

# **Comprehensive Action Plan on the Green Transition**

UNIVERSITY OF MONTENEGRO UNIVERSITY OF PÉCS UNIVERSITY OF SARAJEVO MASARYK UNIVERSITY JAGELLONIAN UNIVERSITY OF KRAKOW J. SELYE UNIVERSITY PANNON EUROPEAN GROUPING OF TERRITORIAL















# For HEIs and other institutions

# Main challenges for Green Transition indicated by project participants

# Universal:

- Insufficient institutional capacity, lack of capital for investments.
- Low awareness or motivation among staff and students, lack of systems for monitoring and evaluating progress in sustainability areas, lack of an overall long-term strategy. Transitioning to a culture of sustainability among students, staff, and stakeholders is slow and gradual.
- Policy and Regulatory Gaps National and low level policies often lag behind sustainability needs.
- Technological Barriers Access to advanced technologies may be limited or costly.

# Individual (most common):

- Lack of systems for monitoring and evaluating progress.
- Decentralised structure, lack of professional capacity to implement changes.
- Funding Availability Institutions in developing regions may have limited access to green financing.
- Disciplinary Balance Integrating sustainability across diverse faculties (STEM, social sciences, arts) requires tailored approaches.
- Stakeholder Engagement Varying levels of awareness and interest among students, faculty, and local communities.

# Priorities for advancing Green Transition in HEIs and other institutions

Main priorities identified in each of the main thematic areas

# **Waste Management:**

- Minimising waste generation
- Maximising waste sorting and reuse

# **Energy & Green Infrastructure:**

- Energy efficiency audits for buildings and facilities
- Green infrastructure investments and modernisation

# **Public Procurement, Catering:**

- Conscious and informed procurement procedures
- · Reduction of plastic use for catering

# **Mobility & Transport:**

- Availability of green transport measures on campus
- Promotion of green transport for work travel

# **Water Management & Biodiversity:**

- Water-saving and efficiency in water use
- Engagement with local ecosystem

# **Education & Awareness:**

- Modernisation of curricula
- Information campaigns

# **External Cooperation:**

- Active collaboration with both private and public sector
- Active engagement with local community

## **Staff & Student Engagement:**

- Awareness campaigns
- Programs encouraging sustainable practices

# Solutions and suggested indicators for advancing the main priorities for each respective thematic area

# Waste Management

# **Medium and Big HEIs**

- Introduce simple monitoring practices (e.g. regular audits or basic reporting tools) to better understand waste flows and identify areas for improved sorting and reduction.
- Establish internal reuse platforms for furniture, ICT and lab equipment, with options for inter-faculty or inter-university sharing.
- Launch campus-wide awareness campaigns combined with visible infrastructure (composters, colour-coded bins, digital signage).

## **Small HEIs**

- Partner with local waste management companies that guarantee high levels of sorting and reuse at low administrative cost.
- Create small-scale reuse initiatives (e.g. furniture exchange boards, repair workshops) to extend the life of university assets.
- Focus on targeted awareness sessions for staff and students to reduce food and chemical waste in daily operations.

# Other institutions (research centres, associations, NGOs, etc.)

- Prioritise procurement from contractors that provide reuse and recycling guarantees, and report transparently on outcomes.
- Facilitate asset-sharing networks with nearby universities or organisations to maximise reuse of scientific and office equipment.
- Organise thematic campaigns or pilot projects (e.g. "zero waste week") to raise visibility and engage stakeholders in practical solutions.

## Indicators

- Quantity of assets reused or shared (number of items redistributed instead of purchased new).
- Number of awareness events/campaigns on waste reduction held annually.
- % reduction in total waste generated per year.

# **Energy & Green Infrastructure**

#### **Medium and Big HEIs**

- Carry out regular energy audits across multiple buildings and use the results to prioritise high-impact upgrades such as insulation, smart lighting, and automated HVAC systems.
- Invest in large-scale renewable solutions (e.g. solar panels on campus rooftops, geothermal systems) and integrate them into sustainability strategies.
- Communicate audit results and infrastructure improvements to staff and students to

increase awareness and engagement.

## Small HEIs

- Conduct basic energy assessments focused on key facilities (e.g. student housing, libraries) to pinpoint the most urgent efficiency upgrades.
- Prioritise affordable improvements with quick returns, such as LED lighting, insulation of smaller buildings, or motion-sensor systems.
- Use campus visibility (notice boards, events) to showcase implemented energy-saving measures and build a culture of sustainability.

# Other institutions (research centres, associations, NGOs, etc.)

- Undertake targeted energy audits of office and research spaces to identify specific areas for energy savings.
- Invest in modest but visible green solutions (e.g. solar-powered lighting, small green areas, efficient IT equipment) to set an example.
- Share good practices and results from audits with partner organisations to inspire wider adoption of green infrastructure.

#### Indicators:

- Number or % of buildings with recent energy audits.
- Installed capacity of renewable energy on campus (kW).
- Number of awareness campaigns or communications on energy efficiency per year.

