Committee: Youth Delegates Forum (YDF)

Issue: Mitigating the Effects of Misinformation on the Subject of Climate Change

Student Officer: Christina Charitaki

Position: Co- Head

### **PERSONAL INTRODUCTION**

Dear Delegates,

My name is Christina Charitaki and I have the utmost pleasure to serve as the co- head of the Youth Delegates Forum for the 6th annual DSTMUN conference. This will be my first ever DSTMUN and 10th conference in total, and I couldn't be more grateful for this opportunity.

Having chaired a similar committee before I can totally understand how frightening and intimidating MUN can be, but I will do my best to ensure that it will be a pleasant and amazing experience for all of you and that all your hard work will pay off.

The topic that I will be examining in this study guide is "Mitigating the Effects of Misinformation on the Subject of Climate Change". Reflecting the general topic of this conference, Climate Change is a phenomenon that concerns us all. It can be harmful not only for the fauna and flora but also for mankind as ultimately, exotic destinations and islands inhabited by people like the Maldivian Islands will end up underwater.

Though this study guide will include in-depth and multi- aspectual information, I sincerely encourage you to do your own research too, as understanding such a multidimensional topic requires numerous and varied sources of information.

Should any of you need, any kind of help during the preparation process, please feel free to contact me via e- mail at <u>christinacharitaki2007@gmail.com</u>

Looking forward to seeing you all in November for a fruitful and enjoyable experience,

Christina Charitaki

# **TOPIC INTRODUCTION**

Since the subject of climate change was brought up, people were wondering what climate change is and how it can be verified rather than seeking ways to combat the climate crisis or listening to the experts who try to convince the public to take action. This is happening because of climate misinformation. Statements are made, reports are released, and words of scientists are heard without doubting their authenticity or reliability.

In today's digital world the function and the usage of the media, be it social networking sites or the traditional mass media like the TV or even newspapers and magazines, play a cardinal role as it is our most used source of information. However, it doesn't necessarily mean that everything presented to us is trustworthy and even correct. A great majority of what is posted on the net is just personal beliefs, opinions or even theories without being backed up by the scientific community that usually aim to confuse the world. Climate Change is a global phenomenon which can end up harming mankind in terms of sinking inhabited land or altering the weather conditions putting at risk the fauna and flora. This is why, in this specific issue misinformation must be tackled as soon and as effectively as possible.

In 2017 the United Nation set 17 sustainable development goals to be achieved by 2030 with its 13th being Climate Action. Given the aforementioned results and the general climate of insecurity and fear that torment our world regarding who we can trust and how can we know for sure which data to believe, conclusions made during the Covid- 19 pandemic when fear had taken over people's minds stopping them from listening carefully to the experts who tried to advise us on what to do, misinformation prevents the accomplishment of this goal and prevents all the efforts made for climate stability.

## **DEFINITION OF KEY TERMS**

## **Climate Change**

Changes in the earth's weather, including changes in temperature, wind patterns and rainfall, especially the increase in the temperature of the earth's atmosphere that is caused by the increase of particular gasses, especially carbon dioxide<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Press, Oxford University. "Climate-Change Noun - Definition, Pictures, Pronunciation and Usage Notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com." Oxfordlearnersdictionaries.com, 2019, www.oxfordlearnersdictionaries.com/definition/english/climatechange?q=climate+change.

### Misinformation

The act of giving wrong information about something<sup>2</sup>

### Disinformation

False information that is given deliberately<sup>3</sup>

### Industrialization

The process of developing industries in a country<sup>4</sup>. The industrialization is inter connected with the industrial revolution as well with the urbanization as it meant that new job offers were on the market because of the development of industries.

### **Climate skeptic**

A person who doubts the accuracy of claims that changes occurring in the Earth's climate pose a risk of environmental catastrophe<sup>5</sup>

### **Conspiracy Theories**

Events that involve conspiracy between sinister and powerful groups<sup>6</sup>

# BACKGROUND INFORMATION

<sup>3</sup> "Disinformation Noun - Definition, Pictures, Pronunciation and Usage Notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com." Oxfordlearnersdictionaries.com, 2021, www.oxfordlearnersdictionaries.com/definition/english/disinformation?q=disinform ation.

<sup>4</sup>"INDUSTRIALIZATION | Meaning in the Cambridge English Dictionary." *Dictionary.cambridge.org*, <u>dictionary.cambridge.org/dictionary/english/industrialization</u>.

<sup>5</sup> Collins Dictionary. *CLIMATE SKEPTIC: Meaning in Collins Dictionary*. www.collinsdictionary.com/dictionary/english/climate-sceptic.

<sup>6</sup> Kingaby, Harriet. "Four Types of Climate Misinformation Online." *Medium*, 16 June 2021, <u>misinfocon.com/four-types-of-climate-misinformation-online-56ae9487f884.</u>

<sup>&</sup>lt;sup>2</sup> Press, Oxford University . "Misinformation Noun - Definition, Pictures, Pronunciation and Usage Notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com." Oxfordlearnersdictionaries.com, 2022, www.oxfordlearnersdictionaries.com/definition/english/misinformation?q=misinfor mation.

# History of Climate Change: How our climate is changing

The rate of change of the climate in the 20th century and over millennia are certainly very different. It is crystal clear that the climate has been changing as centuries go by. In the last 800,000 years there have been 8 cycles of ice ages with the last one being 11,700 ago almost in the same time as the human kind started out their industrial activity<sup>7</sup> In fact, it was suggested based on experiments that the carbon dioxide (CO2) and other gasses produced could be detected in the atmosphere and the warming theory was about to appear. Later in the late 1950s, and specifically in 1958 the data gained about CO2 through research and experiments led to the belief of the real existence of the warming theory which was enhanced and applauded by scientists at the time.<sup>8</sup>

# **Industrial Revolution and Climate Change**

The Industrial Revolution began in Great Britain in the 1700s with iron and coal having a dominant role in the manufacturing industry. Later, During the 1800s, the ideas of this significant event passed on the US with the American Industrial Revolution, or the second industrial revolution taking place and being characterized by new machinery for agriculture and manufacture as well as new means of transport. It created new job offers which meant that a lot of people living in the villages moved in the main city centers resulting in industrialization and capitalism<sup>9</sup>

