

Sustainability in research: follow-up report 2022

1. Framework and principles

Ghent University wants to further stimulate opportunities for research towards a more socially just and ecologically sustainable future without losing sight of which efficient economic system contributes to it. Such research applies a wide variety of scientific approaches, often using a multi-, inter- and transdisciplinary approach and starting from a high societal impact.

In addition, Ghent University offers to the wider society, locally and globally scientifically based services in the field of sustainability.

This ambition comes from Ghent University's sustainability vision (2013) and has been further developed in research policy in recent years.

This follow-up report provides a state of play, explains the actions carried out and assesses the results. Some new actions are added. This forms the basis for continuous improvement and adjustment and determines the input for next year's plans.

This report was formed on the basis of input given by representatives of the Directorate of Research Affairs (DOZA) and experts from the faculties and the central administration. Suggestions were also gathered from the think tank Transition UGent and the Raretijdenkabinet.

2. Evolution of indicators

In the coming years, Ghent University wants to continue investing in stimulating and supporting inter- and transdisciplinary research collaboration and societal valorisation. After all, a fertile breeding ground is necessary for bottom-up research initiatives to grow. It is not easy to make a quantitative calculation, for example in terms of budgets spent, of indicators that reflect sustainability in research.

That this context is present within Ghent University is proven by the presence of and Ghent University support for a growing number of new promising research networks, such as (non-exhaustive list):

- City Academy
- Ghent University Human Rights Research Network
- Centre for the Social Study of Migration and Refugees (CESSMIR)
- Green-Chem
- EnerGhentIC
- Bioresource recovery from organo-biological residues and wastes (Infinity)
- the strategic investment of 3 professorial offices around 'Urban waste and circular economy'
- Business Development Centres 'Cleantech for sustainable chemical production' (CleanChem)
- Biobased production systems (Biomolecules)
- Innovative technologies for sustainable building materials and structures (DuraBUILDmaterials)
- Energy research and innovation community (EnerGhentIC)
- Innovations for sustainable aquaculture production (Aquaculture)
- Valorisation of industry by-products (End-of-Waste)
- International Centre of Excellence for the African Great Lakes' Natural Capital (CAFRINAT)
- Centre for Advanced Process Technology for Urban Resource recovery (CAPTURE), etc.
- Operations, Network and Transportation Analytics Centre of Knowledge (new since 1/9/2020)

- Twentieth-Century Crossroads (new since 15/11/2020)
- Centre for Participatory Democracy (new since 14/4/2021)
- IOF BD Center: textile innovations for protection, comfort and care (new since 29/4/2021)
- Architectural culture and the contemporary condition (new since 28/5/2021)

3. Evaluation action plan and adjustment

Given the urgency of the climate issue and the high level of ambition of the sustainability policy, it is very important to closely monitor the set objectives and the progress of the action points. Depending on the result of the actions taken, adjustments will have to be made. The evaluation below will therefore also determine the action plan for the coming year.

Pillar 1: A research policy within which sustainability research can thrive

Sustainability research must be reconcilable with institutional research policy. In addition, academics should be given the freedom and confidence to conduct research on various topics but also feel supported in their ambition to contribute to the ecological and social transition.

The following concrete actions are further included or newly proposed:

Action 1.	Inter- and transdisciplinary research and collaboration is promoted with recurring calls around 'interdisciplinary projects', 'concerted research actions' (GOAs), 'IOF business development centres', 'international thematic networks', and support for 'interdisciplinary research consortia with societal impact', 'the strategic investment in 21 professorships',
Evaluation	-
Adjustment and planning	It is proposed to initiate a debate within the womb of the Research Council on a position on impulse funding for interdisciplinary research on technological and societal solutions, given the urgency of the climate crisis.
Action 2.	Through the automatic allocation of a start-up credit , new ZAP members are given the opportunity to set up a research line in complete freedom.
Evaluation	-
Adjustment and planning	It is proposed to initiate a debate within the Research Council's bosom on the appropriateness on core funding for other ZAP categories.
Action 3.	Ghent University draws the card of Open Science and strives for policy, infrastructure and guidance to support the dissemination and stimulation of Open Science attitude among its research community. The Open Science policy has several lines of action: open access, FAIR data, adapted way of evaluating and rewarding, research integrity, involving citizens in science, ...
Evaluation	To reinforce its vision and a continued commitment to evaluate research responsibly, Ghent University signed the San Francisco Declaration on Research Assessment (DORA) in 2020. Ghent University subscribes to the ALLEA code and has had a policy on scientific integrity since 2015. A policy on research data

	management has also been in place since 2016. On 3 June 2022, the Board of Governors approved the updated Ghent University Scientific Publishing Policy.
Adjustment and planning	-

Action 4.	Ghent University applies the knowledge and expertise of its own researchers and consortia. For example, it deploys 'living labs' around e.g. circular building, energy transition, water robustness, sustainable mobility, green and biodiverse campuses, etc.
Evaluation	In the framework of the transition plan sustainable travel policy (RVB 2/7/2021), it was decided to equate the CO ₂ contribution of flights with the price of CO ₂ on the international market, with part of it serving for the provision of 'living labs', which are being set up together with Ghent University academics and policy staff at Ghent University in the context of the climate plan. Guidelines for this were worked out and a first call organised. The 2 project proposals met the assessment criteria and received the requested subsidy.
Adjustment and planning	The above methodology is being explored. More effort is being put into commission disclosure. The search for (structural and more comprehensive) funding for this operation continues (e.g. avenues on innovative procurement, IOF funds, investment budget, etc.).

A particular line of research policy that contributes to promoting sustainability research is the policy on social valorisation of research (via a specific policy plan since May 2015).

