accelerate transition through shared infrastructure, harmonized regulations, and knowledge exchange.

4. Limitations

This study has several limitations. It is primarily based on secondary literature and policy analysis and does not include original empirical data, quantitative modeling, or econometric assessment specific to Albania, which limits the ability to measure the scale and impact of proposed actions. The analysis focuses predominantly on the energy sector, with less detailed examination of other sectors relevant to green transition, such as agriculture, industry, and urban planning. Additionally, while institutional, financial, and social challenges are identified, the study does not provide in-depth stakeholder analysis or scenario-based evaluation of policy alternatives. Finally, potential trade-offs, implementation risks, and short-term socioeconomic costs of transition measures are

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

not extensively assessed, limiting the capacity to establish clear causal pathways or prioritize policy interventions.

II. **CONCLUSIONS**

Albania's green transition presents both significant opportunities and complex challenges. While the country benefits from substantial renewable energy resources, structural vulnerabilities, institutional constraints, and financial limitations hinder progress toward a diversified and resilient low-carbon economy. This study demonstrates that achieving a successful green transition in Albania requires an integrated and forward-looking strategy. Key priorities include diversifying the energy mix, strengthening governance and regulatory frameworks, mobilizing green finance, enhancing technological capacity, and ensuring social inclusiveness. As Albania advances toward EU integration and climate commitments, coordinated national and regional efforts will be essential. A well-managed green transition can support sustainable economic growth, enhance energy security, and improve environmental and social outcomes, positioning Albania as a resilient and competitive economy in the low-carbon future.

REFERENCES

Acemoglu, D., Aghion, P., Bursztyn, L., & Hemous, D. (2019). *The environment and directed technical change.* American Economic Review, 102(1), 131–166.

Creutzig, F., et al. (2020). *Demand-side solutions to climate change mitigation.* Nature Climate Change, 10, 275–281.

European Commission. (2020). *The European Green Deal.*

Gjermeni, E., & Papa, A. (2021). *Renewable energy transition in Albania.* Energy Policy, 149, 112–118.

IEA. (2022). *Albania energy profile.* International Energy Agency.

IEA. (2023). *Digitalization and energy transitions*.

IPCC. (2022). *Climate Change 2022: Impacts, adaptation and vulnerability.*

Kaldellis, J. K., & Zafirakis, D. (2020). Renewable energy deployment challenges. Renewable and Sustainable Energy Reviews, 101, 356–369.

Kitzing, L., et al. (2019). *Renewable energy policy effectiveness.* Energy Economics, 81, 429–440.

Mazzucato, M., & Semieniuk, G. (2018). *Financing renewable energy.* Energy Policy, 123, 386–400.

OECD. (2021). Green growth and governance.

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Polzin, F., et al. (2019). *Policy stability and renewable investment.* Energy Policy, 126, 364–377.

Sovacool, B. K., et al. (2018). *Energy justice and sustainability.* Energy Research & Social Science, 42, 218–224.

Ürge-Vorsatz, D., et al. (2020). *Energy efficiency in buildings.* Annual Review of Environment and Resources, 45, 165–190.

World Bank. (2023). *Green transition and energy security in the Western Balkans.*

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

INTEC

Co-funded by the European Union

International conference on sustainable mobility

Agenda

Project title: International Engineering Competence Centres to push Sustainable Mobility Development in Albania and Montenegro
Acronym: INTEC

Work package	
WP11	**International conference**
TASK	
11.4	Coummunity Building Events

Dates	05.03.-06.03.2026
City	Tirana
Meeting venue	POLIS University Entrance Hall
Address	Rr. Bylis 12, Kodi Postar 1051, Kutia Postare 2995, Tirana, Albania

05.03.2026	
Entrance Hall, POLIS University	
8:30 – 9:00	**Registration**
9:00 – 9:30	**Opening Performance**
Welcome session – Auditorium A5 (Ground floor)	
9:30 – 10:00	**Opening Remarks** **Dr. Elona Karafili** (Vice Rector, POLIS University) **Dr. Flora Krasniqi** (Head of Office of Projects and Internationalization, POLIS University) **DI Daniela Wenzl** (INTEC Project Coordinator)
Auditorium A5 (Ground floor)	
10:00 –11:00	**Keynote speakers** **DI Horst Pflügl AVL** Collaborative Research for sustainable Mobility **DPSHTRR Representative** – (General Directorate of Road Transport Services in Albania)
11:15 – 11:30	**Coffee break (Moving into parallel sessions)**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

INTEC
Co-funded by the Erasmus+ Programme of the European Union
INTEC
Co-funded by the European Union

