

# CLIMATE CHANGE EXISTS!

Arguments to deal with unbelievers and the indecisive

#### **CHANGE? WHAT CHANGE?**

It's true: the climate has always changed due to different natural phenomena. But... for several decades it has been changing at an unprecedented speed and with obvious consequences. The concentration of CO<sub>2</sub> in the atmosphere is increasing at a much faster rate than it had in hundreds of thousands of years, which is causing the rise in global temperature, the rise in sea level, the acidification of the oceans, the melting of the polar ice caps, storms and so on. We are in the midst of a climate crisis. The year 2019 is set to end the hottest decade on record, according to the World Meteorological Organization. In fact, the temperatures reached between 2015 and 2019 have broken all previous records. The effects of climate change are manifested through extreme and anomalous weather events, such as heat waves and floods, that used to occur every century and are now becoming more frequent.

## **HOW DO WE KNOW IT'S NOT A NORMAL CLIMATE CHANGE?**

Because we have evidence. Scientists obtain their evidence from ice blocks extracted from Greenland, Antarctica and glaciers in tropical mountains. These blocks store information from hundreds of thousands of years ago and prove that the Earth's climate responds to changes in greenhouse gas (GHG) levels. Tree rings, ocean sediments, coral reefs and sedimentary rock layers are also valuable sources of data. That's how we know that the CO<sub>2</sub> concentration peaked at 407.8 parts per million in 2018. Furthermore, the length of time the GHGs remains in the atmosphere is considerable. CO<sub>2</sub> can remain between 50 and 200 years, which gives climate change a cumulative nature, that can affect the climate for thousands of years.

# THE CLIMATE HAS ALWAYS CHANGED, BUT DUE TO NATURAL CAUSES. MAN'S ACTION HAS NOTHING TO DO WITH IT.

In reality, it does. The human race is responsible for this acceleration, according to scientific evidence. Our actions generate greenhouse gases (GHG) that accumulate in the atmosphere and retain heat, contributing to an increase in global temperatures. Although there are GHGs of a natural origin, industrialization has caused an exponential concentration of these gases since the beginning of the last century. CO<sub>2</sub> is the greenhouse gas most commonly produced by human activities and it is responsible for 63% of man-made global warming. The current energy model based on the use of fossil fuels (coal, gas and oil), the combustion of which generates large quantities of GHG, has been one of the main causes of climate change. Two thirds of global GHG emissions are due to the production of energy for electricity, transport, heating and industry.







## **DEGREE UP, DEGREE DOWN, WHAT DOES IT MATTER?**

It sounds odd, we know. But each degree of warming matters. A temperature increase of 1°C is a significant change because it is the average temperature rise across the globe. The special report of the Intergovernmental Panel on Climate Change (IPCC) emphasizes the need to keep the average global temperature rise below 1.5 °C as opposed to a 2 °C increase. That half-degree difference is vitally important. For example, it may mean that millions of people less are exposed to extreme heat waves, water shortages and health risks.



# WITH ALL OUR DAILY PROBLEMS, WE DON'T HAVE TIME TO WORRY ABOUT THE CLIMATE!

Climate changes affects all of us. Scientific predictions range from scenarios of lack of drinking water to major changes in food production conditions and an increase in mortality rates due to floods, storms, droughts and heat waves. The extinction of animals and plants is also anticipated, as habitats will change so rapidly that many species will be unable to adapt in time. In addition, the World Health Organization (WHO) has warned that the health of millions of people could be threatened by increased malaria, malnutrition and water-borne diseases. In short, we are facing an environmental phenomenon with serious economic and social consequences. And if we fail to act and take no steps now, the situation will be irreversible: there will be no going back in the accumulation of GHG in the atmosphere.



#### BUT SOLVING THIS IS A MATTER FOR INSTITUTIONS AND GOVERNMENTS...

We all count. We are all needed. Governments must take action and reach ambitious emission reduction commitments. The private sector must implement multilateral agreements between governments and provide the necessary funding to meet the objectives. The different economic sectors must be involved in these efforts. For example, in the field of energy, we must advance the decarbonization process by promoting renewable energies, reducing the use of fossil fuels, encouraging energy efficiency and promoting the sustainability of transport (sustainable mobility). And we citizens must make changes, carry out actions and decisions to fight climate change and protect the environment on a day-to-day basis.



### THERE'S A LOT OF GREEN HYPE, BUT IBERDROLA ALSO POLLUTES...

On a European level, Iberdrola has made a public commitment to remaining among the largest European companies with the lowest CO<sub>2</sub> emissions per kWh produced. Our strategy is focused on gradually cutting back the intensity of greenhouse gas emissions by continuing the development of electricity generation from renewable sources, while steadily incorporating the most efficient and least carbon-intensive technologies into its existing facilities.

In Spain, in 2018, we emitted 4.9 kt of CO<sub>2</sub>, a third of which is due to the production of electricity in 2 coal plants that are currently in the process of closure. In this way and thanks to the investments in solar and wind that will be put into service in 2020, we are continuing to reduce our emissions. Today, we are the electricity company that emits the least per kWh produced.



#### SO WHY ARE BIG COMPANIES PRESENT AT THE COP?

The solution to climate change is everyone's business. The Paris Agreement clearly states the fundamental role of companies in achieving its objectives. In order to halt the climate crisis, it is essential that the economy undergoes a transformation towards decarbonization. The participation of companies and civil society in general is channelled through the "Climate Action Agenda", one of the most important forums held in parallel with the official negotiations.



## YOU'RE TALKING A LOT, BUT REALLY, WHAT IS IBERDROLA'S COMMITMENT AGAINST CLIMATE CHANGE? ARE YOU DOING ANYTHING?

We have been defending a sustainable energy model for 20 years. Over this time we have invested 100,000 million euros in renewables and have shut down 15 coal and oil plants. Today, more than two thirds of our installed capacity is emission-free and in the UK we are 100% green. And we will continue along these lines because our goal is to be carbon neutral by 2050.

Our commitment goes far beyond business. We actively participate in the global climate agenda and exercise a clear leadership in the international negotiations that take place in this area. In this sense, we are fully committed to a climate scenario aligned with a maximum temperature increase of 1.5 °C and the appropriate framework of working conditions and equitable transition to foster decarbonisation. In addition, we promote training, climate awareness and sustainable mobility.

