



## GLOSSARY

### ANTI-VAXX / ANTI-VACCINE / VACCINE SCEPTIC

For the purposes of this report, the terms “vaccine-sceptic, “anti-vaccine” and “anti-vaxx” cover a range of attitudes, characterised by distrust of a specific vaccine (e.g. for COVID-19) or immunisation regimes more broadly. “Vaccine sceptics” are not categorically opposed to vaccines, but have reservations to varying degrees about their safety, necessity or inclusion within public health mandates. By contrast, “anti-vaxxers” are fundamentally opposed to vaccination as a matter of principle. Their reasons range from speculation derived from conspiracy theories to the deeply held belief that vaccines constitute a harmful intervention into the body’s biochemical processes, potentially causing long-term damage.

### CLIMATE DENIAL

Climate denial, in contrast to other stances like scepticism (see below), refers to the overt rejection of climate change as a phenomenon, as well as its related causes and impacts. This includes claims, contrary to scientific consensus, that climate change is a ‘hoax’, global temperatures are not rising, or that warming constitutes a natural process with no relation to anthropogenic (i.e. human-driven) greenhouse gas emissions.<sup>1</sup>

### CLIMATE SCEPTICISM

While this term is often used interchangeably with denialism, academics have carved out a more distinct understanding of climate sceptic content. The common denominator is an emphasis on doubt and uncertainty around both climate science and climate action<sup>2</sup>. The former includes public misperceptions about the nature of scientific ‘proof’, as well as the credibility of scientific institutions or researchers themselves, both of which can be reinforced by media portrayal<sup>3</sup>. Scepticism can also weaponise a lack of understanding around how scientific work is conducted and the nature of peer-reviewed research or multi-stakeholder processes. This is perhaps most evident in the [alleged scandal](#) involving the private correspondence of researchers at the University of East Anglia in 2009, commonly referred to as ‘Climategate’; an event widely misconstrued as manipulation of evidence to suit a political agenda. Sceptic narratives reinforce the false beliefs that a) evidence around climate change is inherently unreliable, fraught with ‘conflicting data’ or lacks broad consensus (‘epistemic scepticism’); and b) that action on climate change is unnecessary or nothing can be done to mitigate its impacts (‘response scepticism’).<sup>4</sup>

### DISCOURSES OF DELAY / DELAYISM

Characterised as discourses that “accept the existence of climate change but justify inaction or inadequate efforts. In contemporary discussions on what actions should be taken, by whom and how fast, proponents of climate delay would argue for minimal action or action taken by others. They focus attention on the negative social effects of climate policies and raise doubt that mitigation is possible”.<sup>5</sup> This sits in contrast with other known forms of climate opposition, including climate denial and climate scepticism (see above), as well as ad hominem attacks on climate science or related institutions.

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<sup>1</sup> Lewandowsky, S. et al (2015), Seepage: Climate change denial and its effect on the climate change community. *Global Environmental Change* 33, 1-13. <https://doi.org/10.1016/j.gloenvcha.2015.02.013>

<sup>2</sup> Capstick, S. B. and Pidgeon, N. F. (2014), What is climate change scepticism? Examination of the concept using a mixed methods study of the UK public. *Global Environmental Change* 24, 389-401 <https://doi.org/10.1016/j.gloenvcha.2013.08.012>.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Lamb, W., Mattioli, G., Levi, S., Roberts, J., Capstick, S., Creutzig, F., . . . Steinberger, J. (2020). Discourses of climate delay. *Global Sustainability*, 3, E17. doi:10.1017/sus.2020.13

Instead, by rejecting most proposed mitigation and adaptation efforts, delayists aim to drive “deadlock or a sense that there are intractable obstacles to taking action.” Such arguments can be framed as ‘pro-green’ while advocating for inertia or inactivism, and often use the veneer of fiscal pragmatism, free market logic or concerns about individual liberty to confer legitimacy.

### **FAR-LEFT**

There is no broadly agreed definition of the far-left, and the scholarship on radical or far-left actions and groups in contemporary Western societies is much less developed than that surrounding the far-right. Following Cas Mudde and political researcher Luke March, as well as established framing of the far-right (see below), we propose a distinction between left-wing radicalism and extremism. Under this frame, the latter groups would be considered anti-democratic, while the former advocate fundamental political and economic changes without being anti-democratic per se. Radical left groups, actions or networks are typically rooted in Marxist, socialist or anarchist ideologies, and pursue an anti-capitalist, anti-imperialist and radically egalitarian and anti-fascist agenda, often with an internationalist outlook.

### **FAR-RIGHT**

There are no unanimously agreed parameters or traits for the term ‘far-right’, but for the purposes of this report we refer to the well-established framing put forward by Dutch political scientist and right-wing extremist expert Cas Mudde and UK-based academic Elisabeth Carter. This understands the extreme right to be typically marked by several of the following characteristics: nationalism, racism, xenophobia, anti-democracy, and strong-state advocacy or authoritarianism. We use the generic umbrella term ‘far-right’ to cover both radical and extreme right-wing groups, actions, and ideologies. The conceptual difference between right-wing radicalism and extremism is that the former is not explicitly anti-democratic (e.g. far-right libertarian, anti-Muslim groups), while the latter is characterised also by an explicit anti-democratic stance (e.g. openly fascist, neo-Nazi groups). Both share the core ideology of exclusivist nationalism, which openly advocates against the principle of egalitarianism.

### **LUKEWARMERS / LUKEWARMERISM**

The term ‘lukewarmer’ originated as a self-description by various authors and bloggers publishing on climate related topics, such as British Viscount and author Matt Ridley, before being picked up by media outlets as a wider narrative trend. Academic research has since defined this term as a basic acceptance of anthropogenic climate change combined with a belief that the threat is exaggerated, impacts will be markedly less than predicted by most climate scientists, or that global warming may even have beneficial effects. A key component of lukewarmerism is to claim that the ‘small and manageable’ effects of climate change render efforts to limit emissions ‘too difficult or expensive’, and that related calls to action are ‘alarmist’.

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<sup>6</sup> Ibid.

<sup>7</sup> March, L., Mudde, C. What’s Left of the Radical Left? The European Radical Left After 1989: Decline and Mutation. *Comp Eur Polit* 3, 23–49 (2005). <https://doi.org/10.1057/palgrave.cep.6110052>

<sup>8</sup> Allington, D., McAndrew, S, and Hirsh, D. *Violent Extremist Tactics and the Ideology of the Sectarian Far Left* (2019)

<sup>9</sup> Mudde, Cas, *The Ideology of the Extreme Right*, (Oxford University Press, 2000); Elisabeth Carter (2018) Right-wing extremism/radicalism: reconstructing the concept, *Journal of Political Ideologies*, 23:2, 157- 182.

<sup>10</sup> Marshall, Paul (2015), Why Are People Skeptical about Climate Change? Some Insights from Blog comments. *Environmental Communication* 9 (2), 152-168. <https://doi.org/10.1080/17524032.2014.999694>

<sup>11</sup> Ward, Bob (2018), Why being right is not enough for climate researchers. Commentary, Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science. <https://www.lse.ac.uk/granthaminstitute/news/why-being-right-is-not-enough-for-climate-researchers/>

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“The motivations of the various cogs of the denial machine vary considerably, from economic (obvious in the case of the fossil fuel industry) to personal (reflected in the celebrity status enjoyed by a few individuals), but the glue that holds most of them together is shared opposition to governmental regulatory efforts to ameliorate climate change, such as restrictions on carbon emissions. While the claims of these actors sometimes differ and evolve over time (there’s no warming, it’s not caused by humans, it won’t be harmful, etc.), the theme of ‘no need for regulations’ remains constant.”

- [The Oxford Handbook of Climate Change and Society \(2011\)](#)

## PART 1: DISCOURSES OF DELAY

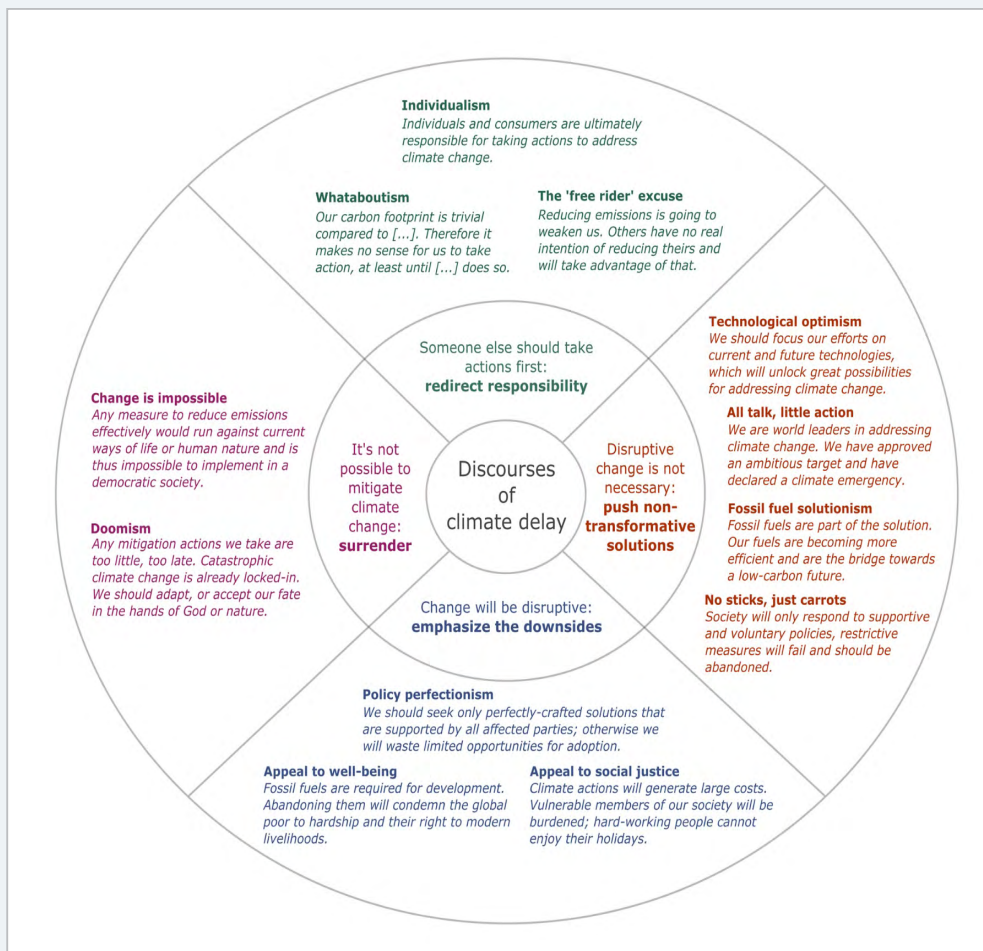
In recent years we have witnessed a clear evolution in rhetoric opposing the idea of climate change and related action. While outright denial of climate change is still present and espoused by many pundits, or found in their former outputs, it has largely been confined to the margins of public debate. According to various large-scale polls - including a [2021 study](#) of 1.2 million people in 50 countries by UNDP and the University of Oxford - there is a strong public mandate to address the climate crisis. Denying the reality and impacts of climate change, or the need for corresponding action, is therefore unlikely to hold sway as it might have done in previous decades. In its place, narratives have trended towards discrediting any proposal for mitigation, adaptation and transition - arguments sometimes referred to as '[discourses of delay](#)' (see Fig. 1).

The 'opposition playbook' (i.e. the tactics used by those seeking to undermine action on climate change) has been forced to adjust to this new paradigm, including by historically polluting industries and those with vested interests. Even with broad consensus on the issue of climate, there is a long road ahead to achieving meaningful policy change in line with IPCC warnings and the goals of the Paris Agreement. By focussing efforts in that gap - between recognition, buy-in and action - actors who oppose action can maintain the status quo without resorting to the now unpalatable opinions of the nineties and early noughties. Arguments framed as 'pro-green' can still advocate for inertia or [inactivism](#), often using the veneer of fiscal pragmatism, free market logic and concerns about individual liberty. In this way, environmentalism has followed policy issues like migration and public health as a [new front in the culture wars](#), becoming ever-more enmeshed in broader identity and grievance politics. Whether through conspiracies like '[climate lockdown](#)', or by conflating climate with divisive issues like critical race theory, LGBTQ+ rights and abortion access, the goal of much climate change mis- and/or disinformation is now is to distract and delay. Yet, with the window to act deemed "[brief and rapidly closing](#)", such an approach may prove fatal.

Monitoring by Climate Action Against Disinformation (CAAD) [over the course of COP26](#) and [beyond](#) confirms these trends (more information about coalition partners can be found at the start of this report). We identified four key 'discourses of delay' across social media, which continue to achieve high reach and engagement or set the parameters for debate in contexts globally. These are:

- 'Hypocrisy and Elitism'
- 'Absolutionism'
- 'Unreliability of Renewables'
- 'Ineffective Electric Vehicles'

Such narratives are not always clear-cut and in some cases overlap. Attacks on electric vehicles can include an elitism angle or be mixed with arguments about the unreliability of renewable energy sources, for example. Nevertheless, four distinct types of delayist argument trended on social media at the time of the summit. This categorisation serves to introduce the key rhetorical strategies and assess the timing and intensity of social media activity across platforms. Analysis was based on a tailored keyword list to map the spread of narratives on Facebook and Twitter from 24 October to 19 November 2021, capturing the duration of COP26 itself as well as the week directly preceding and following the summit (see Methodology in Appendix 1). In the cases of the ‘Elitism’ and ‘Renewable Energies narratives’, an extended timeframe has been used to show specific patterns or put COP26 into a broader historical context.



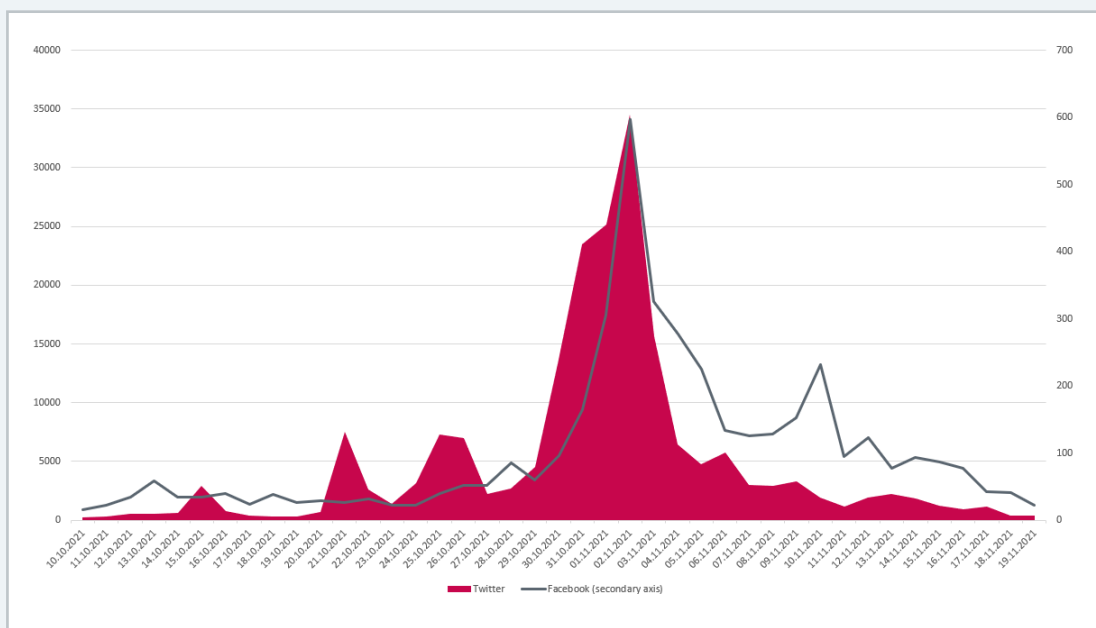
**Figure 1: Taxonomy for ‘Discourses of Delay’ from Lamb, W., Mattioli, G., Levi, S., Roberts, J., Capstick, S., Creutzig, F., . . . Steinberger, J. (2020). Discourses of climate delay. *Global Sustainability*, 3, E17. <https://doi.org/10.1017/sus.2020.13>**



### Hypocrisy and Elitism

The narrative generating the most activity around COP26 centred on themes of wealth, power and legitimacy. Content in this category portrayed the summit as elitist, highlighting alleged double standards for delegates and, in some cases, referencing wider conspiracies around globalism or the ‘New World Order’. Hypocrisy was argued on two key fronts: first, the climate impact of the event itself (e.g. through use of air travel), and the perceived pivot on public health measures (e.g. ‘the pandemic has conveniently disappeared now they want to discuss climate change’). These arguments tended to conclude that COP26 as a process was corrupt, irrelevant and/or had no public mandate, and as such the negotiated outcomes should be discounted. In many instances, a similar line of reasoning was applied to environmental agendas writ large, beyond the Glasgow event itself.

The below graph shows the volume-over-time of posts on Twitter and Facebook in this bracket. An extended timeframe has been used to highlight the early spikes in this kind of language, which was already gaining traction three weeks prior to the summit.



**Graph 1: Mentions of the COP26 Hypocritical Elites narrative on Twitter and Facebook from 10.10.21 until 19.11.21**

The most prevalent claim was that world leaders had descended on Glasgow, via private jets and despite the COVID-19 restrictions imposed elsewhere, to decide the fate of average people. The dataset also includes a few high-traction posts by climate activists demanding more radical action, such as those from [Greenpeace UK](#) or [activist group Extinction Rebellion](#); these use similar language but focussed more on the hypocrisy element (e.g. the relative attendance of industry-linked delegates versus those representing indigenous communities and other frontline movements). However, the vast majority of posts in this category came from accounts known to share right-wing and far-right content, rarely engaging with the substance of negotiations and instead focussing on COP26 as a symbol of the ‘liberal woke agenda’.

**In total we identified 199,676 mentions of this narrative on Twitter (tweets and retweets) and 4,377 posts on Facebook, which were shared 101,749 times between 10 October and 19 November 2022.** Social media activity peaked during the opening days of the summit, a trend echoed for all narratives analysed below. In the case of ‘Hypocrisy and Elitism’, volume and engagement were largely spurred by the arrival of delegates in Glasgow, in particular celebrities, world leaders and other prominent public figures. Such content declined once negotiations began in earnest, but for some outlets had already set the tone of their coverage and remained a consistent theme.

While arguments of this nature are, as outlined above, increasingly present in the wider climate debate, ‘Hypocrisy and Elitism’ posts were the most targeted at (and tailored to) the summit itself. The frequent use of memes and other image-based content drove virality at various points, including posts with outright disinformation shared by verified accounts (see Policy Ask 7 for further detail).

**Table 1: Examples of widely shared posts using the 'Hypocrisy and Elitism' narrative during COP26.**



British politician David Kurten, former UKIP and current leader of the fringe Heritage Party, who on 15 October linked COP26 hypocrisy to the far-right conspiracy of a New World Order (3k retweets).  
spokesperson

**Account followers (Twitter): 89.2k**



A tweet by climate denier and Canadian tabloid writer Lorrie Goldstein, who attacked “global elites” for flying in private jets despite the ongoing pandemic (retweeted 336 times).

**Account followers (Twitter): 78.1k**



Facebook post by the German affiliate of Russian-state media outlet RT, which calculated total emissions from delegate flights to Glasgow, and additionally spread the debunked conspiracy that electric vehicles used to transport attendees were charged using diesel generators (see below). (3.2k shares).

**Account followers: Not currently accessible due to EU restrictions surrounding RT-affiliated sites and pages since Russia's invasion of Ukraine in February 2022.**



US ‘Shock Jock’ and conspiracy theorist Glenn Beck who posted a video to Facebook entitled “How Biden’s Climate Agenda will ENRICH the Elite & BANKRUPT you” (51k views). Note the reference to “Build Back Bankrupt”, vocabulary also used by Republicans in the Congressional hearings on Big Oil.

**Page followers (Facebook): 3.3m**



A tweet by British right-wing politician Martin Daubney, [Deputy Leader of the Reclaim Party](#) and former Member of the European Parliament, posting a picture of Boris Johnson at COP26 (4k retweets).

**Account followers (Twitter): 111.3k**

### Absolutionism

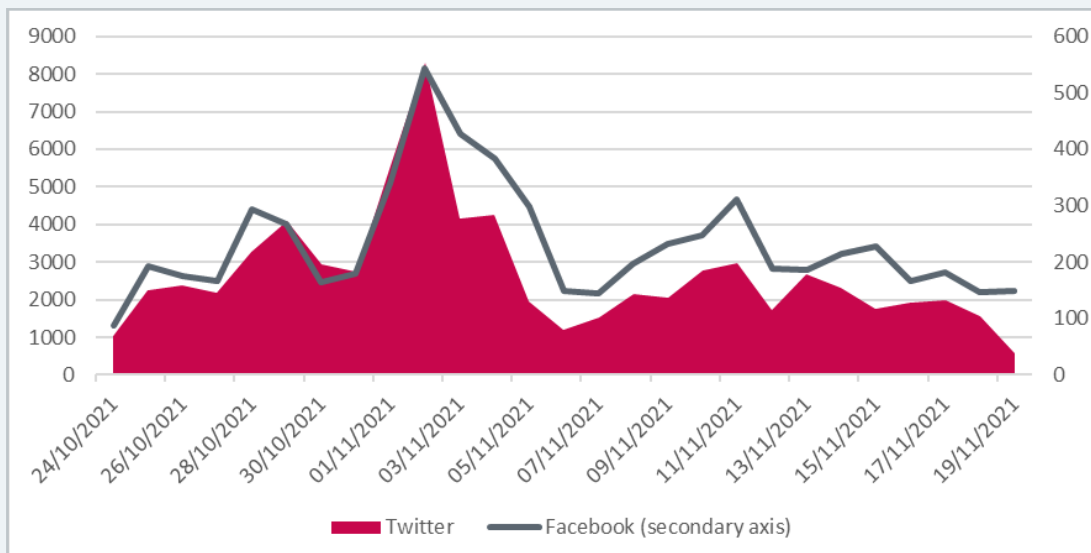
‘Absolutionism’, the second major narrative we identified and analysed, seeks to absolve a given country from taking any climate action by highlighting the perceived failings of another state or multilateral group. In the United States, European Union, United Kingdom, Australia and other countries broadly categorised as ‘Western’, this line of argument tends to focus on China and, to a lesser extent, India for making insufficient progress or having weak onward targets. Russia and Saudi Arabia can also be cited, but are far less frequent targets for this line of argument.

Analysis of this narrative has featured in [previous ISD research](#) across several geographies and is pivotal to delayist rhetoric, not least in the political sphere. Content generally condemns domestic policymaking on principle, claiming such efforts are: i) futile in reducing global carbon emissions (since others pollute more); ii) a form of ‘self-inflicted harm’ that punishes citizens (through loss of livelihoods, rising prices, lifestyle changes etc.); and/or iii) will cede power to geopolitical foes (who benefit from continued fossil fuel use and export).

In parallel, absolutist narratives are found in content originating from or linked to India and China, particularly State-affiliated media, arguing the reverse: namely, that they have already risen to the challenge at a domestic level (e.g. through solar infrastructure) or introduced ambitious targets (e.g. for coal phase-down), and responsibility lies with countries in the West/Global North to act. This argument references the principle of [‘common but differentiated responsibility’](#), which states that while all countries are accountable for addressing climate change, the burden does not apply equally. This point has long been [championed by emerging economies and blocs from the Global South](#), who want agreements to factor in historic emissions, economic disparities and the disproportionate impact of climate change already felt in many regions.

In both instances, ‘Absolutist’ content actively contradicts the framework of the Paris Agreement, which mandates [every country to pledge and implement nationally-determined contributions \(NDCs\)](#). It also contravenes evidence from the IPCC, including the 2022 [Mitigation of Climate Change report](#), which both recognises the benefit of policies to date and states that we need a ‘rapid acceleration’ of commitments across the board to limit warming at a liveable threshold. Far from scaling back ambition, the [IPCC report](#) outlines that “without a strengthening of policies beyond those that are implemented by the end of 2020, GHG emissions are projected to rise beyond 2025, leading to a median global warming of 3.2.”

The playbook adopted by some actors who seek to undermine action on climate change is to critique foreign states for slow progress or lack of transparency; while these are often valid claims, they are falsely framed as an excuse for local inaction. In doing so they create a false “either/or” paradigm which suggests climate action is dependent on just a few countries, and that scrutiny is biased in one direction. At a time where populism and isolationism appear to be on the rise, villainising states elsewhere can prove highly effective and make ‘green’ agendas harder to land with an electorate back home.

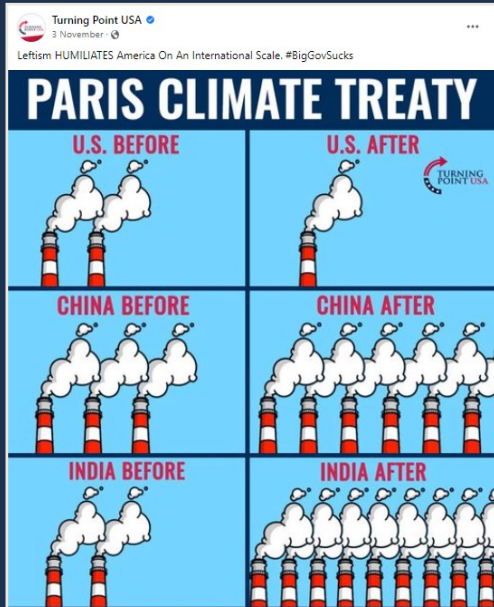


**Graph 2: Mentions of the Absolution narrative on Twitter and Facebook from 24.10.21 until 19.11.21**

**Overall, 6,262 Facebook posts and 72,356 tweets across our dataset were assigned to this narrative.** The main spike occurred at the beginning of the summit, when world leaders outlined their respective agendas and their future policy goals. However, there were also **two smaller spikes pre-COP** that can be traced to **Congressional hearings on ‘Big Oil’ in the US**. High-traction posts praised statements by Republican Congressmen in which they argue that climate protection measures represent an attack on the US fossil fuel industry, to the benefit of other countries like China (see interventions by [Rep. Ralph Norman \(R-SC\)](#), [Rep. Clay Higgins \(R-LA\)](#) [Rep. Pete Sessions \(R-TX\)](#), [Rep. Jim Jordan \(R-OH\)](#)). One particularly popular statement (see table below) argued that questioning of Executives from Exxon, Chevron, BP and Shell - for example on their role in trade lobbies like the [American Petroleum Institute](#) - constituted ‘rank intimidation’ and ‘a gross violation of the First Amendment’.

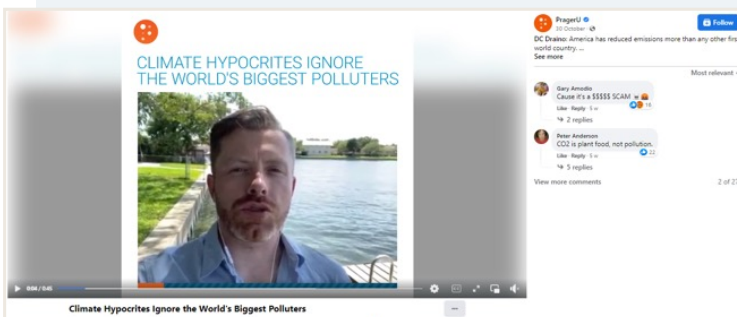
Political figures and pundits from the conservative spectrum continued to drive ‘Absolutionism’ content throughout COP26 and achieved some of the highest engagement metrics. Notably, activity trends were uniform across both platforms despite the difference in volume, unlike other narratives analysed where content diverged or peaked around different events. This suggests that similar events fuelled peaks on Facebook and Twitter and were central to the overall ‘Absolutionism’ debate. In addition, while COP26 served as context in many cases, some of the most widely shared content was focussed on national political debates and competition.

**Table 2: Examples of widely shared posts using the ‘Absolutionism’ narrative during COP26.**



The most shared post during COP26 circulated on Facebook from [Turning Point USA](#), achieving close to 40k shares and 65k likes. Texas Commissioner for Agriculture, Sid Miller, further amplified this message using the same graphic on November 4 (2.2k shares).

**Page followers (FB): 2.6m**



Right-wing media group PragerU posted a [popular video](#) (412k views/2.4k shares) with the title “Climate Hypocrites Ignore the World’s Biggest Polluters”.

**Page followers (FB): 4.4m**



A small political consultancy, XStrategies LLC, published a widely shared video from the US Congressional Hearings, in which Congressman Byron Donalds argues that the US will not be able to beat China by cutting emissions while Beijing burns more fossil fuels (1.8k retweets/6.3k likes).

**Account followers (TW): 19.9k**



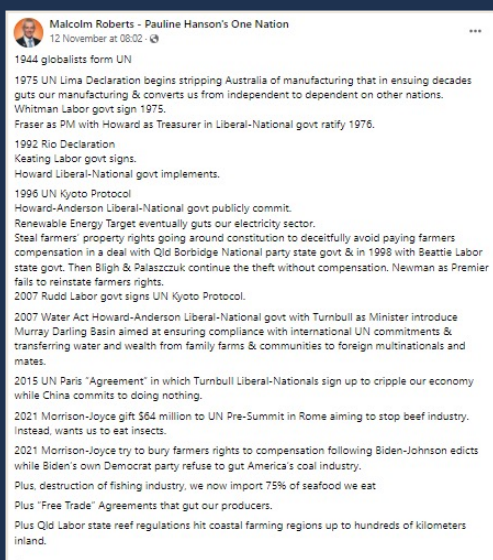
Congressman Dan Crenshaw, who attended COP26 with a Republican delegation, posted attacks on renewable energies using China as a scapegoat (3.4k shares/10k likes). He also criticised the COP process and other commitments to emission reductions due to China's absence from the summit (3k shares/21k likes).

**Account followers (FB): 925k**



Republican Congresswoman Marjorie Taylor Greene, perhaps best known for her links to the QAnon conspiracy movement, attacked climate measures in light of China and Russia's absence from Glasgow. This was among a series of high-traction posts by Greene on both Twitter and Facebook during the summit (see below).

**Account followers (TW): currently suspended from Twitter**



Australian Senator Malcom Roberts, who represents the right-wing One Nation Party, accused 'globalists' and the Morrison government of destroying the country's economy through the Paris Agreement "while China commits to doing nothing" (1.2k shares, nearly 2k reactions).

