Nations around the world are already bearing the brunt of climate change and, unless we reverse this trend, the effects that they are going to experience in the near future are going to be significantly more devastating. Europe, the third most populated continent on Earth, is certainly not spared by global warming. From north to south, from east to west, all of its countries are, in some shape or form, affected by issues ranging from air pollution and droughts to wildfires and sea level rise. Here are the top 6 environmental issues in Europe and what single countries are doing to tackle them.

Top 6 Environmental Issues in Europe

1. Air Pollution

First on the list of the biggest environmental issues in Europe is air pollution, which the European Environment Agency (EEA) deems as the "single largest environmental health risk" in the continent.

While it is true that continent-wide COVID-19 lockdowns contributed to a significant reduction in pollutant concentrations in the atmosphere by up to 25% in major cities in France, Italy, and Spain, air pollution remains a major health concern for Europeans. According to the EEA's latest report on Europe's air quality, the majority of Europe's urban population –approximately 96% – is exposed to levels of air pollution deemed unsafe and concentrations of particulate matter (PM) well above the latest World Health Organization's (WHO) recommendations. This is particularly true in central-eastern Europe and Italy, which in 2021 reported the highest concentrations of PM.

In October 2022, France's highest administrative court ordered the state to pay a 20-million-euro fine for failing to tackle air pollution in the country. In France alone, poor air quality leads to approximately 48,000 deaths every year. The situation is especially dire in France's capital Paris, but other metropolitan areas such as Toulouse, Lyon, and Aix-Marseille also remain particularly at risk.

Among the main reasons for air pollution in Europe is the burning of fossil fuels for domestic heating and their use in industry as well as transportation. To make matters worse, the extremely pressing energy crisis that arose in the wake of Russia's invasion of Ukraine in early 2022 is pushing several European nations to revive coal plants to make front to gas shortages, a move that will inevitably slow down the progress the continent has made in terms of emissions reduction and renewable energy scale-up.

The European Union (EU) bloc and its 27 member states are committed to cooperating to achieve a net domestic reduction of at least 55% in GHG emissions by 2030 compared to

1990 levels and net zero by 2050.
EU member countries possess a robust network of air quality and pollution management standards, making the bloc's larger cities substantially more liveable than most metropolises across the globe. Since the 1970s, the EU has provided guiding frameworks for member states and cities to follow, mainly directed at controlling emissions of harmful pollutants into the atmosphere, improving fuel quality, and integrating environmental protection requirements into the transport and energy sectors. Important legislation includes the 2013 Clean Air Package, which set objectives for 2020 and 2030 to reduce emissions of major pollutants, including sulphur dioxide, lead, nitrogen oxides, carbon monoxide, and benzene.
Another cornerstone of the EU's policy to combat climate change and a key tool for reducing greenhouse gas emissions cost-effectively is the EU Emissions Trading System (ETS), a cap-and-trade system that imposes a cap of GHGs that can be emitted every year, called 'carbon credits'. Those industries with low emissions can sell their extra allowances to larger emitters. This supply and demand for emissions allowances establishes a market price for GHG. The cap helps ensure that emission reductions will take place to keep emitters within their pre-allocated carbon budget.
Moreover, in October 2022, EU members reached an agreement to ban all sales of fossil fuel cars by 2035, a major step towards delivering the European Green Deal, an ambitious package of measures to meet the bloc's climate change goals.

2. Droughts

Droughts are undoubtedly among the most pressing environmental issues in Europe. Especially warmer countries in the Mediterranean basin, including Italy, Spain, Greece, and Turkey, are naturally inclined towards hot, dry summers, and seasons will be even hotter and drier with temperature rise. Recurrent droughts have severe repercussions on water supplies, leading to crop failure and a higher occurrence of wildfires in mismanaged areas, as well as worsening public health conditions in cities and regions affected by heatwaves. Summer 2022 in particular will be hardly forgotten, as 47% of Europe was declared under drought "warning" conditions in what scientists call its worst drought in at least 500 years. France went through its hottest May on record, and the UK government – a country usually not prone to heatwaves – declared its first-ever national emergency red heat alert, as exceptionally high temperatures in July baked London and other parts of the country for days. Record heat across the continent also led to severe water shortages that affected some of Europe's largest and most important rivers.

Italy was undoubtedly one of the countries most severely affected by this summer's droughts. Due to record-breaking high temperatures and the absence of precipitation for more than 100 days, the nation's longest river and one of its most important resources dried up. Given that the river's surroundings are one of Italy's most fertile and moist floodplains and thus exceptionally good for the cultivation of cereal crops such as wheat and barley, the water shortage had major repercussions on its food supplies, already impacted by the war in Ukraine. The drought heavily impacted hydropower energy generation as well, with reservoirs storing water from the River Po destined to be used in hydroelectric plants dropping below the minimum historical values.

3. Wildfires

This summer's persistently hot and dry conditions across Europe fuelled an early wildfire season "sensibly above the average", with Spain and Portugal as well as France experiencing particularly acute forest fires. In August alone, wildfires destroyed an area of more than 500,000 hectares (5,000 square metres) and over 750,000 hectares (7,500 square metres) since the start of the year – the second-highest total for any year since records began in 2006 – compared to a yearly average of just over 260,000 hectares (2,600 square metres) between 2006 and 2021.

Recent data from the Copernicus Atmosphere Monitoring Service (CAMS) suggests that carbon emissions from wildfires in the EU and the United Kingdom in the summer of 2022 were the highest since 2007.

