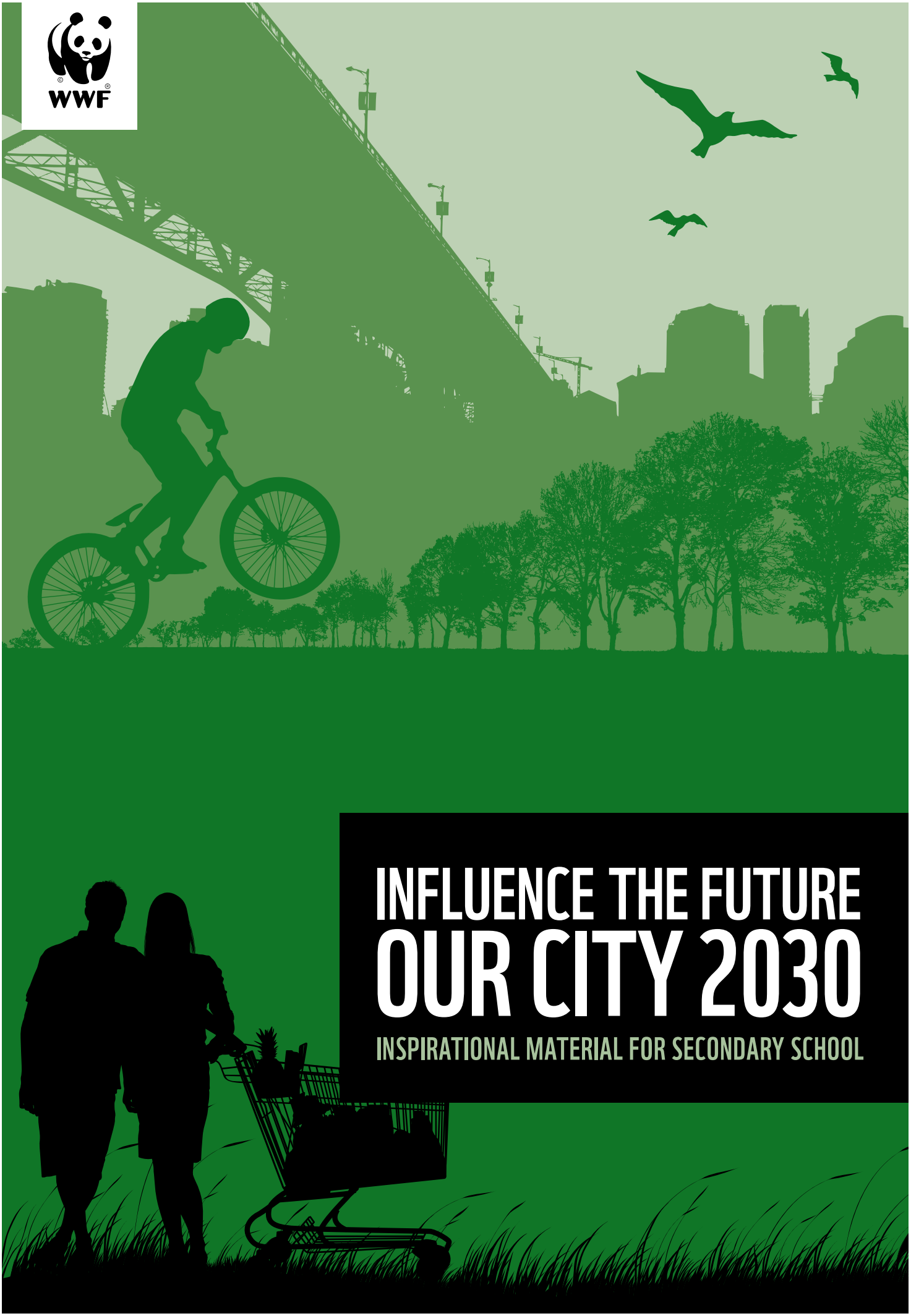


INFLUENCE THE FUTURE
OUR CITY 2030

INSPIRATIONAL MATERIAL FOR SECONDARY SCHOOL

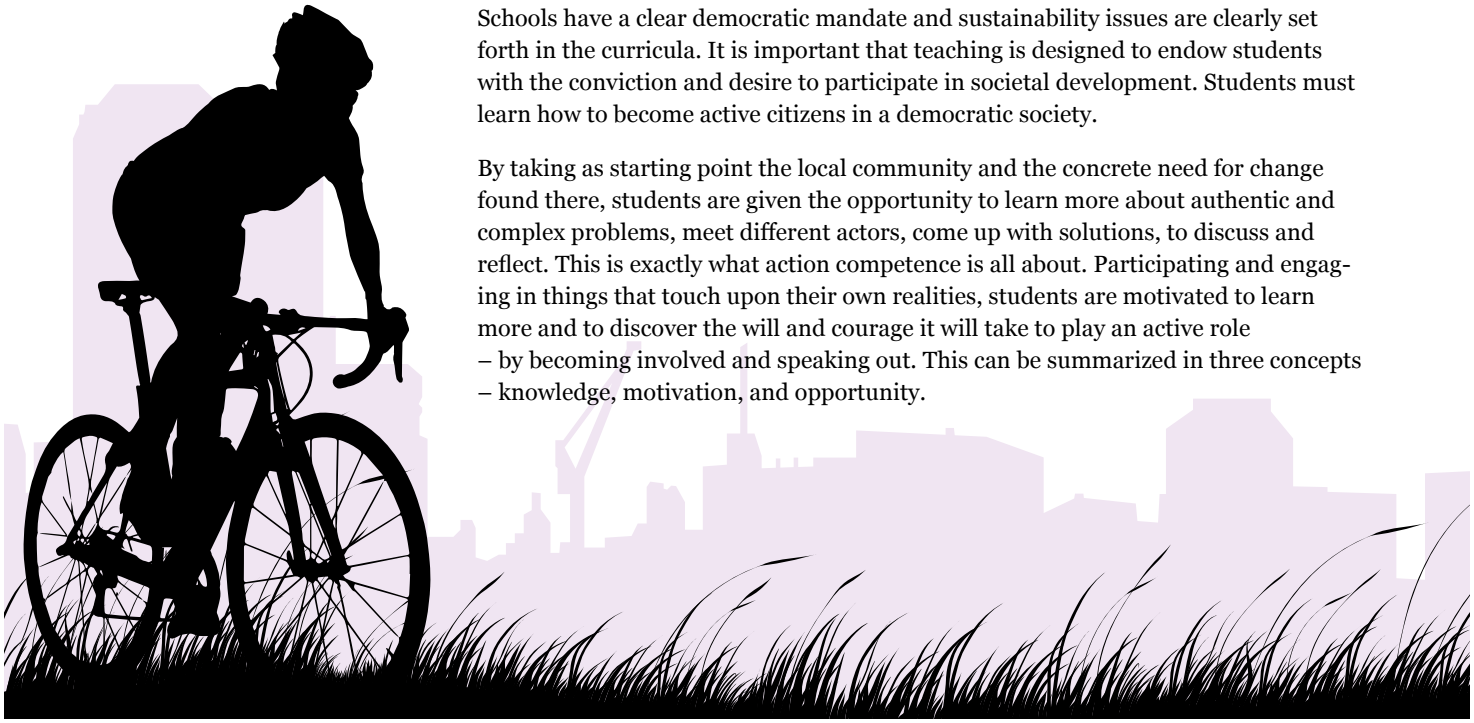
INFLUENCE THE FUTURE
OUR CITY 2030

INTRODUCTION. It's 2030 when you set your foot in the city. You are struck by the fact that everything is so quiet, all you can hear is the chirping of birds and the faint susurration of electric vehicles. Most of the people you see are walking or riding bikes. Schools, preschools, and shops are integrated into residential areas. There are plenty of opportunities for leisure activities around you and meeting places catering to all ages and interests. Up on the roofs of grocery stores some of the vegetables destined for customer shopping baskets are cultivated. But even at street level you are surrounded by greenery, trees and plants sustain the wellbeing of both people and animals throughout the city.

This is perhaps a vision of what sustainable urban development will achieve. With the help of Influence the Future – Our city 2030 we want to give young people an opportunity to visualize and clothe in words ways in which they would like the places they live in to change and become sustainable.

Our world faces enormous challenges. Accelerating climate change, rapidly declining biodiversity, growing populations with more and more people moving to urban areas, new epidemics impacting both our health and economies – to name but a few. These challenges are likely to become glaringly apparent to the younger generation in the years to come. Many new creative solutions will be needed if we are to surmount these complex problems and bring about sustainable societal change. To accomplish this we will need participating and committed citizens.

Many need to be given the opportunity to learn and deepen their knowledge about current events, to explore possible solutions and reflect on the consequences of the choices they make.



Schools have a clear democratic mandate and sustainability issues are clearly set forth in the curricula. It is important that teaching is designed to endow students with the conviction and desire to participate in societal development. Students must learn how to become active citizens in a democratic society.

By taking as starting point the local community and the concrete need for change found there, students are given the opportunity to learn more about authentic and complex problems, meet different actors, come up with solutions, to discuss and reflect. This is exactly what action competence is all about. Participating and engaging in things that touch upon their own realities, students are motivated to learn more and to discover the will and courage it will take to play an active role – by becoming involved and speaking out. This can be summarized in three concepts – knowledge, motivation, and opportunity.

Action competence is about our knowledge, willingness, and ability to participate and influence to achieve sustainable societal development. How can we, both locally and globally, embark on a new, non-environmentally destructive path?

The working method presented in Influence the Future

– Our City 2030 is just as suitable for big city schools as for those serving a smaller community

Influence the future - Our City 2030 in brief

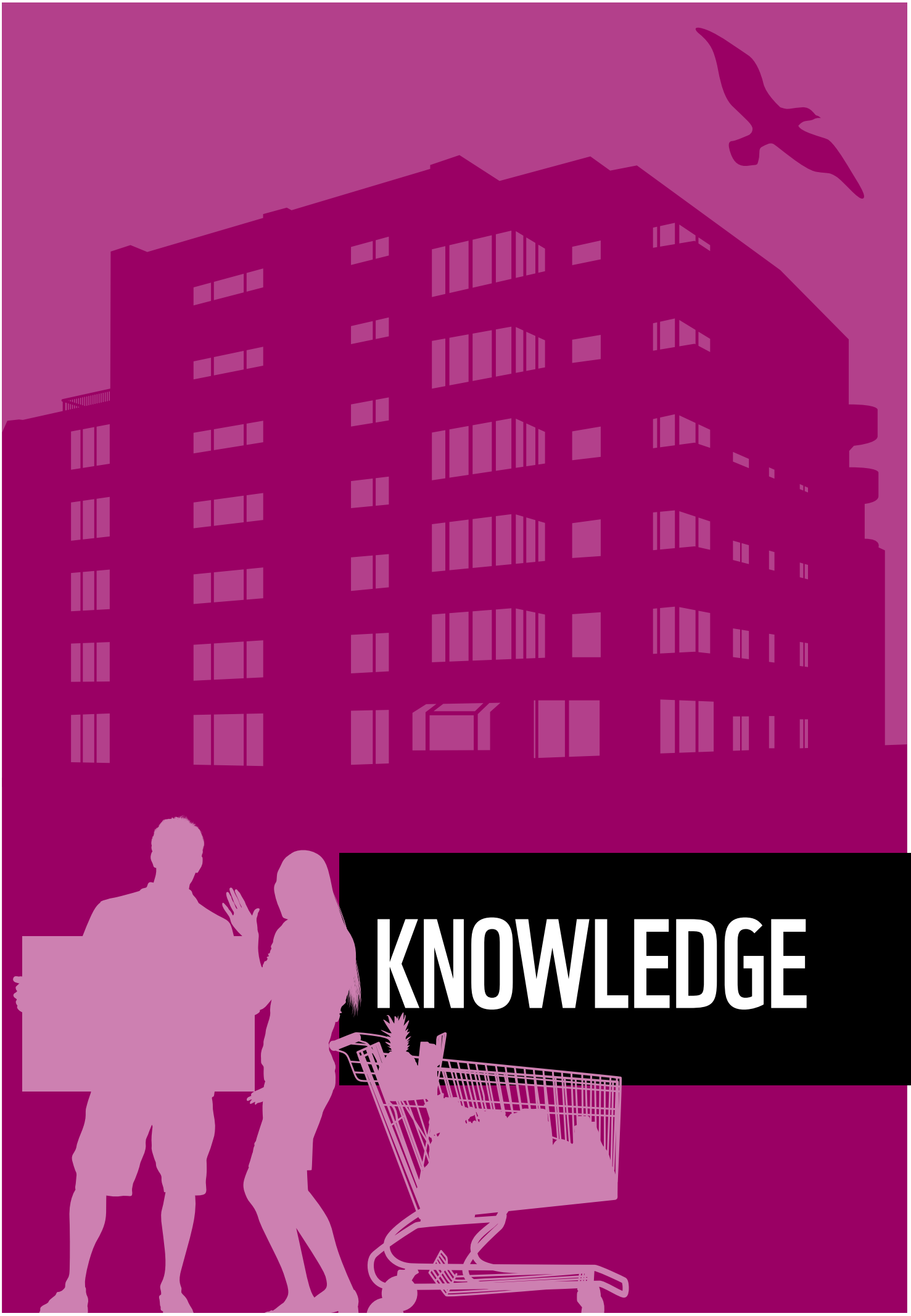
The Influence the Future – Our city 2030 teacher guide sets out a methodology designed to grow and nourish student action competence. The approach is interdisciplinary and aims to provide students with the action competence they will need as we transit to a sustainable society. One of its key elements is outward-looking and authentic learning. Influence the future – Our City 2030 is primarily intended for students in upper secondary school and those in higher elementary classes, but the working method and most exercises are equally applicable at intermediate levels.

The guide is built around the three pillars needed to develop action competence: knowledge, motivation, and opportunity.

It begins with a factual segment around sustainable development, it then addresses Education for Sustainable Development (ESD) and suggests how this can be used to motivate students in their learning. In conclusion, there is a section setting out the opportunities inherent in this pedagogical approach, one that delves deeper into the working method employed and illustrates with inspirational activities implemented by communities and cities that have worked with Influence the Future – Our City 2030. Appended to the guide are four teaching areas with suggestions for student exercises. The teaching areas are: biodiversity, climate and energy, consumption and waste, and food.

Influence the Future – Our City 2030 is part of WWF´s efforts to reduce ecological footprints, promote sustainable cities and foster learning and participation. Our focus is on youth involvement in the democratic process and sustainability work at city levels. This approach challenges and motivates students to take part in societal change and encourages them to scrutinize development initiatives undertaken by the community. For example: the construction of a park or new school, the refurbishment of residential areas or other processes that address the development of the wider community. The students engage in a dialogue with city officials and residents in order to, as concretely as possible, come up with suggestions for sustainable city development.

To determine what the sustainable city of the future might look like, students need to understand how our lifestyles and decisions affect ecosystems, economies, and people in other countries. Through work with Influence the Future – Our city 2030, students are guided towards an increased understanding of the challenges awaiting us in the future, and the role cities play. Moreover, students are motivated by working with real challenges in their immediate surroundings and encouraged to discover opportunities they can exploit and shown how to make their voices heard. In other words, work with Influence the Future – Our city 2030 reinforces action competence at the local level.


KNOWLEDGE

KNOWLEDGE

70 %

In a few decades, an estimated 70% of the world's population will live in cities.

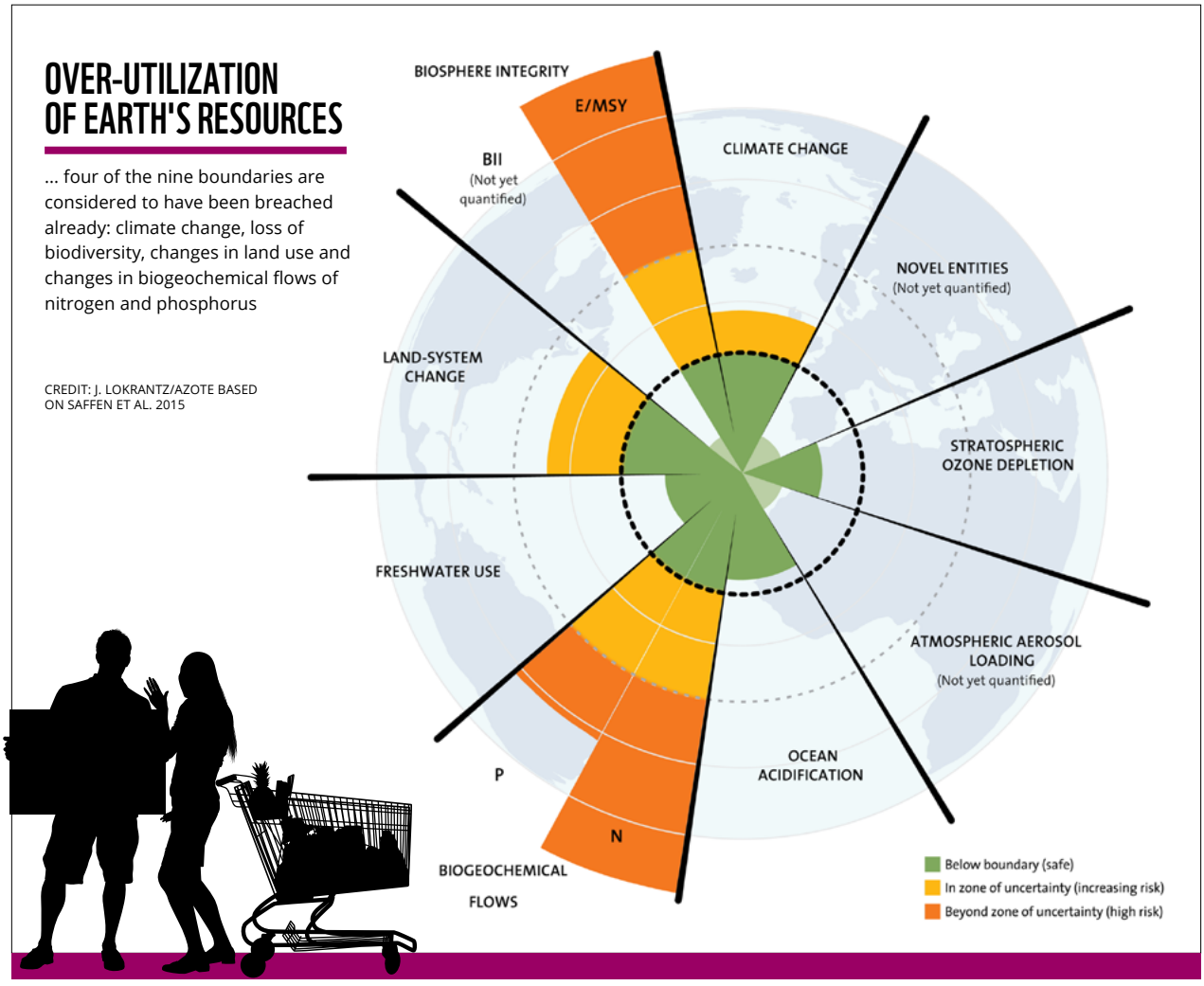
What are we facing?

