

## THE CLIMATE CHANGE AND SUSTAINABLE **DEVELOPMENT AGENDA**

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2025

Sustainable consumption

Education and research 2025

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Acting with a sense of unity and solidarity towards the challenges ahead, conscious of the University's social responsibility towards the academic community, all citizens as well as the natural world, the University of Warsaw is engaging in an expanding number of initiatives specifically related to climate and environmental protection. Additionally, through its mission and strategy pursued through research, teaching and social activities, the University of Warsaw has participated in a number of initiatives, programmes and projects that help us to meet and fulfil the UN Sustainable Development Goals.

Universities play a unique role in the shaping of society and the world around us. Our task is to educate the widest possible audience, which includes future decision-makers. There is no planet B; we have one chance – and it's worth fighting for.

> **PROF. ALOJZY Z. NOWAK** Rector of the University of Warsaw

At the University of Warsaw, we have undertaken actions and initiatives to provide in-depth education on contemporary climate change.

As an academic community, we also aim to minimise our negative impact on the environment and counteract the adverse effects of the changes that are taking place. The goals and objectives we have set ourselves will stimulate action in the areas of key importance for our country over the coming years. We want to take up the challenge of protecting the planet's resources and using them rationally. Personally, as a result of my scientific interests, I am extremely aware of the problem of limited access to clean water, which is common in developing countries. With the rapidly increasing frequency of excessively warm days, accompanied by the overall decrease in snowfall during winter, the problem will undoubtedly affect us all directly. On 28 July 2010, the UN General Assembly adopted a historic resolution declaring the right to clean drinking water as a human right "indispensable for the full enjoyment of life". Awareness of fundamental human rights, but also of responsibilities towards the environment and future generations, should have a dominant role in research work, knowledge promotion and education at the University of Warsaw.

> PROF. EWA KROGULEC UW Vice-Rector for Development, Chair of the Rector's Team for Ecology and Climate Crisis

All of the objectives pertaining to the concept of sustainable development are extremely important: social, economic and environmental. Our ambition must be to implement them swiftly and efficiently. Future generations should also have the opportunity to develop. The community of the University of Warsaw is addressing the challenges of sustainable development at various levels - regional, national and global: it builds communication platforms, changes established patterns and seeks out solutions to the problems of the modern world. At the University of Warsaw, we create cutting-edge solutions, projects and research in line with the goals and objectives of sustainable development in many elements of our activities.

**PROF. SAMBOR GRUCZA** UW Vice-Rector for Co-operation and Human Resources At the University of Warsaw, within the framework of activities for the Sustainable Development Goals, we provide the highest possible standards of education and actively support the idea of lifelong education. Our mission is to prepare future graduates who will be aware of the contemporary challenges of civilisation and will know how to solve them. We share knowledge by popularising science and stimulating cognitive curiosity in people of all ages. At each stage of studies, we take on the difficult challenge of teaching the ability to think critically, to be sensitive to words and to be relentless in asking questions - including the most difficult ones - about the responsibility of the current generations towards those who come after us.

**PROF. SŁAWOMIR ŻÓŁTEK** UW Vice-Rector for Students and Quality of Teaching The research we undertake serves to build a modern, informed society, create a sustainable research infrastructure, promote sustainable development and an inclusive model of economic development, as well as foster innovation. We are aware that scientific consensus is unequivocal - as humanity we are facing a climate and environmental crisis - so as a University we will place increasing emphasis on the research and teaching activities aimed at minimising the negative effects of climate change and seeking out innovative solutions to mitigate the changes occurring in the natural environment.

> **PROF. ZYGMUNT LALAK** UW Vice-Rector for Research

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# Introduction

In the face of abrupt climate change together with the biodiversity crisis, the University of Warsaw has determined that its core mission of education and research is inadequate in the current situation. The governing authorities together with members of the academic community have decided to prepare and commence the implementation of a comprehensive plan, which will minimise the environmental impact of our University and campus life, but also prepare us to learn and work in new and increasingly adverse environmental conditions.

