KTH's university-wide sustainability objectives 2021-2025 and climate objectives 2021-2045

This steering document has been adopted by the President (reference number V-2021-0087) based on Section 7 of the Ordinance on environmental management in government agencies (SFS 2009:907). This document is effective as of 2 February 2021. It governs KTH sustainability objectives for the period 2021-2025 and climate objectives for the period 2021-2045. The KTH Sustainability Office is responsible for management and issues concerning this steering document.

The following are KTH's six university-wide sustainability objectives, including climate objectives.

1. KTH is a leading technical university within education for sustainable development in which all students, post-graduation, will be able to drive and participate in the transition to sustainable development and an equal and climate-neutral society.
2. KTH is a leading technical university within research for sustainable development and a climate-neutral society.
3. KTH's collaboration, research, and innovations contribute to sustainable development, gender equality and equal opportunities, and climate transition and exert an increased, clear impact on society.
4. KTH's work with sustainable development and gender equality is integrated into everyday operations, and employees and those working on behalf of KTH have knowledge and are provided with the conditions to contribute based on their individual roles.
5. The KTH organisation is characterised by efficient resource management and contributes to sustainable development and a climate-neutral society.
6. KTH is a leading technical university for climate transition and a climate-neutral society.

For each university-wide objective, there are sub-targets described below.

# Sustainability objective 1: KTH is a leading technical university within education for sustainable development in which all students, post-graduation, will be able to drive and participate in the transition to sustainable development and an equal and climate-neutral society.

## Sub-targets to be achieved by the end of 2025 at the latest

1.1 Within KTH, sustainable development has been integrated into all educational programmes at all levels so that students, post-graduation, are aware of technology's role in society and people's responsibility for how it is used. They possess the knowledge and skills to drive sustainable societal development and contribute to the transition to an equal and climate-neutral society.

1.2 Within KTH, all teaching, Bachelor and Master's programmes, as well as the architecture programme, have reached at least level 3i in the CDIO standards for sustainable development. All Master's and doctoral programs have reached at least level 2 in the CDIO standards for sustainable development.

1.3 Within KTH, there are first cycle, second cycle, and third cycle educational programmes that focus on sustainable development and climate transition from an interdisciplinary perspective.

## Sub-targets to be achieved by the end of 2022 at the latest

1.4 Within all KTH's civil engineering programmes and its architecture programme, it is possible for students to tailor their education to build a sustainability profile through elective courses or by choosing a master's programme or by specialisation focusing on sustainability.

1.5 KTH has developed digital teaching and digital examination methods to contribute to sustainable development and a climate-neutral society.

1.6 KTH has developed and strengthened continuing professional development and education within sustainable development, including climate issues, connected to lifelong learning.

1.7 KTH's educational programmes all include elements integrated into compulsory courses that lead to students, post-graduation, possessing sufficient knowledge and skills to contribute to a transition to sustainable development and a climate-neutral society within their field of study.

1.8 As part of the KTH quality assurance system for education, sustainable development is included in both continuous and regular reviews.

# Sustainability objective 2: KTH is a leading technical university within research for sustainable development and a climate-neutral society.

## Sub-targets to be achieved by the end of 2025 at the latest

2.1 In KTH's research base, the integration of sustainable development and climate research has increased (base year 2020). KTH's research base includes teachers, researchers, faculty funds for research, third-cycle education and centre formations, etc.

2.2 KTH has significant and increasing external grants within sustainable development from various financiers (base year 2020).

2.3 KTH's research leads to increased social value, which contributes to increased sustainable development (base year 2015).

## Sub-targets to be achieved by the end of 2022 at the latest

2.4 KTH has strengthened interdisciplinary research in sustainable development (base year 2020).

2.5 Continuous and regular audits of KTH's research, utilization, and impact include sustainable development and climate issues.

2.6 KTH makes greater use of the campus areas in research on sustainable development and climate issues (base year 2020).

# Sustainability objective 3: KTH's collaboration, research, and innovations contribute to sustainable development, gender equality and equal opportunities, and climate transition and exert an increased, clear impact on society.

## Sub-targets to be achieved by the end of 2025 at the latest

3.1 KTH's target groups know, perceive and experience that KTH is a leading technical university for sustainable development and climate transition and associates KTH's brand with sustainable development and climate transition.

3.2 KTH ranks high in the reputation, cooperation, and utilization parts of relevant rankings where sustainable development and climate transition are assessed.

3.3 KTH's capacity-building activities in developing countries in support of the implementation of the Sustainable Development Goals have increased (base year 2020).