Though the Industrial Revolution entailed job offers and socioeconomic growth, it impacted the atmosphere and the climate as well. Specifically, Climate change is connected with the CO2 emissions which date back as far as the 1830s with the first signs of warming. The industrial revolution is marked with a rise of CO2 and other greenhouse gasses emissions which derive from human activity and ultimately alter the world's climate leading to the increase of the greenhouse effect.<sup>10</sup> The greenhouse effect is a natural process that warms the Earth's surface and makes life on Earth

<sup>&</sup>lt;sup>7</sup>NASA. "Climate Change Evidence: How Do We Know?" Climate Change: Vital Signs of the Planet, National Aeronautics and Space Administration, 21 Sept. 2018, <u>climate.nasa.gov/evidence/.</u>

<sup>&</sup>lt;sup>8</sup> Editors, History com. "Climate Change History." *HISTORY*, 6 Oct. 2017, <u>www.history.com/topics/natural-disasters-and-environment/history-of-climate-change#1988-global-warming-gets-real.</u>

<sup>&</sup>lt;sup>9</sup> Chen, James. "Industrial Revolution." *Investopedia*, 2 Oct. 2022, <u>www.investopedia.com/terms/i/industrial-revolution.asp.</u>

<sup>&</sup>lt;sup>10</sup> EPA. "Causes of Climate Change." *Www.epa.gov*, EPA, 15 Apr. 2021, www.epa.gov/climatechange-science/causes-climate-change.

possible. The greenhouse gasses are gasses that have the ability to change how much heat is absorbed by the earth. However, the more of these gasses are emitted to the atmosphere, the slower the heat is going to be absorbed and as a result the global temperatures are rising. For instance the CO2 levels in the last 150 years have increased from 280 parts per million to 450 parts per million. Without the emission of the greenhouse gasses the average temperature would be -18°C instead of approximately 15°C That is now.<sup>11</sup> Moreover, according to John Perlin the CO2 emissions have resulted from the burning of coal and the speech rates of deforestation in the USA <sup>12</sup>

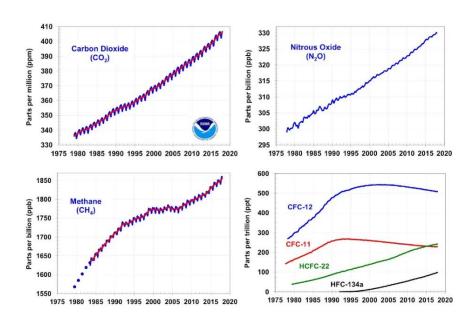


Figure 1: Diagram depicting the rise of greenhouse gasses emissions<sup>13</sup>

<sup>&</sup>lt;sup>11</sup> NSW government. "Causes of Climate Change." *AdaptNSW*, 2022, www.climatechange.environment.nsw.gov.au/causes-climate-change.

<sup>&</sup>lt;sup>12</sup> Little, Becky. "Industrial Revolution Linked to Early Signs of Climate Change." *History.com*, 18 Apr. 2023, <u>www.history.com/news/industrial-revolution-climate-change.</u>

<sup>&</sup>lt;sup>13</sup> Lopez, Antonio. "Fake Climate News: How Denying Climate Change Is the Ultimate in Fake News - the Journal of Media Literacy." *International Council for Media Literacy*, 1 Apr. 2020, <u>ic4ml.org/journal-article/fake-climate-news-how-denying-</u> <u>climate-change-is-the-ultimate-in-fake-news/</u>.

### **Climate Misinformation and the Mass Media**

Contradicting social media, the mass media include all ways that the public can get informed about affairs without interference, so they consist of the newspapers, the magazines, the TV news etc. The Mass Media's usage is to inform the public about current affairs however, climate change is a constant issue so the more the general public hears about it, the less interesting so reports and studies are no longer presented or are presented less frequently. However, the ultimate result is the belief of misleading posts on social networking platforms.<sup>14</sup> This is why climate change coverage in the media has to change. Such an effort has been initiated with the Covering Climate Now Project by The Nation and Columbia Journalism Review where drops in the climate coverage are reported. Specifically in 2018, there was a 45% drop in Climate Crisis Coverage by three major American TV companies including FOX.<sup>15</sup> To describe the situation better, the media bias called "Bothsidesism" was created meaning that some issues are presented as being more balanced between opposing views than the evidence supports. According to the Northwestern University, bothsidesism could damage the public's perception on the news and make them unable to tell reality and fiction apart, harming the scientific consensus.<sup>16</sup>

#### Social Media contribution to misinformation spread

Undoubtedly, social media is a key factor when referring to misinformation. These platforms constitute a great threat to the spread of misinformation as they assemble a great number of users permitting the sharing of information and opinions without having official filter mechanisms in everything that is written in the various blogs and websites. According to researchers at Indiana University, the social media ecosystem does not only spread intentional misinformation but also accidental one. The latter happens because of three different but interconnected biases that us humans have without understanding it, most of the time. These are the cognitive, social and

 <sup>14</sup> Russell, Connor. "Climate Change in the Media: Public Perception and the Responsibility of News Outlets." *Earth Day*, 2 Dec. 2022, <u>www.earthday.org/climate-change-in-the-media-public-perception-and-the-responsibility-of-news-outlets/.</u>
<sup>15</sup> Lopez, Antonio. "Fake Climate News: How Denying Climate Change Is the Ultimate in Fake News - the Journal of Media Literacy." *International Council for Media Literacy*, 1 Apr. 2020, <u>ic4ml.org/journal-article/fake-climate-news-how-denying-</u> climate-change-is-the-ultimate-in-fake-news/.