**Page followers (FB): 131k**



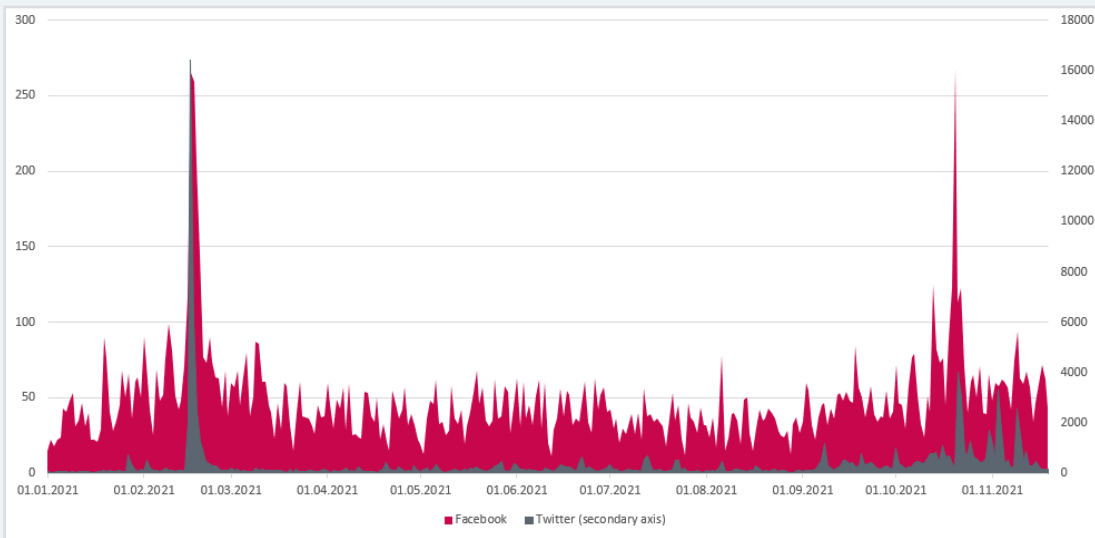


Another Australian Senator from the governing coalition, Matthew Canavan, posted a video of himself speaking out in Parliament against any domestic climate targets due to China's alleged inaction (22k views, 3.2k likes, 573 shares).

**Page followers (FB): 56k**

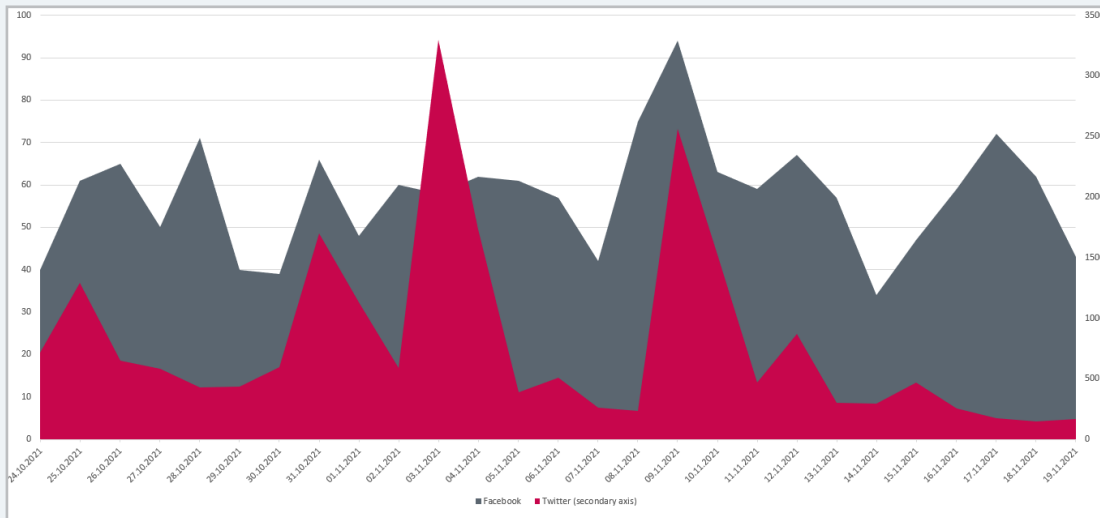
### Unreliable Renewables

Calling into question the viability and effectiveness of renewable energy sources is a common practice among climate sceptics and delayist actors. The [Texas blackouts](#) in February 2021 revealed how [disinformation](#) about power failures, accompanied by images taken from entirely unrelated events, can go viral and become a defining narrative for extreme weather events. To compare these events with COP26, we analysed the relevant keyword set from 1 January to 19 November 2021. The following graph shows the volume over time for social media activity containing this narrative.



**Graph 3: Number of posts claiming that renewable energy is unreliable on Facebook and Twitter (secondary axis includes retweets) from 01.01.21 - 19.11.21.**

From January to mid-November a total of around 115,830 tweets or retweets were published on Twitter, alongside 15,443 posts on Facebook, with a clear spike in February around the Texas Blackouts. Another significant peak occurred in mid-October, just prior to our COP26 monitoring period. This was tied to high-profile accounts posting threads that claimed countries have over-invested in renewables and that energy might have to be rationed going forward - for example from [Michael Shellenberger](#) (20.5k likes, 6.6k retweets), [Alex Epstein](#) (600 likes, 300 retweets) and [Dr Jordan B Peterson](#) (20.2k likes, 4,169 retweets), whose three accounts have a follower base of over 3m on Twitter alone. In comparison, the use of this narrative during our COP26 analysis (24 October - 19 November) was lower overall and on Twitter broadly comparable with average activity throughout the year. A few Facebook-specific spikes were observed during this period.



*Graph 4: Number of posts claiming that renewable energy is unreliable on Facebook and Twitter (secondary axis includes retweets) in the weeks immediately preceding, during and after COP26*

**During and around COP26, a total of 14.4k tweets/retweets and 855 Facebook posts spread this narrative**, with a combination of generic anti-renewable and COP-specific attacks. For example, a smaller peak during week 1 was driven by the false claim that the summit was “running on coal” as “wind died to nearly net zero”. Another viral piece of disinformation alleged that diesel generators were powering Glasgow, and continued to gain traction even after the COP Presidency issued [an official fact-check](#). The [first tweet](#) making this claim garnered 8.7k likes and 3k retweets, in stark contrast to the Presidency comment which had fewer than 100 interactions overall. This demonstrates how **fact-checking may not achieve desired outcomes, whether via labels, prompts or evidence-based responses; unless content is downranked or removed by platforms and action taken against repeat offenders, disinformation often remains at large.**

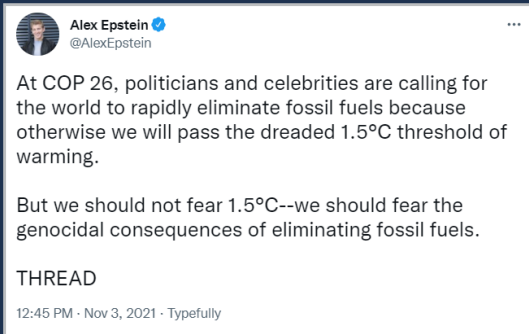
*Table 3: Examples of widely shared posts using the ‘Unreliable Renewables’ narrative during COP26*



The most retweeted post came from Patrick Moore, who claims to be a Greenpeace co-founder despite counter-statements from the organisation itself and now oversees the CO2 Coalition, describing himself as a ‘sensible environmentalist’ (over 2.5k retweets/6.2k likes). His tweet claimed that due to low winds the UK had to rely on coal plants to provide electricity for COP26, linking to an [article](#) by climate-sceptic campaign group Net Zero Watch. The [associated image](#) in fact shows Ferrybridge power station from 2005 and bears no relation to the Glasgow summit.

The same argument was used by Peter Sweden, a UK-based [vlogger known for sharing conspiracy theorist content](#), congratulating “climate change fanatics” for their over-reliance on wind energy (1k retweets/3.7k likes).

Charles V. Payne, a Fox Business contributor, ranked third with a post stating that “Clean Energy = Billions to China for solar panels and unreliable windmills” and that such efforts serve to transfer taxpayer money to the wealthiest (400 retweets, 1.1k likes).



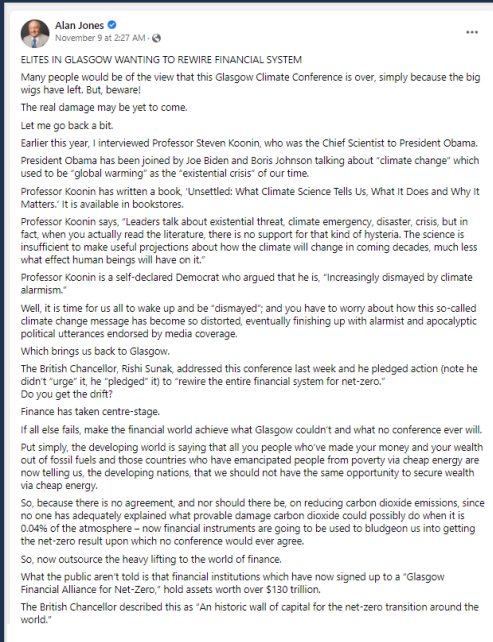
Alex Epstein, author of *The Moral Case for Fossil Fuels* and Founder-President of The Center for Industrial Progress (a for-profit think tank which sells 'I love fossil fuels' merchandise) also gained traction on Twitter. One key post from Epstein argued that the “genocidal consequences” of phasing out fossil fuels outweigh the potential impacts of a 1.5-degree temperature rise. The same article by Net Zero Watch cited in Patrick Moore’s tweet was also retweeted by Dan McTeague, President of Canadians for Affordable Energy, which claimed that “coal keeps lights on at COP26 as low wind strikes again” (778 likes, 323 retweets).

Account followers (TW): 96.3k



Maxime Bernier, leader of the [People’s Party of Canada](#), [posted](#) about rejecting “global warming hysteria” and the need to invest in nuclear energy over poor renewable technologies (1.3k likes, 300+ retweets).

**Account followers (TW): 189.3k**



Former Sky News Australia host and known climate change denier, Alan Jones, ranked highest on Facebook with a 1000-word post about the “rewiring of the financial system” to achieve net zero (1.2k shares, 3.3k reactions). Aside from repeating various false claims about the reality and impacts of climate change, he alleges that “low wind speeds” meant coal-fired power stations were paid “to keep the lights on” in Europe. This is a near-verbatim rendering of the argument also put forward by Patrick Moore, Peter Sweden and Dan McTeague. (A detailed analysis of Alan Jones’ activity and positions is included in Volume 8 of the “COP, Look, Listen” bulletin).

**Page followers (FB): 184k**

**(excerpt due to length of post)**



The second ranked post in terms of Facebook interactions was a meme from Cold Dead Hands, the affiliated Facebook page for a Texas-based National Second Amendment Group. It mocks a so-called “green vehicle” (a replica of the car from TV show The Flintstones) that requires no fossil fuel or other “unreliable” clean energy to run (1k shares, 1.9k likes).

**Page followers (FB): 2.2m**

**Pauline Hanson's Please Explain** posted a video to playlist **Climate Alarmism**.  
November 1 · 🌐

**NET-ZERO CLIMATE TARGETS MEAN YOU WILL PAY MORE TAX**

Scott Morrison's Liberal/National Government has announced a brutal net-zero climate target policy.

Under this Liberal/National climate cuts plan, your taxpayer dollars will be diverted into funding solar panels, wind turbines and other unreliable green energy schemes.

This means there will be less money for schools, hospitals and infrastructure, which means more pain for everyday Aussie.

Working Aussies will then take another hit to the hip pocket off the back of rising energy costs and job losses.

Morrison might try and spin it but the truth is his net-zero climate target comes with a huge list of hidden costs and taxes.

A cost that will be forced onto you and other everyday Aussies at a time when they can least afford it.

**Follow**

A clip from Sky News shared by Pauline Hanson, Senator of Queensland, Australia, and leader of the right-wing One Nation Party, reached over 33k views. The post argues that PM Scott Morrison's newly-announced "brutal net zero climate target policy" will mean that taxpayer dollars are "diverted into funding solar panels, wind turbines and other unreliable green energy schemes" (33k views, 1k reactions, 424 shares).

**Page followers (FB): 442k**

**Alberta Proud**  
November 4 · 🌐

COP26 had to run on coal because the wind wasn't blowing and the sun wasn't shining. SHOCKING -- NOT.

**BREAKING NEWS:**

**Coal keeps lights on at COP26 as low wind strikes again**

Wednesday, 3rd November 2021 | John Constable

**COAL KEEPS THE LIGHTS ON AT COP26**

**NETZERO WATCH**

The UK's falling renewable strategy is a national embarrassment. Critically low wind power, for nearly the whole of yesterday, resulted in extremely high prices, with the two remaining coal units at Drax offering to save the day at £4,000/MWh, nearly 100 times the wholesale price normal before the current crisis started, with many other fossil fuel generators also riding to the rescue at staggering prices.

**You can't make this stuff up...**

**ALBERTA PROUD**

1.3K · 101 Comments · 822 Shares

Alberta Proud, an advocacy group "fighting for smaller, more affordable government" in Alberta Canada, also cited the Net Zero Watch article discussed above (822 shares, 1.3k reactions). Derek Sloan, former leadership candidate for the Conservative Party of Canada, shared the same narrative and article with the following commentary: "They're using energy derived from burning coal to power the non-stop, useless virtue signal-fest that is COP26" (282 shares, 1k likes).

The #6 best performing post is from British right-wing party UKIP, again linking to the Net Zero Watch piece and stating: "Coal keeps lights on at #CRAP26 as low wind strikes again." (1k likes/148 shares)

**Page followers (FB): 204k**

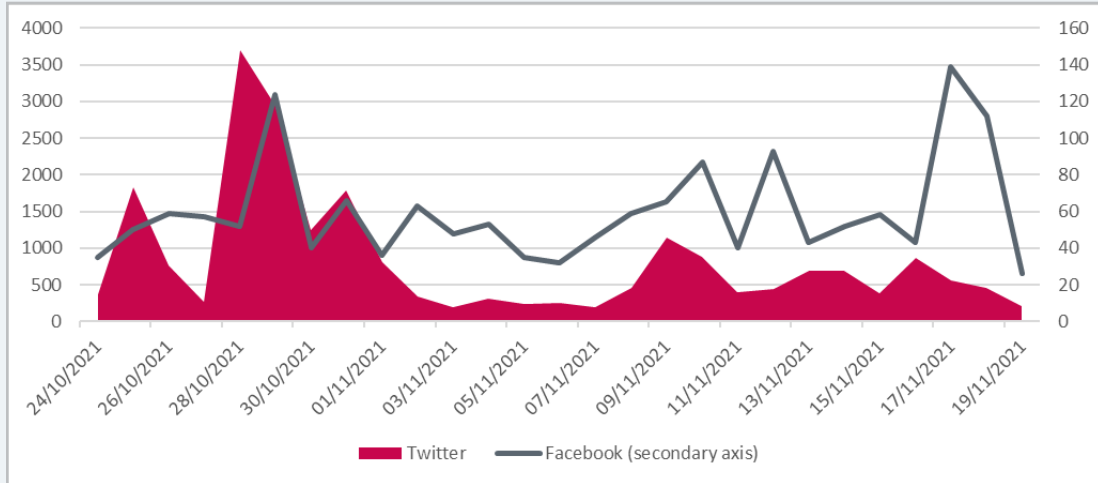
### Electric Vehicles (EVs)

**The EV narrative showed comparatively less activity overall, with 1,612 Facebook posts and 22,421 tweets in the monitored period, but remained a prominent narrative around COP26.**

The use of EVs as local transportation for the summit, combined with false claims about charging stations powered by diesel generators, also led to overlaps with ‘Hypocrisy and Elitism’ content. This came alongside other high-traction posts claiming that ‘rich metropolitan elites’ aim to make driving unaffordable for ordinary people. As our table of widely shared content shows (see below), such diesel generator claims were by no means restricted to COP26, and also circulated in the US without any reference to the summit during the same period. Attacks surrounding EVs, particularly on Facebook, were generally more focussed on national political conflicts across the Anglosphere. In both the US and Canada, popular posts accused the governments of inflating petrol prices to force EVs on their citizens, while the Australian government was [attacked](#) for softening its formerly sceptical stance.

COP26 also gave new life to older and [already debunked](#) narratives that claim EVs have an equally bad, if not worse, impact on the environment than petrol-based vehicles. The newly-minted [Net Zero Watch](#), the campaign arm of influential climate sceptic group [GWPE](#), played a prominent role providing content in this regard. Some of these claims rest on the assumption that the energy grid is entirely powered by coal, and therefore EVs do not constitute green technology. In many settings this is untrue, with the balance set to shift even further in the coming years. Even in coal-heavy grids, [a life cycle assessment](#) shows that EVs are markedly cleaner than traditional petrol cars. [A study](#) from the universities of Cambridge, Exeter and Nijmegen found that in 95% of the world, driving an electric car is already better for the environment than petrol-powered alternatives, despite a carbon-heavy electricity production mix. In addition, [a study](#) from MIT found that EVs’ superior energy efficiency over time offsets greater initial manufacturing emissions.

Despite this evidence, the lines of attack against EVs have only grown since November 2021, often framed as ‘pro-environmental’ stances. This includes alleged concerns over the production of EV battery packs using rare earth metals like cobalt, which are often mined in countries with poor human rights records such as the DRC and China, and raise potential environmental issues in their acquisition. Once again, while such critiques have merit and there is pressure to improve the sustainability of EV core components, this does not outweigh the benefits of electric-powered transport. The [Union of Concerned Scientists](#) has comprehensively explored this issue and its more specious elements, [stating that](#) attacks “shouldn’t be used by the oil industry and their allies as a rallying cry to dismantle EV policy support, or as reason to stop the growth of the EV industry.” In May 2022, Climate Nexus also published [a guide](#) with cited rebuttals to a range of arguments used to EV adoption at scale.



**Graph 5: Mentions of the Electrical Vehicles narrative on Twitter and Facebook from 24.10.21 until 19.11.21**

**Table 4: Examples of widely shared posts using the ‘Ineffective Electric Vehicles’ narrative during COP26**

**talkRADIO** @talkRADIO

Andrew Montford from Net Zero Watch says the Gleneagles hotel brought a fleet of electric cars to drive COP26 delegates to and from the venue.

“The hotel has only one charging point so they’ve installed diesel generators. It’s just virtue signalling nonsense.”

@Iromg | #COP26

NEWS ALERT: SUDAN'S PRIME MINISTER ABDALLA HAMDIK IS UNDER HOUSE ARREST AS PART OF A MILITARY COUP. THE COUNTRY'S INFORMATION MINISTRY SAID.

8:11 am · 25 Oct 2021 · Twitter Media Studio - LiveCut

882 Retweets 118 Quote Tweets 1,827 Likes

A tweet by UK media outlet talkRADIO was one early example of the claim that EVs at COP26 were being charged by diesel generators. While few individual pieces of this type of content ‘went viral’, the topic contributed to early spikes in activity through numerous, low-traction posts (each <200 retweets). The most high-traction tweet within this flurry came from a private Canadian account and achieved 2251 retweets.

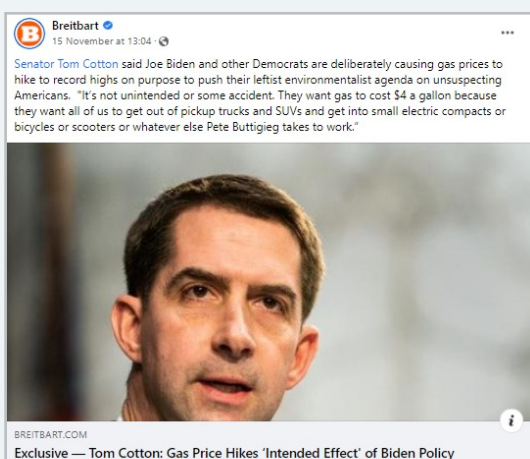
**Account followers (TW): 214.5k (account name since changed to @TalkTV)**





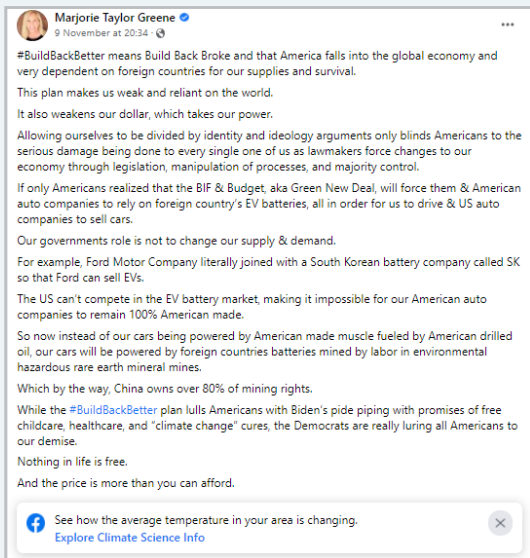
The most widely shared Facebook post came from a page called 'Wyoming Energy Families', garnering over 19k shares and 13k likes. The page is overtly pro-oil, gas and coal and opposed to measures like Biden's Build Back Better bill or increased use of wind power. Numerous US accounts shared the same image of a random EV charging port with a technical device directly adjacent, which they claimed to be a diesel generator. Such content is now marked as "False Information" by Facebook, highlighting that this is not a diesel generator powering the station, but content remains live on the platform. Other examples include:

- A high-volume public group called 'Kaitlin Bennett' with over 100k members and upwards of 400 posts a day, often memes in support of various US conservative talking points (823 shares/2k likes)
- A page labelled as 'satire/parody' called 'No Definite Purpose' which boasts 55k followers (204 shares)
- A page labelled as 'interest' called 'The Lockdown Left Lunacy' which has 3.6k+ followers and posts memes around right-leaning talking points. It also contains large volumes of content sceptic of COVID-19, vaccines and related public health measures (127 shares).



A Breitbart post on Facebook, citing US Republican Senator Tom Cotton, illustrates how climate protection is framed as a cultural battleground. It pits the lifestyle of 'average people' against elites, who are seen to orchestrate shadowy agendas against the will of the majority. In this case the alleged manipulation of petrol prices is intended to force people into driving "small electric compacts or bicycles or scooters."

**Page followers (FB): 5.2m**

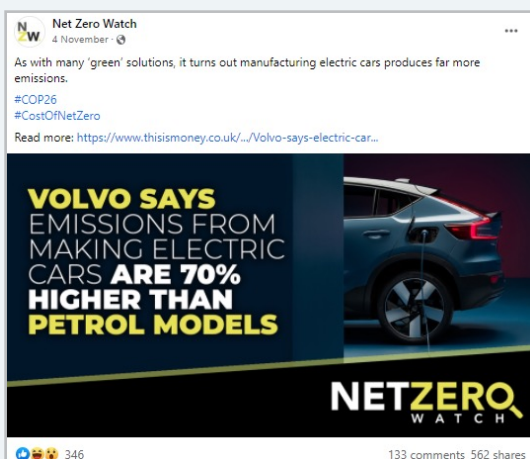


Republican Congresswoman Marjorie Taylor Greene called support for EVs by Biden's administration an "attack on the US car industry" (1.7k shares, 7.5k likes). She argued that the need to cooperate with foreign battery makers would mean US cars are no longer "100% American made" or fuelled by "American drilled oil," playing off broader tensions with China and a protectionist agenda around trade and energy production.

**Page followers (FB): 414k**



A viral Bjorn Lomborg video from 2016 was re-shared in various forms by PragerU, a right-wing digital media entity, amassing 2.6m views/1k shares on a single post during COP26. Older posts containing the video were viewed 2.4 million times with 4.8k likes (PragerU on Facebook), 7.1m times (PragerU's own website) and 1.9m times with 32k likes (PragerU on YouTube). The video claims that EVs have an equal, if not markedly worse, carbon footprint than existing petrol-based vehicles and thus constitute a 'green myth'.



Net Zero Watch also tried to discredit the 'green credentials' of EVs, citing an article from [This is Money](#) which itself was based on an environmental impact study by Volvo. While linking to the original story, the post cherry-picks content and omits the more positive conclusion reached in the piece.

**Page followers (FB): 14.7k**

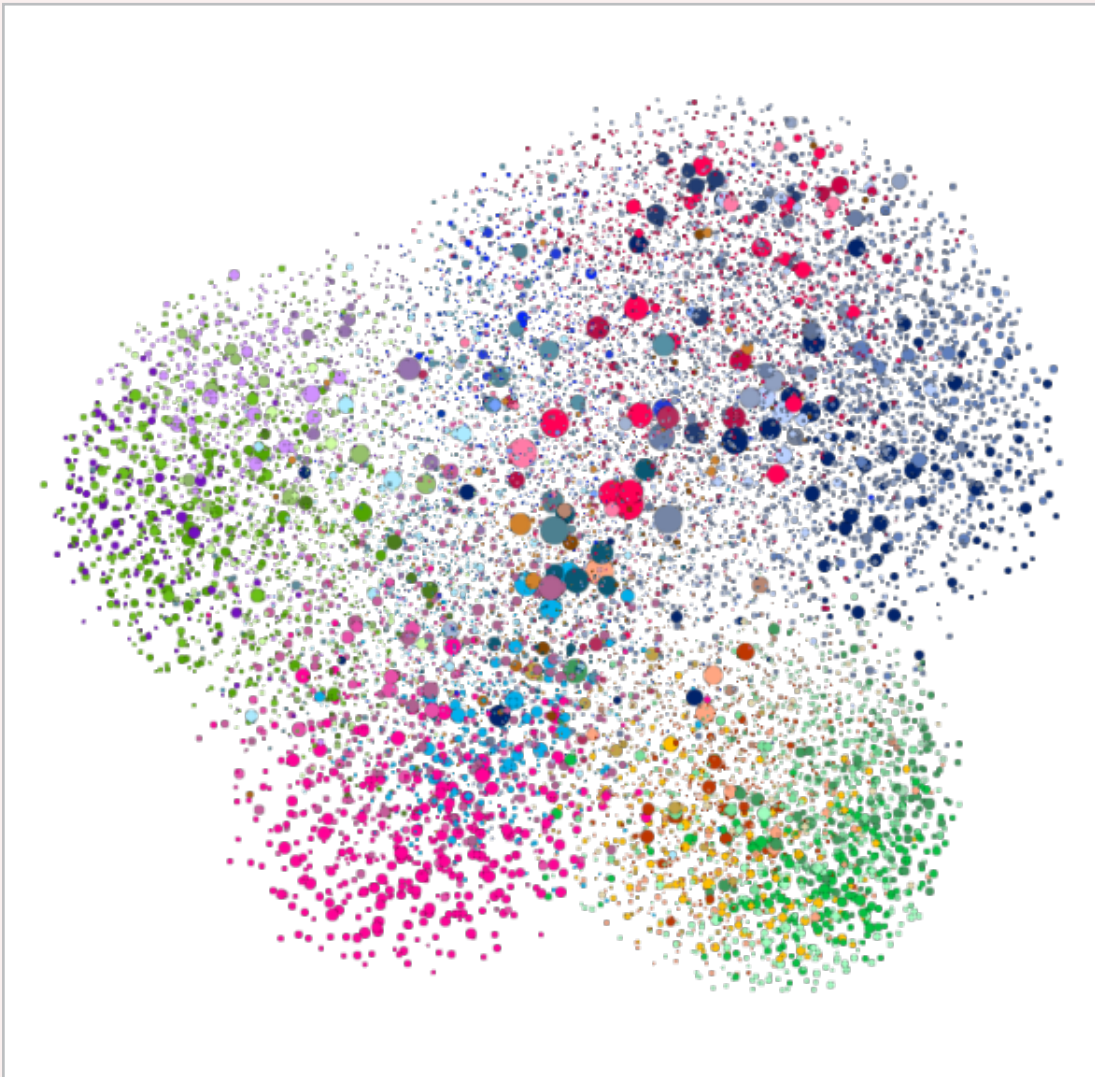
## UNDERSTANDING THE NETWORK: A STRUCTURAL ANALYSIS OF ACCOUNTS ON TWITTER

Social media activity around COP26 highlighted both key climate sceptic narratives and the actors behind them. By far the most prominent anti-climate content stemmed from a handful of influential pundits, many with verified accounts on social media. Network analysis of these accounts shows that they are members of distinct communities with equally distinct audiences. When analysing the content of their posts, it also becomes clear that they engage with different ‘shades’ of climate denial.

The following section outlines the main social media communities that cluster around these key accounts, as well as the ways these communities interconnect and the potential for cross-pollination of content and ideas. The specific role of these accounts during COP26 and beyond is elaborated in later sections of this report, particularly in reference to the problem of ‘repeat offenders’ and social media platforms’ Community Guidelines or Terms of Service.

### **Network Overview**

To create the network map, in the course of our COP26 monitoring we identified a diverse cross-section of over 50 Twitter accounts that have a disproportionate impact in either seeding or spreading denialist and delayist narratives, either through a high volume of content and/or regularly overperforming posts. This list was further filtered down to 16 key actors, whose Twitter or Facebook accounts place in the top 12% for total interactions (i.e. likes/reactions, retweets/shares, comments for Facebook). The process entailed collecting the followers of each of these key influencers and reducing the resulting network to those actors with a high in-degree centrality. This means that the graph represents the most well-connected actors, and thus the core audience of these influencers who are most likely to have direct exposure to their content. As our monitoring was conducted in English, the results centre on communities in the Anglosphere (US, UK, Canada, Australia) and those with an international focus.



*Figure 2: Combined network of followers of prominent climate sceptic influencers during COP26.  
Source: Graphika*

The analysis identified 13 distinct sub-groups, each separately colour-coded in the resulting graph. Table 5 below lists the individual groups and provides key metrics for each respectively.

- **‘Number of Nodes’** refers to the overall number of Twitter accounts belonging to each category.
- **‘Percent of Map’** demonstrates how much a community engages with our sample of key climate sceptic actors. The greater the map volume a community occupies, the higher this engagement is.
- **‘Density’** indicates how closely knit a community is. A high degree of density is often crucial for online communities to coordinate their content effectively and galvanise support for their cause. It can also signify that a group is particularly impermeable to external sources of information, developing into its own echo chamber.