## **Public Procurement & Catering**

# **Medium and Big HEIs**

- Integrate sustainability criteria (e.g. Fairtrade, life-cycle costing, energy efficiency) into procurement processes for catering and equipment.
- Collaborate with local and regional suppliers to reduce transport emissions and support seasonal food sourcing.
- Phase out single-use plastics in canteens and events by introducing reusable or compostable alternatives at scale.

#### **Small HEIs**

- Use simplified procurement guidelines that prioritise local and seasonal products to ensure conscious purchasing without excessive administrative burden.
- Gradually replace disposable items in catering with reusable sets or biodegradable alternatives.
- Encourage small pilot initiatives (e.g. "plastic-free events") to raise awareness and test scalable solutions.

# Other institutions (research centres, associations, NGOs, etc.)

- Include ethical and environmental standards (e.g. certified products, low-carbon options) in catering and procurement contracts.
- Partner with local suppliers and caterers that guarantee reduced plastic packaging and sustainable practices.

• Lead by example through awareness campaigns on sustainable procurement and by publicly reporting on progress.

#### **Indicators**

- % of procurement contracts including sustainability criteria (e.g. Fairtrade, local suppliers).
- % reduction in single-use plastic items purchased.
- Number of awareness campaigns on sustainable procurement/catering per year.

# **Mobility & Transport**

## **Medium and Big HEIs**

- Expand campus infrastructure for sustainable mobility (e.g. bike lanes, secure storage, e-charging points) to reduce reliance on cars.
- Introduce incentive schemes for staff and students to choose green transport for work-related travel, such as subsidies for rail or shared transport.
- Regularly monitor and report on transport usage patterns (parking, bike use, public transport uptake) to guide further improvements.

#### **Small HEIs**

- Provide basic but visible facilities such as sheltered bike racks and carpool coordination platforms to promote greener commuting.
- Encourage the use of regional and cross-border train connections for staff travel by offering partial reimbursement or information campaigns.
- Organise awareness events (e.g. "bike to campus days") to build a culture of sustainable mobility.

# Other institutions (research centres, associations, NGOs, etc.)

- Facilitate shared mobility solutions (bike-pooling, carpooling) adapted to smaller communities or office settings.
- Prioritise trains and other low-emission options for domestic and regional work travel by adjusting internal travel policies.
- Demonstrate leadership by promoting visible green mobility practices (e.g. staff cycling allowances, low-emission vehicle use).

## **Indicators**

- Number of bike racks or e-charging stations installed.
- % of work-related trips made by train vs. air.
- Number of green mobility awareness events or campaigns per year.

## **Water Management & Biodiversity**

## **Medium and Big HEIs**

• Develop comprehensive water management strategies supported by regular audits to

track consumption and identify efficiency gains.

- Install water-saving technologies at scale (e.g. low-flow taps, smart irrigation, water fountains) across large facilities.
- Create biodiversity zones on campus by planting native species and setting up habitat features (ponds, bird boxes, pollinator gardens).

#### **Small HEIs**

- Focus on affordable water-saving measures, such as aerators, leak checks, and efficient use of water in student housing.
- Promote simple biodiversity initiatives, like planting native shrubs or maintaining small green areas without pesticides.
- Engage staff and students through workshops or volunteering days on water conservation and local ecosystem protection.

# Other institutions (research centres, associations, NGOs, etc.)

- Adopt responsible water-use practices in offices and laboratories, supported by awareness campaigns for staff.
- Collaborate with local communities and authorities to support conservation projects (e.g. river clean-ups, tree planting).
- Showcase biodiversity-friendly practices (e.g. native plant gardens, bird feeders) to set a visible example for partners and stakeholders.

#### Indicators

- % reduction in water consumption per building/user.
- Number of buildings equipped with water-saving fixtures.
- Number of biodiversity-supporting features installed (e.g. bird feeders, pollinator gardens).

# **Education & Awareness**

## **Medium and Big HEIs**

- Systematically review and update curricula to integrate sustainability across disciplines, ensuring consistent coverage of environmental, economic, and social aspects.
- Develop new interdisciplinary courses and programmes co-taught by multiple faculties to reflect the complexity of sustainability challenges.
- Run large-scale awareness campaigns (e.g. sustainability weeks, lecture series) to engage the whole academic community.

## **Small HEIs**

- Introduce targeted sustainability modules or case studies into existing courses to modernise teaching with minimal structural change.
- Offer optional workshops or short courses for students and staff to build practical knowledge on sustainability.
- Promote sustainability through small-scale but visible campaigns, such as poster series or themed events on campus.

## Other institutions (research centres, associations, NGOs, etc.)

- Provide specialised training and seminars on sustainability topics relevant to their field of activity.
- Collaborate with universities and local communities to deliver joint awareness campaigns and events.
- Use digital platforms (newsletters, webinars, social media) to spread information on sustainability practices and engage stakeholders.