<sup>16</sup> Witynski, Max. "False Balance in News Coverage of Climate Change Makes It Harder to Address the Crisis." *News.northwestern.edu*, 22 July 2022, <u>news.northwestern.edu/stories/2022/07/false-balance-reporting-climate-change-crisis/.</u>

algorithmic biases. The cognitive bias means that we are more inclined to believe and thus spread what sounds to us right without confirming it whereas the social one means that we tend to trust something written or said by an individual from our social and/ or ideological circle. Lastly, the algorithmic bias has to do more with the function of the social networking sites themselves. Specifically, social media platforms are designed to respond to our preferences. For instance, if we "like" a post depicting climate misinformation, we will be seeing a lot similar to these.<sup>17</sup> Additionally, according to Wendy Wood, a University of Southern California expert on habits, misinformation is " really a function of the structure of the social media sites themselves". In order to attract attention, the ones who manage the social media's function have established a rewarding system in order to encourage the users to maintain their accounts active. However, this entails critically deficit posts or posts full of political biases affecting their ability to recognize false stories.<sup>18</sup>

## Forms of Climate Misinformation

# **Conspiracy Theories**

Conspiracy theories exist and can have major influence in a lot of fields and in a lot of global issues like climate change or the COVID- 19 pandemic so consecutively a person susceptible to COVID- 19 conspiracy theories may be as well susceptible to climate change ones. One of the most famous climate conspiracies came on the 21st of October in 2020 a Conspiracy Theory called "Avoiding a Climate Lockdown" came out. The ultimate goal would be to transition to a "green economy" and achieve a "radical overhaul". However, this theory suggests that should the aforementioned failure, the governments are going to impose similar lockdowns as they did as a precaution for the pandemic while at the same time limiting private-vehicle use, banning consumption of red meat, and imposing extreme energy-saving measures, while fossil-fuel companies would have to stop drilling. At first, this theory gained popularity on social media. After it had gathered momentum, Newsbusters, a company that rejected the scientific consensus and judges the climate change coverage by the media, published an article headed: "Soros/Gates-Funded Org (\$6.5m): World May Need 'Climate Lockdown' commencing a spread of misleading coverage prominent climate change deniers in their articles, on YouTube videos and on right- wing

<sup>&</sup>lt;sup>17</sup> Turrentine, Jeff. "Climate Misinformation on Social Media Is Undermining Climate Action." *NRDC*, 19 Apr. 2022, <u>www.nrdc.org/stories/climate-misinformation-social-media-undermining-climate-action</u>.

<sup>&</sup>lt;sup>18</sup> Madrid, Pamela. "Study Reveals Key Reason Why Fake News Spreads on Social Media." *USC News*, 17 Jan. 2023, <u>news.usc.edu/204782/usc-study-reveals-the-key-reason-why-fake-news-spreads-on-social-media/.</u>

newspapers like the news companies starting making newspapers like the Washington Times until the 21st of December, 2020 when it appeared for the first time on broadcasting media by the Fox News. In the end, it was broadcasted that the climate crisis declaration in the USA stemmed from the election of President Biden and that he was pressured to enforce lockdowns in case of an emergency. Though Fox News operates internationally, the story of the Climate Lockdown didn't last for long. However, on the 26th of February the World Economic Forum deleted and apologized for an already published post in the media suggesting that the aforementioned lockdowns are slowly improving cities, enhancing the theory. The situation escalated when, on March 3rd, the Guardian released a misleading headline implying that in order to accomplish the climate goals set in the Paris Agreement, there would need to be lockdowns every two years sparking controversies on a social platform. After seeing this, the papers replaced the headline with a more neutral one.<sup>19</sup> Another conspiracy theory that was popular at the time of the 26th UN Climate Change Conference (COP26) is suggesting that climate change is actually the result of secret government experiments. Specifically, there is a USA state- funded program which causes this phenomenon and is called the "High-frequency Active Auroral Research Program (HAARP)".<sup>20</sup>

## **Culture Wars**

Culture Wars are used especially in the field of politics to cause disruption between groups creating 'out groups' through name calling and reductive arguments.<sup>21</sup> They are caused because of climate change measures that conflict with divisive and controversial issues like LGBTQ+ rights, critical race theory and abortion rights in order to turn the public's attention to them and delay climate action.<sup>22</sup> One significant

<sup>21</sup> Kingaby, Harriet. "Four Types of Climate Misinformation Online." *Medium*, 16 June 2021, <u>misinfocon.com/four-types-of-climate-misinformation-online-56ae9487f884.</u>

<sup>&</sup>lt;sup>19</sup> Maharasingam-Shah, Eisha. "Climate Lockdown" and the Culture Wars: How COVID-19 Sparked a New Narrative against Climate Action 2 2 "the GREAT REPLACEMENT": THE VIOLENT CONSEQUENCES of MAINSTREAMED EXTREMISM / Document Title.

<sup>&</sup>lt;sup>20</sup> Patterson, Dan. "Climate Change Conspiracies Are Spreading Rapidly During the UN's COP26 Event." *Www.cbsnews.com*, 9 Nov. 2021,

www.cbsnews.com/news/climate-change-conspiracies-are-spreading-rapidly-duringuns-cop26-event/.

<sup>&</sup>lt;sup>22</sup> Taylor, Mathiew. "Climate Policy Dragged into Culture Wars as a "Delay" Tactic, Finds Study." *The Guardian*, 9 June 2022,

www.theguardian.com/environment/2022/jun/09/climate-policy-dragged-intoculture-wars-as-a-delay-tactic-finds-study.

example is that of the abortion. Specifically, according to the Guttmacher Institute each year approximately 121 million pregnancies are unintended and 10% of births are unwanted. Should abortion and contraception be made available and accessible to everyone globally, then the population would be reduced by 10% and so would the carbon dioxide emission in the long run. The carbon emissions would be down by 3.6 billion tons per year, which is more than the total combined emissions of Germany, Japan, Brazil, Turkey, Mexico, and Australia.<sup>23</sup>

### **Effects of Climate Misinformation and Disinformation**

Climate misinformation and disinformation posts are major menaces when it has to do with climate action. The primary effect of this phenomenon is the fact that it delays climate action. As Melissa Fleming, UN Under- Secretary General stated in an article "climate action is being undermined by bad actors seeking to deflect, distract, and deny efforts to save the planet". Moreover, a deception regarding climate science is created, undermining the climate consensus blocking the public's contribution for domestic and international policies and guidelines.<sup>24</sup> People convinced regarding climate change's non- existence, fail to acknowledge that the world's experts on environmental affairs align with each other on the issue thus, making it credible and therefore do not contribute to its resolving through simple measures like recycling, limited usage of plastic bags and preference to utilizing public transports rather than private vehicles. Finally, another impact of the false news is the misperception of the scientific consensus which derives from ideological polarization and statements made by politicians contradicting the reality of climate change. <sup>25</sup> Explaining further, according to the social bias, people are inclined to trust and believe the ones who they identify with. So, should an individual for example be ideologically in accordance with the politician because of his stances or his position of power, they are going to have faith in his words rather than someone qualified with degrees and distinctions.

#### MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

<u>e360.yale.edu/features/unwanted-pregnancy-contraception-abortion-climate-</u> <u>change.</u>

<sup>&</sup>lt;sup>23</sup> PROCTOR, ROBERT N, and LONDA SCHIEBINGER. "How Preventing Unwanted Pregnancies Can Help on Climate." *Yale E360*, 21 July 2022,

<sup>&</sup>lt;sup>24</sup> "Climate Action against Disinformation | What Is Climate Mis/Disinformation." *CAAD*, <u>caad.info/what-is-climate-disinformation/.</u>

<sup>&</sup>lt;sup>25</sup> Benegal, Salil D., and Lyle A. Scruggs. "Correcting Misinformation about Climate Change: The Impact of Partisanship in an Experimental Setting." *Climatic Change*, <u>ideas.repec.org/a/spr/climat/v148y2018i1d10.1007\_s10584-018-2192-4.html.</u>

# China

China is dominant in CO2 emission, so it holds a special place on the subject of climate change making it prevalent and increasing the possibilities to appear in cases of climate misinformation. Specifically, from September 2022 to April 2023 the responsible authorities have collected over a hundred misleading posts, videos and messaging on Chinese and nonsocial media platforms<sup>26</sup>. For example, there are posts depicting Greta Thunberg, describing her "selective environmentalist" with the accusation of not commenting on Japan's nuclear plans, whereas she did as well as suggesting that the Chinese minimize the use of chopsticks to reduce deforestation. In addition, China is subject to insulting comments of creating or spreading misinformation. Specifically, United States President Donald Trump shared in the media his thoughts accusing the Chinese of climate change and described it as a joke. Specifically: "The concept of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive"<sup>27</sup> Although the Chinese have long been suffering from misleading posts in the media, they only accepted that the climate crisis is real in 2012 and started developing green technology which was regarded as a business opportunity for the country's economy. Until then, they regarded it as a Western tool to prevent China's growth, exactly what President Trump accused it of. However, misinformation is not only misleading posts in the media or accusations from economic competitors. Journalists in China find it extremely hard to report and cover environmental issues because of censorship. Whereas in the past journalists would make accurate and frequent reports even if that meant exposing the country's disruptive policies and thus adopting greener policies, now they are facing threats and are being censored by different kinds of stakeholders, including local authorities and central governments.<sup>28</sup> They are labeled as traitors, get arrested and get lawsuited. For example, in 2017, thirty eight journalists were imprisoned.<sup>29</sup>

<sup>&</sup>lt;sup>26</sup> Romero, Purple. "China's New Problem: Climate Misinformation Driven by Nationalism." *Www.aljazeera.com*, 3 July 2023,

www.aljazeera.com/opinions/2023/7/3/chinas-new-problem-climate-lies-fuelled-bynationalism.

<sup>&</sup>lt;sup>27</sup> Wong, Edward. "Trump Has Called Climate Change a Chinese Hoax. Beijing Says It Is Anything But." *The New York Times*, 18 Nov. 2016, www.nytimes.com/2016/11/19/world/asia/china-trump-climate-change.html.

<sup>&</sup>lt;sup>28</sup> Genovese, Isabella. "Environmental Reporters Face Disinformation, Threats in China's Restrictive Political Climate." *International Journalists' Network*, 18 Nov. 2022, <u>ijnet.org/en/story/environmental-reporters-face-disinformation-threatschinas-restrictive-political-climate.</u>

<sup>&</sup>lt;sup>29</sup> Xu, Beina, and Eleanor Albert. "Media Censorship in China." *Council on Foreign Relations*, 17 Feb. 2017, <u>www.cfr.org/backgrounder/media-censorship-china.</u>

# France

These days climate misinformation is particularly prevalent in the French republic. It all started with "Paradoxes of the punitive ecology and of the green obscurantism", written by the philosopher Yves Roucaute regarding the insufficient justification of the connection of CO2 emissions and global warming. The Intergovernmental Panel on Climate Change (IPCC) has rejected these theories calling them baseless<sup>30</sup> Moreover, France is facing an influx of climate misleading posts. According to David Chavalarias, research director at the National Centre for Scientific Research (CNRS) and director of the Complex Systems Institute: "Previously, France was much less affected by climate skepticism than the United States. But between 2021 and the summer of 2022, the activity of 'denialist' accounts increased sixfold"<sup>31</sup> Being alarmed by the aforementioned fact, on July 8th, 2023, France hosted a pre-International Association for Media and Communication Research (IAMCR) conference in Lyon specifically aimed to discuss climate mis/disinformation. It noted that climate misinformation is enhanced by transactional interest groups, politicians and social algorithms as well as noted the work of the previous pre- conferences. Specifically, they explored conspiracy theories, fake experts, fabrication of fake controversies as well as the "inactivism" on the issue. For this year's conference, they addressed the Big Tech Companies' and social media's affiliation and aimed to explore the relation of climate change mis/disinformation with populism, and vested interests through methodical and theoretical papers.<sup>32</sup>

# Belgium

Belgium faces climate disinformation rather than exactly misinformation issues. In June 2022, an image circulates in the web showing one picture from 1977 warning about "global cooling" and one from 2008 warning about "global warming" encouraging the public to distrust the experts calling them " unreliable"<sup>33</sup> Additionally,

<sup>31</sup>Garric, Audrey. Climate Change Denialism Is on the Rise on French Twitter, ResearchersFind.23Mar.2023,<u>www.lemonde.fr/en/environment/article/2023/02/16</u> /climate-change-denialism-is-on-the-rise-on-french-twitter-researchersfind\_6016035\_114.html.