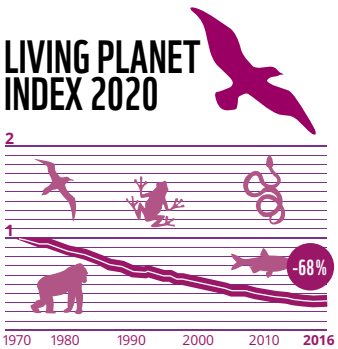
By 2050, according to UN estimates, there will be around 9.7 billion people on planet Earth who will need energy, food, fibre for clothing, paper, building materials and much more. Simultaneously, we must preserve nature, animals, and plants, avoid social conflicts and promote human rights. An additional challenge, but one that may also be an opportunity, is the fact that in a few decades almost 70 per cent of the Earth´s population is expected to live in cities.

The extent of our impact on the globe, the totality of our consumption of resources and what this means for the planet, is known as our ecological footprint. Global consumption means that a world citizen lives as if there were 1.7 planets at their disposal. Another way of describing our overconsumption is the so-called Earth Overshoot Day – an annual calendar that shows us when human consumption exceeds the Earth´s capacity to regenerate renewable resources. In 2020 the global Overshoot Day fell on August 22. This means that we lived on resources "borrowed from the future" for the remaining months of that year.

SOURCE: GLOBAL FOOTPRINT NETWORK NATIONAL FOOTPRINT AND BIOCAPACITY ACCOUNTS 2019, HTTPS://WWW.OVERSHOOTDAY.ORG/ABOUT/

Another way to illustrate how humankind overutilizes the Earth´s resources is shown by the sustainable boundaries concept, developed by a research group at the Stockholm Resilience Center, under the leadership of Professor Johan Rockström. Humankind cannot cross these nine planetary boundaries without posing great risks to present and future society. However, four of the nine boundaries are considered to have been breached already: climate change, loss of biodiversity, changes in land use and changes in biogeochemical flows of nitrogen and phosphorus.





Virtually all the world´s climate scientists agree that the accelerating climate change we are experiencing today can be traced back to human activity. We lack a comprehensive understanding of the dynamics of the planetary climate system, but enhanced greenhouse effects and global warming are facts we cannot ignore. Today our emissions are disrupting the balance of nature and will do even more so in the future.

Biodiversity is seriously threatened as well. The Living Planet Index measures fluctuations in 20,811 populations and 4,392 species of the Earth´s wild vertebrates (mammals, fish, birds, amphibians, and reptiles). Unfortunately, the prognosis here is dire, the curve points downwards. Between 1970 and 2016, the Living Planet Index decreased by 68 per cent. A major reason for declining biodiversity is linked to our increased utilization of land for food production.

International goals to address these issues

A number of political initiatives have been taken in attempts to tackle these challenges. In September 2015, UN member states adopted Agenda 2030. With this treaty, the countries of the world committed to eradicating poverty, fighting inequality, building peaceful and inclusive societies, and protecting human rights by 2030. All this to be carried out while simultaneously protecting the planet and its natural resources. The agreement established 17 global goals and 169 sub-goals. These goals are universal, integrated and indivisible, but are adapted to the capabilities of each individual country. Humankind must make a concerted effort to deliver social, economic, and ecological sustainable development across the board.

Goal 7, Affordable and clean energy, Goal 11, Sustainable cities and communities, Goal 12, Responsible production and consumption, Goal 13, Climate action and Goal 15, Life on land, are particularly relevant for Influence the Future – Our City 2030. Sustainable urban development targets construction and housing, infrastructure, public places, energy consumption, transport, recycling as well as safer chemical management – which in turn require new technologies and cooperation between multiple sectors. Both production and consumption must be sustainable. Today cities account for about 70 per cent of global carbon emissions. When cities expand, nature is often pushed to one side. At the same time, cities offer great opportunities. Now smart ways are needed to meet human needs with small footprints and increased quality of life. Inclusive and innovative urban planning is necessary to make cities safe and sustainable for the future and places where nature and biodiversity are in harmony.

In December 2015, most of world´s countries also signed on to a new climate agreement at the climate summit in Paris. This agreement was scheduled to come into effect no later than 2020, and the goal is for global warming to be kept well below 2°C, with the ambition to remain below 1.5°C. The UN Climate Panel has since then published a special report showing that the 1.5°C target will enable our societies to better cope with adaptation, compared with 2°C or more, which will be much more problematic. However, even 1.5°C warming will cause damage and have negative consequences for nature and society.

In 1992 the Convention on Biological Diversity was established. This multilateral convention, which was ratified by 196 nations, has three main goals: the preservation of biodiversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising from genetic resources.

This convention is currently being evaluated and expanded, which will result in nine more measurable goals than previously. The new goals include access to safe and potable water, genetic diversity and the number of endangered plant and animal species. (Convention on Biological Diversity)

So, how can we create local communities where people thrive and prosper, while simultaneously bolstering sustainable development initiatives, not just locally but worldwide? The local and the global are connected. We must create a good society that spans the entire planet. There is an urgent need to find wise, smart and innovative solutions that meet the needs of humans and other species, both in the short and long term.


MOTIVATION

MOTIVATION

EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD)

"We often talk about climate and global challenges without realizing that they affect us. Here we can work with global issues at home."

UPPER SECONDARY SCHOOL STUDENT FROM SWEDEN WHO PARTICIPATED IN INFLUENCE THE FUTURE – OUR CITY 2030

For the vast majority of students, working with real-life and concrete issues and knowing that decision-makers and other actors were paying attention to what they were saying, and giving them the opportunity to influence the local community, definitely ramped up motivation. Motivation is pivotal when it comes to deepening understanding and reinforcing ability. For this reason, real problem solving aimed at tackling the sustainability challenges facing society, in close collaboration with actors outside the school, should be part of our core mission. In an evaluation of Influence the Future – Our city 2030 (previous version) carried out in Sweden, teachers observed that students who usually did not do particularly well at school performed much better during the project and that it was gratifying to see students normally disengaged at school showing great commitment outside school hours. Several also mentioned that students indifferent to environmental and climate issues prior to the project became much more aware of issues around sustainable development, and able to grasp not only how the subjects they were being taught at school were interconnected, but also the nexus between their own future roles and engagement in environmental issues.

Agenda 2030 and goal number 4, which addresses good education for all, include a special sub-goal, 4.7, which references ESD and is a mandate aimed at all educators:

"By 2030, ensure that all students have the knowledge and skills needed to promote sustainable development, including through education for sustainable development and sustainable lifestyles, human rights, gender equality, the promotion of a culture of peace, non-violence and global citizenship. as well as the appreciation of cultural diversity and the contribution of culture to sustainable development."

HTTPS://SDGS.UN.ORG/GOALS/GOAL4

The education sector has a clear mission to contribute to sustainable development, formulated in international governing documents

One of the goals of education is thus that everyone is to be accorded the knowledge and motivation that will enable them to act for sustainable development. Education for Sustainable Development (ESD) encompasses all processes that promote knowledge, skills, values and attitudes that leverage the individual, school and society´s efforts to create a just society, promote economic security and ecological sustainability and instil democratic values.

UNESCO writes on its website: "Empowering people to be 'global citizens' who engage and assume active roles, both locally and globally, to face and to resolve global challenges and ultimately to become proactive contributors to creating a more just, peaceful, tolerant, inclusive, secure and sustainable world" (UNESCO)

“The Our City 2030 project is an attempt to introduce young people to education for sustainable development – which is all about climate change, inequality and social injustice.”

STUDENT

Has my coffee contributed to deforestation of the rainforest? Does my Granola contain uncertified palm oil? Were forest workers given a living wage and able to avoid being exposed to pesticides? Where does the milk come from?

ESD provides context and purpose accompanied by knowledge and as it throws light upon their everyday lives it is seen as relevant and meaningful by students. A basic understanding of the ecological framework that underpins society is necessary. This may be an awareness of planetary boundaries, energy flows, various natural cycles, interactions within nature or biodiversity. It can also embrace knowledge and attitudes that touch upon human needs, health issues, language, culture, creative activities, ethical dilemmas, and the meaning of life – and how we can deploy energy and resource-efficient solutions to overcome the challenges the future has in store for us.

An example: When eating my breakfast that consists of a cheese sandwich and a bowl of yogurt and granola, I lift my eyes from coffee cup and am struck with the realization that I am exploiting both local and global natural resources and that there is a long list of questions I should be asking myself.

Has the coffee I am drinking contributed to deforestation of the rainforest? What about granola, does it contain uncertified palm oil? What was it like for the people working in the plantations, were they given a living wage? Could they avoid being exposed to pesticides? Where does the milk used to make my cheese and yoghurt come from – is it locally produced or imported? Have the cows been let out to pasture in the summer, or have they been confined all year round and fed with concentrates such as soy?

Life is complicated, to say the very least. It is no longer possible to study each aspect of it separately. Everything is connected. My social behaviour can have ecological consequences in the same way that ecological disruption may force me to change the way I live my life. To understand my impact on sustainable development based on my breakfast, I will need to analyse global value chains: forests that are converted into arable land for growing coffee, palm oil or soybeans that directly or indirectly end up in what I consume and that have profound ecological and social implications for both humans and nature.

KEY SUSTAINABILITY COMPETENCIES

- **Systems thinking competency**
- **Anticipatory competency**
- **Normative competency**
- **Strategic competency**
- **Collaboration competency**
- **Critical thinking competency**
- **Self-awareness competency**

Some key competencies are pivotal to sustainable development. Systems thinking that will enable us to recognize and understand contexts and complex systems is essential. Likewise, both critical and normative/ethical competencies. Anticipatory competency that makes it possible to understand and evaluate different future scenarios is also important. To be able to solve challenges, both collaborative competence and strategic/action-oriented competence will be needed. The latter is about being able to develop and implement innovative solutions. Self-awareness is necessary to enable us to reflect on our own role in the local and global community, evaluate our own actions and manage our feelings and desires. All these competencies bundled together make up action competence.

Teaching must be structured in a way that helps students foster and strengthen all the above skills. ESD is therefore not just about teaching content but more an approach to learning and didactics. Teaching needs to be interdisciplinary and linked to authentic situations and problems, giving students the opportunity to think about and develop constructive solutions to various sustainability issues. Thus, place-based learning with outreach to the surrounding community and nature becomes important. ESD also presupposes that students are encouraged to participate and influence both content and pedagogical design.

Maria Ojala, associate professor of psychology at Örebro University, has investigated youth concerns about global warming. Her study shows that anxiety does not always have to be negative and destructive, it can instead act as a driving force and foster action competence. If concern about climate issues is combined with feelings such as hope and meaning, action competence is strengthened (Maria Ojala 2016).

Students must therefore be given a space to act in and supported in their endeavours. Perhaps the most important impetus for behavioural change is belief in the future combined with a solution-oriented approach. Schools need to be places that inspire hope and offer innovative tools to tackle local and global challenges. The working method presented in this material is intended to support and stimulate hope-inspiring teaching.

Maria Ojala, associate professor of psychology at Örebro University, has investigated youth concerns about global warming.

"Our City 2030 opened the minds of young people and encouraged them to think about visions and solutions for the future."

STUDENT


OPPORTUNITY

OPPORTUNITY

"When we work across disciplines and collaborate between different subjects, it is much easier to make the student understand that everything is a whole. That the world outside school is not divided into subjects."

A TEACHER

ACTION COMPETENCE

Pedagogical design

Influence the Future – Our City 2030 is meant to be combined with regular teaching activities and not intended as an external project that falls outside normal planning. The material is based on interdisciplinary working methods and learning in authentic situations. The guide presents various suggestions for teaching areas that can be adapted to relevant goals in the subjects and courses involved and shaped by teachers familiar with the student group.

Before you start, it is important that you carefully look at the subjects you think should be included and decide which aspects of the course/subject plans should be taken up and how student progress is to be evaluated. This must be made clear to both teachers and students.

No matter how you choose to use this material, it is important that you make students feel that they are dealing with real-world challenges/issues and that you link to processes and change initiatives relevant to your community. A well-defined collaboration with appropriate people in the community and other actors in the immediate area is pivotal if your work is to be authentic. Another important component here is the implementation of a so-called climate council. It is in this forum that students are given an opportunity to present their thoughts around how they want their city to progress, and it is also a communications channel that allows them to interface with city decision makers.

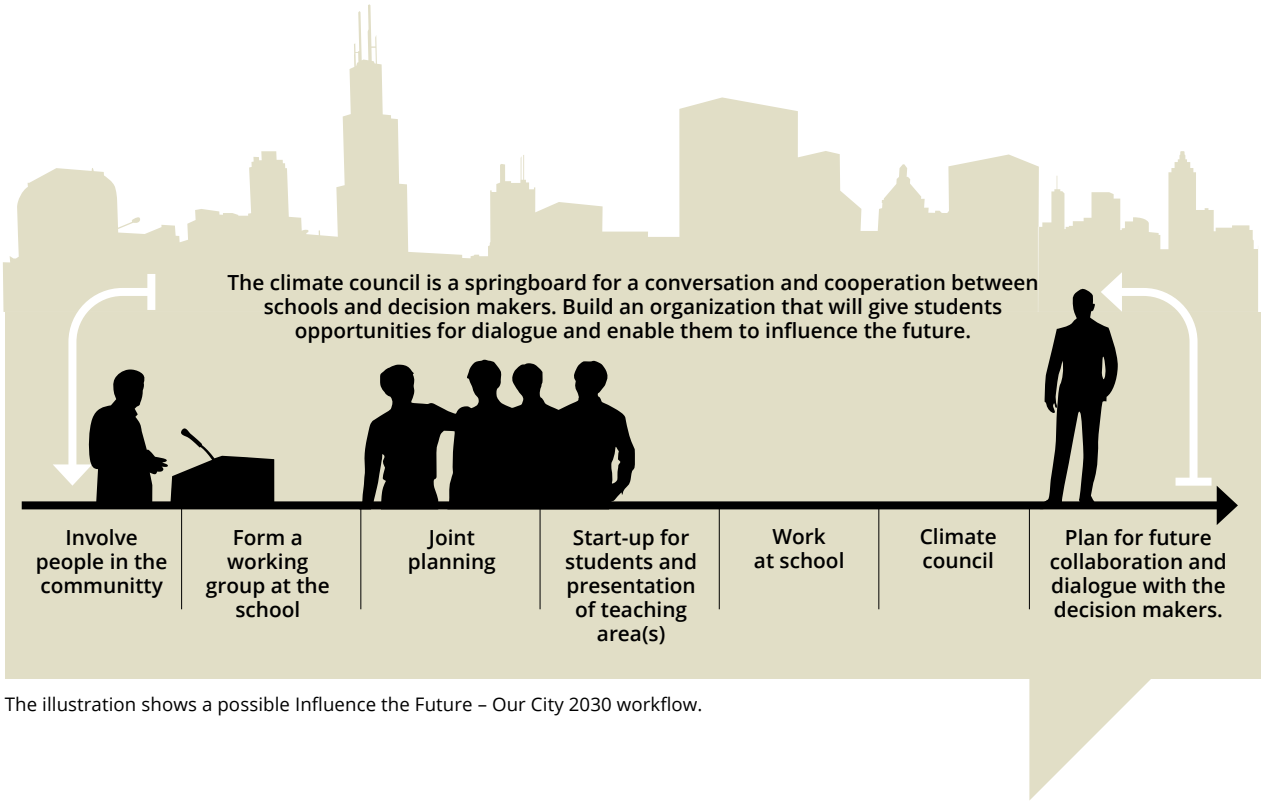
KNOWLEDGE MOTIVATION OPPORTUNITY

This material is based on the action competence trinity: Knowledge, motivation, and opportunity. If students are to develop action competence, they need to work with and develop all of these three pillars.

KNOWLEDGE is about facts, practical skills – i.e., how to influence, deeper understanding, broad knowledge, and wisdom, in short, all that we know and that which makes us what we are. Without knowledge about how what we eat impacts people living in different parts of the world in terms of working conditions, biodiversity, climate, pollution, land, and water use, etc, it is difficult to both influence and make well-reasoned choices in our daily lives.

MOTIVATION, an inner driving force that emboldens us with the desire, will and courage to act – on our own or together with others. A learning that is based on the reality students live in can increase motivation. This will allow them to identify problems in their immediate environment and find solutions that can contribute to commitment and the will to influence.

OPPORTUNITY, there may be different alternatives and openings you can take advantage of to leverage solutions. It may be that a particular store offers good vegetarian food at a reasonable price or that students realize how a municipality works and how to influence the decisions made there.



The illustration shows a possible Influence the Future – Our City 2030 workflow.

"Many of the students have grown in stature. Adults listening to students have given them self-confidence. The project has made student goals and planning visible. They have been trained to take personal responsibility. Their ideas become real when they are taken seriously when different actors confirm their projects."

