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REPORT ON GREEN JOB OPPORTUNITIES IN URBAN DEVELOPMENT

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Curricula innovation in climate-smart urban development based on green and energy efficiency with the non-academic sector

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Executive Summary

The SmartWB Workshop on Green Job Opportunities in Urban Development was held on 22 May 2025 in Tirana, Albania. This one-day event, organized under the framework of the ERASMUS+ SmartWB project, was hosted by the Polytechnic University of Tirana and brought together a diverse group of participants from academia, industry, and government. The workshop's overarching goal was to promote green employment pathways in urban development by sharing knowledge on climate-smart urban innovations and strengthening collaborations between higher education and the labor market.

The program featured a plenary opening and three focused sessions. After a welcome coffee and registration, the event opened with introductory remarks by event organizers, setting the stage for the day's discussions. The first session showcased international best practices in low-carbon and sustainable urban development, highlighting cutting-edge research and case studies. Session II centered on local and regional initiatives demonstrating how urban planning can create green job opportunities, featuring examples from Albania and neighboring countries. Session III was an interactive workshop that engaged all stakeholders – students, faculty teachers, professionals, and officials – in a dialogue on scaling up green skills across industries. The day concluded with a closing session and an informal networking dinner, allowing participants to solidify connections and reflect on insights gained.

In summary, the SmartWB workshop served as a high-impact platform for knowledge exchange and stakeholder engagement. It disseminated the SmartWB project's principles of integrating sustainable practices into urban development education and practice, and it actively connected future graduates with potential employers in the green economy. Key outcomes included raised awareness of emerging green job roles, identification of skill gaps and training needs, and strengthened partnerships between universities and the urban development sector. This executive summary underscores the workshop's contribution to the SmartWB project's mission of fostering a *greener, smarter, and more inclusive urban future*.

List of abbreviations

CCL	Circular City Labs
1FUTURE	Climate Action Plans for Western Balkan Universities
GHG	Greenhouse Gas
SEN	Sensitive
AI	Artificial Intelligence
CCL	Circular City Labs
CSUD	Climate Smart Urban Development
RAMSAR	Convention on Wetlands of International Importance (Ramsar Convention)
SmartWB	Curricula innovation in climate-smart urban development based on green and energy efficiency with the non-academic sector
UNMO	Dzemal Bijedic University of Mostar
ERASMUS+	European Community Action Scheme for the Mobility of University Students (Plus)
EACEA	European Education and Culture Executive Agency
EU	European Union
UET	European University of Tirana
FCE-UPT	Faculty of Civil Engineering - Polytechnic University of Tirana
IoT	Internet of Things
NGO	Non-Governmental Organization
NMBU	Norwegian University of Life Sciences
PFAS	Per- and Polyfluoroalkyl Substances
U_POLIS	Polis University
UPT	Polytechnic University of Tirana
UPT	Polytechnic University of Tirana
REKit	Reusable Event Kit
SMEs	Small and Medium Enterprises
STD	Smart Tourist Destination
THOWL	Technische Hochschule Ostwestfalen-Lippe
PATIVEL	Territorial Plan for the Coastal Area of Valencia (Spain)
URJC	Universidad Rey Juan Carlos
UNBI	University of Bihać
UoM	University of Montenegro
UoM	University of Montenegro
BOKU	University of Natural Resources and Life Sciences
UNI	University of Nis
UNSA	University of Sarajevo
UNIZG	University of Zagreb
WB	Western Balkan
WP	Work Package

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1. Introduction

SmartWB (*Curricula Innovation in Climate-Smart Urban Development based on Green and Energy Efficiency with the Non-Academic Sector*) is an ERASMUS+ Capacity Building in Higher Education initiative aimed at modernizing university curricula and promoting sustainable, low-carbon approaches in urban development. The project strengthens collaboration between universities and the labor market, enhances student employability, and integrates climate-smart practices (such as clean energy and sustainable planning) into education and professional practice. Through training programs, digital tools, and stakeholder engagement, SmartWB is building a workforce equipped to address climate and sustainability challenges in the Western Balkans and beyond. In line with these goals, dissemination and stakeholder involvement are key components of the project's strategy, ensuring that academic innovations translate into real-world impact.

The SmartWB Workshop on Green Job Opportunities in Urban Development was conceived as a vital dissemination and engagement activity within the project (part of Work Package 7 on impact and dissemination). Its primary objective was to promote green job opportunities in the context of sustainable urban development by bringing together academia and the non-academic sector. Specific aims included:

- **Showcasing Innovative Practices:** Present and discuss best practices in low-carbon, climate-smart urban development – from technical solutions (e.g. water pollution control, energy efficiency) to policy and planning innovations – thereby illustrating how such approaches can contribute to sustainability and job creation.
- **Linking Urban Development to Employment:** Highlight how urban development strategies and projects can lead to green employment pathways, demonstrating to students and professionals the emerging career opportunities in fields like renewable energy, sustainable planning, environmental management, and green construction.
- **Stakeholder Dialogue and Network Building:** Facilitate an interactive dialogue among students, academic staff, industry professionals, and public officials on the skills required for the green transition. This included identifying gaps in current curricula, discussing the skills needs of employers in sustainable urban sectors, and strengthening partnerships that can support curriculum innovation and internships/job placements.

By achieving these objectives, the workshop directly supported SmartWB's mission to align higher education outcomes with market and societal needs in the climate-smart urban development field. It provided a platform for knowledge exchange between Western Balkan universities and European partners, and for engagement with local stakeholders (including over 30 private companies and municipal representatives) to ensure the relevance of academic efforts. The presence of a wide range of stakeholders underscored the collaborative spirit of SmartWB, where education, innovation, and society intersect.

The workshop was structured as an intensive one-day event combining presentation sessions and interactive discussion. The agenda was organized into three thematic sessions, each addressing a distinct aspect of the green urban development agenda, plus opening and closing segments. The opening segment included welcome speeches from the host institution, framing the importance of the

event within the SmartWB project and regional sustainability efforts. Following this, Session I focused on *"Promoting Low-Carbon Solutions for Sustainable Climate-Smart Urban Development"*, featuring expert presentations on innovative solutions and best practices. Session II, titled *"Promoting Green Job Opportunities in Urban Development"*, highlighted local and regional initiatives linking urban projects to employment outcomes. Session III was an *Interactive Workshop on "Scaling Green Skills Across Industries"*, designed as an open-floor discussion rather than formal presentations. This session enabled direct input from various stakeholders and was crucial for meeting the workshop's engagement objectives. The day concluded with a formal closing and an informal networking dinner, which allowed participants to continue discussions and explore collaborations in a relaxed setting. Overall, the carefully planned structure ensured a balance between knowledge dissemination (through presentations of research and case studies) and active stakeholder participation (through dialogue and networking).

As a part of SmartWB's outreach and impact activities, the workshop played a strategic role in translating the project's academic work into practical impact. It exemplified how project partners are engaging with external stakeholders to validate and enrich the project's outcomes. The insights gained from the discussions – such as industry expectations for graduates' skills and examples of successful green initiatives – feed back into the SmartWB project's curriculum development efforts. Moreover, by raising the profile of climate-smart urban development challenges and opportunities in Albania and the region, the workshop helped cement SmartWB's position as a catalyst for change in higher education and urban practice. In summary, the workshop was both a showcase of SmartWB's progress and a conduit for collaboration, ensuring that the project's innovations are grounded in real-world needs and poised to generate lasting benefits in terms of green jobs and sustainable urban growth.

2. Agenda and Program Structure

The workshop commenced at 9:00 AM with a welcome coffee and registration period, allowing participants to network informally before the formal program began. At 9:45 AM, the official proceedings opened with a welcoming speech delivered by Mr. Genti Qirjazi, who provided a brief introduction to the SmartWB project and the objectives of the workshop. He emphasized the importance of bridging academia and industry in fostering green skills, echoing SmartWB's mission. These opening addresses set an appreciative and forward-looking tone, underlining the collaborative spirit of the event and its alignment with broader educational and environmental goals.

2.1. Session I – Promoting Low-Carbon Solutions for Sustainable Urban Development

Kicking off the substantive program, **Session I** (10:00–12:00) was devoted to exploring low-carbon and climate-smart urban innovations. This session featured four expert presentations that showcased best practices and research from different countries.

- *Water Management and Micropollutants:* The first presentation, by Prof. Martin Oldenburg and Dr. Claudia Steinert (Technische Hochschule Ostwestfalen-Lippe, Germany), addressed the challenge of micropollutants in water management. They discussed how advanced treatment technologies and monitoring strategies can mitigate the impact of these pollutants on urban water systems, illustrating a crucial aspect of low-carbon urban infrastructure (clean water and public health protection).
- *Intelligent Tourism Sites:* Next, Prof. Carmen De Pablos Heredero and Dr. Miguel Blanco (Universidad Rey Juan Carlos, Spain) shared best practices for developing intelligent tourism sites. Their talk demonstrated how digital innovations and smart planning can make tourist destinations more sustainable and energy-efficient. By integrating technology and cultural heritage management, they showed, cities can reduce the carbon footprint of tourism while enhancing visitor experiences – a clear win-win for urban sustainability.
- *Urban Planning and Illegal Construction:* Representing the Croatian context, Prof. Željko Bačić (University of Zagreb, Croatia) presented a case study on illegal construction and its implications for urban development. He examined how unregulated building practices contribute to urban spread and environmental degradation. The case study highlighted measures taken in Croatia to address illegal construction through policy enforcement and community engagement, thereby contributing to more sustainable and legally compliant urban growth.
- *Community Co-housing and Waste Management:* Finally in Session I, Mr. Nikola Perović (Ecological Movement "Ozon", Montenegro) spoke about urban challenges in the Municipality of Nikšić, focusing on two grassroots initiatives: a co-housing project and an improved waste management system. He described how community-led housing models can create affordable, energy-efficient living spaces, and how local waste reduction programs contribute to a low-carbon city. These examples from Nikšić provided insight into practical, citizen-driven solutions for sustainability in smaller urban centers.

Collectively, the presentations in Session I underscored a range of low-carbon solutions – from technological interventions in water and tourism, to policy and community-based actions in urban planning. The session demonstrated how diverse European contexts are tackling climate-smart urban development, offering transferable lessons and sparking discussion among attendees on how such practices could be adapted in their own cities. A Q&A segment followed, allowing participants to engage with the speakers on technical details and the feasibility of implementing similar projects in the Western Balkan region. The morning session concluded at noon, and a one-hour lunch break (12:00–13:00) gave attendees an opportunity to continue informal discussions and networking.

