The role of universities in the process of decarbonization of urban areas: The EUA Road Map

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WHY WE NEED A UNIVERSITY VISION FOR THE EUROPEAN GREEN DEAL

A European Green Deal that achieves its purpose must be science-driven, with suitable mechanisms for the provision of scientific advice and the boosting of scientific literacy among citizens and policy makers. Europe’s universities are ready and eager to help enhance these and to co-create the policies necessary for a sustainable society.
WHY WE NEED A UNIVERSITY VISION FOR THE EU GREEN DEAL

• Universities are in a unique place to address these issues, bringing together researchers, innovators, public and private sectors, as well as their surrounding communities

• Beyond their role as producers and stewards of knowledge, universities also connect existing knowledge to develop new framings on societal challenges

• In fact, the long-term future of universities depends on offering programmes of study, research, and innovation that convey the necessary knowledge and skills to address such challenges at national and transnational level

• No less important is universities’ place at the centre of local communities and regions, which requires them to set an example as employers and civic institutions by limiting their own environmental impact and being mindful of ethics and equity.
EUROPEAN STRATEGY FOR UNIVERSITIES

By mid-2024, the Commission proposes to focus on achieving the four joint key objectives:
1. Strengthen the European dimension in higher education and research
2. Support universities as lighthouses of our European way of life
3. **Empower universities as actors of change in the twin green and digital transitions**
4. Reinforce universities as drivers of the EU’s global role and leadership
A Green Deal roadmap for universities

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FOUR PILLARS

1. Research & innovation
2. Education & students
3. Staff & operations
4. Public engagement & societal impact
TECHNOLOGIES ARE IMPORTANT AND NECESSARY. WHILE SOME ARE MATURE AND CAN CONTRIBUTE TO REACHING NET-ZERO EMISSIONS, OTHERS CANNOT CONTRIBUTE.

- EU research and innovation programmes typically match the high-level political priorities set by the European Commission and are designed with a fixed duration of several years. However, the programmes are often not sufficiently demand-driven and adaptable to changing needs.
- Even while new solutions still have to be explored, existing solutions are not always well used, and in each case implementation pathways reflecting societal needs and planetary boundaries have to be built in from the outset to facilitate extended use even beyond 2050 climate targets.
- Regulations are vital to enable implementation, and universities can help with a more wideranging reflection on the risks and limitations of new technologies and the legal frameworks allowing for their appropriate use.

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POLICIES AND FUNDING PROGRAMMES MUST ADEQUATELY SUPPORT INTERDISCIPLINARY RESEARCH AND EDUCATION AND TURN THEM INTO CORE ENABLERS OF EUROPE’S SUSTAINABILITY AGENDA

- A timely delivery of the Green Deal depends on universities’ proven agility in integrating new perspectives on climate change and on what drives human behaviour.
- Interdisciplinarity is among the strongest tools to understand the challenges ahead and render realistic models of social change, using frameworks like the United Nations Sustainable Development Goals (SDGs).
- Interdisciplinary mindsets also enable students to demand climate action both within and beyond their institutions, and to collaborate in their future occupations towards achieving sustainability.
UNIVERSITIES PRODUCE NEW INSIGHTS INTO VALUES, NORMS AND PROCESSES THAT ENSURE JUSTICE AND FAIRNESS IN ACHIEVING SUSTAINABILITY

Policies and funding programmes for research and innovation are prime instruments to support this and to generate impactful fundamental science, while also ensuring that basic and applied research are better connected. A balanced mix must be ensured between basic research and more mission-driven approaches within the “smart directionality” of Horizon Europe.
INSTITUTIONALIZED INTEGRATED SUSTAINABLE ENERGY AND CLIMATE ACTION PLANS

Introducing a systematic and participatory planning approach for viable plans and projects

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With seven schools and 21 departments in five cities, the University of Western Macedonia, Greece, aims to cover all its energy needs for heating, cooling, electricity, and transportation from renewable energy sources. Located in a region where 40% of the local GDP is derived from activities related to lignite power plants, the University embarked on a path to net zero emissions due to the planned phasing out of lignite by 2028. An important step is participation in an energy community together with the regional authority and the 13 municipalities of Western Macedonia. This energy community will develop and implement actions aimed at promoting energy sustainability in order for its members to meet their electricity needs by self-production of energy and net-metering, and fight the energy poverty of economically vulnerable individuals and groups.
WORKING AT THE SCIENCE-POLICY INTERFACE AND OFFERING SUPPORT TO LOCAL COMMUNITIES MUST BE INCENTIVISED BY PURSUING REFORMS OF ACADEMIC CAREER ASSESSMENT TOGETHER WITH MEMBER STATES.

Engaging with citizens and policy makers must be acknowledged and rewarded as a normal part of academics’ work, since this enables universities to act as honest brokers in the Green Deal. The competitiveness of academic careers, as well as their assessment, currently generate only limited rewards for academics who take up such engagement.
Policy makers must partner with universities to develop and implement new thinking around sustainable wellbeing, which is central to orchestrating a holistic transition.

Universities can help calibrate the various strands of the Green Deal so that the ensuing transition is social and behavioural just as much as it is technological and industrial. Discussions about behavioural change are undoubtedly difficult, but an exit from past paradigms about economic growth and consumption is necessary.
EU GREEN (RESPONSIBLE GROWTH, INCLUSIVE EDUCATION AND ENVIRONMENT)

It is an alliance of nine European universities: the University of Parma, Wrocław University of Environmental and Life Sciences, the University of Extremadura, Otto von Guericke University Magdeburg, the University of Evora, the University of Angers, the University of Gävle, the University of Oradea, and Atlantic Technological University. Its mission is to empower society and develop the capabilities, opportunities, and cooperation for a better and more viable environment in the long run.
With more than 850 members, the European University Association (EUA) is the representative organisation of universities and national rectors’ conferences in 48 European countries.

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