<sup>&</sup>lt;sup>30</sup> Canetta, Tommaso. "Disinformation about Climate Change - Main Narratives in June at the European Level." *EDMO*, 21 July 2022,

edmo.eu/2022/07/21/disinformation-about-climate-change-main-narratives-in-june-at-the-european-level/.

<sup>&</sup>lt;sup>32</sup> "Climate Mis/Disinformation in a Post-Factual Era: An IAMCR Pre-Conference | IAMCR." <u>Iamcr.org</u>, <u>iamcr.org/lyon2023/climate-information</u>.

a study made in the country analyzes how climate disinformation flows in the country with a lot of scientists admitting being climate skeptics or, as they call it climate realists. However, the situation lightens the fact that a limited number of people double check the facts they encounter facilitating the limitation of spreading fake news.<sup>34</sup>

# Earth Journalism Network (EJN)

The Earth Journalism Network (EJN) was created in 2004 to encourage journalists of limited economic resources to examine the environment more effectively. They operate in almost every region of the world with its mission being to ameliorate the quality of environmental reporting. The journalists are trained to cover a plethora of news, develop pioneer websites for the environmental news and produce adequate reports. On the subject of climate misinformation, EJN will embark on a four- month journey in 2023 in Ethiopia, Kenya, Tanzania and Uganda, particularly as it pertains to climate misinformation. These countries are home to major ecosystems that suffer the consequences of climate misleading information and particularly wrong practices that increase fossil fuel use, further exacerbate deforestation and result in inadequate preparation for extreme weather events, public health crises and increased water stress.<sup>35</sup>

# **Environmental Defense Fund**

The Environmental Defense Fund was founded in 1967 by a group of scientists and a lawyer in order to fight to save ospreys from a toxic pesticide with their work being to consult and support people who face climate threats.<sup>36</sup> They have brought to the public's attention that people seem to have started using a new tactic which has the

<sup>&</sup>lt;sup>33</sup> Canetta, Tommaso. "Disinformation about Climate Change - Main Narratives in June at the European Level." *EDMO*, 21 July 2022,

edmo.eu/2022/07/21/disinformation-about-climate-change-main-narratives-injune-at-the-european-level/.

<sup>&</sup>lt;sup>34</sup> Romero-Vicente, Ana . "Don't Stop Me Now: The Growing Disinformation Threat against Climate Change in Belgium." *EU DisinfoLab*, 17 Apr. 2023, <u>www.disinfo.eu/publications/dont-stop-me-now-the-growing-disinformation-threat-against-climate-change-in-belgium/</u>.

<sup>&</sup>lt;sup>35</sup> EJN. "Studying Climate Misinformation in East Africa | Earth Journalism Network." *Earthjournalism.net*, <u>earthjournalism.net/projects/studying-climate-misinformation-in-east-africa</u>.

<sup>&</sup>lt;sup>36</sup> Environmental Defense Fund. "Our Work." *Environmental Defense Fund*, 2018, <u>www.edf.org/our-work.</u>

goal to delay climate action, acknowledging that climate change is real but filling the web with false information about its effects and consequences.<sup>37</sup>

### **BLOCS EXPECTED**

### Bloc 1

Countries that are climate skeptics or are ambivalent about climate change and believe in or have created conspiracy theories or have promoted the creation of culture wars. Also countries that simply do not occupy themselves with climate change and have no policies, legal frameworks, have not ratified the United Nations Framework Convention (UNFCCC) on Climate Change, the Paris Agreement and the Kyoto Protocol or have not contributed somehow to tackling this issue. These are policies followed by Sub-Saharan Africa, the United States or America and France.

#### Bloc 2

Countries that believe and have addressed the issue of climate change, that have ratified the UNFCCC, the Paris Agreement and the Kyoto Protocol, have participated in research to demonstrate the high prevalence of misinformation within their territories, have established measures and and guidelines to resolve the problem of misinformation. Also, countries that have reported high percentages of climate misinformation/ disinformation in their local or in the global social networking sites reflecting China's policy.

Date	Description of event
1700s	First appearance of the Industrial Revolution in Britain
1800s	Second Industrial Revolution in the US
1830	Signs of global warming according to 2016 study
1950s	CO2 experiments and belief about the existence of the warming theory
9 <sup>th</sup> May 1992	Adoption of the United Nations Framework Convention on Climate Change (UNFCCC)
21 <sup>st</sup> March 1994	UNFCCC is entering into force
11 <sup>th</sup> December 1997	Kyoto Protocol

#### **TIMELINE OF EVENTS**

<sup>&</sup>lt;sup>37</sup> Environmental Defense Fund. "Climate Misinformation." *Environmental Defense Fund*, <u>www.edf.org/issue/climate-misinformation.</u>

16 February 2005	The Kyoto Protocol is entering into force
12 December 2015	Paris Agreement
26 March 2018	Publishment of the Consensus Handbook
20 November 2022	United Nations Climate Change Conference 2022 - Open Letter
2023	The Earth Journalist Network embarks on a four- month journey to explore climate misinformation in East Africa
13-19 March 2023	Intergovernmental Panel on Climate Change (IPCC) sixth assessment report - AR6
8 July 2023	Pre- International Association for Media and Communication Research (IAMCR) Conference, hosted in Lyon, France

## **RELEVANT RESOLUTIONS, TREATIES AND EVENTS**

# United Nations Framework Convention on Climate Change (UNFCCC)

The UN Framework Convention on Climate Change was adopted on 9 May 1992 to manage human interference in the climate and it was signed by 198 states and was enforced on 21 March 1994.<sup>38</sup>It resulted in the 1997 Kyoto Protocol and 2015 Paris Agreement. Every year the parties to the convention meet in order to upgrade and re-evaluate the Paris Agreement<sup>39</sup> The convention itself recalls previous UN General Assembly (UNGA) Resolutions on the subject of the greenhouse effect and rising sea-levels, cites specific definitions and states the objectives, principles, commitments and establishes the conference of the parties. Though the Convention itself does not directly address the issue of misinformation, it shows which countries have ratified it, meaning that through participating in the conferences or in any other events organized, they are interested in tackling climate change and thus tackling misinformation as it prevents its resolving.

