

Environment and Climate Action Plan 2021–2024



**Karolinska
Institutet**

Environment and Climate Action Plan

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ENVIRONMENT, CLIMATE, AND SUSTAINABLE DEVELOPMENT

By 2030, Karolinska Institutet (KI) will be a ground breaking, engaged, and global university, as stated by KI's Climate Strategy 2030. Sustainability is a prerequisite for this work and should permeate all the University's activities, including ensuring that the campus is environmentally and socially sustainable in the long term.

The Environment and Climate Action Plan 2021-2024 covers KI's environmental and climate work. The action plan is a way of contributing to the fulfilment of KI's Strategy 2030, but also aims to contribute to the commitments that KI has as a government agency. In accordance with the Higher Education Act¹, KI must work towards sustainable development and according to the Regulation on Environmental Management in Government Agencies², KI must have established environmental objectives for its activities and an associated action plan. KI also has a responsibility to contribute to the achievement of the national environmental quality objectives, the UN's Agenda 2030, and the Paris Agreement.

CLEAR AMBITIONS

KI's climate strategy³, decided by the President in 2021, states that by 2030 KI will significantly increase education and research efforts related to climate change and health and at least halve greenhouse gas emissions by 2030, with the aim of becoming climate neutral. The Environment and Climate Action Plan 2021-2024 concretises the climate strategy, and missions and activities have been developed to achieve the goals of the climate strategy. The action plan is also based on KI's significant environmental aspects⁴ and is part of KI's management system for environment and sustainable development.

WE HAVE A SHARED RESPONSIBILITY

The ultimate responsibility for compliance with the action plan rests with the President. Heads of department are responsible at the departmental level. Everyone working and studying at, or otherwise affiliated with KI is responsible for working in line with the action plan. KI's Council for Environmental and Sustainable Development is responsible for developing proposals for action plans for environment and climate work, and for following up the work.

Under each target area of the action plan, assignments are given to Departments, Central administration, and committees. Organisations will work on these assignments continuously during the period of the Action Plan. Responsible persons integrate the assignments into their organisation's regular activities.

¹ Higher Education Act 1992:1434, Chapter 1, Section 5

² Regulation on Environmental Management in Government Agencies (2009:907)

³ Climate Strategy 2030 (ref. number 1-32/2021)

⁴ KI's significant environmental aspects are: energy use, new construction and renovation, chemicals and chemical waste, business travel, and research and basic education. The environmental aspects were developed in the Environmental Assessment 2018 (ref. number 1-437/2018)

FOLLOW-UP AND CONTINUOUS IMPROVEMENT

The KI Council for Environment and Sustainable Development compiles an annual follow-up of the objectives and activities of the action plan. The follow-up of the action plan is part of KI's quality work, and the results must be communicated to management and in the organisation. The monitoring also forms the basis for annual reporting to the Swedish Environmental Protection Agency and the Ministry of Education and Research.

Responsible organisations follow up their missions and activities annually and provide data for the University's overall follow-up. The results will be communicated internally to Departments, committees, and units. The work of Departments and the Central administration is also addressed in internal environmental audits.

The conditions for environmental and climate work change over time. As KI's environment and climate work progresses, the Action Plan may be revised to ensure that KI achieves its goals.

COMMUNICATION AND SKILLS

Achieving the goals of the Action Plan requires communication and skills related to the issues. Communication does not have its own objective in the action plan but is seen as a given means of supporting the objectives and activities set out in the action plan. However, a section on communication and competence is included in which some overall communication activities to be undertaken are listed. Through increased communication and awareness of environment and climate, and the issues related to them, everyone at KI is given the opportunity to contribute to promoting sustainable development vis-a-vis their role and assignment. University and Departmental Management have an important task in showing the way.

Agenda 2030

Agenda 2030, or The Global Goals, is the United Nations' sustainability agenda adopted in 2015. All 193 United Nations member states have committed to working towards a socially, environmentally, and economically sustainable world by 2030. The Agenda contains 17 Sustainable Development Goals (SDGs) and 169 targets. The goals are integrated and indivisible, which means that no goal can be achieved at the expense of any other goals.

Paris Agreement

The Paris Agreement is a global climate agreement that entered into force in 2016. All the countries of the world have committed to implement measures that contribute to achieving the goals of the Paris Agreement. The core of the Agreement is to limit global warming by reducing greenhouse gas emissions. The Paris Agreement states that the global temperature increase should be kept well below 2°C and that the aim should be to limit it to 1.5 °C.

Climate neutrality

Climate neutrality means that an organisation should be free of greenhouse gas emissions, or offset the emissions that do occur, so that the total is zero.