2.2. Session II – Promoting Green Job Opportunities in Urban Development

After lunch break, the workshop shifted focus to the human capital and employment dimension of urban sustainability. **Session II** (13:00–14:30) highlighted how innovative urban projects and policies can generate green jobs and foster new skills in the workforce. This session featured five presentations from local and regional experts, each illustrating a link between urban development initiatives and employment or entrepreneurship opportunities:

- *Circular Economy in Local Business:* Prof. Merita Toska (Co-PLAN, Albania) opened the session with a presentation on the Circular City Labs Tirana initiative, which pilots a reusable packaging system in local businesses. She explained how this project not only reduces plastic waste in the city, but also creates green job roles in logistics, operations, and community outreach to support the reuse system. The case demonstrated the job-creation potential of circular economy models at the city scale.

- *Urban Metabolism and Planning Innovation:* Ms. Mirlinda Rusi (Technical Planning Development shpk, Albania) introduced the concept of urban metabolism as an innovative planning approach. She detailed how analyzing cities as living organisms – in terms of energy, water, and material flows – can reveal opportunities for efficiency and new services. Her talk highlighted a project in Albania where applying urban metabolism principles has opened avenues for green consultancy services and data-driven policy jobs, as municipalities seek to hire experts who can conduct such analyses for sustainable planning.

- *Climate City Contract – Elbasan:* Mr. Drini Nushi (Institute of Urban Research, Albania) presented on the "Transformation in progress: A climate city contract for Elbasan." He described Elbasan's efforts to develop a Climate City Contract, a strategic agreement bringing together city authorities, businesses, and civic groups to achieve a green and healthy city for all. This initiative, part of a European Mission on climate-neutral cities, is creating stakeholder coalitions and will generate jobs in project management, urban green infrastructure, and renewable energy deployment as the plan moves forward. Drini Nushi emphasized how such contracts can formalize commitments to green job growth while guiding urban development.

- *Carbon Footprint Reduction in Higher Education Buildings:* Shifting focus to the education sector itself, Ms. Era Fusha (Department of Environmental Engineering, Polytechnic University of Tirana) discussed a study on the carbon footprint of university buildings – specifically, a case at the Faculty of Civil Engineering in Tirana. She outlined measures for carbon emission reduction in campus facilities (such as energy retrofitting and sustainable operations). Importantly, Era Fusha noted that implementing these measures not only contributes to

climate goals but also requires skilled professionals (energy auditors, building retrofit specialists, facility managers) thereby creating green employment opportunities in the construction and facilities management sectors.

- *Climate Resilience in Protected Areas:* Concluding Session II, Ms. Sindi Alliu (Department of Environmental Engineering, Polytechnic University of Tirana) presented a case study on building climate resilience in protected areas, focusing on Baks Rrjoll in the Shkodër region. She described how adapting and protecting natural areas against climate change (through measures like reforestation, eco-tourism, and community engagement) can generate jobs for local communities – from environmental monitoring and park management to guiding and education services. This example reinforced the message that climate action can be a driver of local employment, aligning conservation efforts with socio-economic benefits.

Through these varied presentations, Session II illustrated concrete ways in which urban sustainability initiatives intersect with job creation. The audience learned about the skills and training required for these emerging roles, such as expertise in circular economy practices, data analysis for urban metabolism, climate policy planning, energy efficiency, and ecosystem management. The discussions following each talk delved into questions of scalability and replication: for instance, how the Tirana reusable packaging pilot could be expanded to other municipalities, or how universities can incorporate training on carbon accounting and urban metabolism into their curricula. By the end of Session II, participants had a richer understanding of the career prospects in the green urban development sector, which directly feeds into SmartWB's aim of enhancing student employability in this field.

2.3. Session III – Interactive Workshop: Scaling Green Skills Across Industries

The final session (14:30–15:30) departed from the formal presentation format and adopted an interactive, participatory approach. **Session III** was structured as a moderated discussion titled *"Scaling Green Skills Across Industries: how to equip the workforce with the green skills needed across sectors"*. The session facilitator (from the SmartWB team) opened the floor by posing key questions derived from the project's focus: *Which green skills are most in demand across different industries? Where are the gaps in current education and training? How can universities, employers, and policymakers collaborate to bridge these gaps?*

Participants in this session included students and academic staff from partner universities, as well as representatives from industry (engineering firms, environmental consultancies, construction companies) and government agencies present at the workshop. The discussion was lively and inclusive: students shared their perspectives on the skills they wish to acquire for future green careers, faculty members talked about the challenges of updating curricula, and industry representatives highlighted the competencies they seek in new hires (such as proficiency in sustainable design, environmental impact assessment, or renewable energy systems).

Throughout the dialogue, several key themes emerged. One theme was the importance of interdisciplinary knowledge – successful green solutions often require blending engineering expertise with understanding of economics, policy, and social engagement. Another theme was the need for practical experience: internships and project-based learning were cited as crucial for students to develop hands-on skills in areas like energy auditing, urban green infrastructure, and climate

adaptation planning. Participants also discussed establishing stronger partnerships between universities and employers, such as joint training programs, guest lectures from industry experts, and collaborative research projects that involve students. This session effectively allowed the workshop attendees to articulate a shared vision of how to scale up green skills development. The ideas and recommendations from the discussion were recorded by the SmartWB organizing team, providing valuable input for the project's ongoing efforts to modernize curricula and for stakeholders seeking to invest in workforce training. The interactive workshop thus reinforced the collaborative spirit of the event, ensuring that every voice – from young graduates to seasoned professionals – contributed to the conversation on building a greener workforce.

At approximately 15:30, the formal program was brought to a close. The organizers offered brief closing remarks, thanking all participants for their contributions and summarizing the day's key insights.

To celebrate the successful event and further foster informal connections, a dinner gathering was held later in the evening (19:30) at a traditional restaurant in Tirana. This social event allowed speakers, guests, and project partners to continue conversations in a relaxed atmosphere. The convivial setting of the dinner reinforced the sense of community that the workshop had built, rounding off the day on a warm and collegial note.

In summary, the agenda and program structure of the SmartWB workshop were designed to maximize both knowledge dissemination and interactive engagement. Each session built upon the previous one: from understanding innovative solutions (Session I) to seeing their implications for jobs (Session II), and finally to strategizing about skills and collaboration (Session III). The inclusion of networking opportunities, from coffee breaks to the dinner, further enhanced the exchange of ideas. By integrating structured presentations with open discussion, the workshop ensured that participants not only learned from the experts but also learned from each other, fulfilling its role as a catalyst for partnership and innovation in the realm of climate-smart urban development.

3. Session I – Workshop on Promoting Low-Carbon Technologies and Blue-Green Infrastructure

Session I of the SmartWB Workshop focused on low-carbon and climate smart urban development through four expert presentations. These talks highlighted innovative approaches to sustainable urban development – from water pollution control and smart tourism to urban planning and waste management – all aligning with SmartWB's goals of *curricular innovation, green skills development, and climate-smart urban planning* with non-academic partners. Below we summarize each presentation's title, presenter and affiliation, and key points, along with how they tie into the SmartWB project objectives.

3.1. Micropollutants – a Challenge for Water Management

Martin Oldenburg & Claudia Steinert, *University of Applied Sciences and Arts Ostwestfalen-Lippe*

This presentation addressed the issue of micropollutants in water bodies and their treatment. Micropollutants are defined as a broad class of anthropogenic chemicals present at very low concentrations (micro- to nanograms per liter) with low biodegradability, leading to their persistence in the environment. The speakers emphasized that these substances – often originating from pharmaceuticals, pesticides, personal care products, etc. – can harm aquatic ecosystems and water resources.

A notable focus was on PFAS (per- and polyfluoroalkyl substances), a group of extremely persistent chemicals used in many industrial and consumer applications. PFAS are *water-, grease-, and dirt-repellent* and highly persistent; once released, they are *difficult or impossible to remove, hence known as "forever chemicals"*. The presenters explained that conventional wastewater treatment is not designed to eliminate such micro-contaminants. They discussed advanced low-carbon water treatment technologies for micropollutant removal, including activated carbon filtration and ozonation. Activated carbon (in granular or powdered form) can effectively adsorb many micro-contaminants. Ozone treatment is another option to break down pollutants, though it requires careful management of by-products. These technologies represent *innovative engineering solutions* that can be incorporated into curricula for environmental engineering and urban water management, strengthening green skills training.

The talk underscored the need for policy support (e.g., the EU Water Framework Directive and new wastewater treatment directives) and continued research, aligning with SmartWB's emphasis on up-to-date curricular content in climate-smart urban development.

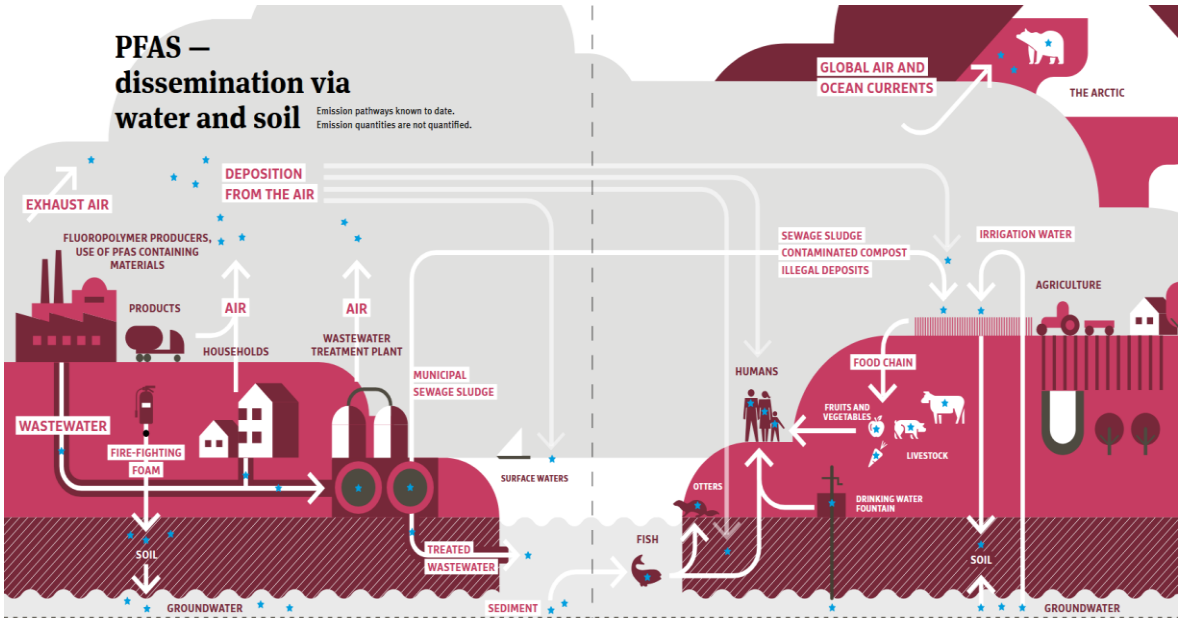


Figure 1 - Dissemination about water and soil

3.2. Smart Tourism – Smart Tourist Destinations: The Spanish Case

Carmen De-Pablos-Heredero & Miguel Blanco-Callejo, Universidad Rey Juan Carlos, Spain

This presentation explored how smart city concepts and sustainability are applied in tourism, using Spain as a case study. Spain, being one of the world's top tourism destinations, has pioneered the Smart Tourist Destination (STD) framework to ensure tourism development aligns with innovation and environmental sustainability. The presenters outlined the Spanish STD program's five pillars: Governance (public-private collaboration and transparent management), Innovation (new models and services), Technology (use of Big Data, IoT, AI for tourism management), Sustainability (climate-smart, resource-efficient approaches), and Accessibility (inclusive tourism for all). These pillars integrate digital transformation with *green infrastructure and low-carbon goals* – for example, the Sustainability dimension explicitly includes climate-friendly and resource-efficient practices.