## Sub-targets to be achieved by the end of 2022 at the latest

3.4 KTH collaborates with partners who contribute to sustainable development, gender equality and equal opportunities, and who participate in reducing climate impact.

3.5 KTH's agreements and collaborations with strategic partners and other partnerships have integrated sustainable development, gender equality and equal opportunities, and climate issues, and KTH pursues the issues within these collaborations.

3.6 KTH's campus areas are used to a greater extent than before as a meeting place for students, researchers from different disciplines, employees and the outside world to take on global challenges and create new knowledge and innovations (base year 2020).

3.7 KTH encourages and offers opportunities for students and employees to create innovations that can contribute to sustainable development and KTH is seen as an attractive university for innovative students and researchers from all over the world.

3.8 KTH reaches and retains top positions in internationally known and recognised rankings that include sustainable development.

3.9 The visibility of KTH's work with sustainable development, gender equality and equal opportunities, and climate issues has increased (base year 2020).

# Sustainability objective 4: KTH's work with sustainable development and gender equality is integrated into everyday operations, and employees and those working on behalf of KTH have knowledge and are provided with the conditions to contribute based on their individual roles.

## Sub-targets to be achieved by the end of 2025 at the latest

4.1 In KTH's steering and follow-up processes (processes, plans, and decisions), the environment, gender equality and equal opportunities, and sustainable development are integrated.

4.2 At KTH, employees have knowledge of sustainable development, gender equality and equal opportunities, and climate challenges and work to contribute to sustainable development and reduced climate impact in daily operations according to their functional roles.

4.3 Schools' departments and divisions whose subject can contribute to sustainable development and a climate-neutral society have teachers and researchers with expertise in teaching about this and who can research and attract external grants for sustainable development and transition to a climate-neutral society.

4.4 KTH's employees and students use practical and digital training solutions for safe chemical management.

## Sub-targets to be achieved by the end of 2022 at the latest

4.5. KTH is a leader in taking advantage of the opportunities digitalisation provides with respect to sustainable development, gender equality and equal opportunities, and climate transition.

4.6 At KTH, decision-makers, managers, and other senior officials have knowledge of sustainable development, gender equality and equal opportunities, and climate issues.

4.7. At KTH, staff in educational leader roles such as Director of First and Second Cycle Education, Director of Third Cycle Education, Programme Director, and people on the Board of Education, Faculty Council and the like, have undergone training in how sustainable development including gender equality and equal opportunities and climate issues can be integrated into degree programmes.

4.8 KTH has developed the systematic approach to phase out particularly hazardous substances that are not a necessary part of research or teaching.

# Sustainability objective 5: The KTH organisation is characterised by efficient resource management and contributes to sustainable development and a climate-neutral society.

## Travel and transport

## Sub-targets for travel and transport to be achieved by the end of 2025 at the latest

5.1 KTH's climate impact from business travel (carbon dioxide equivalents per full-time equivalent) has decreased by 40% (base year 2015).

5.2 KTH's climate impact from students' education-related travel has decreased by 40% (base year 2015).

5.3 KTH employees' travel and transport to, from, within, and between our campus areas is carried out with reduced climate impact (base year 2015).

5.4 In cooperation with relevant stakeholders, KTH has reduced emissions and noise emissions from transports and stationary vehicles outdoors on campus areas.

## Sub-targets for travel and transport to be achieved by the end of 2022 at the latest

5.5 KTH's climate impact from business travel (carbon dioxide equivalents per full-time equivalent) has decreased by 25% (base year 2015).

## Procurement and waste management

## Sub-targets for procurement and waste management to be achieved by the end of 2025 at the latest

5.6 From a life cycle perspective, KTH has an effective management of the goods and services purchased, used, and waste management within KTH.

5.7 KTH sets sustainability requirements in all procurements, calls and purchases, where possible, and the requirements are continuously developed and followed up.

5.8 KTH's total amount of waste has decreased in weight per full-time equivalent student and full-time employee equivalent by 25% (base year 2019).

## Sub-targets for procurement and waste management to be achieved by the end of 2022 at the latest

5.9 At KTH, the amount of furniture and interior materials that go to waste management has decreased (base year 2019).

5.10 KTH's total amount of waste has decreased in weight per full-time equivalent student and full-time employee equivalent by 20% (base year 2019).

5.11 At KTH, the proportion of separated waste collection, including organic waste, plastic and paper packaging, has increased (base year 2019).