## Indicators

- Number or % of courses/programmes revised to include sustainability content.
- Student/staff participation rate in sustainability-related courses or events.
- Number of awareness campaigns or sustainability events held annually.

## **External Cooperation**

## **Medium and Big HEIs**

- Establish strategic partnerships with public and private actors to co-develop sustainability research, policies, and pilot projects.
- Engage in international networks and consortia to exchange methodologies and influence sustainability strategies beyond the national level.
- Involve local communities in large-scale outreach initiatives such as open lectures, living labs, or joint environmental campaigns.

## **Small HEIs**

- Partner with local authorities, SMEs, and NGOs on applied sustainability projects with visible community benefits.
- Share academic expertise by offering guest lectures or workshops for the wider public on practical sustainability topics.
- Build long-term ties with the local community through joint volunteering actions (e.g. clean-ups, biodiversity projects).

# Other institutions (research centres, associations, NGOs, etc.)

- Collaborate with both public institutions and private companies on knowledge transfer and applied sustainability solutions.
- Support local communities by providing training, awareness events, or participatory projects that highlight sustainability practices.
- Act as facilitators connecting universities, businesses, and civic groups to create cross-sector sustainability networks.

## **Indicators**

- Number of partnerships with public, private, and NGO actors in sustainability projects.
- Number of community-focused sustainability initiatives/events organised per year.

• Number of joint projects/policies influenced through external cooperation.

# **Examples of external cooperation form project participants:**

#### International networks:

- Visegrad Fund ("Accelerating and Enhancing Green Transition")
- Green Economic Development (GED) UNDP
- UNAI SDG7 Hub Energy Community
- REPper Repair Perspective
- EHP/Norway Funds
- RECETOX-Örebro University Collaboration
- UN-Habitat
- Science and Innovation Park
- Green AURA AR-Enhanced Living Lab for Decarbonization
- WE.Circular Circular Economy Support for Female Entrepreneurs

## University networks:

- EDUC Alliance (Erasmus+ Alliance)
- Una Europa Joint Bachelor in Sustainability (BASUS), Una Europa university alliance
- Utrecht Network
- ECOBIAS Environmental Monitoring Curriculum Development
- Compostela Group
- Sustainable Blue Economy Partnership
- ISEP (International Students Exchange Programme)
- The Hague Network
- European Urban Initiative
- European Digital UniverCity (EDUC Alliance)
- Sustainability Platform of Hungarian Universities (MEFP)
- Leader of International Cooperation for Green Transition (UJ degree) Key to the Future — Comprehensive Programme for the Development of Education for the Needs of Key Industries at Jagiellonian University

## National/regional networks:

- South Moravian Region, Statutory City of Brno, South Moravian Innovation Centre (JIC), South Moravian Centre for International Mobility (JCMM), UNILEAD I & II.
- The City of Pécs, Pécs-Baranya Chamber of Commerce and Industry, Baranya County Government & National Agricultural Chamber, Baranya County (Regional Government), Ökováros-Ökorégió Alapítvány, Pécsi Környezetvédelmi Kft., Tettye Forrásház Zrt., H2SCALE – Green Hydrogen Ecosystems in the Danube Region, Energy Community Concept in Energy Law Training.
- Urban Transformation Project Sarajevo (UTPS), Climate City Contract Sarajevo Functional Urban Area, Pioneer Partnership – Climate Actions in the Balkans (MOU between UNSA's School of Economics and Business, GORD - Gulf Org. for Research & Development -, Economic institute Sarajevo, and Rimor Company).
- Carpathian Convention, City of Kraków, Polish National Agency for Academic Exchange.

# Students & Staff Engagement

# Medium and Big HEIs

- Launch recurring campus-wide campaigns (e.g. "Sustainability Month") combining lectures, challenges, and exhibitions to engage large student and staff populations.
- Develop structured programmes (e.g. sustainability ambassadors, green labs, ecovolunteer networks) that allow staff and students to actively contribute.
- Offer incentives (certificates, recognition, small grants) for initiatives that demonstrate measurable sustainable practices.

#### **Small HEIs**

- Organise interactive workshops and seminars tailored to the scale of the institution, ensuring high participation rates.
- Encourage small but impactful initiatives (e.g. "bring your own cup" campaigns, local volunteering days) to build daily sustainable habits.
- Establish simple recognition schemes (e.g. "green office" or "green classroom" awards) to motivate staff and students.

## Other institutions (research centres, associations, NGOs, etc.)

- Provide training sessions and awareness events on sustainability relevant to the organisation's specific field of expertise.
- Involve staff and volunteers in sustainability programmes, such as reducing office waste or supporting local eco-projects.
- Share success stories and best practices through newsletters or online platforms to inspire wider engagement.

### **Indicators**

- Number of sustainability workshops, seminars, or campaigns organised annually.
- % of students and staff participating in engagement programmes.
- Number of initiatives led by student/staff sustainability ambassadors or volunteers.