

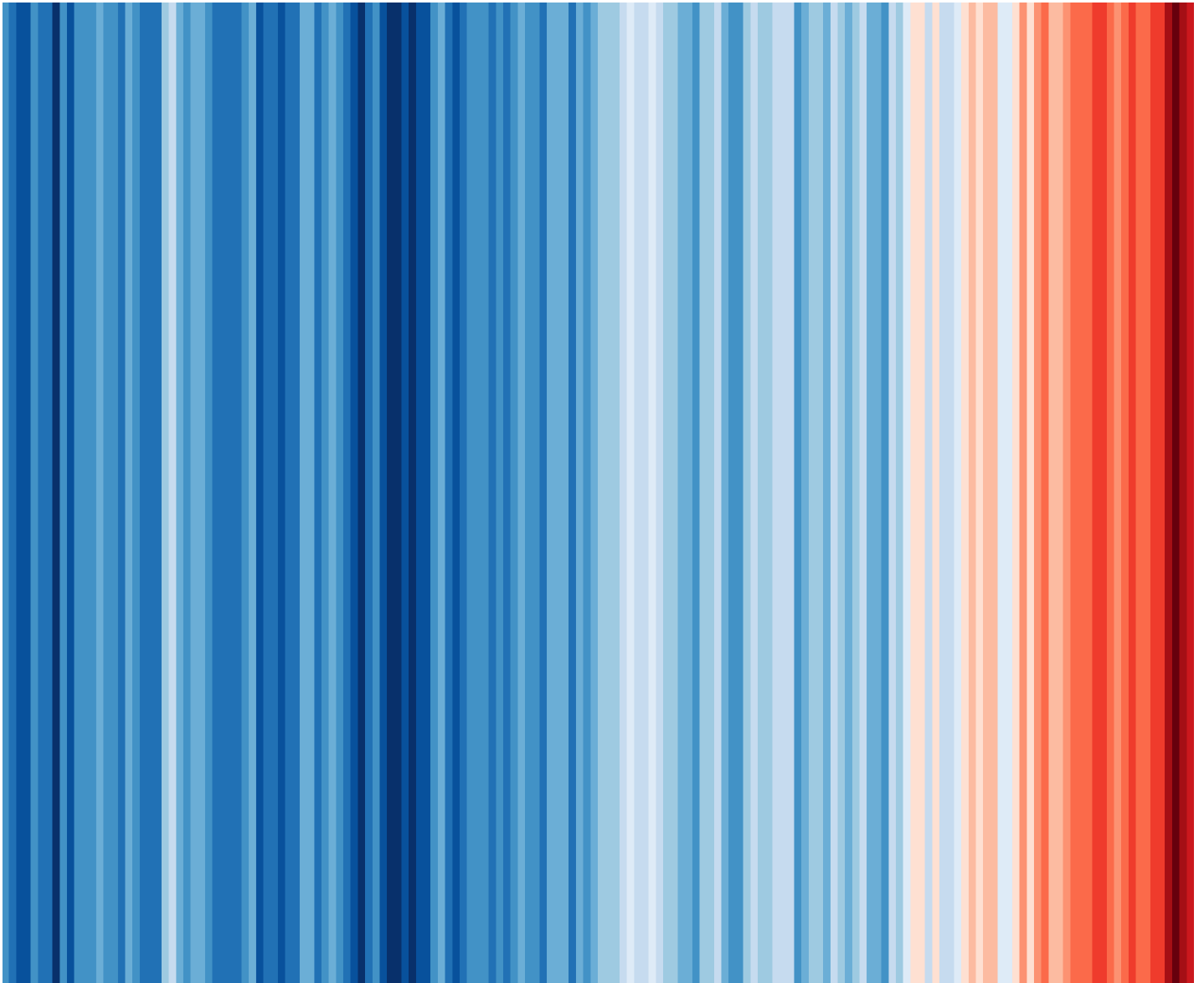


# CLIMATE GUIDE

STRATEGIC CLIMATE ACTION FOR  
DEPARTMENTS AND EQUIVALENT UNITS



UPPSALA  
UNIVERSITET



*Warming Stripes by Ed Hawkins. Global temperature between 1850 and 2021. Shades of blue show cooler years. Shades of red show warmer years. The cluster of red years towards the right-hand side shows the rapid warming of the planet in recent decades<sup>1</sup>. ([showyourstripes.info/s/globe](http://showyourstripes.info/s/globe))*

**Climate Guide:**  
**Strategic climate action for departments and equivalent units**

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Uppsala University, Uppsala, 2023

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<sup>1</sup> Ed Hawkins i Thunberg (2022)

# CONTENT

Welcome to the Climate Guide for Uppsala University!.....	4
<b>PART I .....</b>	<b>6</b>
FAQs on how to use the Climate Guide .....	8
The climate crisis.....	10
Strategic climate action.....	11
Strategic action in four pillars .....	12
The four pillars.....	14
Incentives for accelerating climate action .....	17
Who can I contact?.....	18
<b>PART 2 .....</b>	<b>20</b>
Developing a strategic climate plan .....	22
Workshop: Create a vision.....	24
Key competences for sustainability .....	26
Discussion questions: Key competences for sustainability .....	27
Climate emotions.....	28
Workshop: Dealing with climate emotions .....	30
Climate communication.....	32
Taking the first step.....	34
<b>Appendixes.....</b>	<b>35</b>
Template for strategic climate plan.....	36
Suggestions for starting-up surveys.....	37
References .....	38
Thank you! .....	39

# Welcome to the Climate Guide for Uppsala University!

If you are a manager, a member of staff or a student at a department or equivalent unit at Uppsala University, this Climate Guide is for you. The Guide is intended to give you inspiration and guidance for implementing and accelerating strategic and enhanced climate action in your particular area.

#### THIS CLIMATE GUIDE:

- Is addressed to departments and equivalent units at Uppsala University.
- Focuses on strategic and practical climate action.
- Involves management, staff, students and support functions.
- Is an Uppsala University climate pot project.

**T**he Climate Guide consists of two parts, the first of which is primarily descriptive and the second of which is more practical. Part One contains a brief background explaining why it is important to accelerate the University's climate action across all fronts simultaneously. This is followed by a strategic model for implementing such action and adapting it to the diverse academic and support operations at the University. Part Two contains more practical guidance in the form of workshops, discussions and lists of ideas.

The content of the Guide revolves around the climate crisis, though climate change is closely related to many other sustainability challenges that can be addressed in tandem with climate action. As the departments and equivalent units are the principal target group for the Guide, it does not encompass important issues such as investments, finances and land use that are primarily controlled by other parts of the University or external actors.

According to calculations made at the University, each employee is estimated to cause annual emissions of 8 tonnes of CO<sub>2</sub> in the course of their work<sup>2</sup>. This is a high figure and to bring it down as quickly as possible, climate action needs to be speeded up. Reading and taking note of this Climate Guide can be a first step along the road.