TEACHER ABOUT THE WORK WITH INFLUENCE THE FUTURE – OUR CITY 2030

Time to get started

Work with Influence the future – Our City 2030 will differ depending on the subjects you focus on and how much time you have at your disposal. The guide is structured around four different teaching areas:

- Biodiversity,
- Climate and energy
- Consumption and waste
- Food.

Each teaching area contains suggestions for three different activities. These are designed to develop student action competence. We also encourage you as a teacher to add your own activities and adapt the structure to harmonize with your teaching goals and available time.

The introduction to each teaching area lists the pertinent global goals and provides a brief fact segment. The key competencies required are also listed. At the conclusion of each area you are shown how to prepare for the upcoming climate council and how to involve students in real processes in the community.

The activities should be seen as an introduction and are suggestions on how to introduce work with Influence the future – Our City 2030. Dialogue and cooperation between students and appropriate functionaries in the community, as well as other actors in the local area, are pivotal throughout the process. The idea here is that students should present their own visions and ideas for a sustainable city at the climate council, and for them to be able to do this it is important that they first master an understanding of the area(s) you have chosen to work with.

You can either choose to address multiple teaching areas or select an overarching theme that you subsequently link to ongoing processes in your community.

Before you start working with the students, you will need to:

- Anchor your plans with the school management and possibly legal guardians.
- Inform and anchor your plans with relevant politicians and officials in the community. If your efforts are to be authentic, these must be familiar with what you are trying to accomplish, contribute to the project and be aware that they will be invited to attend a climate council where their presence will be indispensable.
- Plan the set-up together with colleagues and decide whether you will concentrate on a single teaching area (for example biodiversity) or if you will span multiple areas.
- Identify relevant goals in the curriculum.
- Decide on follow-ups and criteria for formative assessments and grading.

STUDENT PARTICIPATION

SUBJECT INTEGRATION AND HOLISTIC PERSPECTIVES

AUTHENTICITY

CREATIVITY

Work with Influence the Future - Our City 2030 is not a linear progression from "A to Z". Knowledge, motivation, and opportunity are pillars of student action competence and these should be addressed in a parallel process. The goal here is for students to discover the sustainable urban development challenges facing the city, build on the knowledge they already possess and achieve an understanding of possible and desirable solutions to these challenges, and that they should be aware of the ways in which they can participate in and influence urban development, and be given a chance to meet and discuss this with decision makers in the community.

Essential keywords in this regard: student participation, subject integration, holistic perspectives, authenticity, and creativity.

STUDENT PARTICIPATION: Work in the project must be based on things that interest students and provoke their curiosity. How do they want their city to develop and become sustainable and climate-smart? What needs to be done to realize their visions?

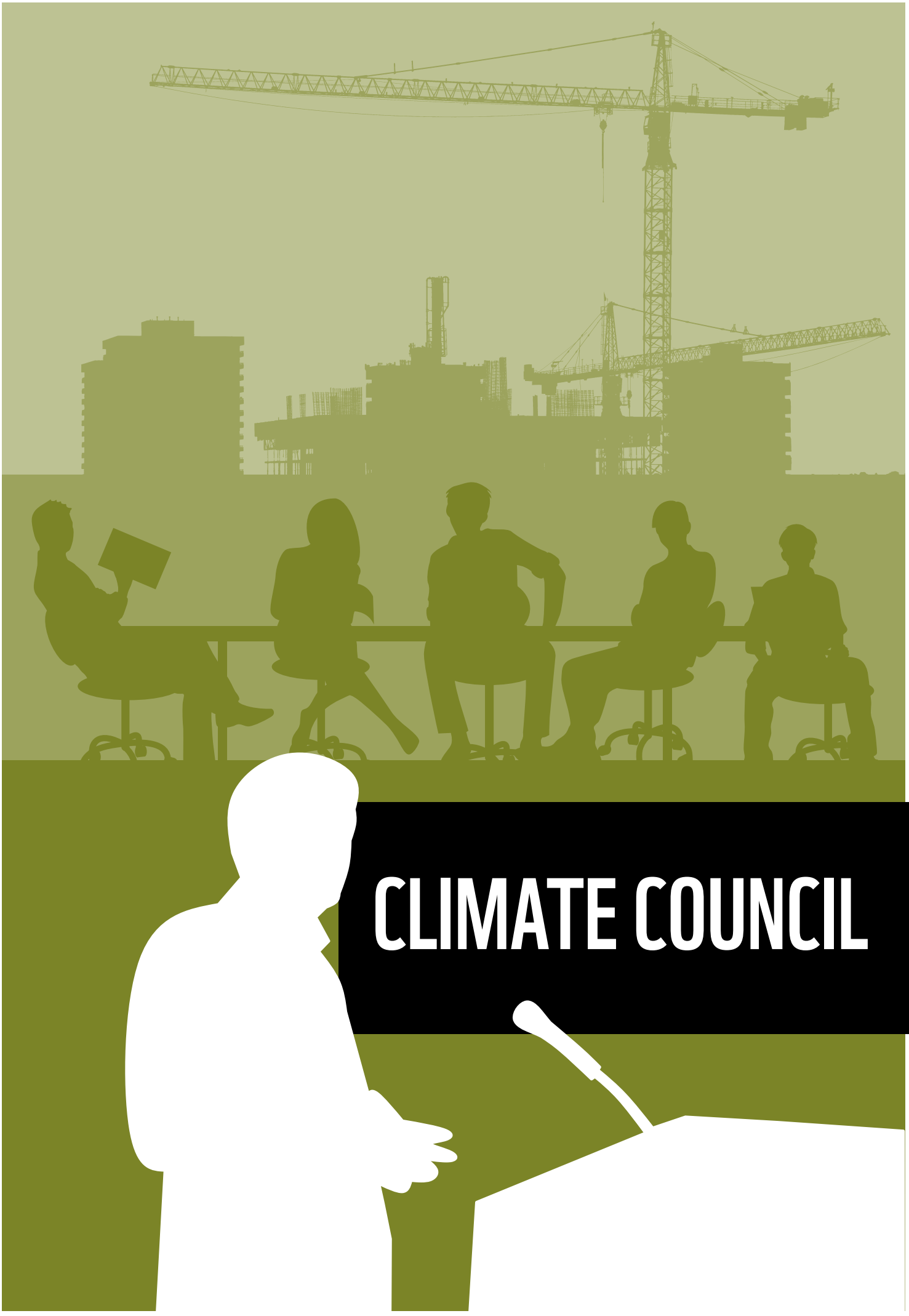
SUBJECT INTEGRATION AND HOLISTIC PERSPECTIVES: An important part of ESD is looking at things from different perspectives. Sustainability challenges are not linked to a particular school subject or interest but are interconnected across larger systems and should be viewed from a variety of different standpoints.

AUTHENTICITY (OR GENUINE PARTICIPATION AND REALITY-BASED LEARNING): By allowing students to work with real problems or challenges that they experience in their city, they engage in authentic learning. They meet local decision-makers, become involved and are able to exert real influence.

CREATIVITY: Thinking innovatively and creatively is something the adults of the future will need to do to deal with a world in constant flux. By developing visions and ideas for their future city, students practice thinking constructively and in new and innovative ways.

"Somebody delivered a fantastic presentation about how to tackle littering in the city, and there were actually some practical things I could take back to the administration and ventilate with them – I´ve been given all these ideas by a group of young people, could they actually be something we could use?"

PARTICIPATING POLITICIAN AT THE STUDENT CLIMATE COUNCIL


CLIMATE COUNCIL

CLIMATE COUNCIL

"... we were able to present our proposals and the politicians came and listened to what we had to say."

STUDENT FROM ON WHAT WAS POSITIVE ABOUT THE CLIMATE COUNCIL.

The climate council plays an important role in Influence the future – Our City 2030. Its purpose is to enable students to present and communicate visions around change and contribute to developing their city by making it more sustainable. It is here students get the chance to meet decision-makers and hold authentic conversations about the future and how they can best become involved and exert influence. At the climate council, the students not only present their ideas to decision-makers, but they also have an opportunity to discuss sustainable urban development and youth participation in democratic processes. The decision makers at the meeting are also required to provide feedback to the students.

The climate council should not be seen as the culmination of the project – its end piece. The experiences students have had should be followed up on, they should be provided with feedback from participants in the council (officials, politicians, and others) and there should be plans for continued collaboration with all relevant actors and stakeholders. Let the climate council signal the birth of an ongoing citizen dialogue between students and the city officials.

Let the students discover the development processes that are underway or planned in your community. These might be the construction of a new residential area, the refurbishment of buildings and properties, the construction of a park, the expansion of public transport, a new waste management plan, etc.

Rewarding conversations with young people. Partly to hear what they think about the times we live in and the problems we are facing, but also to be encouraged by their hope and belief in the future.

Inspirational listening!

ADULT PARTICIPANT
IN CLIMATE COUNCIL

Prior to the climate council:

The students have worked across multiple disciplines, addressing motivation, facts, and opportunities. They have completed a number of exercises in the teaching area you have chosen, or in a more general approach that targets more than one area. Now is the time to propose concrete solutions.

Let the students discover the development processes that are underway or planned in your community. These might be the construction of a new residential area, the refurbishment of buildings and properties, the construction of a park, the expansion of public transport, a new waste management plan, etc. This can be best done by inviting officials or politicians from the city to come to the school and talk about ongoing initiatives, by exploring the municipal website, by visiting the city hall and talking to those responsible or in digital meeting between students and decision makers. The way in which you choose to do this is unimportant. The important thing is that you target authentic processes.

The students work in small groups – each group choosing an ongoing or planned process that they think will repay detailed scrutiny. They are tasked with finding out as much as possible about the project and the district in question. Encourage them to visit, interview residents, carry out surveys and so on.

Based on what they discover, students formulate ways in which they think the area might be developed. Here, the focus should of course be on sustainability – ecological, social, and economic. If the community itself intends to realize this in practice, how can it be done as sustainably as possible? What decisions must be made to facilitate things? Let students brainstorm visions and encourage them to come up with as many different ideas as possible. The next step will be to determine which of these ideas might be realistic, Challenge the students to learn new things, help them find new ways to avoid getting stuck in traditional solutions and old and outmoded patterns of thought.

The groups prepare a proposal or an idea for their area, their process, which they then present in any way they choose. This might be a movie, a model, a digital presentation, a Power-Point presentation or some other innovative way. This will then be presented and explained at the climate council. The presentation of student visions and solutions is one of the most important and crucial parts of work with Influence the Future– Our City 2030. It is now that students must "reach out" to politicians and officials, telling them what they want their city to look like in the future. For this reason, it is important that they are helped with communication knowhow, both when it comes to oral presentation/dialogue and media presentation, e.g., exhibitions, slide shows, posters, printed matter, etc. It is also important that the students are challenged in their thought processes as a step in developing their capabilities to learn.

FOR THE PRESENTATION TO BE "REAL", IT NEEDS TO INCLUDE THE FOLLOWING:

BACKGROUND: How did the students gather facts about the area and what conclusions have they arrived at?

JUSTIFICATION: What makes their idea sustainable?

IMPACT ASSESSMENT: What would the consequences be if the process planned by the city is not sustainable?

Have students practice by delivering their presentations to others in the group and encourage them invite questions that will enable them to further develop reasoning around critical issues. It can also be a good idea have a dress rehearsal at school for other students.

Time for the climate council:

If individual schools working with Influence the Future – Our City 2030 are hosting the climate council the event can take place on their own premises. If multiple schools in the community are taking part you will need access to a larger venue.

The climate council can take place at your own school. If multiple schools are involved, you will need to have access to a larger venue.

Things to include in the climate council:

- Exhibition of student proposals
- An in-depth presentation of some of the proposals students have come up with, if needed
- Round table discussions
- Panel discussions
- Feedback from decision makers
- Where do we go from here? One suggestion is that each participating school be assigned a city contact person with whom they can keep in touch with. How can the school/students continue to participate in community development efforts linked to their proposals?

Extensive planning prior to the climate council is paramount. Here are some tips:

- The council should be jointly planned by educators in collaboration with relevant city departments as the presence of politicians and officials at the event is essential.
- There is a budget for the event.
- Information and invitations should be disseminated in good time and via diverse channels.
- Programmes for participants and a detailed timetable for organizers and teachers should be prepared.
- The media has been invited.
- Lunch and coffee are provided. The menu should be in line with the message of the day.
- Furniture and technologies suitable for exhibitions, large gatherings, plenary and roundtable discussions should be in place on the premises.
- Student exhibitions should be identified by a well-designed sign displaying the name of the participating school (if more than one school is taking part).
- The event has a suitable moderator. One familiar with sustainable development and able to communicate with young people.
- Follow-ups, especially in connection with student proposals and recommendations, should be planned and communicated.
- The event and the process that has led up to it should be documented in collaboration with teachers.
- Permission to publish photographs of students should be obtained if these are intended for use on the Internet, etc.
- An evaluation of the climate council should be planned ahead of the event.

Permission to publish photographs of students should be obtained if these are intended for use on the Internet, etc.

DO NOT FORGET: The students own the climate council; it is their ideas and visions that will be on centre stage during the day!

Example agenda:

9.30-10.30	Students on site to prepare the exhibition.
10.30-11.00	Welcome ceremony, presentation of participating schools etc. (led by moderator)
11.00-12.00	Exhibition, invitees wander around the exhibits and are introduced to the proposals put forth by the students.
12.00-13.00	Lunch
13.00-13.30	Panel discussion in which invited decision-makers react to student proposals (led by moderator)
13.30-14.00	Round table discussions with students and decision makers. Discussion around a particular theme linked to proposals from students, sustainable urban development, and the importance of youth participation in the democratic process.
14.00-14.30	Summary of round table discussions between students and decision-makers (led by moderator)
14.30-14.45	Health break
14.45-15.15	The next step, how should decision-makers take the student proposals further and the best way for students to get feedback (led by a moderator)
15.15-15.30	Summary by the students and conclusion (led by moderator)

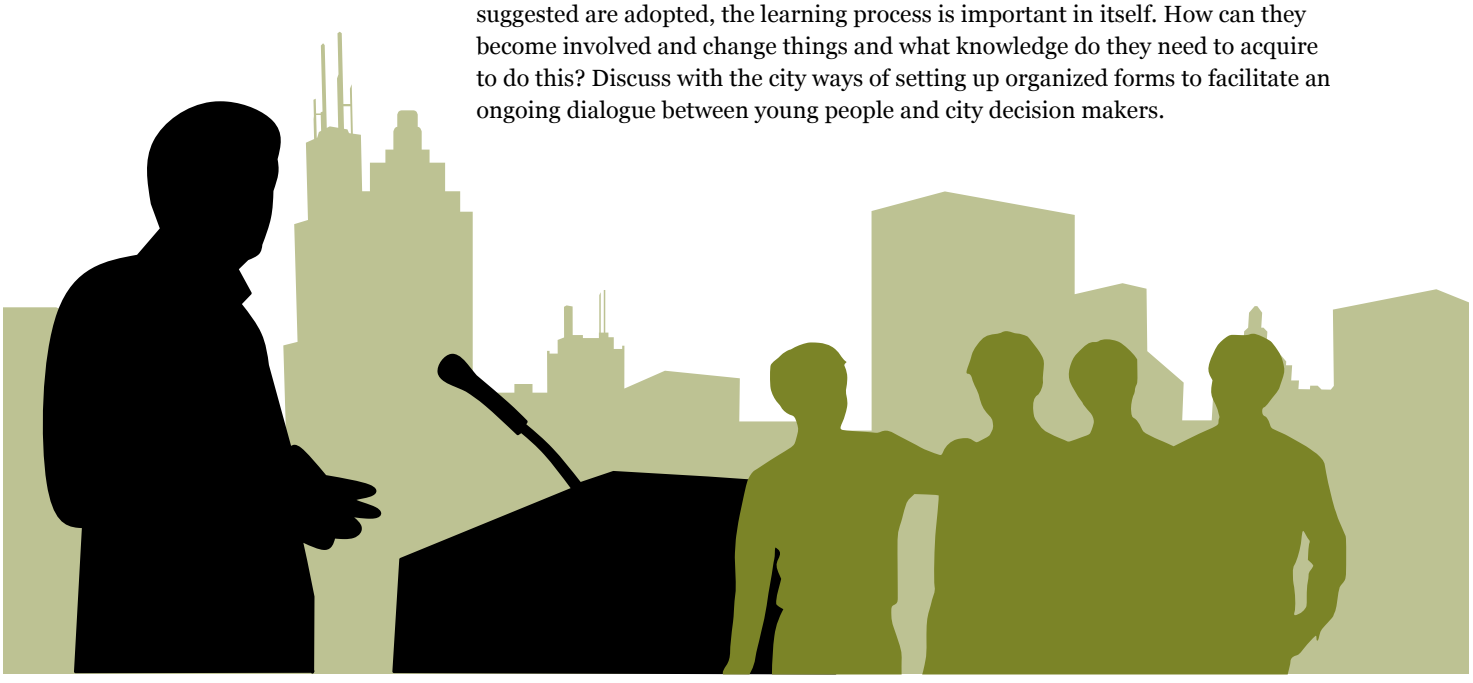
Of course, you should set up the climate council based on local conditions and adapt times and content to suit you.

"Committed students who were well prepared. Good with adults and students in the same forum. Many interesting thoughts were put forth."

ADULT CLIMATE COUNCIL PARTICIPANT

What happens after the climate council?

It is important that work with Influence the Future – Our City 2030 does not end with the climate council. If the students are to develop action competence further – if they are keen to find out even more (knowledge), if they feel motivated to act and want to influence their own futures (opportunity) – the process you have started must not stop here. Notwithstanding whether or not the proposals students have suggested are adopted, the learning process is important in itself. How can they become involved and change things and what knowledge do they need to acquire to do this? Discuss with the city ways of setting up organized forms to facilitate an ongoing dialogue between young people and city decision makers.