Segment	Tags	Number of nodes	Percent of map	Density
> INT Anti-Science   Conspiracy		1,569	11.22	3.42%
> INT Climate Activism   Policy		540	3.86	5.45%
> US Right-Wing		4,024	28.77	1.75%
> US Anti-Science   Conspiracy		1,137	8.13	1.50%
> US Libertarian		375	2.68	6.39%
> US Political Media   Progressives		400	2.86	4.46%
> CAN Right-Wing		1,074	7.68	18.04%
> CAN Anti-Science   Conspiracy		376	2.69	9.04%
> CAN Media   Policy		914	6.53	4.15%
> UK Right-Wing		960	6.86	5.89%
> UK Anti-Science   Conspiracy		1,304	9.32	5.40%
> AUS Politics		979	7.00	12.37%
> US Business   Crypto		336	2.40	4.24%

*Table 5: List of groups in the network, ranked by their relative volume. Source: Graphika*

Of the 13 groups the analysis identified, three distinct clusters in the network emerged around anti-science and conspiracy communities in specific countries (US, UK, Canada), and another representing a wider international anti-science and conspiracy group. During COP26, there was a high degree of interconnection between these communities. It is likely that these groups were paying attention to content that transcended their respective local and national grievances around climate change.

Overall, the audience engaging with climate sceptic influencers spans the political spectrum. However, the strong presence of US, UK and Canadian right-wing Twitter communities within the network suggests that climate sceptic actors are succeeding in reframing the online conversation about climate change along partisan lines. Furthermore, qualitative analysis of the social media activity of key accounts who previously focussed solely on climate issues suggests that some of these actors are branching out into other policy areas and/or 'culture war' issues, which seems to corroborate this further. Specific instances of this are elaborated upon more in-depth in the description of key communities below and in the section on repeat offenders (see Policy Ask 2).



*Figure 2: Close proximity of anti-science and conspiracy Twitter communities in the UK, US, Canada and beyond. Source: Graphika*

This finding is further underlined by the structural overlaps between communities defined by their politics, such as the US Right-Wing group, and those refuting evidence of environmental and public health crises. As shown below, there is a significant crossover between the two communities in the US context. On Figure 4 (see below), the Right-Wing politics group is highlighted in blue and another based around conspiracies in pink. Due to the relative volume of these groups and their geographical focus, some of the most popular content across the network, even during a prominent event like COP26, pertained to unrelated topics such as the origin of COVID-19, ‘cancel culture’, critical race theory and LGBTQ+ education in schools. These are all issues high on the agenda of right-wing pundits and activists, the latter two particularly in the US. This further suggests that the audiences of US climate-sceptic influencers are also engaging in other ‘hot button issues’ and could be cross-pollinating communities with their content.



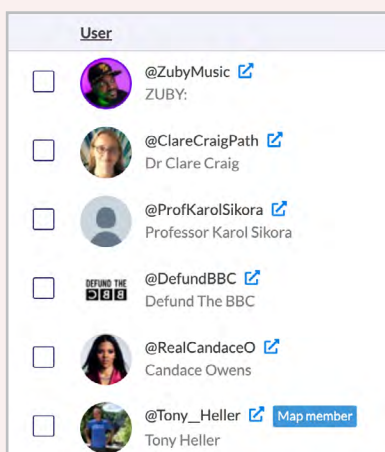
*Figure 4: Overlap between right-wing political and anti-science communities in the US. Source: Graphika*

There are indications that climate sceptic communities occupy their distinct national spaces, due to the multipolar structure of the network. There is, however, some overlap in followership between these climate sceptic communities. Crucially, the major connective tissue between all these communities are climate sceptic influencers used to seed the network. They are shown in the centre of the map and provide both content hubs and transnational links for those on the denialism-delayism spectrum.

### Major communities

The largest and most vocal cohort in this network are right-wing groups, activists and pundits from the US, UK and Canada. Graphika's mapping showed these groups were more active in conversations immediately preceding COP26 than dedicated climate sceptic and conspiracy accounts. All clusters tied to the political right-wing combined made up 43.31% of the map, compared with 31.36% comprising those focussed on science scepticism and related conspiracies. Several top influencers at the core of the network fall into the category of sharing right-wing content: [Dinesh D'Souza](#), [Ezra Levant](#), [Rita Panahi](#) and [PragerU](#). These conservative pundits and organisations have successfully built followings in their own right on Facebook, Twitter, YouTube, and alt-tech platforms. While climate issues are not part of their main content strategy, they nevertheless engage in frequent criticism of their respective governments' environmental policies, attack or ridicule prominent climate activists, or employ narratives outlined in the previous section of this report. During COP26 in particular, they downplayed the climate emergency and amplified accusations of hypocrisy against politicians and other figures attending the Glasgow summit.

The other major group in the network consists of four anti-science clusters. As highlighted above, they coalesce around geographies, but showed interconnectedness during COP26 around content that extended beyond their local and national issues. It is noteworthy that COVID-19 and climate sceptic accounts overlap both structurally and in the content they share. The network includes several anti-vaccine clusters within the wider anti-science groups. For the purposes of this report, the terms "vaccine-sceptic", "anti-vaccine" and "anti-vaxx" cover a range of attitudes, characterised by distrust of a specific vaccine (e.g. for COVID-19) or immunisation regimes more broadly. "Vaccine sceptics" are not categorically opposed to vaccines, but have reservations to varying degrees about their safety, necessity or inclusion within health mandates. By contrast, "anti-vaxxers" are fundamentally opposed to vaccination as a matter of principle. Their reasons range from suppositions derived from conspiracy theories to the deeply held belief that vaccines constitute a harmful intervention into the body's biochemical processes, potentially causing long-term damage. The most widely followed accounts in the UK-based Anti-Science/Conspiracy group are a mix of anti-vaccine influencers alongside prominent climate denialists.



*Most followed accounts in the UK Anti-Science/Conspiracy group - a mix of personalities that have shared COVID misinformation, such as British rapper Zuby and Dr. Clare Craig, and climate misinformation super-spreaders such as Tony Heller. Source: Graphika*



The most significant influencers in this category, such as Patrick Moore, Michael Shellenberger, Bjorn Lomborg, Tony Heller or Friends of Science (see below), are characterised by their primary focus on creating and sharing climate-related content. They most commonly come from scientific or academic backgrounds and some were previously involved in the green movement. This allows them to present themselves as ‘rationalist’ environmentalists and claim greater credibility for their analysis. It also gives them significant appeal online and the potential to galvanise far broader audiences, since they are frequently invited by conservative media outlets as ‘climate experts.’ It should be noted, however, that there are cases where these pundits also delved into other policy areas or culture wars-type content.

A prime example of this phenomenon is Michael Shellenberger, who contributed to a [‘Woke Religion Taxonomy’](#) that presented climate action and several other causes as [‘easily debunked myths and supernatural beliefs.’](#) In 2021, Shellenberger also published a book critical of policies he claims contribute to homelessness in San Francisco, with the subtitle [‘Why Progressives ruin cities’](#), before announcing his candidacy as an Independent in the 2022 California Gubernatorial race (against Democrat incumbent Gavin Newsom). This branching-out is reciprocated by accounts that focus on portraying themselves as ‘rational’ voices against ‘woke’ society.

The remaining key influencers in the ‘Anti-Science’ group fall into this contrarian set, sometimes branded as the [‘Intellectual Dark Web.’](#) While their focus is on social wedge issues, climate change also plays a role in such ‘anti-woke’ messaging. Jordan B. Peterson, the fourth most followed account in the overall network, falls into this category and has a track record of both climate-sceptic and climate denialist statements (covered below and in other sections of the report). Peterson’s central placement in the network emphasises the role such influencers play in amplifying and sustaining a climate sceptic community. Another member of this group, Peter Boghossian, collaborated with Shellenberger on the abovementioned ‘Woke Religion Taxonomy.’

### Key actors

These pivotal accounts are not only widely followed across the network, but have also generated some of the most widely shared climate sceptic or denialist content analysed throughout this report. The following table provides further context on their intersection with climate issues, both past and present:

Key Amplifier	Followers/Subscribers	Description
Bjorn Lomborg	Facebook - 44k Instagram - n/a TikTok - n/a Twitter - 110.7k YouTube - n/a	A <a href="#">former academic statistician</a> , Lomborg is a prominent pundit and author who shares climate-sceptic content. <a href="#">Media profiles and publisher synopses for his books</a> continually refer to Lomborg as a “former member of Greenpeace”, despite clear <a href="#">efforts by the organisation</a> to distance Greenpeace from his current stances and activity. He is the founder of the “Copenhagen Consensus Center,” which <a href="#">operates</a> from the US after having lost funding from the Danish government in 2012. A staple of his messaging is to present various climate protection measures as <a href="#">excessive</a> or ‘ <a href="#">misguided</a> .’ His <a href="#">claims</a> and <a href="#">use of evidence</a> have <a href="#">repeatedly</a> been shown to be misleading. <a href="#">The same applies to his books</a> titled ‘False Alarm’, ‘Cool It’ and ‘sceptical Environmentalist’. In the run-up to COP26, Lomborg began <a href="#">writing a series of columns</a> for the Wall Street Journal and also published in other mainstream conservative outlets like the <a href="#">Daily Mail</a> .

Key Amplifier	Followers/Subscribers	Description
Dr Jordan B Peterson	Facebook - 1.4m Instagram - 2.9m TikTok - 442k Twitter - 2.2m YouTube - 4.5m Reddit: 274k (r/JordanPeterson) Quora: 41.9k	<p><u>Now-emeritus</u> Professor of Psychology at the University of Toronto, Peterson initially achieved fame on YouTube for his polemical takes on culture and liberalism. He has since become a ‘celebrity intellectual’ within conservative circles, <u>sparking controversy</u> on everything from feminism and gender identity to racial privilege and university censorship. Over the course of 2021, Peterson became more publicly vocal on environmental issues, amplifying stances by other pundits like Lomborg and Shellenberger.</p> <p>In January 2022, Peterson was <u>widely criticised</u> for inaccurate statements made about climate science, environmental modelling and other issues on the Joe Rogan podcast. This included claims such as “there’s no such thing as ‘climate’” because “‘climate’ and ‘everything’ are the same word”; that “more people die every year from solar energy than from nuclear”; and that US carbon emissions have decreased over the past 20 years due to fracking. Following pushback from the scientific community, Peterson <u>tweeted a thread</u> to his 2.2m followers encouraging them to read ‘Hot Talk, Cold Science: Global Warming’s Unfinished Debate’ by the (now deceased) climate sceptic Fred S. Singer. As <u>documented by DeSmog</u>, Singer was a career climate change denier and a regular recipient of funds from the Heartland Institute. In a <u>2018 episode of Rogan’s podcast</u>, Peterson joked that he had learnt ‘how to monetize social justice warriors’ through his own reactionary content.</p>

Key Amplifier	Followers/Subscribers	Description
Dinesh D'Souza	Facebook - 2.6m Instagram - 1.1m TikTok - n/a Twitter - 1.8m YouTube - 642k	D'Souza is a right-wing commentator and author, who <a href="#">started his career</a> in the Reagan administration and mainstream conservative think tanks the <a href="#">American Enterprise Institute</a> and the <a href="#">Hoover Institution</a> . Chiefly known for his controversial views on race, as well as producing <a href="#">conspiracy-based content</a> on the cultural left and US Democratic Party, D'Souza has also <a href="#">garnered attention</a> for his climate denialism. This includes comparing Greta Thunberg to ' <a href="#">Nordic white girls with braids</a> ' from ' <a href="#">Nazi propaganda</a> ' campaigns, and a <a href="#">track record</a> of stoking outrage about alleged climate hypocrisy.
Ezra Levant	Facebook - 73k (personal), 276k (Rebel News) Instagram - 3.2k (personal) / 210k (Rebel News) TikTok - 12.4k (Rebel News) Twitter - 296.6k (personal) / 263.3k (Rebel News) YouTube - 1.52m (Rebel News)	A <a href="#">Canadian conservative lawyer turned media figure</a> . He is the <a href="#">founder</a> of the right-wing media organisation Rebel Media, <a href="#">notorious for its extreme anti-Muslim views</a> . In the past, the outlet had far-right figures <a href="#">Tommy Robinson</a> and <a href="#">Gavin McInnes</a> on its payroll. Levant himself has a <a href="#">long track record</a> of supporting the fossil fuel industry in his home province of Alberta, particularly in his 2010 non-fiction book "Ethical Oil." .

Key Amplifier	Followers/Subscribers	Description
Friends of Science	Facebook - 33k Instagram - 222 TikTok - n/a Twitter - 39.4k YouTube - 43.7k	<p>Friends of Science is a Canadian organisation <a href="#">describing itself</a> as a “group of earth, atmospheric, solar scientists, engineers, and other professionals” who conclude “that the Sun is the main direct and indirect driver of climate change”. Their <a href="#">position statement</a> further claims that “IPCC reports have been misrepresented by the non-scientific IPCC bureaucrats.” The group has a <a href="#">history of funding by the oil and gas industry</a> and <a href="#">undisclosed donations</a> being channelled to the group via the University of Calgary. Friends of Science has <a href="#">contributed to a public inquiry</a>, launched in 2019 by the Government of Alberta, into alleged ‘foreign-funded campaigns targeting Alberta’s oil industry’. Upon publication of its results in 2021, the inquiry was <a href="#">widely criticised</a> as ‘junk climate-denial science, bizarre conspiracy theories and oil-industry propaganda.’</p>

Key Amplifier	Followers/Subscribers	Description
Michael Shellenberger	Facebook - 2.8k Instagram - 15.1k TikTok - n/a Twitter - 168.7k YouTube - n/a	<p>Former environmentalist turned ‘eco-pragmatist’ pundit. Shellenberger co-founded the <a href="#">Breakthrough Institute</a> in 2003 and has been the <a href="#">Founder-President of Environmental Progress</a> since 2015. He regularly writes about climate and energy for <a href="#">Forbes</a>. His position has been <a href="#">described as a “lukewarmer”</a> towards climate change: He <a href="#">publicly apologised</a> on behalf of environmentalists for a ‘climate scare’ while <a href="#">supporting fracking and the shale gas industry</a>, as well as highlighting the world’s improved ability to <a href="#">withstand natural disasters</a>. He is also a <a href="#">keen supporter of nuclear power</a>, and the 2017 annual report of the Nuclear Energy Institute, the trade association of the US nuclear industry, suggests he was <a href="#">engaged by the group to give media interviews and write op-eds</a>. In 2020, Shellenberger published the <a href="#">debunked climate book ‘Apocalypse Never’</a>, and in October 2021 was featured on <a href="#">Joe Rogan’s podcast</a> talking about ‘Climate Change Alarmism.’ Following COP26, he <a href="#">attacked</a> it as “neo-feudal” pageantry and that it “gathered all of the world’s douchebags in a single conference.”</p>

Key Amplifier	Followers/Subscribers	Description
Patrick Moore	Facebook - n/a Instagram - n/a TikTok - n/a Twitter - 103.9k YouTube - n/a	<p>A former President of Greenpeace Canada, who has since been <a href="#">denounced by the organisation</a> for ‘offering anti-environmental opinions on a wide range of issues’ and for being ‘a paid spokesman for a variety of polluting industries.’ Greenpeace particularly criticises how Moore uses his former ties to the group to claim legitimacy and expertise, especially his <a href="#">refuted claim that he co-founded Greenpeace</a>. Moore is the author of ‘Confessions of a Greenpeace Dropout: The Making of a Sensible Environmentalist,’ Director of the <a href="#">C02 Coalition</a>, and Senior Fellow at the <a href="#">Heartland Institute</a>. Notably, his claims denying a climate crisis and portraying global warming as potentially beneficial were <a href="#">shared on Twitter</a> by then-US President Donald Trump after Moore was featured by Fox News in 2019. He has in the past <a href="#">also denied anthropogenic climate change</a> before the US Senate. He also shares his views on climate policy on social media. A twitter thread calling Congresswoman Alexandria Ocasio-Cortez a ‘pompous little twit’ and claiming her Green New Deal proposals would cause ‘mass death worse than WW2’ garnered <a href="#">widespread attention</a>.</p>

Key Amplifier	Followers/Subscribers	Description
PragerU (Prager University)	Facebook - 4.4m Instagram - 1.9m TikTok - <a href="#">permanently banned</a> PragerU from the platform for ‘multiple violations’ of its community guidelines Twitter - 612.6k YouTube - 2.94m	A tax-exempt, non-profit media company, primarily targeting millennials and Gen-Z audiences online in the US. Their outputs span a range of conservative narratives, with the <a href="#">self-described aim</a> to “promote American values...[as] an alternative to the dominant left-wing ideology in culture, media, and education”. Its founder, radio host <a href="#">Dennis Prager</a> , has openly claimed that the Green New Deal “will lead to bloodshed, loss of liberty, loss of human rights” and that “climate change is God’s will”. PragerU’s online platform was launched in part through <a href="#">investment from fracking billionaires Dan and Farris Wilks</a> , and regularly platforms other key players in this network such as Bjorn Lomborg, Patrick Moore, Dinesh D’Souza and Alex Epstein. According to their main website, PragerU content has garnered over 5 billion views with 4 million average views daily. It also claims that 60% of its YouTube audience are under 35 and 70% of them ‘changed their mind on at least one issue’ after viewing PragerU content (further profiles available via <a href="#">Media Matters for America</a> ; <a href="#">DeSmog</a> ; <a href="#">New York Times</a> ).



Key Amplifier	Followers/Subscribers	Description
Rita Panahi	Facebook - 67k Instagram - 16.2k TikTok - n/a Twitter - 280.6k YouTube - n/a	<p>Pahani is an American-born Iranian refugee who <a href="#">became a prominent right-wing media personality</a> in Australia. Starting her media career at the major News Corp newspaper <a href="#">the Herald Sun</a>, Panani also <a href="#">hosts a show</a> at Sky News Australia. She belongs to a set of presenters at the station that are promoting the most controversial content and <a href="#">platform conspiracy theorists</a>. During COP26, <a href="#">Panahi attacked Prince Charles</a> as the “biggest hypocrite and idiot” and claimed he bullied a hitherto reluctant Australian PM Scott Morrison to attend the summit. Previously, she called <a href="#">climate change “scaremongering”</a> that was not “rooted in hard science.</p>
Sebastian Gorka	Facebook - 141.2k Instagram - 388k TikTok - n/a Twitter - 1.1m YouTube - n/a	<p>Conservative media personality and former aide to President Donald Trump. During his time at the White House, Gorka <a href="#">vocally supported the administration’s travel ban</a> on several Muslim-majority countries. Gorka also <a href="#">downplayed the significance of white supremacists</a> days before the events at the 2017 Unite the Right rally in Charlottesville. Prior, he served as <a href="#">national security editor for Breitbart News</a> and <a href="#">since his departure from the administration</a> worked as a radio host, Fox News contributor and received a talk show on Newsmax in April 2021. On climate change, Gorka has in the past drawn heavy criticism for <a href="#">remarks about Greta Thunberg</a> and likened climate change policy proposals to <a href="#">outdoing Stalinism</a>.</p>

Key Amplifier	Followers/Subscribers	Description
Scott Adams	Facebook - 18.7k Instagram - 18.5k TikTok - n/a Twitter - 664.7k YouTube - 105k	A cartoonist and author, best known for the popular “Dilbert” comics, Adams has turned into an <a href="#">internet provocateur</a> popular with right-wing audiences. During the 2016 Republican primaries he <a href="#">compared</a> Donald Trump to Jesus and vocally supported him while in office. Despite <a href="#">later criticism</a> around the 2020 Presidential Debate, Adams <a href="#">originally defended Trump’s controversial response</a> to the neo-Nazi violence in Charlottesville in 2017. As part of Adams’ wider propagation of conspiracies, including <a href="#">predictions</a> that Republicans would be hunted and killed if Joe Biden won the 2020 election, he also <a href="#">engages</a> in climate denialism <a href="#">commentary</a> .
Tom Fitton	Facebook - 123k Instagram - 328k TikTok - banned from the platform in January 2022 Twitter - 1.2m YouTube - 483k (branded as Judicial Watch)	President of the conservative advocacy group <a href="#">Judicial Watch</a> , Fitton has also promoted <a href="#">false claims</a> about the 2020 Iowa caucuses and <a href="#">vote counting</a> during the 2020 US Presidential elections. He was identified as a major amplifier of COVID-19 disinformation by the <a href="#">Federation of American Scientists</a> and linked to the Trump administration’s <a href="#">efforts</a> to portray Antifa as a left-wing terrorist group. Fitton <a href="#">denied</a> that Judicial Watch has a stance on climate change, despite trying to obtain the private communication of climate scientists working for the US government. However, his personal social media profile involves <a href="#">posts</a> calling climate change ‘fanaticism’ and labelling it a totalitarian ideology, together with other topics like critical race theory.

Key Amplifier	Followers/Subscribers	Description
Tony Heller	Facebook - ~300 Instagram - n/a TikTok - n/a Twitter - account currently suspended YouTube - 113k	<p>Also known by his pen name Steven Goddard, Heller's main output is the blog Real Climate Science. A <a href="#">debunked claim</a> that the world is cooling and climate scientists falsify the data, which gained prominent exposure in conservative media, has been <a href="#">traced back by Media Matters</a> to Heller's blog.</p> <p>In 2017, Heller was <a href="#">invited</a> as an expert to a hearing of the Washington state legislature. The same year, he was also a <a href="#">panellist</a> on an event at that year's <a href="#">CPAC conference</a>. Beyond his climate focus, Heller has also spread other conspiracy theories about the <a href="#">Sandy Hook school shooting</a>, former President Obama's <a href="#">birthplace</a> and the 2020 US Presidential <a href="#">election</a>.</p>

## SECTION 2: ADDRESSING CLIMATE MIS- AND DISINFORMATION

The following section outlines seven policy asks which in tandem would help to systematically detect, analyse and counter climate mis- and disinformation. Our primary aim is to limit the influence of false or misleading content in public life, which could otherwise inhibit the passing of climate legislation.

For the first time in 2022, the IPCC recognised mis- and disinformation and the “politicization of science” as key barriers to action, urging an associated response as part-and-parcel of wider efforts. The 3000+-page ‘[Climate Change: Impacts, Adaptation and Vulnerability](#)’ report states that “vested economic and political interests” have “generated rhetoric and misinformation that undermines climate science and disregards risk and urgency”. According to their analysis, this has ultimately driven “public misperception of climate risks and polarised public support for climate actions”, weakening consensus and extending the timeline to achieve meaningful progress. Governments, multilateral bodies, tech platforms and the media all have a role to play. Some mandates are better led via a state institution or regulator; others require buy-in and transparency from individual private companies. The policy asks captured below reflect both what is achievable in the near-term, and potentially without state interventions, alongside the more holistic measures needed to achieve change at scale. These are:

- 1) a. **Implement a unified definition of climate mis-and disinformation within key institutions (e.g. UNFCCC, IPCC, COP Presidency); and**
  - b. **Reflect these criteria in tech company Community Standards and/or Terms of Service.**
- 2) **Enforce platform policies against repeat offender accounts.**
- 3) **Improve transparency and data access for vetted researchers and regulators on climate misinformation trends, as well as the role played by algorithmic amplification.**
- 4) **Limit media exemption loopholes within legislation (e.g. the EU Digital Services Act, UK Online Safety Bill and other proposals)**
- 5) **Restrict paid advertising and sponsored content from fossil fuel companies, known front groups for fossil fuel companies, and/or other actors repeatedly found to spread disinformation that contravenes the definition in Policy Ask 1.**
- 6) **Ensure better platform labelling on ‘missing context’ and the re-posting of old or recycled content.**
- 7) **Enable API image-based searches to support research on viral disinformation.**

For each recommendation, we have outlined how and why it relates to the problem at hand and other contextual information. This is followed by a set of case studies, produced by ISD and partners within the Climate Disinformation Coalition (Dis.Co) and Climate Action Against Disinformation (CAAD), which provide an evidence-base to further support these recommendations.

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## POLICY ASK 1(A): IMPLEMENT A UNIFIED DEFINITION OF CLIMATE MIS-AND DISINFORMATION WITHIN KEY INSTITUTIONS (E.G. UNFCCC, IPCC, COP PRESIDENCY)

## POLICY ASK 1(B): REFLECT THESE CRITERIA IN TECH COMPANY COMMUNITY STANDARDS AND/OR TERMS OF SERVICE

To date, the response from technology platforms regarding climate mis- and disinformation has been lacklustre at best, and wholly absent at worst (see below for details).

According to the [IPCC](#) and countless other multilateral and academic bodies worldwide, climate change poses an existential threat to humankind. As such, tech companies have a duty to ensure the content gaining exposure on their platforms is grounded in scientific data. This by no means precludes the need or opportunity for public debate - as countries review the best approaches for mitigation and adaptation, there are legitimate discussions to be had about the pace, scale and efficacy of changes proposed. However, as with public health measures for COVID-19 or efforts around electoral integrity, there must also be a line drawn somewhere.

Outright climate denial is still endemic across social media, not to mention the ‘softer’ tactics neatly summarised in this piece on [‘Discourses of Delay’](#). This content serves to mislead users about the reality, impacts of, and viable responses to climate change. Without a basic foundation of facts, citizens cannot engage meaningfully with their policymakers or advocate for a path forward. Instead, as we have seen this past year, climate will become yet another axis in the culture wars, fuelling the outrage economy online and distracting us from the urgent task at hand.

**To shift the dial, we need a working, commonly held definition of climate mis- and disinformation recognised by key scientific and multilateral bodies. This will create a precedent for both private and third sector entities and remove the pressure for companies to act as sole ‘arbiters of truth’ on climate, which is an increasingly contentious issue.**

### **Suggested Definition**

A coalition including 350.org, Climate Nexus, Conscious Advertising Network, Digital Climate Coalition, DeSmog, Fair Vote, Friends of the Earth US, Global Witness, Global Disinformation Index, Greenpeace, ISD, Reset, Eco-bot.net, Purpose and Stop Funding Heat co-developed the following definition as a starting base:

#### **Climate mis- and disinformation refers to deceptive or misleading content that:**

- 1. Undermines the existence or impacts of climate change, the unequivocal human influence on climate change, and the need for corresponding urgent action according to the IPCC scientific consensus and in line with the goals of the Paris Climate Agreement;**
- 2. Misrepresents scientific data, including by omission or cherry-picking, in order to erode trust in climate science, climate-focused institutions, experts, and solutions; or**
- 3. Falsely publicises efforts as supportive of climate goals that in fact contribute to climate warming or contravene the scientific consensus on mitigation or adaptation.**

**To note:** ‘Misinformation’ refers to the accidental sharing of false, misleading or incomplete information. While there is no clear intention to harm, the negative consequences can be just as powerful, increasing confusion or misunderstanding around a topic, creating divisions between groups, and in extreme cases putting people in danger. ‘Disinformation’ refers to any information that has been deliberately created to deceive people or give them an inaccurate understanding of an issue. While often presented as fact-based, in reality it is intentionally false, misleading or incomplete.

#### **Current Actions by Platform**

Policies of this nature are being developed in some companies, following advocacy from the climate sector, and prove that integration into existing Community Guidelines, rules or standards is an attainable goal. Action relies primarily on internal buy-in, and sufficient pressure being applied from policymakers or relevant regulatory bodies (for example, on advertising standards) - a unified definition would therefore create the momentum to encourage action across social media platforms, as well as traditional media outlets.







**Facebook** has a general policy on ‘repeat offenders’ which states that an account fact-checked more than 5 times in 90 days by their trusted partner network will be deplatformed. As this policy is rife with loopholes and poorly enforced (see Policy Ask 2), there is functionally no internal mechanism to combat climate mis- and disinformation at scale. In lieu of changes to their Community Guidelines, Facebook has instead touted its [Climate Science Center](#) as a source of verified information and ‘mythbusting’, initially available in 16 countries with [plans to expand to 100](#).

According to [documents](#) from the so-called ‘Facebook Papers’, leaked to the US Securities and Exchange Committee (SEC) by whistleblower Frances Haugen, such efforts have done little to stymie the prevalence or impact of outright climate denial, let alone the wider universe of sceptic, ‘lukewarmer’ and misleading content on the platform. [CNN reporting on the leak](#) highlighted two particular statistics: that 86% of Facebook users yet to access the Climate Science Center were unaware of its existence, falling to only 66% for users who had previously visited the hub. Facebook has dismissed such criticism and continues to “downrank” climate content labelled false by fact checkers - this follows a wider company policy to merely limit the distribution of mis- and disinformation which, by their own account, ‘does not cause imminent physical harm’. As detailed in [a November 2021 blog post](#) by Facebook VP Nick Clegg, the labels themselves are only available on posts in around twenty countries, including Canada, France, Germany, Ireland, Nigeria, South Africa, Belgium, Brazil, India, Indonesia, Mexico, the Netherlands, Spain and Taiwan. The platform also alleges ongoing action against pages, groups or accounts that regularly share false claims about climate science, although has not provided further detail.

In November 2021, [Twitter announced plans](#) to ‘pre-bunk’ climate mis- and disinformation, prompted by the COP26 summit in Glasgow - in practice this constitutes information hubs similar to Facebook’s Climate Science Center. Users are directed to these hubs via the Explore, Search and Trends features on the platform, alongside a subscribable climate change Topic that claims to enable “personalized conversations about climate change, including Tweets from environmental and sustainability organizations, environmental activists, and scientists’ in the Home timeline.

In April 2022, to mark Earth Day, the platform announced a [new policy](#) which will prohibit adverts that contradict the scientific consensus on climate change, in line with their Inappropriate Content Policy. The policy’s enforcement will be informed by authoritative sources, including the [Intergovernmental Panel on Climate Change Assessment Reports](#).

In October 2021, **Google** announced a [new policy](#) for advertisers, publishers and YouTube creators that prohibits “ads for, and monetization of, content that contradicts well-established scientific consensus around the existence and causes of climate change. This includes content referring to climate change as a hoax or a scam, claims denying that long-term trends show the global climate is warming, and claims denying that greenhouse gas emissions or human activity contribute to climate change.” Developed with the Conscious Advertising Network, this policy is undoubtedly a step in the right direction, although to date enforcement has proved inconsistent and prone to error. A [recent report](#) from the Global Disinformation Index (GDI) found that 38.8% of climate disinformation was still monetised by Google, although this did constitute a reduction from the predicted 70% and therefore suggests some progress. The platform continues to engage civil society partners to improve implementation, and build on the evidence generated by the research community.

