EXERCISE 4 - CLIMATE DISINFORMATION

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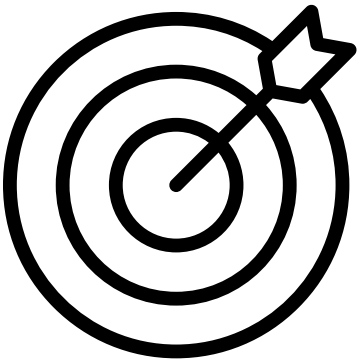

Objective

The goal of this exercise is to learn to distinguish between reliable information and unverified or false information that constitutes climate disinformation. By analyzing two real articles, participants will be able to verify which one conveys scientifically validated information and which one contains information that may not be fully accurate.

Instructions

The facilitator divides participants into groups and asks each group to read the articles below and then collectively decide which one may be based on credible data and which one may constitute climate disinformation. In addition to the substantive issues conveyed in the articles, participants should also analyze technical aspects, such as the source and credibility of the author.

Then, each group shares their observations in a forum.

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HOW GLOBAL WARMING DISRUPTS LIFE ON EARTH

Author: Sarah Gibbens
February 14, 2024

Our planet is getting warmer. Since the Industrial Revolution—a period that spurred the use of fossil fuels in everything from power plants to transportation—the Earth has warmed by 1 degree Celsius, about 2 degrees Fahrenheit. This may seem insignificant, but 2023 was the hottest year on record, and all ten hottest years have occurred within the last decade.

Global warming and climate change are often used interchangeably, but scientists prefer to use "climate change" when describing the complex changes currently affecting the Earth's weather and climate systems.

Climate change includes not only rising average temperatures but also natural disasters, changes in wildlife habitats, rising sea levels, and a range of other impacts. All of these changes occur as humans continue to add heat-trapping greenhouse gases like carbon dioxide and methane into the atmosphere, which drive climate change (also known as global warming).

What causes global warming? When fossil fuel emissions are pumped into the atmosphere, they alter the chemical composition of our atmosphere, allowing sunlight to reach Earth but preventing heat from escaping into space. This warming effect is known as the greenhouse effect. Carbon dioxide is the most common greenhouse gas and accounts for about 75 percent of all climate-warming pollution in the atmosphere. This gas is a byproduct of the production and combustion of oil, gas, and coal. About a quarter of carbon dioxide also comes from land cleared for timber or agriculture. Methane is another common greenhouse gas. Although it accounts for only about 16 percent of emissions, it is roughly 25 times more potent than carbon dioxide and disperses faster. This means that methane can cause a significant spark in warming, but ending methane pollution could also quickly reduce the amount of atmospheric warming. The sources of this gas include agriculture (primarily livestock), leaks from oil and gas production, and landfill waste.

What are the effects of global warming? One of the most concerning impacts of global warming is the effect of warmer temperatures on the Earth's polar regions and mountain glaciers. The Arctic is warming four times faster than the rest of the planet. This warming reduces critical ice habitat, creating more unpredictable weather patterns worldwide.

A warmer planet not only raises temperatures but also makes rainfall more extreme as the planet warms. For every degree the thermometer rises, the air holds about seven percent more moisture. This increase in atmospheric moisture can cause flash floods, more destructive hurricanes, and even paradoxically stronger snowstorms.

The world's top scientists regularly gather to review the latest research on the changes taking place on our planet. The results of this review are synthesized into regularly published reports known as Intergovernmental Panel on Climate Change (IPCC) reports. A recent report highlights how destructive global temperature increases could be. Coral reefs are currently a severely threatened ecosystem. When corals are exposed to environmental stressors, such as high temperatures, they expel their colorful algae and turn ghostly white—this effect is known as coral bleaching. In this weakened state, they are more likely to die. Trees increasingly die due to drought, and this mass mortality is changing forest ecosystems. Rising temperatures and changing rainfall patterns are making wildfires more frequent and widespread. Research shows they are even spreading to the eastern United States, where fires have historically been less common. Hurricanes are becoming more destructive and bringing more rain, which will cause even more damage. Some scientists say we must prepare for Category 6 storms, even though the current classification system ends at Category 5.

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How can we limit global warming? Limiting the rise of global warming is theoretically achievable but politically, socially, and economically challenging. The same sources of greenhouse gas emissions must be reduced to lessen warming. For example, oil and gas used for electricity generation or industrial production will need to be replaced with net-zero emission technology, such as wind and solar energy. Transportation, another major source of emissions, will need to integrate more electric vehicles, public transit, and innovative urban design, such as safe bike lanes and pedestrian-friendly cities. (Learn more about solutions to limit global warming.) One solution to global warming that was once considered unlikely is now taken more seriously: geoengineering. This type of technology involves manipulating the Earth's atmosphere to physically block warming sun rays or by drawing carbon dioxide directly from the sky. Restoring nature can also help limit warming. Trees, oceans, wetlands, and other ecosystems help absorb excess carbon —but if they are lost, so too is their potential to combat climate change. Ultimately, we will have to adapt to rising temperatures, for example, by building homes that withstand rising sea levels or cooling homes more efficiently during heatwaves.