An example from Valencia highlighted how regional policy protects coastal green infrastructure (the PATIVEL plan) to prevent unchecked development and preserve natural landscapes. The speakers also noted that smart tourism initiatives in cities like Valencia and Benidorm involve tracking and reducing the carbon and water footprint of tourism, promoting sustainable mobility, and leveraging open data for efficiency and transparency. This holistic approach demonstrates how urban areas can leverage technology to both enhance visitor experience and meet low-carbon and green infrastructure targets.

For SmartWB's purposes, the Spanish case offers valuable insights into curricular innovation: training students in urban planning and tourism management to use smart tools and data for sustainable development. It also underscores the importance of multi-sector collaboration (government, industry, academia) – mirroring SmartWB's model of involving non-academic partners – and can inform curriculum modules on sustainable tourism, digital skills, and climate resilience in urban economies.

Figure 2 - Smart Tourist Destination Program

3.3. Illegal Construction – Case Study from Croatia

Željko Bačić, University of Zagreb, Croatia

Professor Bačić's presentation examined the impacts of illegal construction on urban development and the environment, using Croatia as a case study. He addressed why combating illegal construction is relevant to climate-smart, green urban development and even to green job promotion. Illegal or unpermitted buildings were shown to have serious negative effects on urban sustainability. They often occupy and degrade green areas, cause unplanned strain on infrastructure, and foster urban sprawl.

Bačić noted that unauthorized developments "attack" green spaces in and around cities, create traffic congestion due to lack of proper road networks, and reduce energy efficiency because city services and building retrofits cannot be systematically planned. In short, *illegal construction creates chaotic conditions that hinder climate-smart urban development*. The presentation chronicled Croatia's policy responses, including legalization programs and enforcement actions. Over the past decade, Croatia processed hundreds of thousands of legalization requests for buildings constructed without permits. Interestingly, the legalization efforts themselves generated significant work for professionals (architects, surveyors, etc.), resulting in "a lot of job[s] for specific professions involved in legalization". While these are not "green jobs" in the strict sense, the point was made that *clear regulatory frameworks and urban planning enforcement can create economic opportunities* (and, implicitly, space for legal green infrastructure in city plans). The case study concluded that *"smart and illegal can't go together"* – a smart city or climate-resilient city must operate within sound planning and legal frameworks.

For SmartWB, this topic reinforces the importance of educating future urban planners and engineers on governance, policy, and legal aspects of sustainable development. Integrating such case studies into the curriculum can build skills in spatial planning, law, and community engagement, which are crucial for developing livable, green cities.

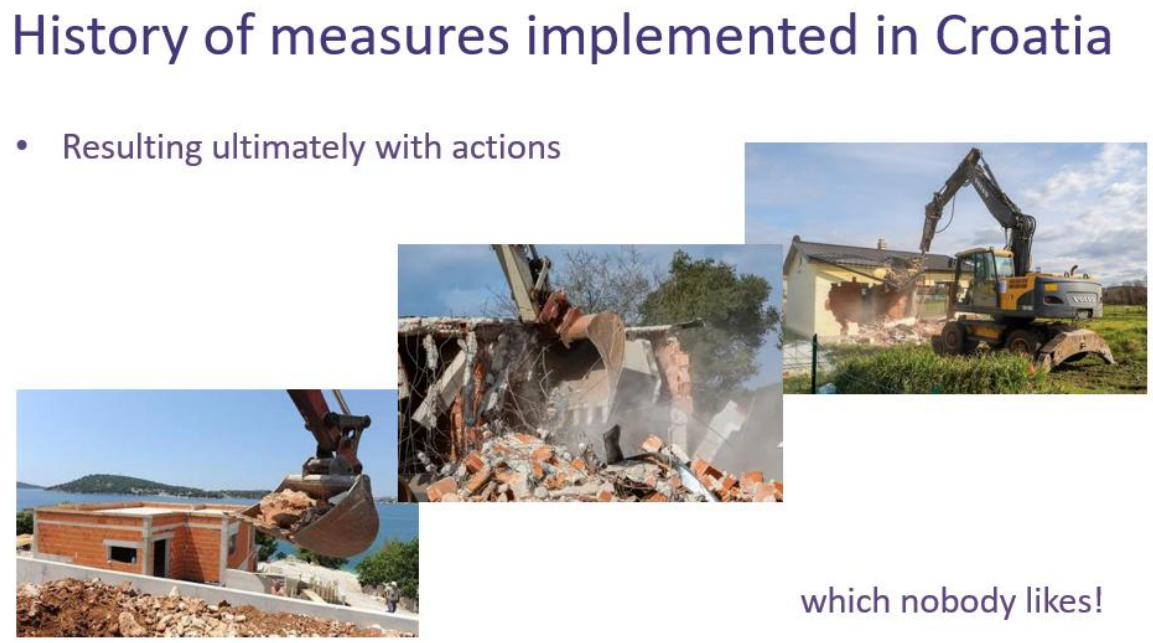


Figure 3 - Demolition of an illegally built structure in Croatia – an example of enforcement actions "which nobody likes," but sometimes required to restore urban order.

3.4. Urban Challenges in Nikšić: Co-Housing and Waste Management Projects

Nikola Perović, Ecological Movement "Ozon", Montenegro

Representing an environmental NGO, Nikola Perović presented practical initiatives from Nikšić, Montenegro, addressing social housing and waste management – two areas relevant to low-carbon and blue-green infrastructure in cities.

The first part focused on co-housing and social housing challenges in Nikšić. Many apartment buildings in the city suffer from poor conditions: *lack of infrastructure, deteriorating facades, overcrowded parking, and generally low-income residents*. Approximately 17,000 people live in substandard apartments, including vulnerable groups like pensioners, single mothers, and disabled persons. To improve this, local projects are introducing green and energy-efficient solutions: for example, installing energy-efficient roofs, establishing housing cooperatives for better management, and promoting social engagement in building upkeep. These measures not only improve living conditions but also create jobs and training opportunities in retrofitting and maintenance – aligning with SmartWB's interest in green skills.

The second part addressed waste management, a key component of urban environmental infrastructure. Montenegro has committed (under EU directives) to recycle 50% of collected waste by 2030. In Nikšić, plans are underway for a regional recycling center and related facilities to serve multiple municipalities. The smart waste management initiative in Nikšić leverages technology to optimize operations: *sensor-equipped bins* provide real-time data on fill levels, enabling efficient collection routes that cut fuel use and emissions; data analytics help identify waste trends and improve recycling strategies; and "smart containers" with compression and even solar power features increase efficiency. Together, these actions reduce pollution and greenhouse gas emissions from waste while increasing recycling rates.

Perović emphasized the multi-stakeholder approach – the NGO works with the municipality, citizens, and international partners (e.g., World Bank, Union of Municipalities) – exemplifying the SmartWB principle of academic-public-private collaboration. For the SmartWB project, the Nikšić examples serve as case studies on community-level innovation in blue-green infrastructure (like waste and water systems) and highlight curriculum topics such as sustainable housing policy, circular economy (waste recycling), and IoT applications for environmental management. By involving an NGO perspective, it also reinforces the role of civil society and grassroots action in creating greener cities.

4. Session II – Promoting Green Job Opportunities in Urban Development

Session II of the SmartWB workshop, *"Promoting Green Job Opportunities in Urban Development,"* featured five presentations by experts and young researchers. These talks showcased how sustainable urban initiatives – from circular economy pilots to climate action plans – can create green employment pathways while aligning with SmartWB's goals of curricular innovation, green skills training, and climate-smart urban development. Each presenter's insights highlighted the links between urban sustainability projects and opportunities for green jobs in communities.

4.1. Circular City Labs Tirana – Testing Reusable Packaging Systems in Local Businesses

Merita Toska – Co-PLAN, Albania

Merita Toska opened the session with a presentation on Circular City Labs (CCL) Tirana, a pilot initiative to reduce urban waste and emissions through reusable packaging in local businesses. She explained that CCL Tirana aims to cut down greenhouse gas emissions by introducing economically viable reusable packaging systems in the city, while also empowering women's participation in the local circular economy.

In her talk, Toska described several pilot projects with small and medium enterprises (SMEs) in Tirana that illustrate this approach. For example, a local event services company has developed a modular "Reusable Event Kit" (REKit) system – durable cups collected via deposit, washed, and reused at public events. Similarly, the *Barefoot Festival* introduced a "Mobile Refill" station providing refillable containers to attendees, drastically cutting single-use plastic waste at events. Other pilots include a craft brewery reclaiming and sanitizing beer bottles, a healthy foods business offering orders in returnable jars, and even a laundry service shifting to reusable garment bags. Together, these examples show how circular economy innovations in an urban setting can spur new green business models and jobs – from waste collection and cleaning services to logistics and customer engagement – all while aligning with climate-smart development goals.

Toska's presentation underscored the SmartWB project's emphasis on climate-smart urban development and green skills: the CCL Tirana pilots not only reduce waste and emissions but also require training local entrepreneurs and staff in sustainable packaging management, an emergent green skill set.

