Why the outdoor movement need to engage in and promote sustainability – a brief review

Svenskt Friluftsliv

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Introduction

Why the outdoor movement need to engage in and promote sustainability in society and within the movement itself is hopefully obvious to most of us: Climate changes and global warming caused by mankind generates major and serious damages to nature, ecosystems and to public health. Without a prosperous and healthy nature and climate, we have no real foundation for outdoor recreation or outdoor sports – the love of our lives! Furthermore, damages and detrimental impacts on nature and climate make life and living more difficult for most people on the planet – and disadvantaged groups and countries face the biggest challenges and risks. In addition, if there are aspects of our movement and activities that is not sustainable today, we risk reduced credibility in the future.

Obviously, the outdoor movement and related organisations are not solely responsible for global warming and emissions of CO2 in the world. We may not have caused more than a tiny, tiny fraction of all the CO2 emissions during our lifetime. On the contrary, one can argue that the outdoor movement and the focus within the movement on access to, and preservation of, nature contribute to a more sustainable world – not only socially, but also economically and environmentally. Of course, outdoor organisations cannot solve all problems related to unsustainability on their own, but together with other actors and stakeholders we have an important role to play to contribute to a solution and progress towards more sustainable, healthy and robust communities and societies in the future.

Outdoor recreation and access to outdoor areas are important pieces of the puzzle in creating a more sustainable society, but the outdoor movement also has challenges to address to reduce the environmental footprint, for example in the case of used materials and products, in activities and events. At the same time, it is important to mention that the outdoor movement already contributes to a more sustainable world, for example by promoting social sustainability, increasing physical activity, reducing social isolation, and by organizing activities and events that can be reached by environmentally- and climate-friendly means of transport.

This review outline research and data on the effects of climate change and the motives for the outdoor movement to introduce and implement measures to limit global warming as much as possible. Additionally, it presents not only the current knowledge base on known climate impacts on health development, well-being and public health but also outlines the future impact on outdoor recreation and nature.

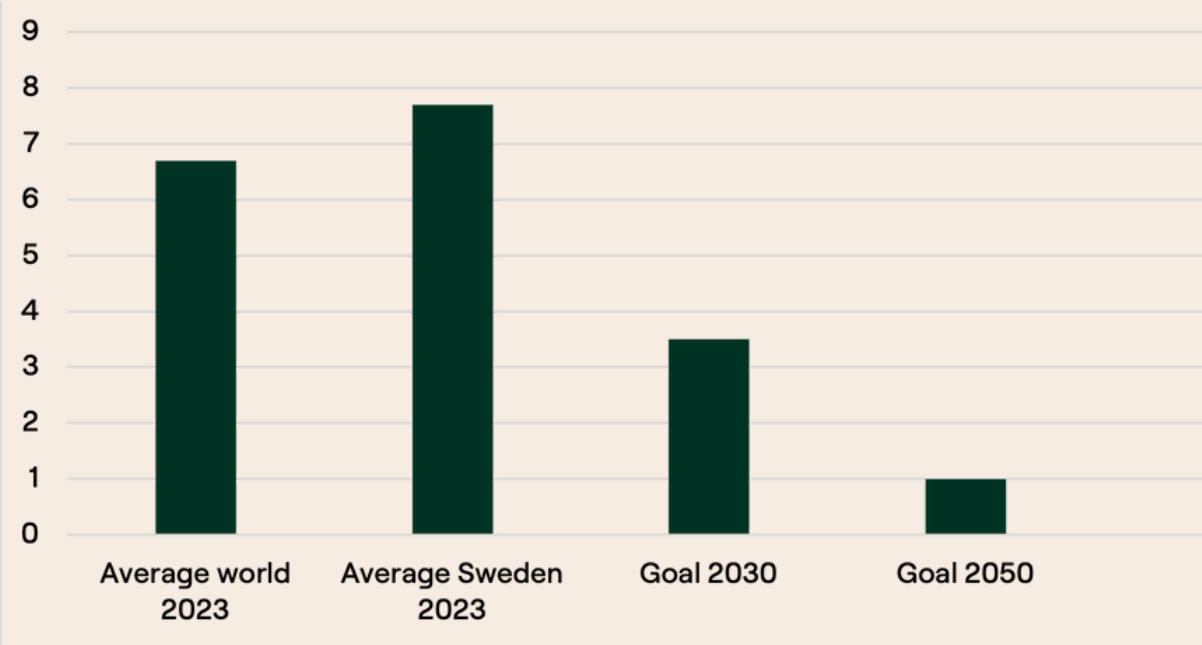
What is the problem?

At the time of writing, nearly all countries on the planet are struggling to fully understand, manage and implement measures for the transformation of society that is urgently needed to prevent a future climate disaster and limit the negative impacts caused by global warming. Research has established beyound any doubt that global warming is caused by the emission of greenhouse gases, mostly CO2. The concentration of CO2 in the atmosphere is the highest ever at 423 ppm and emissions have increased by 6 percent over the past ten years (Dagens Nyheter, 2024). The emissions of greenhouse gases by 2030 will be about 40 percent higher than the highest level “accepted” to limit global warming to only 1.5 degrees compared to before the industrial revolution.

Achieving the Paris Agreement's 2030 goals requires a 50 % reduction of emissions in many European countries, which corresponds to more than 5 per cent reduction per year. Most countries are not even close to achieving this reduction. Sweden, for example, releases well above the average in the world per person and far above the levels required to achieve established goals for 2030 and 2050 – especially if one takes into account the Swedes' emissions abroad due to consumption (emissions in Sweden are called territorial).

The scientific community has clearly stated that technological development, such as more efficient machines, systems and emission capture technologies, will not solve the above problem. Changes in the lifestyles and habits of people, in systems and in organisations at the societal level are needed to reduce emissions and counteract global warming.

Figure 1. Average greenhouse gas emissions per person and year in Sweden and internationally at present, and targets for 2030 and 2050 (tonnes of CO2) respectively in order to reach the Paris Agreement.