The **"Climate and Sustainable Development Agenda"** outlined in this document contains strategic "milestones" that we aim to achieve over the coming years. This is in response to the clear and unambiguous scientific position that human activity has led to the warming of our planet, causing rapid and widespread environmental change. It is also the University's attempt at building a sustainable and resilient future for all of us as well as future generations - in line with the UN Sustainable Development Goals.



The tasks listed in the "Agenda", touch upon all aspects of academic life - from the food available at campus catering outlets, to the educational offer, to transport and university infrastructure - and are consistent with the direction set out in the resolution adopted by the United Nations General Assembly entitled "Transforming our world: the 2030 Agenda for Sustainable Development", in particular the following goals:



**Goal 6:** Ensure availability and sustainable management of water and sanitation for all:

and promote lifelong learning opportunities for all;

**Goal 4:** Ensure inclusive and equitable quality education

- **Goal 7:** Ensure access to affordable, reliable, sustainable and modern energy for all;
- **Goal 12:** Ensure sustainable consumption and production patterns;



**Goal 13:** Take urgent action to combat climate change and its impacts;



Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.



The 17 Sustainable Development Goals (SDGs), with their 169 targets, are a wide-ranging action plan to: transform the world; reduce poverty; ensure access to education, food and clean water; ensure equal opportunities; promote human rights, peace and environmental protection; minimise climate change; and spread access to sustainable energy sources. The targets aim not only to meet the needs of the current generation in a sustainable manner, but also to take into account the needs of those generations that will come after us.

At this point, it is worth highlighting the University of Warsaw's achievements to date in implementing the Sustainable Development Goals. We have undertaken a number of projects and initiatives across a range of activities, with particularly notable achievements in Goal 3 - Good health and well-being and Goal 5 - Gender equality.

Achieving the social and environmental objectives defined in the UN document would not be possible without the participation of the entire academic community, through the implementation of the principles of social responsibility and activity in all areas. The objectives defined below are divided into large, strategic "milestones" that will take longer to achieve and smaller actions that should be relatively easy to implement.



Implementing the changes contained in this document will require all of us to modify our habits and will involve a number of sacrifices. As a result, we will not only reduce our negative impact on the environment on an ad hoc basis, but also permanently change the attitudes of our large academic community – for the benefit of future generations.

The Agenda will be regularly reviewed and updated to best respond to changing realities.

RECTOR'S TEAM FOR ECOLOGY AND CLIMATE CRISIS

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# SUSTAINABLE TRANSPORT

1.1

#### Sustainable domestic transport

The University of Warsaw will introduce additional facilities to make campus infrastructure more convenient for people who commute to work and classes by bicycle. The University will also actively promote the use of public transport among the University community. Currently, a significant proportion of the University's staff, students and doctoral students choose sustainable forms of transport, but we are keen to gradually increase this number. In addition, we will endeavour to install electric vehicle charging stations on each campus, powered by green energy, which will provide an additional incentive for employees to switch their mode of transport.

The University will strive for ZTM Warsaw (the city's public transport provider) to improve transport accessibility in less well-connected areas and to increase the frequency of existing lines as well as to extend bicycle paths in the vicinity of University facilities. The parking spaces in the main courtyard will be reduced and the area they currently occupy will be converted into a biologically-active area. In addition, the University will seek to increase the number of urban bicycle stations around the campuses as well as university buildings located beyond campus terrain. Furthermore, the University will support initiatives and projects that increase the use of different forms of shared mobility, i.e. bike sharing and car sharing, which shall contribute to the reduction in the use of individual vehicles.

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# Sustainable international transport

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Air transport is currently the fastest growing source of carbon dioxide emissions in the world. The academic community agrees on the need to reduce the generated carbon footprint resulting from international air travel. Consequently, the use of land-based modes of transport, especially rail, is recommended where possible. Travel requests by staff, doctoral students and students for planned air travel should be reasonably justified. The documentation of each business trip will be accompanied by information on the generated carbon footprint of the traveller.