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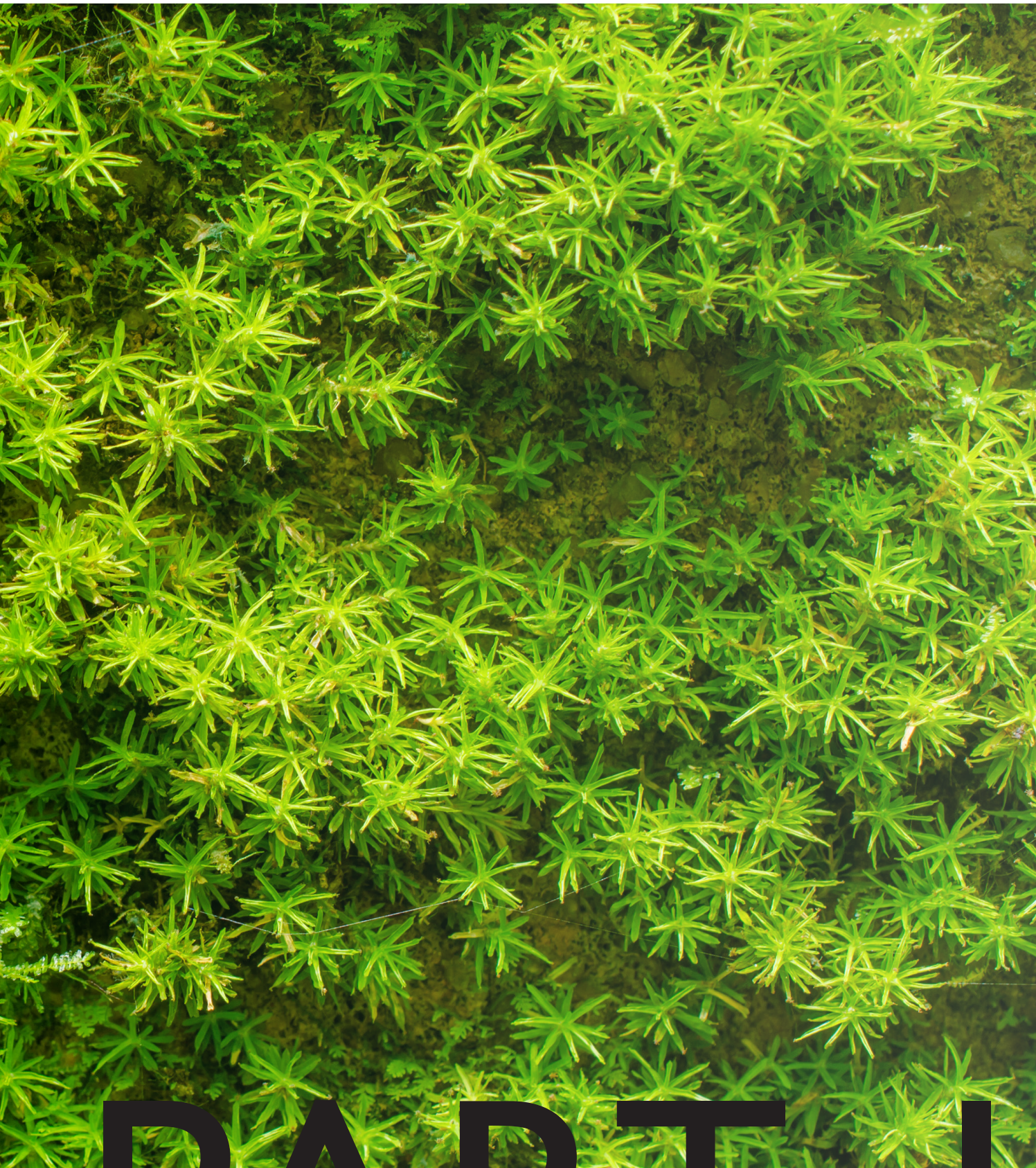
<sup>2</sup> Uppsala University (2022a)



*There is no reason to delay vital climate action. Photo: Mikael Wallerstedt.*



Moss. Photo: Adobe Stock.



**PARTI**

# FAQs on how to use the Climate Guide



Cyclist. Photo: Mikael Wallerstedt.



## FOR HEADS OF DEPARTMENT AND SIMILAR MANAGERS

*How can the Guide help me, as a manager at the University, to initiate action?*

- The support provided in the Guide gives you practical suggestions for the process of establishing a strategic climate plan and creating a vision for your climate action through a six-point programme and a workshop. To ensure that the climate issue is integrated into the core activities of education, research and external engagement, you can initiate the

suggested discussion questions on key competences for sustainability. The Guide can help you as a manager decide where resources for climate action are needed and whether your colleagues need further education and training. The Climate Guide can serve as a support and source for you in your cooperation with your environmental representative. The Guide also contains proposals for starting-up studies that can help you gauge the 'climate situation' at your department.

## FOR MEMBERS OF STAFF SUCH AS LECTURERS, RESEARCHERS, DOCTORAL STUDENTS, ADMINISTRATIVE STAFF, FACILITIES MANAGERS, EMPLOYEES IN SUPPORT ROLES AND OTHERS

*How can the Climate Guide help me, as a member of staff, to take concrete action?*

- It can be difficult for an individual member of staff to know where to begin in an organisation as big as Uppsala University. This Guide gives you practical tips for organising climate action at a general level at your department or equivalent. The Guide is suitable for use as input at department meetings, for example, and when deciding on the direction of your teaching, research and external engagement. Here you will find suggestions for discussion questions about key competences for sustainability. If you have several colleagues who

want help in managing negative climate emotions, you can get together and do the workshop on this. The contents of the Guide can also be a source of inspiration. You can encourage others around you to read it and discuss with them whether there is any part of the contents you would like to take up or share in the department or equivalent. The Guide can support environmental representatives in their work with the head of department or equivalent on the climate issue. If you're an impatient sort of person who wants to get started immediately, you can work your way through the list of first steps in climate action.

## FOR STUDENTS

*How can I, as a student, use the Climate Guide to influence my time at Uppsala University?*

- The Guide can be a starting point for discussing the contents of your education with other students and programme directors at your department or equivalent. It can also help you to formulate arguments if you have opinions about your education and want to have a say in the way it is organised. Among other things, you will find discussion questions about key competences for sustainability that you can use. The Guide can also be used as a lever to speed

up overall climate action at the department or equivalent. If you are a group of students who want help in managing negative climate emotions, you can get together and do the workshop on this. The Guide contains proposals for starting up questions that you can initiate for use at the department or equivalent to find out what knowledge or competences the students would like to acquire in the climate area (see *Appendix 2*). If you're an impatient sort of person who wants to get started immediately, you can work your way through the list of first steps in climate action.

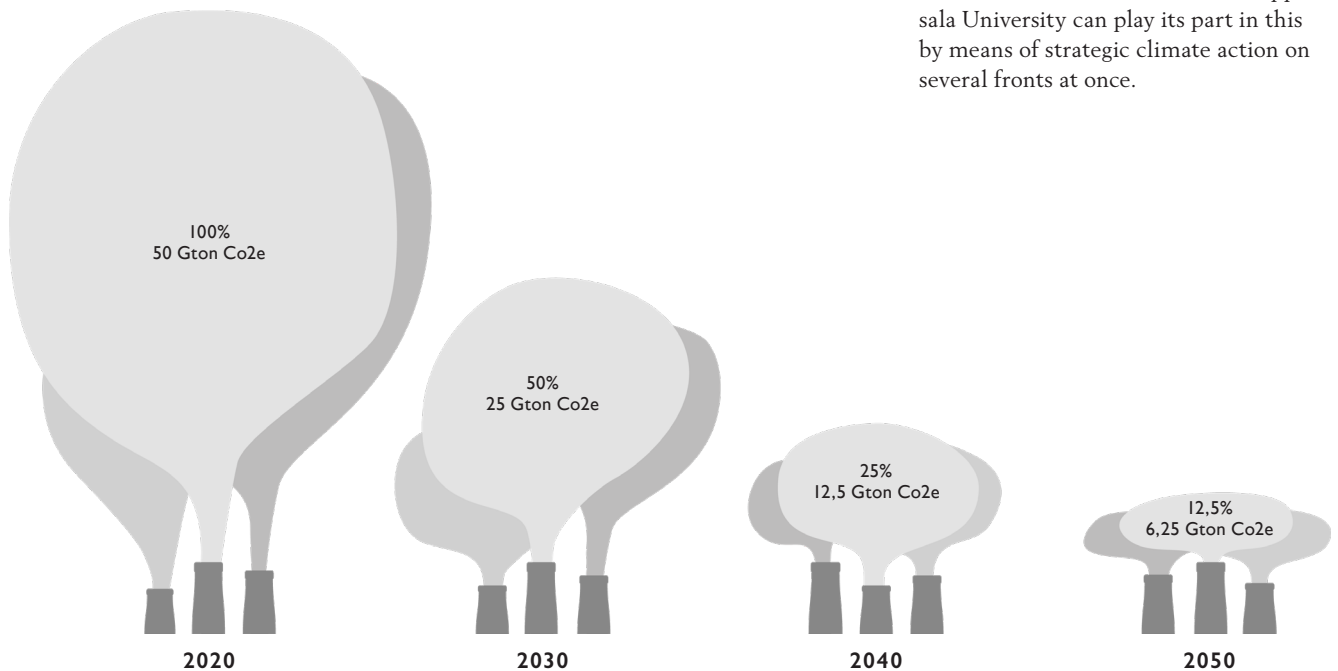
# The climate crisis

**D**The ongoing changes in the climate affect communities all over the world. Global warming in the wake of climate change jeopardises the stability of numerous ecosystems that are vital to human and natural life. In the 2015 Paris Agreement, the participating countries agreed to keep the rise in the average global temperature well below two degrees, with the ambition of limiting warming to a maximum of 1.5 degrees<sup>3</sup>. Leading climate researchers consider that exceeding this limit could entail incalculable risks for both communities and ecosystems.

The quantity of carbon in the atmosphere has continued to increase until 2022, which is the opposite of what

is needed to achieve the goals of the Paris Agreement<sup>4</sup>. A simplified way of explaining the order of magnitude by which greenhouse gas emissions need to decline in order to fulfil the Agreement is by a halving of emissions each decade up until 2050. This means that a first halving needs to be achieved by 2030<sup>5</sup>, which in turn means average annual global emissions reductions of at least 7% starting now. Countries that have historically contributed to large greenhouse gas emissions, such as Sweden, need to bring down their emissions more quickly than that. However, it is not enough simply to reduce greenhouse gas emissions; we also need to restore and protect natural carbon sinks such as wetlands.