MORE INSPIRATION

MORE INSPIRATION

During 2018-2020, Our City 2030 was implemented in four cities: Quezon city in the Philippines, Lusaka in Zambia, Kampala in Uganda, and Nyamata in Rwanda. This was a collaboration between WWF and Plan international and the project was funded by the Swedish Postcode Lottery.

Some words about Our City 2030 from participating students, teachers and city officials:

"Our City 2030 helped us to engage ourselves in things that were happening to our city because of changes in the environment. It also gave us an opportunity to show and express our thoughts, and ideas, and to propose solutions to what is happening in the world today. It empowered us and taught us how to speak out."

STUDENT FROM QUEZON CITY, PHILIPPINES

"This project changes mindsets about how to interact with the environment. It is all about ESD, acquiring knowledge and being able to develop the environment in a sustainable way."

TEACHER IN KAMPALA, UGANDA

"It is a good opportunity for us to learn from the youth and see how young people are able to actively participate in our vision for sustainable development."

CITY OFFICIAL IN QUEZON CITY, PHILIPPINES

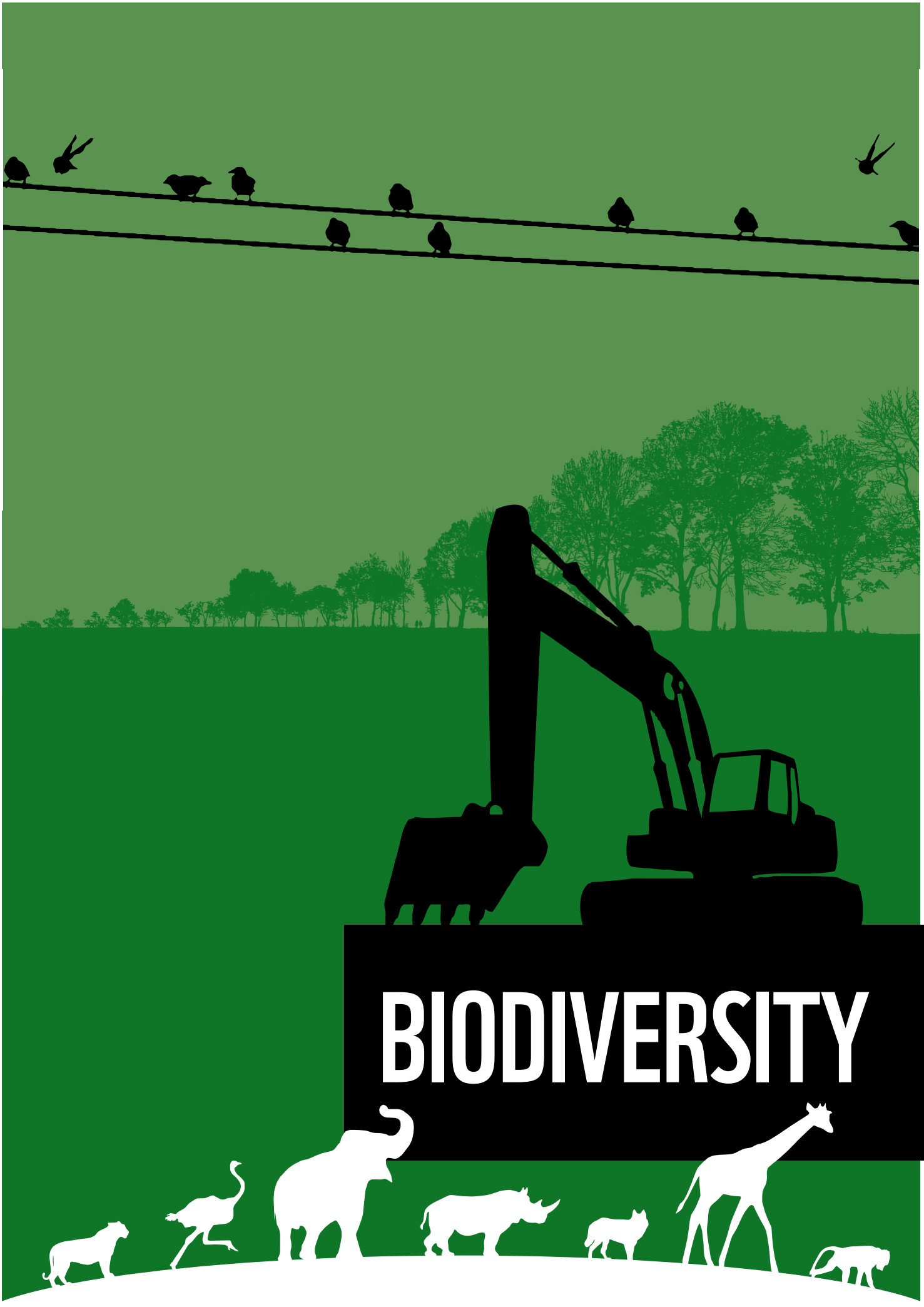
MORE ABOUT THE IMPLEMENTATION OF OUR CITY 2030:

▶ **Youth visions and solutions**

Here you will find inspiration booklets for teachers and student as well as videos about the project.

CONTACT:

▶ **susie.broquist.lundegard@wwf.se**


BIODIVERSITY

BIODIVERSITY

FIND OUT MORE ABOUT BIODIVERSITY AND WILDLIFE

▶ panda.org/wildlife

INTRODUCTION AND FACTS

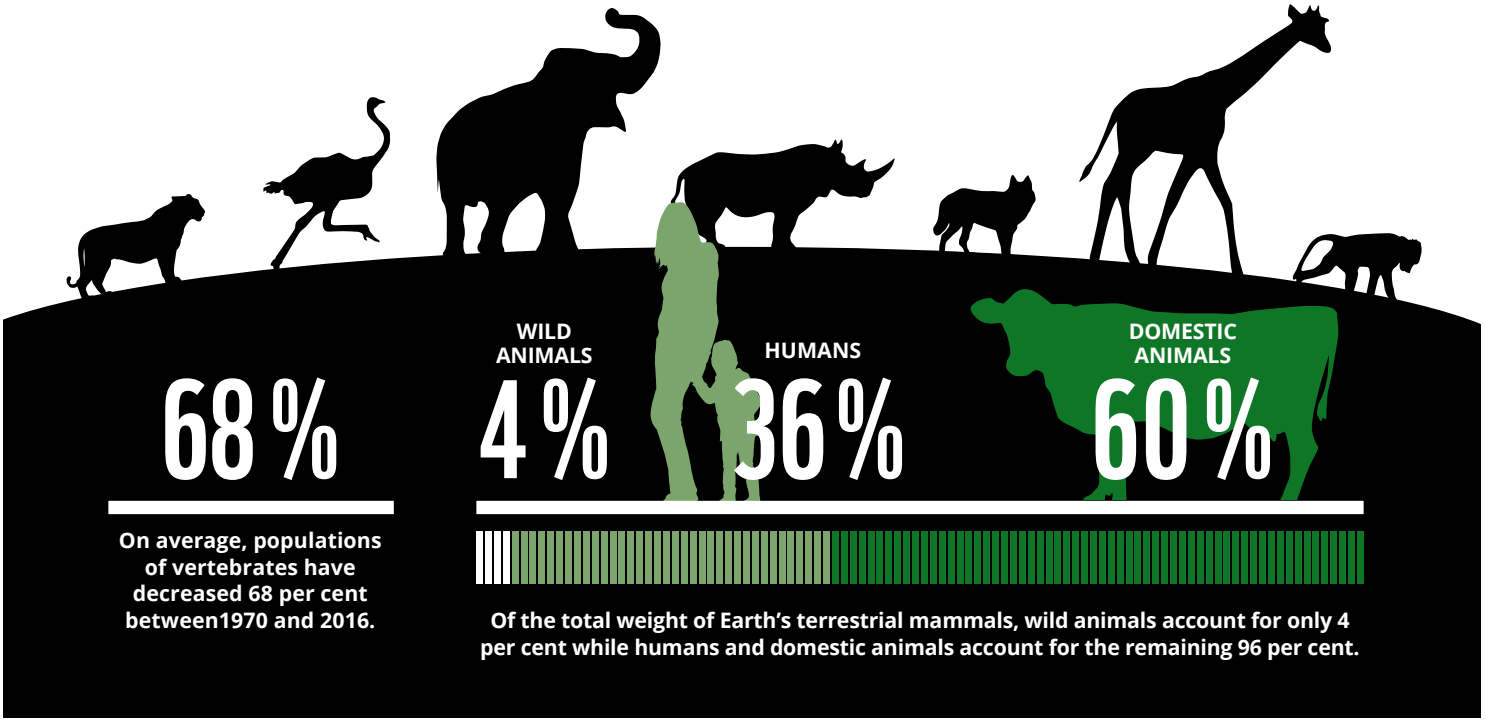
Earth is a wondrous place teeming with millions of creatures – a wild profusion of plants, animals, fungi and microorganisms. It is estimated that 5 to 100 million different species can be found on our planet. And most of these we have not even discovered yet. To date only 1.8 million have been identified. What significance does this diversity have for humanity? If there are so many species, does it matter if some of them disappear?

The answer to the latter question is a resounding "YES!" Biodiversity is crucial to the balance of Earth´s ecosystems. both on land and in water. Biodiversity is the "infrastructure" that sustains all life on Earth.

Abundance is vital if the planet is to function optimally – landscapes with many different habitat types, an enormous variety of species, and pronounced genetic variation within these species. In all ecosystems, a number of processes take place that all living things depend upon – not least the human race. Photosynthesis in green plants, decomposition in the soil, the pollination of our crops, and water regulation in the landscape. All this is necessary if we are to have food, clean water, and clean air. The "free services" that nature provides are usually referred to as ecosystem services.

Today, biodiversity is under threat. Over the past 50 years, the world has changed because of an explosion in global trade, consumption and population growth, as well as rapid increases in urbanization. This has led to an unprecedented overexploitation of natural resources and in turn to a world where natural ecosystems are increasingly being depleted.

Living Planet Report 2020 (LPR) shows that between 1970 and 2016 populations of vertebrates decreased by an average of 68 per cent. If you consider the total weight of the Earth´s terrestrial mammals, wild animals account for only 4 per cent, while humans and domesticated animals account for 96 per cent (humans 36 per cent, domestic animals 60 per cent.



68 %

On average, populations of vertebrates have decreased 68 per cent between1970 and 2016.

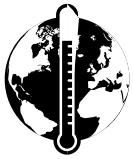
Of the total weight of Earth's terrestrial mammals, wild animals account for only 4 per cent while humans and domestic animals account for the remaining 96 per cent.

The five biggest threats to biodiversity are: loss of habitat, species overexploitation in the form of hunting and fishing, climate change, invasive species that are displacing native species and spreading disease, and pollution. But the depletion of biodiversity is not just an environmental problem. It reflects our ethics, morals as well as development in general – the whole gamut from economic considerations to global security. Nature underpins all dimensions of human health and plays a central role in our wellbeing. Biodiversity is also important in enabling us to deal with climate change as it contributes to resilient ecosystems – systems that are important when it comes to absorbing greenhouse gases.

THE FIVE BIGGEST THREATS TO BIODIVERSITY ARE:

Loss of habitat

Species overexploitation



Climate change

Invasive species

Pollution

TERMS:

BIODIVERSITY: Biodiversity is a term used to describe the enormous variety of life on Earth. It can be used more specifically to refer to all the species in one region or ecosystem. Biodiversity refers to every living thing, including plants, bacteria, animals, and humans.

▶ **Find out more**

ECOSYSTEMS: An ecosystem is a community of living organisms in conjunction with the non-living components of a geographic area, interacting as a system. Ecosystems can be large or small, such as the area around a tree stump, a garden, or the entire planet Earth.

▶ **Find out more**

ECOSYSTEM SERVICES: Ecosystem services are the many and varied benefits to humans provided by the natural environment and from healthy ecosystems, for example, the pollination of crops, natural water regulation and human mental and physical wellbeing.

▶ **Find out more**

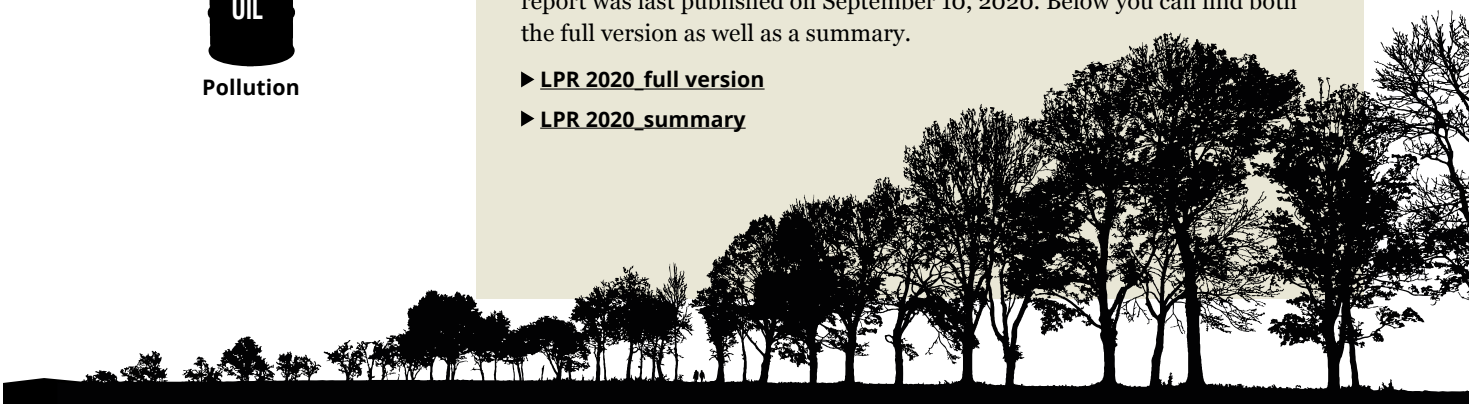
INVASIVE SPECIES: An invasive species is a non-native species that causes ecological or economic harm in a new environment where it is alien. These species thrive and multiply because they often have no natural enemies to hold them in check.

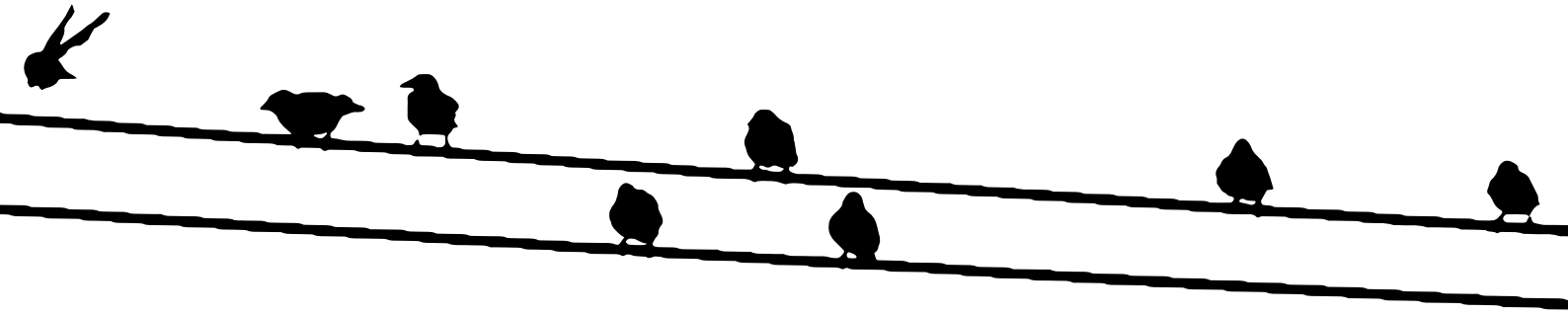
▶ **Find out more**

LIVING PLANET REPORT (LPR): LPR is published by WWF every two years and surveys the state of biodiversity and the ecological footprint. The report was last published on September 10, 2020. Below you can find both the full version as well as a summary.

▶ **LPR 2020_full version**

▶ **LPR 2020_summary**





ACTIVITIES/ BIODIVERSITY

Three activities linked to biodiversity are presented below. They include tips on things you can do to increase student understanding and awareness of human impact on the natural environment and its diversity. After the final activity, you will find tips on more things you can do in the run-up to the climate council to involve students in authentic processes in your community. Here is an overview of the activities:

ACTIVITY 1

A living planet

In this activity, the students, with the help of the summary of Living Planet Report 2020, address and discuss the importance of biodiversity and the threats it faces. They will also be asked to reflect over our ecological footprint and what they might be having for breakfast if there were no longer any microorganisms or fungi.

ACTIVITY 2

Who is most dependent on nature?

Humankind is an integral part of nature and we need functioning ecosystems to deliver, among other things, the food, water, and energy we depend on. Here, students consider our reliance on nature and what might happen if ecosystems are disrupted.

ACTIVITY 3

Threats and opportunities

How much biodiversity is there in the school´s immediate environment, and what is your community doing to promote species richness. Students investigate their local environment and their community and seek visions and ideas that will help districts across the city promote biodiversity.

FIND MORE EXERCISES ABOUT ECOSYSTEM-SERVICES

If you have chosen biodiversity as your target area, invite those responsible for dealing with this issues in the community to come and talk to students about their work, and the steps your community has taken to protect biodiversity. You can of course do this in a virtual meeting. Showing the nexus between climate and energy issues and the students' immediate environment and daily lives will leverage authentic learning that touches and engages.

1 / A LIVING PLANET

Material: The Internet, LPR 2020_summary

KEY COMPETENCES FOR SUSTAINABILITY:

- ■ **Systems thinking competency**
- ■ **Anticipatory competency**
- ■ **Normative competency**
- ■ **Critical thinking competency**
- ☐ Strategic competency
- ☐ Collaboration competency
- ☐ Self-awareness competency

PURPOSE

To encourage students to reflect on the importance of biodiversity and our dependence on it.