Greenhouse gas emissions have dramatic consequences, among other things on rising sea levels and increasing temperatures. New research shows that sea level rise is accelerating faster and is now twice as large as it was 20-30 years ago – 4.7 mm per year compared to 2.14 back then. In terms of global warming, the years 2023-2024 were the warmest on record with a 1.4 degree increase in global average temperature. But some countries have experienced significantly higher rises in temperatures, e.g., Sweden and the other Nordic countries.

The increase in average temperature in Sweden is 1.9 degrees Celsius in the last 100 years according to the Swedish Meteorological and Hydrological Institute (SMHI) – that is, significantly above the world average of 1.4 degrees. In the Swedish mountains, temperature increases have been significantly higher than the global average. Even though the countries of the world have introduced measures to reduce greenhouse gas emissions, the annual average is expected to increase by about 2.5 degrees by the end of the century compared to pre-industrial times. In Sweden the increase will be even higher. In northern Europe the average temperature was as much as 3 degrees warmer in 2022-24 compared to the pre-industrial era.

The link between climate and public health

A warmer climate will not only lead to a sharp increase in the number of heat waves, more air pollution, more and more severe floodings, more floods droughts and so on, but also have serious consequences for individuals' health status and public health of the population. Climate change and weather disasters have increased by 40 per cent in the past 20 years and they are responsible for over 400,000 deaths in the world today (International Red Cross and World Red Cross, 2022). Climate change does not directly cause common diseases, but it facilitates their spread and impair our ability to prevent and treat illness and ill health. This causes enormous costs for communities beyond human suffering and increased risk of social disorder. There is also a good knowledge base on how climate change changes will affect the conditions for outdoor recreation.

It is easy for public health and health issues to be ignored when climate issues are discussed, but health and public health issues may in fact be one of the keys in changing the situation and engage people and groups in the work. Effects of climate on health and public health can be experienced as topics that affect people on a deeper level compared to the effects of climate and pollution on nature. There is a need to include the impact of climate change on public health, societal costs and increased ill health of people in politicians' decision-making processes regarding climate.

There is substantial evidence that climate change affects human health and public health already today, and a warmer climate will worsen the situation even further in the future. These are issues that also concern us involved in the outdoor movement. One can take air pollution as an example: Air pollution is caused by the same factors that cause global warming. Today, approximately 8000 Swedes die prematurely from air pollution every year.

The corresponding number of premature deaths globally is an unimaginable 10 million, which corresponds to 20 percent of all deaths at an annual cost of 4-5 percent of the countries' total GDP. Ambient air quality is an issue that also affects many people in everyday life, e.g., while being outdoors and engaging in outdoor sports.

Examples of climate-related damage that can make it more difficult for outdoor recreation or lower the perceived value of the visit to nature are shown below:

- Increased risk of extreme runoff and soil erosion due to increased precipitation and milder Winters;
- More storm-felled trees due to reduced access to frost during the winter months and more and more powerful storms;
- Increased damage to seedlings and trees due to increasing populations of certain types of game, spruce bark beetle and other harmful organisms;
- Increased prevalence of root rot on trees due to shorter winters and increased rainfall;
- Increased risk of forest fires due to warmer and drier climate
- Damage to roads, gravel roads and reduced accessibility due to warmer and wetter climates and more rain during the Winter;
- More dead trees and plants in nature due to increasing dry periods and a harder crust, which makes it difficult for trees and plants to absorb water during rain;
- More powerful and more heatwaves and increased UV radiation can make it more difficult to be outdoors, especially in summer and especially for vulnerable groups in society;
- Poorer water flow and levels in different types of watercourses due to long periods of drought;
- The tree and shrub line moves upwards in bare mountain environments due to a warmer climate, which reduces accessibility and accessibility for hiking, among others;
- More precipitation in the form of snow and more periods of heavy rain and rain during the Winter increase the number of avalanches and makes it more difficult for wild animals to find food;
- Warmer and rainier climates will make it more difficult for snow and ice-based outdoor activities in almost the whole of Sweden.

Outdoor recreation can also have a negative impact on the natural environment (Andersson, 2022). Potential impact on soil and vegetation includes:

- Trampling, wear and erosion;
- Damage to trees and roots;
- Soil compaction;
- Fragmentation of the landscape;
- Altered plant composition;
- Dispersal of seeds or alien species;
- Littering

Potential impact on aquatic environments includes:

- Altered runoff and deteriorating water quality;
- Chemical impact and pollution;
- Wear and damage to underwater vegetation;
- Altered bottom habitat;
- Spread of bacteria or alien species.
- Potential impact on wildlife:
- Activities disturb wildlife, escape;
- Activities disturbing wildlife, changing behavior;
- Loud noises that disturb wildlife;
- Activities are disturbed by habitat change.

Heat and heat waves

Heat waves are another very serious factor for both the status of nature and human health and well-being: Research shows that heat is responsible for about 1.5 percent of all deaths in the world today and the number of days with heat stress will increase sharply in the future. Heat stress has a negative impact on health, for example through damage to internal organs and increased fatigue, in addition to increasing the risk of premature death. Climate change is already behind almost 40 percent of all heat-related deaths in the world; and rising temperatures will greatly increase the number of heat-related deaths in the future.

In already exposed countries, the increase in heat and heat waves will be enormous – up to ten times more common compared to today. However, this trend will also be evident in Northern countries such as Sweden. Children born today in Sweden will experience 36 times more heat waves during their lives compared to adults born in the mid and late 19th century. This, in combination with an aging population, is of grave concern for the future. Increased heat in the world will also lead to an increase in the incidence of cardiovascular disease, vascular diseases, aggravating underlying conditions such as lung diseases, complications of pregnancy, more tick-borne infections and premature births. A warmer climate will cause an additional 21 million cases of malaria by 2030, of which a considerable number will be in countries that have not previously had malaria cases. A warmer climate will also increase the risk of drought.