	 Meta		 		
Official acknowledgement of threat posed by climate mis- and disinformation?	YES	NO	YES	YES	NO
Comprehensive definition of climate mis- and disinformation?	NO	NO	YES	YES	NO
Formal inclusion of climate mis- and disinformation in existing policies, Community Guidelines or Terms of Service?	NO	NO	YES	YES	NO
Specific policy on monetisation of climate mis- and disinformation?	NO	NO	YES	YES	NO
Transparent and comprehensive data published on prevalence and nature of climate mis- and disinformation on their platforms?	NO	NO	NO	NO	NO
Transparent and comprehensive data published on enforcement of fact-check and/or content moderation processes for climate disinformation?	NO	NO	NO	NO	NO
Transparent policy for accounts repeated violating policies, Community Guidelines, or Terms of Service for climate disinformation?	NO	NO	NO	NO	NO



In April 2022, the US-based Climate Disinformation Coalition, along with Friends of the Earth, Avaaz, and Greenpeace USA, [released an analysis of social media companies' policies](#). The 27-point evaluation of Facebook, Pinterest, TikTok, Twitter and YouTube found that all companies fell short on adopting definitions and policies to address the issue at scale, and continue to conceal data about the prevalence and impact of climate disinformation on their products or services.

Of the five companies assessed, Pinterest and YouTube were deemed to have taken the most notable steps, including explicit mis-/disinformation policies informed by climate experts - both scored 14 out of a possible 27. Pinterest's [new policy rollout](#), which directly cites language from the above definition within their community standards, helped raise their score. In contrast, Facebook, TikTok and Twitter fared the worst, receiving 9, 7, and 5 points respectively due to a lack of transparency and detail on how they are holding repeat offenders accountable.

The full [report](#) shows how social media leadership has largely failed to take action against climate disinformation despite promises to do so. This lack of transparency prevents climate experts, researchers and advocates from monitoring the severity of the problem and uprooting the mis-/disinformation ecosystem at a time when the [window for climate action is fast closing](#).

### Advocacy to Date

An [Open Letter](#) was issued during COP26 and now has over 300 signatories including:

- **Laurence Tubiana**, CEO of European Climate Foundation and a key architect of the Paris Climate Agreement
- **Manuel Pulgar-Vidal**, WWF Global Lead for Climate & Energy, COP20 President and Former Minister of Environment for Peru
- **Bill Hare**, CEO of Climate Analytics and Lead Author for the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report, for which the IPCC was awarded the Nobel Peace Prize in 2007
- **Al Gore's** Climate Reality Project
- **Sky and SSE** plc, COP26 Principal Partners
- **Baroness Bryony Worthington**, crossbench Peer in the UK House of Lords and lead author of the UK Climate Act
- **Mohamed Adow**, Director, Power Shift Africa
- **Bob Ward**, Policy and Communications Director at the Grantham Research Institute on Climate Change and the Environment
- **Dr Jonathan Barnard**, CEO of the World Land Trust
- **Dr Dale Vince OBE**, founder of Ecotricity and Chairman of Forest Green Rovers FC
- **Paulo Roberto Jubilut**, host of the YouTube channel Biologia Total (2m+ subscribers)
- Companies such as **Ben & Jerry's**, **British Gas**, **Hewlett Packard Enterprise** and **Virgin Media O2**
- Creative agencies such as **Havas Media Group**, **JW Collective** and **VCCP**
- Key climate and civil society bodies such as **Alliance for Science**, the **Brazilian Climate Observatory** (Observatório do Clima), **UK National Union of Students**, **HOPE Not Hate**, **Instituto ClimalInfo**, **CarnegieUK**, **Sustainable Wales**, **Forum for the Future**, **Purpose Climate Lab**, **Changing Markets Foundation** and **Responsible 100**

Despite interest from various national delegations and summit organisers, language could not be passed within the Negotiated Outcome at COP26; nonetheless, there is hope for inclusion at the COP27 summit to be held in Sharm el Sheikh in November 2022.

There will undoubtedly be pushback against any effort to formalise definitions, anchored in the claim that ‘green fanatics’ are trying to stifle opposing views. As a [recent piece in Spiked Online](#) claimed (referencing the BBC, ISD and others):

*“They are the products of spoon-fed ‘churnalism’, a re-packaging of the views of an establishment think tank. And their purpose is to denigrate and demonise any dissent from green ideology. This shows how difficult it is to challenge climate-change alarmism today. It is being pushed not just by the political elite and the state, but also by supposedly independent think tanks and the media, which uncritically and credulously toe the green line. As any deviation from the establishment line is rebranded as ‘misinformation’, the space for debate gets ever narrower. This does not bode well for democracy.”*

Or as Iain Duncan Smith [wrote in British newspaper The Telegraph](#):

*“The greatest irony of the climate debate is that those who would normally describe themselves as liberals - and thus believers in pluralism - have casually parked that core virtue in favour of net zero fealty. This new religion of environmentalism has led to the dismissal of any rational questioning, with the individual accused of being a climate change apostate.”*

Those with a vested interest in maintaining the status quo, such as the ‘Repeat Offenders’ discussed in later sections, often build their brands by weaponising (and monetising) ‘cancel culture’ rhetoric online. As such, tech platforms will need support from climate actors and institutions to rationalise their approach, and counter the inevitable claims of censorship or discrimination any policy change will inspire.

Indicative pieces of content under each heading are included below, to provide a benchmark for future discussion.

**To note:** while our research surfaced hundreds of examples relevant to each pillar, we have only included a handful in each instance as illustration. These come primarily from Twitter and Facebook and were posted by verified 'blue tick' accounts, those directly affiliated with industry bodies and/or that exceed 20k followers. Many of the associated individuals and entities are described in detail elsewhere in the report. This is intended to maintain the privacy of accounts with lower public exposure or where the identity of the account holder could not be confirmed.

**Definition Pillar 1: “Undermines the existence or impacts of climate change, the unequivocal human influence on climate change, and the need for corresponding urgent action according to the IPCC scientific consensus and in line with the goals of the Paris Climate Agreement”**



**Tony Heller** @Tony\_Heller  
 Replying to @CNBC  
 Atmospheric CO2 is down more than 90% since the Cambrian Era, and close to the lowest in earth's history.

**Institute of Public Affairs**  
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 ID: 5265456090161406

What happens when our scientific institutions and bodies depart from the scientific method and ignore past experience?

What if there are alternative ideas to the alarmist climate change narrative based on run-away carbon dioxide?

What if such ideas have been explored but too hastily dismissed?...

CLIMATE CHANGE  
 CLIMATECHANGETHFACTS.ORG.AU  
 CCTF: Dr Jennifer Marohasy speaks with Jo Nova on Climate Change: The Facts 2020 [Learn More](#)

**Michael Shellenberger** @ShellenbergerMD

People think climate change is increasing fires but the share of land that burned globally declined from 4.2% in 1900 to 2.5% this year

What about California? Wildfires burned up to 12% of the state before 1800 & was 4.2% in 2020

@BjornLomborg @WSJ

wsj.com  
 Opinion | Climate Activists Blow Smoke on Wildfire Fears  
 The amount of land burned has declined steadily since 1900, even with rising temperatures.

**Alex Epstein** @AlexEpstein

This is one of my favorite questions to ask confident climate catastrophists: What percentage of the atmosphere is CO2?

In my experience, leaving aside trained scientists most catastrophists have the same response as the people in this video.

[twitter.com/1Fubar/status/...](https://twitter.com/1Fubar/status/...)

**Ayaan Hirsi Ali** @Ayaan

If sea levels rise, then what? Apocalypse?  
 No, the situation is called the Netherlands. Perhaps, we should all learn how to build dikes. Next climate summit and all climate summits after that should be held in Holland. Proost!

7:00 AM · Nov 8, 2021 · Twitter for iPhone

326 Retweets 48 Quote Tweets 2,804 Likes

**Patrick Moore** @EcoSenseNow

Replying to @TheAccountantUK and @another\_jan

That is not correct. Virtually all the 40% increase in atmospheric CO2 is due to human emissions from fossil fuels and cement production. It is entirely a positive development as it is restoring a balance to the global C cycle and greening the Earth:

**Peter Clack** @PeterDClack

Rising oceans is among the most obvious of the myriad deceptions of the UN's climate change hoax. It is based only on computer models without any empirical evidence. Yet Australia will blindly hand \$2 billion in cash to Pacific Island nations. Wealth transfers have begun.

**spiked** @spikedonline

The real problem we face today is not climate change – it's climate-change hysteria. The political elites are suffering from Climate Derangement Syndrome. They're convinced the world is coming to an end. It really isn't, says Brendan O'Neill

spiked-online.com  
 Climate Derangement Syndrome  
 It's the hysteria about climate change that poses the greatest threat to humanity.

**Sky News Australia** @SkyNewsAust

Ian Plimer: We've had a Green movement tell us that there is climate change due to human activity.. not one scientist has ever shown that carbon dioxide by humans drives global warming or climate change.

MORE: [bit.ly/2FklbBS](https://bit.ly/2FklbBS) #jonesandco

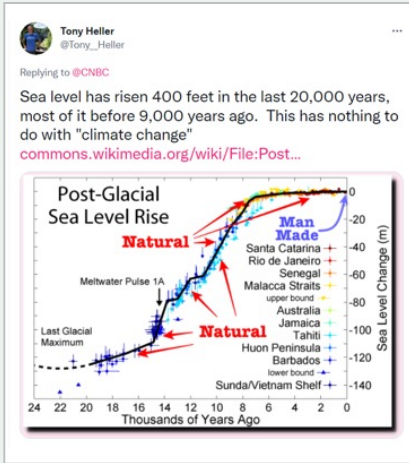
132,987K views  
 MORE VISIT SKYNEWS.COM.AU  
 Video @SkyNewsAust

**Sky News Australia** @SkyNewsAust

Child Psychologist Clare Rowe says it's uncomfortable seeing world leaders listen to a child like Greta Thunberg who has "essentially received a one sided point of view her whole life", and has "grossly exaggerated the impact of climate change".

skynews.com.au  
 Believing the world is going to end like Greta Thunberg is an 'enormous psychia...  
 Child Psychologist Clare Rowe says it's uncomfortable seeing world leaders listen to a child like Greta Thunberg who has "essentially received a one sided point o..."

10:18 AM · Jan 22, 2020 · TweetDeck



**The Washington Times** @WashTimes

"As world leaders met this week at Glasgow for COP26, real-life data such as cold weather and increasing sea ice hints at the falseness of their faux climate crises." @VijayJayaraj\_CC @WashTimesOpEd

washingtontimes.com  
Consecutive cold years reveal climate hoax of COP26  
As world leaders met this week at Glasgow for COP26, real-life data such as cold weather and increasing sea ice hints at the falseness of their faux climate crises.



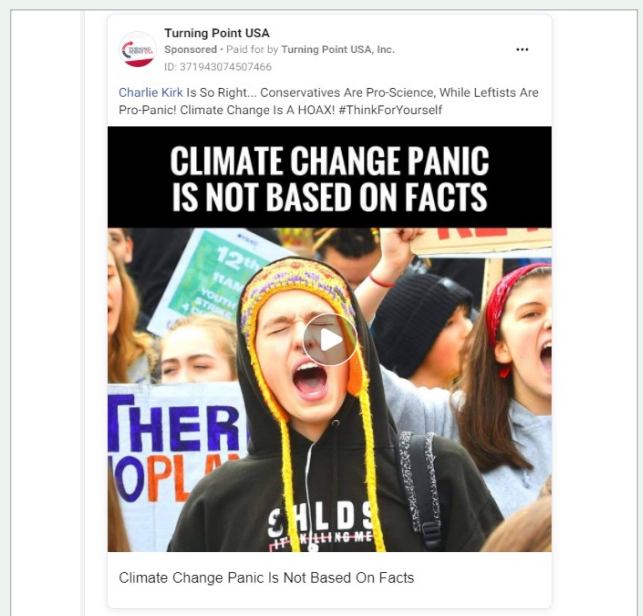
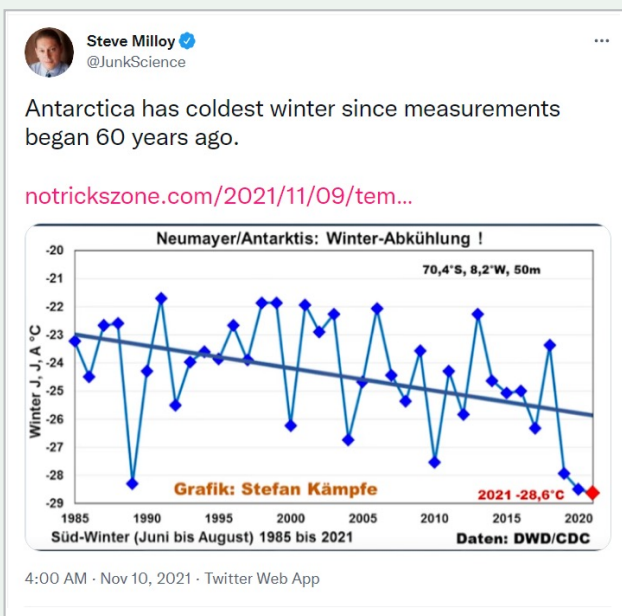
**IPA Institute of Public Affairs**  
Sponsored · Paid for by Institute of Public Affairs

Mainstream Australians support jobs over emission cuts.

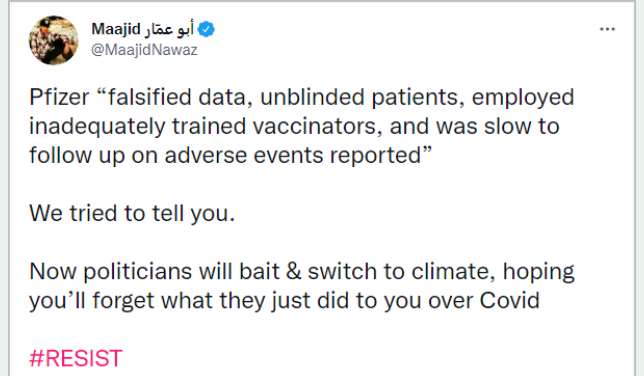
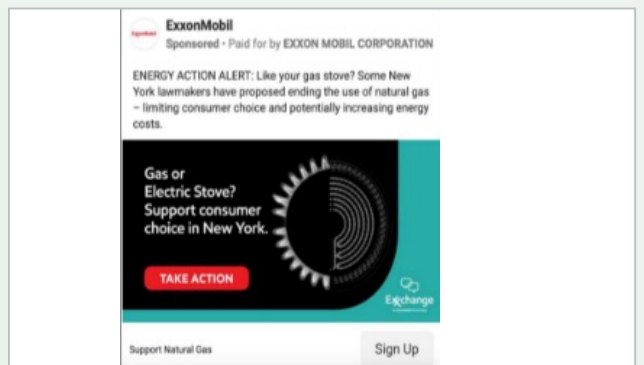
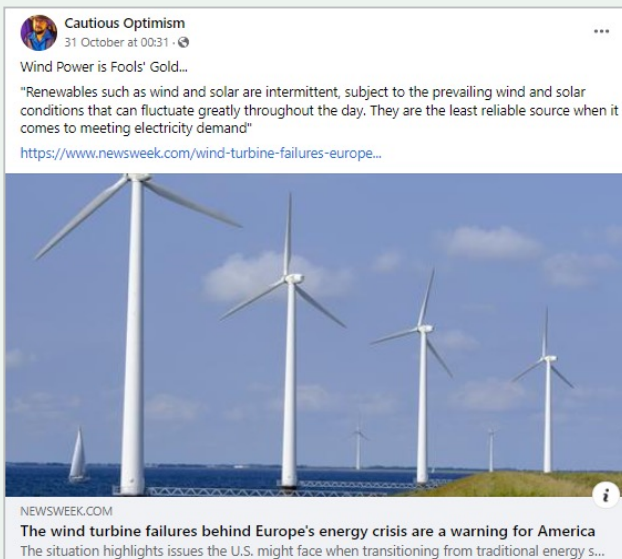
Watch Daniel Wild discuss the new poll commissioned by the IPA finding that 52% of Australians agree with this statement: "Jobs and economic security are more important than reducing carbon emissions."

**Peter Clack** @PeterDClack

The climate fear campaign is rotten to the core. It lies about the role of carbon dioxide & fails to explain its many unique qualities. Oceans set global weather & temperatures far more than the atmosphere. Oceans have 260 times the mass of atmosphere. CO2 is 1 molecule in 2,500.



**Definition Pillar 2: “Misrepresents scientific data, including by omission or cherry-picking, in order to erode trust in climate science, climate-focused institutions, experts, and solutions”**



**Nigel Farage** @Nigel\_Farage

Why should we trust what anyone says at COP26 this week?




dailymail.co.uk  
World's top climate scientists told to 'cover up' the fact that the Earth's temper...  
A leaked UN report on climate change has revealed deep concerns among politicians about a lack of global warning over the past 15 years.

5:58 PM · Nov 2, 2021 · Twitter for iPhone

**Alex Epstein** @AlexEpstein

Check out my latest Energy Talking Points—this time covering COP 26, 1.5°C pseudoscience.

Also, sign up for my free Energy Talking Points Substack newsletter. It's the ultimate source of ammunition on energy, environmental, and climate issues.



**Patrick Moore** @EcoSenseNow

Bit of a cock-up in the electricity department. The UK had to start up its coal plants to keep the lights on as wind died to nearly net zero. COP26 running on coal!!

[netzerowatch.com/coal-keeps-lig...](https://netzerowatch.com/coal-keeps-lig...)



12:06 PM · Nov 3, 2021 · Twitter for iPad

**Cautious Optimism**

30 October ·

Wind Power is Fools' Gold...

"Renewables such as wind and solar are intermittent, subject to the prevailing wind and solar conditions that can fluctuate greatly throughout the day. They are the least reliable source when it comes to meeting electricity demand"

<https://www.newsweek.com/wind-turbine-failures-europe...>



NEWSWEEK.COM  
The wind turbine failures behind Europe's energy crisis are a warning for America

**Michael Shellenberger** @ShellenbergerMD

The UN climate team is comprised of Malthusian ideologues who have manipulated climate talks to deny poor nations cheap energy while providing global elites with a list of airports (e.g. Farnborough, Buffon Hill) in which to land their private jets

Private Airport - Farnborough Airport UK

Farnborough Airport is a full service private airport for passengers, crew and aircraft. This purpose-built airport is London's gateway for business...

About Us | Contact Us | FBO - The Terminal

About Farnborough Airport UK

Farnborough Airport is the Business Aviation Gateway to London, with easy access to major road links into London. The Capital is also reachable by a 30...

https://www.farnboroughairport.com/

https://www.wikiwand.org/en/Farnborough\_Airport - Wikipedia

**Senator Matthew Canavan**

2 November ·

Two thirds of the Glasgow conference is now being powered by coal and gas! We would freeze without fossil fuels.

Thread

**Javier Blas** @JavierBlas

After a very windy weekend, Britain is going wind-less today (and worse, it's a cold morning). Right now, the country is relying heavily on fossil fuels, with natural gas combined cycle, gas peakers and coal providing nearly 65% of all electricity generation | #COP26 #Snapshot



**Climate Realists** @ClimateRealists

MUST SEE YOUTUBE: Ross McKittrick: UN's IPCC Gets it Wrong on Greenhouse Gas Effect

[youtu.be/WjxFeh5SUt0](https://youtu.be/WjxFeh5SUt0) via @YouTube



UN's IPCC Gets it Wrong on Greenhouse Gas Effect

"Electric cars are coal-powered cars."  
-Vinod Khosla  
Co-founder,  
Sun Microsystems

## ARE ELECTRIC CARS REALLY GREEN?

Presented by Bjorn Lomborg

California to Ban Sale of Gas-Powered Cars by 2035

Like Comment Share 1.9K · 1K comments · 2.6M views

NO Greens - Real Conservation, Not Green Lies  
20h · 🌐

#NAILED IT!!!! #CLIMATE FACTS WHICH CANNOT BE DENIED!!!

1896 - 1903  
(7 Year)

Bernie Jackson ▶ Farming in Australia for real farmers and supporters.  
26 October 2019 · 🌐

"CLIMATE CHANGE"  
During the 7 year period from 1896 to 1903, before the vast land clearing, Industrial Revolution, before the first world war, and the second world war, before the millions of cars were on the road and the vast amount of coal mining to date, and the Green Party, I was looking at this period and here are some of the facts from the period.  
- Rainfall for this period was 46% below the previous wet period  
- Federation Drought, Heatwaves, Bush Fires and Dust storms, associated with 40% livestock losses in Queensland.

Coalition of Concerned Manufacturers & Businesses of Canada  
8 November at 20:40 · 🌐

The most recent IPCC climate models ("CMIP6") ignore recent scientific evidence of low climate sensitivity to increased carbon dioxide concentrations in the atmosphere. The models lead to invalid conclusions about the level of warming that may occur in future and about the need for "carbon budgets". CLINTEL's analysis indicates that the likely global temperature increase to 2100 is in the range of 1.2 degrees C, which warrants some planned adaptation in the decades ahead, but confirms that there is no climate "crisis".  
[https://www.ccmbc.ca/coalition\\_commentary](https://www.ccmbc.ca/coalition_commentary)

Robert Lyman

## THE REAL SCIENTISTS CONFRONT CLIMATE ALARM

Crying "wolf" and making statements that provoke fear get headlines and are intended to provoke policy making by panic. It works when the public never hears or reads about the other side of the story.

Institute of Public Affairs  
5 November · 🌐

Jennifer Marohasy commentary is featured in today in IPA's daily Bulletin on negotiations at Glasgow. Read her article and subscribe to an honest account of the costs to Australian jobs and cost of living at <https://ipa.org.au/netzero> #saynotoglasgow

"Irrespective of any agreements made in Glasgow, there has been no increase in the incidence of cyclones and coral cover on the Great Barrier Reef is good and improving."  
-Jennifer Marohasy" Institute of Public Affairs

Number

Non Severe Severe

Bjorn Lomborg  
@BjornLomborg · 🌐

Because we have become richer and more resilient, our climate-related death risk has declined by 99% over the past century.

My latest Wall Street Journal column:  
[wsj.com/articles/clima...archive.md/eLTNT](https://www.wsj.com/articles/climate...archive.md/eLTNT)

My latest interview for Sky News Australia:

skynews.com.au  
Climate related disasters killing less people  
Copenhagen Consensus Centre President Bjorn Lomborg says there are

Alex Epstein  
@AlexEpstein · 🌐

In this 9-minute interview/debate on @GBNEWS, available in full on Twitter for the first time, I explain why COP 26 is not a progressive scientific conference but an anti-human, primitive-religious attempt to commit mass genocide.

COP26 GLASGOW SUMMIT  
Twitter pledged to censor climate misinformation  
8:46 182.8K views

6:04 PM · Nov 10, 2021 · Twitter Web App

1,953 Retweets 289 Quote Tweets 4,090 Likes



**Definition Pillar 3: “...Falsely publicises efforts as supportive of climate goals that in fact contribute to climate warming or contravene the scientific consensus on mitigation or adaptation.” (Many images for this pillar sourced via Eco-Bot.Net research)**

**John Stossel** ✓  
1 November · 🌐

President Biden and other heads of state are at the U.N.'s big Climate summit #COP26.

Moronically, as they blivate about climate change, the US and many other attendees are moving AWAY from nuclear power, the ONLY technology that, at least now, could make a difference:  
See less

[Follow](#)

**Michael Shellenberger** ✓  
@ShellenbergerMD

One of the most dishonest parts of the UN's talking dinosaur is that it's concern is over supposed "subsidies" for fossil fuels. But what the UN calls "subsidies" are basic infrastructure investments like transmission lines required to move nations out of poverty

**ExxonMobil**  
Sponsored  
ID: 209819104534736

Canada's largest diesel facility is coming. Combining Canadian-grown crops and hydrogen produced from carbon capture and storage technology, the resulting renewable diesel can bring annual emissions savings equal to planting a forest half the size of Vancouver Island. [exxonmobil.co/3kFUT7z](https://exxonmobil.co/3kFUT7z)

**Building Canada's largest renewable diesel facility**  
Combining agriculture and technology to lower emissions to support Canada's ambition to net zero

Canadian-grown crops supply feedstock

[Learn More](#)

**ExxonMobil**  
Sponsored  
ID: 203201521881292

Certified natural gas brings customers the energy they need while helping them meet their environmental goals. Learn how an independent standard offers a more transparent approach to assessing methane emission management, including methane intensity, in natural gas production. <https://exxonmobil.co/3urv71v>

Customers striving to be more environmentally conscious.

What's helping accelerate the demand for certified natural gas?

Read how voluntary efforts to reduce methane emissions are helping to enable independent certification of natural gas in our operations across the industry.

[Learn More](#)

**American Gas Association**  
Sponsored · Paid for by AMERICAN GAS ASSOCIATION  
ID: 285112486717179

The #natgas industry is supporting a more sustainable #energy future by investing in renewable energy sources like renewable natural gas. Learn about the benefits of RNG.

**Committed to a sustainable energy future**

[Learn More](#)

**Teck**  
Sponsored · Paid for by Teck  
ID: 236425908149496

With over 100 years of experience in responsible mining, we know sustainability.

**Sustainably Canadian**  
Providing metals and minerals for a low-carbon world

[LEARN MORE](#)

TECK.COM/RESPONSIBILITY  
Sustainably Canadian  
Guided by sustainability.

[Learn More](#)

**Consumer Energy Alliance**  
Sponsored • Paid for by Consumer Energy Alliance  
ID: 265653088806022

The most underrated solution to mitigate climate change is by capturing carbon and storing it through CCUS. Learn more about CCUS – a solution we have NOW for cleaning up the air we'll breathe tomorrow.

**A SOLUTION TO REDUCE EMISSIONS IS ALREADY HERE**

[LEARN MORE](#)




CONSUMERENERGYALLIANCE.ORG  
**The Future of Clean Air Starts with 45Q**  
Carbon Capture Utilization and Storage (CCUS) is a process and also a technology that helps reduce carbon dioxide (CO2)...

[Learn More](#)

**American Gas Association**  
Sponsored • Paid for by AMERICAN GAS ASSOCIATION  
ID: 906767576574517

#Natgas is resilient because it helps provide Americans with reliable, clean #energy in the face of extreme weather. Like this post if you agree.



**American Gas Association**  
Sponsored • Paid for by AMERICAN GAS ASSOCIATION  
ID: 168341065424813

We can continue innovating to drive down emissions without making it harder to provide West Virginians with the reliable and affordable energy they need. Tell your member of Congress to say no to increased energy bills.

**335,000**  
**West Virginia households rely on natural gas.**



P2A.CO  
**West Virginians: Tell Congress to Vote No on Increased Energy Bills**  
Say no to higher energy costs! Join me and send a message to your legislator.


[Learn More](#)

**Consumer Energy Alliance**  
Sponsored • Paid for by Consumer Energy Alliance  
ID: 1154924951708379

Unfortunately, there is no magic bullet to fight climate change, so while we develop new technology, shouldn't we keep doing everything we can to make fossil energy cleaner now while we're using it?

**YOU DON'T HAVE TO WAIT UNTIL 2030 TO START FIGHTING CLIMATE CHANGE**

[LEARN MORE](#)




CONSUMERENERGYALLIANCE.ORG  
**We Can Start Reducing Emissions Now**  
While people are doing more with less energy, its efficiency that has led the charge. That doesn't mean American's aren't...

[Learn More](#)

**OMV**  
Sponsored · Paid for by OMV (Norge) AS  
ID: 457273242388683

"I am involved in a project to build a co-processing plant in our Schwechat Refinery to produce #GreenDiesel. This plant will help us save up to 360,000 tonnes of CO2 per year." 🌱

Like Gudrun, many of our employees are working hard every day to reduce OMV's carbon footprint. After all, #OMV operations should be carbon neutral by 2050. 🌱




**Gudrun Kollmitzer**  
OMV Head of Bio & Feedstock

OMV & The Climate: Green Diesel

**Energy For Progress**  
Sponsored · Paid for by THE AMERICAN PETROLEUM INSTITUTE



Can motor oil help tackle climate change? See how collaboration helped make the world's top-selling truck more eco-friendly.



**TC Energy**  
Sponsored  
ID: 546505579911688

It's no secret, but we are a big fan of pigs around here. 🐷 We use smart-PIGS to monitor our pipelines and we're using hog waste to create energy! We recently placed into service our third renewable natural gas (RNG) interconnect in Missouri. At full ramp up, the three interconnects will flow a combined 2.1 million cubic feet per day of RNG produced from hog waste 🌱. This also means we're reducing the amount of emissions entering the atmosphere....

**TC Energy's Missouri renewable natural gas operations** by the numbers

90,000 hogs on 8 farms =	Moved by 3 ANR pipeline interconnects	Methane extraction process avoids <b>42,800</b> tonnes/year of CO <sub>2</sub> e — comparable to:
<b>2.1</b> MMcf/d of RNG		emissions of roughly <b>9,300</b> passenger vehicles driven for one year
	<b>TC Energy has 10</b> active U.S. RNG interconnects and 28 in development	or carbon sequestered by <b>52,400</b> acres of U.S. forests in one year

TC Energy [Learn More](#)

## POLICY ASK 2: ENFORCE PLATFORM POLICIES AGAINST REPEAT OFFENDER ACCOUNTS

The largest technology companies claim to be tackling disinformation, climate or otherwise, through policies within their Terms of Service or Community Standards. By engaging third-party fact-checkers, [the premise](#) is that posts rated ‘false’ or ‘misleading’ will be labelled, downranked and/or removed, and some punitive action taken against the related account depending on the severity of the content and number of ‘strikes’ already recorded. It follows that such measures should be properly enforced and, above all, prevent ‘repeat offenders’ acting with impunity on their platforms. Unfortunately this is not the case, even for the types of disinformation explicitly covered by company policies (e.g. Twitter’s [Covid-19 Misleading Information Policy](#) and [Civic Integrity and Election Fraud Policy](#); Facebook’s [Covid-19 Misinformation Policy](#)).

As reported by [CNN in September](#): “Some platforms have three-strike policies for specific violations, others use five strikes. Twitter (TWTR) doles out strikes separately for misinformation related to Covid-19 and civic integrity, which could give misinformation spreaders up to nine chances before being booted from the platform. On YouTube and Facebook (FB), expiration timelines for strikes — 90 days and a year, respectively — could provide loopholes for people looking to post misinformation spread out over time, especially when using multiple accounts, experts say. And in some cases, strikes don’t always amount to a ban.”