#### 1.3

#### University green fleet

The vehicle fleet belonging to the University of Warsaw will be modernised to make it more environmentally friendly. We will strive to prioritise the purchase of zero-emission vehicles powered by green "fuel" when making car replacement decisions. In future, further calls for tender for the purchase of vehicles should be limited by a specific provision in the "Terms of Reference", allowing only for the purchase of vehicles with the lowest carbon footprint during use.

#### 1.4

#### Organisation of conferences, lectures and classes via videoconferencing

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An important factor reducing the need for travel is the widespread use of the latest technological solutions. The SARS-CoV-2 pandemic, despite being a difficult experience for the entire academic community, has shown us that lectures, conferences and meetings can be conducted effectively online. We aim to learn from this experience and we will make permanent certain elements which have proved worthwhile, such as the possibility of using a researcher's on-call time remotely.

We should keep pace with dynamically changing conditions and encourage the use of virtual mobility already operating in Europe for employees and for students and doctoral candidates.

# SUSTAINABLE NUTRITION

### 2.1

#### Food

In response to the growing needs and the greater number of people in society who are giving up or reducing their consumption of meat and animal products - for health, moral and ecological reasons as well as out of a sense of responsibility for biodiversity, water resources and greenhouse gas emissions into the atmosphere - the University will recommend that all catering outlets operating at the University introduce additional wholesome, plant-based meals.

The canteens operating at the University should offer a variety of vegetarian and vegan meals. Furthermore, the catering managers of these outlets should take care to ensure that the products used in the preparation of meals are of local origin. The university will explore the needs and capabilities of restaurants, many of which were affected by the pandemic, and will offer an educational offer for chefs on how to prepare wholesome plant-based meals.

During university events, such as conferences, debates, meetings or celebrations, plant-based meals and snacks will primarily be served.



### 2.2

#### Packaging

In catering outlets, it will be ensured that food products can be packaged in the customer's own packaging, e.g. pouring a hot or cold drink into customers' own cups or packing a meal in their own containers. If used, takeaway containers should be chargeable and biodegradable, and these rules will be permanently regulated by appropriate provisions enclosed in contracts or annexes.

There will be a gradual replacement of the products available in vending machines, with the final goal of excluding products in plastic bottles and packaging that cannot be recycled.



### 2.3

#### Food waste

In order to avoid food waste, food remains after catering is served should be sent to "community fridges", or so-called "food pantries". Their number will be increased within the University.

We aim to have "food pantries" available for everyone on every University campus, where the members of our community can donate surplus food or produce that might pass its use-by date prior to being consumed. The operators managing catering outlets will be obliged to donate fit for consumption products that they usually throw away. Catering leftovers should also go into "community fridges" if they are discarded at the end of service.





# SUSTAINABLE CONSUMPTION

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#### 3.1

#### Tenders, procurement and purchasing

The environmental factor must always be taken into account when preparing tenders and ordering office supplies and domestic cleaning products. Tenders for office supplies will include in the specifications the availability of recycled and environmentally friendly non-chlorinated materials from the supplier, such as printing paper, envelopes, paper towels and toilet paper.

WYDZIAŁ NEOFILOLOGI DZIEKANAT

> VIDZAL GEOGRAFI I STUDIÓN REGIONELNICH

The University should purchase electronic equipment with the highest energy efficiency rating, manufactured to high ecological standards, and the procurement process should be structured in such a way as to take account of the possibility of supplying spare parts and the longest possible lifespan of the equipment in question.

#### 3.2

#### "Second life" of objects

In line with the idea of the sharing economy, we will aim "to give a second life" to unwanted materials, electronics, furniture and equipment before throwing them away or disposing of them. Other individuals and offices should have the opportunity to decide whether they will find a use for these items.