Climate change also causes a shortage of groundwater. About a fifth of the world's land area was hit by extreme drought in 2020, causing fires, destroyed forests, wiped out or decimated animal populations in addition to water and food shortages. 2022 was the second worst year ever in Europe in terms of the scale of forest fires, and the fires themselves cause large emissions of CO2. In 2023 and 2024, the negative trend continued.

Impact on animals and access to food

An often overlooked factor for sustainability and public health development is the extermination and decimation of animals and plants in recent decades. Human activities have reduced populations of birds, fish, reptiles, amphibians and mammals in the world by two-thirds since 1970. The number of birds has decreased by 560-620 million in Europe since 1980. Research shows that the risk of eradicating flying insects will increase significantly if no measures to limit global warming and greenhouse gas emissions are implemented.

A collapse of flying insects and insect pollination is estimated to cause 1.4 million more human deaths annually, most of them would be due to increased incidence of heart disease, stroke and certain types of cancers caused by shortages of fruits, vegetables and nuts that depend on insect pollination. A lack of certain types of food is only one side of the coin.

There are also detrimental effects on the climate from food waste in the consumption stage and by individual behaviours: Food waste is estimated to cause around 7-8 per cent of the world's total greenhouse gas emissions, and a third of all food produced in the world never reaches our plates. How can we counteract food waste in the world in general and within the outdoor movement specifically?

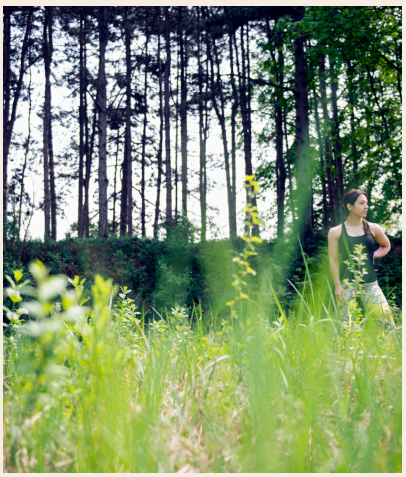
Precipitation and torrential rain

Many of us probably have the summer of 2023 and the disaster in Spain in 2024 fresh in our minds with both heat waves, huge downpours and floods in nature as well as in cities. But rain, heat waves, lack of green areas and lack of shade in cities also have a negative impact on opportunities to engage in outdoor recreation by making outdoor activities more difficult or less attractive. Among other things the situation increases the likelihood of dead trees and plants, many open spaces become difficult to visit in bright sunshine, causes higher exposure to UV radiation, causing low flows in waterways, provides poorer water quality and increases risk of forest fires.

In 2022, two out of three rivers in Europe had extremely low water flows. At the same time, the risk of sudden downpours and flooding increases in warmer climates and during heat waves, which could potentially make activities more difficult to plan or might impair the experience of the visit to nature. The average annual precipitation in Sweden has increased from 600 to 700 mm since the 1930s, and the increase in the future will be 9 mm per month until the year 2100. The melting of sea ice, increased precipitation and warming of the seas along coasts in Sweden have led to a sea rise by 15–20 cm since the end of the 1800s. The rise will accelerate sharply in the future, according to SMHI. Globally, the seas have risen by an average of 26 cm since 1880. Earlier, the sea rise was mainly due to the warming of the seas (hot water expands and takes up more space). Today, the rise is mainly due to melting sea ice and glaciers.

Arctic sea ice has decreased by 30 percent in just 45 years. Reversing the trend of rising oceans will take many decades or centuries – if that is even possible. Science warns that we can be dangerously close to a tipping point where entire systems are irreversibly collapsing. Such tipping point will lead to a sea rise of more than five meters in about a few hundred years.

Another effect of warming which affects outdoor recreation is that trees and shrubs establish themselves in higher terrain in the mountains. The bushes create new environments in which accessibility to bare mountains is affected and hiking becomes more difficult. The tree line in the Swedish mountains have moved up 200 meters in just over 100 years. The environments have problems with bushes taking root. Researchers estimate that the tree line will increase another 200-250 meters at 1.5 degrees temperature increase, and double that at even higher temperatures, in the future. It would completely wipe out the mountain landscape south of Tärnaby in Sweden (most of the bare mountain terrain). Furthermore, the snow season in the southern and middle parts of Sweden is almost a month shorter today compared to the mid and late 1900s. The new climate particularly affects popular outdoor activities on snow and ice negatively.



What causes climate impact and how are the trends for the future?