As in other areas like [public health](#), our research shows that a small group of accounts create the majority of anti-climate content, originate or amplify new lines of attack, and have disproportionate influence on the public debate across social media (see also CCDH’s report on the [‘Toxic Ten’](#)). Many of these accounts have been [labelled by fact-checkers](#) as sharing false or misleading content, yet remain live even after repeated flags by our coalition directly to platforms’ internal teams. Such disinformation is often not limited to climate issues, but runs the gamut of ‘culture wars’ talking points: from anti-vaxx and COVID-19 scepticism to conspiracies like the New World Order, unsubstantiated claims of ‘voter fraud’, or Holocaust denial. In some cases, such as with Paul Joseph Watson and Alex Jones, high-visibility [figures have eventually been banned](#), although not before they could garner millions of interactions for their content and cultivate profiles on other mainstream and ‘alt-tech’ platforms to maintain an audience. There is also limited consistency across platforms - while Watson has been suspended from Facebook, he boasts 1.1m Twitter followers, 1.9m YouTube subscribers and even maintains an Instagram account with over 40k followers. Meanwhile, articles and posts re-sharing Watson’s content, as well as public fan groups, remain active on Facebook.

If exceptions are being made to stated policies, these decisions should be fully transparent. As part of the [‘Facebook Files’ reporting](#), for example, the platform [was discovered](#) to have an “XCheck” program that resulted in many high-profile accounts being exempted from community guidelines. This elite tier, which is said to include at least 5.8m users such as celebrities, politicians and journalists, have allegedly been ‘white-listed’ for years (i.e. shielded from enforcement actions) and/or allowed to post violatory content while remaining on a ‘pending review’ list for employees.

It is unclear whether the actors detailed below have benefitted from initiatives like XCheck - some are certainly ‘blue tick’ or verified accounts - but they continue to drive a climate disinformation ecosystem with little-to-no repercussions. We know that sensational content fuels the ‘outrage economy’, and therefore serves the current business model of most platforms, and climate is no exception - whether outright denial or other forms of disinformation, this content is generally high-engagement, which increases the value proposition for advertisers on social media. As such, efforts like Facebook’s much-touted [Climate Science Center](#) become somewhat moot - while they report an average of 100,000 daily visitors, organic content from known ‘super-spreaders’ of disinformation gains vastly more reach and visibility. Rather than fixate on individual posts, accounts which consistently distort, undermine or refute scientific consensus should be addressed in line with Terms of Service, Community Standards and the definition outlined in Policy Ask 1.

While climate disinformation is targeted at a broad audience, it is produced by a relatively small group of actors. More often than not, these individuals and entities are supported by decades-long investments from the fossil fuel industry into academia, nonprofits and media, as documented in books like [Merchants of Doubt](#), [Dark Money](#), and [Democracy in Chains](#). Any policy that addresses specific, high-profile sources of climate denial and misinformation would have an outsized effect in improving the state of affairs online, cutting off those for whom sensational and misleading content is a (monetisable) occupation.

### Repeat Offender Network

In the opening section of this report we outlined a network clustered around a group of highly-followed accounts. While not all of these necessarily spread disinformation specific to or during COP26, they form a group that regularly engages with and amplifies climate denial content. They are also influential across a mix of communities ranging from climate change deniers to international conservative and ‘contrarian’ audiences. Some of the most prominent are seed accounts whose followers were collected to plot the network in the first instance, while others arose naturally during the mapping exercise. They are known to have spread climate mis-/disinformation repeatedly in the past, prior to the COP26 monitoring period.

The map below shows the most followed accounts in the network of climate sceptics and/or deniers. As outlined in the introduction, the network primarily consists of clusters engaged in right-wing politics as well as those focussing on anti-science and related conspiracies. Geographically, these communities are mainly located in the Anglosphere (US, UK, Canada, Australia), with a smaller international component. Among the influencer accounts, the group of academic ‘anti-woke’ contrarians - who sometimes label themselves as the ‘Intellectual Dark Web’ - plays a prominent role. Figure 5 below explores the engagement with climate issues across these communities in the run-up to and during COP26.

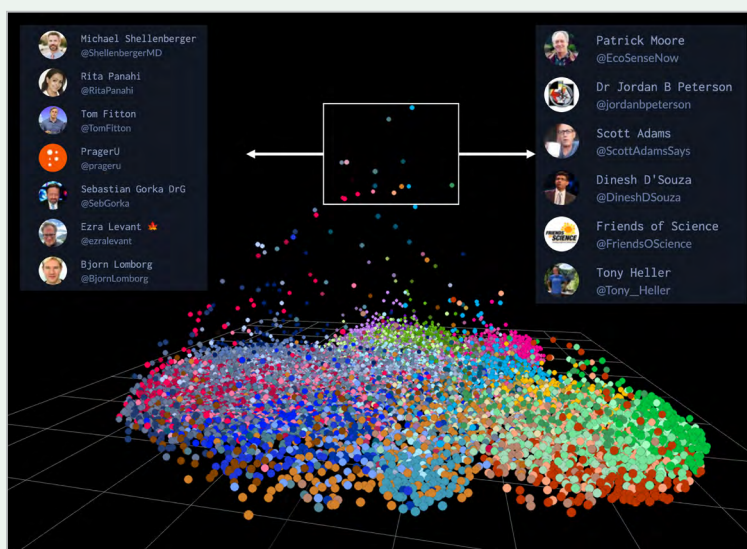
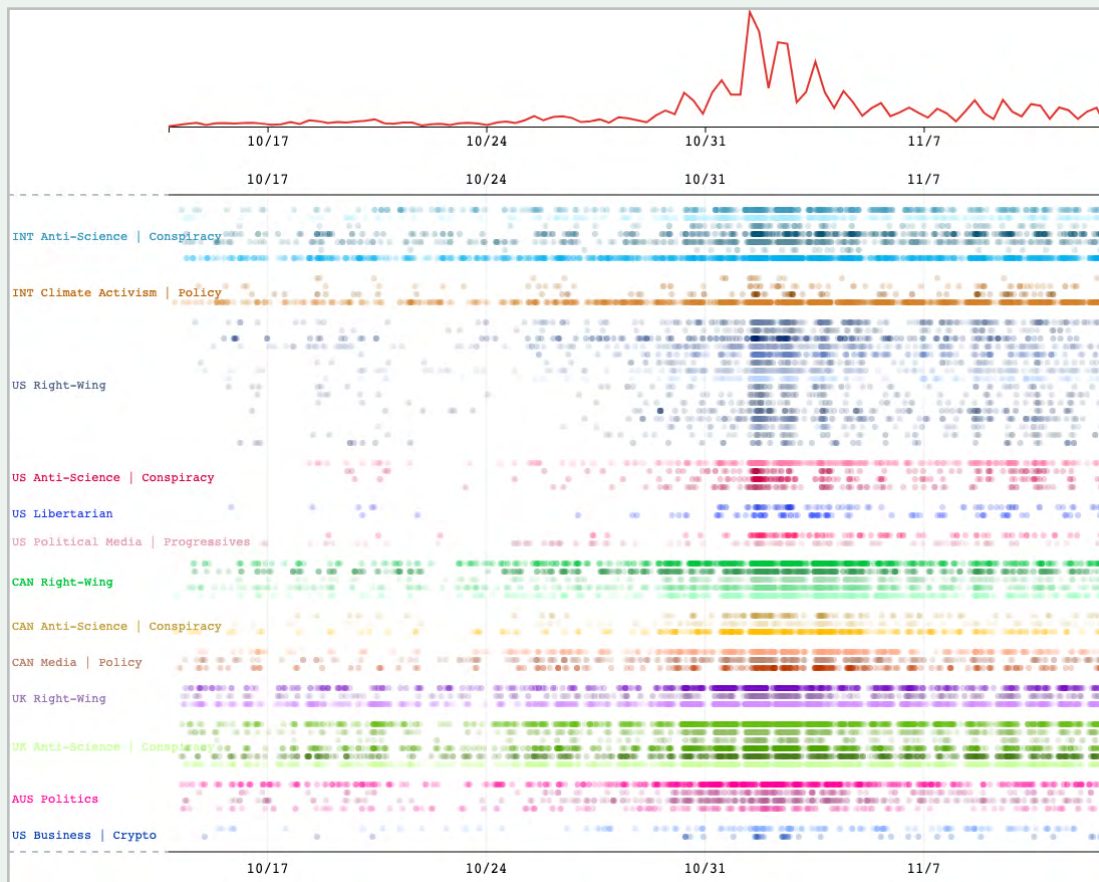


Figure 5: Top followed accounts in the Climate Denial network.

Source: Graphika



*Figure 6: This graph shows the use of the hashtag #COP26 by groups in the Climate Denial network over the monitoring period. Source: Graphika*

### Repeat Offender Case Studies

This analysis by Graphika shows how a small group of repeat offenders can have a disproportionate effect on seeding and pushing adversarial content. **In the period from October 25 to November 21 2021, the tweets and quote tweets of just 16 Twitter accounts amassed a total 507,000 likes and retweets (“interactions”) on climate narratives alone<sup>12</sup>.** For perspective, the anti-climate content shared by these entities received far more engagement than the combined total from 148 other well-known climate sceptic and denial accounts on Twitter<sup>13</sup>. In the following section we highlight a few examples from these 16 ‘super-spreaders’ to illustrate the breadth and extremity of their output. Posts range from explicit climate denial to more sophisticated undermining of solutions, as well as those weaving environmentalism into the culture wars and/or linking it to other politicised issues like COVID-19.

<sup>12</sup> Messages that triggered narrative filters for either climate- or COP26-related terminology. Other unrelated messages were excluded.

<sup>13</sup> The 148 accounts referred to here are a seed list of climate-adversarial-only accounts measured in a specific dashboard during COP26. These accounts received 330,000 interactions over the same period.

### PETER IMANUELSEN

An emerging trend appears to be ‘contrarian’ or polemical figures using climate to spread their broader worldview and recruit new followers. This includes vlogger Peter Imanuelsen - Twitter alias @PeterSweden - who featured prominently in our COP26 data collections with posts such as on page 65. Imanuelsen is a controversial figure beyond climate, [previously tweeting](#) that “the Holocaust is a lie to further the agenda of the NWO”, that Hitler “had some good points” and that “the globalists (mainly Jews) are the ones bringing in the muslims to Europe”. He has also espoused strong anti-immigrant and anti-Muslim rhetoric, [as documented by Media Matters](#) in 2018 and more recently by [Hope not Hate](#). The repeated framing of climate action as “communism” or “global tyranny” may also prove a dog-whistle to antisemitic tropes, tying into recent conspiracies like [The Great Reset](#) which [play on scapegoating](#) of ‘Jewish elites’.

From ISD analysis, Imanuelsen’s major amplifiers span Bitcoin advocates, COVID-19 conspiracists and accounts using the anti-Biden catchphrase ‘[Let’s Go Brandon](#)’, many with their own follower counts in the tens of thousands to millions. Notable accounts retweeting his content include a UK actress (519k followers), a Mexican influencer (804k followers), a US-based OnlyFans model (505k followers), an NFT trader (260k followers) and a lifestyle coach (142k followers). On the political front, his posts have been re-tweeted by figures including [Martin Daubney](#) from the right-wing party Reform UK, Dutch right-wing politician [Thierry Baudet](#), former US Assistant Secretary of the Treasury [Monica Crowley](#), and Australian Senator [Malcolm Roberts](#).

Many of these accounts were most engaged with content around COVID-19, but would likely be exposed to Imanuelsen’s rhetoric on climate in parallel. Brandwatch shows 235,700 retweets or quote tweets of his posts in the period from 25 October - 14 November 2021 (immediately before and during COP26). Applying a filter to look for COVID-19 related keywords (e.g. medical; covid; QR code; mask; hospital) and climate keywords (e.g. climate; power plant; global warming; COP26), we found 85,569 retweets contained the former and 54,454 retweets contained the latter, although some will constitute an overlap.



We cannot infer that those sharing such content identify with Imanuel's other, more extreme positions (e.g. Holocaust denial). However, his popularity as a pundit demonstrates how those opposed to climate action are increasingly in dialogue with extremist and conspiracist groups across social media. The high traction of posts such as below, which conflate global warming with broader power struggles, also signal how climate has become weaponised in online discourse and may galvanise new audiences in the process.

 **PeterSweden** ✓  
@PeterSweden7

Climate change lockdowns and climate change passports to save the planet.

How long before this happens?

4:06 PM · Nov 2, 2021 · Twitter for Android

1,376 Retweets 101 Quote Tweets 6,470 Likes

 **PeterSweden** ✓  
@PeterSweden7

Make no mistake.

This push for electric cars is about taking away your freedom.

Electric cars are useless if you want to travel any meaningful distance.

In Communism they limit your freedom of movement by forcing you to use busses.

It's basically the same thing.

5:08 PM · Aug 9, 2021 · Twitter for Android

198 Retweets 17 Quote Tweets 526 Likes

 **PeterSweden** ✓  
@PeterSweden7

▲ The elite go to space in rockets and fly private jets while telling you to ride bikes and electric cars.

▲ The elite throw massive parties while telling you to be in lockdown.

▲ The elite hire private security while abolishing the police for you.

This is Communism folks.

11:20 PM · Aug 7, 2021 · Twitter for Android

561 Retweets 26 Quote Tweets 1,210 Likes

 **PeterSweden** ✓  
@PeterSweden7

I'm more worried about global tyranny than global warming.

Tyranny is happening right now in front of our eyes.

9:11 PM · Nov 4, 2021 · Twitter for Android

6,785 Retweets 197 Quote Tweets 26.3K Likes

## JOHN STOSSEL

On the other side of the spectrum is [John Stossel](#). Starting his career as a primetime TV host on ABC's 20/20 segment, he [sparked controversy](#) for using child interviewees to push an anti-environmental stance. Stossel transitioned to Fox Business News from 2009-2016, after which his own production company became one of the top contractors for the Charles Koch Institute. The company secured [over \\$1.5 million in Koch contracts from 2017-2019, in addition to nearly \\$500,000 of Koch donations to Stossel's non-profit](#). [He is currently suing Facebook](#) for defamation after a fact checker debunked one of his posts, stating it contained a video with active climate disinformation. This has resulted in a reduction of ad revenue and traffic to his page. However, on Twitter Stossel received the highest average interaction per post among the 16 key accounts monitored. His 9 posts about COP26 drew an average of 905 interactions each - three times greater than the average (though this is likely due to his sparse posting relative to others, rather than any inherent quality of his content.)



On 1 November, as COP26 officially began in Glasgow, Stossel posted a [“Paris Climate Fraud”](#) video that amassed over 300,000 views on Twitter. Three days later, he [tweeted a video](#) of a panel presentation he hosted in 2019, organised by the [polluter-funded](#) and frequently [fact checked](#) Heartland Institute. It featured Patrick Michaels, [who once guessed that around 40% of his research funding came from fossil fuels](#); David Legates, whose [climate denial led him to be reassigned under the Trump administration](#); and Willie Soon, who [in 2015 was outed by the New York Times](#) for receiving over a million dollars from the fossil fuel industry to produce climate disinformation. This lineup of climate deniers was not new, and the video itself had [already been fact checked](#) by ClimateFeedback where it was rated to have “very low” credibility and said to use “imprecise language that misleads viewers about the scientific understanding of climate change”. However, since Twitter lacks a climate disinformation policy that would recognise and action fact checks, the clip could once again gain traction online. On 1 November, Stossel also posted a video to Facebook which [has garnered over 900,000 views](#) and frames nuclear energy as “the ONLY technology” which could help mitigate climate change. The clip once again repurposed old content which had already been fact-checked, featuring individuals who create and/or propagate climate disinformation regularly.

Stossel has not slowed down with his climate disinformation efforts since COP26. On 30 November 2021, [he posted a YouTube video](#) attacking [Poynter](#), the highly esteemed journalism institution that oversees the fact checking organisations used by Facebook (including ClimateFeedback). The transcript of the video was quickly picked up by right-wing and/or polluter-funded outlets like [the Daily Signal](#), [Heartland](#), [TownHall](#) and [PatriotPost](#). In it, Stossel interviews other figures known for spreading anti-science misinformation: a contributing editor at the [Manhattan Institute for Policy Research](#), as well as Michael Shellenberger and Bjorn Lomborg who are covered in further detail below.


### MICHAEL SHELLENBERGER

Producing 203 climate-focused tweets during COP26, Michael Shellenberger was a key influencer during the summit, garnering over 124,000 interactions for content [attacking COP26](#) or the premise of climate change.



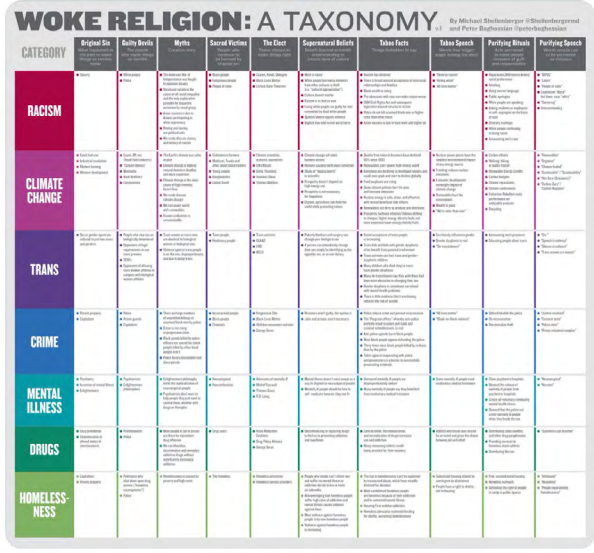
On 28 October, before the summit had even begun, Shellenberger shared Bjorn Lomborg's article in the Wall Street Journal which questioned the impacts of climate change and was [retweeted a thousand times](#). He featured continually in our dataset throughout the event, often achieving some of the highest engagement figures in a given day. On November 11, as negotiations neared their climax, he tweeted a graphic entitled "[Woke Religion: A Taxonomy](#)" which was co-authored with academic Peter Boghossian and positions climate change alongside other contentious issues such as racism, gender identity, crime and mental illness. Under the 'Myths' column for climate are statements such as "The Earth's climate was safer in the past", "We can power world with renewables" and "Human civilization is unsustainable", while 'Supernatural Beliefs' (defined as beyond scientific understanding or known laws of nature) include "Humans causing sixth mass extinction", "Prosperity doesn't depend on high energy use" and "Study of 'tipping points' is scientific". In the same diagram, 'Taboo Facts' and 'Taboo Speech' (things which are supposedly

censored from mainstream debate) encompass “Deaths from natural disasters have declined 90% since 1900”, “Renewables are dirty to produce and distribute”, “Fracking reduces carbon emissions” and “Economic development outweighs impact of climate change”. The taxonomy also implies that oil and gas companies, the Koch Brothers and “climate deniers” have been unfairly cast as villains in the climate debate, while actors like Greta Thunberg, climate scientists and UN officials are uncritically chosen to lead.

 **Michael Shellenberger** ✓  
@ShellenbergerMD

Special bonus: Woke Religion: A Taxonomy

Co-authored with [@peterboghossian](#)



**WOKE RELIGION: A TAXONOMY**  
By Michael Shellenberger @ShellenbergerMD and Peter Boghossian @PeterBoghossian

CATEGORY	Political Stance	Policy Goals	Myths	Sacred Figures	The God	Supernatural Beliefs	Sins/Facts	Taken Attacks	Purifying Rituals	Purifying Speech
<b>RACISM</b>	...	...	...	...	...	...	...	...	...	...
<b>CLIMATE CHANGE</b>	...	...	...	...	...	...	...	...	...	...
<b>TRANS</b>	...	...	...	...	...	...	...	...	...	...
<b>CRIME</b>	...	...	...	...	...	...	...	...	...	...
<b>MENTAL ILLNESS</b>	...	...	...	...	...	...	...	...	...	...
<b>DRUGS</b>	...	...	...	...	...	...	...	...	...	...
<b>HOMELESSNESS</b>	...	...	...	...	...	...	...	...	...	...

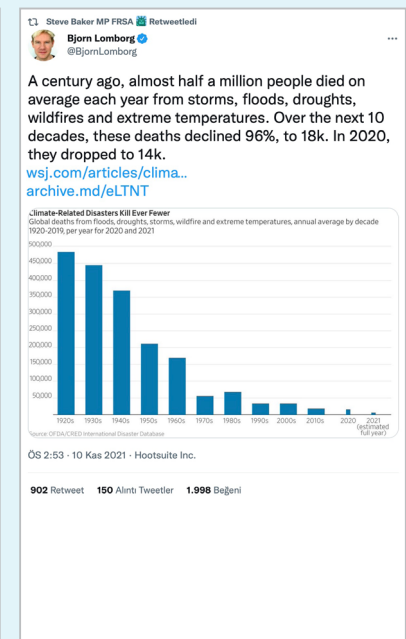
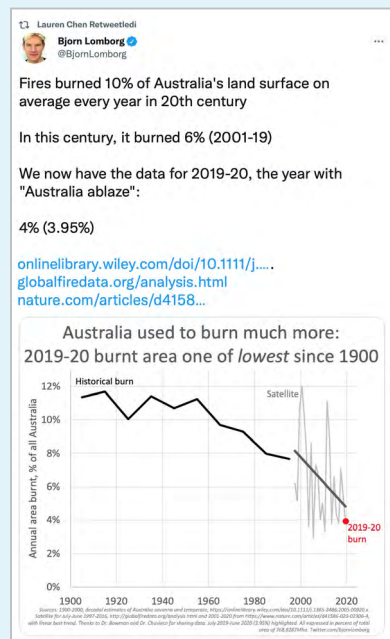
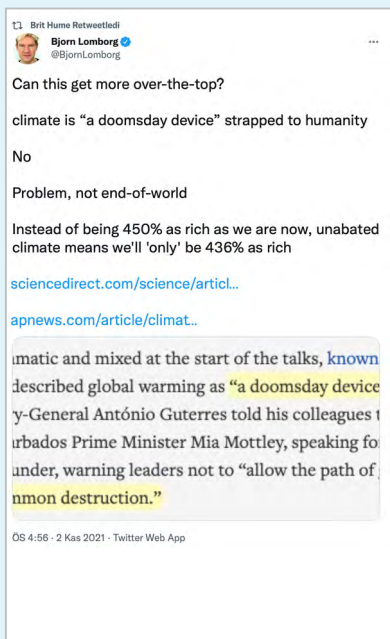
Shellenberger’s taxonomy was liked over 6.5k times and retweeted over 2k times, including from a number of influential accounts across media and politics. Like others highlighted in this section, he has become central to so-called ‘anti-woke’ networks on social media, who in turn expose their audiences to such climate sceptic or actively misleading content. Posts like the one described above have been shared by figures such as journalist Glenn Greenwald (1.7m followers), former OANN correspondent and [far-right activist](#) Jack Posobiec (1.6m followers), Fox News host Bret Baier (1.3m followers) and contributor Brit Hume (1.2m followers), Republican Congressman Dan Crenshaw (1.1m followers), [conspiracy theorist and ‘alt-right’ agitator](#) Mike Cernovich (847k followers), Spanish People’s Party politician Toni Cantó (425k followers), right-wing content mill PragerU (617k followers), and Sky News Australia host Rita Panahi (284k followers). The breadth and cumulative reach of these accounts is notable, as is their potential to influence public opinion at a transnational level. This further reinforces how a handful of individuals can serve as engines for a wider movement, providing content or lines of attack which are easily repurposed in different geographic contexts.

### BJORN LOMBORG

Lomborg has cultivated a strong presence in both legacy and social media, most notably via his [regular column in the Wall Street Journal \(WSJ\)](#) and frequent platform in outlets across the globe including [Fox News](#), [The Daily Mail](#), the [New York Post](#), [Sky News Australia](#), [talkRADIO](#) and [Forbes](#). One of Lomborg’s first columns for WSJ [was fact checked](#) by PolitiFact, but this did not prevent their editorial page editor Paul Gigot from [interviewing him on Fox News](#), a clip which Lomborg then [posted to his Facebook page](#).

During COP26, an old [video](#) of Lomborg was repurposed by [right-wing propaganda](#) hub PragerU to attack electric vehicles, garnering millions of interactions on Facebook - this case study is documented fully in Policy Ask 6. He also appeared in The Washington Post thanks to a column by Marc Thessein (itself [fact checked](#)), who is affiliated with a group [funded partially by polluters and tobacco companies](#) and has [a history of platforming climate disinformation](#). While the fact-checks may have slowed Lomborg’s spread on Facebook, he still garnered over a thousand interactions for [one post alone](#). Meanwhile on Twitter, where there were no parallel measures to curb reach, Lomborg neared 20,000 interactions for his 60 climate posts over the COP period. The Daily Mail also appeared as a top performing domain in our overall dataset, within which Lomborg’s COP26 [op-ed was the second most shared link](#).

Across the monitored timeframe, key amplifiers of Lomborg’s content included Fox News contributor [Brit Hume](#) (1.2m followers), talkRADIO host [Julia Hartley-Brewer](#) (367k followers), conservative Canadian YouTuber [Lauren Chen](#) (325k followers), Sky News Australia host [Rita Panahi](#) (284k followers), British MP and member of the Net Zero Scrutiny Group [Steve Baker](#) (152k followers), and prominent Polish climate denier [Łukasz Warzecha](#) (130k followers).



### TONY HELLER

A retired computer engineer turned video producer, Heller posted nearly 300 tweets to his now-suspended account and garnered almost 30,000 interactions during COP26. Heller is commonly known by the pseudonym '[Steven Goddard](#)' and formerly contributed to climate denial blog WattsUpWithThat - he has [previously described](#) global warming as “the biggest scientific fraud in history”. In addition to content on [COVID-19 conspiracy theories](#), which led to his [suspension from Twitter in mid-December 2021](#), Heller also pushed the [debunked](#) conspiracy that temperature records are being manipulated to justify climate action. He has been repeatedly fact-checked for such claims, including by [ClimateFeedback](#) and [Politifact](#), but remained a key influencer online during the Glasgow summit.

While Heller's content has earned him temporary suspensions from YouTube and Twitter, previous bans were lifted and do not seem to have affected his general rhetoric - the most recent suspension from Twitter appears to be permanent, but came after he had amassed hundreds of thousands of interactions on topics including COVID-19 and climate change.

### PATRICK MOORE

Canadian activist Patrick Moore is another individual whose online reach has not been curbed by repeated fact-checks. He presents himself as a Greenpeace “Co-Founder”, although the organisation has [strongly distanced itself](#) from any former affiliation and Moore's more recent stances on climate. He now oversees the [CO2 Coalition](#). Moore self-describes as a ‘sensible environmentalist’, and achieves continually high engagement on Twitter in particular. A week before COP26 began he achieved nearly 45k likes and 16k retweets for [one post](#), sharing a Sky News Australia segment in which the host condemned youth climate activists as “selfish, badly educated virtue-signalling little turds”. His most popular content tends to push back against ‘woke media’ who dismiss those sceptical of the climate crisis/emergency as ‘eco-traitors’.

Similar to Shellenberger and Lomborg, Moore's success is partially dependent on branding himself a pro-climate ‘liberal’, although his content is frequently debunked or rated false by entities like [ClimateFeedback](#), [The Tyee](#) and [PolitiFact](#). Despite such comprehensive fact-checks, Moore's social media presence remains unfettered and high-traction. For example, over 6000 users liked his erroneous claim that [COP26 was running on diesel fuel](#), with nearly 3000 retweets. An official [fact-check](#) by the COP Presidency team (commented under Moore's post) received only 70 likes and less than 20 retweets - a stark reminder of the attention disinformation can gain in the face of verified sources.

During COP26 alone, key amplifiers of Lomborg's content included [Jordan B. Peterson](#) (2.4m followers), Rebel News journalist [Ezra Levant](#) (353k followers), and conservative Canadian politician [Maxime Bernier](#) (186k followers).

These case studies are by no means exhaustive, but highlight a few key features of the ‘repeat offender’ cohort:

**1) The network is mutually reinforcing**, with many actors cross-referencing, sharing or making appearances in each other’s content. This creates an impression of consensus and ‘critical mass’ on social media, and confers false legitimacy on individuals in the wider media landscape.

**2) Accounts are repeatedly fact-checked without any meaningful response from platforms.** Many of the largest tech companies tout their partnership with ‘independent, third-party’ fact-checkers, certified via bodies like the [International Fact Checking Network \(IFCN\)](#), to identify, review and take action on questionable content. As Facebook [highlights on its website](#), this model is intended to combat viral misinformation, with a focus on false claims that are ‘timely or trending and important to the average person’. The company also states that ‘pages, groups, accounts and websites that repeatedly share misinformation will face some restrictions, including having their distribution reduced’, among other punitive actions. Our analysts found some instances where fact-checking labels had been applied to content, or where users were directed to more reliable content hubs and sources. However, beyond this lowest-tier measure there is little evidence of any enforcement against known disinformers, even during critical moments like a global climate summit or extreme weather event.

**3) Repeat offenders have often spread mis- or disinformation on multiple topics.** This is most clearly observed in the number of high-traction accounts sharing misleading claims on climate and COVID-19, but encompasses a wider range of issues - from anti-vaxx sentiment and genocide denial to conspiracies such as QAnon, the Great Reset and electoral fraud. This should provide an even greater incentive for platforms to act, since an effective response against such accounts could have a ‘force multiplier’ effect and mitigate harm in multiple areas.



## POLICY ASK 3: IMPROVE TRANSPARENCY AND DATA ACCESS FOR VETTED RESEARCHERS AND REGULATORS ON CLIMATE MISINFORMATION TRENDS, AS WELL AS THE ROLE PLAYED BY ALGORITHMIC AMPLIFICATION

“Today CrowdTangle is still available, but it’s in maintenance mode. Meta has stopped onboarding new partners, no new features or major updates have been released in over a year, and a global partnerships team that used to run it no longer exists. The tool is slowly dying, and one of Facebook’s most significant commitments to transparency is very much up in the air. Meanwhile, other major platforms, including ones that host large swaths of our civic and political information ecosystems, continue to do almost nothing to let the outside world look into their black boxes and face no real consequences...