The impact of the climate crisis on communities varies. Places in the world with a lower general standard of welfare are more vulnerable to the consequences of climate change, despite not having contributed to global greenhouse gas emissions to the same extent as wealthier regions. Issues such as health, gender equality, equity and livelihoods are all closely linked with the impact of the climate crisis and will affect both present and future generations. The climate issue requires many, multifaceted solutions, which by their nature can involve contradictions and create conflicts of interest within and between stakeholders in society and geographical regions. To bring down greenhouse gas emissions as quickly as possible, both society as a whole and individuals need to be involved and to contribute. Uppsala University can play its part in this by means of strategic climate action on several fronts at once.



The figure shows a simplification of the need to halve emissions every decade up until 2050 in order to keep the rise in temperature below 1.5 degrees.

<sup>3</sup> UNFCCC (2015)

<sup>4</sup> UNEP (2019) / Global Carbon Budget (2021)

<sup>5</sup> Rockström et al. (2017)

# Strategic climate action

**S**trategic climate action can be described as acting on several fronts simultaneously in a well-considered and planned manner and taking the action that has greatest impact and/or influence first. Strategic action on climate transition can of course reduce the University's climate footprint, but apart from that, it can help to broaden climate engagement in the organi-

sation so as to involve more actors, in terms both of core and support operations and number of employees. Participation and engagement at all levels of the organisation are important in strategic climate action. Through the University's external engagement and collaboration, knowledge and good practice can also spread to the wider community.

## INTERVIEW WITH TORA HOLMBERG, VICE-RECTOR AT UPPSALA UNIVERSITY WITH A SPECIAL MANDATE TO REPRESENT THE VICE-CHANCELLOR ON SUSTAINABILITY ISSUES

*Why is strategic climate action important for Uppsala University?*

Overall, by far the greatest contribution Uppsala University can make in the area of climate action is what we do in our core operations: research, education and external engagement. At central level, we are focusing on property matters such as energy efficiency, sustainable materials, etc. We also have to become better at making tough demands on suppliers to make a difference. Turning to the local level in our large university, given the diversity of operations at departments and equivalent units, the measures they prioritise may and indeed should differ. This Climate Guide can inspire us all in our efforts.

*What is the advantage of Uppsala University taking a strategic approach to climate action?*

Uppsala University is working with other actors worldwide to reduce climate impact. We are engaged in similar cooperation regionally to make a difference with our partners closer to home. Our collaborations with other actors outside the University give us an opportunity to contribute our expertise and to learn about existing needs. The upcoming focus of the Vice-Chancellor's initiative for research on conflicts between goals is one example of the importance of external engagement regionally and globally. Here we can make a difference.

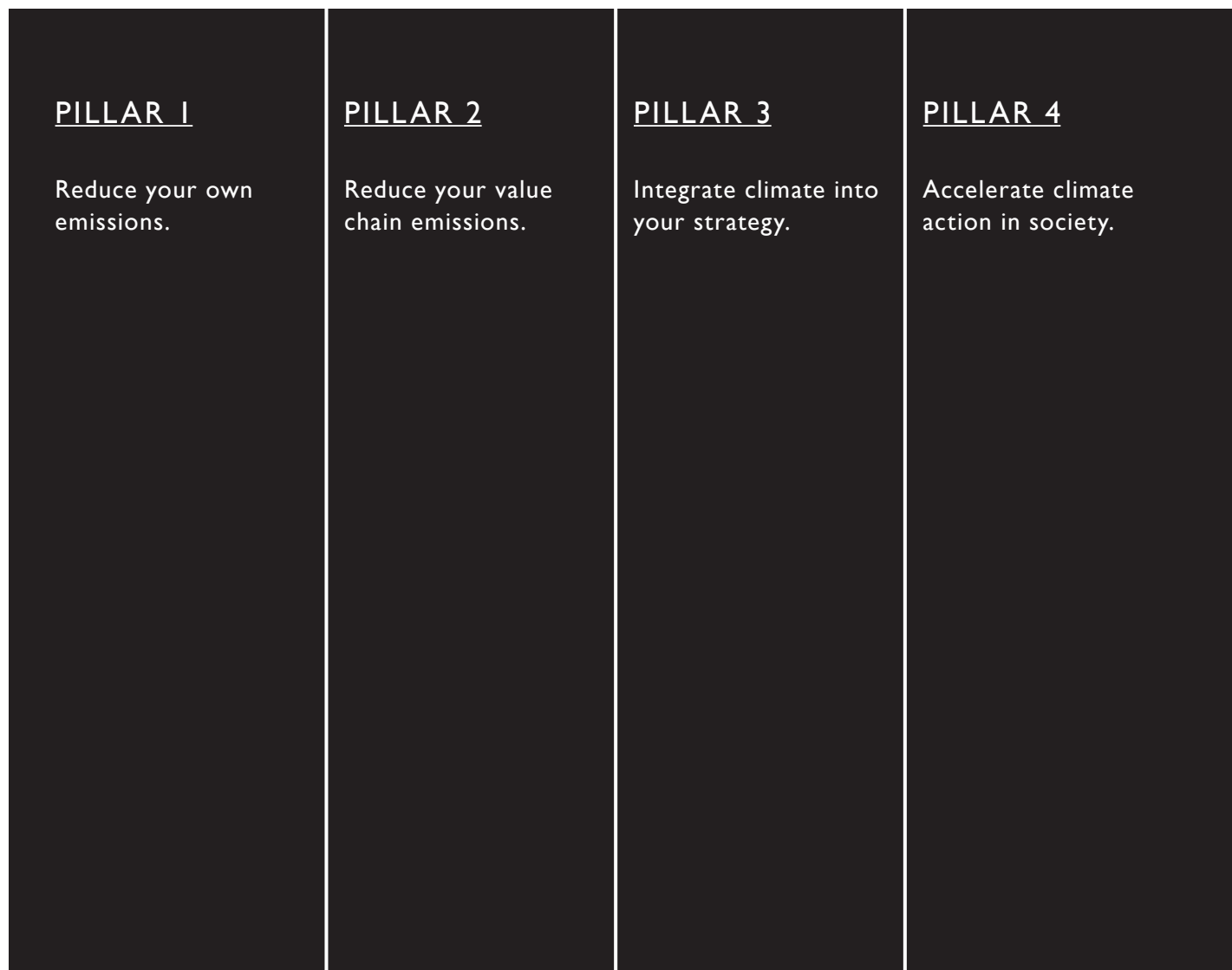
### THE SWEDISH UNIVERSITIES CLIMATE NETWORK

Several Swedish higher education institutions have jointly formed the Swedish Universities Climate Network. Uppsala University is one of the members. They have undertaken to jointly contribute to the climate transition by their teaching, research and external engagement, but also by reducing the climate impact of their own activities. The Climate Network has created a framework that can provide guidance on how to go about strategic climate action and supplements this Climate Guide.

# Strategic action in four pillars



*Wild grass. Photo: Adobe Stock.*



This Guide presents a model for strategic climate action that builds on a revised and adapted framework developed by experts in strategic climate transition that is used in the business sector<sup>6</sup>. It is applied there to accelerate emissions reductions by several of the world's largest and foremost companies.

One way of getting started with strategic climate action can be to divide it up into different areas. The model used in this Guide consists of four pillars with different focuses that concern overall emissions attributable to departments or equivalents, emissions by suppliers, core operations, and the University's engagement and collaboration with the wider

community to contribute to climate transition.

The framework consists of a model with four pillars that need to be addressed simultaneously in order for an organisation's climate strategy to be in line with the ambition of limiting global warming to 1.5°C.

To maximise the impact of action, all pillars need to be addressed at the

same time. While this may sound complicated, a good rule of thumb is to start with what is easiest to implement. In an organisation like Uppsala University, different departments or equivalents have different roles and vary in their scope for action. Depending on who is reading the Guide, some pillars will therefore be more relevant than others.

<sup>6</sup> Falk et al. (2022)

# The four pillars<sup>7</sup>

Here the four pillars are presented separately along with a number of questions that can be discussed to identify measures that may be relevant in climate action at your department or equivalent. Each pillar is presented with examples of measures in the different areas. To simplify matters, it may be helpful to draw up a strategic climate plan. You can read more about how to do this on page 12.

## PILLAR 1:

Reduce your own emissions.

### PILLAR 1 INCLUDES:

Energy used by buildings and efficiency of use, Heating and cooling (for buildings, servers, etc.), Own vehicles, Business.

### QUESTIONS TO ASK:

*What is the current situation? How do things stand at present?*

*What can the department or equivalent do to reduce emissions, for example through business travel and efficient use of buildings?*

*What must the University do at a central level?*

*Can the department or equivalent do anything to speed up the University's efforts?*

## PILLAR 2:

Reduce suppliers' emissions.