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Information on the equipment and items held by the units to be decommissioned should be published on a dedicated portal.

Before discarding electrical equipment, attempts should always be made to conduct repairs if economically viable, and the "Reuse" principle should be implemented wherever possible.

REUSE

### 3.3

#### **Reducing paper consumption**

Procedures concerning the circulation, format and means of storage of documents will aim to reduce the number of printed forms required (with a preference to reducing the amount of paperwork produced by introducing less bureaucratic procedures where possible) - by extending the circulation of electronic documents, reducing the number of copies required, and adopting mandatory two-sided printing of each document. We will also reduce the number of printed invitations, posters, conference materials, flyers and other promotional and information materials. Where printing is necessary, we will aim to use recycled paper. Documents and messages that do not need to be kept as hard-copies should, where possible, not be printed.

The University of Warsaw will strive to implement, in all its units and offices, an electronic document workflow.



# SUSTAINABLE USE OF NATURAL RESOURCES AND ENERGY

#### 4.1

#### Sustainable use of water

Building renovations and upgrades that will take place in the future will include the installation of sanitary facilities that use less water and, where justified, a dual water cycle will be introduced, using "greywater".

In addition, the University will assess the state of campus greenery and, where possible, instead of watered and mown lawns, will plant flower meadows, which are shown to provide much greater resistance to drought, do not require manual irrigation and have a deeper root system and the ability to absorb water, thus reducing the risk of flooding. They will also contribute to increasing biodiversity in the city. During periods of low water availability, lawn irrigation will be limited to no more than two days per week.

## 4.2

# Reducing the consumption of energy from fossil fuels

The University will strive to increase the share of renewable energy in the energy mix until climate neutrality has been achieved. Due to the historic nature of the main campus, it may prove extremely difficult or impossible to implement certain solutions. Therefore, the University will seek to increase renewable energy generation on the Ochota campus as well as at University buildings located off campus and in newly constructed facilities.

### Sustainable investment and renovation

One of the more environmentally-damaging industrial sectors is the construction industry, which is responsible for high energy and resource consumption. According to the European Commission's 2020 report on the "Energy efficiency in buildings", buildings and the construction sector account for around 40% of our energy consumption and 36% of our greenhouse gas emissions,\* and as such University infrastructural investment should be kept to a minimum. When planning new buildings, the University will also aim to achieve energy neutrality. In addition, new developments will be planned to be inclusive, welcoming to all, inclusive for people with disabilities, and will have communal spaces for working and relaxing. Decision makers concerning new developments will be mindful that University buildings should also be friendly toward flora and fauna, including insects, and exemplify the University spaces where everyone will be able to observe the latest methods and technologies for caring for our planet and combating climate change. Where sustainable solutions have already been introduced, information and educational signs will be installed so that they are easily recognised and encourage their implementation in other places.

The University will also take steps to decarbonise existing buildings. The first step towards this should be an energy audit of the University's infrastructure, adapted to the specifics of our activities and methods of functioning, including taking into account the historical space in which some of the buildings operate.

\*source: https://ec.europa.eu/info/news/focus-energy-efficiency-buildings-2020-feb-17\_en.

## 4.4

#### Electrical appliances and heating in office premises will be switched off at the end of each working day.

Appliances left in stand-by mode continue to consume electricity. Leaving them in this mode overnight or during weekends results in unnecessary consumption of electricity, which in Poland is derived predominantly from the burning of fossil fuels.

It is also important to turn off heating and air conditioning units in rooms that do not need to be kept at a suitable temperature, especially during weekends and holidays. This will reduce the overall energy consumption at the University. Facility administrators should ensure that this recommendation is followed by means of adopting the so-called smart solutions.

The University will make an attempt to carry out an analysis examining how the COVID-19 pandemic period and the introduction of working and studying predominantly remotely has affected energy requirements.