The Living Planet Report (LPR) 2020 shows that between 1970 and 2016 populations of vertebrates decreased by 68 per cent on average. Other species of plants and animals are also threatened by human overexploitation of the Earth's resources. We depend on healthy ecosystems and biodiversity for our survival.

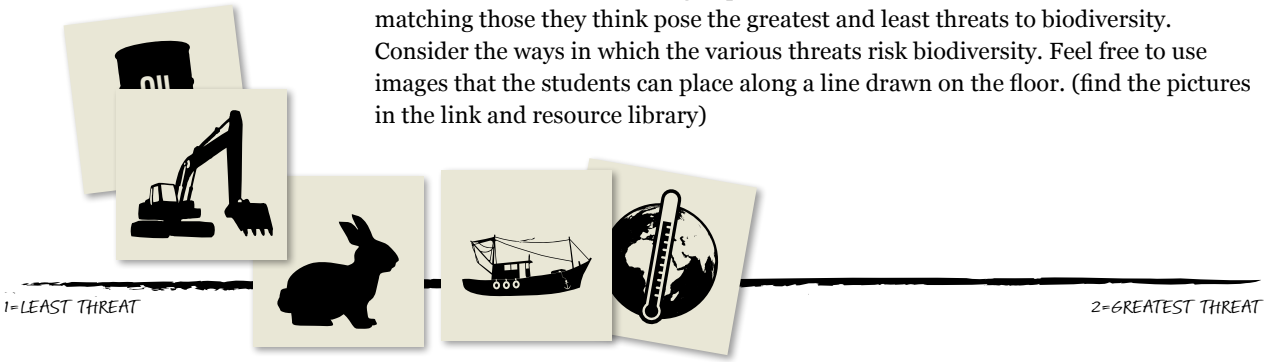
Let students study the latest LPR 2020_summary. In addition you can also turn your attention to LPR for youth.

The five greatest threats to biodiversity are loss of habitat, the overexploitation of species, climate change, invasive species and disease, and pollution.

Start by analysing these threats and what they imply. What is an invasive species? What does overexploitation mean? And so on.

Then let the students, working in pairs, rank these threats on a scale from 1-5, matching those they think pose the greatest and least threats to biodiversity. Consider the ways in which the various threats risk biodiversity. Feel free to use images that the students can place along a line drawn on the floor. (find the pictures in the link and resource library)

IMAGES FOR PRINTING CAN BE FOUND IN THE RESOURCE LIBRARY



Let the students present and justify their choices to their peers. It is important that they realize that there aren't any right or wrong answers here, and that threat levels may vary for different plants and animals and in different locations on the planet.

Pages 20-21 address the ecological footprint concept. An ecological footprint is the biologically productive area required to produce what we consume, and to absorb the waste this generates (read more about ecological footprints). Look at the maps and think together about which countries have large or small ecological footprints. What could be the reasons behind this?

LIVING PLANET REPORT FOR YOUTH

Biodiversity and functioning ecosystems are crucial when it comes to managing our food supply. Pages 34-35 describe the nexus between food and biodiversity. Talk about how the students' everyday lives would be affected if there were no pollinators or if there were no longer any fish in the sea. What would happen with the cheese sandwich you eat for breakfast if there were no microorganisms or fungi?

READ MORE ABOUT ECOLOGICAL FOOTPRINTS

Conclude by dividing the students into five groups. Distribute the five threats to biodiversity evenly between these groups. Let the students look for facts that expose how the threat they have been assigned is being tackled in your country, and whether there is any room for improvement.

ACTIVITY

2 / WHO NEEDS NATURE THE MOST?

Material: Pen and paper or computer/tablet

KEY COMPETENCES FOR SUSTAINABILITY:

- ■ **Systems thinking competency**
- ☐ Anticipatory competency
- ■ **Normative competency**
- ☐ Critical thinking competency
- ☐ Strategic competency
- ■ **Collaboration competency**
- ■ **Self-awareness competency**

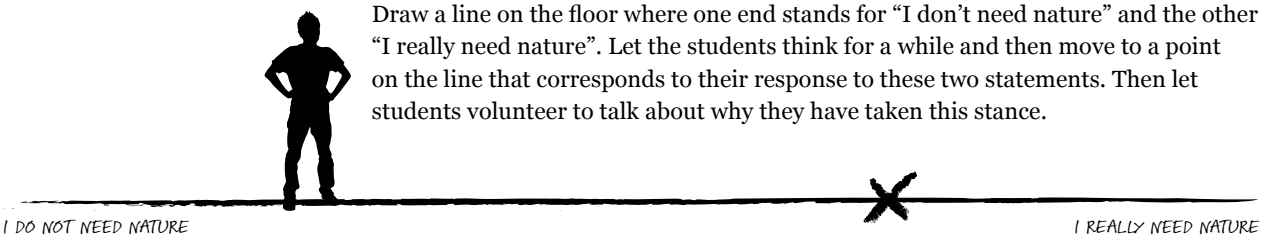
PURPOSE

An increased understanding that man is part of nature and that nature is essential for our day-to-day existence.

We are all dependent on nature and undisturbed and effective ecosystems. We sometimes talk about the relationship between human beings and nature, but in actual fact we are not outside nature – we are very much a part of it!

PART 1: A valuation exercise that encourages students to think about how dependent they are on nature. Do they need it in their daily lives?

Draw a line on the floor where one end stands for "I don't need nature" and the other "I really need nature". Let the students think for a while and then move to a point on the line that corresponds to their response to these two statements. Then let students volunteer to talk about why they have taken this stance.



© Germund Seligren / WWF-Sweden

PART 2: Divide the students into small groups. Let them look at the images above and discuss the following:

- Where do you think these people live?
- How old do you think they are? Do they have families? Describe what their normal working days might look like. What do they need in order to live a good life? Which of them do you think needs nature the most? For what purpose?
- Make a list over the needs each of these people get help with from nature.

Think together about:

- What threatens the people in the pictures having their needs met?
- How can they preserve, protect, and promote biodiversity?

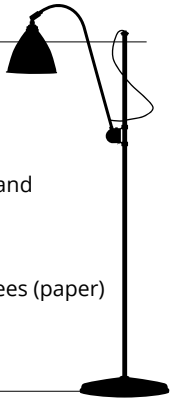
PART 3: Feedback on the valuation exercise (part 1). Do YOU need nature? Why do you need it?

Our need for nature and the ecosystem services it provides is huge. Almost everything we do is in one way or another dependent on efficient ecosystems.

Ask the students to consider a single day in their lives. What do they do each and every day, and where does the need for nature and ecosystem services fit in?

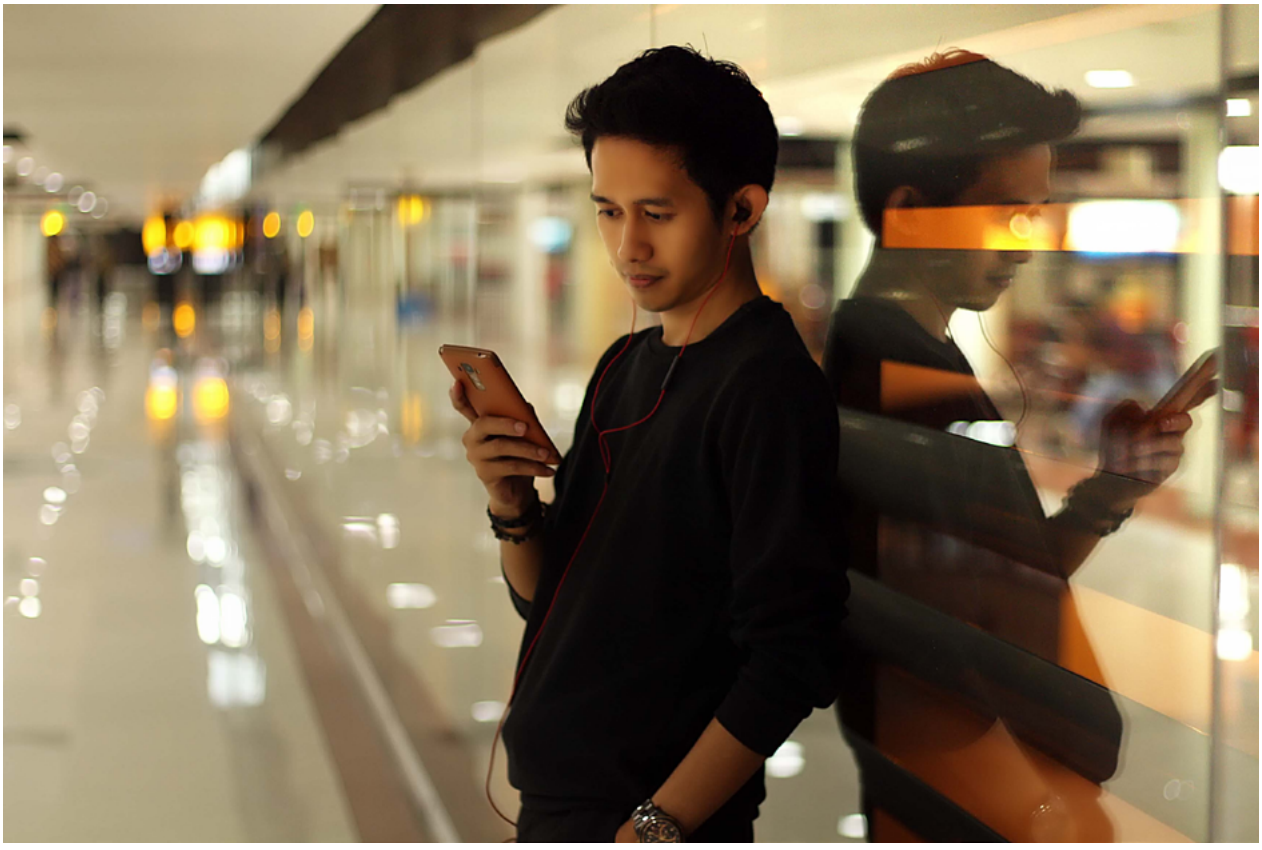
Work in small groups and put together a list of your needs and discuss them in class. What would happen if these ecosystems were put out of commission? How might you be affected?

A day in the life of a student



WHAT ARE YOU DOING?	WHICH SERVICES DOES NATURE PROVIDE?
Eating breakfast	Pollinators, clean water, energy, (solar, wind, oil, biogas) for the stove, arable land
Getting dressed	Clean water, arable land (cotton), pollinators
In the classroom	Energy (lighting, heating, smartboards, etc.), trees (paper)
Surfing on my phone	Energy, minerals for the battery

When you have finished repeat the valuation exercise. Has anything changed?



ACTIVITY

3 / THREATS AND OPPORTUNITIES

Material: The Internet to search for information.

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ■ **Anticipatory competency**
- ☐ Normative competency
- ☐ Critical thinking competency
- ■ **Strategic competency**
- ☐ Collaboration competency
- ☐ Self-awareness competency

PURPOSE

To identify threats to biodiversity in the local environment and think about solutions and the ways in which students can become involved and exert influence.

The five greatest threats to biodiversity are loss of habitat, the overexploitation of species, climate change, invasive species and disease, and pollution. What is the situation in your community and how can you help improve biodiversity in your local environment?

Start small. How are things in your schoolyard and in the environs of your school? How many different species of plants and animals can you find? Are they threatened in any way? Did you find any invasive species? What can you do at school to increase biodiversity there?

Some tips: Don't mow the entire lawn but let some areas grow freely, set up bug hotels, and why not plant bushes for the butterflies to enjoy? Consult the headmaster and caretaker and see if you can do anything to improve your schoolyard.

Encourage students to do something similar in the vicinity of their homes. Is there any room for improvement? And who will they need to contact to start the ball rolling? Can they do something on their own bat, or should they join forces with their neighbours?

CONTINUE WORKING IN THE RUN-UP TO THE CLIMATE COUNCIL:

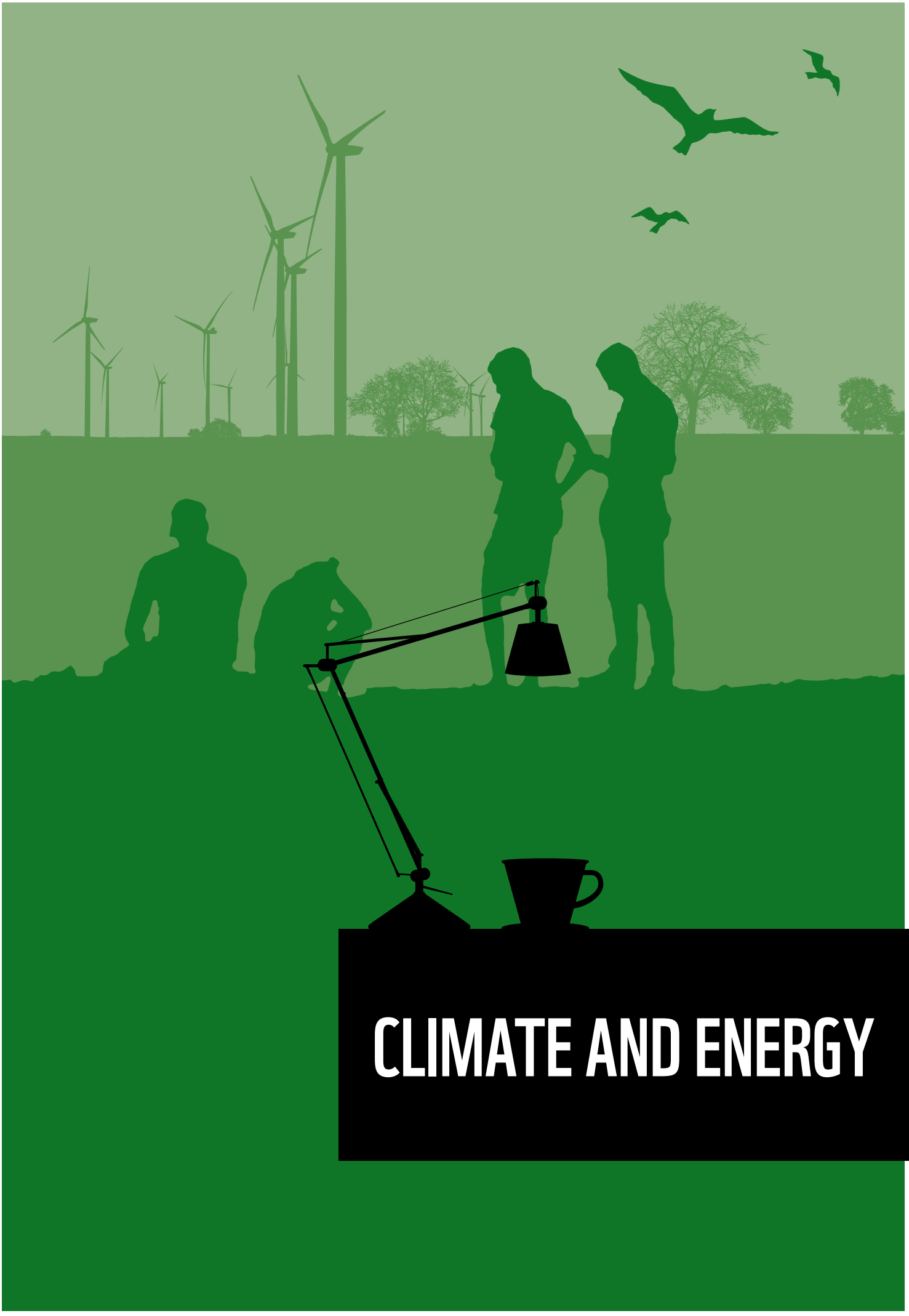
The next step is to find out how things stand locally in your community. What threats to biodiversity can you identify and what projects have been initiated to remedy these? What is the acreage of protected land in your community? How does this stack up compared to the national average and does it correspond to current set goals?

Ask your municipal environmental strategist, or someone else with similar credentials, to come to the school to inform you about what the community is doing. You can also do this virtually online.

Think about the initiatives the community have taken. Is it doing enough? Would you like it to do more and if so, what? Are there any ways you could become involved and help the community?

Let students identify some areas, preferably somewhere the community already has started or plans some type of rebuilding, refurbishment, new construction project, etc. How can these projects be carried out and still leave room for biodiversity? Let the students consider how they would like to bring about change and the decisions that must be taken to this end and what must be done to promote biodiversity in the area. What will the area look like when the project is finished?

The students are now ready to present their visions and ideas to relevant actors in the community on a climate council.



CLIMATE AND ENERGY

CLIMATE AND ENERGY

FIND OUT MORE ABOUT
CLIMATE AND ENERGY

INTRODUCTION AND FACTS

Today most people have heard of Greta Thunberg, Fridays For Future and the struggle of young people to build a better future. These young activists believe that we must listen to the science, take climate change seriously and act immediately. Imagine if we could convince everyone, both young and old, to shoulder responsibility and act together.

We know that in the long run global warming will have catastrophic consequences – melting glaciers, rising sea levels, increased flooding, storms and fires, and a higher frequency of extreme temperatures. The poorest and most vulnerable people on our planet will be the hardest hit, due to food insecurity as food production becomes more and more threatened. In addition, vital species, habitats and entire ecosystems are at risk.