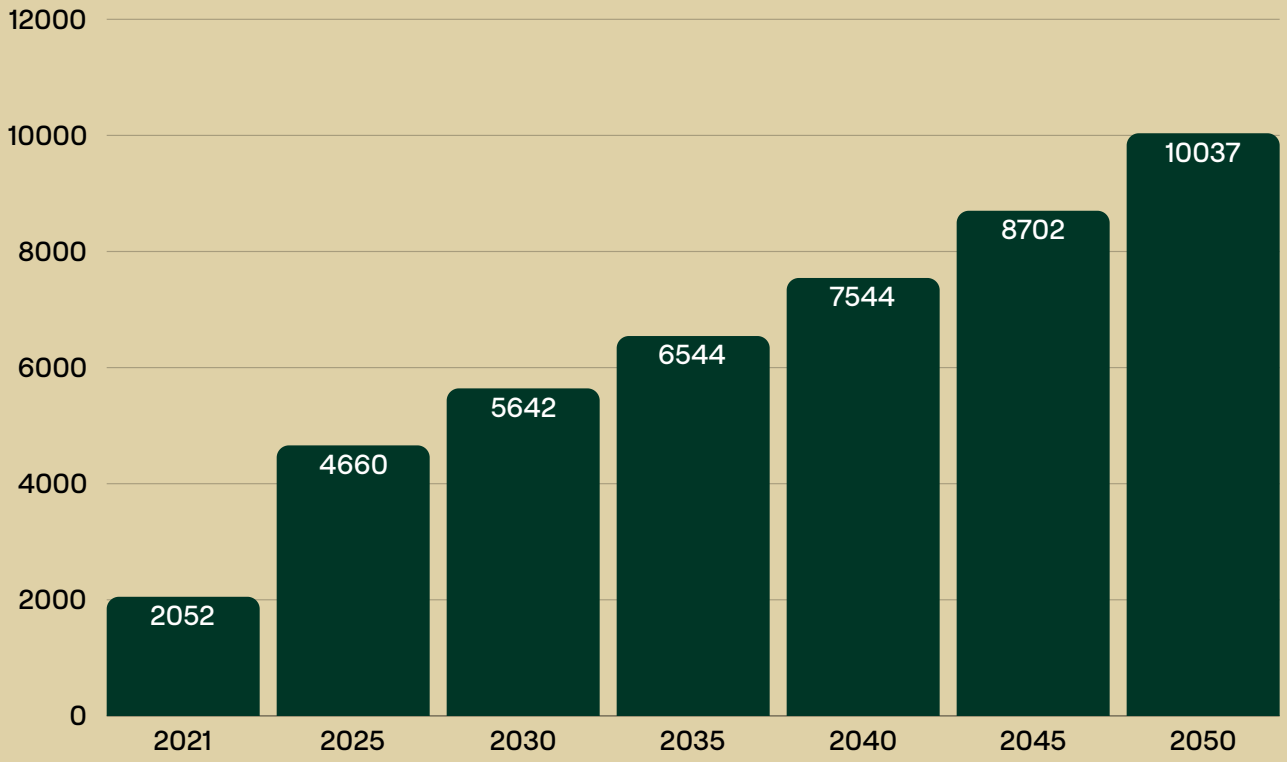
The way we move and choose transport, our consumption choices and other behaviors that individuals engage in affect our climate and environment in different ways. 60 percent of emissions in Sweden come from household consumption, while 40 per cent is caused by public consumption and investment. Presented below are some of the most prominent causes of global warming and stress on the environment.

Transport:
Fossil-dependent transport accounts for about 25 percent of Europe's and Sweden's greenhouse gas emissions and emissions from the sector has increased in recent years. The proportion is even higher globally, about 30 percent. There are also challenges within the outdoor movement with unsustainable travel by a large share of fossil-fuelled transports to events and activities.

Another aspect of transport concern delivery of products in e-commerce. In Sweden, 200 million parcels are sent annually from e-retailers to private individuals. Of these, 12 million packages are returned directly. The parcels are often delivered with light trucks that run on diesel – to date only a small share of the trucks in Sweden are electric or hybrid, even if there is a slight increase in electric operation in later years.

As is commonly known, air travel stands for a large proportion of emissions and is a substantial factor for the total climate footprint in the world. Unfortunately, the trend in aviation is towards a huge increase in air travel. Air travel is expected to multiply for a long time to come.

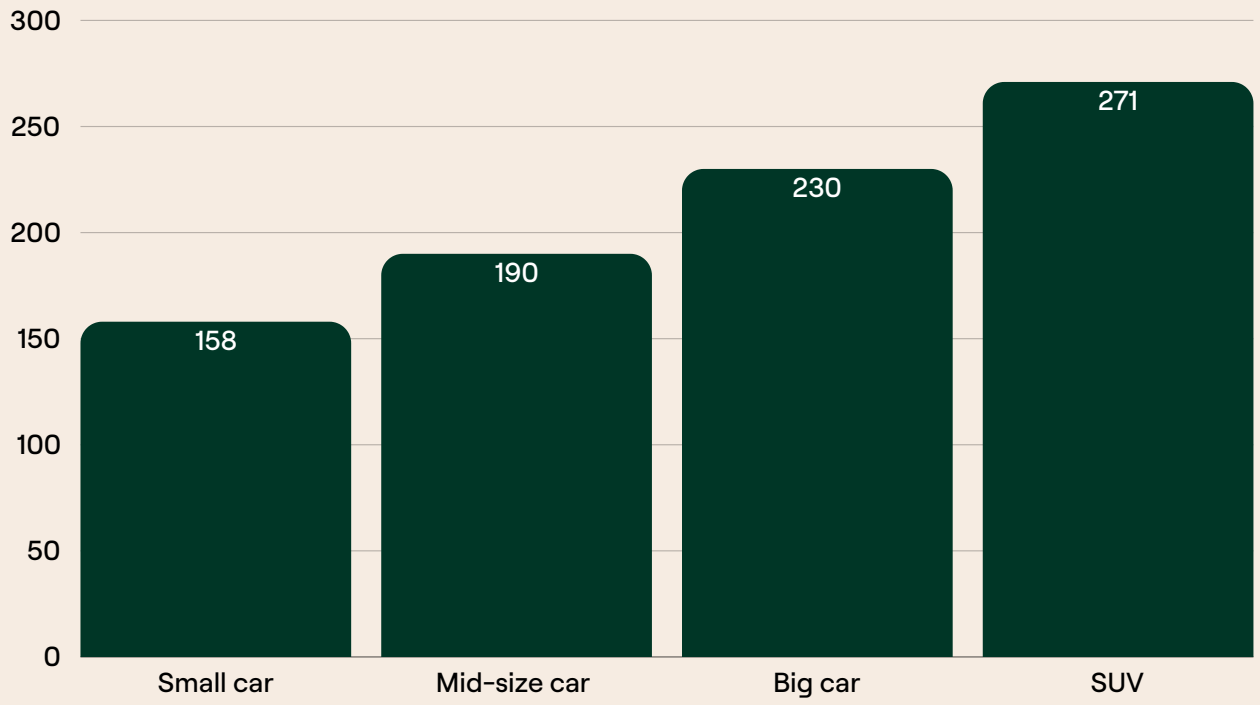
Figure 2. Expected increase in the number of flights worldwide until 2050. Millions of trips per year.



The choice of passenger or company car also has a major impact on emissions and climate, for example, large cars such as a SUV cause significantly greater emissions of greenhouse gases than ordinary fossil-dependent smaller cars.

he share of SUVs in the world has increased significantly in 10-15 years. SUVs are significantly heavier and consume more energy and require bigger batteries compared to conventional passenger cars. Larger cars additionally require more critical raw materials and more electricity (electric cars) and emissions (fossil-fueled cars) to run.

