



# ONDER PROFESSOREN

## Responsibility and climate



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#### At a time when the effects of climate change and biodiversity loss are undeniable, universities are taking action – but they can, and must, do more.

The key scientific findings are general knowledge to academics of all disciplines: human activity causes global warming [1, 2] and environmental degradation via pollution [3], habitat destruction [4], overexploitation, and the introduction of invasive species [5]. The risk of another global pandemic is becoming more severe [6]. The negative impacts of these processes are increasing and disproportionately borne by those who are least responsible for causing them [7]. And still, the level of new greenhouse gas emissions has never been higher than in the year 2023 [8]. Despite numerous political pledges, the crisis progresses, threatening all of the natural world, including human societies.

Public universities in the Netherlands have a dual responsibility: primarily funded by taxpayers' money, they provide spaces for young people to get educated, to develop, and to prepare for their professional careers. Simultaneously, universities produce knowledge, adhering to scholarly and scientific principles. This dual role puts them in an ideal position to be at the forefront of climate action – hosting a research community that can inform policy makers about mitigation strategies, and nurturing students who can advocate for and implement planet-friendly solutions in their personal and professional environments.

#### SHOULD IT 'GO ALL IN' AND OFFICIALLY DECLARE A CLIMATE EMERGENCY ON CAMPUS?

The big question is: amidst the severity of the situation and the desperate need for action, what is the role of a (Dutch) university that wants to be part of the solution? Should it 'go all in' and officially declare a climate emergency on campus? Should it radically decrease its own ecological footprint? Should those responsible for educational programs add courses on the climate emergency as well as elements highlighting the connections the climate emergency possesses with their respective area of study? Should faculties actively support research initiatives that may help mitigate the climate and ecological emergency?

In early 2020, at a time of previously unseen mobilization of young people protesting against climate inaction by their governments, physicist Sanli Faez (Utrecht University) published a call for action [9], raising questions similar to the above towards scientists at all Dutch universities, urging them to be proactive in the transition to a climate neutral society. Four years and two 'Public Health Emergencies of International Concern' later [10], the notion of sustainability, specifically in the form of the UN Sustainable Development Goals (SDGs) has entered the strategic plans of many Dutch universities. New

educational programs have been launched, including a Master's in 'Sustainability Science, Policy and Society' at Maastricht University and an interdisciplinary Bachelor's program 'Global Responsibility & Leadership' at Groningen University. In April 2024, Vrije Universiteit Amsterdam put its 'Framework on Fossil Free Research' into effect, strongly limiting new research collaborations with the fossil fuel industry. Following VU's example and inspired by student and staff requests to do so, University of Amsterdam and Utrecht University have worked on similar frameworks. TU Eindhoven recently requested to have its name removed from a lobbying document of the aviation industry. At some universities, individual staff members' website contents are automatically linked with one or more SDGs, increasing the visibility of research projects that contribute to sustainable solutions.

#### WITH SOME IMAGINATION, AN INTERNSHIP PROGRAM AT SHELL CAN BE LABELLED AS 'FOSTERING INNOVATION'

While the above measures are tangible, at times courageous, examples of climate action, universities have not yet fulfilled their potential in terms of positive impact. Despite their appeal, there is a hazard in using the SDGs as placeholders for sustainability. With some imagination, an internship program at Shell can be labelled as 'fostering innovation' (SDG 9). Research on dismantling subsidies for the solar energy sector can be linked to 'promoting economic growth' (SDG 8). Greenwashing the status quo while, perhaps, betting on technological progress as a means to reduce greenhouse gas emissions, may make an institution appear to be in line with the SDGs. But this represents a high-risk bet, which may or may not contribute to the collapse of life as we know it.

As an alternative, universities can and should facilitate initiatives that address the climate and ecological crisis in an integrated way. Innovative projects are often started by individuals or groups of staff members or students. Notable examples include the 'CO2-assistent', a sustainability initiative by medical students and young doctors for the health care sector, the 'Atlas of Universities for Sustainable Futures' launched by Utrecht University researchers, or the interdisciplinary 'Climate Expert Centre' at VU Amsterdam. Faculty and university boards should recognize that such initiatives are not just nice to have, but that they can present opportunities to learn from in terms of strategic direction and educational renewal.

But there is more to be done. Adhering to the international goals on limiting the planetary crisis requires deeper, more radical change. To start, universities could establish dedicated sustainability working groups on the faculty level, consisting of staff and students. The first deliverable of these task forces would be an honest assessment of the existing core activities at their respective school, in terms of their compatibility with the goals of the Paris agreement. Building on such an inventory, both best practices and gaps could be identified, and a set of recommendations could be developed, that could be implemented in collaboration with faculty boards, student associations, department heads, and program management teams.

#### FACILITATE KNOWLEDGE EXCHANGE WITH OTHER UNIVERSITIES AND RESEARCH INSTITUTIONS TO ACCELERATE THE TRANSITION AND TO SHARE BEST PRACTICES

Examples for such recommendations include (1) to support interdisciplinary research on climate mitigation and adaptation, (2) to integrate science about the climate and biodiversity crisis into the curricula of all disciplines, (3) to offer more specialized, optional courses and workshops on the interplay between the respective

discipline and environmental science, (4) to collaborate with government agencies, non-profit organizations and industry partners that share the same goals and (5) to facilitate knowledge exchange with other universities and research institutions to accelerate the transition and to share best practices.

To safeguard the efficacy of faculty-specific sustainability task forces, their roles should be outlined in faculties' strategic plans, and their work should be evaluated on a regular basis. Furthermore, a point of contact with a university's central administration would need to be established, to create synergies and ensure open lines of communication. Importantly, the most effective solutions are likely to vary strongly across disciplines, even across study programs within one faculty. This need not be a disadvantage, as the strongest, most robust results often come from bringing together a diverse set of perspectives.

Staying true to their traditional responsibilities of delivering high-quality education and cutting-edge academic research is a necessary but not sufficient condition for universities to remain relevant. In addition, they must also embrace their role of fostering students and staff who take responsibility for the future of the planet. Given the complex challenges posed by this crisis to all of us, universities have an opportunity to be a significant part of the solution.

Deep change does not come overnight, which is all the more reason to start immediately. ■

[1] <https://iopscience.iop.org/article/10.1088/1748-9326/11/4/048002?fbclid=IwAR3JrQp9hgzcHuyhKAIzSv1Zi5xwD9PJns3BHUJFGbscPFpuL8rQgbTnv0>

[2] <https://www.ipcc.ch/report/ar6/wg1/resources/climate-change-in-data/>

[3] <https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.16689>

[4] <https://www.pnas.org/doi/abs/10.1073/pnas.1611855114>

[5] see [https://environment.ec.europa.eu/news/biodiversity-new-ipbes-report-finds-invasive-alien-species-growing-and-costly-threat-worldwide-2023-09-04\\_en](https://environment.ec.europa.eu/news/biodiversity-new-ipbes-report-finds-invasive-alien-species-growing-and-costly-threat-worldwide-2023-09-04_en)

[6] <https://www.nature.com/articles/s41586-020-022-04788-w>

[7] see <https://link.springer.com/article/10.1007/s10584-019-02637-w>

[8] see <https://www.iea.org/reports/co2-emissions-in-2023/emissions-grew-in-2023-but-clean-energy-is-limiting-the-growth>

[9] See <https://www.scienceguide.nl/2020/01/are-dutch-universities-ready-to-address-the-climate-crisis/>

[10] Not only Covid-19, but also the 2022 mpox outbreak was classified as such by the WHO.