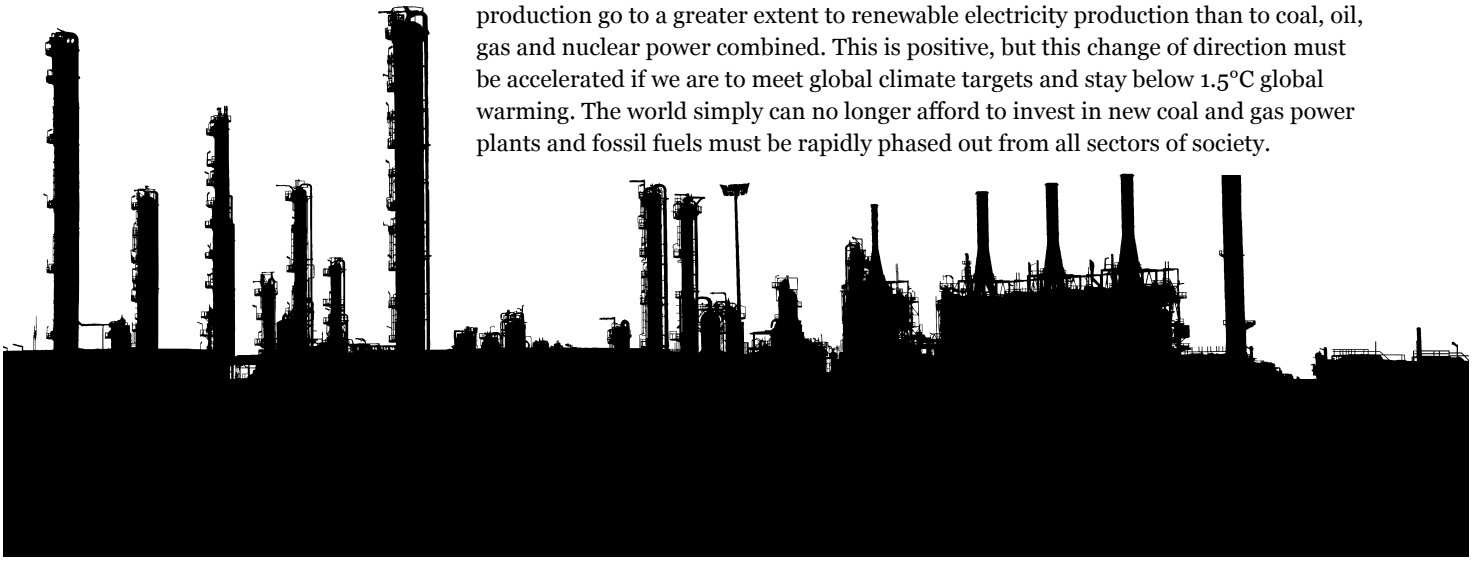
The problem is that it is our way of life that has given rise to the situation we find ourselves in. Humans burn fossil coal, oil and gas to satisfy their needs and desires.

The temperature increase we are seeing today is the result of historical emissions. To date we have only experienced a small amount of the warming that the intensified greenhouse effect of the 20th century will provoke.

Global warming implies much more than just a few degrees rise in temperature. Our climate system is complex, and a global average temperature increase leads to changes that will have unprecedented and unforeseen consequences. The rich part of the world is behind most of the emissions that affect our climate. The G8 countries (USA, UK, Canada, France, Germany, Italy, Japan, and Russia) previously stood for almost half of global CO_2 emissions, and still account for very large per capita emissions. Over the past twenty years, China has gone from having relatively low emissions to becoming the world's biggest emitter of greenhouse gases per year.

Climate research clearly shows that if we are to reverse this negative trend, we need not only to achieve zero global emissions this century but to achieve negative emissions – i.e., in the future greenhouse gases must also be extracted from the atmosphere in a sustainable way if we are to reach the climate goals the world has agreed upon.

Today we see a global and historically unique trend: New investments in power production go to a greater extent to renewable electricity production than to coal, oil, gas and nuclear power combined. This is positive, but this change of direction must be accelerated if we are to meet global climate targets and stay below 1.5°C global warming. The world simply can no longer afford to invest in new coal and gas power plants and fossil fuels must be rapidly phased out from all sectors of society.



TERMS

RENEWABLE ENERGY SOURCES: Renewable energy is not based on finite resources, nor does it contribute to global warming. Renewable energy sources include, e.g., solar, wind and hydropower.

▶ **Find out more**

ENHANCED GREENHOUSE EFFECT: The enhanced greenhouse effect is additional to the natural greenhouse effect and is due to human activities changing the composition of the atmosphere thus disrupting the climate system.

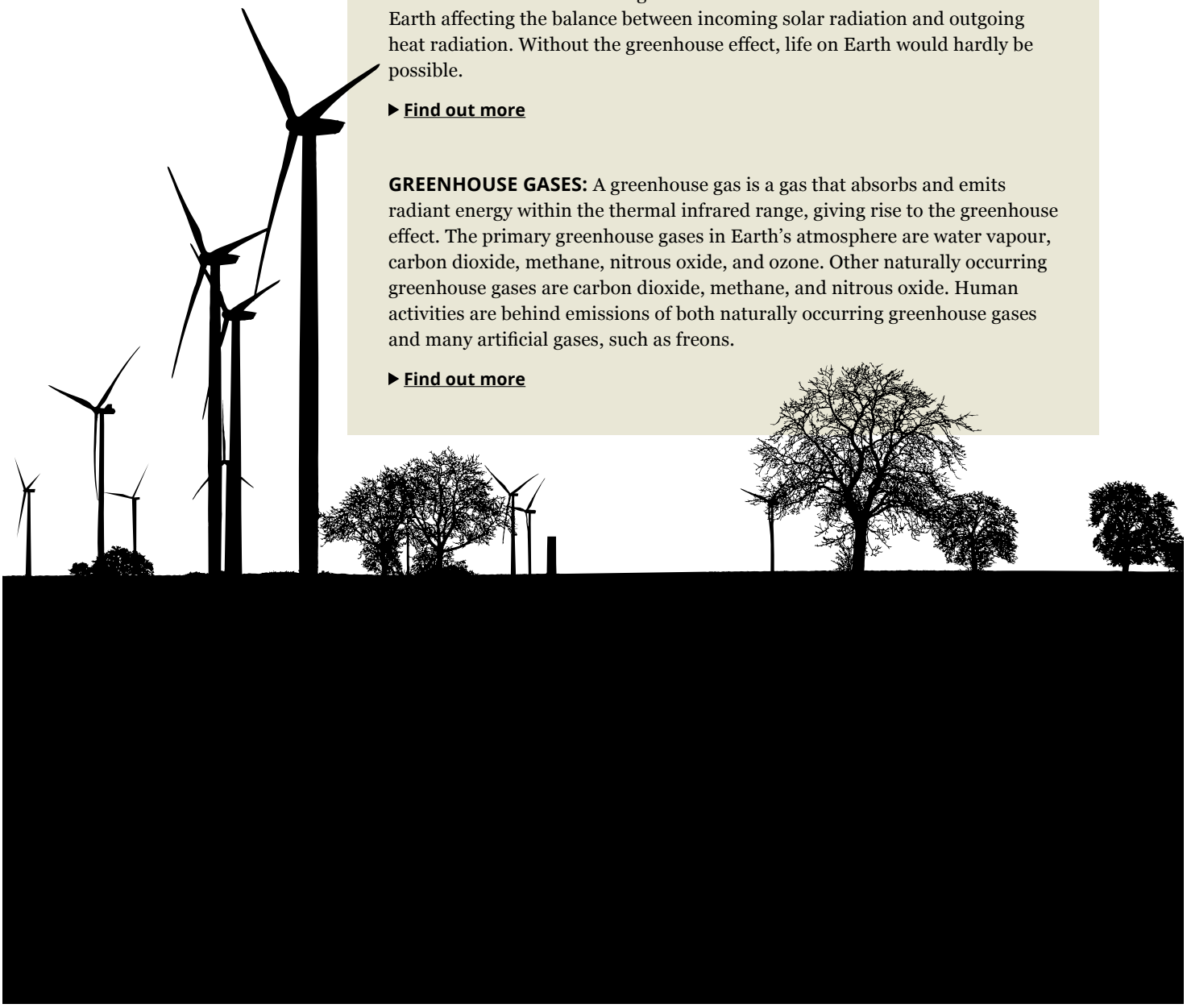
▶ **Find out more**

GREENHOUSE EFFECT: The greenhouse effect is a fundamental feature of the Earth affecting the balance between incoming solar radiation and outgoing heat radiation. Without the greenhouse effect, life on Earth would hardly be possible.

▶ **Find out more**

GREENHOUSE GASES: A greenhouse gas is a gas that absorbs and emits radiant energy within the thermal infrared range, giving rise to the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone. Other naturally occurring greenhouse gases are carbon dioxide, methane, and nitrous oxide. Human activities are behind emissions of both naturally occurring greenhouse gases and many artificial gases, such as freons.

▶ **Find out more**



ACTIVITIES/ CLIMATE AND ENERGY

Three activities linked to energy and climate are presented below. These are tips on what you can do together with your students to increase their understanding of how human activities affect the climate. After the final activity, you will find tips on more things you can do in the run-up to the climate council to involve students in authentic processes in your community. Here is an overview of the activities:

ACTIVITY 1

Our need for energy

What do we really need and what is the difference between need and want? In this activity, students identify the needs people have in the city and think about whether energy is required to meet these needs, and what should be done to reduce energy consumption.

ACTIVITY 2

Become an innovator

Problems related to social, ecological, and economic sustainability are often complex and require innovative solutions. What is good solution for one person may not work for another. Here, students try to think outside the box to find solutions to various challenges linked to climate issues.

ACTIVITY 3

At school – create an energy plan

How can your school cut back on energy needs? Can the school reduce energy use itself or will it have to get help from the city officials. Do other schools face the same challenges? An exercise in finding out what actually requires energy and how to reduce your energy needs and communicating this to relevant actors in the city.

If you have chosen climate and energy as your target area, invite those responsible for dealing with these issues in the community to come and talk to students about their work and the city's climate and energy plans. You can of course do this in a virtual meeting. Showing the nexus between climate and energy issues and the students' immediate environment and daily lives will leverage authentic learning that touches and engages.

ACTIVITY

1 / OUR NEED FOR ENERGY

Material: Pen and paper, alternative computer or tablet

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ☐ Anticipatory competency
- ■ **Normative competency**
- ■ **Critical thinking competency**
- ☐ Strategic competency
- ☐ Collaboration competency
- ■ **Self-awareness competency**

PURPOSE

To clarify that our needs require energy and the connection to renewable and non-renewable resources.

Many of our needs and daily activities require energy but we don't often realize this. And perhaps we think even less about where the energy we use to meet our needs comes from. By thinking about these issues, student understanding and awareness of the difference between needs and wants and of the energy consumption linked to this is increased.

Start by dividing the students into groups and asking them consider the following:

- What does the city require if it is to satisfy the basic survival needs of its inhabitants?
- Do residents have other needs that they want taken into consideration?

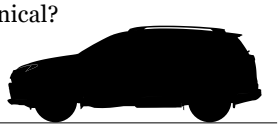
Encourage free thinking.

Each group lists the needs they have identified. Now ask them to prioritize the 3-5 they think are the most important. Maybe some should be seen as wants rather than needs. What is the difference?

Think about whether energy is required to meet these needs.

Compile the groups' needs lists and assemble a common list of the highest priority needs. Continue the discussion with the whole class assembled. Highlight the needs that require energy and think about the following:

- Were any of the priority needs dependent on energy?
- Were more or fewer of the needs you identified dependent on energy than you thought?
- What needs are most important if our energy resources are to be adequate in the future? What needs are today met with renewable rather than non-renewable energy?
- Can you see any opportunities for reducing energy use?
- How might changes in consumption patterns or lifestyles affect energy use?
- Where is innovation needed – should it be social or technical?
- What conflicts might there be?



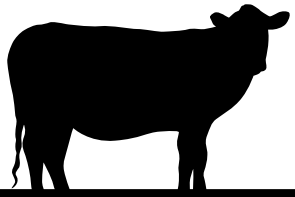
An example needs list:

NEED	IS ENERGY NEEDED?	RENEWABLE/NON-RENEWABLE	SUGGESTIONS FOR IMPROVEMENT
Food	Yes	Diesel is needed for the tractor.	Urban farming. Less food wastage.
Cars/ transport	Yes	Yes and no. Petrol versus electric car. Where does the electricity come from? The battery?	More electric cars, more public transport.
Homes	Yes	Depends on whether you have "dirty" or "green" electricity. District heating. Solar panels. Geothermal heating.	Smaller homes. More solar panels.
Purchasing	Yes	Where do clothes come from? Transport? Production?	Shop second hand and eco-labelled. Shop more as needed and less as wanted.

ACTIVITY

2 / BECOME AN INNOVATOR

Material: Internet, material for presentations



KEY COMPETENCES FOR SUSTAINABILITY:

- ■ **Systems thinking competency**
- ■ **Anticipatory competency**
- ☐ Normative competency
- ☐ Critical thinking competency
- ☐ Strategic competency
- ■ **Collaboration competency**
- ☐ Self-awareness competency

PURPOSE

To discover the complexity of sustainability issues and the need for innovative ideas and solutions.

Many of the sustainability challenges have inherent conflicts embedded in them and run into difficulties of various kinds, so-called “wicked” problems. Simply put, these are problems that are difficult to resolve because there is no one-size-fits-all solution: “If we stop eating meat in an attempt to reduce our climate emissions, how will this impact farmer incomes and open landscapes?”

In the future we will need innovative ideas to tackle difficult challenges.
Let students be innovative and creative in thinking about solutions to different climate challenges.

Divide the students into smaller groups and let each group address an area relevant to climate issues. Here are some suggestions:

- Clothing/gadget consumption
- Food consumption
- Transport
- Water
- Energy

Each group should formulate a problem/climate challenge within the area they have chosen. For example, “It takes a lot of water to produce cotton and many countries that grow cotton have dry climates.”

The group’s task now is to find a solution to this problem and present it to the rest of the class. The presentation can be in the form of a film, a model, a lecture, or something else. Here too, innovation is encouraged. Challenge students to learn new things and ask critical questions. Encourage them to think freely about the solutions they propose but insist that they motivate their choices and thoughts.

ACTIVITY

3 / AT THE SCHOOL – CREATE AN ENERGY PLAN

Material: Pen and paper, alternative computer or tablet, Internet for any research that might be required.

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ■ **Anticipatory competency**
- ☐ Normative competency
- ☐ Critical thinking competency
- ■ **Strategic competency**
- ■ **Collaboration competency**
- ☐ Self-awareness competency

AIM

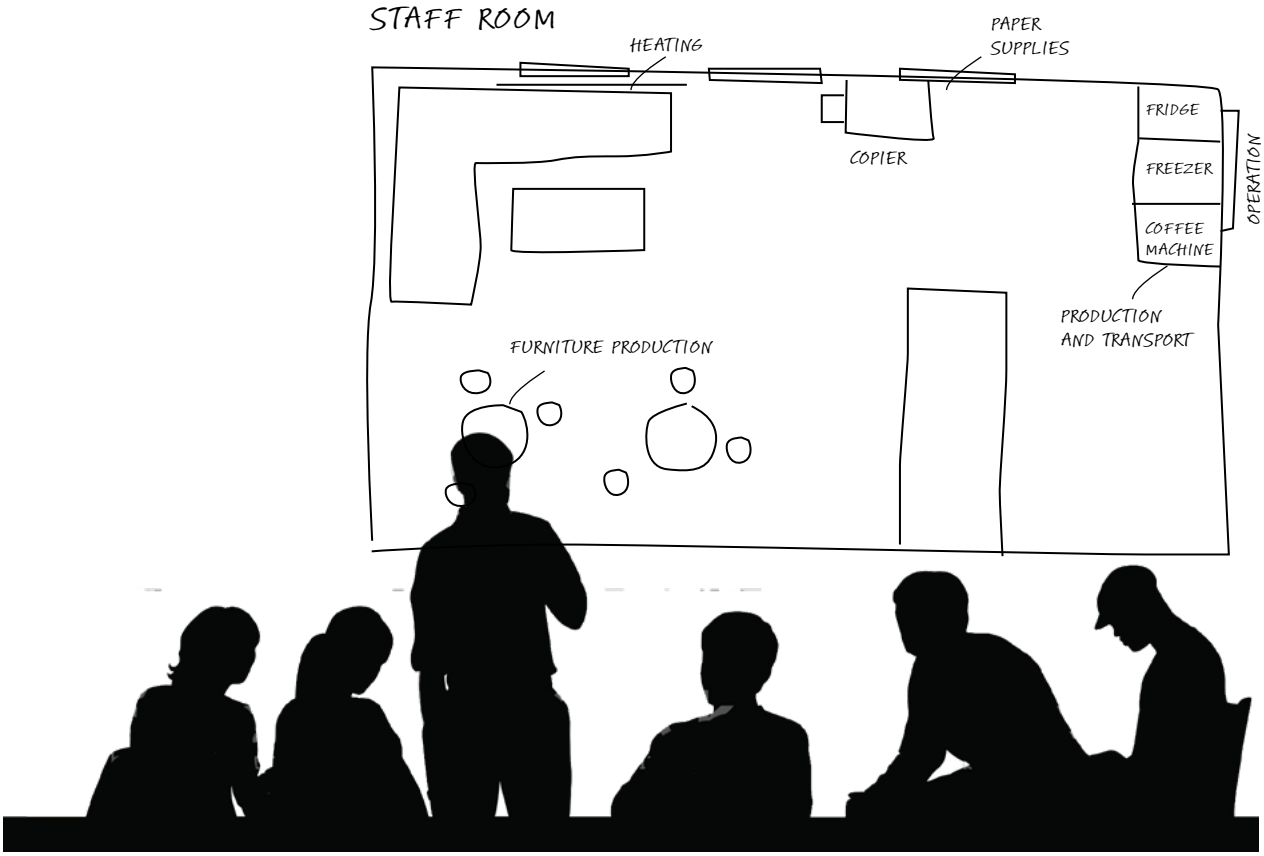
To become more aware of and help reduce energy use at the school.

Many things at school consume a lot of energy: lighting, heating and air-conditioning, school kitchens, computers etc. In addition to these visible energy guzzlers, schools also consume energy in ways that are not quite so obvious. It takes energy to produce furniture, teaching materials and food, footballs and skipping ropes.

Find out how energy efficient your school is by carrying out an environmental inventory.

Divide students into groups and let each group examine part of the school.
Let them start by making a drawing over their field of investigation. When they have done this, let them survey the result. What have they discovered that needs energy? And how could the energy demand be reduced?

