

THE INFORMATION DOMAIN

Issue 08/25 (Aug)

Climate Misinformation and Disinformation: Tactics and Implications

INTRODUCTION

- 1. Climate-related crises such as extreme weather events, resource scarcity, and environmental degradation have been escalating globally. *AP News* noted that the annual State of the Climate Report by the World Meteorological Organization found that 2024 was the hottest year on record, with the top 10 hottest years on record in the past decade. Global heating contributed to more extreme weather events, causing the highest levels of displacement for 16 years, worsening food crises and massive economic losses. It was estimated that there were at least 151 unprecedented extreme weather events in 2024.
- 2. Across the globe, international frameworks have been set up to resolve these challenges. In 1997, the Kyoto Protocol established legal binding emissions reduction targets for developed countries and aimed to cut greenhouse gases by 5% below 1990 levels between 2008 to 2012. Subsequently, the 2015 Paris Agreement sought to limit global warming below two degrees Celsius, and to pursue efforts to cap warming by 1.5 degrees Celsius above pre-industrial levels. More recently, nations adopted the 2021 Glasgow Climate Pact at COP26, which strengthened efforts to build resilience to climate change, with nations reaffirming their pledge to provide over 100 billion annually to help climate finance for developing countries. Nations and

governments play a significant role in helping to reduce their countries' carbon footprint.

- 3. The transition to a cleaner economy brings significant opportunities and risks to societies. Deloitte's 2025 Renewable Energy Outlook reported that solar and wind energy dominated new capacity additions, with solar energy growing by 88% and surpassing hydropower and nuclear. Another report by The Guardian noted that the UK government could save energy users up to five billion pounds a year by overhauling the electricity market to stop gas-fired power stations from setting the wholesale price for electricity. However, in order for businesses to become more climate friendly, they are likely to face an increase in operating costs due to higher expenditure in their infrastructure (e.g. replacing older, less energy efficient equipment for more environmental friendly ones). This may result in consumers paying more in the short term as costs are transferred to them as end users who consume goods and services by companies. Separately, governments may have to divert resources in order to increase spending on greening their economies and infrastructure, which may result in less spending in other parts of their economy. The many stakeholders with different interests and agendas could result in tension, which subsequently could create fertile ground for climate misinformation and disinformation to occur, to polarise communities and delay changes in climate policy.
- 4. According to the UNDPClimate Promise. climate misinformation arises from misunderstandings, misinterpretations of data, or outdated knowledge. Climate disinformation could be spread by individuals or organisations with vested interests to deny or downplay the reality of climate change and its impacts on society. Euronews noted that a report by the International Panel on Information Environment identified the oil industry, politicians and even governments as key actors in propagating disinformation narratives. Anna Siewiorek, an expert on climate communication and project management at the Climate&Strategy Foundation noted that climate disinformation narratives have changed. Narratives had moved away from "hard climate denialism", where proponents advocate that climate change was not a real threat, to a more subtle approach which

questioned the effectiveness of scientific solutions to counter climate change (e.g. questioning the effectiveness, costs and fairness of climate solutions to communities). The casting of doubt on climate solutions and reframing climate issues on a community and individual level appeals to one's emotions and responsibilities, instead of looking at the hard science, making it easier for climate disinformation actors to spread their narratives online. This digest explores some tactics and examples used by actors in climate misinformation and disinformation campaigns.

Tactics Used in Climate Misinformation and Disinformation Campaigns

- 5. First, social media algorithms amplify climate misinformation by promoting sensational narratives that undermine scientific findings. A 2023 *Reuters* report noted that major social media platforms continued to allow the spread of misleading content despite public commitments to combat them. *Reuters* noted that out of five social media platforms (Meta, Pinterest, TikTok, YouTube and X), none of the platforms scored more than 12 out of 21 when graded on a set of metrics which included policy content, enforcement, advertising, transparency and privacy. Erika Seiber, a climate disinformation spokesperson at Friends of the Earth, said that the scores were "unacceptable and should be a wake-up call for platforms and regulators to take climate misinformation seriously.
- 6. Separately, the *Centre for Countering Digital Hate* (CCDH) noted in their July 2025 report that misinformation had surged after Hurricanes Helene and Milton, and the Los Angeles wildfires in 2024. The report posited that technology companies had facilitated the work of conspiracy superspreaders, and profited from lies about rescue efforts. This enabled the spread of falsehoods that could impede emergency response, putting lives at risk. CCDH researchers found that the social media platforms had only applied fact-checks to fewer than 2% of the 300 misleading posts (Figure 1) analysed across platforms, with an overwhelming majority of posts being left unmoderated before being algorithmically boosted and monetised.

Alex Jones
@RealAlexJones

Treason Alert: The Biden/Harris Admin Have Been in Control of Hurricanes Helene and Milton Using Pentagon Weather Weapons

1:51 am ⋅ 9 Oct 2024 ⋅ 1.7M Views

□ 1.3K
□ 11K
□ 26K
□ 9.4K
□ 9.4K
□

Figure 1: Example of an unmoderated X post

Source: CCDH

- 7. Another *Reuters* 2024 report noted YouTube had made millions from advertisements on channels that made false claims about climate change as content creators used new tactics to evade the social media platform's policies to combat misinformation. The report noted CCDH had used artificial intelligence to review transcripts from over 12,000 videos over six years, and found that climate denial content on the channels focused on attacking climate solutions as unworkable, portraying global warming as harmless or casting climate science and the environment movement as unreliable. Given that the sites' algorithms prioritise popular content and recommend similar content to users to encourage them to continue using their platforms, such platform-driven amplification distorts the public's understanding of climate change and slows the momentum needed for climate action.
- 8. Second, disinformation campaigns may manifest in grassroots faking as opposition or manipulating narratives to sow distrust in climate policies in order to slow down or reverse their implementation. *The Guardian* carried an op-ed by London and Paris' mayors that there were vicious backlash to climate action when new climate policies were introduced. In Paris, online disinformation campaigns, amplified by populist politicians and partisan influencers, distorted policies designed to clean the air and protect public health into cultural war flashpoints.