Source:
https://www.nationalgeographic.com/environment/article/global-warming-effects

NO MATTER WHAT WE DO, THE CLIMATE WILL CONTINUE TO CHANGE

Robert Azembski

March 30, 2024

Even a complete cessation of industrial CO2 emissions will not stop climate changes on Earth, argues Professor Piotr Wolański, chair of the Space Research Committee of the Polish Academy of Sciences, in an article titled "Climate and Humanity" published in Wprost.

Professor Wolański, a prominent scientific authority, believes that human activity has a minimal, if any, impact on climate warming. He provides arguments to support this view, summarized below.

As is known, Earth's climate is shaped by three fundamental climate-forming processes: the heat cycle, the water cycle, and air circulation. The primary source of heat on Earth is solar energy. This thermal radiation is absorbed by land, water surfaces, and the atmosphere, while some of the solar energy reaching Earth is reflected by land, water, and clouds, and remitted into space. Part of this solar energy causes warming of land and ocean surfaces, as well as the evaporation of water from oceans, land reservoirs, rivers, and other moist surfaces.

Solar Heat and the Greenhouse Effect

What happens next? Solar energy absorbed in the atmosphere raises its temperature and drives the water cycle and air circulation. This leads to winds and precipitation, such as rain and snow. Heated lands and oceans emit infrared radiation, some of which escapes our planet into space, while another portion is absorbed by greenhouse gases and partly emitted back into space, with the remainder returning to Earth's surface.

This process is responsible for the so-called greenhouse effect, which maintains an average temperature of about 15°C on our planet. According to the professor, without this effect, the current temperature would be about 18°C lower.

Greenhouse gases are directly responsible for the greenhouse effect—primarily water vapor, which (according to various estimates) accounts for 70-99 percent of the entire greenhouse effect. The remaining contributors are those detested by climate activists: carbon dioxide, methane, nitrous oxides, and so on. Dust particles from volcanic eruptions, desert storms, forest fires, and, of course, industrial emissions also significantly impact the heat balance in Earth's atmosphere. This inclusion of "also" implies that they do not have a principal impact.

In summary, according to the professor, the most significant influences on the climate are (in this order): the Sun, volcanic activity, greenhouse gases, and ocean currents—such as El Niño or the Gulf Stream. To a lesser extent, other factors like the precession of Earth's axis also play a role.

Climate Has Changed Many Times Before

Earth's climate has been continuously changing since the beginning of our planet's existence. Over the past 450,000 years, there have been four long ice ages, lasting from about 80,000 to over 100,000 years, interrupted by shorter, interglacial warming periods lasting around 15,000 years or less.

Data obtained from ice cores in Antarctica show a clear correlation between temperature and the levels of CO2 and dust in the atmosphere. Antarctic ice cores indicate that at the end of previous ice ages, carbon dioxide concentrations in the atmosphere generally began to increase only after temperatures started to rise. This indicates that rising CO2 levels were not the initial cause of warming at the end of ice ages.

"It appears that at the end of the last ice ages, some factor—likely orbital changes—caused an increase in temperature. This led to higher CO2 levels, which in turn caused further warming, releasing even more CO2, and so on: a positive feedback loop that amplified a small change in temperature. At some point, the shrinking ice sheets further reinforced the warming," according to climate scientists Michael Le Page and Catherine Brahic.

There is also a distinct correlation between colder periods and dust levels—the more dust, the lower the temperature.

It's Temperature That Generates CO2, Not the Other Way Around

Research by Professor Piotr Wolański and observations by other scientists suggest that rising temperatures cause an increase in atmospheric carbon dioxide (not the other way around, as portrayed by climate activists). Rising CO2 levels in the atmosphere have always been a secondary effect, driven by rising temperatures, which in turn led to further warming of ocean waters, thereby releasing more CO2 from the oceans, and so on.

"Despite the fact that the greatest influence on climate changes has been, is, and will be the varying activity of the Sun, we should still care for our environment," urges Professor Wolański.

Why is it so important to expose the falsehoods propagated by climate activists at international COP meetings as the so-called "scientific consensus"? It's not about fearing accusations of denialism or conspiracy theories, but rather engaging in an open debate. This is because the liberal scientific establishment has concocted this notion that carbon dioxide plays a critical role in Earth's climate system to justify raising taxes and para-taxes and to stimulate the development of new "clean" industries. The greatest proponents of this agenda are the European elites, who aim to forcibly remodel our economic and social lives.

Source:
https://fpg24.pl/obojetnie-co-zrobimy-klimat-i-tak-bedzie-sie-zmienial/