Target areas

FIRST, SECOND, AND THIRD CYCLE EDUCATION

KI strives to be a medical university at the international forefront of climate change and health education. Students at KI should gain knowledge of future challenges and all students graduating should have discussed issues about sustainable development and Agenda 2030 during their studies.

Interim goal for 2024:

- In 2024, there are intended learning outcomes in all educational programmes where students will acquire knowledge and skills in the field of climate change and health as part of teaching related to sustainable development.

Activities/assignments	Responsible
Promote learning outcomes in courses in all undergraduate and graduate programmes that provide students with knowledge and skills on climate and sustainable development	Departments supported by the Unit for Teaching and Learning (UoL)
Promote learning outcomes on climate and sustainable development in relevant graduate courses	Departments supported by the Unit for Teaching and Learning (UoL)
Where possible, taking into account quality assurance and internationalisation aspects, use digital working methods in courses and other activities	Departments
Monitor the development of climate and sustainable development in undergraduate, postgraduate and doctoral education in the ongoing quality assurance process.	Committee for Higher Education Committee for Doctoral Education
Ensure that the provision of information is consistent with the updated learning outcomes focusing on health in relation to climate and environment	University Library

RESEARCH

KI is conducting research at the international forefront in order to promote better health for all. Research conducted in the fields of climate change and health, climate-friendly healthcare, and behavioural science and preventive healthcare linked to climate change shall, within the next decade, be at the international forefront.

Interim goal for 2024:

- In 2024, KI conducts more active research in the fields of climate change and health, climate-friendly healthcare, as well as behavioural science and preventive healthcare linked to climate change.
- In 2024, KI has one or more professorships, lectureships, or postdoctoral fellowships in one or more of the fields climate change and health, climate-friendly healthcare, or research into behavioural science and preventive healthcare linked to climate change.

Activities/assignments	Responsible
Strengthen communication and visibility of health research related to environment, climate, and sustainable development	Departments Communications and Public Relations Office KI Council for Environment and Sustainable Development
Organise an annual research conference, seminar or workshop on the theme of health in relation to sustainable development	Committee for Research Committee for Doctoral Education
Announce research funds that contribute to sustainable development	Committee for Research Research Support Office
Inform about funding opportunities for research related to sustainable development	Research Support Office
Encourage researchers to apply for research funding, for example by making it easier for researchers to relate their research to sustainable development	Research Support Office
Provide services, or centre formation, in one or more of the fields climate change and health, climate-friendly healthcare, or research into behavioural science and preventive healthcare linked to climate change.	KI Council for Environment and Sustainable Development
Investigate the possibility of more systematic bibliometric analyses linked to research on health in relation to climate and the environment	University Library

COLLABORATION FOR UTILISATION

Collaboration is an important task for a university. Today, KI collaborates in a multitude of contexts locally, nationally, and globally and is constantly seeking new arenas in which the university can contribute with knowledge and expertise, but also learn from others. In collaboration, it is important that KI not only bring its expertise in health to the table, but also addresses how this engagement can be achieved while reducing negative climate impact and increasing knowledge about the relationship between climate change and health.

Interim goal for 2024:

- In 2024, climate issues are integral to KI's collaborations with its most important partner, the healthcare sector.
- In 2024, climate issues are included in all major collaborative projects in which KI participates.
- In 2024, KI contributes its expertise in health related to climate change to several broad societal projects.
- In 2024, KI plays an important role in the higher education sector's work on climate issues.

Activities/assignments	Responsible
Ensure that climate and sustainable development are an integral part of collaborative projects	KI's Management Departments Central administration
Promote increased collaboration with health and medical services on environmental and climate aspects of health care	Environmental coordinator KI Council for Environment and Sustainable Development
Develop collaboration with NGOs and municipalities on climate and sustainable development issues	KI's Management
Work to ensure that the Stockholm Trio collaboration actively promotes the environment, climate, and sustainable development	KI's Management KI Council for Environment and Sustainable Development
Develop interaction and collaboration with students on issues related to the environment and climate	Environmental coordinator KI Council for Environment and Sustainable Development
Participate actively in the Climate Framework to make the activities and responsibilities of universities visible together with other higher education institutions	Environmental coordinator KI Council for Environment and Sustainable Development

MEETINGS AND TRAVEL

KI is an engaged, global university. While meetings are often necessary in research, education and collaboration, air travel has a major impact on the climate. New digital working methods offer possibilities to meet and interact without travelling. Knowledge of business travel and its emissions will be increased to facilitate dialogue regarding which journeys should be prioritised and which means of transport should be chosen. Reducing climate impact from travel requires collaboration between different actors at KI, but also with external partners.