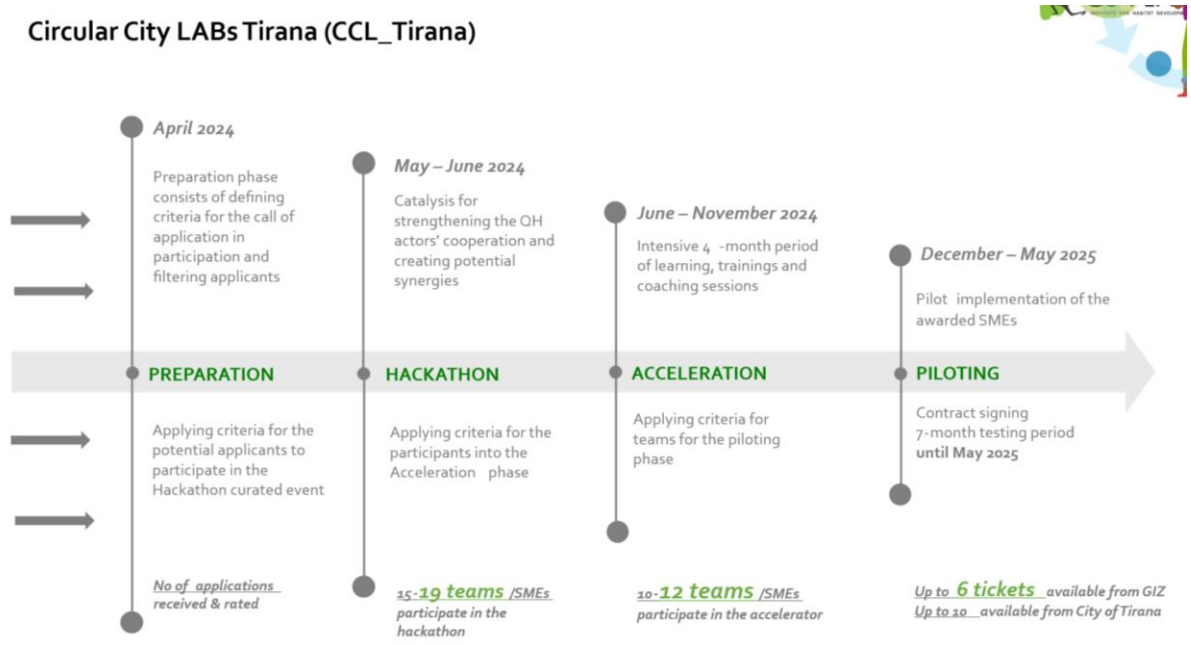


Figure 4 - Example pilot initiatives under CCL Tirana: SMEs like breweries and festivals adopting reusable packaging (reducing waste and creating green enterprise opportunities).

4.2. The Concept of Urban Metabolism as an Innovation in Local Urban Planning in Albania

Mirlinda Rusi – Co-Founder and Manager, Technical Planning & Development shpk, Albania

Mirlinda Rusi's presentation introduced urban metabolism as an innovative planning concept for Albanian cities, emphasizing its relevance for sustainable development and potential to generate green jobs in the long run. Rusi – an urban planner and licensed environmental expert– explained that viewing a city through the lens of *metabolism* means analyzing all the flows of materials, energy, water, and waste that feed the city's functioning. This method, she argued, can reveal opportunities to improve resource efficiency and environmental performance in urban plans.

During her talk, Rusi illustrated how the urban metabolism framework categorizes resource flows into three main groups: natural inputs, products, and wastes. Natural inputs include raw materials, water, and energy entering the city; product flows are goods and services produced; and waste flows encompass all outputs (solid, liquid, gaseous) discharged into the environment. By quantifying and mapping these flows, local planners can identify where circular economy interventions or green infrastructure are most needed – for instance, pinpointing high waste outputs that could be turned into recycling or composting initiatives. Rusi highlighted that adopting this concept in local urban plans is a *new practice in Albania*, effectively a form of curricular and professional innovation: it requires building new expertise among planners and decision-makers. Over time, implementing urban metabolism analysis can open up green job opportunities such as environmental auditing, waste management, and renewable energy projects, as cities redesign systems to be more sustainable.

In line with SmartWB's goals of curricular innovation, Rusi's talk demonstrated the importance of introducing cutting-edge sustainable planning concepts to both academia and practice, thereby equipping the next generation of professionals with the skills to drive climate-smart urban development.

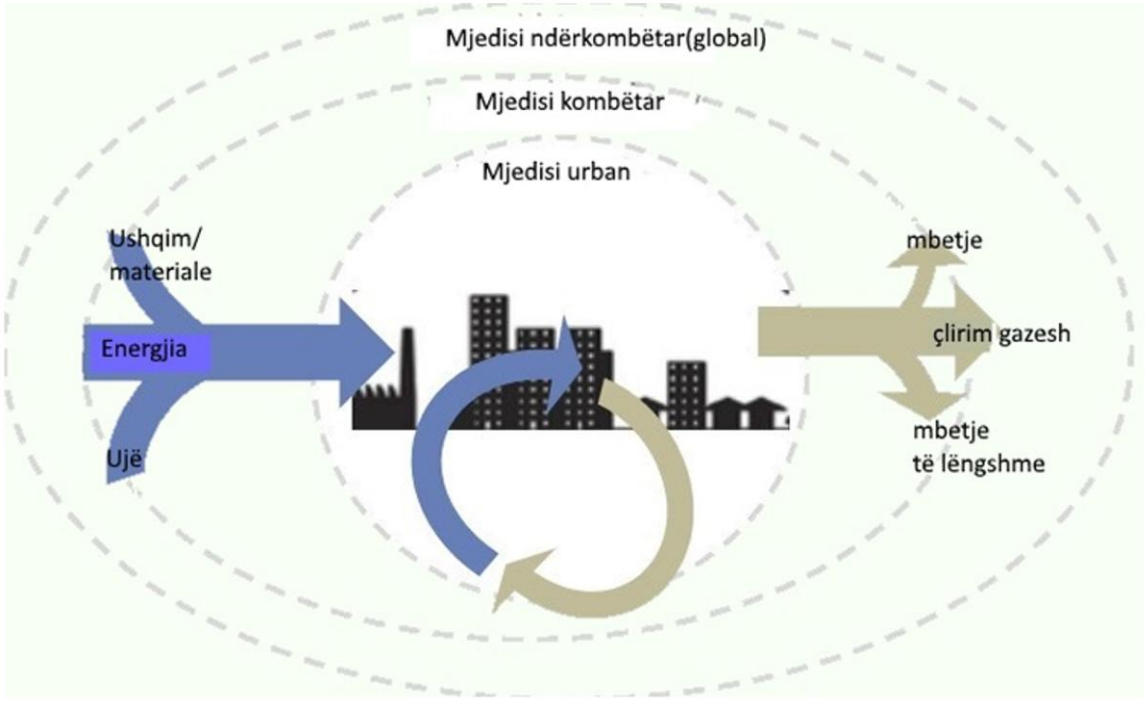


Figure 5 - Simplified diagram of the urban metabolism concept (flows of energy, water, and materials in a city) as presented by Mirlinda Rusi, highlighting opportunities for sustainable interventions.

4.3. Transformation in Progress: A Climate City Contract for Green and Healthy Elbasan

Drini Nushi – Institute of Urban Research, Albania

Representing the Municipality of Elbasan's experience, Drini Nushi presented a success story of city-level climate action and its links to green jobs.

Elbasan is one of Albania's pilot cities committed to climate neutrality, and Nushi's talk detailed its "Climate City Contract" – a roadmap for a green and healthy Elbasan – and several ongoing projects under this framework. He noted that Elbasan's vision is to become a model of sustainable urban development, especially in energy and mobility. One flagship initiative, titled Green-ELB, aims to retrofit buildings for energy efficiency and move toward near-zero emissions in the building sector. The expected impacts are significant: residents benefit from lower energy bills and improved comfort, the city gains capacity in energy-saving programs, and greenhouse emissions are targeted to drop by 15% by 2030 on the path to zero-emission buildings by 2050. Nushi explained that achieving these goals involves a broad coalition of stakeholders – local government, universities, businesses, and community groups – working together on projects like electric mobility plans, school energy efficiency

upgrades, sustainable tourism development, and climate-smart transportation. Crucially, his presentation emphasized capacity building and inclusive innovation as part of Elbasan's climate action. For example, the city's program includes training sessions for youth volunteers in advanced energy audit techniques and community energy assessments. Moreover, a dedicated training on project management for energy retrofitting explicitly incorporates *green job opportunities* and gender inclusivity, preparing participants to take on roles in the expanding energy efficiency sector. By highlighting these efforts, Nushi demonstrated how a municipal climate strategy can serve as an engine for local green employment – from energy auditors and retrofit specialists to public awareness campaigners – while also aligning with SmartWB's emphasis on practical skills and climate-smart curricula. Elbasan's transformation in progress shows that pursuing urban climate neutrality creates not only environmental benefits but also new professional pathways for the community.

