



Climate change refers to long-term shifts in temperatures (which causes global warming) and weather patterns. These shifts can occur naturally, such as through variations in the solar cycle. Since the 1800s, however, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas, which produce large quantities of CO₂ emissions.¹ And emissions continue to rise. As a result, the Earth is now about 1.1°C warmer than it was in the late 1800s. The previous decade (2011-2020) was the warmest on record.

Many people think climate change mainly means warmer temperatures. But temperature rise is only the beginning of the story. Because the Earth is a complex ecosystem, where everything is connected, changes in one area can influence changes in all others.

What fosters climate change?²



Climate change is caused primarily by the greenhouse effect, which is when gases trap the sun's heat close to the Earth's surface, making the planet warmer than it would otherwise be.

Many of these greenhouse gases occur naturally, but human activities are increasing the concentrations of some of them in the atmosphere, such as carbon dioxide (CO₂), methane, nitrous oxide, and fluorinated gases.

The following activities foster the rise of emissions:

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Cutting down forests (deforestation).

Trees help to regulate the climate by absorbing CO₂ from the atmosphere. When they are cut down, that beneficial effect is lost and the carbon stored in the trees is released into the atmosphere, adding to the greenhouse effect.

Increased livestock farming.

Cows and sheep produce large amounts of methane when they digest their food.

Burning coal, oil and gas

produces carbon dioxide and nitrous oxide³.

Fluorinated gases are emitted from equipment and products that use these gases (air conditioners, foams, aerosol cans). Such emissions have a very strong warming effect, up to 23,000 times greater than CO₂.

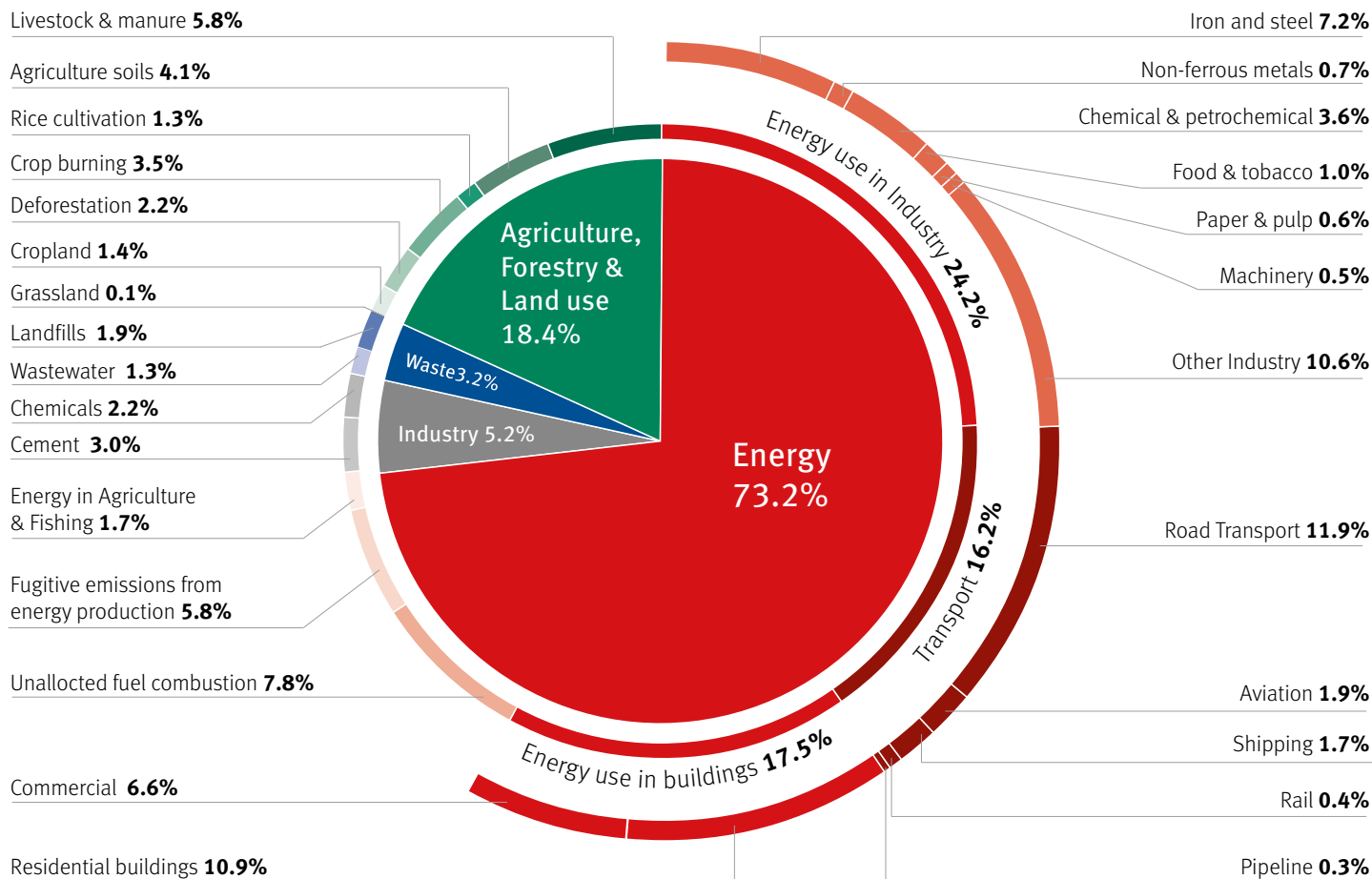
Fertilisers containing nitrogen produce nitrous oxide emissions.