## Sustainable buildings

## Sub-targets for sustainable buildings to be achieved by the end of 2025 at the latest

5.12 In cooperation with property owners, KTH has reduced the purchased energy (electricity, heating, cooling, operational energy), by 3.5% compared with the year before until 2025.

5.13 In cooperation with property owners, KTH has zero emissions of greenhouse gases from the production of purchased electricity, heating, and cooling.

5.14 In cooperation with the property owner, KTH's energy consumption has decreased by 25% (electricity, district heating, cooling) per full-time employee equivalent, full-time equivalent student, and per square meter, without sacrificing the indoor climate (base year 2015).

5.15 In cooperation with property owners, KTH has increased the efficiency of premises use by 15% calculated per full-time equivalent student and full-time equivalent (measured as area per person) (base year 2020).

5.16 In cooperation with property owners, KTH ensures that any new construction and conversions have a lower climate impact than the corresponding type building in 2015.

5.17 In cooperation with property owners, KTH ensures that relevant certifications, including standards for energy efficiency, are used for any new construction and renovations, and that the highest class is sought.

5.18 KTH's buildings and campuses shall feel safe, accessible, and inclusive for everyone there.

5.19 In cooperation with property owners, KTH ensures that renewable building materials are used to an increasing degree in connection with new construction and conversions of KTH's buildings.

## Sub-targets for sustainable buildings to be achieved by the end of 2022 at the latest

5.20 In cooperation with the property owner, KTH's climate impact (in carbon dioxide equivalents and normal year-adjusted) from energy consumption has decreased by 15% per full-time employee equivalent, full-time equivalent student and per square meter (base year 2015).

5.21 In cooperation with the property owner, KTH has increased the efficiency of premises use by 10% calculated per full-time equivalent student and full-time equivalent (measured as area per person) (base year 2020).

5.22 In cooperation with the property owner, KTH has reduced the need for supplemental heating in the form of electricity for climatization of premises (base year 2020).

## Food and food services

## Sub-targets for food and food services to be achieved by the end of 2025 at the latest

5.23 KTH shall be a driving force with respect to considering the environment and sustainable development within the scope of food and food services.

5.24 KTH sets requirements in its procurements and orders regarding what each meal may maximally emit in the form of carbon dioxide equivalents per meal.

## Sub-targets for food and food services to be achieved by the end of 2022 at the latest

5.25 KTH systematically sets concrete climate and sustainability requirements in procurement and framework agreements for catering, as well as climate and sustainability requirements on restaurants where KTH has an agreement with the tenant.

5.26 KTH's procurements and orders of catering services comply with KTH's Guidelines for sustainable events and conferences, and specifically those on food and drink.

5.27 KTH and the property owner have, in cooperation with the restaurateurs, developed sustainability criteria for their operations.

## Biodiversity and ecosystem services

## Sub-targets for biodiversity and ecosystem services to be achieved by the end of 2025 at the latest

5.28 In collaboration with property owners, KTH's campus areas are developed and managed so that ecological structures and processes are strengthened and highlighted with special focus on the importance of nature to human health and well-being.

# Climate objective 6: Overall climate objectives for the period 2025-2045: KTH is a leading technical university for climate transition and a climate-neutral society.

## Sub-targets for education, research, and collaboration for 2025 - 2030

6.1 KTH is a leading technical university providing education within sustainable development and for a transition to a climate-neutral society.

6.2 KTH continues to be a leading technical university within research for a climate-neutral society. Results from KTH's climate research benefit society on a national and international level and contribute to achieving Sweden's climate targets of net zero emissions and global objectives linked to the Paris Agreement.

6.3 KTH is perceived by its stakeholders as a leading university for climate transition. This continues to be consolidated and developed further. The work is continuous and new objectives are developed during the period.

## Overall quantitative objectives for emission reductions 2022-2045

The following are quantitative objectives for the entire organisation. The base year is 2015.

6.4 2022: KTH is climate-neutral regarding Scope 1 (direct emissions from KTH's own operations) and is clearly reducing emissions from Scope 2 (emissions from production of purchased electricity, heating and cooling).

6.5 2025: KTH is climate neutral regarding Scope 1 and 2.

6.6 2030: KTH has reduced its climate impact by 60% regarding Scope 1, 2, and 3 (emissions from other goods and services procured by KTH) per full-time equivalent compared with 2015.

6.7 2040: KTH has reduced its climate impact by 90% regarding Scope 1, 2, and 3 per full-time equivalent compared with 2015.

6.8 2045: KTH is climate neutral (Scope 1, 2, and 3).

6.9 After 2045, KTH has negative emissions.