Figure 3. Greenhouse gas emissions (kg) depending on the car's size. Consumption of petrol at 100 km drive, comparison between small, middle size, large car and SUV.



Another environmental aspect of cars relates to the damage to nature, people and animals when the vehicles are washed in unsuitable environments, for example, on villa plots. The washing brings pollution, heavy metals and oil residues into the nearest stormwater well, which is then carried unfiltered into local watercourses, rivers and lakes. A third damage is on soil and vegetation when cars are illegally driven outside the road network.

Clothing and products

The clothing and fashion industry accounts for 8-10 percent of the global emissions of CO2 each year – more than all the international air travel and the entire shipping industry put together. Clothing production has doubled in 20 years. At the same time, the lifespan of clothes has been halved, that is, we keep the clothes we buy shorter and shorter time. Swedes purchase an average of 15 kilos of clothing and home textiles per year – an increase by as much as 40 percent since the year 2000 according to the Swedish Environmental Protection Agency. The average use of clothing is only seven times. Research shows that we can only buy five newly produced clothing per year to stay within the Paris Agreement's limits for a sustainable planet.

The average Swede currently purchases 50 new garments per year according to national surveys. A "sustainable wardrobe" should contain a maximum of about 85 garments per person in a country like Sweden with four distinct seasons (outdoor clothes and shoes are included, but not underwear). The consumption of clothes and the short lifespan of them thus causes large emissions of CO2 into the atmosphere. However, most clothes and textiles can be reused. Reusing a piece of clothing instead of buying new reduces CO2 emissions by 51 per cent according to Swedish research project Mistra Sport & Outdoors (Mistra Sports & Outdoors Annual Report 2022). Recycling and the reuse of clothing and textiles is increasing in society in pace with better systems and routines. This is a trend that also can be seen in the outdoor movement and the outdoor industry, although starting from a low level.

Plastics are an increasing threat to both the environment and the climate in the World. Plastics cause greenhouse gas emissions in all phases of their life cycle and a large share of plastic items end up in the sea, lakes, rivers or other waterways. The amount of plastic items in the world is expected to double by 2040 according to international research. Only 34 percent of plastic items in Sweden was recycled in 2022 according to The Swedish Plastic Recycling Association. Increasing recycling of plastic packaging, phasing out plastic products and choosing non-plastic products in the first place are important measures to reduce greenhouse gas emissions in Sweden and internationally. This is an important issue for the outdoor movement as well.

There is also spread of plastic in nature through the fishing industry and recreational fishing (but perhaps mainly through professional fishing/the fishing industry). Each year, large amounts of fishing gear, fishing lines and fishing nets ends up in Swedish waters posing a danger to fish and other organisms and is negative for the aquatic environment with the release of chemicals and micro- and macroplastics. Each year, it is estimated that 8,500 000 fishing lures, 3,400,000 sinkers and 42,500,000 metres fishing lines end up in Swedish waterways (Svensk Natur, 2023).

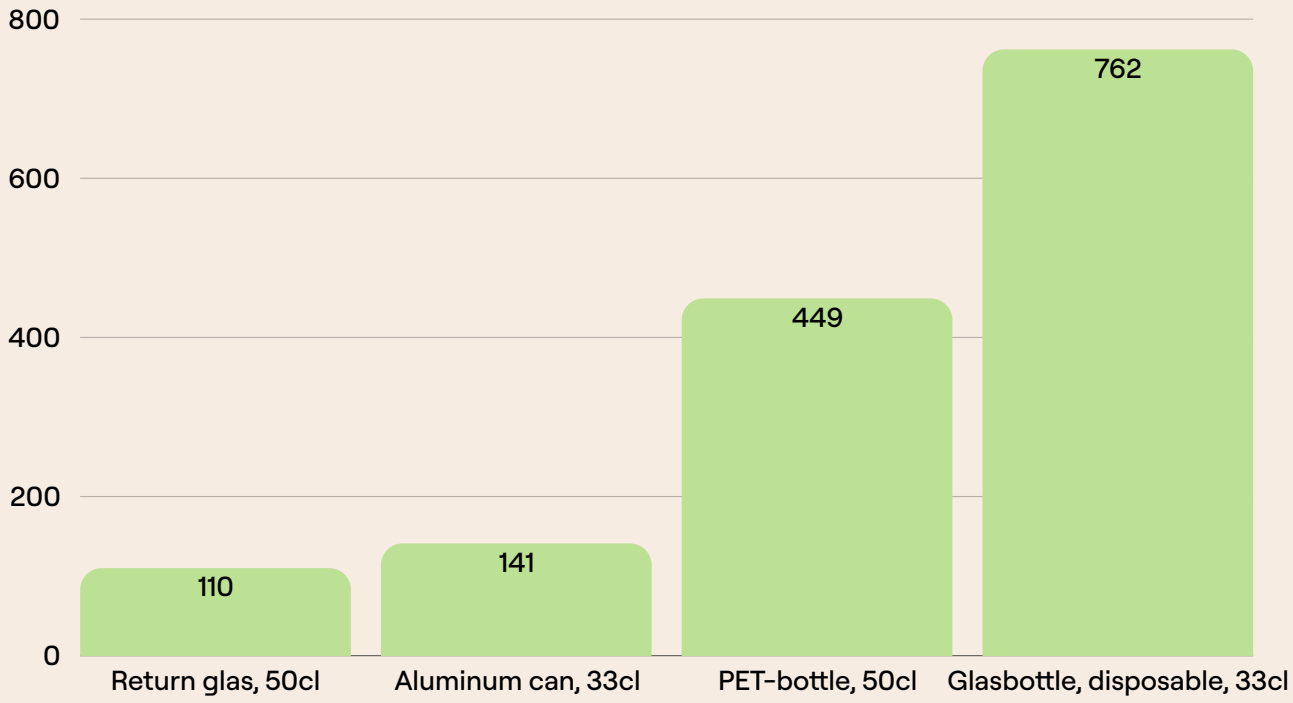
Food

Food waste causes 7-8 percent of total greenhouse gas emissions in the world annually. Swedes throw away an average of 17 kg food every year. Food waste is an environmental hazard in general, but there are also specific foods that contribute more than others to emissions, e.g. cow-based milk, cheese and red meat. Cheese is an environmental culprit on the dining table and the production causes large emissions of CO2. Approximately 1/3 of all milk production in Europe is used to produce cheese. Use of vegetable diets and locally grown products are important measures to reduce the impact on the environment, climate and plants. Meanwhile, meat consumption has a strong negative impact – especially a diet high in red meat and hard cheese based on milk from cows.