¹ <https://www.un.org/en/climatechange/what-is-climate-change#:~:text=Climate%20change%20refers%20to%20long,like%20coal%2C%20oil%20and%20gas>

² https://ec.europa.eu/clima/climate-change/causes-climate-change_en

³ Nitrous oxide, like CO₂, is a long-lived greenhouse gas that accumulates in the atmosphere over decades to centuries.

In terms of economic sectors, energy for industrial process, agriculture, forestry and land use are the activities that generate the highest emissions.



OurWorldinData.org – Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020). Licensed under CC-BY by the author Hannah Ritchie (2020).

(Diagram design PCH)

Did you know?



Climate change has serious impacts on society and nature.

Society:

- Climate change adversely affects our health and wellbeing through more extreme weather events, such as droughts, storms, floods, and wildfires.
- It causes air quality to deteriorate.
- Climate-related disruptions to agriculture can cause crop failures.
- In some regions in the world, climate change weakens the quality of surface and groundwater supplies due to contaminant concentrations after heavy rainfalls.⁴

Nature:

- Global temperatures rose about 1°C from 1901 to 2020.

- The rise in sea level has accelerated from 1.7 mm/year throughout most of the 20th century to 3.2 mm/year since 1993.
- Glaciers are shrinking: the average thickness of 30 well-studied glaciers has decreased by more than 18 metres since 1980.
- The area covered by sea ice in the Arctic at the end of summer has shrunk by about 40% since 1979.
- The amount of carbon dioxide in the atmosphere has risen by 25% since 1958, and by about 40% since the Industrial Revolution.⁵

For more information, please see:
Causes and Effects of Climate Change/ National Geographic

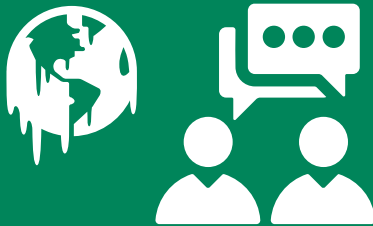
⁴ <https://www.globalchange.gov/climate-change/impacts-society>

⁵ <https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts#:~:text=Our%20changing%20climate&text=Global%20temperatures%20rose%20about%201.8,than%2060%20feet%20since%201980>

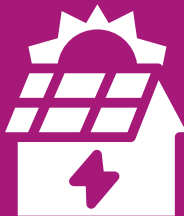
What can you do to reduce climate change?