Interim goal for 2024:

- In 2024, carbon dioxide emissions per full-time-equivalent from business travel are 40% lower than in 2015.

Activities/assignments	Responsible
Facilitate travel-free meetings and conferences, including internationally, among own staff and partners	Departments Central administration
Work to maintain low air travel after the pandemic and when travelling choose train travel more often.	Departments Central administration
Ensure that all employees are aware of the current guidelines for business travel	Departments Central administration
When organising meetings and conferences, use the Sustainable Meetings Guide	Departments Central administration
Conduct a dialogue with research funders on digital meetings and that travel under the grants should be by the lowest possible emission means of transport	Central administration
Establish new guidelines for business travel, highlighting travel-free meetings and trains	Travel manager
Facilitate and create incentives for employees to make business travel more environmentally and climate friendly, e.g., by train	Travel manager
Regularly inform Departments about the number of trips made in the organisation and the emissions from these trips	Travel manager
Ensure that the new travel agency contributes to achieving the KI's climate targets	Travel manager
Provide and develop technology and resources to organise meetings and scientific conferences that reduce air travel and disseminating knowledge about same.	Information Technology Office Property and Facilities Office

Did you know that:

In 2015, KI's total emissions from travel (trains and flights) were approximately 1,660 kg CO₂/full-time equivalent. Of this, 97% came from flights longer than 500 km. By 2019, emissions were reduced by 17% to 1,381 kg CO₂/full-time equivalent. A round-trip journey to New York generates about 800 kg CO₂.

This is calculated without the so-called high-altitude effect. Burning at high altitude is estimated to roughly double the climate impact compared to burning at ground level. Statistics on travel sometimes include high-altitude effects and sometimes do not. In KI's climate strategy, emissions are given without the high-level effect. There is no consensus regarding how emissions should be reported and there is currently no regulatory standard for doing so.

ENERGY AND BUILDINGS

Energy use and new construction and refurbishment are among KI's significant environmental aspects. KI uses energy mainly from renewable sources, but all energy use has an environmental and climate impact. In new construction and renovation, environmental and climate impacts occur at the time of construction in the form of materials and transport. Requirements must be set to reduce this impact, and to lay the foundations for reduced environmental and climate impact over the lifetime of the property. KI will promote an efficient use of space. This work requires cooperation between property owners, property managers, and the organisation.

Interim goal for 2024:

- In 2024, carbon dioxide emissions from KI's energy consumption are 50% lower per square meter than in 2019.
- In 2024, KI's energy consumption is 15% less per square meter than in 2019.

Activities/assignments	Responsible
Improve energy efficiency, e.g., by reviewing the use of fume hoods, freezers and ventilation	Departments Property and Facilities Office
Choose energy-efficient products when purchasing electronics	Departments Central administration
Promote the purchase of second-hand furniture and the recycling of used furniture	Departments Central administration
Set environmental and energy requirements for new buildings and renovations	Property and Facilities Office
Promote efficient use of space	Property and Facilities Office
Develop new long-term energy targets in collaboration with property owners	Property and Facilities Office
Work to reduce energy use in collaboration with property owners	Property and Facilities Office
Work to reduce energy use in collaboration with property owners in new construction and renovation	Property and Facilities Office
In cooperation with property owners, work for the continued development of sustainable campuses with, for example, smoke-free environments, plenty of green space, and access to sufficient secure bicycle parking	Property and Facilities Office

Did you know that:

Three fume hoods use as much energy as an entire house. Therefore, never leave fume hoods open unnecessarily.

PROCUREMENT AND PURCHASING

Each year, KI purchases goods and services for considerable sums. Purchases have a major impact on the environment and climate. With greater understanding of the environmental effect of these purchases, the correct requirements can be set when procuring goods and services to reduce our climate impact. This requires cooperation between several actors within the KI, but also with external actors.

Interim goal for 2024:

- In 2024, KI has data about its emissions from the consumption of goods and services.
- In 2024, wherever possible sustainability and climate requirements are included in all relevant procurements, call-off orders, and purchases. These requirements are followed up.