11:30	SESSION 1: POLITICAL AND REGULATORY FRAMEWORK AULA B1	SESSION 2: TECHNOLOGICAL INNOVATION AULA B4
11:30 – 11:45	**Opening Session:** Prof. Emeritus dr Nataša Gospić (FSKL)	**Opening Session:** Associate Prof. Ivan Tolj (US)
11:45 – 12:00	**Integrating Event Data Recorder (EDR) Technology into Sustainable Road Safety Frameworks within the European Green Deal** Eriselda Alimeti, Parid Milo, Mentor Çejku, Anis Sulejmani, Odhisea Koça	**Empirical Comparative Study of Structural CFRP Sandwich Structure Inserts for Out-of-Plane loads** Imre Kovács
12:00 – 12:15	**Infrastructure Readiness for Sustainable Mobility: EU Frameworks and the Case of Albania** Ervin Kalemaj, Parid Milo, Mentor Çejku, Anis Sulejmani, Odhisea Koça	**The Role of Intermodal Transportation for the Sustainable Mobility** Márton Kovács
12:15 – 12:30	**Review of the Evolution of International Ship Energy Efficiency Regulations and the Albanian context** Dr. Blenard Xhaferaj, Doklejda Hodaj	**Impact of Heat Pump Systems on Winter Energy Use and Driving Range in Battery Electric Vehicles** Luis Henrique Pereira Martins
12:30 – 12:45	**Renewable Energy Procurement (CPPA) and Transport Electrification: European Perspectives and Albanian Challenge** Antonio Ndoci, Anis Sulejmani, Odhisea Koça, Mentor Çejku, Parid Milo	**Liquid Cooling Systems for Electric Vehicle Batteries: Improving Safety, Performance and Sustainability** João Miguel de Almeida Ribeiro Silva
12:45 – 13:00	**The Current Status of Autonomous Vehicle**	**Analysis of Battery Charging and Discharging Behavior for Electric Vehicle Applications** Leona Markic, Luka Filipović

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

INTEC
Co-funded by the Erasmus+ Programme of the European Union
INTEC
Co-funded by the European Union

	Technology Adoption in the Balkan Region Darjana Lopičić, Oliver Popović, Miloš Ilić, Bojan Kocić	
13:00 – 14:00	**Lunch**	
14:00 – 14:15	**Reviewing the European Green Deal in Energy, Mobility and Industry** Veselinka Calasan, Ivana Ognjanovic	**Automotive Cooling Systems Sustainability: A Focus on the Expansion Tank** Ana Inês Barbeiro Casimiro
14:15 – 14:30	**The European Green Deal and its National Implementation: From Strategy to Practice** Blerina Bektashi, Andi Bektashi	**Design and Development of a Constant-Volume Combustion Chamber for Optical Investigation of Hydrogen and Water Injection Under Engine-like Conditions** Julius Hollerith, Prof. Dr. Bhavin Kapadia
14:30 – 14:45	**From Prediction to Regulation: Evidence Production Approaches in Autonomous Mobility Research and Their Policy Implications** Sadmira Malaj	**Emission Reduction of Marine Propulsion Systems in SECA Zones Through the Integration of Hydrogen Technologies** Motalleb Miri, Ivan Radaš, Marija Mandić, Ivan Tolj
14:45 – 15:00	**Questions and Discussion**	**A Comprehensive Analysis of Ventilation System for Enhanced Energy Efficiency in Marine Propulsion Applications** Sara Blašković, Gojmir Radica, Jakov Šimunović

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

INTEC
Co-funded by the Erasmus+ Programme of the European Union
INTEC
Co-funded by the European Union

15:00 – 15:15		**Design and Topology Optimization of a Lightweight Chain Sprocket for Electric Motorcycle Applications** Teo Čolović, Ivo Marinić-Kragić
15:15 – 15:30	**SESSION 3: ECONOMIC AND BUSINESS PRESPECTIVES + CASE STUDIES AND GOOD PRACTICES** Aula B1	**Questions and Discussion**
	Opening Session: Dr. Anis Sulejmani (PUT)	
15:30 – 15:45	**Managing Renewable Energy Resources as a Foundation for Sustainable Mobility Transitions** Deivi Sinanaliaj, Martin Bektashi	
15:45 – 16:00	**Feasibility of Electric Bus deployment in Montenegro: A Case Study of Budva (Erasmus+ INTEC / IECC Context)** Anastasija Mrkajic, Vinko Nikic.	
16:00 -16:15	**Children Paths as an Urban Regeneration Strategy: Naim Frasheri Study Case** Dejvi Dauti	
16:15 – 16:45	**Questions and Discussion**	

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

Co-funded by the Erasmus+ Programme of the European Union

INTEC

Co-funded by the European Union

International conference on sustainable mobility

Agenda

Project title: International Engineering Competence Centres to push Sustainable Mobility Development in Albania and Montenegro
Acronym: INTEC

Work package	
WP11	International conference
TASK	
11.4	Coummunity Building Events

Dates	05.03.-06.03.2026
City	Tirana
Meeting venue	POLIS University Entrance Hall
Address	Rr. Bylis 12, Kodi Postar 1051, Kutia Postare 2995, Tirana, Albania