Climate change exacerbates fires by increasing the hot and dry conditions that not only fuel them but also help them spread faster and burn longer. Experts predict that, in a high-emissions scenario, weather-driven fire danger during summers could increase by over 40% in southern and western Europe, with northern countries also experiencing significant increases.

4. Sea Level Rise

The relentless melting of glaciers as well as of the Antarctic and Greenland ice sheets triggered by human-induced global warming has been the predominant cause of sea level rise both globally and in European regional seas. A study published in August found that the rapid glacial melting in Greenland alone will raise global sea levels by 10 inches (25cm), more than twice as much as previously forecast.

Some of the cities most threatened by sea level rise across the world are in Europe. The Netherlands' capital Amsterdam, for example, might experience a rise in sea levels of between 1.2 and 2 metres over the next 80 years if greenhouse gas emissions are not

reduced immediately and the melting of the Antarctic ice sheet accelerates. This could result in the displacement of nearly 97% of the city's population by 2100. Fortunately, Amsterdam already has some of the world's most sophisticated flood control systems in place, which have repeatedly been adjusted and improved over the last 50 years.
Neighbouring Germany is also deadline with this issue, which represents a major threat to cities located on the northern coast, such as Hamburg. To tackle the growing threat of global warming, the low-lying city is now counting on a US$592-million renovation project. The plan aims to improve the city's already existent dikes in the next 30 years, make them more resilient to high tides and capable of holding back rapidly rising rates of sea levels.
The UK is also threatened by sea level rise, with cities such as the Welsh capital Cardiff as well as London among the ones most at risk from global warming.
According to experts' predictions, sea level rise will affect every coastal region in Europe, impacting coastal ecosystems, settlements, and human lives. Receding coastlines and periodic flooding will be particularly severe for countries and regions with low-lying terrain. The threat level to human lives and potential economic losses varies depending on the emissions scenario and degree of sea level rise, but under a high emissions scenario, where the world is unable to keep temperature rise below 2C above pre-industrial levels and insufficient investments are directed towards strengthening infrastructure, anywhere between 1.5 and 3.6 million lives would be at risk, and the economic cost could rise to as high as €31 billion (US$ 30.8 billion) by 2100.

5. Biodiversity Loss

When discussing some of the most pressing environmental issues in Europe, biodiversity loss cannot be left out.
As of 2020, Europe was home to 1,677 species classified by the International Union for Conservation of Nature (IUCN) as threatened with extinction. Snails, clams, and fish are among the most endangered, while the arctic fox, the European mink, the Mediterranean monk seal, the North Atlantic right whale, and the polar bear, are classified as the continent's most threatened mammals. Pollinators such as the European bee and several butterfly species are also declining. Moreover, over half of Europe's endemic trees are also considered to be at risk of extinction.
The European Union has established legislative provisions that recognise animals as sentient beings and protect their rights as such. In order to preserve endangered species, the European Parliament adopted the EU Biodiversity Strategy for 2030, "a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems."

The strategy includes launching a nature restoration plan to restore degraded ecosystems, adopting an ambitious global biodiversity framework under the Convention on Biological Diversity, as well as establishing a larger EU-wide network of protected areas on land and at sea.

According to the European Environment Agency, 26% of the EU's land as well as around 12% of the EU's seas are already protected. Despite covering a wide expanse of waters, Marine Protected Areas (MPAs) have frequently come under fire for lax management and control. One study found that up to 96% of marine parks allowed illicit destructive activities to occur within their boundaries. These activities include illegal fishing, bottom trawling, seabed mining, and destructive industrial or infrastructural development. Over half of MPAs reported no management at all. Over the past decade, MPAs were established at a notably fast pace, and criticism has been levied at a perceived sacrificing of quality for the sake of quantity.

Plastic pollution is undoubtedly one of the biggest environmental problems of our lifetime. Millions of tons of plastic waste are dumped every year, a majority of which makes its way into the oceans, harming wildlife and ecosystems in the process. In Europe alone, nearly 26 million tonnes of plastic waste is generated each year. This alone accounts for about 80% of marine litter.

For decades, several European countries exported their plastic waste to China. Until 2017, when the government announced an import ban on solid waste, the Asian nation was the world's largest importer of plastics, receiving a staggering 8 million tonnes from more than 90 nations around the world every year. The decade-long reliance on China has stifled the development of the domestic market and infrastructure for waste management in many European countries as well, including top-exporter Germany and Belgium. Yet, many believe that in the long run, China's ban could have a positive impact, as it will forces Western nations to develop their own effective waste management systems to deal with the trash they generate.

To tackle the plastic pollution crisis, in 2018 the European Union adopted the plastics strategy, a policy that aims to protect the environment and human health by reducing marine litter, greenhouse gas emissions, and the bloc's dependence on imported fossil fuels. Among the policies that have been adopted since is the Directive on single-use plastics, which forbids markets of EU member states to sell single-use plastic products – including food containers, cotton bud sticks, and sanitary items – where affordable and sustainable alternatives are available.

Singular European states have also implemented certain measures to tackle plastic

pollution. France, Germany, and Spain, for example, are among the countries that put a full ban on single-use plastic, targeting, among other products, plastic bags, containers, and cutlery. A number of European countries have also implemented a policy known as the Extended Producer Responsibility (EPR), where companies are charged for collecting and recycling cardboard boxes, plastic containers, and other packaging materials, as well as the disposal of any non-recyclable packaging materials, Earth writes.