Action 5.	Social impact is embedded in evaluations of researchers and projects.
Evaluation	Through the ZAP career model, social valorisation activities are enabled to be valued the academic career (Research inspiration portfolio). Within the BOF calls, there is room for social and economic impact (e.g. personal section 'Main achievements') in addition to scientific.
Adjustment and planning	-

Action 6.	As part of the university-wide policy choice 'social identity', Ghent University developed a social valorisation fund. With these funds, researchers are encouraged to valorise their research activities socially. Social impact here refers not only to economic impact, but also to challenges related to ecological sustainability and social justice.
Evaluation	Two calls (April and October) were issued in 2021.
Adjustment and planning	Two more calls (April and October) will follow in 2022.

Action 7.	The research information system GISMO allows researchers to register their impact and valorisation activities.
Evaluation	The expertise is registered in the research explorer and is now publicly available. The data model to include available infrastructure was made available in September 2020. Input can be provided voluntarily. Very little use is currently being made of this opportunity (with the exception of researchers from the LW faculty where this opportunity has been offered for some time through the separate research portal).
Adjustment and planning	Communication remains necessary. Furthermore, the GISMO eCV subproject will provide a new impetus for reuse of this information (foreseen in 2023).

Pillar 2: Sustainability research is facilitated through concrete initiatives

Besides broad policies, specific support measures are also needed to encourage sustainability research.

The following concrete actions are further included or newly proposed:

Action 8.	Ghent University is committed to core facilities. This is a cost-effective means of making state-of-the-art equipment/infrastructure and services available to researchers inside and outside the institution. Core facilities serve as a nexus that stimulates collaboration between internal and external researchers, increasing the quality and impact of research and potentially accelerating innovation. Pooling expertise also increases the quality of research infrastructure and services, and the research that uses them.
Evaluation	Even before the roll-out of the Ghent University-wide core facilities policy, some faculties were already exploring this opportunity with, for example, the faculty of GE proceeding to concrete formation of such structures. In April 2021, the policy framework and corresponding recognition procedure followed, with co-financing from the BOF. In the first half of 2022, six dossiers were approved for recognition, and another three are currently up for review.
Adjustment and planning	Accelerated rollout, through recognition of new core facilities.

Action 9.	All entities within the Research domain (projects, publications, research units, infrastructure, etc.) are inventoried in the research information system GISMO. This makes Ghent University's scientific expertise accessible to both internal and external stakeholders, facilitating inter- and transdisciplinary projects.
Evaluation	The expertise is registered in the research explorer and is now publicly available. The data model to include available infrastructure was made available in September 2020.

Adjustment and planning	During 2022 and 2023, GISMO will expand in phases to include the entity 'research infrastructure'. An input module will be developed and information on registered infrastructure will be available (externally) through the research explorer. Registration of infrastructure is mandatory for approved core facilities and recipients of BOF-BAS funding.
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Action 10.	The integrated 'internationalisation' policy plan incorporates sustainability within several action lines.
Evaluation	Several projects are ongoing at Ghent University financed with federal development cooperation funds (VLIR-UOS) around themes of healthcare, agriculture, environment, education, etc. that can contribute to achieving the SDGs. Several strategic partnerships are also being further developed: <ul style="list-style-type: none"> - Regional platforms, to centralise and broaden knowledge around activities with/for/in/about certain regions (Africa, CESAM (Central and Latin America) and ASEAN platform), - International Thematic Networks, which establish academic networks around key research themes with impact on the Global South (e.g. around mycotoxins (MYTOX-SOUTH), sexual and reproductive health (ANSER), governance in conflict situations (Conflict and Development), natural resources (CAFRINAT)), and - Strategic Institutional Partnerships with partners in the Global South (Can Tho (Vietnam), ESPOL (Ecuador), Jimma (Ethiopia) and UWC (South Africa)).
Adjustment and planning	-

Action 11.	(New) Through its participation in a new 'European University' (ENLIGHT), Ghent University is structurally cooperating with eight international partners and with their city and region to identify societal challenges and actually tackle them through education and research.
Evaluation	Over the next three years, ENLIGHT will focus on five societal themes: climate change, health and well-being, inequality, digital revolution, energy and circularity. Within these domains, we will look at how best to collaborate.
Adjustment and planning	-

Pillar 3: Advice and training for researchers and communication aimed at the general public

The research community is assisted in its endeavour to conduct sustainability research with advice, training and communication initiatives.

The following concrete actions are further included or newly proposed:

Action 12.	DOZA provides support to implement the Ghent University vision on sustainability and the Sustainable Development Goals (SDGs) within project proposals.
Evaluation	A general webpage (sustainable development goals (SDGs) in the research context) is available as well as customised feedback possible.

Adjustment and planning	-
Action 13.	(New) From the end of 2021, applications for funding for research infrastructure (BOF, FWO, core facilities) will include a questionnaire, in collaboration with DGFB, to poll for the wider impact of the new infrastructure.
Action 14.	(New, with link to transition plan sustainable travel policy) Researchers are encouraged to conduct their research sustainably (travel policy in international collaborations with concrete guidelines, sustainability in labs, sustainable organisation of events, ...). In addition to inclusion of this topic in the Framework for Good Research Practice, a webpage is being developed specifically for researchers using the content at www.ugent.be/sustainability .
Action 15.	Within the training offer for researchers, competences such as inter- and transdisciplinarity, systems thinking, societal valorisation and dealing adequately with complex sustainability issues and socio-technical transitions can be addressed.
Evaluation	-
Adjustment and planning	The development of a teaching module on (social) impact will start in 2022. It will be examined what offerings linked to sustainability policy are already available and deemed necessary through the Doctoral Schools.
Action 16.	(New) The extent to which the mission of the Science Communication Unit can tie in with the objectives of sustainability research done at Ghent University (in particular in its mission to reach and involve the general public) is being examined.