<sup>&</sup>lt;sup>38</sup> UNFCCC. "What Is the United Nations Framework Convention on Climate Change?" Unfccc.int, 2022, <u>unfccc.int/process-and-meetings/what-is-the-united-nations-</u> <u>framework-convention-on-climate-change.</u>

<sup>&</sup>lt;sup>39</sup> United Nations Women. "United Nations Framework Convention on Climate Change." UN Women – Headquarters, <u>www.unwomen.org/en/how-we-</u> work/intergovernmental-support/climate-change-and-the-environment/unitednations-framework-convention-on-climate-change.

# **Kyoto Protocol**

Along with the Paris Agreement, the Kyoto Protocol resulted from the UN Framework Convention on Climate Change (UNFCCC). It was adopted on 11 December 1997 and entered into force on 16 February 2005 with 192 parties to the Protocol. Its difference with the UNFCCC is the fact that the latter requires the adoption of policies on mitigation and periodic reports whereas the protocol, operationalized the convention by committing industrialized countries and economies in transition to limit and reduce greenhouse gasses (GHG) emissions in accordance with agreed individual targets. The developed countries are the ones binded by the protocol as they are responsible for the high gases' emissions. Since it is a sort of follow up to the UNFCCC, it is highly relevant to the subject of climate change and subsequently to the climate mis/disinformation<sup>40</sup>

# United Nations Climate Change Conference 2022 (COP27)

On November 20th, 2022, the parties who signed the UN Framework Convention on Climate Change gathered in the Egyptian coastal city of Sharm el-Sheikh and concluded on Sharm el-Sheikh Implementation Plan which covers matters of energy, mitigation, adaption as well as loss and damage<sup>41</sup> Though such conferences are organized every year as established with the enforcement of the UNFCCC, this year's conference is different. Campaigners and protesters asked in an open letter the diplomats participating to draw attention to climate misinformation/ disinformation cases and prevent it as well as urged major social networking sites to implement policies to limit the misinformation spread on the media, something that hasn't happened in any of the previous conferences. The letter was signed by 550 groups and individuals, including former leading UN climate official Christiana Figueres and diplomat Laurence Tubiana writing: "We cannot beat climate change without tackling climate misinformation and disinformation[...] While emissions continue to rise, humanity faces climate catastrophe, yet vested economic and political interests continue to organize and finance climate misinformation and disinformation to hold back action" The letter was accompanied by a survey showing that climate misinformation is believed in six of the world's major economies including Australia,

<sup>&</sup>lt;sup>40</sup> "What Is the Kyoto Protocol? ." *UNFCCC*, UNFCCC, 2019, <u>unfccc.int/kyoto\_protocol</u>.

<sup>&</sup>lt;sup>41</sup> United Nations. "COP27: Delivering for People and the Planet." *United Nations*, 2022, <u>www.un.org/en/climatechange/cop27.</u>

Brazil, Britain, Germany, India and the United States with 20% of those inquired believing that global warming is a result of natural causes.<sup>42</sup>

# PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

# **Climate Action Against Disinformation (CAAD)**

The Climate Action Against Disinformation is a united, unprecedented effort of over 50 organizations wishing to address the climate change misleading posts, reports and everything that contradicts the consensus. Its members also have the responsibility to participate in the communication and policy fronts with Big Technology Companies in order to hold accountability in the matter of allowing and preventing fake news publications. Moreover, they have made an official definition for misinformation and disinformation and have released reports, surveys and studies with reliable and accurate percentages. For instance, in November 2022 along with the Conscious Advertising Network (CAN) released a report reviewing the Climate Disinformation Impacts on Public Perception after surveying Australian, Brazilian, German, Indian, British and American populations. According to this inquiry" between 55% and 85% of the populations surveys believe at least one climate misinformation statement" and " Between 6 and 23% of respondents don't believe the climate crisis is real or are uncertain about whether it is happening" $^{43}$  Despite all the aforementioned activities, they participate in conferences fostering their goals and philosophy like the UN Climate Change Conferences but organize similar ones as well.<sup>44</sup>

# Intergovernmental Panel on Climate Change (IPCC) sixth assessment report (AR6)

The sixth assessment report was created to specifically bring up the subject of climate misinformation on 13-19 March 2023 in Switzerland.<sup>45</sup> It addressed the correlation of the rising of social movements, beliefs and tendencies of conservatism and populism with the rise in misinformation resulting in delaying climate action. It also brought up

<sup>&</sup>lt;sup>42</sup> https://www.facebook.com/FRANCE24.English. "Campaigners Rally COP27 to Fight Climate Disinformation." *France 24*, 15 Nov. 2022, <u>www.france24.com/en/live-news/20221115-campaigners-rally-cop27-to-fight-climate-disinformation</u>.

<sup>&</sup>lt;sup>43</sup> Hughes, Georgie. "Survey Reveals Impacts of Climate Misinformation." *EnvironmentJournal*, 16 Nov. 2022, <u>environmentjournal.online/headlines/survey-reveals-impacts-of-climate-misinformation/</u>.

<sup>&</sup>lt;sup>44</sup> "Climate Action against Disinformation | What Is Climate Mis/Disinformation." *CAAD*, <u>caad.info/what-is-climate-disinformation/.</u>

<sup>&</sup>lt;sup>45</sup> IPCC. "AR6 Synthesis Report: Climate Change 2022 — IPCC." *Ipcc.ch*, IPCC, 2023, <u>www.ipcc.ch/report/sixth-assessment-report-cycle/.</u>

the fact that misinformation puts climate action at risk as it lowers the public's demand for mitigation measures delaying climate action. The IPCC Working Group III noted that there is civic and private engagement with climate governance and reported that the science of climate has been underestimated by anti- climate change movements in the social media spreading misinformation regarding the causes and consequences of the climate crisis.<sup>46</sup>

# The Consensus Handbook

The Consensus Handbook was published at first in March 2018 by John Cook, Center for Climate Change Communication, George Mason, University Sander van der Linden, Department of Psychology, University of Cambridge Edward Maibach, Center for Climate Change Communication George Mason, University Stephan Lewandowsky, School of Experimental Psychology, University of Bristol, and CSIRO Oceans and Atmosphere, Hobart, Tasmania, Australia. It was an attempt to show to the world that the overwhelming majority (97%) of scientists agree on the existence and causes of climate change with graphs and statistics as well as convince those responding to climate misinformation about its real-life dimensions.<sup>47</sup>

## **POSSIBLE SOLUTIONS**

## **Database of News Sources**

The public needs to become skeptical about the sites on the internet they come across. So, what can be done, is the creation of an online database, accessible to everyone where verified websites like organizations and governments' official websites as well as websites that are held accountable for informing the world will be in. Every internet page wishing to acquire verification will go through a review process including the owner's credentials and his qualifications, background writing in quantity and authenticity as well as large percentages in viewership and trust by the public.