### PILLAR 2 INCLUDES:

Purchases of goods and services, Cloud services, IT and electronics, Food and catering, Travel to and from the workplace, Opportunities for homeworking Investments, Bank holdings and other assets.

### QUESTIONS TO ASK:

*What is the current situation? How do things stand at present?*

*What can the department or equivalent do to reduce emissions?*

*What must the University do at a central level?*

*Can the department or equivalent do anything to speed up the University's efforts?*

## PILLAR 3:

Integrate the climate crisis into core operations, including support operations.

### PILLAR 3 INCLUDES:

The University's core operations: Education. Research, External engagement.

### QUESTIONS TO ASK:

*How can the department or equivalent enhance climate action in its core operations?*

*How can the students be involved in these efforts?*

*How do the department or equivalent's programmes and courses help to prepare students for a world with a changed climate?*

*How does the department or equivalent's research contribute to knowledge about the climate crisis in its area?*

## PILLAR 4:

Engagement and collaboration with society to contribute to climate transition.

### PILLAR 4 INCLUDES:

Engagement and collaboration, Aspiring to be a climate leader, Using networks and reach for influence and exchange with the wider community.

### QUESTIONS TO ASK:

*What can the department or equivalent do to contribute to climate transition in the wider community?*

*How can the department or equivalent set a good example?*

*How can the department or equivalent share its knowledge most effectively?*

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<sup>7</sup> Falk et al. (2022)

## PILLAR 1

**Business travel is one of UU's focus areas. Specific measures in this area can include:**

Make 2019 the benchmark year so you can compare emissions year by year.

Set a target (or targets) for emissions reductions that is (or are) at least in line with UU's Environmental Plan, i.e. 30% by 2024 (the Environmental Plan runs from 2022 to 2024).

Draw up a travel policy on when air travel is a priority, for example, and the conditions that apply for travel by rail (e.g. whether a train journey can count as working hours).

Look into the possibility of applying for money for a more expensive travel option such as rail.

Be aware that there is a special ecolabel for hotels that you can look out for if possible.

Ask relevant support functions for advice and tips.

Communicate the rules for business travel to staff.

## PILLAR 2

**Specific measures to reduce suppliers' emissions can include:**

Purchase correctly using the contracted suppliers. Procurements include environmental requirements.

Think about your purchases.

Start by trying to use what's already available, e.g. through internal exchanges.

Remember that there are contracts that offer the option of buying second-hand products.

Choose the most sustainable options from the contracted suppliers (look for green dots in the product web).

Contact procurement officers who can help you choose the most sustainable options.

Provide input to the Procurement and Purchasing Office to make the climate a decisive factor when choosing suppliers.

## PILLAR 3

**Education, research, and external engagement are Uppsala University's core operations. Specific measures in these areas can include:**

Taking stock of the education and research on the climate crisis carried out at the department or equivalent.

Taking stock of whether the climate issue is included in education, research, and external engagement at the department or equivalent.

Setting quantitative and qualitative targets for including the climate crisis in education and research (e.g. x students will have taken x courses that include the issue).

Setting quantitative and qualitative targets for including the climate crisis in support operations (e.g. we will discuss and follow up climate measures in x area x times per year).

Communicate the department or equivalent's climate action to staff.

## PILLAR 4

**Specific measures for engagement and collaboration with society to contribute to climate transition can include:**

Drawing inspiration from and inspiring others who are doing similar things, e.g. other departments or equivalents at higher education institutions in Sweden and abroad.

Engaging and collaborating with the wider community, e.g. through the Uppsala Climate Protocol and the Swedish Universities Climate Framework, but also in other connections.

Taking part in conferences and events and telling other people what you are doing.

Communicating results, methods and progress to relevant actors in the wider community.

### FACTS

There is a checklist on the Staff Portal that the head of department or equivalent and the environmental representative can fill in to find out about the situation at the department or equivalent.

For managers - Uppsala University (uu.se)

Uppsala University's Environmental Objectives and Action Plan, which is also available there, specifies many of the items taken up in the four pillars.

Environmental Objectives and Action Plan 2022-2024 - Uppsala University (uu.se)



*Grass in glass. Foto: Mikael Wallerstedt.*



# Incentives for accelerating climate action

There are a number of international and national policies and documents that support accelerated climate action at Uppsala University. Here are some of them.

## UPPSALA UNIVERSITY'S OWN MISSION, GOALS AND STRATEGIES

Uppsala University's mission is to gain and disseminate knowledge for the benefit of humankind and for a better world<sup>8</sup>. Furthermore, Uppsala University aspires to a leading role in the transition to a more sustainable society. The education and research conducted must be translated into new knowledge, better technology, improvements in the organisation of society and changed patterns of behaviour. Collaboration with society is also highlighted as a priority area<sup>9</sup>.

## THE GLOBAL SUSTAINABILITY GOALS AND ARTICLE 12 OF THE PARIS AGREEMENT

As a country, Sweden has committed itself to the UN's 17 global sustainability goals for the period 2015 to 2030. Goal 13 concerns combating climate change<sup>10</sup>. The goals are formulated to build on one another and actions to address the climate crisis can therefore also have a positive impact in several other areas.

There is a particularly interesting passage in Article 12 of the Paris Agreement specifically mentioning education

about the climate issue and underlining the importance of public knowledge and active participation for successfully fulfilling the Agreement<sup>11</sup>.

*Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.*  
(UNFCCC 2015, Article 12)

## SWEDISH AND EU ENVIRONMENTAL OBJECTIVES

Sweden has 16 environmental quality objectives that are intended to serve as guidance for environmental action throughout society. The objectives apply to public authorities such as universities along with other actors in society. Sweden has set a target of net zero greenhouse gas emissions by 2045, with the next major follow-up due in 2030<sup>12</sup>. Sweden also has a responsibility to contribute towards achieving the EU's environmental objectives. The EU's goal is to be climate-neutral by 2050.<sup>13</sup>

## UPPSALA CLIMATE PROTOCOL

At local level, Uppsala Municipality has established a protocol for contributing to the city's climate transition that the University has joined. The protocol contains a climate agreement with an explicit aim to reduce emissions of greenhouse gases by 14% per year up to 2030, when emissions are to be close to zero<sup>14</sup>.

<sup>8</sup> Uppsala University (2022b)

<sup>9</sup> Ibid.

<sup>10</sup> UN (2016)

<sup>11</sup> UNFCCC (2015)

<sup>12</sup> Swedish Environmental Protection Agency (2023a)

<sup>13</sup> Swedish Environmental Protection Agency (2023b)

<sup>14</sup> Uppsala Climate Protocol (2023)

# Who can I contact?

All members of staff and all students have a responsibility to take part in environmental action by following established rules and guidelines<sup>15</sup>. The Vice-Chancellor has ultimate responsibility, while heads of department or equivalent are responsible at department and division level.

The organisation as illustrated in the figure is primarily intended for anyone wondering who to contact when seeking a way to influence climate action in their local setting and to gain support for their engagement. This applies whether you are an undergraduate student or a doctoral student or other employee at a department or equivalent.