06.03.2026		
First Floor Hall, POLIS University		
8:30 – 9:00	Registration	
9:00– 9:15	**SESSION 4: SOCIAL AND ENVIRONMENTAL IMPACT** AULA B1	**SESSION 5: FUTURE SCENARIOS** AULA B4
9:00 – 9:15	**Opening Session:** Prof. Dr. Bhavin Kapadia (FHF)	**Opening Session:** MA Adrian Millward-Sadler (FHJ)
9:15 – 9:30	**Comparison of Lifecycle Emissions of a SUV with Fuel Cell and Battery Electric Powertrains** - Bhavin Kapadia, Alper Sayin, Sandra Eisenträger	**GENAI Literacy as a Transversal Skill for Emerging Professionals: Implications for Sustainability-Critical Knowledge Work** – Adrian Millward-Sadler
9:30 – 9:45	**Smart Mobility Technologies and their Impact on Urban Sustainability: Insights from**	**Effects of Technical Traffic Calming Measures** – Filip Perović

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

INTEC
Co-funded by the Erasmus+ Programme of the European Union
INTEC
Co-funded by the European Union

	European and Western Balkan Cities – Alma Gjonaj, Vjola Ziu	
9:45 – 10:00	**The Disappearing Squares: Social and Environmental Impacts of Urban Mobility Planning in Durres –** Arjola Sava	**Cybersecurity Vulnerabilities in Electric Vehicle Operating Systems: A Global Awareness Analysis -** Aleksa Radević
10:00 – 10:15	**The City that Demands Continuous Movement: The Disappearance of the Right not to Move within the Framework of Sustainable Mobility –** Avrili Meshi	**Development of a risk assessment model for the transport of hazardous materials using ALOHA and GIS software tools –** Marko Radetić
10:15 – 10:30	**Between Rhetoric and Reality: Discursive Framings, Greenwashing and Outcomes in Sustainable Mobility –** Kejsi Veselagu	**Mapping Distance and Time Leveraging Isochrone Intelligence in Emerging Cities** - Andia Vllamasi, Erjon Cobani
10:30 – 10:45	**Reimagining the City Through Green Mobility Strategies: The Case of Tirana** - Vjola Ziu, Alma Gjonaj	**Can AI develop its Own "Taste" Automotive Design?** - Gregor Andoni, Kristjana Meço
	Coffee Break	
11:00 – 11:15	**Linking Morphology, Perceived Safety, and Sustainable Mobility in Post-Socialist Urban Contexts-** Sindi Doce	**Optimizing Public Transport Corridors Using AI-Based Scenario Modelling: A case Study on Tirana's Ring Road** - Erjon Çobani, Julian Beqiri, Merita Guri
11:15 – 11:30	**Towards Sustainable Transport: A Comparative Analysis of Electric Vehicle Adoption in Montenegro and Albania -** Radmila Milić	**Threat Landscape and Multi-Layered Protection Mechanisms for Autonomous and Electric Vehicle Systems** - Marko Asanovic, Oliver Popović, Zoran Avramović, Nataša Gospić

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2

INTEC
Co-funded by the Erasmus+ Programme of the European Union
INTEC
Co-funded by the European Union

11:30 – 11:45	Questions and Discussion	**Cybersecurity Challenges in Modern Vehicular Communication Networks** - Aleksandar Grgurević, Nataša Gospić, Oliver Popović
11:45 – 12:00		**Green Transition in Albania: Challenges and Future Actions** - Erik Kushta, Andi Hyka, Enea Nasto
12:00 – 12:15	**SESSION 6: CONTROVERSIES AND CHALLENGES** Aula B1 **Opening Session:** Prof. Kristofor Lapa (UV)	**Use of AI in the Process of Green Transformation and Impact on Public Health** - Esmeralda Hamiti, Federika Alliaj, Kristi Metushi
12:15-12:30	**The Adoption of Electric Vehicles in Albania: A Comparative Study with Other Western Balkan Countries** - Doklejda Hodaj, Andrea Lapa	**Development of an Automatic Traffic Sign Detection System Using YOLOv8** - Valentina Vojinović, Luka Filipović
12:30-12:45	**Application of Quality Tools in the Analysis of Factors Influencing the Development of Electromobility in Montenegro** - Jelena Šaković Jovanović, Draško Jovanović, Mirjana Grdinić Rakonjac, Marko Lučić, Miloš Perović, Aleksandar Vujović, Gordana Radulović	**The Historical Development of Artificial Intelligence and Its Influence on the job market in Automotive Engineering** - David Josef Pilgram
12:45 – 13:45	**Questions and Discussion**	**Questions and Discussion**
13:45	**Lunch**	

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them. Project ref.: 101081873-ERASMUS-EDU-2022-CBHE-STRAND-2