## **Enhance the Journalism Sector**

<sup>&</sup>lt;sup>46</sup> Tandon, Aditi. "Misinformation Leads to Misperception, Polarisation Causing Delay in Climate Action: IPCC Report." *Mongabay-India*, 12 Apr. 2022, <u>india.mongabay.com/2022/04/misinformation-leads-to-misperception-polarisation-</u> <u>causing-delay-in-climate-action-ipcc-report/.</u>

<sup>&</sup>lt;sup>47</sup> European Union. "How to Deal with Climate Disinformation." *Climate-Pact.europa.eu*, <u>climate-pact.europa.eu/resources/climate-awareness/how-deal-</u> <u>climate-disinformation\_en</u>.

The people responsible for informing the world about what's happening in the world are the journalists. They are supposed to conduct research, gather evidence, double check the facts and then provide an accurate report of their findings. However, an average journalist is on a meager salary which may lead to wrong practices like spreading misinformation through his articles in order to gain profit. The Earth Journalism Network (EJN), should in cooperation with all governments of states that experience misinformation make sure that journalists are paid what they deserve though funding and investments that will lead to new job offers. Additionally, the journalists themselves should be able to separate the false news from the accurate ones so they can report it. This could be tackled with the organization of global conferences by the EJN where they can be educated on common ways of misinformation.

### Education on common ways of misinformation

In all global issues education is key as through it we address the roots of the problem and at the same time prevent the spread and the magnification of the problems. Conspiracy theories and culture wars are the only means of how misinformation is spread. The people's ambivalence may stem from the fact that non- experts on the media may not know how to separate the actual posts from the false ones. That is why, social media specialists can educate the public through reports, studies or TV interviews and emissions on how to tell false information apart by teaching them the tricks such as photoshops and statements that cannot be possible given the background information on the one who wrote them.

# **Fake News Identification Technologies**

Everything uploaded on the internet is not necessarily accurate because most of the time it has not been checked. Especially in the social networking sites where everyone can write whatever they want without confirming its credibility. Big Technology companies including local and global networking sites in association with governmental and non- organization should invest in automated fake news identifications through algorithms that can detect fake news. Later on, all networking sites should decide upon a way to separate the accurate parts from the false ones. It could vary from simple tags and symbols to red warnings and official statements.

## **BIBLIOGRAPHY**

Benegal, Salil D., and Lyle A. Scruggs. "Correcting Misinformation about ClimateChange: The Impact of Partisanship in an Experimental Setting." Climatic Change, vol.148,no.1,2018,pp.61–80,ideas.repec.org/a/spr/climat/v148y2018i1d10.1007s10584-018-2192-4.html.

Brown, Cynthia Stokes. "The Industrial Revolution (Article)." *Khan Academy*, 2019, <u>www.khanacademy.org/humanities/big-history</u>-project/acceleration/bhp-acceleration/a/the-industrial-revolution.

Canetta, Tommaso. "Disinformation about Climate Change - Main Narratives in June at the European Level." *EDMO*, 21 July 2022, <u>edmo.eu/2022/07/21/disinformation-about-climate-change-main-narratives-</u> in-june-at-the-european-level/.

Chen, James. "Industrial Revolution." *Investopedia*, 2 Oct. 2022, <u>www.investopedia.com/terms/i/industrial-revolution.asp.</u>

"Climate Action against Disinformation | What Is Climate Mis/Disinformation." CAAD, caad.info/what-is-climate-disinformation/.

"Climate Mis/Disinformation in a Post-Factual Era: An IAMCR Pre-Conference | IAMCR." <u>Iamcr.org</u>, <u>iamcr.org/lyon2023/climate-information</u>.

Editors, History com. "Climate Change History." *HISTORY*, 6 Oct. 2017, <u>www.history.com/topics/natural-disasters-and-environment/history-of-</u> climate-change#1988-global-warming-gets-real.

EJN. "Studying Climate Misinformation in East Africa | Earth Journalism Network." *Earthjournalism.net*, <u>earthjournalism.net/projects/studying-</u>climate-misinformation-in-east-africa.

Environmental Defense Fund. "Climate Misinformation." *Environmental Defense Fund*, <u>www.edf.org/issue/climate-misinformation</u>.

"Our Work." Environmental Defense Fund, 2018, www.edf.org/our-work.

EPA. "Causes of Climate Change." *Www.epa.gov*, EPA, 15 Apr. 2021, <u>www.epa.gov/climatechange-science/causes-climate-change.</u>

"European Citizens: Conflicted about Climate Debate and Vulnerable to Disinformation." European Citizens: Conflicted about Climate Debate and Vulnerable to Disinformation, 16 Dec. 2021, www.kantarpublic.com/inspiration/thought-leadership/european-citizens-

are-conflicted-about-climate-debate-and-vulnerable-to-disinformation.

Garric, Audray. "Climate Change Denialism Is on the Rise on French Twitter, Researchers Find." *Le Monde.fr*, 16 Feb. 2023, <u>www.lemonde.fr/en/environment/article/2023/02/16/climate-change-</u> <u>denialism-is-on-the-rise-on-french-twitter-researchers-</u>

find 6016035 114.html.

Genovese, Isabella. "Environmental Reporters Face Disinformation, Threats in China's Restrictive Political Climate." *International Journalists' Network*, 18 Nov. 2022, <u>ijnet.org/en/story/environmental-reporters-face-disinformation-threats-chinas-restrictive-political-climate.</u>

https://www.facebook.com/FRANCE24.English. "Campaigners Rally COP27 to Fight Climate Disinformation." *France* 24, 15 Nov. 2022,

www.france24.com/en/live-news/20221115-campaigners-rally-cop27-tofight-climate-disinformation.