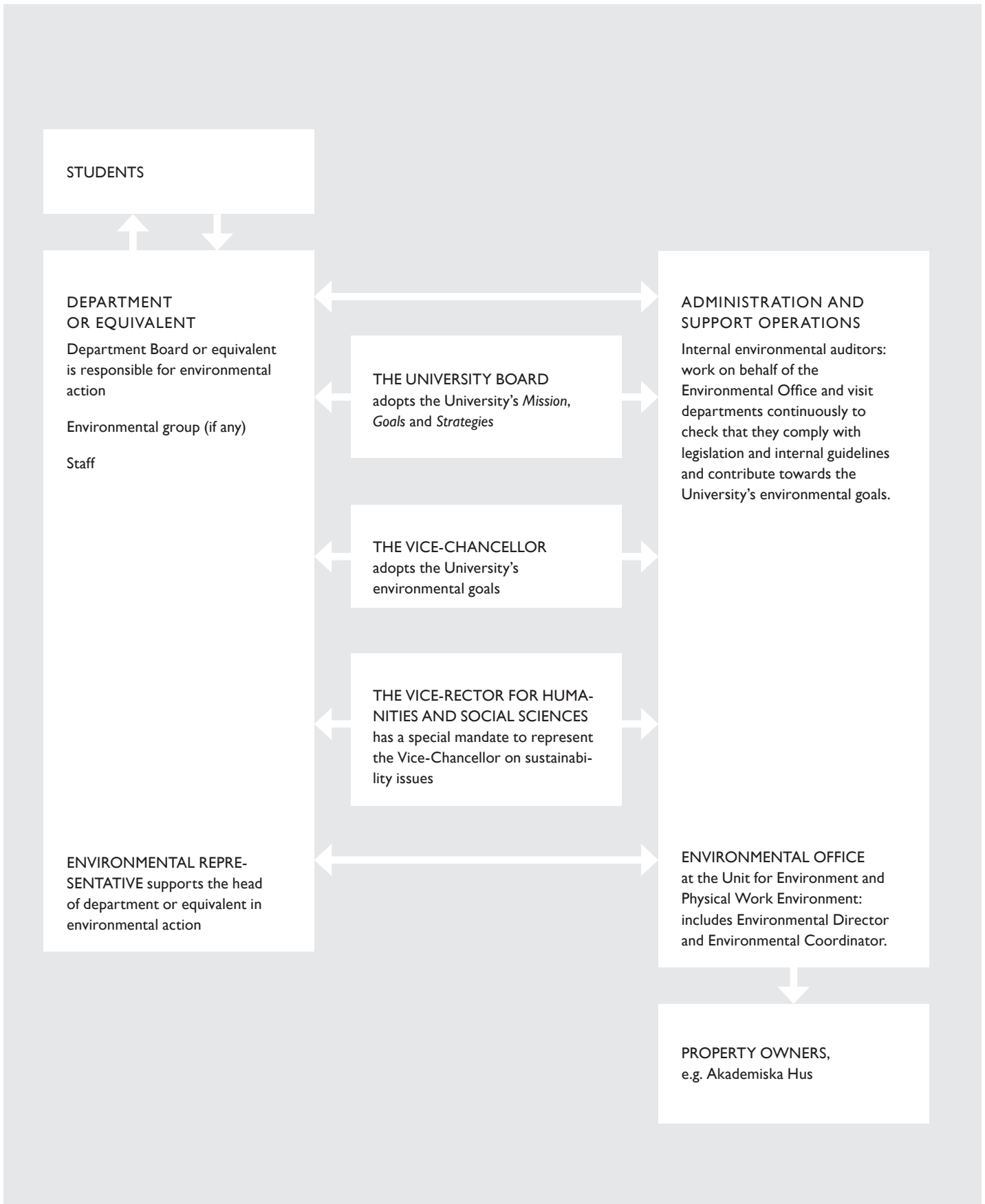
There are environmental representatives in both core and support operations, whose role is to support their manager in environmental action. They are the first point of contact for members of staff and students. The organi-

sational line runs from the University Board, which adopts the University's *Mission, Goals and Strategies*, via the Vice-Chancellor and the Vice-Rector of the Disciplinary Domain of Humanities and Social Sciences, who has a special mandate to represent the Vice-Chancellor on sustainability issues. The University Administration can provide support and impetus for environmental action, specifically through the Environmental Office, with its Environmental Director and Environmental Coordinator. There are other major actors outside the University itself, such as property owners.



Gotland Campus. Photo: Mikael Wallerstdt.

<sup>15</sup> Uppsala University (2023)





*Coniferous forest. Photo: Adobe Stock.*



# PART 2

# Developing a strategic climate plan

**F**or efficient action on the climate issue and maximum impact, the department or equivalent needs to establish a strategic climate plan. Having a climate plan to follow is helpful for both core and support operations. An example of how to formulate a plan of this kind is given below. Base the plan on things that you yourselves have control over. In areas controlled by other parts of the organisation or by other actors, you can contribute to their climate action by lobbying and making demands. You will find a template for formulating your strategic climate plan in *Appendix 1*.

One suggestion is to begin by conducting a brief survey among staff and/or students to obtain a picture of the current situation and the interest in accelerating climate action. Suggested questions for a survey of this type can be found in *Appendix 2*.

## 1. CREATE A VISION

An explicit vision can be the first step towards a climate plan. A vision should aim high and there is no need to clarify exactly how to get there. To engage staff and students, it is an advantage if the vision is concise and clear. The vision should play to your strengths in education, research and external engagement. Write down your vision and communicate its existence and significance through internal channels. You will find suggestions for a workshop that can serve as a tool in formulating your vision on page 14 of this Guide. On page 22, you can find pointers for successful climate communication.

## 2. WORK THROUGH THE QUESTIONS BELONGING TO THE FOUR PILLARS

When you have a shared ambition, it is time to systematically work through the questions associated with the four pillars. The answers to these questions will provide a picture of the current state of your climate efforts and what needs to be done in future. You can summarise your undertakings in a list of bullet points.

## 3. SET AN ORDER OF PRIORITIES

Making early gains that can move the work forward is a good idea in all climate action. When you have acquired an understanding of what you need to do in your climate action, it is time to set an order of priorities. To decide what to do first, you need to strike a balance between two considerations:

- What is easiest to implement
- What has the greatest impact on the climate crisis

Aim to have all pillars represented directly or indirectly in some of the top items on your list.

## 4. MAKE A LIST OF MEASURES SHOWING WHAT WILL BE DONE AND WHO WILL DO IT

Write down a list of measures based on your priorities and share out the responsibility so that as many people as possible are involved in the work and it is not dependent on a few enthusiasts. Communicate the existence of the list of measures and its contents to staff and students.

## IMPLEMENTATION AND CHECKPOINTS

Start by deciding when you can reasonably expect to have completed the first ten items on the list of measures. The amount of time different items require may vary. Then decide when to make your first progress report and how often you will check up after that. There are advantages to not allowing too much time between checkpoints as motivation can decline over time and something that feels urgent when you draw up your climate plan can easily fade when other duties take over and fill up your days. Continuity enables you to keep up the pace of climate action.

## 6. UPDATE PRIORITIES AND LIST OF MEASURES AS YOU GO

When a measure has been achieved, it's important to highlight the success and communicate to staff and students that your climate action is making progress. Having done that, it's time to tackle the next measure. Given the dynamic nature of climate action, both your vision and your priorities may change, which may affect both the measures and the timetable. It may therefore be a good idea to reconsider and update the strategic climate plan annually, so as not to lose focus and stringency.

### HOW DO YOU CREATE A VISION?

The next two pages present a workshop that can help the department or equivalent develop its own vision. The workshop can be initiated by the department board or equivalent.



*Library with many shelves and books. Photo: Adobe Stock.*



Bicycle wheel in workshop. Photo: Adobe Stock.

# Workshop: Create a vision

**Materials:**  
Whiteboard/smartboard  
and pen, post-it notes and  
pens, note-taking materials

**Time allotted:**  
approx. 60 min

Suitable for: Department boards or equivalent, staff days  
at departments or equivalent.



**T**his workshop is based on the back-casting method, which involves imagining something in the future so as to find paths that lead there. The goal of the workshop is to create a basis for producing a climate vision as a goal to aim for in ongoing climate action.

The workshop can set out from the year 2030, for example, when global emissions need to be reduced with 50% in order

to make it possible to achieve the ambition of limiting global warming to 1.5C. It is also fine to choose another year. The workshop method can also be used in areas other than the climate.

### Step 1 – A climate friendly operation in 2030 or other year of your choice.

*In your area of expertise – what would characterise a climate friendly operation of yours in 2030?*

*You can elaborate on actual emissions, a positive climate impact or your engagement and collaboration with society.*

- Write down your thoughts individually, perhaps on post-it notes, and go through the notes together.
- Can you come up with more ideas together?
- Add any new suggestions that occur to you.

### Step 2 – Opportunities and obstacles

*Discuss the opportunities and obstacles for your department or equivalent (education, research, external engagement, campus management, IT or other support functions) to help together to make the climate smart operation you have visualised a reality.*

- Make a two-column list and fill it in.

*Opportunities and obstacles can both be within or outside of your department or equivalent such as Uppsala university as a whole or society.*

### Step 3 – Goals of climate action

*Discuss what you want to achieve by the climate action at your department. Be as specific as possible.*

*For example, you might want X% of the students taking a degree in your department to have been taught about the climate issue in X% of your courses. To give another example, you might aim for X% of your suppliers to belong to networks working actively to halve their emissions by 2030.*

- Remember not to base your goals on climate compensation.

### Step 4 - Formulate a vision

*Formulate one or more visions for your climate action and communicate them internally. The vision does not have to be achievable in the near future.*

- Write down one or more visions.

*For example, you can start with filling in the sentences below:*

- We want to create the ... of the future.
- We want to be no 1 in Sweden (or world-leading) in ...
- Our contribution to climate transition will be ...

*Be prepared to update the vision as your climate action progresses and you learn more.*

- Decide how often you want to revise the vision(s) and whose responsibility it is to do so.
- The vision(s) may need to be sent round for comments and exact formulations before being more permanently decided.

# Key competences for sustainability

Since 2004, Sweden has been involved in the UNESCO initiative Education for Sustainable Development (ESD)<sup>16</sup>. Climate action and sustainable development belong together, since efforts to reduce the impact of the climate crisis also promote sustainable development. The purpose of this educational concept is to develop knowledge and awareness for action and contributions to societal transformation for greater sustainability.<sup>17</sup> The key competences illustrate a breadth of expertise that can be helpful in practical action for sustainable purposes.