For instance, lobbies had opposed the pedestrianising of the Seine's riverbanks, when there was a 40% reduction in air pollution from cars after the policy was introduced. In London, the expansion of the ultralow emission zone was targeted by disinformation campaigns, leading to a surge in attacks online against politicians and supporters, abuse of government workers installing cameras at low emission zones, and destructive acts of vandalism. The examples in both cities demonstrate how climate policies can be utilised by actors to create distrust and unrest.

9. Separately, another *TIME* report noted that ExxonMobil CEO Darren Woods had testified in the US Congress in 2021 denying the company's involvement in climate disinformation to delay implementing climate action over multiple decades. Woods said the company had been truthful, fact-based and consistent with mainstream climate science. However, about a week before Woods testified, ExxonMobil ran a Facebook ad campaign featuring misleading information on climate change (Figure 2) in an attempt to influence proposed legislation related to plans to phase out natural gas in New York city.

ExxonMobil
Sponsored • Paid for by EXXON MOBIL CORPORATION

ENERGY ACTION ALERT: If your household was forced to go full electric, it could cost you more than \$25,600 to replace major appliances.

Loving cooking on gas stoves?

Voice your support for natural gas.

TAKE ACTION

Sign The Petition

Sign Up

Figure 2: Screenshot of ExxonMobile Facebook post

Source: TIME

ExxonMobil's ad campaign targeted New York residents, 10. claiming that households in the metro area would incur significant costs in upgrading their appliances if they were forced to switch from natural gas to electric. TIME's report found there was a clear shift in the narrative of ExxonMobil's ads from the utility of using natural gas to communities (e.g. schools and hospitals) that the oil and gas industry was funding in, to scare people out of supporting the legislation to shift away from natural gas. The report also noted that ExxonMobil ran more than 1,200 such ads across the US within the year and had over 100 million impressions. Similarly, another report by *The Guardian* noted that oil companies' disinformation campaigns had evolved from explicit denial to deception, disinformation and deliberate use of ambiguous language. As a whole, these companies seek to sow distrust in climate policies, undermine trust and hamper implementation, causing delays in emission reduction measures.

CONCLUSION

11. Given the various tactics mentioned above, it is clear that climate misinformation and disinformation can undermine trust, institutional credibility, and slow down climate policy making. Left unchecked, these campaigns will continue to erode societal resilience, deepen polarisation and delay urgent action on climate change. Similar to other forms of misinformation and disinformation, societies can address climate misinformation and disinformation through strengthening media literacy, improving transparency in digital platforms, and enhance collaboration between governments, civil society and international organisations.

CONTACT DETAILS

All reports can be retrieved from our website at www.acice-asean.org/resource/.

For any queries and/or clarifications, please contact ACICE at ACICE@defence.gov.sg

Prepared by:

ADMM Cybersecurity and Information Centre of Excellence

• • • •

REFERENCES

News Articles

1. <u>Last decade was Earth's hottest ever as CO2 levels reach an 800,000-year high, says UN report</u>

[Link: https://apnews.com/article/climate-change-united-nations-bb8e475cdaa3b3fb348f88276837d50e]

2. <u>2025 Renewable Energy Industry Outlook</u>

[Link: https://www.deloitte.com/gr/en/Industries/power-utilities-renewables/perspectives/2025-renewable-energy-industry-outlook.html]

3. What are climate misinformation and disinformation and how can we tackle them?

[Link: https://climatepromise.undp.org/news-and-stories/what-are-climate-misinformation-and-disinformation-and-how-can-we-tackle-them]

4. <u>Extreme Weather</u>

[Link: https://counterhate.com/wp-content/uploads/2025/07/Extreme-Weather-FINAL.pdf]

5. <u>Politicians, oil companies and Russia: Who's fuelling climate disinformation, and why?</u>

[Link:

https://www.euronews.com/green/2025/07/31/politicians-oil-companies-and-russia-whos-fuelling-climate-disinformation-and-why]

- 6. Big Tech drags feet on climate disinformation, advocates warn [Link: https://www.reuters.com/article/technology/big-tech-drags-feet-on-climate-disinformation-advocates-warn-idUSL8N3AW06G/]
- 7. YouTube making money off new breed of climate denial, monitoring group says

 [Link: https://www.reuters.com/sustainability/climate-energy/youtube-making-money-off-new-breed-climate-denial-monitoring-group-says-2024-01-16/]
- 8. Op-ed: In London and Paris, we've experienced vicious backlash to climate action. But we're not backing down
 [Link:
 https://www.theguardian.com/commentisfree/2025/jun/23/london-paris-vicious-backlash-climate-action-sadiq-khan-anne-hidalgo]
- 9. Greenwashing on Facebook: How the World's Biggest
 Polluters Use Social Media to Obfuscate on Climate Change
 [Link: https://time.com/6113396/greenwashing-on-facebook/]
- 10. <u>Big oil privately acknowledged efforts to downplay climate crisis, joint committee investigation finds</u>

 [Link: https://www.theguardian.com/us-news/2024/apr/30/big-oil-climate-crisis-us-senate-report]