The most important thing in this discussion is that without moving forward with legislation, we will continue to be in the dark about the real impact of social media on our lives. We’re going to continue jumping from one anecdotal data point to another, from one leaked document to another, from one urban myth to another, without ever establishing baseline, evidence-backed conclusions about what problems we should focus on. And that means we’re going to risk having an internet that weakens free societies instead of building an internet that protects them.”

**- Brandon Silverman, Former CEO and Co-Founder of CrowdTangle, [testifying to the US Senate Subcommittee on Privacy, Technology, and the Law in May 2022](#)**

The crisis of mis- and disinformation around climate change is not an issue of false content alone. Debate over content removal versus freedom of speech is too often binary, and this has obscured the role that distribution mechanisms play in amplifying and targeting content beyond its original audience. These mechanisms, be it the micro-targeting of ads or recommendation algorithms, constantly make decisions for users about what they see online. They also play an intrinsic role in the disinformation ecosystem, spreading dangerous content that might otherwise have limited reach.



Our monitoring of the climate debate shows why it is imperative for companies to open the ‘black box’ of algorithmic design and conduct systemic audits, whether via regulators or other vetted third parties. Analysis from the COP26 revealed that the most popular narratives travelling across platforms were those able to marry misleading or false content on climate with a broader ‘culture wars’ frame. Divisive posts, whether factual or not, appear to be continually rewarded by social media algorithms optimised for engagement (see reporting in the [Wall Street Journal](#), [Washington Post](#), [New York Times](#) and [TechCrunch](#)). In addition, users are seemingly served content that affirms their pre-existing beliefs, biases and misperceptions, although limited data access provided by platforms means researchers have been unable to fully understand this phenomenon.

In her testimony to UK parliament, Facebook whistleblower Frances Haugen [explained](#) that Facebook’s recommendation system not only “amplifies divisive, polarising, extreme content” but that this kind of content “gets hyper-concentrated in 5% of the population.” Allowing little-understood algorithms to determine which voices are heard, and how information around climate change is understood and distributed, ensures that a small number of sceptics, deniers and vested interests are given disproportionate reach and power. This model is anathema to establishing the shared understanding and trust in science that we need to tackle the climate crisis.

Platforms’ business models dictate the success or failure of certain content and are largely geared to maximising clicks and interactions, and in turn advertising revenue. While labelling debunked content has helped alert many users to falsehoods within their channels and feeds, such reactive efforts alone cannot counter systems that incentivise clickbait and emotion over authority or evidence. In a complaint filed with the US Securities and Exchange Commission (SEC) in February 2022, Frances Haugen alleged that climate change misinformation was prominently available on the platform and that no clear policy was in place to tackle such harms. [As reported by the Washington Post](#): “in a document from the first quarter of 2021, an employee said they searched for ‘climate change’ in the social network’s Watch tab. The second result was a piece of ‘climate misinfo,’ the employee wrote, and had been viewed more than 6.6 million times” while another internal report from 2021 stated that “given how many people use Facebook for information about climate change ... climate science myths are a problem across all surveyed markets”.

While these leaks tally with evidence generated by our coalition, they still fail to quantify the true scale and nature of the issue. Such a deficit does not apply solely to Facebook, but all major social media platforms that play a critical role in public debate. The question we must ask is how and why such content continues to gain traction, when statements from the tech companies allege their strong support for climate action.

At present, this question is impossible to answer for the climate sector. Independent researchers are continually working to expose manipulation on social media, both in crisis situations and beyond, but face restrictions on data access (for example, the lack of an official TikTok API; changes to Facebook’s [Crowdtangle platform](#)). Moreover, the evolving playbook for disinformation

actors is hard to model without platform-level data on trends and activity. Such data is crucial even if companies have labelled or removed the offending content from their platforms, as it can aid longitudinal trend analysis and open-source investigations. At present, there is insufficient evidence to fully understand how and where platforms are being weaponised, whether to deceive users or distort the available flow of information. Not only do we lack insight into the full magnitude of the problem (i.e. how much climate disinformation is known to exist across platforms; how does this differ by language, geography etc.), but also the reach and impact of such content and to what extent platforms are consistently taking action on these issues.

The [Social Science One](#) experiment offers one example of data access, although also highlights the dangers of overreliance on platforms to act voluntarily. The scheme attempted to share large datasets relevant to the study of disinformation, safely and without compromising user privacy. It [received widespread criticism](#) for issues surrounding remote access to data, speed of disclosure, and the use of methods like ‘differential privacy’ to ensure anonymity. Facebook could initially publish just 7 gigabytes of the original 1,000,000 promised to researchers, and as a result lost key partners within the first year. Lessons must be learned from that effort to avoid similar obstacles in the future, for example:

- The legal, ethical and technical complexity of data-sharing efforts cannot be underestimated. The effort has [catalysed a new framework](#) for ‘scholarly and ethical review of networked data research’, providing industry standards that should be considered in future data-sharing models.
- The statistical method they developed for differential privacy should be referenced to [design data-sharing systems](#) that can ‘preserve the privacy of end users while enabling scholars to draw valid statistical inferences on the questions they are investigating’

These challenges notwithstanding, companies have few incentives to provide such data when it may reveal the true extent and impact of harms on their platforms or services - as such, regulation is key to ensure transparency.

In the absence of formal regulation or government oversight, there are creative routes for increasing researchers’ capability in the near-term. Companies have a chance to take the initiative, using their privileged insight into which signals can help detect coordinated disinformation on their platforms. New collaborations should be trialled in this vein, whereby they produce ‘dummy data’ that artificially simulates cases of platform manipulation. By creating invented scenarios, data privacy and competition risks are mitigated, but still improve knowledge-sharing with the independent research sector and enable large-scale, quantitative data analysis.

‘Stage-gates’ on potential disinformation could also be established to reduce the risk of viral ‘waves’, as [outlined](#) by Google News creator Krishna Bharat. This might include the insertion of automatic breaks in rapid news spikes, allowing verification and human vetting before a story gains traction. Such measures would help limit intentional disinformation campaigns, verifying stories or claims before they spread beyond a tipping point of reach and engagement online.

### **Case Study 1: Recommendation algorithms on Facebook (Global Witness analysis)**

In a [recent report](#), researchers at Global Witness tested the experience for a climate sceptic user on Facebook. This involved establishing an account for a fake user named Jane, who displayed an interest in such content by ‘liking’ the page of [Net Zero Watch](#) (the campaign arm of [Global Warming Policy Foundation](#)). The platform’s recommendation algorithm proceeded to direct Jane towards more and often increasingly extreme climate disinformation. In many cases, the algorithm led Jane from pages that primarily espoused misleading narratives or ‘distract and delay’ tactics, such as ‘renewables are unreliable’, to content that denied the very existence of climate change, eventually ending in fringe conspiracies like [chemtrails](#).

Of the 18 pages recommended to ‘Jane’, only one did not contain any climate disinformation, while 12 posted exclusively misleading or factually inaccurate content. Among the content analysed by researchers, only 22% of mis- and disinformation posts included a platform label or link to Facebook’s Climate Science Center. As a sub-category, only 34% of climate denial content included labels or fact-checking. Moreover, while Jane was infrequently referred to the Climate Science Center, she was actively encouraged to follow and like pages that traffick in climate disinformation. To contrast what the experience would be for someone interested in reliable climate information, researchers created a second profile for a user named ‘John’. John ‘liked’ the IPCC’s Facebook page and was subsequently directed to more verified climate science content.

The split-screen realities between Jane and John’s experience shows the dangerously polarising nature of social media algorithms. With platforms chasing user engagement, the way information is distributed can mean those most in need of credible information are the least likely to receive it, and that false and misleading content is disproportionately amplified.

### **Case Study 2: Labelling misleading content on Facebook (Media Matters analysis)**

Media Matters, a nonprofit media watchdog based in Washington, D.C., looked at 140 Facebook pages that consistently post climate or energy-related misinformation, and identified 100 posts with the most interactions (likes, comments, shares) shared between 1 September 2021 and 1 April 2022. These top 100 posts earned 5.2 million interactions, with only two being labelled by Facebook for missing context despite the company’s claims that it reduces the distribution of posts with misinformation.

Notably, the top-ranked post came from the Facebook page of Christian evangelist Franklin Graham, earning 300,000 interactions overall. It claimed that God controls the climate and His judgement is the sole factor in related events or crises, citing biblical stories such as Noah’s Ark and the 7-year famine that Joseph predicts in Egypt. Graham’s page accounted for a further 4 posts in the top 100, earning 400,000 additional interactions. One example, featuring misleading claims about energy and climate and gaining over 130,000 interactions, was [one](#) of only two posts in Media Matters’ study to include a misinformation fact-checking label from Facebook. Nearly identical claims were made in another 37 of the top 100 posts and accrued 1.5 million interactions, but lacked any platform labels indicating misinformation or ‘missing context’.

Aside from Graham, Facebook pages that achieved the most interactions on posts with climate misinformation in the dataset were: Fox News, The Daily Wire's Ben Shapiro, Breitbart, and Turning Point USA. Overall, recurring themes for such content included inflation and high gas prices, drawing misleading connections



between the Biden administration's environmental commitments, regulations placed on the oil and gas industry, and the rising cost of energy and other goods. 41 posts out of the top 100 contained misleading information in direct response to high gas prices and inflation, accounting for 35% of all interactions.

### Case Study 3: A comparison of climate sceptic actors and Facebook's Climate Science Center (ISD analysis)

Over the course of COP26 (31 October - 12 November 2021), ISD tracked posts produced by Facebook's official [Climate Science Center](#) and attempted to benchmark these against accounts known for spreading climate mis- and disinformation on the platform. The Center, first launched in 2020 and [rebranded](#) in September 2021, is the most frequently cited response to climate change from parent company Meta, premised on the idea that verified content hubs on key issues can outweigh 'bad information'. It comprises the following pages: Tyndall Centre for Climate Research; Met Office; IPCC; World Meteorological Organisation; UN Environment Programme; UK Centre for Hydrology and Ecology; and the World Climate Research Programme.

We compared the relevant posts from these entities during the summit to those produced by a sample of accounts known to spread [climate scepticism](#), [discourses of delay](#) and/or content which contains [mis- or disinformation in relation to climate science](#), namely: Breitbart London; Spiked Online; Net Zero Watch (the new campaign arm of GWPF); GB News Online; Heartland Institute; Bjorn Lomborg; and Tucker Carlson. Further information on these entities, including their former stances on climate and why they were deemed relevant for this study, can be found in multiple sources such as the [DeSmog databases](#), our "[COP, Look, Listen](#)" bulletins, and other sections of this report. In order to carry out the comparative analysis, we used a list of keywords related to climate change and COP26. We found that climate sceptic actors posted substantially more during the period of study. In the first week of COP26, **pages affiliated with the Climate Science Center produced 188 posts, while climate sceptic actors on Facebook produced 449 matching our climate-related keywords**. The number of Facebook posts from sceptic actors that contained climate-related key terms increased by over 230% during COP26, compared with the first two weeks of October. We identified an 110% increase in the same timeframe for our sample of authoritative sources listed above.

**The most viewed climate content shared by sceptic pages also generated significantly higher traction than posts from authoritative sources.** The most popular piece of content from the latter group – a video of David Attenborough’s speech at the Glasgow summit shared by the UN Environment Programme (UNEP) – generated just over 8,600 views. By contrast, the most viewed video in the former group featured Spiked Online’s Brendan O’Neill, in which he describes the summit as a gathering of ‘hypocrites, narcissists and virtue signallers’. The video received over 34,100 views and was shared 5 times more than the UN’s post. Overall, the eight authoritative pages featured by Facebook’s Climate Science Center achieved an average of ~7,500 interactions on their posts during the period of study, versus ~92,000 interactions for climate sceptic actors. **This means that sceptic content garnered 12 times the level of engagement of authoritative sources on the platform.** This is reflective of a broader ability to generate engagement and visibility through polarising, incendiary or ‘contrarian’ content on social media.

GB News Online was the most active page in the dataset, producing an average of 100+ posts per day and generating more than 500,000 interactions during the period of study. In contrast, the most active authoritative page (IPCC) produced an average of 6 posts per day and generated just 18,000+ interactions during the same timeframe.

*Caption: Screenshots of the most viewed climate-related Facebook content for the authoritative sources and climate sceptic samples respectively*



When looking at the average interaction per post, authoritative sources received 288 versus 241 for sceptic pages. However, in absolute numbers, **climate-related posts produced by sceptic accounts received three times more engagement and were shared twice as much as those from the Climate Science Center.** Only 2 posts produced by authoritative sources received over 1,000 interactions, in comparison to 30 posts from their sceptic counterparts. It should be noted that authoritative sources did gain visibility during COP26. During the period of study, such pages added over 81,000 followers (compared with just over 7,000 the week before the summit), while climate sceptic pages only increased by 8,300. This suggests that **authoritative Facebook pages benefited from increased exposure during COP26 and global attention on issues surrounding climate change.**

It is clear that climate sceptic pages actively and explicitly attacked efforts to curb climate change. Through a qualitative analysis of the 50 highest performing climate posts in this group, we found that 35 came from GB News Online, 10 from Spiked Online, 3 from Breitbart London, one from Net Zero Watch and one from Bjorn Lomborg. Thematically, the messaging we observed usually presented the summit as one (or more) of the following:

- pointless
  - a failure
  - hypocritical
  - harmful to the economy
  - the product of an 'eco-fascist' agenda orchestrated by climate activists and elites
- One fifth of posts actively tried to undermine COP26 (10/50), with three posts specifically attacking 'elites'. Another fifth (9/50) attacked journalists or climate activists (including Greta Thunberg).

*Caption: Screenshot of the Breitbart article attacking COP26, published on 9 November 2021*



Five posts undermined green solutions and the fight against climate change writ large, and another five fell under the category of outright climate change denial. **Overall, 60% of posts could be classified as actively and explicitly attacking efforts to curb climate change.** One example can be found above from Breitbart London, which quoted an article on its website describing the summit as “an eco-fascist, globalist gaslighting operation”.

Our findings demonstrate that while verified sources on Facebook increased their followership during COP26, actors known to promote climate sceptic or actively disinformative messages significantly ramped up their rate of production. These pages used their existing platform and audience to communicate extensively about climate-related topics and undermine the response to climate change as a whole. By producing highly polarising and sensational content, including ad hominem attacks on activists, their posts continue to generate higher levels of user engagement on Facebook than the platform’s own [Climate Science Center](#). Ultimately, while initiatives such as the Center are welcome, they are insufficient to counter the spread of climate mis- and disinformation, and particularly the high-traction activity of ‘repeat offender’ accounts or pages already discussed in the previous section. Full disclosure of existing data on algorithmic amplification would help assess wider platform efforts, as well as the prevalence and severity of climate disinformation.

## POLICY ASK 4: LIMIT MEDIA EXEMPTION LOOPHOLES WITHIN LEGISLATION (E.G. DIGITAL SERVICES ACT, ONLINE SAFETY BILL AND OTHER PROPOSALS)

**“Research has consistently identified malicious or simply unreliable actors presenting their content as credible journalism whilst sharing false, hateful or misleading information, either intentionally or unintentionally. This includes yellow press and boulevard papers that are regularly reprimanded by national press councils and other media watchdogs. It also includes disinformation operations which routinely rely on media accounts to spread content.” - [EU Disinfo Lab](#)**

Policymakers across the globe are developing a new era of tech regulation, deciding how and where governments should intervene to protect their citizens online. With various pieces of proposed or existing legislation in development, including the EU Digital Services Act (DSA), UK Online Safety Bill (OSB), US Digital Services Oversight and Safety Act (DSOSA), the Australian Online Safety Act and others, certain issues have risen to the fore. Among this is the question of whether tech companies should moderate the content of media outlets active on their products and services. Proposed exemptions would prevent platforms from taking action on content made available by a media provider when it violates their Community Standards.

Arguments in favour of this approach, many coming from broadcasters, media lobbies and publishers, are that freedom of the press is a central tenet of democracy and private companies should not be empowered to monitor ‘the fourth estate’. In addition, many countries already have regulatory bodies or institutions who oversee the sector, and are responsible for arbitrating cases related to media content - this means any additional requirement to comply with platforms’ Terms of Service could constitute a form of indirect ‘double regulation’ and have a chilling effect on free speech.

At the same time, there are significant concerns about granting media outlets (or those claiming to be such) with de facto impunity in what they post or share online. Aside from the challenge of defining what constitutes a ‘legitimate media outlet’ or ‘journalist’ in the digital age, such an approach seems at odds with the outsized reach, influence and authority media outlets hold. Indeed, it may create the perverse scenario where, for example, a mainstream newspaper could tweet outright disinformation to millions of followers with no prospect of mitigating action by the platform. Such content would arguably have greater potential to go viral and shape the public debate than a non-verified account with a few hundred followers, but only the latter would face consequences for their post.



The nuance of how to protect media freedom, pluralism and access to reliable information online is central to any legislation going forward. Nonetheless, it cannot provide loopholes for the media to disinform the public or cause wider harm without consequence. Platforms could be prohibited from more punitive actions, such as suspending or deplatforming media accounts, but denying them any response mechanism creates an arguably unfair distinction between users. The ability to demonetise and downrank content, as well as apply fact-checking labels or other interstitials, is essential to combatting disinformation at scale - this remains true whether the source is an unknown citizen or a multinational news channel.

If tech companies become proxy decision makers for what the media can or cannot distribute, the effect could be disastrous. Equally, if a free press is uniquely important to society then it should also be subject to continual scrutiny and the highest standards of accuracy. If not, its potential to drive and amplify harm is disproportionate. This point is especially relevant for issues like climate change, where certain media outlets have been consistent vectors for laundering denial, ‘discourses of delay’ and fossil fuel industry talking points into the mainstream. Referring back to Policy Ask 2, in cases where an outlet is itself a ‘repeat offender’, platforms must be authorised to act in line with their Terms of Service or Community Guidelines and minimise the impact of such content.

The following section analyses the media domains (i.e. URLs) most widely shared by our ‘adversary actors’, to better understand how news outlets amplify and legitimise climate-related mis- and disinformation online. Whether such coverage is intended to mislead is not within our scope of research, although some outlets have adopted consistent editorial lines from climate scepticism to active denial. However, even if the current dynamic is borne of pundits and lobbyists ‘gaming’ legacy media, using tactics highlighted in the previous section, the danger remains.

Newspapers, cable news, radio stations and digital outlets have a unique place in public discourse, and can provide a veneer of credibility even to more extreme positions. They also possess a large organic audience that cross many segments of society, who may view them as singular sources of information and analysis on key issues. It is arguable that media outlets are where mis- and disinformation have the greatest potential for harm, since content is spread beyond the usual echo chambers or ‘true believers’ to a mainstream public. As such, excluding media from any process of content moderation or fact-checking would prove a fatal blow to tackling climate mis- and disinformation at scale.

**Top 5 media domains cited by monitored adversary actors in their climate- and/or COP26-related posts, ranked by number of distinct accounts. Timeframe: Oct 25 - Nov 21 2021.<sup>14</sup>**

News Outlet	Article most shared by monitored accounts	Wider Distribution* (Twitter)	Wider Distribution* (Facebook)
Daily Mail	World's top climate scientists told to 'cover up' the fact that the Earth's temperature hasn't risen for the last 15 years	11,495	3976
The Guardian	Now the Pentagon tells Bush: climate change will destroy us	796	6786
The Telegraph	Cop26 is set to be an appalling display of Western decadence	477	57
	Revealed: Ursula von der Leyen sed private jet to travel just 31 miles	6359	919
WattsUpWithThat	The Facts: Reporters Exploit Normal Weather To Fan Climate Fear	152	91
Wall Street Journal	Climate Activists Blow Smoke on Wildfire Fears	1806	419

Domain	Number of monitored actor accounts referencing domain	No. unique articles shared	Total citation count (posts)
dailymail.co.uk	143	90	337
theguardian.com	109	128	198
telegraph.co.uk	106	174	532
wattsupwiththat.com	105	181	735
wsj.com (Wall Street Journal)	96	59	177

\* Crowdtangle or Brandwatch data for all posts containing this URL (i.e. across the entire platform). For Twitter the time frame referenced is 30 October and 30 November 2021, and for Facebook is all citations since original publication date until 30 November 2021. As such, distribution for older articles on Facebook than were repurposed during COP26 (e.g. The Daily Mail, The Guardian) will have higher figures attached.

<sup>14</sup>The ranking focuses on media only, thus excluding e.g. links to social media platforms. For the purpose of this analysis, shortened links have not been expanded and thus are not included in the count.

### The Daily Mail

The most popular outlet among our monitored actors was the Daily Mail, with over 140 different accounts sharing 90 of their articles in almost 340 unique posts. The piece cited most frequently was a [news article from](#) 2013 titled 'World's top climate scientists told to 'cover up' the fact that the Earth's temperature hasn't risen for the last 15 years.' Despite being 8 years old (see Policy Ask 6) and subject to [thorough debunks](#) in the intervening period, the article was posted over 11,000 times on Twitter between 30 October and 30 November 2021, including by [former UKIP leader Nigel Farage](#) and the [filmmaker Michael O'Bernicia](#). (O'Bernicia has separately been fact-checked for claims about the [transmissibility of COVID-19](#) and [legality of associated public health measures](#)). It was also shared across at least 86 anti-COVID lockdown and climate sceptic Facebook groups and pages.

The [second most shared article](#) was authored by Bjorn Lomborg and published shortly before the start of COP26. In it, Lomborg criticises delegates and world leaders at the summit for focusing on 'costly and ineffective' climate policy measures, in particular the promotion of renewable energy. He advocates instead for increasing investments in R&D and "explor[ing] energy generation by fusion, fission, water-splitting, and more". While admitting that "we don't know how long it will take to find the breakthroughs that will power the rest of the century", he still argues that "this is the path that will solve climate change". The link to the article has been shared, among others, by [Friends of Science](#), [Net Zero Watch](#) (the campaign arm of Global Warming Policy Foundation) and [CAR26](#). Compared to the article above, the reach of Lomborg's piece was more limited within our dataset, achieving approximately 900 shares across Twitter and Facebook in the period of analysis.

### World's top climate scientists told to 'cover up' the fact that the Earth's temperature hasn't risen for the last 15 years

- **Leaked United Nations report reveals the world's temperature hasn't risen for the last 15 years**
- **Politicians have raised concerns about the final draft**
- **Fears that the findings will encourage deniers of man-made climate change**

By [TAMARA COHEN](#), POLITICAL CORRESPONDENT

PUBLISHED: 20:40 BST, 19 September 2013 | UPDATED: 07:47 BST, 20 September 2013



**865**  
View comments

Scientists working on the most authoritative study on climate change were urged to cover up the fact that the world's temperature hasn't risen for the last 15 years, it is claimed.

A leaked copy of a United Nations report, compiled by hundreds of scientists, shows politicians in Belgium, Germany, Hungary and the United States raised concerns about the final draft.

Published next week, it is expected to address the fact that 1998 was the hottest year on record and world temperatures have not yet exceeded it, which scientists have so far struggled to explain.

### The Guardian

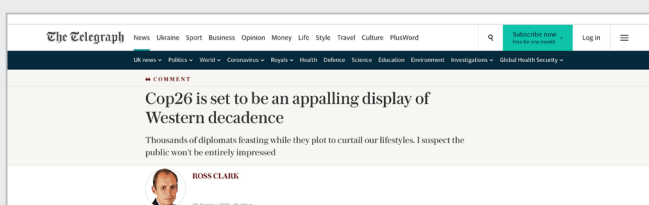
The second most popular news outlet was The Guardian. It is anomalous within this section, in that the articles shared were not themselves misleading or warranting fact-checks, but were nonetheless used to support opposition lines of attack by cherry-picking data or adopting a 'culture wars' frame.

Topping the list of articles shared was a [piece from 2004](#), which covered a leaked report by the Pentagon assessing the possible devastating consequences of climate change. According to the piece, the US defence agency warned that "major European cities will be sunk beneath rising seas as Britain is plunged into a 'Siberian' climate by 2020". The above quote was tweeted on 7 November 2021 by [Kristian Niemitz](#) (19.6k followers), the Head of Political Economy at right-wing, free-market think tank the [Institute of Economic Affairs](#). IEA has become highly influential in British policy debates, including as advocates for 'hard Brexit', and in 2019 was [issued a legal warning](#) for political campaigns that exceeded its remit as an 'educational charity'. It has often adopted a [conservative or sceptic stance](#) on climate action and is chaired by [Neil Record](#), who is also among the few known funders for and current Chairman of the Global Warming Policy Foundation. The article was also shared by GB News contributor [Tom Harwood](#), who commented: "alarmism fuels scepticism". Again, while dating back to 2004, the article was posted 800 times on Twitter alone.

The [second most shared article](#) reports on newer research, according to which the "richest 1% will account for 16% of total emissions by 2030, while the poorest 50% will release one tonne of CO2 a year". According to the article, both Oxfam (who commissioned the study) and the Institute for European Environmental Policy (who conducted it) advocate for action by the wealthy to fight climate change. The article was shared widely - over 4,700 times across Facebook and Twitter - including by a [former candidate](#) from Australia's right-wing One Nation Party who commented "when I see the elites use Zoom, instead of jet travel, I might believe they are worried about man-made climate change." Her post was then retweeted by the party's current leader, [Pauline Hanson](#) (82.1k followers) and member [Mark Latham](#) (60k followers), the latter of whom argued that "government policies on climate change are to subsidise the rich, paid for by workers." While not actively disinformation, such content supports the Elitism and Absolutionism arguments outlined in the introduction of this report.

## The Telegraph

The Telegraph is another news outlet cited by more than 100 accounts in our monitored group, with over 170 different articles shared over the timeframe. The most frequently referenced piece was an [op-ed by Ross Clark](#) titled “Cop26 is set to be an appalling display of Western decadence”, in which he writes that “diplomats are feasting while they plot to curtail our lifestyles.” It was among various Telegraph content shared by [Net Zero Watch](#), all arguing that freedoms are being curtailed under the pretext of climate change and that related targets are anti-democratic. Such posts tended to include #CostOfNetZero, a rallying hashtag for those opposed to climate response. However, the spread of Clark’s article was fairly limited beyond core climate ‘adversaries’ (around 500 posts across Facebook and Twitter).



Gaining a similar amount of traction was a piece “revealing” the extent of private air travel by European Commission President Ursula von der Leyen since taking office. A related tweet from the Telegraph Politics account stated that von der Leyen “has been accused of contributing to a ‘climate disaster’ after using private jets on more than half of her overseas missions, including short hops to London and Paris”. Within our monitored group, [Richard Wellings](#) (30k followers) was among the first to cite this piece, arguing that the global elite treat ordinary people “with utter contempt” and citing a “draconian climate change agenda”. Until 15 November 2021, Wellings was a Director at the Institute for Economic Affairs (see above) where he focussed particularly on transport issues. Another account citing this article compared so-called climate alarmists to “priests who visit brothels”, since both “don’t really believe their quasi religious edicts but are in fact among the worst transgressors”.



The Telegraph has also been instrumental in amplifying anti-climate groups and causes, including CAR26 who were the [first entity](#) to advocate for a “Net Zero Referendum” in the UK. Despite only existing for a month when COP26 began in Glasgow, the group received substantial coverage for its work and policy positions around the summit. Telegraph op-eds were published by [Allister Heath](#) on 20 October 2021, in which he called for a referendum, and Conservative MP (and former party leader) [Iain Duncan Smith](#) on 25 October, in which he attacked net zero as the ‘new religion of environmentalism’. On 26 October, the outlet’s Deputy Political Editor Lucy Fisher [published a story](#) reporting that ‘the British public are in favour of a referendum’ based on an opinion poll commissioned by CAR26 via YouGov of 1,648 people. The piece featured quotes by the group’s Director [Lois Perry](#), a PR consultant and representative for the right-wing Reclaim Party, who has previously been [involved in campaigns](#) against Low-Traffic Neighbourhoods.

CAR26’s website clearly outlined their mandate of opposing efforts to mitigate climate change, and the splash page argued that CO2 is “essential to all life and its welcome growth has greened our planet”. It also stated that political leaders should see the “positives” of climate change, and that the last decade has seen “paused warming” which allows Britain to “safely freeze all carbon-related measures while they are reviewed by calm... scientists”. Much subsequent coverage for CAR26 and its poll referenced (and arguably stemmed from) The Telegraph’s initial reporting, for example in [The Week](#), [Breitbart](#), posts by [Maajid Nawaz](#) (at the time still with LBC), [Conservative Home](#) and [Nigel Farage on GB News](#). A timeline of how CAR26 first emerged and gained momentum in mainstream media can be found in [Vol 1. of the “COP, Look, Listen” bulletin](#). Despite [little evidence of grassroots support](#), the platform given to this group and affiliated actors - including Net Zero Watch and MPs from the Net Zero Scrutiny Group - has been key to their influence efforts. Coverage by The Telegraph, GB News, The Sun, The Daily Mail and other outlets has kept the idea of a referendum at the forefront of headlines and [may impact the UK government’s ongoing Energy Strategy](#).

### **Watts Up With That (WUWT)**

[Watts Up With That](#) is a long-running climate-sceptic blog that aggregates substantial amounts of content from both the ‘amateur’ and ‘professional’ climate contrarian community, as well as sharing other low-effort material like press releases. The website was created by former TV weatherman Anthony Watts back in 2006, though he now publishes more frequently through his position as a Heartland Institute Senior Fellow than at his own blog. WUWT was among the first to promote the ‘[climategate](#)’ disinformation campaign that [misrepresented climate scientists’ emails](#), deployed during the Copenhagen COP in 2009. It has continued to leverage this notoriety since then.

A total of 105 actors in our dataset shared 181 unique links to WUWT. Around ten climate-centered pages and groups with names like “Climate Realists” and “Climate Crisis? There is NO Climate Crisis!” frequently reshared Watt’s content (15 to 33 times). Out of 735 posts linking to the site, 213 were published by WUWT’s own social media channels. Of the ten most-frequently cited URLs, eight appear to be unoriginal or primarily excerpted content from elsewhere, and only two were directly relevant to COP26: a post mocking [China and India’s funding request](#), and [a post promoting the](#)

[fact-checked disinformation](#) that COP26 was using diesel to recharge electric vehicles. [One of the posts](#) with original content was about Indian crop yields by the [polluter-backed](#) CO2 Coalition's Vijay Jayara, while the other was a [glowing review](#) for Patrick Moore's book 'Fake Invisible Catastrophes and Threats of Doom' - the latter [misrepresents its own sources, among many other basic issues](#) with accuracy.