## KEY COMPETENCES FOR SUSTAINABILITY

In the research field of education for sustainable development, five key competences for sustainability are particularly commonly emphasised<sup>18</sup>.

### These are:

- *Systems-thinking competence*, which is the ability to analyse complex problems at the present time and historically.
- *Anticipatory competence*, which is the ability to create sustainability visions and scenarios for the future if we continue with business as usual.
- *Normative competence*, which is the ability to map, specify, apply,

reconcile and negotiate sustainability values.

- *Strategic competence*, which is the ability to develop sustainable strategies that lead to transformation.
- *Interpersonal competence*, which is the ability to collaborate at all stages of problem-solving processes.

Later revisions of the key competences also suggest an implementation competence, meaning the ability to get things done, and an integration competence, meaning the ability to continuously reassess and iterate a problem-solving process in the light of new conditions<sup>19</sup>.

To sum up, education for sustainable development clearly focuses on

skills enhancement intended subsequently to lead to action to enable sustainable societal transformation. Urgent action to solve the climate crisis is part of such transformation.

## REMEMBER

“The most sustainable” is a dynamic category.

What we know today may change tomorrow when we have learned something new.

Education for sustainable development must therefore be allowed to accommodate both contradiction and change.

<sup>16</sup> SOU (2004:104)

<sup>17</sup> UNESCO (2020)

<sup>18</sup> Wiek et al. (2011)

<sup>19</sup> Wiek, A. (2022)

# Discussion questions:

## Key competences for sustainability

Discussions on key competences for sustainability can serve as a starting point when taking stock of how the climate crisis is addressed at the department or equivalent. The University's core operations are education, research and external engagement, and the key competences may be relevant in all three of these areas. The discussion questions below can support the department management team or equivalent in identifying how and in what way sustainability competences can be integrated in students' education and how they can be increased or become more visible in research, external engagement or a specific support function. The questions can also be used for other groups, such as students who want to discuss the contents of their course or programme.

### Discussion questions:

#### EDUCATION:

- What does it mean to have proficiency in the key competences in your educational field?
- Which of the key competences are integrated in your courses and programmes today? At what levels and in which areas of knowledge?
- Which parts of the key competences are you particularly anxious for your students to acquire in their education?
- What role does proficiency in the key competences play in students' future working life or further education?
- Are any special educational approaches needed to use the key competences in the course or programme?

*Appendix 2* contains suggested questions for finding out more about students' own views on their education.

#### RESEARCH:

- What might the various key competences mean in your research context? For example, what do systems-thinking competence, anticipatory competence and normative competence mean in your area? Are any of the competences more relevant than others?
- How do the key competences show in research projects at the department or equivalent today?
- Would it be desirable for them to become more visible or more explicit?

#### EXTERNAL ENGAGEMENT:

- Are the key competences relevant to the choice of partners for collaboration, for example, would you be more interested in seeking collaboration with some particular area of competence?
- Could collaboration/engagement with any particular actors increase your understanding of one or more key competences?

#### SUPPORT OPERATIONS:

- What significance could the various key competences have in your operations?
- Could they help you to think and act more sustainably in any way?

#### IS THERE ANY NEED FOR SKILLS ENHANCEMENT?

The climate issue makes new types of demands on the knowledge and skills of managers and staff, and skills enhancement may therefore be needed to address the climate crisis in the best way in your organisation. Consider whether this is something that might be relevant in your case. Some courses are MOOCs that are offered remotely. There are MOOC courses in the Öppet för klimatet (Open for the Climate) project, which has been established by the government as part of its climate upskilling initiative. Some examples of areas in which there is further education and training are: climate change leadership, emissions calculations, strategic climate action and management of climate change emotions.

# Climate emotions<sup>20</sup>

For many people, the climate crisis is associated with various types of emotions. When you think about climate change, perhaps you feel concerned about how things were when you were younger, the situation now, and what it will be like for rising and future generations. The magnitude of the problem can also arouse emotions, as can the sense that the solutions offered are inadequate, or that no matter what decisions you take in everyday life, it turns out wrong. However, it can also feel agreeable to be one of the world's most highly educated people with knowledge and opportunities to contribute to positive change and a sustainable societal transformation.

**E**ven though Uppsala University is an academic institution devoted to science, everyone involved in the organisation has an emotional life that can be both a help and a hindrance when undertaking climate action.

## ALL EMOTIONS HAVE A FUNCTION

There is one thing all our emotions have in common: they serve a function in enabling us to interact with one another and giving us information and motivation to do something. Anger, for example, can tell us that something is unfair and motivate us to establish justice. Fear tells us that we are threatened and motivates us to protect ourselves against the threat. Emotions related to the climate issue can therefore help us to react and to act, but if they become too difficult to handle, they risk making us passive.

## CLIMATE ANXIETY

In conversations about emotions connected with the climate, we often encounter the concept of 'climate anxiety'<sup>21</sup>. This concept can be misleading, as it is not something pathological that

needs to be cured; on the contrary, it is a completely reasonable reaction to the crisis we are in. The way in which we react to 'climate anxiety' can give us strength in our action for a more sustainable world. Furthermore, it is not only fear and anxiety that people feel in relation to the climate crisis, there is also concern, sorrow, hopelessness, guilt, shame, anger and loneliness.

## COGNITIVE DISSONANCE

When we think about climate change, a psychological phenomenon known as cognitive dissonance can arise<sup>22</sup>. Cognitive dissonance arises when what we think is important is not in agreement with the way we behave. We may for example consider it important to be honest but still lie about certain things. We can also believe it is important to act for a sustainable world while living as if we had five Earths. Cognitive dissonance involves uncomfortable feelings. There are two ways to get rid of them. We can either change our behaviour and bring our action into line with our knowledge and values, or we can change the way we think about the matter.

## CHANGING THOUGHTS OR BEHAVIOURS?

When it comes to the climate issue, it is considerably easier to change our way of thinking than to change our behaviour. Consequently, we often adopt the view that the issue does not concern us personally, find excuses for postponing what we were intending to do, or trust others to take care of the matter. The cognitive dissonance is underlined by the fact that we live in dual realities, where we may read about the urgency of the climate issue, for example, but when we look around in society, among people we know or our family, it is not obvious given what 'everyone else' is doing.

## COPING STRATEGIES

Cognitive dissonance does not lead us to act on the climate issue. Nor do other negative emotions such as powerlessness and hopelessness. The reason for this is what are known as 'coping strategies'<sup>23</sup>. One type of coping strategy is 'emotional coping', where we focus on something less difficult instead. We distance ourselves from the problem.

Another type is 'problem-focused coping'. This means that we do small things that we have learned are good, such as sorting our waste, turning lights off and picking up litter. These things will not solve the climate crisis, which needs large structural changes. Yet we still persist with it, sometimes so as to justify other less climate-smart behaviours like travel and shopping.

<sup>20</sup> This text was developed in collaboration with registered psychologist Kata Nylén, Klimatpsykologerna.

<sup>21</sup> Andersson, Hylander, Nylén (2019)

<sup>22</sup> Stoknes (2015)

<sup>23</sup> Ojala (2012)

<sup>24</sup> Mc Geer (2004)



Wild grass. Photo: Adobe Stock.

## HOPE

A more positive emotion that can arise in action to address the climate crisis is hope. Hope can be based on various things, but when it derives from a personal experience of having achieved something good it can be a powerful motivator.<sup>24</sup> Hope and action go hand in hand. If a person does something positive that has a certain impact, they can feel hope and be encouraged to do more. It is also possible to start out from hope and believe that what you are doing will have an impact, which can spur you on to continue in what you are doing.

When we feel that something makes a difference and contributes towards a goal we want to achieve, we are using a meaningful coping strategy. Feeling that what we do is meaningful reduces cognitive dissonance.

## DEALING WITH CLIMATE EMOTIONS TOGETHER

Two areas in particular are important to enable us to use our climate emotions as a positive force instead of them being a hindrance:

### 1. Emotion management

Emotion management is about allowing emotions to exist. If we talk about them, share them with others and meet understanding and confirmation, they are easier to bear. If, in addition, we practise feeling two contradictory emotions at the same time, they can help one another. It is perfectly possible to feel hope and hopelessness at the same time. Feelings are never dangerous or wrong in the same way that behaviours can be. If we feel angry and frustrated, it is better to relieve our feelings by talking about it and using the anger constructively rather than acting by, say, writing something tactless on social media

### 2. Getting involved with others

Getting involved with others in climate action is closely connected with emotion management. We get better at doing things together if we learn to manage our climate emotions, and we get better at managing our emotions if we get involved with other people. In this way, climate action in various types of contexts and group constellations can achieve a greater impact than acting individually.