Reducing climate change starts with your everyday life: what you do and what you eat. Everyone can make a contribution to stop global warming and climate change. Here are some easy, effective ways to help save the planet.⁶

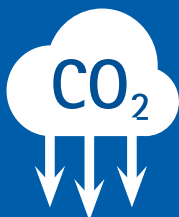
- 1.** Talk to your family and friends – raise awareness about global warming and its dangerous impact on the planet. Share your concerns and knowledge with them.



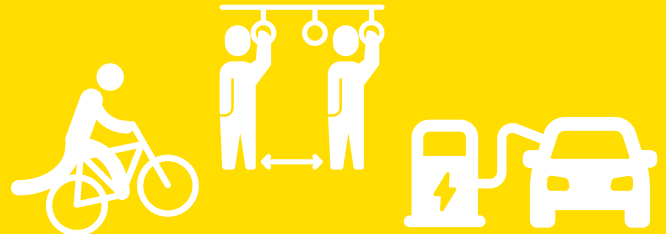
- 2.** Power your home with renewable energy (RE) – use electricity that comes from clean energy and you may reduce energy consumption in general. If you have a house, you might consider installing photovoltaic panels on your rooftop to power your house with solar energy, which is a renewable source.



- 3.** Rethink your eating habits – be sure to eat the food that you actually buy. Around 1.3bn tonnes of food ends up in landfills worldwide. Moreover, consider consuming less meat and buying food that is produced regionally whenever possible. In that way, emissions will be decreased through less transport and less stock farming.



- 4.** Use energy-efficient means of transportation – instead of using a conventional car that runs on fossil fuels or traveling by plane, you could ride your bike for short distances, use public transportation more often or drive a more eco-friendly vehicle, such as plug-in hybrids or fully electric cars. This improves air quality and cuts down on GHG emissions.



- 5.** Reuse, recycle, avoid waste – one way to avoid emissions is to reduce our footprint with regard to the products we buy and use and the emissions that occur during waste management. We should all buy less in the first place and think twice before throwing things out that can still be used.



Initiatives and action against climate change in politics⁷

2011-2020 was the warmest decade on record, with the global average temperature reaching 1.1°C above pre-industrial levels in 2019. Human-induced global warming is presently increasing at a rate of 0.2°C per decade.

An increase of 2°C can cause serious negative impacts on the environment and human health and wellbeing. For that reason, the world has recognised the need to keep warming below 2°C and efforts are in place to limit it to 1.5°C.

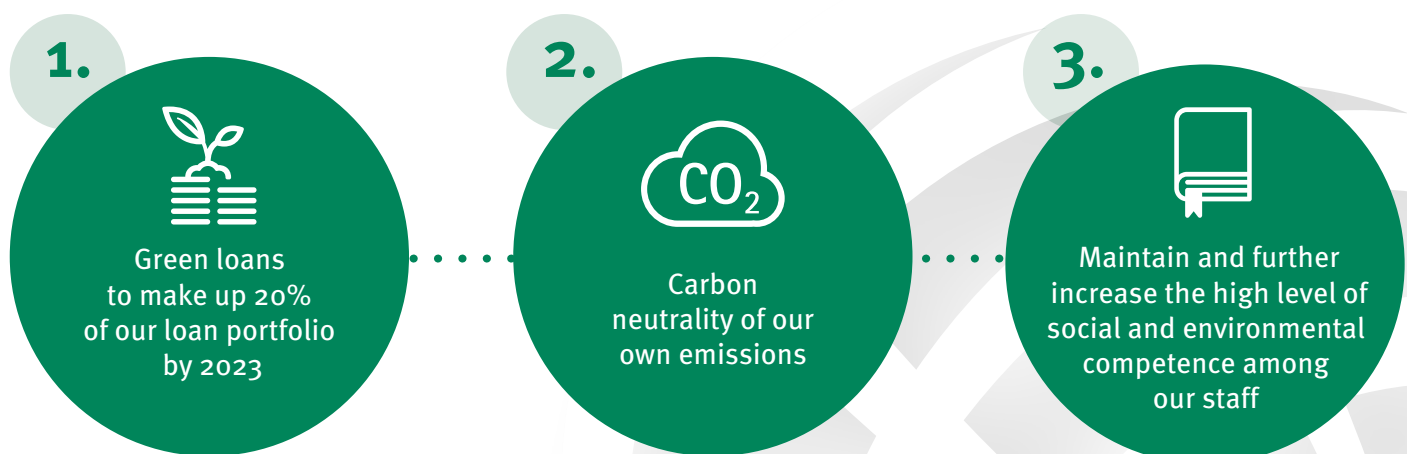
The European Union (EU) has taken action and developed a comprehensive package of activities to fight climate change, such as the European Climate Pact, along with a long-term strategy and targets to regulate climate change by 2050.