### Wall Street Journal (WSJ)

The Wall Street Journal is among the most widely read newspapers in the world, known for its credibility on business and financial reporting. Its opinion page and editorial board are more contentious, [according to 280 of the WSJ's own employees](#). Bought by Rupert Murdoch in 2007, the Journal has run hundreds of anti-climate editorials since the 1990s, only acknowledging the impact of fossil fuels on climate change [a relative handful of times](#) in over 3 decades (usually via 'Letters to the Editor'). The discrepancy between Murdoch's public statements on the issue and the reporting across News Corp - which includes subsidiaries like WSJ, Fox News, The Sun, the New York Post and Sky News Australia - was explored in a [long-form piece by VICE News](#) in late 2021.

Prior to COP26, the WSJ hired Bjorn Lomborg to produce a weekly column, which was [quickly shown to contain disinformation](#) but proved highly popular in online discourse. His piece from 27 October was frequently posted - over 400 times on Facebook and 1.8k on Twitter - including by Lomborg himself who garnered over [2k Facebook interactions](#). Focused on wildfires and climate, it presents a perspective that directly contradicts [scientific analysis](#) and has been debunked repeatedly to date (Examples [1](#), [2](#), [3](#), [4](#), [5](#)). The second most-shared post was also a Lomborg column, this time tweaking his [fact-checked claim](#) that global warming actually saves lives. It claims that "many of the fearful descriptions you hear of souped-up hurricanes, heat waves and wildfires aren't accurate" and that "estimates of costly but increasingly frequent climate damages are typically designed to mislead".

Notably, Lomborg's columns contain an 'Editor's Note' (see image) which frame them as crib sheets to navigate complex data and aspects of climate policy. His outputs have proven a critical vector to launder extreme, denialist and often industry-supported arguments into the mainstream - however, by subtly using the language of fact-checkers, WSJ confer authority to Lomborg and posit him as a 'neutral' commentator.

*Editor's note: With November's global climate conference in Glasgow under way, important facts about climate change don't always make it into the dominant media coverage. We're here to help. Each Thursday contributor Bjorn Lomborg is providing [some important background](#) so readers can have a better understanding of the true effects of climate change and the real costs of climate policy.*

[The third most cited piece](#) presented an "energy poverty" argument which has been [shown to originate from fossil fuel companies](#) themselves, and was authored by Ugandan President Yoweri K Museveni. These pieces also gained significant traction beyond our monitored actor list, totalling almost 5,000 shares across Facebook and Twitter.

During the lead-up to COP26, the WSJ opinion page ran [21 pieces](#) of climate disinformation. In one, columnist [Holman Jenkins Jr.](#), a frequent spokesperson on climate in the Journal, defended Big Tech and Big Oil against comparisons to Big Tobacco. Coverage also included a piece [criticising the summit as a failure with ‘unrealistic targets’](#) before it even began. Overall, October 2021 saw more climate-related disinformation on the opinion page than any month since December 2009, when out of [28 pieces of climate content](#), 23 presented narratives maligning climate science and undercutting related policy negotiations. This former peak was driven primarily by WSJ promoting the [“Climategate” conspiracy](#), which sabotaged that year’s COP in Copenhagen, as well as the US “Cap and trade” policy debate.

WSJ published [another](#) editorial on November 4 (mid-way through Week 1 of COP26) that emphasised the ‘democratic deficit’ and ‘lack of a political mandate’ for climate response, referring to Glasgow as part of the “global-summit-industrial complex”. On the closing day, the outlet rounded off their reporting with a piece from [Walter Russell Mead](#) that opened with: “If there is one thing the world should take away from the Glasgow COP26 summit, it’s that the most dangerous greenhouse-gas emissions come from the front ends of politicians, not the back ends of cows. Pandering is much more dangerous to human civilization than methane, strategic incompetence a graver threat than CO2”.

All prior records were surpassed [in March 2022](#), when WSJ ran 26 op-eds, columns and editorials containing climate disinformation - this includes overt talking points from the fossil fuel industry in relation to rising energy prices and Russia’s war on Ukraine (examples [1](#), [2](#), [3](#), [4](#)). A sole exception that month was [a piece](#) defending Federal Reserve nominee Sarah Bloom Raskin from criticisms on climate, which the WSJ editorial board has otherwise seemed to embrace (examples [1](#), [2](#), [3](#), [4](#)). Raskin’s nomination has since been withdrawn from consideration.



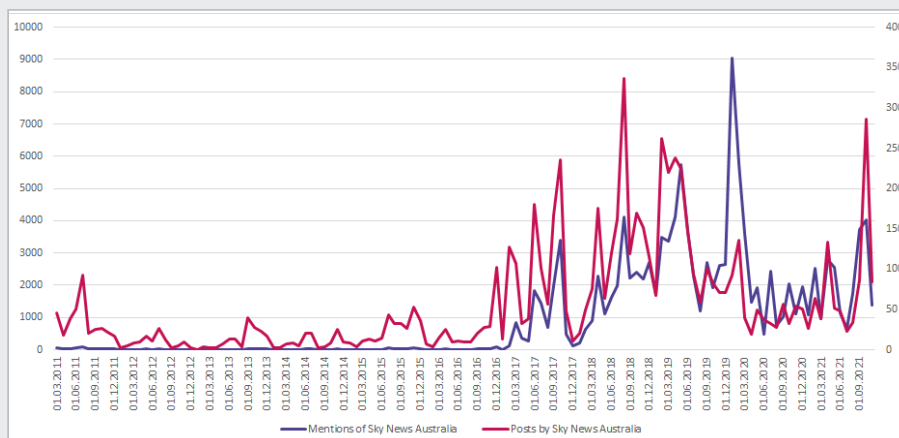
### **In-depth case study: Sky News Australia (ISD and Purpose analysis)**

Despite Sky News’ international brand as a credible, mainstream outlet, its Australian subsidiary has repeatedly ranked in our monitoring and is often used as a content hub for influencers, sceptics and outlets across the globe. Some of the highest traction content we identified during the summit cited Sky News Australia clips, including one attack against youth activists which gained over 1.2m views on Twitter alone. Brandwatch data for tweets that could be geolocated (72K out of 124K posts total) showed that 10% (7,253) of Twitter mentions for the outlet or its stories came from the UK, another 10% (7,110) from US-based accounts and 4% (2,636) from Canada. Australia accounts for 68% of mentions (49K).



Sky News is Australia's only 24-hour news television network and an important right-wing outlet with growing influence internationally. It is played in domestic airports, train stations, office buildings and other public settings, and boasts a relatively small but influential audience for its pay-TV broadcasts amongst the political and business sectors. This is bolstered by a much larger audience online across various platforms. The channel's evening programming, 'Sky After Dark', is [highly partisan](#), consisting of commentator panels, interviews and specials in the style of Fox News. This content is then edited down and shared through Sky's growing digital platforms to increase reach. Over the last few years, Sky has become Australia's most watched media producer online, with over 1.5 billion YouTube views, 2.16 million subscribers, and over 60 thousand videos on its account ([Dec 2021 figures](#)). In 2021, the network [announced](#) a new free-to-air Sky News Regional channel, extending their broadcast reach across the country.

Pre-2017, an average month saw 25 posts or less from Sky News Australia on climate and related issues. In the intervening years, the channel's Twitter account has pivoted dramatically, regularly sharing over 100 posts per month with peaks exceeding 200 and 300. The same applies to mentions of Sky News Australia and sharing of associated links on climate-themed stories.



**Graph 6: Twitter mentions of Sky News Australia and climate change in purple and Twitter posts by Sky News Australia on climate change in pink (secondary axis on the right hand side)**

Since joining News Corp, Sky Australia has become increasingly aligned with the wider Murdoch press at a national level, complementing the output of outlets such as The Australian to build and sustain stories through the daily news cycle. Increasingly, YouTube and other social media distributions of this content are [gaining an audience in the US and other regions](#). Alex Jones has taken to [citing Sky News Australia prominently in his programming](#), while Sky News host [Sharri Markson](#) has appeared on Fox News, the New York Post, and [Steve Bannon's podcast](#). Sky News Australia also provides a mainstream platform for various international right-wing figures such as Nigel Farage, Katie Hopkins and Blair Cottrell. As with News Corp more broadly in Australia, many of Sky News Australia's commentators and staff have close ties with Australia's conservative Liberal Party. One of its most prominent hosts, Peta Credlin, was previously the Chief of Staff for Prime Minister Tony Abbott, and other hosts have held prominent positions within the party and [continue to participate in party fundraising events](#).

According to a [2020 survey](#) of Australian media audiences, 35% of those accessing Sky News Australia stated they did not think climate change was a serious issue, slightly higher than the results for Fox News. The channel provides a platform for many of Australia's most significant climate delayers and those representing fossil fuel interests, including industry associations like [the NSW Minerals Council](#). Other fringe figures and climate deniers use content from Sky News Australia to make their case - this includes Patrick Moore, Norwegian climate denier Per Strandberg, and UK-based "libertarian" Richard Delingpole, the latter of whom [shared a Sky News story on the Great Reset conspiracy](#). Richard's brother is infamous climate denier and Breitbart contributor [James Delingpole](#), whose audience helps to boost posts. Beyond that, figures from the wider Anglosphere are invited to promote their critical views on climate change, including US-based sceptics Alex Epstein, Michael Schellenberger and Bjorn Lomborg, as well as former UKIP leader Nigel Farage. This forms part of [a broader system](#) of content production and distribution, along with News Corp papers, to promote scepticism of climate science and fear or confusion around mitigation efforts. In many of its 'After Dark' panel shows, climate denial also segues into segments promoting other far-right tropes such as [transphobia](#) or [racial scapegoating](#).

On the opening day of COP26 (1 November), leader of the right-wing populist One Nation Party, Pauline Hanson (417K followers), shared a clip to her [Climate Alarmism](#) playlist on Facebook. It was titled the 'Woke & The Wealthy Descend on Glasgow' and generated 33K views, 1.6k reactions and 1k comments. Hanson's channel also includes an Energy Issues playlist where she showcases her own appearances on Sky News Australia. In January 2021, [The Guardian reported](#) that One Nation MPs lost more followers than any other party following Twitter's 'purge' of QAnon accounts, and its members have [frequently been found](#) to share COVID-sceptic, anti-vaxx and other conspiratorial content. Hanson remains one of the most popular Australian politicians on Facebook, regularly topping engagement amongst all federal politicians.

**Pauline Hanson's Please Explain** posted a video to the playlist **Climate Alarmism**.  
27 October · 🌐

MORRISON'S CLIMATE CON EXPOSED AS "STORIES FOR CHILDREN"

Laughable claims from Prime Minister Scott Morrison about the cost of his Liberal/National Coalition's net-zero climate change con have already been exposed.

The truth is attempting to legislate the brutal cuts needed to reach the targets set by the Liberal and National parties put hundreds of thousands of jobs at risk, will drive up energy costs and could very well bankrupt Australia.... [See more](#)



1.8K reactions 1.1K comments 660 shares

**Pauline Hanson's Please Explain** posted a video to the playlist **Climate Alarmism**.  
1 November · 🌐

NET-ZERO CLIMATE TARGETS MEAN YOU WILL PAY MORE TAX

Scott Morrison's Liberal/National Government has announced a brutal net-zero climate target policy.

Under this Liberal/National climate cuts plan, your taxpayer dollars will be diverted into funding solar panels, wind turbines and other unreliable green energy schemes.... [See more](#)



1.6K reactions 1K comments 424 shares

Throughout the conference, politicians like Hanson and her colleagues Senator Malcolm Roberts (31k Twitter followers; 124k Facebook followers) and Mark Latham (60k Twitter followers) collectively received 21.6k daily interactions, totalling 781.3k over the duration of the conference. Subsequently, their follower base grew by 7.5k Followers (versus 1.6k during the same period in October).

[Matthew Canavan](#) (32k Twitter followers; 55K Facebook followers) is a Senator for Queensland and former Minister for Resources and Northern Australia. A well-known [climate sceptic](#), he also generates high levels of engagement across both platforms, often by publicising media appearances on Sky News Australia. His posts during the conference focused on criticism of renewables, the hypocrisy of ‘elites’ attending COP26, and claims that adopting Net Zero targets would destroy the Australian economy.

**Senator Matthew Canavan** ✓  
2 November · 🌐

I was on Paul Murray last night discussing the hypocrisy of the Glasgow Climate Conference. The show wasn't long enough to discuss all of the examples!



👍👎👏 777      188 comments 59 shares

**Senator Matthew Canavan** ✓  
12 November at 01:27 · 🌐

If green energy is cheaper than coal and gas why do they need subsidies for something that's already competitive?

I don't think Australian people's budgets are at a point where we transfer their taxes to those that are already rich?



👍 501      266 comments 58 shares

ALL POSTS > COMBINED TOTAL INTERACTIONS > 11/01/21 - 11/12/21

	TOTAL INTERACTIONS	AVG. WEEKLY INTERACTIONS	WEEKLY INTERACTION RATE	
	<b>781.3K</b>	<b>130.2K</b>	<b>3.73%</b>	
NAME	TOTAL	REACTIONS	COMMENTS	SHARES
 Malcolm Roberts ...	425.1K	300.4K	45.2K	79.6K
 Pauline Hanson's...	255.2K	175.3K	43.6K	36.3K
 Mark Latham's Ou...	100.9K	74.5K	9.4K	16.9K

**Source:** Crowdtangle. Growth in interactions for One Nation politicians during the COP26 summit.

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## **POLICY ASK 5: RESTRICT PAID ADVERTISING AND SPONSORED CONTENT FROM FOSSIL FUEL COMPANIES, KNOWN FRONT GROUPS, AND/OR OTHER ACTORS REPEATEDLY FOUND TO SPREAD DISINFORMATION THAT CONTRAVENES THE DEFINITION IN POLICY ASK 1**

**“The fossil fuel industry has perpetrated a multi-decade, multibillion dollar disinformation, propaganda and lobbying campaign to delay climate action by confusing the public and policymakers about the climate crisis and its solutions.”**

**Geoffrey Supran and Naomi Oreskes, Climate Social Science Network, Brown University**

**“Vested interests have generated rhetoric and misinformation that undermines climate science and disregards risk and urgency... Resultant public misperception of climate risks and polarized public support for climate actions is delaying urgent adaptation planning and implementation”**

**IPCC Report - Climate Change 2022: Impacts, Adaptation and Vulnerability**

Challenging ad tech business models that enable the production and monetisation of mis- and disinformation is among the most powerful tools at our disposal. The current architecture of platforms has enabled disinformation actors to thrive, generating revenue for tech companies and, in many cases, the actors themselves. Such content has also proved highly effective, with studies suggesting it moves through social media platforms far quicker than verified sources. Platforms designed to maximise engagement and capture users’ attention are attractive to advertisers, which creates perverse financial incentives for ‘outrage merchants’, scammers and malicious actors. Estimates of the scale of this problem vary, but an August 2021 study by Newsguard and Comscore found that \$2.6 billion was being spent by big brands advertising on misinformation sites.

*Writ large, the advertising ecosystem amplifies climate mis- and disinformation in two key ways:*

*1) By creating a funding model for bad-faith actors and outlets, who generate advertising revenue through incendiary, false or misleading content.*

*2) By increasing reach, as advertising tools can be applied to disinformation or greenwashing content to target consumers and other key constituencies.*

Digital advertising has a supply chain which remains complicated and opaque, facilitated by technology which few understand, vastly increasing the opportunity for monetising climate denial and ‘discourses of delay’. This has created a profit model for hate and misinformation which undermines the efforts of brands with climate targets who are [inadvertently funding this content](#) through advertising budgets.

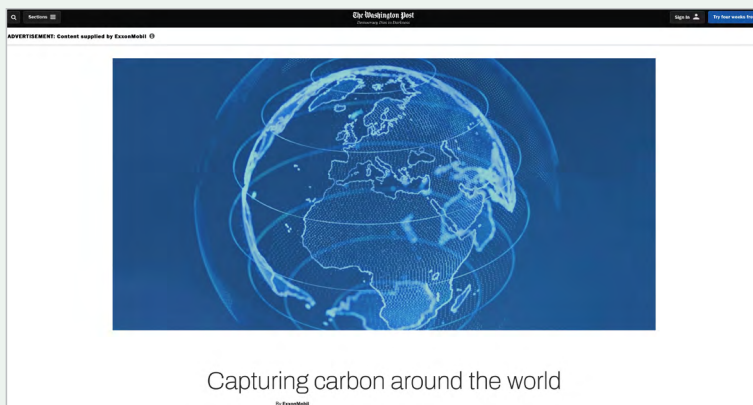
The converse is true of factual reporting on climate. A 2021 study by [CHEQ, Pulsar, Conscious Advertising Network and Media Bounty](#) found that 70% of the most shared climate content was unmonetisable through advertising. The most likely explanation for this is risk averse advertisers adding climate related words to ‘blocklists’. These blocklists are commonly used to prevent adverts appearing next to inappropriate content (for example airline companies avoiding articles with the word ‘crash’ in them), but also cause huge issues for minority communities (a study by CHEQ found that [73% of LGBTQ+ content was unmonetisable by advertising](#) due to words such as ‘gay’ being added to these lists), as well as coverage of major news events. In 2020, the front page of the [Wall Street Journal](#) ran without advertising as large numbers of advertisers had added ‘COVID’ related keywords to their blocklists. The same patterns can be seen with climate content every day.

Technologies supposed to promote ‘brand safety’ have also been criticised as overly cautious in the way they label ‘[hard news](#)’ and topics such as climate. This effectively starves reporting of advertising revenue, disincentivising news rooms from engaging on some important issues. In parallel, known climate deniers and delayers (such as those highlighted in [CCDH’s Toxic Ten research](#) or other sections of this report) continue to generate revenue through ad tech systems native to their websites and channels, often unbeknownst to the advertisers featured next to such content.

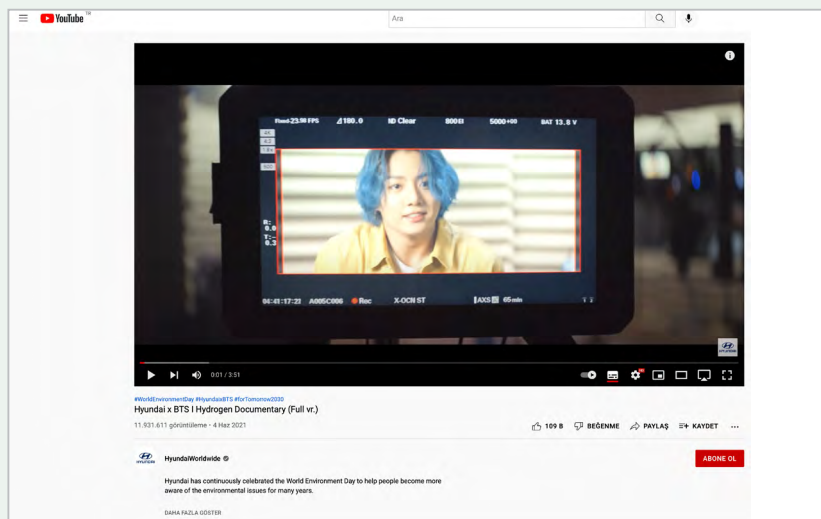
*Implementing manifestos from the [Conscious Advertising Network](#) and the [IPA Climate Charter](#) would change the advertising supply chain and help to defund climate mis- and disinformation, as well as ensure that credible climate voices are funded. As with other issue areas, platform approaches should not fixate on individual pieces of content or asking third party fact-checkers to review millions of posts, but rather address behaviours and actors. This means clearer Terms of Service or Community Guidelines on climate mis- and disinformation (ideally using the definition in [Policy Ask 1](#)); tackling known repeat offenders who build influence via their products (including companies); and revising their underlying systems to prevent the promotion or neglect of such content.*

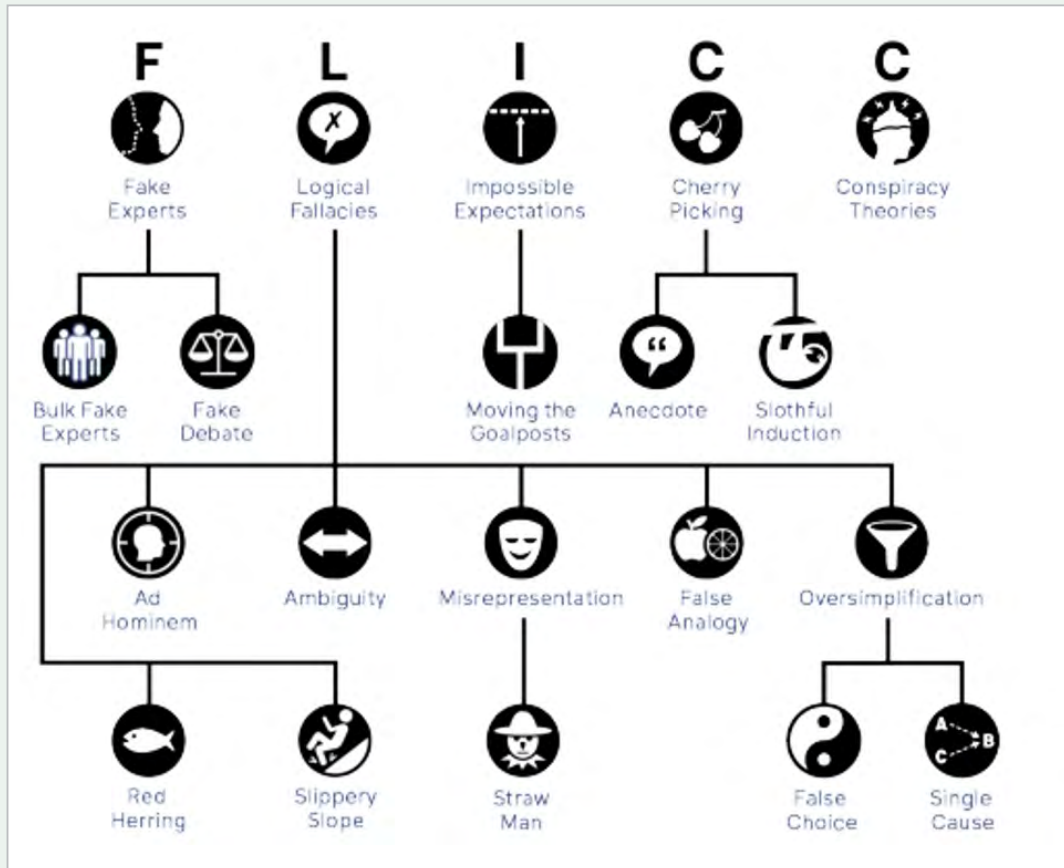
Investigations such as those run by [Check My Ads](#) reveal the intrinsic link between advertisers, advertising technology and harmful content. In the context of climate change the issue is two-fold, and spans both the monetisation of climate mis- and disinformation and the use of platform advertising tools to amplify such content. Paid and sponsored content has increased the reach of greenwashing and other delayer narratives, often run explicitly by polluting industries or their associated lobbies and front groups. Adverts from ‘Carbon Majors’ - the companies responsible for the majority of all historic greenhouse gas emissions - actively promote continued use of fossil fuels, or posit polluting technologies as part of the energy transition. This includes messages such as “Climate change is one of the most pressing challenges of our time, and Canada’s oil sands must be part of the solution” and “Affordable energy depends on American oil and gas production. What’s most important to you? Tell us today!” Analysis of the Facebook Ad Library for entities such as [Eco-Central](#) and [Net Zero Watch](#) reveals a pattern of low-budget experiments enabled by platform tools, used to hone anti-climate messages and audience targeting. No comparable data is currently available for Twitter and other platforms.

Influence campaigning can encompass typical greenwashing (as [defined here](#) by Climate Earth) and more nuanced ‘[woke-washing](#)’ (using marketing to project a stance on popular social issues, while maintaining corporate practices directly counter to that stance). Both types of content present a barrier to public understanding of climate policy and targets in line with the goals of the Paris Agreement, although many may seem innocuous to the casual or less informed reader. For example, industry adverts and [sponsored content](#) regularly [champion](#) their innovation in areas like [Carbon Capture and Storage \(CCS\)](#). While [related but distinct technology](#) may well form a part of long-term mitigation strategies, CCS [does not yet exist at nearly the scale or sophistication](#) needed and [in some contexts](#) (e.g. [Australia](#)) is being used as a ‘silver-bullet’ [solution](#) to negate other critical targets and nationally-determined contributions (e.g. coal phase-out). The same can be argued for certain types of hydrogen fuel, which are increasingly being pushed by companies [as a ‘climate-friendly’ solution](#) requiring government subsidies and extensive public finance. The past year has seen widespread and high-production campaigning on the issue, including [Hyundai’s partnership with K-pop superstars BTS](#), currently totalling nearly 12 million views on YouTube. However, a [recent investigation](#) by Global Witness found that carbon emissions actually increased in a Canadian Shell plant using such technology.



As negotiations began at COP26, [Eco-Bot.Net](#) released an analysis of historic social media data linked to high-emission companies and sectors. This includes so-called Carbon Majors (see below), as well as groups within the Energy, Aviation and Industrial Farming lobbies. Eco-Bot.Net's system retrieved all sponsored ad data from official APIs on Facebook and Instagram from 1 January to 23 October 2021, including content tagged as political and issue-based advertising. Data was then verified by researchers and investigated by independent journalists using academic definitions of climate mis- and disinformation. The frameworks used were developed by John Cook at the University of Melbourne and Aoife Brophy Haney at the University of Oxford's Smith School of Enterprise and the Environment (see [Cook, J \(2020\)](#); [Client Earth \(2020\)](#)).





*Source: Cook, J. (2020). Deconstructing Climate Science Denial. In Holmes, D. & Richardson, L. M. (Eds.) Edward Elgar Research Handbook in Communicating Climate Change. Cheltenham: Edward Elgar.*

The [Carbon Majors](#) comprise 100 companies allegedly responsible for over 70% of all historic global greenhouse gas emissions. According to a study by CDP and the Climate Accountability Institute, their emissions total nearly 1 trillion tonnes since 1988, the year in which anthropogenic climate change was officially recognised with the creation of the IPCC. The group includes industry giants such as ExxonMobil, Shell, BP, Chevron, Saudi Aramco, Shenhua Group and Gazprom, and spans a range of publicly-listed, investor-owned and state-run entities.

Eco.Bot-Net research reveals that 16 Carbon Majors ran 1705 sponsored ads classified as containing climate or energy mis- and disinformation from January to September 2021. This content received over 150 million impressions, primarily in the US, and generated up to \$4.8 million in net revenues for Meta Inc. (formerly known as Facebook).



### Case Study 1: ExxonMobil

From 1 January to 23 October 2021, [ExxonMobil spent over \\$4 million on 1,211 sponsored ads](#) on Facebook and Instagram that contained mis- and/or disinformation relating to energy policy and climate, receiving over 100 million impressions. The company accounted for over 70% of all advertising by Carbon Majors retrieved from Facebook's APIs. These ads generated seven times as many impressions as CEMEX, the next largest actor. Meta's Ad Library [shows](#) that historically, ExxonMobil has spent over \$22 million on sponsored ads related to social issues, elections or politics on Facebook and Instagram since May 2018 (earliest available data) in the United States alone.

On 28 October 2021, Exxon's CEO (Darren Woods) testified before the US Congressional Committee on Oversight and Reform, part of a hearing to interrogate the oil and gas industry's historic and ongoing role in climate disinformation. Under oath, Woods [claimed](#) that ExxonMobil "does not spread disinformation regarding climate change." However, just a week before this hearing took place, [sponsored ads that contained misleading content](#) were running on Facebook in the states of New York and Illinois.

This campaign was part of broader efforts identified to influence public opinion and/or legislative efforts at the local and State level. New York Mayor Bill De Blasio had [announced](#) plans to gradually phase out natural gas in the coming years. An initial step in this agenda is Bill Intro 2317, which would [update the city's building code](#) to prohibit new and renovated structures from using natural gas connections. During crucial weeks for this bill's progression, New Yorkers were exposed to [hundreds of ads](#) from ExxonMobil which misrepresented the proposed ban and its potential impacts. The ads also encouraged viewers to sign a petition asking City Hall to halt the proposed changes. From 8 September to 22 October 2021, the company [ran 351 sponsored ads](#) that contained misinformation, predominantly reaching New Yorkers aged 55+ years old. At the time of analysis, this content had received just under two million impressions and cost Exxon approximately \$100,000 in total.


One [example of misleading](#) content from this campaign claimed that existing New York residents would be 'forced' to switch from natural gas at a cost of over \$25,000 USD. The [legislation proposed](#) only pertained to new-build homes and major renovations, in line with several cities on the US west coast that require new constructions to be all-electric.

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<sup>15</sup> In May 2021, New York City Council accepted [Bill Intro 2317](#), which would prevent natural gas from being installed in new builds only - rather than forcing current residents to switch from gas to electric. The figure of \$25,600 to switch from gas to electric appliances is not substantiated and appears to be a significant overestimate.

**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](#)

ExxonMobil  
**Exchange**  
An ExxonMobil Community

**ExxonMobil**  
Sponsored • Paid for by **EXXON MOBIL CORPORATION**

ENERGY ACTION ALERT: Like your gas stove? Some New York lawmakers have proposed ending the use of natural gas – limiting consumer choice and potentially increasing energy costs.



Gas or Electric Stove?  
Support consumer choice in New York.


**TAKE ACTION**

Support Natural Gas [Sign Up](#)

ExxonMobil  
**Exchange**  
An ExxonMobil Community

**ExxonMobil**  
Sponsored • Paid for by **EXXON MOBIL CORPORATION**

ENERGY ACTION ALERT: Natural gas generated nearly 40% of New York's electric power in 2019, but some lawmakers have proposed ending the use of natural gas – limiting consumer choice and potentially increasing energy costs.




Protect Consumer Choice in New York

**TAKE ACTION**

ExxonMobil  
**Exchange**  
An ExxonMobil Community

**ExxonMobil**  
Sponsored • Paid for by **EXXON MOBIL CORPORATION**

ENERGY ACTION ALERT: A ban on natural gas could limit consumer choice and potentially increase energy costs.