Packaging

The amount of waste from packaging in Sweden has increased from 66 million tonnes in 2009, to 84 in 2021 – an increase by 27 percent in just over 10 years. In Europe, each individual causes almost 189 kg of packaging waste per year. This is expected to increase even further to 209 kg per person by 2030 – an increase of 10.6 percent in the coming years. Another Important aspect of environmental sustainability is our consumption of beverage items, where emissions are much higher for single-use glass bottles and PET bottles compared to recycled glass and aluminum cans.

Figure 4. Carbon dioxide consumption (grams) in the manufacture of various types of beverage packaging: recycled glass, can, PET-bottle, single-use glass.



The recycling of cans and bottles decreases the need for new products, which in turn decreases CO2 emissions. In 2022, recycling of cans and bottles saved 180,000 tonnes of CO2 emission in Sweden. Around 83 percent of all PET bottles in Sweden was recycled in 2022.
Another aspect of waste concerns trash and materials that are thrown or end up in nature by mistake. These products have very different lifespan in nature before decomposition. They also often contain toxins and harmful substances for nature, animals and people. It is important to point out that the habit of throwing food products in nature, regardless of time to decomposition, increases the risk of spreading diseases (swine fever, for example) and can also negatively change the grazing behaviour of wild animals.

Table 3. Time for decomposition of various products that are thrown or end up in nature: apple, orange/banana skin, plastic-coated paper products, cigarettes, wool sock, leather item, aluminium can, plastic bag, glass bottle.

Apple core -	1-2 months
Orange/banana peel -	2 years
Plastic treated paper products -	5 years
Cigarettes -	1-10 years
Wool sock -	5 years
Leather -	50 years
Aluminum can -	80 - 100 år
Plastic bag -	1000 years (1-1000 years)
Glass jar, glass bottle -	1 miljon year

Costs of an unsustainable planet and unsustainable climate

Assessing the costs of climate heating is a complicated issue, but researchers and published studies now indicate that a warming of 2 degrees is believed to cost society around 69 trillion US dollars per year (in 2022 currency). This is a lot of money! A warm-up of 2.6 degrees would result in three times greater global economic harm than caused by the entire COVID-19 pandemic (Thunberg, 2022). The cost of the pandemic in Sweden has been estimated at SEK 413 billion in the years 2020-22. In contrast to the burden, suffering and costs of the pandemic, which has now decreased and continues to decrease, the costs and damages caused by global warming will only worsen from year to year if nothing is done about the emissions and global warming.

Extreme weather in Europe between the years 2010-2020 was estimated at a total cost of about 145 billion euro. The extreme downpour in Gävle, Sweden, in 2021 (100 000 inhabitants) brought costs of SEK 1.85 billion for destroyed homes and premises. Note that this was caused by rain in a single downpour. Two years later, the same city, and many other places in Sweden, were affected by new torrential rains and floods with subsequent high costs and damages to property and landscapes. Several insurance companies in Sweden have announced that they most likely will no longer insure houses and properties in flood-threatened areas, which in turn risks destroying any possibility of selling the house in the future.

It is not too late, however!

The messages in the above text can be perceived as negative and may cause frustration for the reader: We have caused damage to the planet which will take a long time to mend; some damage and processes are beyond repair and there are few signs that people, countries and organisations are implementing sufficient measures to reach the Paris Agreement's target of no more than 1.5 degrees heating. But there is another side of the coin in this equation, namely that some current problems would quickly disappear if we were to implement necessary measures. One such area concerns air quality.

Many people mistakenly believe that all the environmental benefits of a societal transition would take a very long time to occur. This is not the case in all areas. Air quality is perhaps the most obvious example where changes in a very short time would lead to better air. Another well-known example is the ban on freons in refrigerators and similar products in the 80s to save the ozone layer. The ozone layer recovered quite quickly. The positive impact on global air quality would be immediate as air pollution disappears rapidly when emissions cease. The measures would also be cost-effective according to research, i.e., the benefits and the cost-savings of cleaner air would far outweigh the costs of the measures to achieve them.

A country like Sweden could finance the societal transition and climate actions needed to reduce emissions by generating cleaner air. This would in turn save many lives, prevent diseases, reduce sick leave from workplaces and schools and reduce the cost of living. Research from Sweden shows that 8 out of 10 Swedes are exposed to high levels of air pollutants, such as PM2.5 Particles. Pollution annually causes four per cent of the short-term sick leave in Sweden.

The more immediate climate goals are important because it is the cumulative greenhouse gas emissions that determine whether we can reach the Paris Agreement. Every kilogram of carbon dioxide emitted will affect the climate for centuries to come. Therefore, there are climatological, ecological, economic and social risks of postponing emission reduction. The work needs to get started and be intensified now. This is also the case for the outdoor movement and the organisations focusing on outdoor recreation and outdoor sports.