### DOES IT STILL FEEL DIFFICULT?

The next two pages present a workshop that can help groups of staff or students to put their climate emotions into words and discuss them with others.



Sunny field. Photo: Adobe Stock.

# Workshop: Dealing with climate emotions<sup>25</sup>

**Materials:**  
Whiteboard and whiteboard pen,  
post-it notes and pens for writing

**Time allotted:**  
approx. 60 min

**Suitable for:** Staff or students in small groups

*To enable everyone to feel involved, this workshop is recommended for groups with a limited number of participants. A suitable number might be 4–8 participants. If more people want to take part, you can divide up the group and summarise your discussions for each other.*

We are in the midst of a crisis. There is no doubt that this affects our psychological state, the question is in what way and how we can deal with it collectively.

This workshop will train you in putting your feelings about climate change into words and pave the way for using your emotions as a positive force rather than them being a hindrance in your climate action or studies.

<sup>25</sup> Developed in collaboration with registered psychologist Kata Nylén, Klimatpsykologerna

## Step 1 – Identify your emotions

In conversations about emotions connected with the climate, we often encounter the concept of ‘climate anxiety’. This word can be a little misleading. For one thing, it is not something pathological that needs to be cured; on the contrary, it is a completely reasonable reaction to the crisis we are in and moreover a reaction that can help us and give us strength in our work for a more sustainable world. For another thing, it is not only fear and anxiety that people feel in relation to the climate crisis, there are many other emotions, such as concern, sorrow, hopelessness, guilt, shame, anger and loneliness.

- Take 3 minutes and let everyone write what they feel when they think about climate change and environmental degradation on post-it notes.
- Put the notes in a bowl.
- Pull out one note at a time and discuss:
  - > Which emotions can I recognise from my own experience?
  - > Which emotions do I observe among colleagues/staff members/students?
  - > In which situations do these emotions come up?

## Step 2 – Activating vs inhibiting climate emotions

Difficult climate emotions can lead to passivity. It is easy to think “it makes no difference what I do”, and then feelings like hopelessness and meaninglessness arise. We therefore need to strike a balance between being active and passive, where we can manage our feelings so that they drive us forward while allowing ourselves to pause and grieve, for example. The essential thing is not to get stuck in passivity, as it often makes climate action feel heavy-going.

- Draw an arrow on a whiteboard like this:



Then stick up the post-it notes with emotions while discussing:

- Where should they be on the arrow?
- Do you think the emotions you talked about generate more passivity or more power to act?
- What do you think happens to people feeling very activating emotions?
- What do you think happens to people feeling very inhibiting emotions?
- Could there be a need for both categories? If so, in what way?

Note that it is easy here to believe that the emotions that generate power to act are the ‘good emotions’. This is not the case. We need to be passive sometimes for the sake of recovery.

## Step 3 – Alone or together

One of the most important ways of managing our climate emotions can be to act for change. Doing something with others gives us a feeling of meaningfulness and hope, which makes difficult emotions and thoughts easier to bear. Hope is therefore not something we receive, it is something we do. Working for a sustainable future together with others is crucial both for achieving an impact and for our long-term wellbeing. The climate crisis is a great and difficult crisis. And in great, difficult crises we ought not to be alone. Studies show that those who belong to a community cope better with crises – both psychologically and practically.

- Write down all that you do for the climate and the environment on post-it notes (one activity per note).

Working together, stick the notes up in the following model that you have drawn on the whiteboard:

Individual engagement, e.g. cycling to work	Collective engagement, e.g. drawing up a staff travel policy.

- Discuss how you could turn individual engagement into collective engagement.
- Discuss and write up more suggestions for collective engagement that would be possible at your department.

# Climate communication

To speed up climate action, as many people as possible need to be involved. This applies to both staff in various positions and students. To inform people about the seriousness of the climate crisis and the need for the University to take an active role in the climate transition, everyone working in one way or another in the organisation needs to be able easily to find and create information about what is being done and what needs to be done. Improved internal communication about visions and strategies for the University as a whole and within and between departments or equivalent is necessary to increase the level of knowledge and participation in climate action.

## INTERVIEW WITH FRIDA BERRY EKLUND, SPECIALIST IN CLIMATE COMMUNICATION AND ALUMNA OF UPPSALA UNIVERSITY

*How can good internal communications help an organisation like Uppsala University to accelerate its climate action?*

Things that are not communicated are not treated as a priority. The foundation for success is that staff and students know what the department considers important – and that it is clear why this prioritisation has been made. Internal communication needs to be clear and relevant, and to tell me what I, the recipient of the message, am expected to do. It's a bonus if the target group itself can be involved in creating the communication. That often makes people feel more engaged.

*What should one bear in mind in order to communicate climate action as best possible?*

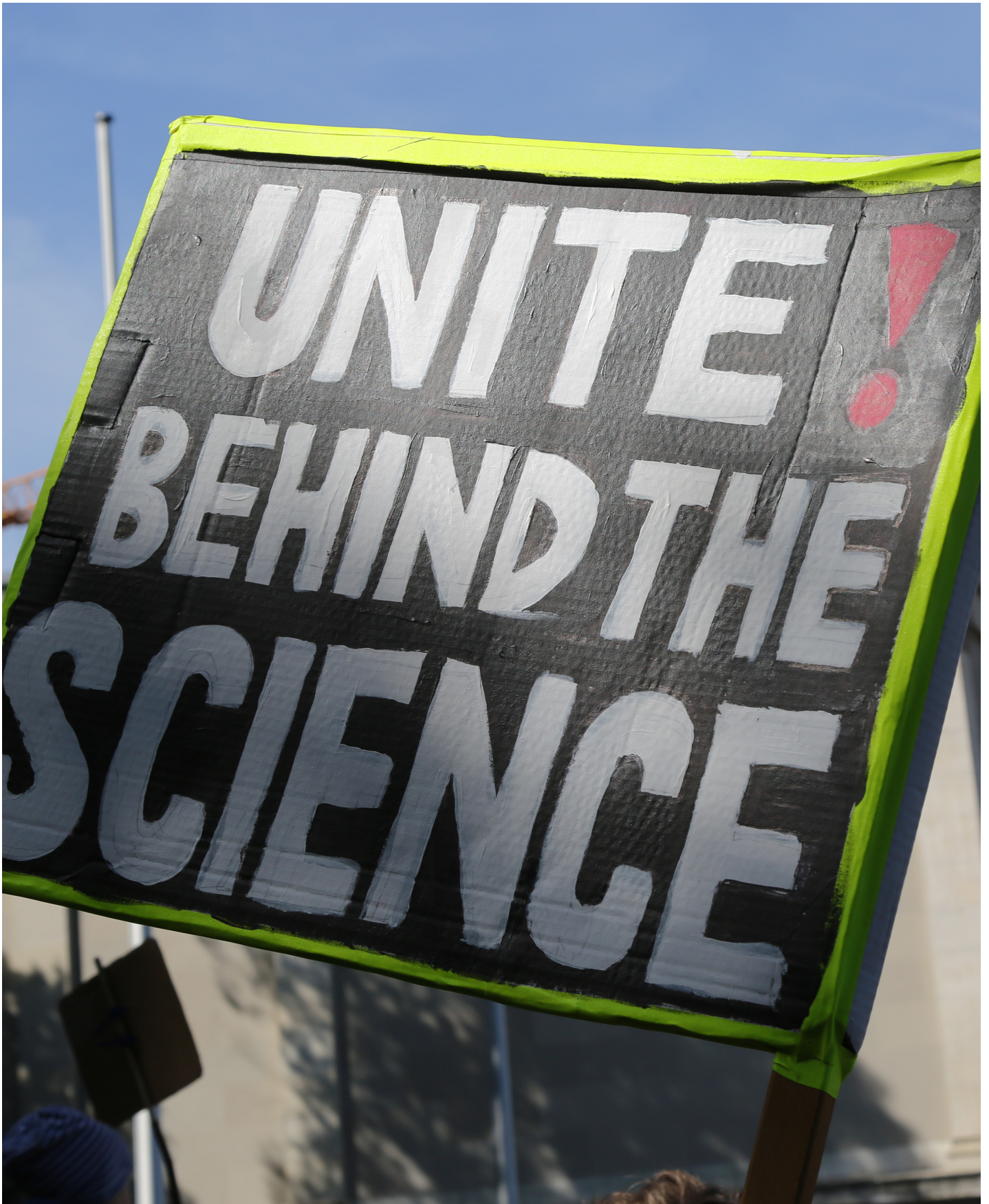
Here are three tips for improving your climate communication:

1. Explain the overall problem and how it affects the organisation concerned.
2. Describe the role of the department or equivalent in contributing to solutions.
3. Say how individuals or groups at the department or equivalent can contribute in practice.