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### 4.5

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# Limitation of the amount of material stored on servers

It is estimated that storing an email on servers for a year contributes to the production of about 0.1 grams of CO<sub>2</sub>. Although this amount may appear small, when converted to the number of staff and students and the contents of our inboxes and virtual drives, it is safe to assume that the total sum is no longer insignificant. It is worth considering regular deletion of unnecessary messages and files, especially in the case of "heavy" files such as post-project documentation in the form of photographs and videos of conferences and debates, which, for example, according to the provisions of the project contract, no longer need to be stored. The electronic document workflow system to be implemented in the future should also take this principle into account.

## 4.6

#### Waste segregation

Segregating waste is the responsibility of everyone in society, in accordance with the European Union, national and intra-university legislation. Despite this, there are still places where waste is not segregated or is not done properly, and as such we are keen to conduct an audit to fully understand the scale of the problem, and, where segregation is not practised, we will need to provide the necessary waste infrastructure and instruct users of particular spaces on the correct methods of waste management. Individual bins beneath workstations will be eliminated. All room complexes will be equipped with waste separation bins. In addition, composters will be established on each campus.



# 4.7

# Sustainable land management and nature restoration

The University will prepare a detailed plan for the model management of green and blue infrastructure, both on campus and in University areas such as research stations. The plan will include, among other things, the identification of areas where biologically active areas can be restored, the most effective types of plants to propagate, methods to protect existing flora and opportunities to reduce light pollution.

# EDUCATION AND RESEARCH

### 5.1

# Education of students, doctoral students and employees

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Currently, at the University of Warsaw, we have a wide range of courses on climate change and sustainable development for students and doctoral students. In 2020, the first course addressing the topic of climate change was conducted at the University for all university staff. We will strive to further expand this offering, with our entire academic community as the audience.

The University will work towards introducing courses on climate change and sustainable development that can be taken by all first-year students and postgraduates – following the format currently used for the Health and Safety course.

## 5.2

#### **Education of the public**

The University will endeavour to permanently offer public lectures, discussions and meetings to raise awareness of climate change and the steps that need to be taken to reduce negative environmental impacts, including, but not limited to, courses on actions to reduce the degradation of natural habitats, halt the loss of biodiversity and prevent the extinction of endangered species. A "Green Dialogue Platform" is being organised to serve the purpose of educating the public. Its aim is to debate, dialogue and discuss the most important issues related to environmental protection and the climate crisis.

### 5.3

#### **Research and innovation**

The University of Warsaw will work to increase international cooperation to facilitate access to research on clean energy and renewable energy technologies, particularly with implementation potential, through a targeted system of internal grants and increased efforts to attract external grants in these fields.

# Research under the IDUB programme

The University of Warsaw is currently implementing the "Initiative of Excellence - Research University" (IDUB) programme, which in two of its five Priority Research Areas deals with research related to identifying threats to the environment, biodiversity, climate and health, and searching for breakthrough innovations for the future: materials, energy sources and technologies, ensuring sustainable development.

The University will strive to further the research and initiatives introduced by the IDUB programme, which will continue beyond the conclusion of project funding. As part of the IDUB programme, dedicated competitions for research projects on broadly defined environmental protection are being organised.





# PREPARING FOR THE IMPACTS OF CLIMATE CHANGE

### 6.1

#### Organisation of work

The climate crisis and associated weather anomalies are already having an adverse impact on the working conditions of our community. Offices are often poorly ventilated, and by way of example are not suitable for extreme heat.

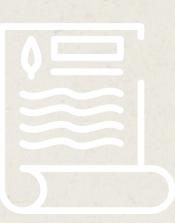
The University of Warsaw will audit its buildings and take measures to adapt the premises to changing climatic conditions, seeking solutions that place as little burden on the environment as possible.



#### Organisation of study

6.2

The University will prepare an update of its study rules and regulations, which will allow for a flexible approach to the classes conducted in the event of heat waves or violent weather events for the sake of the health and lives of its students, doctoral students and staff.