The transition to greener energy is going faster than expected

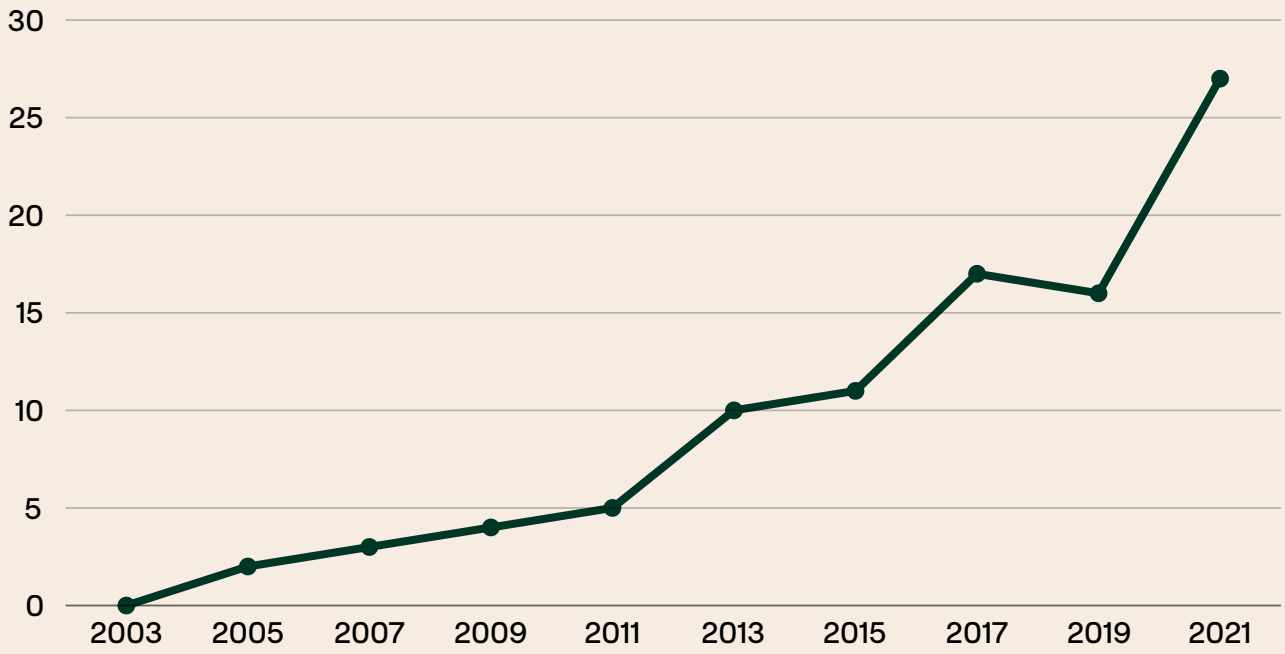
We are constantly fed reports that the transition towards renewable energy sources and measures for a more sustainable society is lacking, too slow and necessary investments are missing. However, there are also trends and areas of the transition that are going faster than expected. A societal transition is underway in general and in a wide range of areas, including in legislation. Statistics from the International Energy Agency (IEA) show that renewable energy will surpass coal as the world's largest energy source as early as 2025. As early as 2027, solar energy will be the largest source of energy in the world – and the rise of renewable energy is exponential. The increase is 30 per cent faster than the IEA's forecast and the proportion of energy from coal, gas, nuclear power and oil is declining .

Already in 2027, solar and wind power will account for about 20 percent of the world's energy production. Investments in renewable energy are now almost twice as large as that of fossil fuels. Within forestry, the EU has decided to introduce binding targets for carbon sequestration in forests and land – the so-called Lulucf law which means in practice that more forest needs to be preserved and protected. Emissions trading is another area where the trend is towards increased incentives to quit or reduce carbon dioxide emissions.

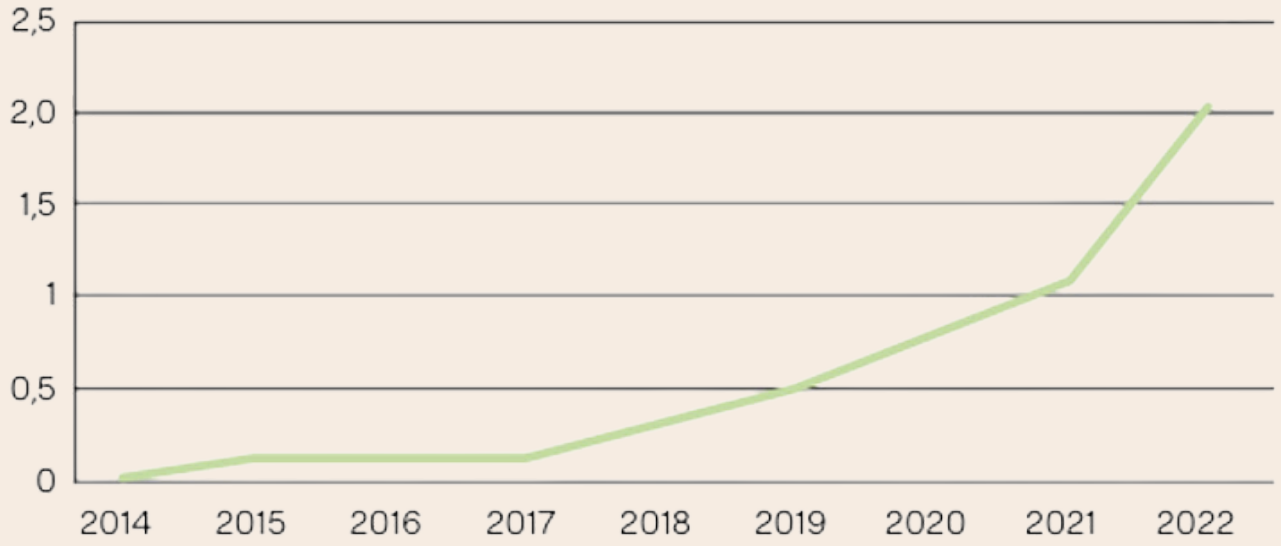
Other examples of rapid change in the positive direction are within the transport sector, where the electrification of the vehicle fleet is moving fast, and the food sector, where eating habits and food-related consumption patterns have changed and continue to be change towards a more plant-based food. A third example is the rapid increase in circular systems for different materials and products. Batteries, solar panels and wind turbines have become significantly cheaper over time. From 2025, charging stations for electric cars will be available every 60 km on Europe's highways, and a sales ban is introduced for fossil-based vehicles in 2035. Aviation and shipping will switch to fuels with lower carbon dioxide emissions and the aviation industry will soon be taxed. In Sweden, energy production from solar panels and wind turbines is now increasing very quickly. Figures 5 and 6 show this production from wind and solar power.