*Three things to be careful about in internal climate communication:*

1. Don't be long-winded. It's almost always better to keep it short and clear, rather than being too wordy. Write short sentences rather than long sentences. Get to the point quickly. What do you want the target group to do after reading your communication?
2. Avoid jargon, acronyms and expressions that may be difficult to understand. Adapt the language and tone so that everyone can take in the communication successfully.
3. Don't be boring. Don't be afraid to provoke feelings when you communicate. They help us to take information in at a deeper level. Humour is sometimes underestimated, for example.





Politicians are urged to get behind the science. Photo: Henning Schlottman/Wikimedia.

# Taking the first step

If you get a feeling that the climate crisis cannot wait and want to get started with climate action right away, you're not alone. It's literally a burning issue and you don't have to wait for your colleagues or coursemates to want to join you in taking action.

## HERE ARE A FEW THINGS YOU CAN DO TO GET YOUR CLIMATE ACTION STARTED QUICKLY:

- Read up on the climate crisis (see the suggested reading on this page).
- If you are a member of staff: Join the University's climate mailing group and share and receive ideas and information about other people's climate action. If you are interested in joining the list send an e-mail to: miljo@uu.se.
- If you are a student: Join Climate Students or other student communities.
- Contact one or more colleagues/coursemates who are already engaged in climate action and ask if you can join in.
- Email your environmental representative and ask what they do and whether you can help.
- Email your line manager to ask about the next step in climate action and say you are willing to help.
- Talk with colleagues or coursemates over lunch or coffee. Are they interested in doing something to speed up climate action?
- Read Uppsala University's environmental plan and the guidance for the Swedish Universities Climate Network and see if there is anything there that you can help with. Contact your line manager and tell them about it.
- If you are already doing climate-focused work, look for contacts in or beyond the University and ask if you can come and talk about your work.

## SUGGESTED READING ON THE CLIMATE:

- The Climate Book (2022) Greta Thunberg.
- Breaking Boundaries: The Science Behind Our Planet (2021) Johan Rockström & Owen Gaffney.
- Klimatkrisens Sverige: så förändras vårt land från norr till söder (2020) Erika Bjerström.
- The Sixth Extinction (2020) Elizabeth Kolbert.
- Klimatpsykologi (2019) Frida Hylander, Kali Andersson & Kata Nylén.
- What we think about when we try not to think about global warming (2015) Per Espen Stoknes.
- Living in Denial: Climate Change Emotions and Everyday Life (2011) Kari Marie Norgaard.
- Silent Spring (1962) Rachel Carson.

Suggest to a colleague or two that you read the same book and then discuss it!

# APPENDIXES

1. TEMPLATE FOR STRATEGIC CLIMATE PLAN .....	36
2. FÖRSLAG PÅ STARTUNDERSÖKNINGAR .....	37
3. REFERENSER .....	38

## APPENDIX I / TEMPLATE FOR STRATEGIC CLIMATE PLAN

### I. WHAT SHALL WE DO UNDER THE FOUR PILLARS?

**Bullet points:**

- Xxx ...
- Xxx ...
- Xxx ...

### 2. WHAT SHALL WE DO FIRST?

**List of priorities:**

- Xxx ...
- Xxx ...
- Xxx ...

### 3. LIST OF MEASURES AND TIMETABLE

<u>WHAT?</u>	<u>WHO?</u>	<u>WHEN?</u>	<u>DATE CHECKED</u>	<u>DONE!</u>
Xxx ...	Xxx ...	Xxx ...	Xxx ...	Xxx ...
Xxx ...	Xxx ...	Xxx ...	Xxx ...	Xxx ...
Xxx ...	Xxx ...	Xxx ...	Xxx ...	Xxx ...

osv.

## APPENDIX 2 / SUGGESTIONS FOR STARTING-UP SURVEYS

Before launching work on a strategic climate plan, it may be worth taking stock of the current situation and the interest in accelerating climate action at your department or equivalent. Here are some suggested questions for staff and students.

### I. SUGGESTED QUESTIONS FOR STARTING-UP SURVEY OF STAFF

- How important do you consider the department or equivalent's climate action is?
- How much do you know about the department or equivalent's climate action?
- Can you give any examples of current climate action at the department or equivalent?
- Do you feel you personally can influence climate action at the department or equivalent?
- How do you perceive the climate issue to be included in teaching (if relevant)?
- How do you perceive the climate issue to be included in research (if relevant)?
- How do you perceive the climate issue to be included in external engagement?
- How do you perceive the climate issue to be included in relevant support operations?
- What do you think the department or equivalent could improve in its climate action?
- What would you personally most like to contribute to the department or equivalent's climate action?
- Which specific climate measures would you like the department or equivalent to take?
- How motivated are you to improve the department or equivalent's climate action?

### 2.SUGGESTED QUESTIONS FOR STARTING-UP SURVEY OF STUDENTS

- How important do you consider the the climate issue is in your education?
- How much do you know about UU's climate action?
- How much do you know about your department or equivalent's climate action?
- Do you feel you personally can influence the way the climate issue is taken up in teaching?
- What would you personally most like to learn about the climate issue in your programme? (Your answer could have to do with both factual knowledge and skills for future working life.)
- Which specific climate measures would you like to see in your education?
- Which specific climate measures would you like to see at your department or equivalent?

## APPENDIX 3 / REFERENCES

1. Thunberg, G. (ed.) (2022) *The Climate Book*, Penguin Books.
2. Uppsala University (2022a), Klimatavtryck - Uppsala universitet (uu.se)
3. UNFCCC (2015) *Paris Agreement*, ADOPTION OF THE PARIS AGREEMENT - Paris Agreement text English (unfccc.int)
4. United Nations Environment Program (2019) *Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies*. Nairobi, <https://www.unep.org/emissions-gap-report-2022/> / Global Carbon Budget (2021) <https://essd.copernicus.org/articles/14/1917/2022/>
5. Rockström et al. (2017) A roadmap for rapid decarbonization. *Science* 355.6331, pp.1269-1271, A roadmap for rapid decarbonization | Science
6. Falk et al. (2022) *The 1.5 C Business Playbook*, Exponential Roadmap Initiative, 1.5C-business-playbook-v2.1\_digital\_Ny-ISBN-1.pdf (exponentialroadmap.org)
7. Ibid.
8. Uppsala University (2022b) Uppsala University: Mission, Goals and Strategies (UFV 2018/64), Mål och strategier för Uppsala universitet (uu.se)
9. Ibid.
10. United Nations (2016) *The sustainable development goals report*, United Nations, New York, <https://unstats.un.org/sdgs/report/2022/The-Sustainable-Development-Goals-Report-2022.pdf>
11. UNFCCC (2015) *Paris Agreement*
12. Swedish Environmental Protection Agency (2023a), Sveriges miljömål (naturvardsverket.se)
13. Swedish Environmental Protection Agency (2023b), Sveriges del av EU:s klimatmål (naturvardsverket.se)
14. Uppsala Climate Protocol (2023), <https://klimatprotokollet.uppsala.se/>
15. Uppsala University (2023), Organisation och ansvar - Uppsala universitet (uu.se)
16. SOU (2004:104) *Att lära för hållbar utveckling*, Fritzes, Stockholm, <https://www.regeringen.se/contentassets/09ac8f7b0f9d402395ff95af1f6eb7cf/att-lara-for-hallbar-utveckling-sou-2004104/>
17. UNESCO (2020) *Education for sustainable development: A roadmap*, Education for sustainable development: a roadmap - UNESCO Digital Library
18. Wiek et al. (2011) Key competencies in sustainability: A reference framework for academic program development, *Sustain Sci*, Vol. 6, pp. 203-218, Key competencies in sustainability: a reference framework for academic program development | SpringerLink
19. Wiek, A. (2022) Living sustainably, Defining Sustainability, forthcoming, (34) Living Sustainability | Arnim Wiek - Academia.edu
20. Registered Psychologist Kata Nylén
21. Andersson, K., Hylander, F., Nylén, K. (2019) *Klimatpsykologi*, Natur och kultur.
22. Stoknes, P-E (2015) *What we think about when we try not to think about global warming*, Chelsea Green Publishing Co.
23. Ojala, M. (2012) Regulating worry, promoting hope: How do children, adolescents and young adults cope with climate change? *International Journal of Environment & Science Education*, Vol. 7 (4), pp. 537-561, How do children, adolescents, and young adults relate to climate change? Implications for developmen (tandfonline.com)
24. Mc Geer, V. (2004) The art of good hope, *The Annals of American Academy of Political and Social Science*, Vol. 592 (1), pp. 100-127, The Art of Good Hope (sagepub.com)
25. Registered Psychologist Kata Nylén

# THANK YOU!

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