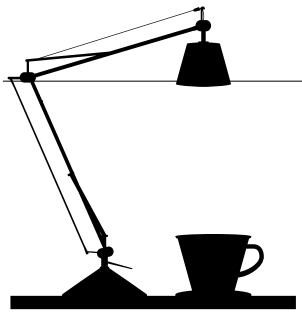
Students map their energy-intensive finds and the ways in which these require energy.



Back in the classroom, students discuss their finds and try to come up with ideas for reducing energy consumption. Think about which measures are relatively easy to implement and those which may require a decision by city officials.

Reducing energy consumption

ENERGY NEEDS IN THE STAFF ROOM	SUGGESTIONS FOR IMPROVEMENT	EASY/HARD
Heating/radiators	Move the sofas so they do not block heat circulation. Set up solar cells.	Easy. Move the furniture. Hard.
Furniture	Repair if broken instead of buying new. Buy second hand.	Easy. Could be difficult to purchase second-hand if this is precluded by procurement regulation.
Copier	Turn off on evenings and weekends. Always put in standby mode. Copy only what is necessary.	Easy. Easy. Easy.
Fridge and freezer	Remove fridge (not in use).	Easy.
Coffee machine	Do not waste any coffee. Buy organic coffee.	Easy. Could be difficult if contradicts city policy or expensive.



Create a joint improvement plan with the aim of reducing school energy needs. Present this to the environmental club, school management, etc. Focus on the things the school can decide for itself. Let students continuously follow up and suggest further improvements to school efforts to reduce energy use.

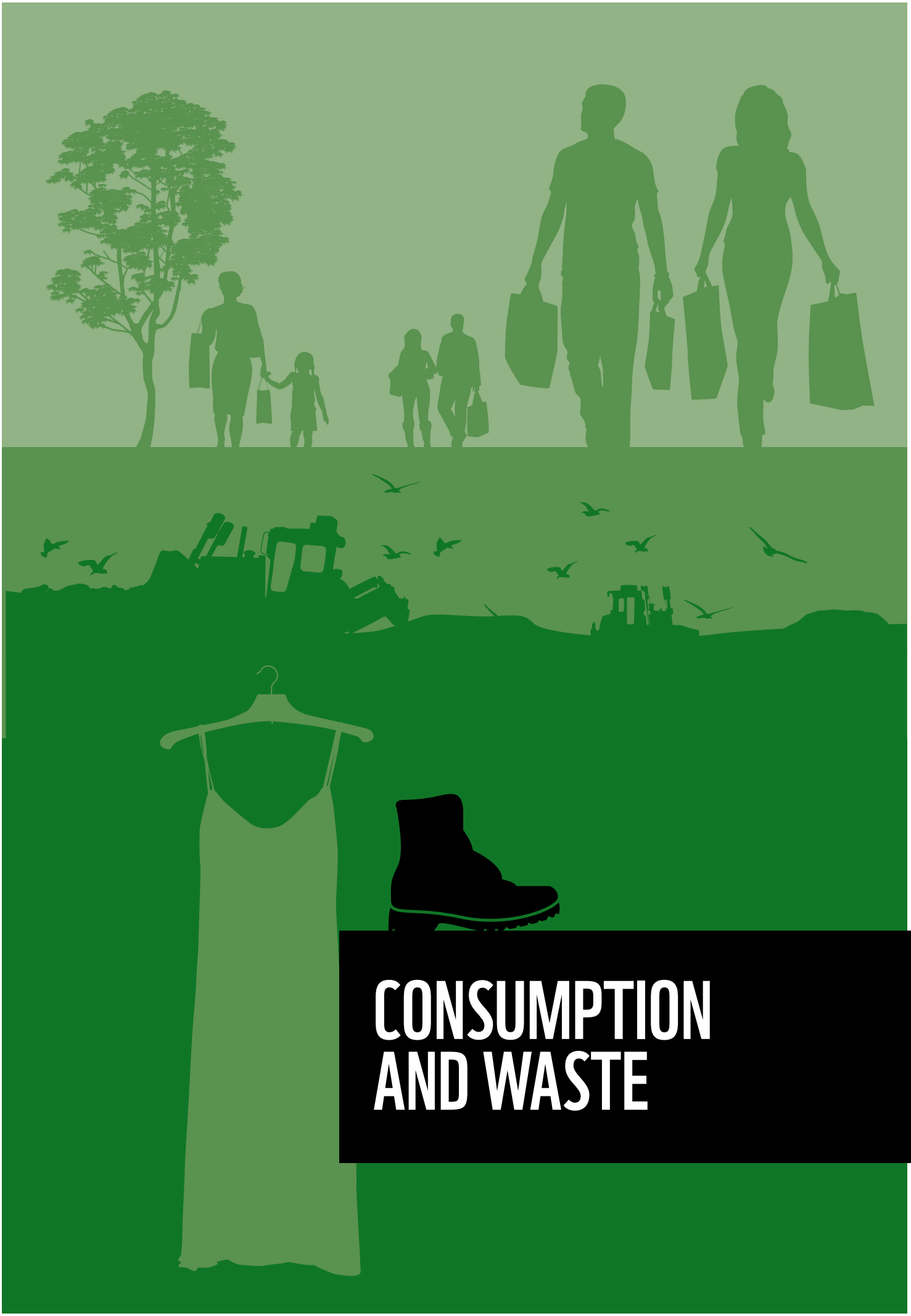
CONTINUE WORKING IN THE RUN-UP TO THE CLIMATE COUNCIL:

Let the students present their improvement plan to those responsible in the city. Either the person in charge is invited to visit the class or students can pay a visit to the town hall – you can also set up a digital meeting. How can local government help with aspects individual schools have no say on?

Talk to other schools in the community. Maybe there are others looking to implement the same improvements which may make it easier to persuade decision makers to act.

What does the city energy plan look like? Let the students make an inventory and propose an improvement plan for a district in the community, preferably somewhere the city already has some type of rebuilding, refurbishment, new construction projects underway, or plans to start these in the future. What do they think should be done to make the area climate-smart <e and for it to satisfy its energy needs sustainably? What decisions must be taken for this to succeed? What will the area look like when it's finished?

The students are now ready to present their visions and ideas to relevant actors in the community on a climate council.



CONSUMPTION AND WASTE

CONSUMPTION AND WASTE

INTRODUCTION AND FACTS

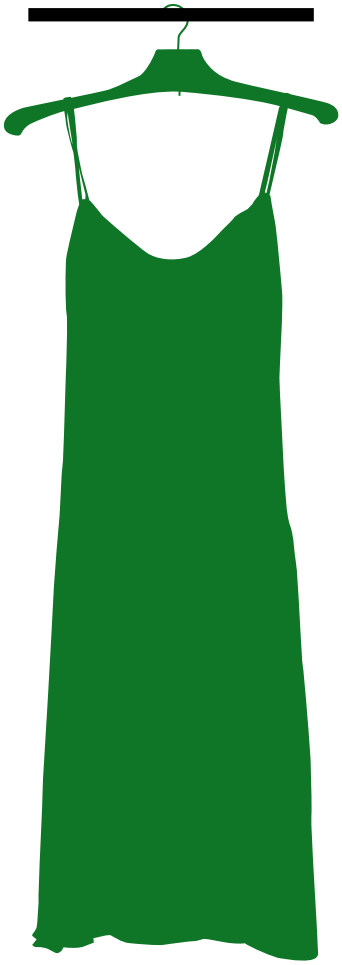
Today's lifestyles, especially in the rich countries, are characterized by an over-consumption that leads to an ever-increasing pressure on natural resources. We consume more than the planet can handle, and we throw away far too much and then just buy new stuff. The food we eat, the clothes we wear, everything we produce impacts the world's forests, oceans, streams, land, air, animals, and plants. The more we produce and consume, the more everything living around us is affected, and when nature and ecosystems suffer there are also serious consequences for humans.

Over the past 50 years, our ecological footprint has grown exponentially. The ecological footprint is a measure of the amount of biologically productive surface area required to produce everything we consume and to absorb the waste we generate.

Something must be done. We are constantly borrowing from our future. Today, the average person lives as if they had 1.7 planets at their disposal. The overloading of ecosystems leads to reduced fish stocks, deforestation, drought, water scarcity and soil erosion – as well as loss of biodiversity and increased carbon dioxide content in the atmosphere with an enhanced greenhouse effect and climate change as a result.

Every day we are inundated with information and advertisements for sustainable consumption, organic clothing, green alternatives. How do you know you're doing the right thing? Which is better: to buy a locally produced product, an organic product or second hand? Our consumption is intimately linked to international trade. The consumption of many of the richer countries consists largely of products manufactured in other countries, which means that we contribute to emissions in other places and to other risks such as poor working conditions, lack of respect for human rights, the overexploitation of nature and so on – far beyond our own national borders.

READ MORE ABOUT
ECOLOGICAL FOOTPRINTS



An example: Europeans use nearly 26 kilos of textiles and discard about 11 kilos every year (News European Parliament). In addition, one third of all food produced is wasted – either being lost in the supply chain or thrown away. (panda.org)
But tackling this is of course not as easy as all of us starting to think more about our consumption, buying second hand, eating leftovers, and sorting our rubbish at source. To reduce our ecological footprint, we need to switch to a fossil-free economy, greatly reduce food waste and meat consumption, and consume more sustainably across the board. We need to close the loop and one way to do this is to think circularly. Simply put, this means we should always attempt to adhere to the following sequence: create – use – reuse. The term circular economy implies that resources already produced are reused, the exploitation of raw materials is inhibited, and less waste is generated, while at the same time the economic value of products are preserved.

Creating a more sustainable system will require major changes at both the production and consumption stages. We must have the courage to make demands on producers, traders, and politicians.

TERMS:

CIRCULAR ECONOMY: In a circular economy, societal resources are retained in closed loops instead of being discarded as waste. By reusing and recycling products, materials, and resources, we can preserve their economic value. At the same time, we can cut back on the extraction of new raw materials and the generation of waste and residual products. We must move from a linear to a circular economy.

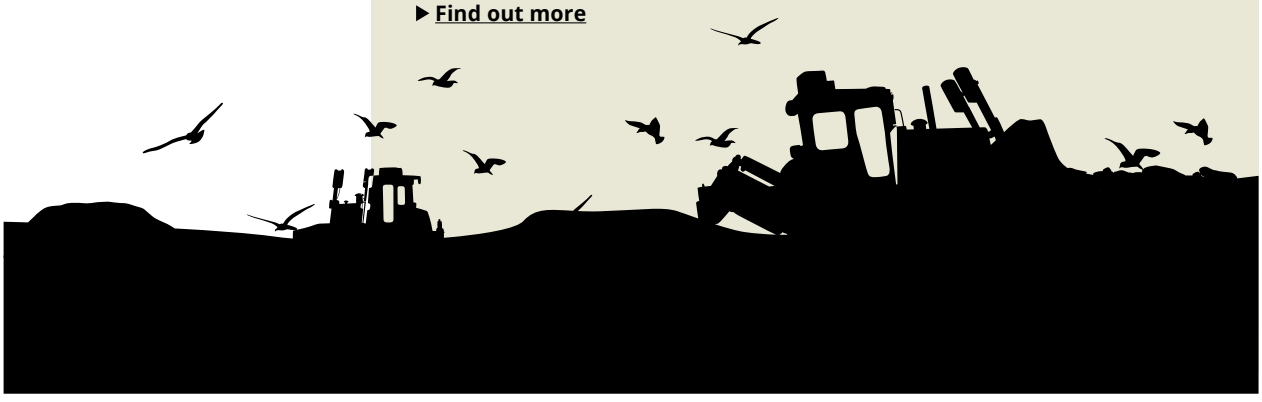
▶ **Find out more**

ECOLOGICAL FOOTPRINT: The biologically productive area required to satisfy human consumption of renewable resources over a period of one year – and to absorb the waste generated.

▶ **Find out more**

ENHANCED GREENHOUSE EFFECT: The enhanced greenhouse effect is additional to the natural greenhouse effect and is due to human activity changing the composition of the atmosphere, thus disrupting the climate system.

▶ **Find out more**



ACTIVITIES/ CONSUMPTION, AND WASTE

Here are three activities linked to consumption and waste. These are tips on what you can do to increase student knowledge and awareness of how our consumption affects the Earth's resources. After the final activity, you will find tips on more things you can do in the run-up to the climate council to involve students in authentic processes in your community. Here is an overview of the activities:

ACTIVITY 1

Consumption hierarchy

Do you really need to buy new or are there other options? In this exercise, students ponder alternatives to buying new. What are the advantages and disadvantages of borrowing, repairing what is broken or buying used – both for themselves and for sustainable development?

ACTIVITY 2

Green jeans – Influencing the environment while shopping for clothes

Everyone likes buying something new to wear. Why not treat yourself to a pair of new jeans? But what impact does what I buy have on the environment? Does it matter if I buy eco-labelled or not? And do we really need everything we buy? Here, students explore different consumption habits and reflect over how these might impact the planet.

ACTIVITY 3

Municipal waste management

In this exercise, students look at both how the school handles its waste and at municipal waste management practices. What should be improved if we want to reduce the amount of waste?

If you choose consumption and waste as your target area, invite those responsible for dealing with these issues in the community to come and talk to students about their work and what exactly they are doing to reduce your ecological footprint. This can also be done in a digital meeting. Showing linkages to the students' immediate environment and daily lives leverages authentic learning that touches and engages.

ACTIVITY

1 / THE CONSUMPTION HIERARCHY

Material: Illustration of the consumption hierarchy, paper, pen; conceivably a shared digital document.

KEY COMPETENCES FOR SUSTAINABILITY:

- ■ **Systems thinking competency**
- ☐ Anticipatory competency
- ■ **Normative competency**
- ■ **Critical thinking competency**
- ☐ Strategic competency
- ☐ Collaboration competency
- ■ **Self-awareness competency**

PURPOSE

To encourage students to think about alternatives to consumption, their advantages and disadvantages and the significance the different levels have in the quest for social, economic, and ecological sustainable development.

Do you have to buy new when something breaks or when you, for example, discover that you need a bicycle? Sometimes you may have to, but there are often alternatives. Here the students weigh different choices – their advantages and disadvantages.

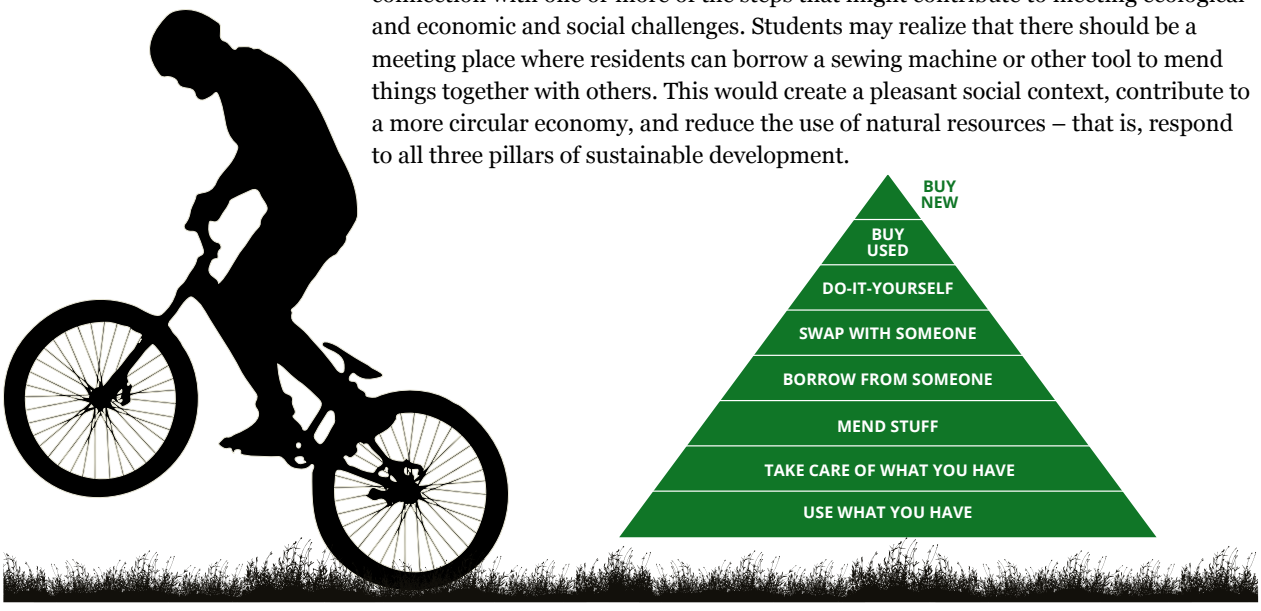
Divide the class into groups of approx. four students and let them discuss this illustration of the different steps in the consumption hierarchy, what are the advantages and disadvantages of the different alternatives? Half the class should attempt to identify the advantages of each alternative and the other half the disadvantages. All three perspectives of sustainable development – ecological, social, and economic – must be taken into consideration.

Ask each group to write down the pros and cons they come up with at each level of the consumption hierarchy. You can enter these in a shared digital document so that all groups can share each other's thoughts.

After a while, the groups should switch tasks, those trying to identify advantages should think about disadvantages and vice versa. Are there any advantages or disadvantages that the other groups have missed? Add these to the notes. In this way, the class is helped to inventory thoughts and perspectives, and you as a teacher get an idea of where you need to challenge their thoughts, and the knowledge gaps that need to be filled.

The next stage will be to think about whether there is something you can do in connection with one or more of the steps that might contribute to meeting ecological and economic and social challenges. Students may realize that there should be a meeting place where residents can borrow a sewing machine or other tool to mend things together with others. This would create a pleasant social context, contribute to a more circular economy, and reduce the use of natural resources – that is, respond to all three pillars of sustainable development.