Activities/assignments	Responsible
Reduce the consumption of goods, e.g., by borrowing products from each other, coordinating the purchase of chemicals, and reviewing the use of disposable products	Departments Central administration
Ensure that climate and sustainability requirements are set in procurement with the aim of ensuring that purchases have the lowest possible environmental and climate impact	Departments Central administration
Promote packaging reduction in purchasing and procurement	Departments Central administration
When serving food, choose options with low environmental and climate impact in accordance with the Sustainable Meetings Guide	Departments Central administration
Develop collaboration with campus restaurants to reduce the environmental and climate impact of food served	Environmental coordinator
Develop work, deploy expertise, in environment, climate, and life cycle perspectives ⁵ of procurement and monitoring	Environmental coordinator
Investigate the climate impact of purchased goods and services	Environmental coordinator
Investigate how KI can reduce the use of plastic products	Environmental coordinator
Develop checklists and procedures to facilitate sustainability requirements in procurement	Purchasing and Procurement Unit
Work to take life-cycle perspective in consideration in procurement	Purchasing and Procurement Unit
Facilitate and encourage sustainable purchasing in the procurement system	Purchasing and Procurement Unit Support systems

⁵ For the purposes of this Action Plan, life cycle perspective refers to the activities and processes that the University can influence; from material extraction, manufacturing, transport, related processes, handling in the business, reuse, and recycling/reclamation. The extent of the possible effect can vary from area to area.

WASTE MANAGEMENT

Waste has a major impact on the climate and the environment. The priority should be to reduce the quantity of waste and increase recycling. Waste that cannot be eliminated shall be recycled. Food waste should be treated as a resource and handled separately.

Interim goal for 2024:

- In 2024, the total waste per full-time-equivalent generated on KI's premises has decreased by 10% compared to 2019.
- In 2024, food waste is collected from all kitchenettes on KI's premises.

Activities/assignments	Responsible
Facilitate and inform about recycling opportunities in the organisation. ⁶	Departments Property and Facilities Office
Investigate existing waste management and identify opportunities for improvement	Property and Facilities Office
Implement food waste collection at all kitchenettes on KI's premises.	Property and Facilities Office
Facilitate the re-use of furniture and furnishings	Property and Facilities Office
Ensure the return of end-of-life computers	IT Office

Did you know that:

A bag of food waste (2 kg) can power a biogas car for ca 4 kilometres. Biogas cars reduce carbon dioxide emissions by 73%.

Source: Stockholm Vatten och avfall

⁶ Activities and operations located outside the KI premises follow local instructions regarding waste and recycling. These activities and operations themselves engage in dialogue with property owners.

CHEMICALS

Chemicals and chemical waste are among KI's most significant environmental aspects. Chemicals handled incorrectly can pose a safety risk to both humans and the environment. To reduce risks, the amount of hazardous chemicals should be reduced and, where possible, replaced by less hazardous products. It is also important to ensure that everyone who handles chemicals has the right knowledge to do so.

Interim goal for 2024:

- By 2024, substitution, phase-out and reduction of hazardous chemical products will have progressed

Activities/assignments	Responsible
Work actively to substitute hazardous chemicals	Departments
Streamline the purchase and use of hazardous chemicals with the aim of reducing both purchases and waste	Departments
Ensure that risk assessments are carried out for the handling of chemicals and that waste management is included in these	Departments
Ensure that all employees who supervise or personally carry out work with chemical products attend a risk assessment course	Departments
Organise training courses in risk assessment and risk management for teachers and laboratory staff	Environment and Safety Unit
Ensure that incidents and deviations are reported in the KI's incident reporting system to improve the working environment and prevent accidents	Departments
Investigate the possibility of introducing a common system for the registration and follow-up of mandatory laboratory safety courses	HR Office

COMMUNICATION AND SKILLS TO ACHIEVE THE OBJECTIVES

Increased knowledge and awareness of environmental and climate issues in the organisation is a prerequisite for KI to achieve the objectives in the Action Plan. Communication and skills development will take place in all areas of the Action Plan and support the achievement of the objectives. In this way, all students and employees at KI are given the opportunity to contribute to sustainable development based on their role and assignment. Managers and leaders have a particularly important mission in this work. The KI Council for Environment and Sustainable Development is responsible for providing training and inspiration to KI staff and for being a unifying link with the issues.

To increase expertise on environment and climate, KI must, among other things:

- Introduce all new employees to KI's environmental and climate work, and to the Departments' own work (Departments, KI Council for Environment and Sustainable Development)
- Regularly inform and inspire regarding KI's environmental and climate work, and to the Departments' own work (Departments, KI Council for Environment and Sustainable Development)
- Organise an annual sustainability day for KI staff and students (KI Council for Environment and Sustainable Development)
- Provide training for employees on environment, climate, and sustainable development (KI Council for Environment and Sustainable Development)
- Maintain an updated website where KI's information on sustainable development is collected (KI Council for Environment and Sustainable Development)