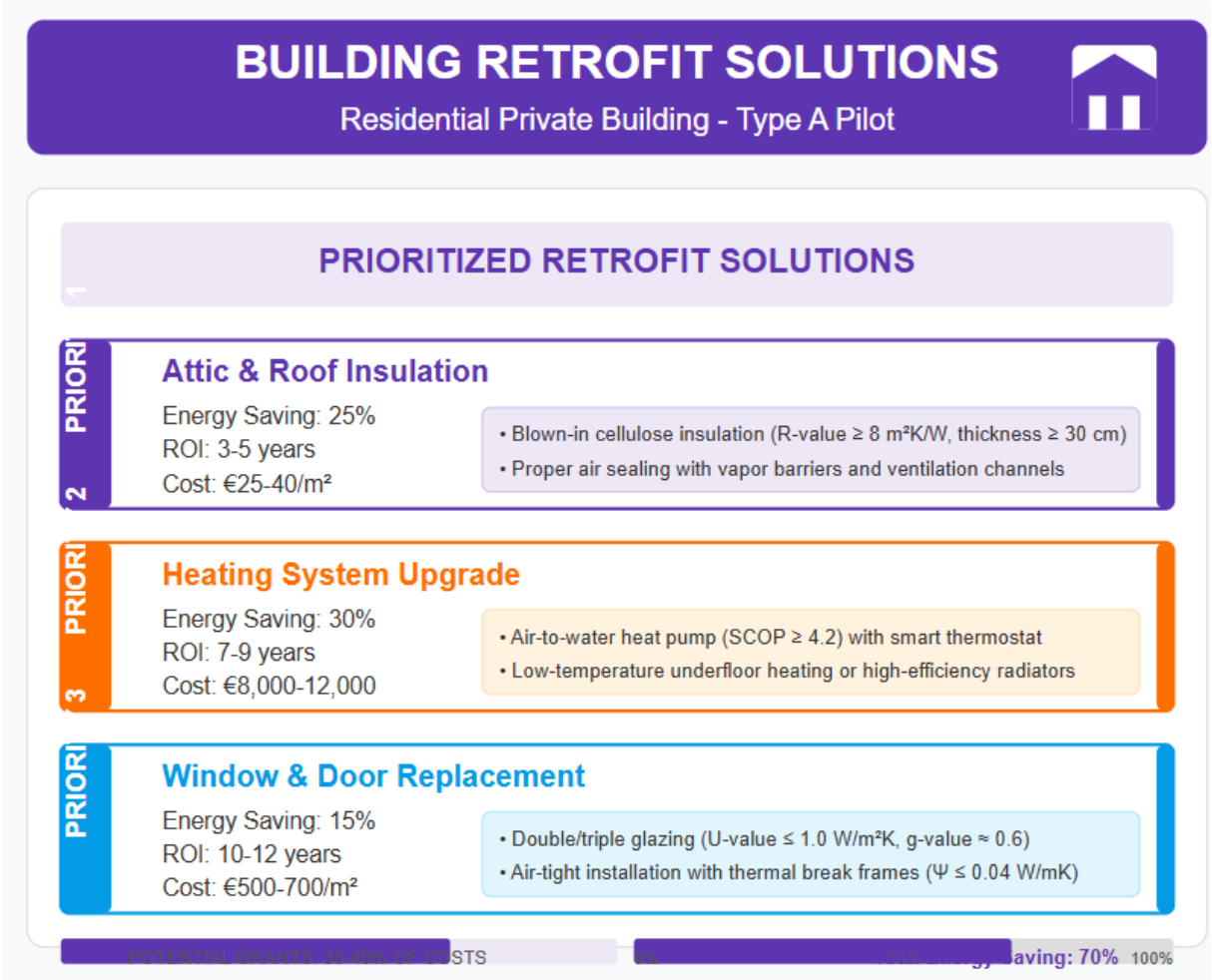


Figure 6 - Elbasan's Climate City Contract initiatives – e.g. building energy retrofitting (Green-ELB) – are reducing emissions and training local youth in energy audit and retrofit skills, laying the groundwork for green jobs in the city.

4.4. Carbon Footprint and Carbon Emission Reduction of Higher Education Institution Buildings – Case Study: Faculty of Civil Engineering, Tirana

Era Fusha – Department of Environmental Engineering, Polytechnic University of Tirana, Albania

Era Fusha, a student from Polytechnic University of Tirana, presented a case study on measuring and reducing the carbon footprint of a university building. Fusha's study focused on the Faculty of Civil Engineering building in Tirana, analyzing its energy use, waste generation, and transportation impacts to calculate total carbon emissions. She found that a major issue is the building's lack of thermal insulation, which leads to excessive heating/cooling demands. By installing proper insulation with modern energy-efficient materials, the faculty could significantly reduce heat loss and cut energy costs and emissions. In her presentation, Fusha detailed the methodology used (aligned with the GHG Protocol standard) and showed data on the building's carbon emissions from electricity, waste, and transport.

An important dimension of this case study is how it ties into a broader institutional initiative: under the 1FUTURE project, all Western Balkan universities are drafting Climate Action Plans for their campuses. Fusha noted that these plans are not only technical blueprints but also educational tools – they *engage students and staff* in sustainability practices. Indeed, a core goal is to *train future leaders* in sustainability by integrating carbon management into research and teaching. As part of the campus Climate Action Plan, activities like sustainability workshops, student-led carbon audits, and community awareness campaigns are being organized.

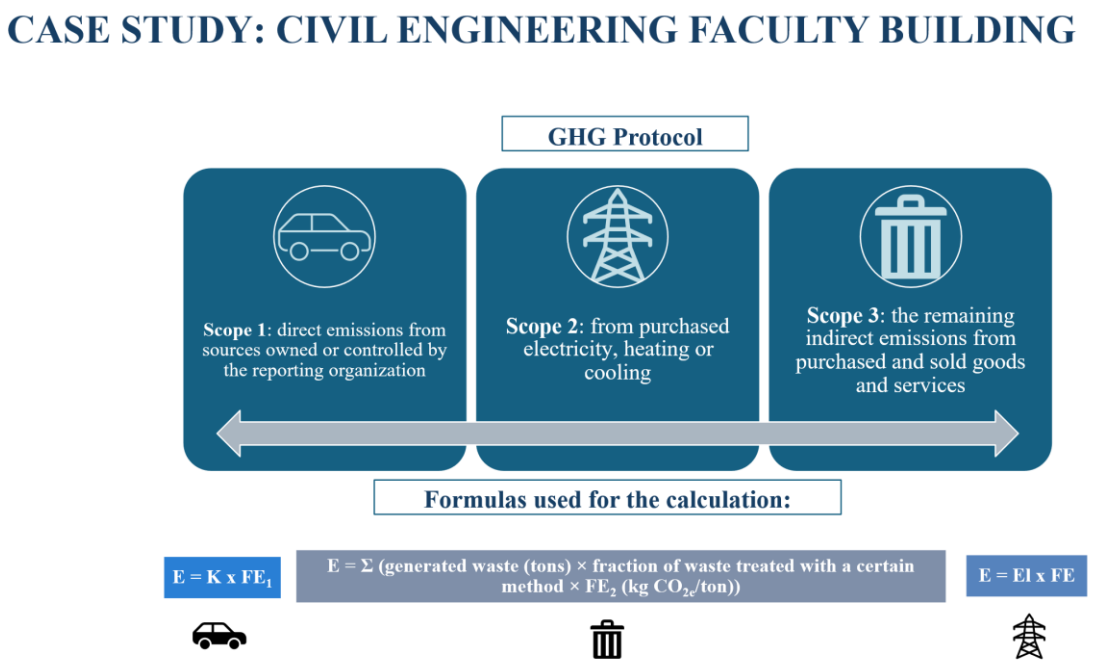


Figure 7 - Carbon footprint analysis of the Civil Engineering Faculty building: Era Fusha's study engaged students in measuring campus emissions and devising reduction strategies, exemplifying how academic projects contribute to climate action and green skill tr

This exemplifies curricular innovation and green skill-building: students gain hands-on experience in carbon accounting and energy management, which are valuable skills in the emerging green job market. Fusha's case study thus demonstrated a twofold benefit of campus sustainability projects –

immediate emission reductions (climate-smart development on campus) and long-term workforce development.

The audience learned that greening university operations can provide a living laboratory for students to acquire green skills (such as carbon auditing, energy efficiency retrofitting, and climate action planning) that will be in high demand as Albania and the region pursue sustainable urban development.

4.5. Building the Resilience of Protected Areas to Climate Change – Case Study: Baks-Rrjoll, Shkodër

Sindi Alliu – Department of Environmental Engineering, Polytechnic University of Tirana, Albania

Sindi Alliu concluded Session II with a case study connecting climate resilience, environmental protection, and local development. Focusing on Baks-Rrjoll – a coastal protected area near Shkodër – Alliu's presentation examined how climate change impacts (like rising sea levels and flooding) can be addressed through sustainable design and planning. She first described the significance of the Baks-Rrjoll area: its wetlands lie on a major European bird migration route and are designated as a RAMSAR site for their ecological importance. These natural assets, if safeguarded, also give Baks-Rrjoll potential to develop eco-friendly tourism, creating green jobs for local communities.

Alliu then outlined a climate-resilient development proposal for a small settlement in the area. Key measures include constructing buildings on elevated wooden columns (0.5 m high) to prevent flood damage during river surges, orienting buildings to optimize solar gain in winter and reduce heat in summer, and incorporating rainwater harvesting systems to supply non-potable water needs (for sanitation, irrigation, etc.). To protect water quality, the plan routes wastewater to a treatment plant in Velipojë and sets up a waste management scheme with sorted recycling bins, ensuring the environment remains clean. Through these interventions, the project exemplifies climate-smart development in a rural context – blending traditional environmental conservation with modern sustainable design.

Alliu emphasized that such initiatives can unlock new opportunities for green employment: for example, jobs in eco-tourism (park guides, guesthouse operators) as the area's natural beauty is preserved, and jobs in construction and maintenance of sustainable infrastructure (rainwater systems, solar panels, flood defenses). Additionally, the project involved collaboration with her university, highlighting a pedagogical aspect: engineering students and faculty contributed to designing solutions, thereby enhancing their practical green skills in climate adaptation and resilient planning. This synergy between academic insight and local action resonates with SmartWB's mission of curricular innovation for climate resilience. Alliu's case study reinforced the session's overarching message – that protecting the environment and adapting to climate change can go hand-in-hand with creating sustainable livelihoods for communities.

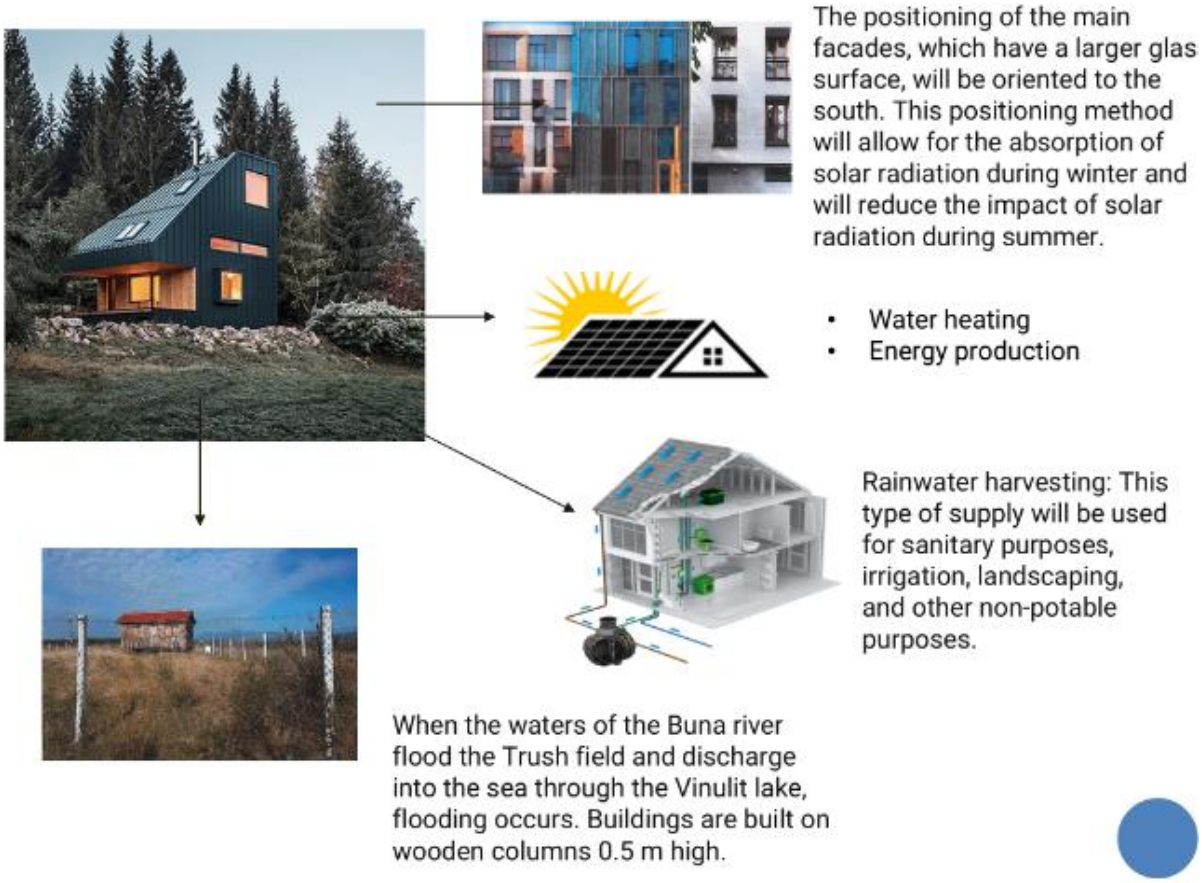


Figure 8 - Climate-resilient design for Baks-Rrjoll: Sindi Alliu's plan proposes elevated, solar-oriented eco-cabins and rainwater harvesting in this coastal wetland, protecting nature and enabling sustainable eco-tourism (a source of green jobs).