Figure 5. Annual electricity production from wind power in Sweden, the years 2003-2022 (TWH).

Wind power:



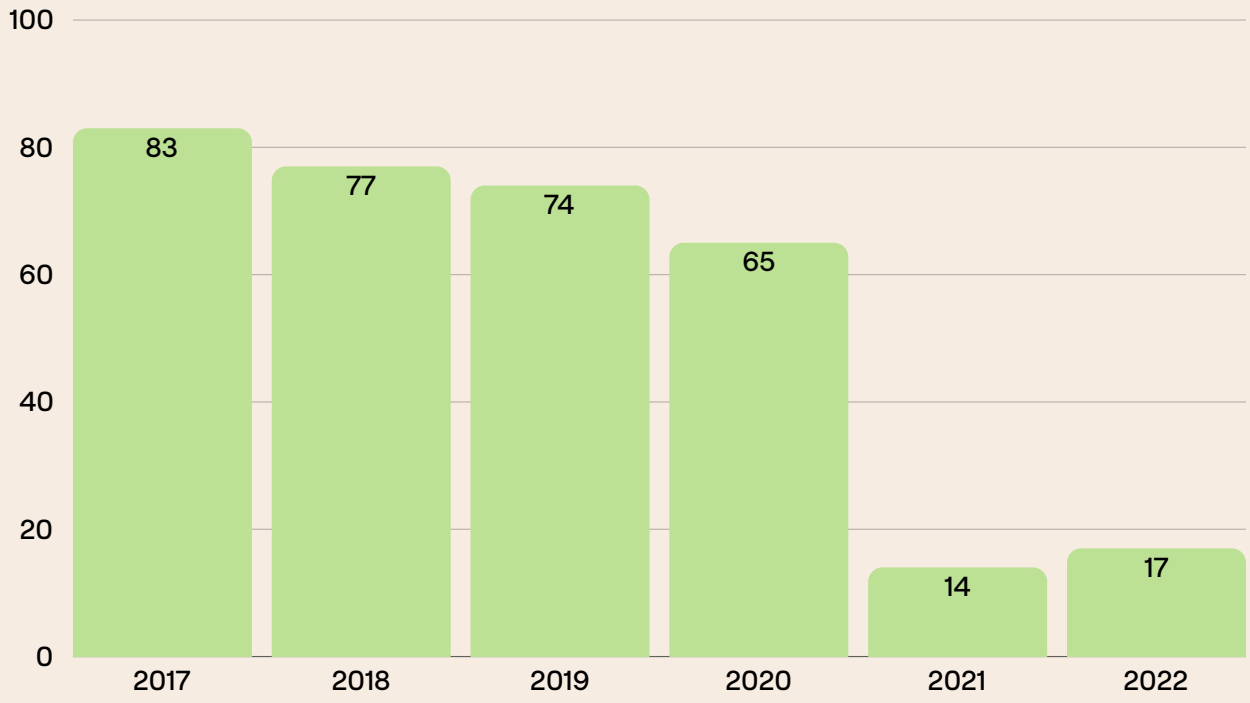
Solar power:



Solar power currently (2023) accounts for about 1 percent of Sweden's total electricity production per year, but production and the share of the energy mix are increasing rapidly. There is great potential to increase this proportion further. It shows not least statistics from Germany, where solar power currently accounts for as much as 8 percent of the country's electricity production.

Another example that unsustainable behaviours can be changed rapidly is from the taxation on plastic bags in Sweden introduced in Autumn of 2020.

Figure 7. Use of plastic carrier bags per person per year (number).



What the outdoor movement can contribute

The planet and our communities are thus faced with a number of interconnected and serious sustainability issues that need to be addressed in the near future; reducing greenhouse gas emissions, promoting physical activity, enhancing health and well-being, reducing isolation and to create more attractive and green cities and areas. Improving the conditions for outdoor recreation and access to nature are highly relevant measures in this task.

The outdoor movement cannot, of course, on its own create sustainable, healthy and vibrant communities, but all of us that in any way affect the conditions for outdoor recreation can play important roles in the future. The outdoor movement is highly committed to nature preservation, greening of cities, at the same time as outdoor organisations have exceptionally high credibility in society. The high credibility can be used to influence others – the public, politicians, schools and other stakeholders. The outdoor movement can take a leading role and show leadership for the transition ahead to reduce climate impact and a more sustainable world.

Nature, trees and recreational areas play a pivotal role in the transition by contributing to lower temperatures in cities, protecting people from heat waves, air pollution and reducing noise. Residential outdoor recreation areas and parks in cities lowers temperatures by an average of 1 degree in cities compared to cities without green spaces according to research. Outdoor areas and nature also take care of stormwater, offer shade to people and animals, provides fresh air and counteracts urban heat waves – and not least contain carbon and greenhouse gases: 99.9% of all removals of carbon and greenhouse gases CO2 in the world today occurs through nature, forests, waterways and cultural landscapes. The outdoor movement wants to protect, preserve and extend green, recreational areas in cities and in rural environments. These are also places and surfaces that benefit outdoor recreation, walking and cycling transport, social relationships and interactions. Municipalities and other landowners have a key role in increasing the share of green spaces and outdoor areas and planting more trees in cities and in communities. The outdoor movement must be a highly active stakeholder in this task.

Further reading

The above text is only a brief summary of the environmental and public health problems linked to global warming and greenhouse gas emissions. For in-depth information, the reader is advised to download the original publications by the IPCC.

This review is an English version of a chapter from a publication by the Swedish Association of Outdoor Organisations (Svenskt Friluftsliv, 2024).

The publication also includes references. The Swedish title of the report:

Hållbarhetsvägledning Vår gemensamma resa mot ett hållbart friluftsliv – kunskapsöversikt.
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Read the swedich version here:
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