If you are interested in learning about more what the EU is doing to fight climate change, follow this link: https://ec.europa.eu/clima/eu-action_en.



How is the ProCredit group working to reduce climate change?

- CO₂ emission accounting: Since 2015, the group has been measuring, monitoring, and reporting the emissions caused by our own operations based on GHG protocols and with the support of an in-house internal environmental management software (iEMS). As a step forward, in 2021, ProCredit joined the Partnership for Carbon Accounting Financials (PCAF) to help quantify and disclose the greenhouse gas emissions generated by our lending activities and published the first report on the emissions associated with the loan portfolio. At the end of 2021, 644 kilotonnes of GHG were generated from our financial activities (*see our Impact Report*).
- Setting targets: In 2018 the group established three medium-term goals to be achieved by the end of 2023 to mitigate our climate change impact:



⁷ https://ec.europa.eu/clima/climate-change/causes-climate-change_en

Green activities that Procredit Bank Georgia has carried out in 2022

Despite technological breakthroughs, people rarely adapt quickly to environmental concerns and associated risks. Every day, Georgia, along with the rest of the world, faces the effects of this shift, which impacts the economy and well-being of the people.

Climate change and environmental protection issues are becoming increasingly significant in our country. Companies in a variety of industries are now speaking more about their responsibility.

Procredit Bank Georgia began taking significant measures in this regard years ago and has made green activities an intrinsic element of its everyday operations and a performance requirement. Procredit Bank is an innovative and remarkable financial institution that has launched eco-friendly projects, so attempting to reduce the impact of its activities on the environment and awareness raising about environmental issues among businesses and individuals.

The bank provides its customers with environmentally friendly products, such as financing for the purchase of an electric vehicle and the installation of a solar power plant. The bank has also launched a nationwide initiative to provide free EV charging stations to customers who use electric vehicles. The bank's latest exclusive product is a green account with a ProGreen card made of organic material, merging environmentally friendly practices and financial products into a single service.

Notable is the fact that Procredit Bank Georgia devotes special regard to concerns such as refusing to use plastic, encouraging waste separation, minimizing air pollution, utilizing solar energy, and saving resources. The bank celebrates environmental events on a regular basis, thereby promoting climate change-related themes and increasing public awareness.

This year, Procredit Bank Georgia launched a wide-scale environmental and social campaign with the tagline "**Make the change**". The objective of the campaign is to increase community awareness and responsibility about climate change and environmental protection issues. As part of its environmental campaign, the bank produced its primary video commercial to demonstrate to the public the threats of degradation of environment instead of calamity catastrophe. By emphasizing ecological issues, ProCredit Bank Georgia encourages everyone not to lose touch with nature, suggesting that each of us plays an important role in this process. The bank also rallied notable thought leaders, change makers around the campaign's central message. Make the change tagline got widespread community approval, good responses, and numerous positive ratings.

It is significant that every ProCredit Bank Georgia employee shares the bank's vision and philosophy. We believe that responsible actions by everyone of us, companies and individuals, may combat climate change and create a healthy environment, and that it is our responsibility to improve the environment and the globally .