Each of these five presentations enriched the workshop with practical examples of linking urban sustainable development to green job prospects. From Tirana's circular economy startups to Elbasan's city-wide climate programs, and from academic campuses to protected rural landscapes, the Session II speakers demonstrated how climate action and innovation can drive employment. Their insights underscore the SmartWB project's core goals: updating curricula and training to include sustainability, equipping the workforce with green skills, and fostering climate-smart development strategies that benefit both people and planet.

5. Session III – Interactive Workshop: Scaling Green Skills Across Industries

The final session of the SmartWB Workshop in Tirana served as an interactive workshop focused on exchanging ideas and real-world experiences around green skill development and scaling employment opportunities in climate-smart sectors. Moderated by Genti Qirjazi (UPT), the discussion drew on insights from the previous two sessions, and encouraged open dialogue among participants, including university staff, local business representatives, and municipal officers.

5.1. Objectives and Guiding Questions

The workshop was framed around a set of strategic questions presented in the session's opening slides:

- What are the most urgent green skills needed today in urban development?
- How can universities better align their programs with green labor market needs?
- What role can local government and municipalities play in green job creation?
- How do we make green careers attractive and accessible to students?
- What types of partnerships (university–business–government) work best for scaling green skills?

These questions are directly aligned with the SmartWB project's mission of curricula innovation, particularly the integration of green, climate-conscious, and energy-efficient themes into higher education and non-academic collaboration.

5.2. Key Discussion Themes and Highlights

5.2.1. Green Skills Across Industries

Participants acknowledged the strong potential for green job creation across various sectors – construction, packaging, tourism, environmental services – as evidenced in previous presentations. However, they also identified a mismatch between education and market demands. Universities were encouraged to modernize programs to include real-world environmental practices and sustainability tools.

5.2.2. Public Policy as a Catalyst

A major barrier discussed was the lack of enabling public policies. While innovative pilots exist (e.g., reusable packaging in Tirana), they often struggle without tax incentives or legal frameworks. Guests highlighted how, unlike in Germany where public subsidies and taxes on single-use plastics support green transitions, Albania lacks similar mechanisms. Local businesses are hesitant to adopt sustainable practices without economic incentives.

"What we faced as a constraint was the absence of local policy support... In countries where these provisions were in place, businesses were very interested." – M. Toska

5.2.3. Challenges in Private Sector Engagement

The private sector was seen as essential but risk-averse in the absence of clear financial returns. Participants noted that green transitions often require upfront investment and patience for long-term payoffs – conditions that many small businesses cannot afford without help. A deeper government–business–university alliance is required to de-risk innovation and boost uptake.

5.2.4. Tourism and Urban Services as Green Employment Zones

Tourism was singled out as a key sector with green job potential but also environmental risks. Unregulated accommodation and waste from seasonal surges were identified as threats. There is an urgent need to green urban services such as hospitality, food supply chains, and public transport to support both environmental protection and sustainable tourism development.

5.2.5. The Role of Universities

The discussion closed with a consensus that universities should lead the transition. Not only by educating students, but also by becoming innovation hubs and proactive partners to businesses and municipalities. Embedding sustainability into degree programs, offering green entrepreneurship modules, and facilitating student-business collaboration were all encouraged.

"Universities must create professionals that demand green products. The business will then follow."

5.3. Proposed Recommendations from the Workshop

- Encourage municipalities to adopt and enforce sustainability-based policies, including incentives for businesses that adopt green practices.
- Align academic curricula with green market needs, particularly in urban development, tourism, and environmental engineering.
- Develop structured university–business–government partnerships to support internships, joint pilot projects, and student-led innovations.
- Increase awareness campaigns among students and young professionals on viable green career paths and the importance of sustainability skills.
- Identify service sectors (e.g., tourism, packaging, construction) as quick wins for scaling green employment with tailored curricula and training programs.

This session was pivotal in engaging all stakeholders – academia, public administration, and private enterprise – in a collective dialogue around scaling green skills. The workshop reaffirmed the SmartWB project's role as a regional platform to facilitate such exchange and to embed its findings into ongoing curricular reform, capacity building, and local economic development.

5.4. Conclusion and Reflections

Session III's interactive workshop provided an invaluable forum for exchange, knitting together perspectives from the public sector, academia, and industry on how to grow and nurture the green skills needed for climate-smart urban development. The interactive format proved effective in uncovering insights: it became clear that urgent green skill gaps exist (in fields from renewable energy

to sustainable urban planning), but also that there are innovative ideas and goodwill among stakeholders to bridge these gaps.

Key takeaways include the importance of government leadership in signaling demand and supporting training, the need for universities to stay closely aligned with industry developments, the role of companies in championing and investing in workforce skills, and the necessity of engaging students by making sustainability learning compelling and career-ready. Thematically, the session underscored that green skill development is multifaceted – it encompasses educational content, pedagogy, policy incentives, cultural attitudes, and economic drivers.

Crucially, the discussion in Session III mirrored and reinforced the SmartWB project's goals. SmartWB aims to improve the quality and relevance of higher education in climate-smart urban development, and to strengthen ties between higher education institutions and the socio-economic environment. The session also touched on curricular innovation – not just in theory, but as a living process involving external partners (exactly as SmartWB advocates by involving the non-academic sector in curriculum design). Additionally, many points raised pertained to implementing climate-smart strategies (e.g. low-carbon projects, resilience planning) and ensuring the workforce is prepared to carry them out. By identifying both obstacles and solutions, the session provided a roadmap of sorts for future SmartWB activities and beyond. It became evident that achieving a climate-smart urban future in the Western Balkans will require continued dialogue, experimentation, and partnership-building – the very principles showcased in this interactive workshop.

6. Key Insights and Thematic Conclusions from the SmartWB Workshop

On May 22, 2025, the SmartWB project convened a multi-stakeholder workshop in Tirana to showcase innovative practices and discuss pathways toward sustainable urban development. This chapter synthesizes the main insights and conclusions from the three workshop sessions, organized thematically around core SmartWB focus areas. The presentations and discussions reinforced the Erasmus+ SmartWB project's goals by highlighting practical low-carbon solutions, strategies for green jobs and skills, curricular innovations aligned with labor market needs, and the importance of policy and institutional cooperation.

6.1. Low-Carbon Solutions and Climate-Smart Urban Strategies

A central theme of the workshop was the promotion of low-carbon solutions and climate-smart strategies in urban development. International experts presented best practices demonstrating how cities can reduce environmental impacts and innovate for sustainability. Key examples included:

6.1.1. Managing Water Micropollutants

Researchers from Germany highlighted the challenge of micropollutants in water management and strategies to prevent ecosystem deterioration. This illustrated the need for advanced water treatment and pollution prevention as part of climate-smart urban planning.

6.1.2. Smart Sustainable Tourism

Spanish partners shared the *Smart Tourism Destinations* initiative, showcasing award-winning examples of intelligent tourism sites. These cases showed how digital innovation and data-driven planning can make urban tourism more sustainable and low-carbon.

6.1.3. Addressing Unplanned Urbanization

A Croatian case study on illegal construction underscored the problems of unregulated urban growth. The presenter provided guidance on policy solutions to ensure urban development follows sustainable plans and resiliency standards.

6.1.4. Community Co-housing and Waste Management

A Montenegrin NGO (Ozon) discussed co-housing projects and waste management in Niksic municipality, demonstrating grassroots approaches to low-carbon living. This example emphasized community engagement in reducing waste and creating more sustainable urban lifestyles.

Collectively, these insights underline a multi-faceted approach to climate-smart urban strategies. Effective urban sustainability requires integrating technological innovation, sound policy enforcement, and community-based solutions. The diverse cases from water quality to tourism and housing all align with SmartWB's vision of low-carbon, climate-resilient urban development, providing real-world content to inform updated curricula and practitioner training.

6.2. Green Job Creation and Skills Development

Another prominent focus was how sustainable urban initiatives can drive green job creation and require new skill sets. Session II highlighted local and regional projects that link urban development with employment opportunities in the green economy. The examples presented demonstrated pathways for generating jobs while advancing environmental goals:

6.2.1. Circular Economy Enterprises

The *Circular City Labs Tirana* pilot on reusable packaging in local businesses showed how circular economy models not only reduce waste but also create new business opportunities. Such initiatives can spawn green jobs in recycling, logistics, and sustainable product design, underlining the need for skills in waste management and eco-innovation.

6.2.2. Innovations in Urban Planning (Urban Metabolism)

Introducing the concept of urban metabolism in Tirana's planning illustrated how analyzing energy and material flows in cities can lead to more efficient resource use. This approach can open up specialized roles for urban planners and environmental consultants to develop and implement green infrastructure and resource optimization strategies.

6.2.3. Climate City Contract for Elbasan

A case from Elbasan demonstrated a "climate city contract" – a local commitment to a green and healthy city. Implementing such a contract involves projects like building retrofits and renewable energy installations, which in turn create jobs in construction, energy auditing, and project management. It highlighted the value of project management and technical skills for executing municipal climate initiatives.

6.2.4. Low-Carbon Campus Initiatives

A study on the carbon footprint of a university building (Faculty of Civil Engineering in Tirana) showcased how higher education institutions can lead by example. Efforts to reduce campus emissions (energy efficiency upgrades, sustainable operations) engage professionals in energy management and facilities engineering, providing hands-on learning opportunities for students and staff to develop green skills.