! AN ILLUSTRATION OF THE CONSUMPTION HIERARCHY SUITABLE FOR PRINTING CAN BE FOUND IN THE RESOURCE LIBRARY



ACTIVITY

2/ GREEN JEANS – INFLUENCING THE ENVIRONMENT WHILE SHOPPING FOR CLOTHES

Material: Paper and pen, access to the Internet

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ☐ Anticipatory competency
- ☐ Normative competency
- ☐ Critical thinking competency
- ☐ Strategic competency
- ■ **Collaboration competency**
- ☐ Self-awareness competency

AIM

To investigate and learn more about eco-labelled clothing and how the choice of clothing affects the environment.

Everything that is produced and consumed requires resources and affects the planet in one way or another. Here, students survey buying habits and learn more about eco-labelling and how the choice of clothes impacts the environment.

Begin by letting students search for information on sustainable clothing consumption.Divide the class into smaller groups and task them with conducting a survey over the buying habits of a defined target group, for example a class at school or the group's own families. Let the groups discuss what questions they should ask in their survey. Each group should put about five questions to interviewees. Here are some examples:

- How many pairs of jeans / trousers do you buy per year?
- How much do you usually pay for them?
- Do you know where the jeans were made?
- Do you normally ask the store questions about where and by whom the jeans are made?
- Do you know what organic cotton is?
- Do you know of any eco-labels for clothes?
- Would you rather buy eco-labelled jeans than a regular pair, even though they may be more expensive? Why/why not?

In addition, you should discuss alternative answers and ways in which these can be made comparable, e.g., by allowing respondents to rank their answers on a scale from one to five. Encourage students to report answers anonymously. Also ask students to assure respondents that their names will not be mentioned in presentations.

Let the groups compile their answers using diagrams or by calculating how the respondents answered in percentages.

What thoughts did the survey give rise to? Would the students like to continue working on consumption issues? How could they do this?

ACTIVITY

3 / WASTE MANAGEMENT IN THE MUNICIPALITY

Material: Access to the Internet.

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ■ **Anticipatory competency**
- ☐ Normative competency
- ☐ Critical thinking competency
- ■ **Strategic competency**
- ☐ Collaboration competency
- ☐ Self-awareness competency

AIM

To learn more about municipal waste management practices.

Every year the world generates 2.01 billion tonnes of municipal solid waste (source: World Bank). How is this, and all other waste flows, dealt with? Of course, there are laws and regulations to address this. In this exercise, students examine the school's waste management strategies and waste management practices in your community.

Start by having students look closer at the school's waste management. Is source sorting possible in classrooms? Is biological waste sorted in staff areas? Where does food waste from the school cafeteria end up? Who makes sure that the school´s waste is sorted correctly?

Then let the students work in groups to find out more about the municipal waste plan and who is responsible for it. Try to find out what ambitions the municipality has for the future by interviewing people who work with waste as well as various decision-makers.

Ask students to formulate interview questions, e.g.:

- Into which fractions is waste sorted in the community?
- How are sorted and unsorted waste streams handled in the community?
- In what way does the community strive to promote waste sorting and recycling and reduce waste flows?
- What measures has the community taken to reduce food waste?

Discuss the answers together and think about what could be improved. Start by looking at the school's waste management strategies. Could you do something to make these better? Maybe more sorting stations are needed or perhaps more information and knowledge about why we need to take care of our waste. What about forgotten clothes? Why not arrange a jumble sale to sell the clothes that have been left behind at school? Are there other ways you can help improve school waste management and reduce waste?

CONTINUE WORKING IN THE RUN-UP TO THE CLIMATE COUNCIL:

Examine your interview answers from the previous exercise in the light of another municipality's waste management strategies. What similarities or differences do you see? Do you think that waste management practices function well or badly in your municipality? Let students compose a report or debate article and publish in the appropriate media. Encourage them to include their thoughts around the municipality's waste plan.

What do they think is the best practice waste management strategy the community should adopt? What decisions must be made and what must be done for this to become reality? For example, could the community increase the reuse of discarded goods by making provisions for someone else to benefit from them?

The students are now ready to present their visions and ideas to relevant actors in the community on a climate council.

FOOD

FOOD

READ MORE ABOUT
FOOD AND AGRICULTURE

EXERCISES ABOUT
ECOSYSTEM SERVICES

INTRODUCTION AND FACTS

The agricultural revolutions of the past have allowed us to feed more people, but this has come at the expense of forests, grasslands, wildlife, water, and a stable climate. With the global population projected to increase by over 2 billion by 2050, expansion and intensification of food production will place our planet under even greater strain. A business-as-usual food system potentially risks irreversible impacts on the planet, making it an increasingly inhospitable place for humans and wildlife. It is essential that multiple stakeholders, including local communities, companies, and governments, come together to take integrated planning approaches. Sustainable production must be seen as an integral part of resilient landscape planning, something which can enhance nature rather than inhibit it.

The Earth's resources are not infinite, but if we use them wisely they are enough for the essential needs of everyone living on the planet. Today, however, our consumption and the distribution of the Earth's resources are unsustainable. Food is a key part of the sustainability puzzle and accounts for as much as 25 per cent of our global greenhouse gas emissions. These take place along the entire chain, from production until the food is eaten, and even when it is discarded. Food production causes greenhouse gases to be released into the atmosphere, through the cultivation of the soil, because food production frequently utilizes fossil energy and since ruminants give rise to considerable methane gas emissions. Emissions of greenhouse gases may also be caused by food processing, fossil-fuelled transports to wholesalers and shops, and finally, households use of energy to get to shops, and to store and prepare food. Emissions of greenhouse gases occur at all stages along the food chain.

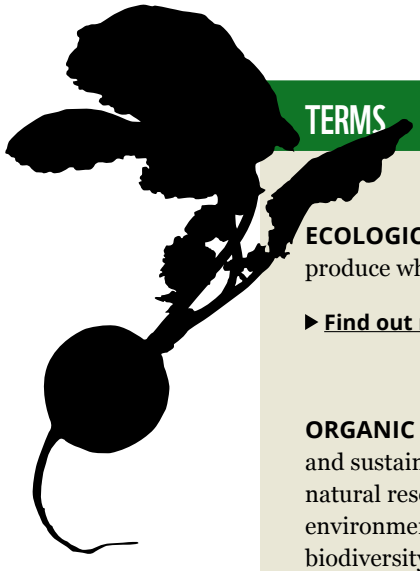
But it is not only the climate that is affected by our food choices – biodiversity is also impacted by the way in which we produce our food. Humankind is dependent on nature and the so-called ecosystem services. These are outputs, conditions, or processes of natural systems that directly or indirectly benefit humans or enhance social welfare, such as wild fish, pollinating insects, water purification, natural pest control and the formation of fertile soil.

Plants, animals, and microorganisms perform a myriad of tasks on which we depend for our survival and wellbeing. Many of these ecosystem services are impossible to replace with technology. Ecological footprints and ecosystem services are linked. Therefore, it is very important where the cultivation and production of our food takes place and the way in which it is carried out – food production must not deplete biodiversity or contribute to the extinction of species.

To reduce our impact, great efforts are required in many areas. One way to exert influence is to be a well-informed consumer – one who insists that food is produced sustainably. Giving clear signals to producers, growers and processors is a good step towards a sustainable food chain.

Maintaining sustainable development in the long run necessitates parallel and coordinated efforts directed towards the environment, ethical considerations, animal care and social welfare.

Creating a more sustainable system will require major changes at both the production and consumption stages. We must have the courage to make demands on producers, traders, and politicians.



TERMS

ECOLOGICAL FOOTPRINT: The biologically productive area required to produce what we consume and absorb the waste this generates.

▶ **Find out more**

ORGANIC FARMING: This refers to producing food in a long-term and sustainable way – from farm to fork. To do this, you need to use natural resources such as soil, energy and water in ways that impact the environment as little as possible. Organic production must also support biodiversity and safeguard animal welfare.

▶ **Find out more**

ECOSYSTEM SERVICES: Ecosystem services are the many and varied benefits to humans provided by the natural environment and from healthy ecosystems, e.g., the pollination of crops, natural water regulation and human mental and physical wellbeing.

▶ **Find out more**

GREENHOUSE GASES A greenhouse gas is a gas that absorbs and emits radiant energy within the thermal infrared range, giving rise to the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone. Human activity is behind emissions of both naturally occurring greenhouse gases and many artificial gases, such as freons.

▶ **Find out more**

ACTIVITIES/ FOOD

Three activities linked to food and sustainability are presented below. They include tips on things you can do to increase student understanding and awareness of the impact of food production on the climate and environment. After the final activity, you will find tips on more things you can do in the run-up to the climate council to involve students in authentic processes in your community. Here is an overview of the activities:

ACTIVITY 1

My thoughts around food – a valuation exercise

This exercise will encourage students to start thinking about food and its relation to the climate and environment. What are their innermost thoughts here? Can be used as an introduction to the food and sustainability area but also to pause and reflect as work with the project progresses. You can do this exercise when you begin addressing this area and repeat it when you have completed the other exercises. This will let the students discover if they have changed their minds about anything along the way.

ACTIVITY 2

Ecological footprints on the plate

An exercise that shows how large the ecological footprint of different meals or ingredients is and how complex an issue this is. How do you know what is good or bad? Students are encouraged to think about and discuss food issues that affect the environment and climate: How are peas grown? How far has the food been transported? What is the difference between potatoes and rice in terms of climate impact? How are steaks produced? What conditions are the farmers working under? Is fishing sustainable? And so on.

ACTIVITY 3

Sustainable school food

Students examine the food served at the school cafeteria. By finding out the facts, visiting and interviewing people who work there, they learn about today's situation. Ask them to reflect and communicate their thoughts around what needs to be changed and improved.

If you choose Food and sustainability as your target area, invite the staff at the school cafeteria, municipal meal services or others who work with food to come and talk to the students. This can, of course, also be done in a digital meeting. Maybe there are farmers or cooks among the students' guardians? Connecting food issues to the students' immediate environment and daily lives will leverage authentic learning that moves and engages.

ACTIVITY

1 / MY THOUGHTS AROUND FOOD – A VALUATION EXERCISE

Material: Chairs (one chair more than the number of students)

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ☐ Anticipatory competency
- ■ **Normative competency**
- ■ **Critical thinking competency**
- ☐ Strategic competency
- ☐ Collaboration competency
- ■ **Self-awareness competency**

AIM

To encourage students to address their own perceptions around food, and to stimulate conversations that deepen student knowledge and their ability to communicate about food issues.

What do I really think? Some things you may not have given much thought to, but you keep on doing what you've always done, or do as your friends do. In this exercise, students are asked to take a position on and discuss a number of assertions about food and the environment. It is important to point out that there are no rights or wrongs here, it's just about personal opinion and experience, and you can change your mind at any point in the exercise.

Put the chairs in a ring. Make sure there is one chair more than the number of students. The students sit and the teacher reads an assertion from the list out loud. Those who agree remain seated, those who don't agree get up and change places. Those who are unsure remain sitting with their arms crossed. The teacher leading the exercise sits on the same chair in the ring throughout.

After each assertion, you can ask if there are any students who would like to defend their choices. It is important, however, that this is voluntary. Continue with the assertions one after the other. Make sure there is adequate time for reflection and discussion after each assertion has been read aloud.

Suggested assertions:

The students will need time to think about where they stand. Make sure they have ample opportunity to reflect before asking them to decide. Do not miss the opportunity to hold preliminary discussions in the whole group. Feel free to formulate your own assertions that could stimulate discussion.

- Consumers have power.
- If you cannot afford organic chocolate, you shouldn't be buying chocolate at all.
- Organic, imported vegetables are better than conventionally grown and locally produced.
- Food is much too cheap.
- It is just as important that a pig is treated well as a dog is.
- It shouldn't be possible to buy vegetables that are off season.
- People in rich countries eat too much meat.
- It is better for local farmers to produce the food those of us living in the country consume than for foreign farmers to do this.
- It is better for the farmers in our country to sell their produce here than for them to export it.
- I impact the climate through the food I choose to eat.
- Not everyone can afford to buy nourishing food.
- A meat tax would be a good tool for reducing meat consumption.

ACTIVITY

2 / ECOLOGICAL FOOTPRINTS ON THE PLATE

**Material: Images of individual meals, ingredients, etc.
Something to visualize gradation, e.g., a length of string.**

KEY COMPETENCES FOR SUSTAINABILITY:

- ■ **Systems thinking competency**
- ☐ Anticipatory competency
- ■ **Normative competency**
- ■ **Critical thinking competency**
- ☐ Strategic competency
- ■ **Collaboration competency**
- ☐ Self-awareness competency

AIM

To reveal the ecological footprints of what we eat.

Determining which foodstuffs have the biggest ecological footprint is not always easy. By reflecting over this together and looking at the question from different angles, students realize how complex things are, at the same time as their thinking around this is stimulated, and they arrive at a deeper understanding of the impact food has on the environment and climate. Start off with the entire class. Show students an image of a dinner plate. What's on the plate? What resources have been used to get between farm and fork? Is the meal's footprint small or large? Ask them to place it somewhere along the sliding gradation and to explain their reasons for putting it just there, see the illustration below.

SMALL ECOLOGICAL FOOTPRINT — LARGE ECOLOGICAL FOOTPRINT

Will there be any changes if you instead set the endpoints to Unhealthy and Healthy? The students´ opinions will give rise to a thought-provoking discussion. In the end, the class may agree that both meals with shrimp and steak have a large ecological footprint. Now give the students other images to examine, but this time working in pairs or in groups of three. The images can be of different meals, individual ingredients or perhaps a restaurant, grocery store, a field of crops or a rice paddy. The image won't reveal everything. The student group has the interpretative prerogative.

Ask students to insert the images at the appropriate position along a line drawn on the floor or hang them from clothes pegs on a "washing line". Ask some groups to describe the image and give their reasons for putting it where they did. Challenge their thoughts! Why does that meal or those images have big or small footprints? What parameters do they need to take into consideration? Transport, spraying, working conditions, emissions, packaging and so on. What needs to be changed for the image to be placed further to the left on the line?

With WWFs food calculator you can assess the impact food has on the climate yourself.

Round off by once again going through what the term ecological footprint stands for.

IMAGES FOR PRINTING CAN BE FOUND IN THE RESOURCE LIBRARY

ACTIVITY

3 / SCHOOL MEALS ON A SUSTAINABLE PATH

Material: Internet access.

KEY COMPETENCES FOR SUSTAINABILITY:

- ☐ Systems thinking competency
- ■ **Anticipatory competency**
- ☐ Normative competency
- ☐ Critical thinking competency
- ■ **Strategic competency**
- ■ **Collaboration competency**
- ☐ Self-awareness competency

AIM

Develop apply and communicate knowledge about the origin of goods and the impact of different foodstuffs on the environment and climate.

By visiting the school cafeteria and talking to the staff there, students discover how their school contributes to reducing the impact the school's food consumption has on the climate and environment. They are also forced to think about changes and improvements that might reduce the environmental and climate impact of school meals.

Divide the students into smaller groups. Give the groups time to familiarize themselves with the issue and discover facts about the impact of food on the climate and environment before moving on to the next step. What do they need to know if they are to ask relevant questions to the cafeteria staff?

It is also important that students prepare their visits in advance by thinking about what they want to find out. Each group formulates some questions depending on what they already know and what they are interested in knowing more about.

Here are some examples of questions the students could ask:

- How many school meals are served at school each day?
- How much food is thrown away by the students/kitchen?
- Who decides upon the meals the school serves?
- How can students become involved and influence which food is served?
- What do the staff at the school cafeteria know about the origin of the food they are preparing?
- What do the staff do to reduce the environmental and climate impact of school meals?

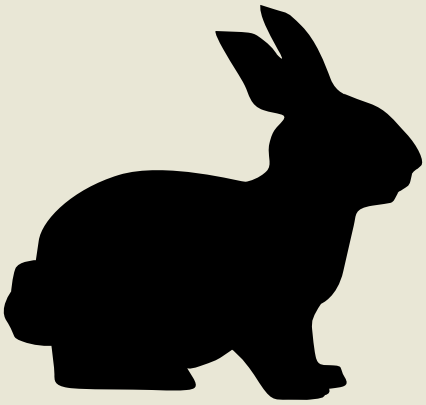
It is impossible for the entire class to talk with cafeteria staff at one and the same time. Let each group contact the staff and agree upon a time that suits both parties. After the visit, students compile what they have found out and the lessons they have learned as well as new questions and thoughts that may have arisen. Let students formulate action plans for how they want to improve school meals. What needs to change to leverage more sustainable meals at your school? Is there a food or sustainability council at your school? If not, it may be time to start one – this can become a forum where students and kitchen staff can find ways to change and develop your school cafeteria and make it more sustainable.

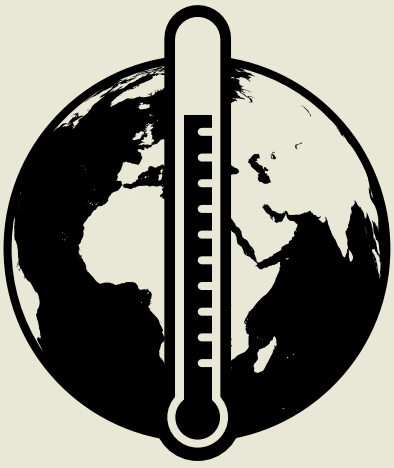
CONTINUE WORKING IN THE RUN-UP TO THE CLIMATE COUNCIL:

The next step is to find out how things stand in your community, at other schools, and in other school cafeterias. Invite relevant stakeholders from the community to a dialogue at your school or set up a digital meeting. Ask them tell you about how they are working to achieve more sustainable food. Think about the stakeholders´ efforts. Are they doing enough? Do you think they could do more and if so, what? How could students become involved in helping the community? Let students imagine a vision of what a sustainable food system might look like. What decisions must be made and what must be done to realize this vision? The students are now ready to present their visions and ideas to relevant actors in the community on a climate council.

RESOURCE LIBRARY

ACTIVITY/ A LIVING PLANET





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OUR MISSION IS TO STOP DEGRADATION OF THE PLANET'S NATURAL ENVIRONMENT AND TO BUILD A FUTURE IN WHICH HUMANS LIVE IN HARMONY WITH NATURE.

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