6.3

#### Preparing infrastructure for severe weather events

The University will also take into account the need to protect buildings from heavy rain and gale-force winds when upgrading and expanding infrastructure. It will relocate "sensitive" infrastructure, expensive apparatus and unique exhibits or protect those located below ground level from water intrusion to minimise the risk of water damage. The space between buildings will be modernised so that as much of it as possible is biologically active, allowing rainwater to be absorbed. The buildings, including dormitories, will be equipped with air conditioning along with further upgrades to ensure comfort for work, study and life and to protect against the dangerous health effects of prolonged exposure to excessive heat in rooms.

# 6.4

#### **Energy storage**

With the rapid technological development, the University will exploit its potential to store energy generated by renewable sources (bearing in mind the possibility to use the future "green fleet" as a natural storage resource). Where possible, a photovoltaic - hybrid installation will be installed. This solution will be used primarily in the buildings housing valuable reagents, collections and equipment that require stable conditions to minimise the chance of irreversible damage.

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# 6.5

#### The Rector's Team for Ecology and Climate Crisis

In 2021, the Rector established a team for ecology and climate crisis for the 2020-2024 term, whose tasks include: integrating the pro-environmental activities carried out at the University of Warsaw, piloting and coordinating the University's work on tackling the climate and environmental crisis, and conducting a needs-based analysis and developing good practices related to the reduction of negative environmental impacts. Additionally, in 2021 the University of Warsaw appointed the Rector's Plenipotentiary for Environment and Sustainable Development, the first position of its kind in Poland. The Team is an essential component of the smooth, "green transformation" of our University, and a similar team should be appointed also for future terms of office. The Rector's Plenipotentiary is a vital link between the academic community and the Rector's authorities, therefore successive Rectors, when starting a new term of office, should always consider appointing a person to carry out this function.

## 6.6

# Cooperation with the socio-economic environment

The University will actively establish partnerships in support of the Sustainable Development Goals, climate crisis activities and the preparedness of local authorities to adapt to the impacts of climate change and implement early warning systems for risks, as well as to deepen any cooperation it has already established in this field.

#### MILESTONES

#### 1. Sustainable transport

Reducing the carbon footprint generated by the University community when commuting to work and study, travel to conferences and business trips. Achieving the goal requires the implementation of novel internal regulations and the improvement of cycling infrastructure on the campuses.

Expected time of achievement - 2030

#### 2. Sustainable nutrition

Reducing the carbon footprint generated by the consumption of meat and animal products and reducing the amount of food wasted.

Expected time of achievement - 2023

#### 3. Sustainable consumption

Extending the life of electronic equipment by purchasing equipment that is cost-effective to repair in the event of failure. Reducing the carbon footprint by purchasing top-of-the-range energy-efficient equipment. Implementing a platform to facilitate the exchange of devices, equipment and office supplies between employees.

Expected time of achievement - 2025

#### 4. Sustainable use of natural resources and energy

Implementing policies accompanying the construction of new facilities that emphasise energy efficiency, reduced energy consumption and reduced water consumption as well as smart solutions.

Expected time of achievement - 2030

#### 5. Education and research

Increasing the number of classes and open access events on climate, the environment and the consequences of the climate crisis. Intensifying the research, including international research, on the climate crisis and its consequences. Researchers from developing countries will also be included in the implementation of this research.

Expected time of achievement – 2025

2035

2020

2021

AGENDA

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AND SUSTAINABLE DEVELOPMENT



#### 6. Preparing for the impacts of climate change

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Preparing infrastructure for severe and unprecedented weather phenomena, and carefully positioning critical infrastructure to be more resilient to these phenomena. Preparing work and study rules and regulations that take into account and systematise coordinated responses in the event of violent weather phenomena. Estimated time to prepare documents and analyses and start implementing changes – 2023. Expected time of achievement – 2040

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2040



THE CLIMATE CHANGE And Sustainable Development Agenda

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