6.2.5. Climate Resilience in Protected Areas

Research on improving the resilience of a protected area (Baks Rrjoll in Shkoder) to climate change indicated demand for expertise in ecosystem management and climate adaptation. Projects in conservation and climate resilience create roles for environmental scientists, park managers, and local community workers focused on sustainability.

Across these cases, the workshop illuminated that pursuing urban sustainability goes hand-in-hand with cultivating a green workforce. Each initiative demonstrated how new employment pathways emerge – from technical roles in energy and infrastructure to community-level green entrepreneurship. Participants noted that universities must prepare graduates with the practical skills to fill these roles, reinforcing the SmartWB mission to link curricular outcomes with the needs of a growing green job market.

6.3. Curricular Innovation and Alignment with Labor Market Needs

A core message from the event was the imperative to modernize academic curricula to meet sustainability targets and labor market demands. The SmartWB project's primary objective is to innovate university programs in Montenegro, Bosnia & Herzegovina, and Albania, aligning them with the skills needed for sustainable development and the UN Sustainable Development Goals. The workshop's discussions strongly reinforced this goal.

During the interactive session *"Scaling Green Skills Across Industries,"* stakeholders – including students, faculty, and industry representatives – debated how to equip the workforce with the green skills required across sectors. Several conclusions emerged:

- Academic curricula need to incorporate interdisciplinary green skills – from renewable energy and energy efficiency know-how to sustainable urban planning, waste management, and climate risk assessment. Traditional programs in engineering, architecture, and urban planning should be updated with modules on low-carbon technologies and climate resilience to produce well-rounded graduates.
- Practical training and collaboration with industry are critical. Participants highlighted that hands-on projects (such as those presented in the workshop) and partnerships with businesses and municipalities give students real-world experience. This ensures that graduates not only learn theory but also can apply sustainable solutions in practice, making them job-ready for the green economy.
- Lifelong learning and upskilling were identified as necessary for the current workforce to adapt to new sustainability standards. The workshop underscored that universities, as knowledge centers, should offer continuous education programs and certifications in emerging areas (e.g. environmental data analysis, green project management) to meet evolving labor market needs.

By showcasing pioneering projects and facilitating open dialogue, the workshop provided valuable input for curriculum developers. The innovative cases discussed (from smart tourism to energy-efficient building design) are being leveraged as learning materials and case studies in updated courses. This direct transfer of knowledge from the field to the classroom exemplifies how SmartWB ensures curricular innovation is tightly aligned with what employers and communities need. Ultimately, the event confirmed that educating future professionals in climate-smart urban development is pivotal for sustaining the momentum of green initiatives beyond the project's lifespan.

6.4. Policy and Institutional Cooperation Between Academia, Government, and Industry

Finally, the workshop underscored the importance of policy support and institutional cooperation in advancing climate-smart urban development. Achieving lasting change requires collaboration across academia, government agencies, and the private sector – a principle at the heart of the SmartWB project. The event itself brought together diverse stakeholders (university professors and students, municipal officials, national Erasmus representatives, NGOs, and industry experts), creating a rich environment for exchange and networking. This multi-actor participation demonstrated how cooperation can accelerate progress:

6.4.1. Shared Governance and Policy Alignment

Several presentations highlighted that supportive policies are needed to implement low-carbon solutions (for example, enforcing urban planning regulations to curb illegal construction or adopting city-wide climate contracts). Open discussions allowed policymakers and researchers to identify gaps and align on solutions. The presence of government representatives ensured that insights from the workshop could inform local and national policy frameworks.

6.4.2. University–Non-Academic Partnerships

The SmartWB consortium itself is built on inter-university and international collaboration, paired with non-academic partners from the NGO and professional sectors. Partners such as Co-Plan (a planning NGO) and Ozon (an environmental NGO) actively contributed their expertise during the workshop, exemplifying academia–civil society cooperation. This collaboration enriches academic programs with practical perspectives and helps translate research into on-the-ground action.

6.4.3. Cross-Border Knowledge Transfer

With institutions from Albania, Montenegro, Bosnia & Herzegovina and EU countries (Spain, Germany, Austria, etc.) involved, the workshop facilitated exchange of best practices across regions. For instance, lessons from Spain's smart tourism or Germany's water management research can inspire policy and educational reforms in the Western Balkans. Such international cooperation enhances institutional capacity and ensures that successes in one context can be adapted and replicated elsewhere.

6.4.4. Sustained Stakeholder Engagement

The interactive format (especially the open-floor Session III) allowed continuous engagement beyond formal presentations. Students and young professionals voiced their aspirations and concerns, while industry and government representatives offered feedback. This dialogue helped build trust and a shared vision among stakeholders. It also created networking opportunities that may lead to internships, research collaborations, or pilot projects, embodying the "quadruple helix" approach (academia, industry, government, civil society) to innovation.

In summary, the workshop reinforced that achieving climate-smart urban development and green growth is a collective effort. Policy instruments, academic research, and business innovation must work in tandem. The SmartWB project's emphasis on institutional cooperation was vividly reflected in the event's collaborations and discussions. By bridging academic and non-academic sectors, the project ensures that educational outcomes, research agendas, and policy initiatives mutually support one another. This cooperative spirit is not only advancing the project goals but also laying the groundwork for enduring partnerships that will continue to promote sustainability in the region.

7. Annex I: Participation statistics

The SmartWB Workshop on Promoting Green Job Opportunities in Urban Development attracted a diverse group of participants from academic, public, private, and professional sectors. A total of 87 individuals took part in the event, representing a wide spectrum of stakeholders engaged in climate-smart urban development.

Table 1 - Number of participants based on target groups

Target Groups	No of participants
TG1. Students educated in urban development and related study programmes and courses	**8**
TG2. Teaching staff	**36**
TG3. Representatives of business sector companies in the field of urban development (predominantly SMEs)	**28**
TG4. Professionals in the field of urban development and related disciplines	**10**
TG5. Governmental authorities, public municipal administration and agencies	**5**
TOTAL	**87**

This participation profile highlights the successful engagement of all core SmartWB target groups, with particularly strong representation from academia and the private sector. The presence of students, professionals, and public officials provided a well-rounded platform for discussing green jobs, low-carbon technologies, and skills development in urban contexts.