IPCC. "AR6 Synthesis Report: Climate Change 2022 — IPCC." *Ipcc.ch*, IPCC, 2023, <u>www.ipcc.ch/report/sixth-assessment-report-cycle/.</u>

Little, Becky. "Industrial Revolution Linked to Early Signs of Climate Change." *History.com*, 18 Apr. 2023, <u>www.history.com/news/industrial-revolution-climate-change</u>.

Lopez, Antonio. "Fake Climate News: How Denying Climate Change Is the Ultimate in Fake News - the Journal of Media Literacy." *International Council for Media Literacy*, 1 Apr. 2020, <u>ic4ml.org/journal-article/fake-climate-news-how-denying-climate-change-is-the-ultimate-in-fake-news/.</u>

Madrid, Pamela. "Study Reveals Key Reason Why Fake News Spreads on Social Media." USC News, 17 Jan. 2023, <u>news.usc.edu/204782/usc-study-reveals-the-key-reason-why-fake-news-spreads-on-social-media/.</u>

Maharasingam-Shah, Eisha. "Climate Lockdown" and the Culture Wars: How COVID-19 Sparked a New Narrative against Climate Action 2 2 "the GREAT REPLACEMENT": THE VIOLENT CONSEQUENCES of MAINSTREAMED EXTREMISM / Document Title.

NASA. "Climate Change Evidence: How Do We Know?" *Climate Change: Vital Signs of the Planet*, National Aeronautics and Space Administration, 21 Sept. 2018, <u>climate.nasa.gov/evidence/.</u>

NSW government. "Causes of Climate Change." *AdaptNSW*, 2022, <u>www.climatechange.environment.nsw.gov.au/causes-climate-change.</u>

Patterson, Dan. "Climate Change Conspiracies Are Spreading Rapidly during UN's COP26 Event." *Www.cbsnews.com*, 9 Nov. 2021, <u>www.cbsnews.com/news/climate-change-conspiracies-are-spreading-rapidly-during-uns-cop26-event/.</u>

PROCTOR, ROBERT N, and LONDA SCHIEBINGER. "How Preventing Unwanted Pregnancies Can Help on Climate." *Yale E360*, 21 July 2022, <u>e360.yale.edu/features/unwanted-pregnancy-contraception-abortion-</u> climate-change.

Romero, Purple. "China's New Problem: Climate Misinformation Driven by Nationalism." *Www.aljazeera.com*, 3 July 2023, <u>www.aljazeera.com/opinions/2023/7/3/chinas-new-problem-climate-lies-fuelled-by-nationalism.</u>

Romero-Vicente, Ana . "Don't Stop Me Now: The Growing Disinformation Threat against Climate Change in Belgium." *EU DisinfoLab*, 17 Apr. 2023, <u>www.disinfo.eu/publications/dont-stop-me-now-the-growing-</u>

disinformation-threat-against-climate-change-in-belgium/.

Russell, Connor. "Climate Change in the Media: Public Perception and the Responsibility of News Outlets." *Earth Day*, 2 Dec. 2022,

www.earthday.org/climate-change-in-the-media-public-perception-and-theresponsibility-of-news-outlets/.

Tandon, Aditi. "Misinformation Leads to Misperception, Polarisation Causing Delay in Climate Action: IPCC Report." *Mongabay-India*, 12 Apr. 2022, india.mongabay.com/2022/04/misinformation-leads-to-misperception-polarisation-causing-delay-in-climate-action-ipcc-report/.

Taylor, Mathiew. "Climate Policy Dragged into Culture Wars as a "Delay" Tactic, Finds Study." *The Guardian*, 9 June 2022, <u>www.theguardian.com/environment/2022/jun/09/climate-policy-dragged-</u> <u>into-culture-wars-as-a-delay-tactic-finds-study.</u>

Thomson, Ashley . "Social Media Companies Are Failing to Tackle Climate Disinformation." *Greenpeace USA*, 21 Apr. 2022, www.greenpeace.org/usa/feeds-of-deceit-how-social-media-companies-are-failing-to-tackle-climate-disinformation/.

Tigue, Kristoffer. "Online Disinformation Uses Culture Wars to Delay Climate Action, Study Says." *Inside Climate News*, 10 June 2022, <u>insideclimatenews.org/news/10062022/online-disinformation-uses-culture-</u>wars-to-delay-climate-action-study-says/.

Turrentine, Jeff. "Climate Misinformation on Social Media Is Undermining Climate Action." *NRDC*, 19 Apr. 2022, <u>www.nrdc.org/stories/climate-misinformation-social-media-undermining-climate-action</u>.

UNFCCC. "What Is the United Nations Framework Convention on Climate Change?" *Unfccc.int*, 2022, <u>unfccc.int/process-and-meetings/what-is-the-united-nations-framework-convention-on-climate-change.</u>

United Nations. "COP27: Delivering for People and the Planet." *United Nations*, 2022, www.un.org/en/climatechange/cop27.

"What Is the Kyoto Protocol? ." UNFCCC, UNFCCC, 2019, unfccc.int/kyoto protocol.

United Nations Women. "United Nations Framework Convention on Climate Change." UN Women – Headquarters, <u>www.unwomen.org/en/how-we-work/intergovernmental-support/climate-change-and-the-</u>

environment/united-nations-framework-convention-on-climate-change.

Wong, Edward. "Trump Has Called Climate Change a Chinese Hoax. Beijing Says It Is Anything But." *The New York Times*, 18 Nov. 2016, <u>www.nytimes.com/2016/11/19/world/asia/china-trump-climate-</u> change.html.

Xu, Beina, and Eleanor Albert. "Media Censorship in China." *Council on Foreign Relations*, 17 Feb. 2017, <u>www.cfr.org/backgrounder/media-censorship-china.</u> Zeidan, Adam. "Industrial Revolution." *Encyclopedia Britannica*, 21 July 2021, <u>www.britannica.com/event/Industrial-Revolution.</u>