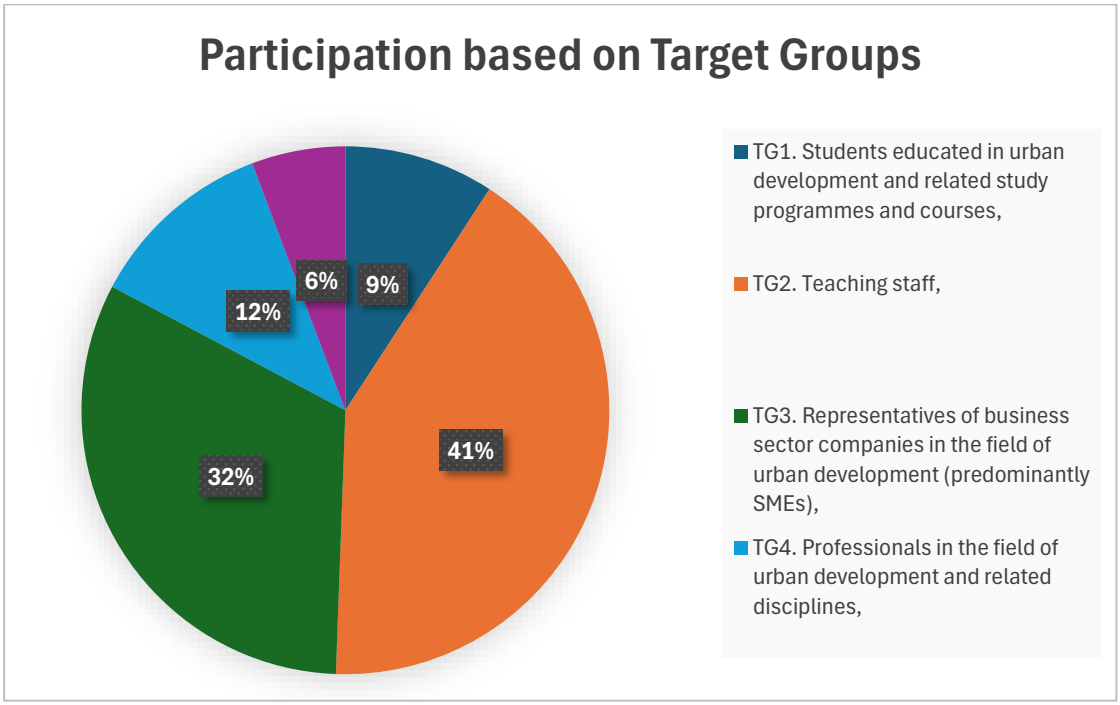


Figure 9 - Participation Based on Target Groups

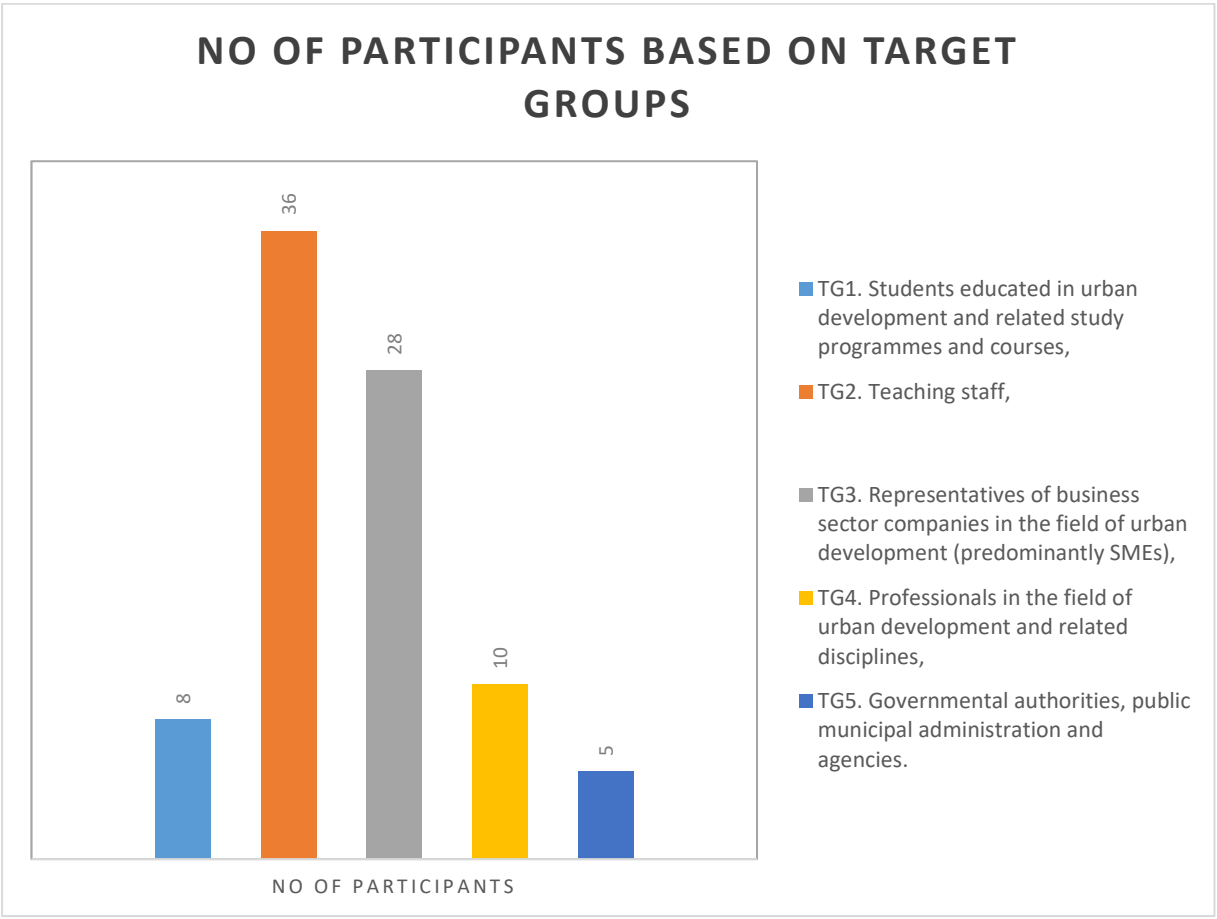


Figure 10 - No of Participants based on target groups

8. Annex II: Workshop Agenda

SmartWB Workshop on Promoting Green Job Opportunities in Urban Development (22 May 2025, Polytechnic University of Tirana). This annex provides the detailed schedule, list of presentations, and timing as described in the Agenda document.

Agenda

Workshop for promoting green job opportunities in urban development

Project title: Curricula innovation in climate-smart urban development based on green and energy efficiency with the non-academic sector

Acronym: SmartWB

Project Nº: 101081724

Work package	*Title*
7	***Impact and dissemination***
Task N°	***Task name***
T7.5	***Workshop for promoting green job opportunities in urban development***

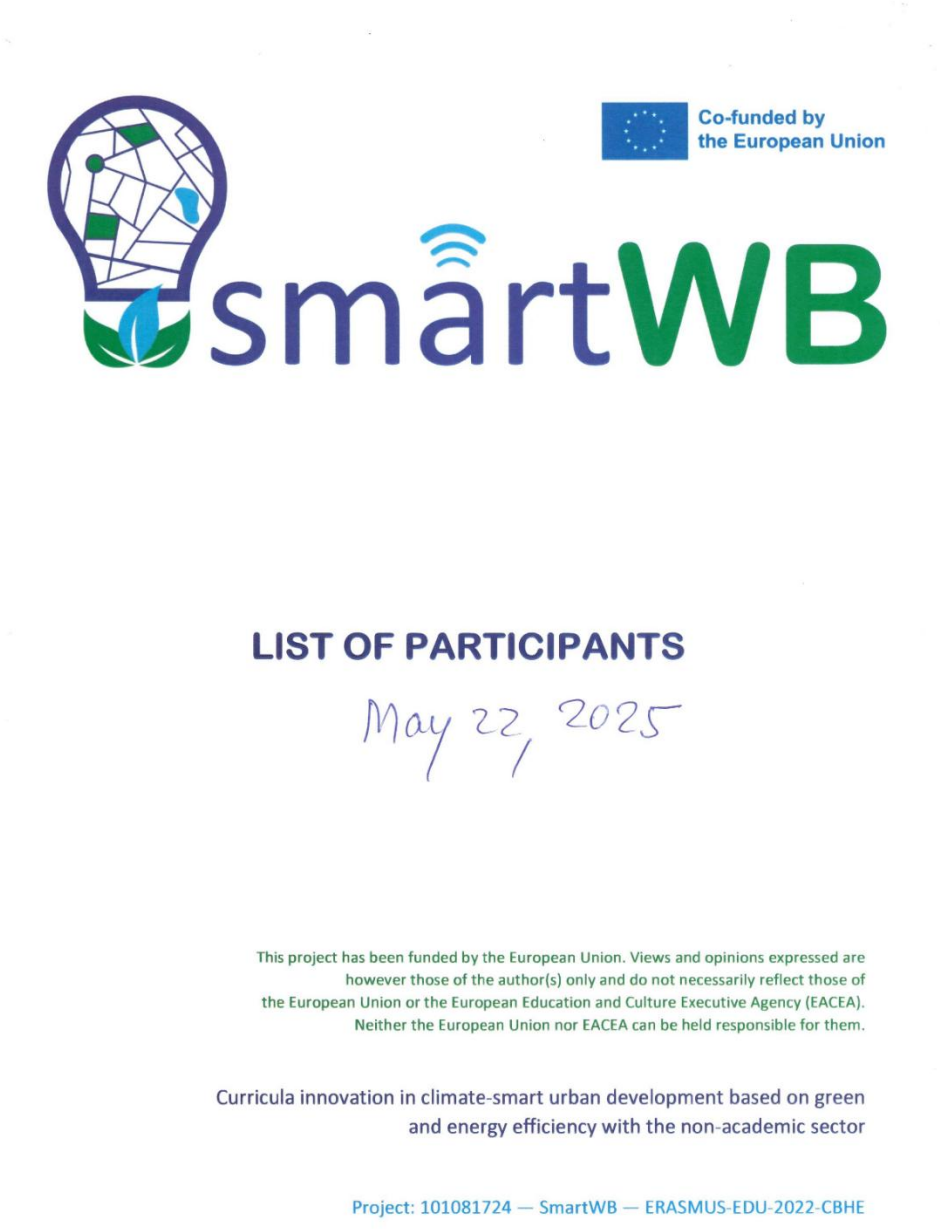
Dates	**22nd May 2025**
City	**Tirana, Albania**
Meeting venue	**Polytechnic University of Tirana, Faculty of Civil Engineering** *Aula magna - Room B110*
Address	**Rr. Muhamet Gjollesha, No. 54, Tirana**
Online access	**https://events.teams.microsoft.com/event/f49d6b3f-6908-4faa-9767-cefa7f0e53f3@6387145a-d81d-495f-9693-4ea4ef251b7d**

Thursday, 22nd May 2025		
Polytechnic University of Tirana, Faculty of Civil Engineering, Rr. Muhamet Gjollesha, No. 54, Tirana *Aula magna - Room B110*		
9:00-9:45	Welcome Coffee & registration	
9:45-10:00	Welcoming speech: Genti Qirjazi – Brief introduction of SmartWB project Welcome speech from Director of National ERASMUS	
Session I - Promoting Low-Carbon Solutions for Sustainable Climate-Smart Urban Development *(Presentation of best practices and contributions to low-carbon and sustainable urban innovation)*		
10:00-10:30	Micropollutants – A Challenge for Water Management	Martin Oldenburg, Claudia Steinert *Technische Hochschule Ostwestfalen-Lippe, Höxter, Germany*
10:30-11:00	Intelligent Tourism Sites – Best Practices	Carmen De Pablos Heredero, Miguel Blanco *Universidad Rey Juan Carlos, Spain*
11:00-11:30	Illegal Construction – Case Study from Croatia	Željko Bačić *University of Zagreb, Croatia*
11:30-12:00	Urban challenges in Municipality of Niksic: projects on co-housing and waste management	Nikola Perovic – *Ecological Movement Ozon, Montenegro*
12:00-13:00	*Lunch break*	
Session II - Promoting Green Job Opportunities in Urban Development		

(Local and regional initiatives that demonstrate how urban development strategies can lead to green employment pathways)		
13:00-13:20	Circular City Labs Tirana - Testing reusable packaging system in local businesses	Merita Toska *Co-PLAN*
13:20-13:40	The Concept of Urban Metabolism as an Innovation in Local Urban Planning in Albania	Mirlinda Rusi *Technical Planning Development shpk*
13:40-14:00	Transformation in progress: A climate city contract for a green and healthy Elbasan for all	Drini Nushi *Institute of Urban Research*
14:00-14:15	Carbon Footprint and Carbon Emission Reduction of Higher Institution Education Buildings: Case of Faculty of Civil Engineering Building, Tirana	Era Fusha *Department of Environmental Engineering (FCE-UPT)*
14:15-14:30	Building the resilience of protected areas to climate change (case study: protected area Baks Rrjoll, Shkoder)	Sindi Alliu *Department of Environmental Engineering (FCE-UPT)*
Session III – Interactive Workshop: Scaling Green Skills Across Industries *(joint discussion with stakeholders on how to equip the workforce with skills needed for green and climate-smart urban development)*		
14:30-15:30	Moderated workshop session with open floor contributions from students, academic staff, and stakeholder representatives. Theme: "Scaling Green Skills Across Industries*: how to equip the workforce with the green skills needed across sectors*"	Workshop Participants
15:30	Closing	
19:30	**Dinner event at Bar Restorant Piceri "Serenata Korçare"** **(https://maps.app.goo.gl/mRLEdXZop3jTtYBC9)**	

9. Annex III: Participant List

A comprehensive list of participants, including names, affiliations, and stakeholder groups (e.g., university faculty, students, municipal representatives, NGO members, industry experts) who attended the workshop.



Co-funded by the European Union

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LIST OF PARTICIPANTS

May 22, 2025

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Curricula innovation in climate-smart urban development based on green and energy efficiency with the non-academic sector

Project: 101081724 — SmartWB — ERASMUS-EDU-2022-CBHE

smartWB

Workshop for promoting green job opportunities in urban development

Project title: Curricula innovation in climate-smart urban development based on green and energy efficiency with the non-academic sector

Acronym: SmartWB

Project N°: 101081724

Type of event	*Workshop for promoting green job opportunities in urban development*
Venue	*Faculty of Civil Engineering (ground floor), Street "MUHAMET GJOLLESHA" No. 54 1023 Tirana, ALBANIA*
Date	*22nd and 23rd May 2025*
Organizer	*POLYTECHNIC UNIVERSITY OF TIRANA, FACULTY OF CIVIL ENGINEERING, DEPARTMENT OF GEODESY*

This project has been funded by the European Union.

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By signing this participation list, the participants have agreed to be photographed for the Workshop event.

smartWB May 22, 2025 List of participants

May 22, 2025

No.	Name and surname	Institution	Mob.	E-mail	Signing
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10. Annex IV: Photos

A selection of photographs from the workshop, capturing key moments.


Curricula innovation
in climate-smart urban development
based on green and energy efficiency
with the non-academic sector


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