Support Affordable Energy in the U.S.

**TAKE ACTION**

ExxonMobil  
**Exchange**  
An ExxonMobil Community

**ExxonMobil**  
Sponsored

ExxonMobil is the industry leader in carbon capture and storage, developing innovative solutions needed to help achieve a lower-carbon future.



With over 30 years of carbon capture and storage experience,

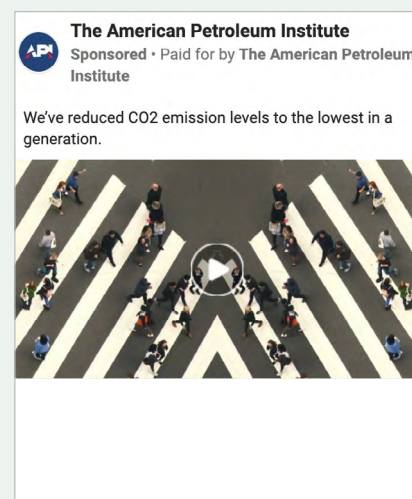
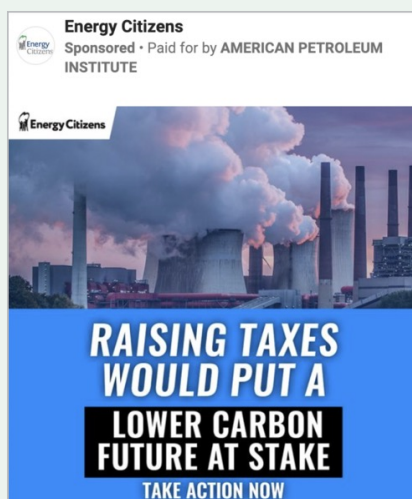
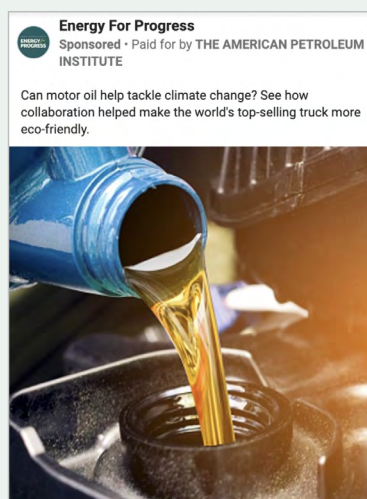
### Case Study 2: American Petroleum Institute

American Petroleum Institute (API) is a powerful lobbying and trade group whose CEO Mike Sommers also [testified at the Big Oil Congressional Hearings in October 2022](#). Representative Ro Khanna, a California Democrat who chairs the House Subcommittee on the Environment, has announced that they intend to subpoena oil and trade companies in the coming months - investigations will focus on activities from 2015 to the present, including social media posting and paid-for content.

On the same day that API was [subpoenaed by Congress](#), the group was running over 850 ads either directly or via proxy pages on Facebook, spending around USD \$500k and achieving more than 12 million impressions. Ads contained both greenwashing content, and misleading information relating to fossil fuels, CO2 reduction and climate change.

Since May 2018, API has spent over USD \$6 million and run over 30,000 targeted ads on Facebook and Instagram receiving hundreds of millions of impressions. Along with their own official account, API uses 3 proxies for influence campaigns on these platforms: 'Energy Citizens', 'Energy For Progress', and 'Power Past Impossible'. On 28 October 2021 alone, Energy For Progress had 695 targeted ads running that were paid for by API. Six of these ads appear in over 100 variations, which indicates a high likelihood of 'micro-targeting' audiences online. At the time of writing, these ads have been seen by over 5 million viewers in the US. In parallel, Energy Citizens was running 192 targeted ads on the two social media platforms paid for by API, which have now been seen by over 7 million people and cost approx. \$400,000 to run.

Alarming, since May 2018 API has spent USD \$279,954 via its 'Energy Citizen's proxy on ads that ran without a disclaimer, which indicates widespread abuse of Facebook's tools that [require labelling if they are social or political in nature](#).



Eco-Bot.Net's research also exposed wide-scale, targeted influence campaigns by four industry bodies for the oil, gas and petrochemical industries during the monitored timeframe.

## POLICY ASK 6: ENSURE BETTER PLATFORM LABELLING ON ‘MISSING CONTEXT’ AND THE RE-POSTING OF OLD OR RECYCLED CONTENT

Recirculation of old media is a common tactic in the disinformation playbook, especially articles that boast misleading headlines or unsupported claims. Such content is often misconstrued (or deliberately framed) as current news, forcing scientists and fact-checkers to re-assess claims that have already been debunked. Some mitigating steps have been taken by social media platforms, for example via [fact checking programs](#) and prompts or interstitials that ‘increase friction’ (such as [urging users to read content before sharing](#)) – however, the lack of contextual information included in link previews remains a significant hurdle.

At present neither Twitter or Facebook displays contextual information for a given piece of content, meaning users must click through before they can see important elements such as publication date and authorship. These details are easily overlooked, especially when browsing at speed. Conscious of this issue, The Guardian website [began adding bright yellow tags](#) with the date to old stories in 2019. In lieu of action from the tech platforms themselves, media outlets should also adopt banners, labels or other alerts to signpost older content (e.g. articles >1 year) for readers.

Such changes alone will be insufficient, but adding extra context in link previews (generated when users share posts) could help prevent the ‘re-virality’ of content as it resurfaces online. In addition, platforms should increase the prominence of ‘missing context’ labels, as they can often prove inconspicuous and fail to obscure the original post before reading or watching ([see example linked from Instagram](#) and [see example linked from Facebook](#) - the latter does not even register explicitly as a fact-check label, and instead merely links to the platform’s Climate Science Center for more information).

Notably, this does not solve the issue of users who share content deliberately and in full knowledge of its deceptive or misleading nature. Platforms such as Facebook should amend their enforcement mechanisms so that posts rated “false” get removed or replaced with a link to the relevant fact-checked content. In parallel, it may be feasible to have scaled warning mechanisms whereby a platform applies friction to accounts that repeatedly share links rated “false” (e.g. forwarding limits, interstitials before posting).

As with other issue areas, platform approaches should not fixate on individual pieces of content or requiring third party fact-checkers to review millions of posts, but rather address behaviours and actors: this means clearer Terms of Service or Community Guidelines on climate mis- and disinformation (see Policy Ask 1); tackling known repeat offenders who build an audience via their products, including companies (see Policy Ask 2); and revising their underlying systems to prevent the promotion or overlooking of such content (see Policy Ask 4).

### Case Study 1: The Daily Mail during COP26

**Coinciding with the start of COP26, an article from UK outlet the Daily Mail, originally published in 2013, resurfaced on social media.** It alleged that a leaked draft report produced by the UN's Intergovernmental Panel on Climate Change (IPCC) had been obtained by the Associated Press, which "revealed deep concerns among politicians about a lack of global warming over the past few years." Specifically, it suggested that the leak contained findings indicating global temperatures had not risen for more than a decade, and that scientists involved in the report's publication were "urged" to participate in a cover up. The piece provided no supporting evidence to substantiate this claim, and the idea that temperatures are not rising has since been [thoroughly debunked](#).



**Review of the AP reporting cited in the Daily Mail piece suggests the latter's interpretation of coverage was at best highly creative, and at worst purposefully misleading even back in 2013.** Indeed, the AP made clear that the leaked IPCC report in question "[would] say it's "extremely likely" that climate change is man-made," an upgrade from a previous 2007 report. 2013 was also one of the ten warmest years on [record](#).

**Nevertheless, this old and deceptive content was subsequently shared across at least 86 anti-COVID lockdown and climate sceptic Facebook groups and pages, as well as in 11,314 tweets between 30 October and 30 November 2021.** On Twitter, initial amplifiers included filmmaker [Michael O'Bernicia](#) (1,441 retweets) and LBC radio host [Maajid Nawaz](#) (1,077 retweets) on 31 October, as well as a post by former UKIP leader [Nigel Farage](#) (813 retweets) on 2 November. Singular tweets continued to reference the article throughout the month, but tended to gain less traction. The article began to (re)-circulate on Facebook on 2 November, and an analysis of performance suggests at least some shares were the result of possible coordinated activity. For example, timestamps appended to shares across a pair of [fan groups](#) for the right-wing conspiracist [Paul Joseph Watson](#) - the first instances following an Italian-language blog [sharing](#) it on 30 October - indicate it was posted in both groups by the same user within only seconds. It is worth noting that Watson himself was [deplatformed from Facebook and Instagram](#) in 2019 alongside a swathe of accounts seen to promote hate speech, including then-InfoWars colleague Alex Jones, ex-Breitbart Editor Milo Yiannopolous, Nation of Islam leader Louis Farrakhan, and white supremacist Paul Nehlan.

As The Atlantic reported at the time: “Watson...[is] personally banned, as are any accounts set up in their likeness. But users may still praise those figures on Instagram and share content related to them that doesn’t violate other Instagram and Facebook terms of service.” In practice, this means that Watson’s fan base not only clips and re-shares content across the two sites, but also funnels audiences to his high-traction profiles on Twitter, YouTube and elsewhere. In [recent leaked audio](#) obtained by the Byline Times, Watson appears to make a series of extreme racist and antisemitic slurs, including his hope that someone will “press the button to wipe Jews off the face of the Earth“. He nonetheless continues to boast 1.2m followers on his Twitter account and 1.9m subscribers on YouTube, with continual forays into issues surrounding climate change.

The story achieved its first major spike within the anti-vaccination and anti-lockdown communities after being shared again by [Maajid Nawaz](#) and [Piers Corbyn](#) (a [well-known conspiracist](#) on a range of topics). The most widely shared post referring to the article on Facebook came from prominent Australian climate sceptic [Senator Malcolm Roberts](#) on 7 November (2.3k shares). It has since been shared regularly by pages with climate sceptic, far-right and other conspiratorial profiles, although as on Twitter these later posts have gained minimal traction (10-20 shares on average). The last recorded instance of an original [post](#) sharing the article in our time frame was on 27 November.

### **Case Study 2: PragerU opposition to EVs**

On 4 November, a [6-minute video](#) was posted to Facebook attacking California’s 2020 [announcement](#) to phase out gas-powered cars by 2035, and has already **garnered over 4 million views across different posts and platforms**. This is largely thanks to repeated uploading by right-wing content-producer PragerU ([not an actual university](#)), which posted it on both its [Facebook page](#), its [website](#), and its [YouTube channel](#).

**The clip puts forward a case for why electric cars are worse than those powered by gasoline, featuring prominent climate sceptic [Bjorn Lomborg](#).** Among other misleading claims, Lomborg assumes the energy grid (where the electricity for EVs is sourced) is entirely powered by coal, and therefore EVs do not really constitute green technology. In an already large and growing number of geographies this is far from true, and will shift even more in the coming years.

**Although now being presented as a rebuttal to California Governor Gavin Newsom in 2020 (re-posted in 2021), the video was actually shot in 2016** - towards the end Lomborg refers to an energy agency as being “Obama’s”. Lomborg is therefore working from outdated data on the electricity mix, making it harder to fact-check his figures directly, not least since he fails to cite any specific sources. However, even in coal-heavy grids, [a life cycle assessment shows](#) that EVs are markedly cleaner than traditional gas cars. [A study](#) from the universities of Cambridge, Exeter and Nijmegen found that in 95% of the world, driving an electric car is already better for the environment than gasoline-powered alternatives, despite a carbon-heavy electricity production mix. In addition, [a study](#) from MIT found that EVs’ superior energy efficiency over time offsets greater initial manufacturing emissions.

Older versions of the video from 2016 have been viewed:

- [2.5 million](#) times on Facebook (plus 4.8k likes)
- [7.1 million](#) times on PragerU’s own website
- [1.9 million](#) times on YouTube (plus 32k likes)

**Making an aggregate total of 11.3 million views since it was first posted in February 2016.**



## POLICY ASK 7: ENABLE API IMAGE-BASED SEARCHES TO SUPPORT RESEARCH ON VIRAL DISINFORMATION

For those wishing to spread disinformation, use of decontextualized or manipulated images is another common tactic, and can end up defining a major event. We saw this play out in real-time during the [Texas Blackouts](#) in March 2021, where ISD analysts found that a viral image being used to discredit wind energy in fact dated back to a Swedish article from 2015 and had been ‘meme-ified’ by anti-climate actors for years as and when it proved useful. The specific tweet which ignited a frenzy around Texas garnered more than 30k retweets and 90k likes in just a few days before the author (a Texan oil and gas consultant) made his account private to avoid backlash.

The use of memes and other image-based content lends itself to virality, since these posts can transcend language barriers and engage people via humour or recycled formats. Such content also removes the need to engage substantively with climate policy or related events, instead distilling opposition into pithy one-liners. The immediacy of an image can bypass critical thinking and, as such, prove a highly effective vector to land ideas in the mainstream. This often constitutes outright disinformation and is designed to incite contempt, anger or confusion in the general public, in particular at pivotal moments (e.g. during an election; an extreme weather event; a climate summit).

It is essential that researchers have the means to identify and track image-based trends in real time, not least during periods of heightened crisis where disinformation can be turbo-charged and prove much harder to counter. At present, such functionality is either limited or absent from platform APIs. Quantifying the spread of images remains near-impossible on Twitter, while tools on Facebook and Instagram only enable searches if the image contains specific text. However, since memes generally splinter into different, slightly adapted forms (see below), embedded text is likely to change as the disinformation spreads within and between platforms. Moreover, engagement metrics are only available for public pages and groups on both Facebook and Instagram - this provides a limited view of how falsified or decontextualised images are gaining traction and resonating with users.



### Case Study 1: Private Jets in Glasgow

In November 2021, one prominent meme claimed the summit could have ‘easily been held via Zoom’, with images supposedly showing private jets queuing up in Glasgow (see below). Various iterations of this meme went viral across social media, but the images in question were entirely unrelated to COP26. Via tools such as TinEye, researchers traced the online circulation of one image as far back as 2010, and another to a 2017 post by America’s Aviation website.

Our analysts were able to determine that the meme was first published by a [Libertarian page](#) on Instagram and Facebook and was re-uploaded more than 360 times (342 Facebook; 19 Instagram) by other like-minded groups and pages. **In total, posts with this single meme were interacted with more than 220,000 times (185,081 Facebook, 40,719 Instagram).** The same idea was then repurposed in cartoon or even more hyperbolic forms (as shown in examples [1](#), [2](#) and [3](#)) to bolster the ‘Hypocrisy and Elitism’ lines of attack detailed in the opening section of this report.



**Poster:** *Young Americans for Liberty, a conservative group affiliated with politician Ron Paul whose mission is “to identify, educate, train and mobilise youth activists to #MakeLibertyWin” (1m followers).*

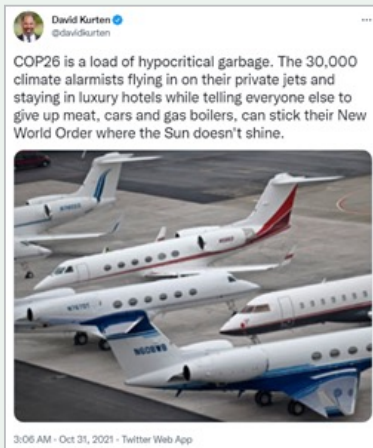
**Real Source:** *According to the image-sourcing tool [TinEye](#), the image was first featured on Mashpedia (now unavailable) in reference to the National Business Aviator Association’s Meritorious Service to Aviation Award on April 13, 2017.*

**Platform:** Facebook

**Reach:** 40k likes, 39k shares

<https://www.facebook.com/photo.php?fbid=253042703528614&set=pb.100064686581649.-2207520000..&type=3>

<sup>16</sup> Our research covers public groups, pages and verified profiles only.



**Poster:** David Kurten (former London Mayoral candidate, [vaccine sceptic](#) and Leader of the UK Heritage Party founded to promote ‘traditional family values’ (85k followers).

**Real Source:** This is a stock image used 246 times to date, according to [TinEye](#). The oldest occurrence was found on 29 Jan 2010, published by a daily free newspaper in Switzerland.

**Platform:** Twitter

**Reach:** Nearly 9.5k likes and 4k retweets

<https://twitter.com/davidkurten/status/1454646024153227266>

### Case Study 2: Txai Suruí

Disinformation attacking indigenous youth activist Txai Suruí went viral on Facebook and Twitter in an attempt to discredit her participation at COP26. Suruí, who [gave a speech to world leaders at the opening sessions in Glasgow](#), was publicly criticised by President Bolsonaro and [had already reported receiving hate messages on social media](#). During the first week of COP26, Avaaz documented six posts and tweets mocking her that received nearly 12k interactions and 32k views within 72 hours.

One falsified image claimed to show Suruí partying and implied she is a ‘fake Indian’, but was in fact taken from another woman’s Instagram page (as verified by Brazilian fact-checkers [Boatos.org](#)). The photos depicted “Txai” in revealing clothing drinking what appears to be alcohol, and text alongside the post read: “Brazilian Indian that is at the climate meeting, speaking ill of Brazil. She’s nothing like an Indian. Do you understand why Bolsonaro didn’t participate?”



In the 24 hours after fact-checks were published by two major Brazilian newspapers, Avaaz were able to track the spread of the image on Facebook using Crowdtangle's image search feature, which retrieved screenshots of the viral tweet even when captions differed slightly from the original text. In this way, researchers could document fifteen posts with >50 interactions that contained the misidentified image, and track respective actions taken by Facebook. However, due to API constraints we were unable to retrieve images without captions, or those containing different wording from posts identified in official fact-checks. Fourteen out of fifteen posts were removed or labelled with a fact-check message as of 7 December, but not before achieving 4,307 interactions across the platform. Researchers could not adequately track the spread of this falsehood on Twitter

as there is no image search function currently enabled. We manually identified only three tweets, none of which were actioned by the platform as of early December, and provided an incomplete picture of the source or circulation of this narrative.

## APPENDIX 1: METHODOLOGY

### The COP26 Disinformation 'War Room': Technical Set-up

Our approach is rooted in an award-winning disinformation detection and investigation capability called Beam. Since 2015, this system has been built through a partnership between ISD and CASM Technology, who specialise in the development and use of emerging technologies for social media research. In the run-up to COP26, we have worked to adapt the system to the specific challenges faced by the climate sector, designing and establishing a sophisticated monitoring system aimed at identifying and analysing climate disinformation, as well as wider lines of attack around the summit. The system parameters, like actor and keyword lists, were developed by ISD in collaboration with all contributing partner entities and supported by CASM Technology, which has provided and further developed the technological infrastructure for this research.

### Data collection strategy

In order to maximise our coverage of disinformation around COP26, we collected data from a wide range of social media platforms (Twitter, Facebook, Instagram, MediaCloud, Telegram\*, YouTube\*, Reddit\*), combining actor-based and topic-based approaches:

\*Limited to actor-based data collections.

- **Actor-based:** We collected all messages from 300+ climate-focussed actors, many of whom have a proven track record of sharing mis- or disinformation on this issue and can act as bellwethers for new lines of attack. Selections were based on pre-existing databases and sector research, including the [DeSmog Climate Disinformation Database](#); Facebook pages and groups identified by [Stop Funding Heat](#); official COP26 sponsors; and other industry lobbyists registered as delegates or documented by partners such as Global Witness. In addition, we filtered for climate-related messages from 3,200+ non-climate focused actors, chosen based on their influence in the public debate and/or for representing the viewpoints of key communities on a range of topics. These individuals were drawn from databases such as the German Marshall Fund's [Hamilton 2.0 Dashboard](#), media entities and related accounts available via [Media Cloud](#), and ISD's own ongoing analysis and mapping of right-wing, [far-right](#), conspiracy and [disinformation](#) actors worldwide.

To segment analysis and enable real-time monitoring of trends, accounts were grouped into nine different 'communities', as described in the table below. Actors were also manually assigned a geographic label based on their location (self-declared or commonly made public), covering a total of 20 countries.

User Category	Type	Description
Climate	Unfiltered	Any type of actor whose content is nearly 100% related to climate issues. In case of conflicts, "climate" will take priority over other categories (e.g. climate media, climate influencers, climate far-right etc.)
Industry and Lobbying	Filtered	Individual or corporate entities, including accounts of oil, gas, automotive or other industry/lobbying firms
COP26 Sponsor	Filtered	Corporate sponsors of COP26
Media	Filtered	Media outlets and journalists (if content is primarily related to climate, then it should be categorised as "climate")
Non-climate Influencers	Filtered	(Mostly) online personalities and pundits. Climate-specific influencers should be categorised under "climate", as noted above. This category takes priority over political orientation (Far-right/Far-left/Right-wing/Left-wing)
Diplomacy/Politics	Filtered	Diplomatic missions, Ambassadors, government bodies, politicians and other actors officially related to politics
Far-right	Filtered	e.g. fringe patriot and militia groups, known far-right organisations and conspiracy groups (for example on Facebook)
Far-left	Filtered	e.g. fringe far-left groups - currently this category of accounts only applied to Australia

**Filtered** – only collecting posts that match our pre-determined climate keywords

**Unfiltered** – collecting all posts

● **Topic-based:** We conducted a keyword-based collection of messages related to COP26 (i.e. mentioning COP26, #COP26, UN climate summit 2021, UNFCCC or other keywords explicitly referencing the conference). In parallel, we collected data on ten additional narratives related to specific aspects of negotiation and/or broader threats which emerged in the run-up to the summit (e.g. on Article 6, climate financing, loss and damage, coal and methane targets). This type of collection was a key component of our monitoring during COP26 to identify relevant content, and therefore generally contributed to the findings in this report. However, the main analysis did not rely on these more granular, topic-based narratives. They are also distinct, despite partial overlap, from the narratives developed to capture broader ‘Discourses of Delay’ (see the Queries/Keyword Dictionaries section below). For full transparency, the wider set of keyword lists is available on request.

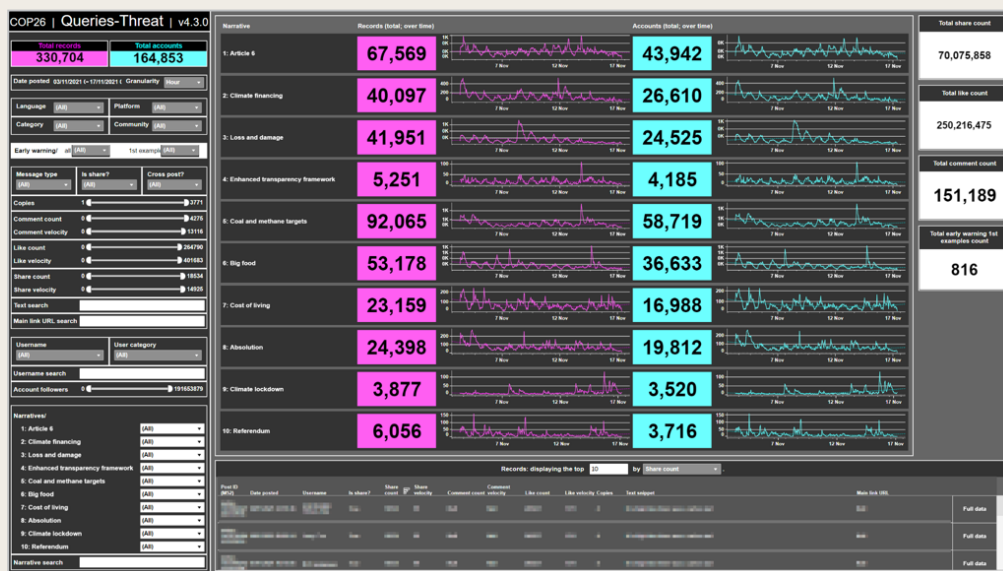
### Beam

Beam is a multi-lingual, multi-platform research technology that uses bespoke Natural Language Processing and other sophisticated text analysis techniques directed by human experts to both continuously discover new disinformation campaigns, and investigate their underlying tactics, techniques, likely purposes and possible origins when found. It has been deployed across four continents, eight languages and 11 platforms for over 330 end-users and in 2021 was the joint-winner of the US-Paris Tech Challenge for innovative approaches to counter disinformation, sponsored by the US State Department, DCMS and NATO.

Beam is designed to enable users without a formal data science background to collect, analyse, and visualise large and unstructured datasets. This is especially the case for large text-based datasets, such as those drawn from social media, but has in the past also been used for datasets consisting of emails, forum data, or internal and proprietary data held by large organisations, among other text media. For this project, ad hoc Beam architectures were built on to collect social media data live and perform some semi-automated analyses. This was then made available to analysts via four dashboards (see below) for further exploration. Analyses performed automatically via Beam included: (i) the classification of collected posts into bespoke narratives defined by analysts, in order to quantify the prevalence of specific threats in the course of the summit; (ii) the identification of prominent website links and domains; (iii) the statistical analysis of posts’ timestamps, in order to identify cross-posted and cross-linked content (i.e., messages containing the same text and/or link, published in short sequence); (iv) the calculation of share, like, and comment velocities, in order to identify potentially viral content in advance; (v) the automated flagging of posts with particularly high traction compared to other posts from the same community or belonging to the same narrative.

## Climate Dashboards

Outputs were made available to analysts via four distinct interactive dashboards, providing means to interrogate and inspect data through numerous data enrichments (metadata, classifications, narratives, etc.) afforded by Beam. This enabled the near real-time visualisation and multivariate analysis of data, without the need to design bespoke processing pipelines. These four dashboards showed, respectively: (i) all messages posted by climate-focused disinformation actors; (ii) climate and COP-related messages posted by a wide range of non-climate focused actors (politicians, diplomats, lobbyists, media, far right groups, etc.); (iii) all conversations around COP26; (iv) all conversations around ten additional narratives related to specific negotiation items and/or broader narrative threats which emerged in the run-up to COP.



## Other Analyses

Between 25 October and 21 November, analysts relied on the dashboard system for their daily monitoring of climate disinformation throughout COP26. To complement our findings, we relied on several additional tools (Crowdtangle, Brandwatch, TinEye among others) to monitor the spread of the identified disinformation threats beyond the monitored actor-sets, narratives and time-frames. The following outlines in more detail our approach to each of the different types of analysis featured in this report, and the methodological considerations for these more in-depth analyses.

### Longitudinal narrative analysis

Using the disinformation monitoring system outlined above, discourses of delay were identified by analysts in the run-up and throughout COP26. In order to monitor the spread of selected narratives beyond our regular monitoring of selected actors and issue-sets, we used the commercial social listening tool Brandwatch and Meta-owned research platform Crowdtangle to quantify overall mentions of these narratives across Twitter and Facebook respectively during the summit and in the week before and after. For transparency, the exact queries are included in the last section of this appendix. The same approach was also used for the Sky News Australia case study featured under Policy Ask 3.

### Links and domains analysis

The links and domains analysis featured under Policy Ask 3 refers to all climate or COP26-related posts published by the monitored actors (with the exception of those belonging to the ‘Media’ community to avoid skewing the results). In order to produce a ranking of the most popular domains within this actor-set, we first extracted all links present in the collected messages, and then aggregated them by domain. The ranking is based on the number of unique users who have referred to each domain. Our top 10 social media domains exclude social media domains themselves as well as URL shortener websites (e.g. bit.ly).

In the same section, for each domain we also provide additional information on which articles have been the most widely shared within our dataset. In order to quantify the spread of these articles beyond the monitored actor-sets, we have used Brandwatch and Crowdtangle to quantify their diffusion across the entirety of Twitter and Facebook (respectively).

### Meme and reverse image search

The meme search featured under Policy Ask 4 was done using the ‘Meme search’ function available on Crowdtangle dashboards. This necessarily limited us to the spread of these memes on Facebook and Instagram. To identify the original pictures used for the memes, we employed a reverse image search via [TinEye](#).

### Case study on climate deniers vs authoritative pages

The comparative analysis of the performance of authoritative sources and climate sceptics was conducted via Crowdtangle. The sample of authoritative sources was generated based on Facebook’s official [Climate Science Center](#), one of the company’s most-publicised responses to disinformation that is premised on the uncorroborated idea that you can outperform bad information with good information. It thus comprises the following pages: Tyndall Centre for Climate Research, Met Office, IPCC, World Meteorological Organisation, UN Environment Programme, UK Centre for Hydrology and Ecology, and the World Climate Research Programme. Our climate sceptic sample consisted of accounts with a track record of spreading [climate scepticism](#), ‘[discourses of delay](#)’ and/or content which contains [mis- or disinformation in relation to climate science](#). These were selected using a range of credible and pre-existing sources, primarily [Desmog’s Climate Disinformation Database](#). Specifically, these were Breitbart London, Spiked Online, Net Zero Watch (formerly known as GWPF), GB News Online, Heartland Institute, Bjorn Lomborg and Tucker Carlson. In order to carry out the comparative analysis, we used a list of keywords related to climate change and COP26 that enabled us to collect equally defined relevant posts for both samples. The full list of terms is available in the last section of this appendix.



### Network Mapping

Accounts in the network map produced by Graphika were collected based on the followers of a set of 16 seed accounts. Those 16 were selected manually from an initial list of 50+ accounts identified during our monitoring as having disproportionate influence in either producing or sharing denial narratives, through persistent posting and/or consistently popular content. This manual selection process involved filtering down to the actors known to be predominantly engaging with and sharing climate denial content. All of the 16 actors studied were in the top 12% for total interactions on Twitter or Facebook (likes/reactions, retweets/shares and comments for Facebook) over the monitoring period.

The first step to mapping this network was to collect the followers of each influencer, and then reduce the size of the resultant network to only those with high in-degree centrality. These 13,988 users (including the seeds) were then clustered according to a machine learning algorithm trained to detect interest patterns. The third step in this process was a team of analysts reviewing these algorithmically determined clusters to assess whether they represent a coherent online community and to provide a label that describes the interest that unites the users in the cluster. For example, the cluster of accounts labelled 'AUS Liberal Pols | Climate Focus' represents Australian Twitter users preferentially following politicians associated with the Liberal Party and those interested in climate issues. As such, this cluster is situated within a group of other Australian political communities which were given the umbrella label of 'AUS Politics'. Each group is assigned a distinct colour and the accounts within it are assigned shades of that colour, facilitating the visual detection of overlaps in communities.

### Policy Ask 6, Case Study Facebook #2 (Media Matters)

Using CrowdTangle, Media Matters compiled a list of Facebook pages that have posted climate change and energy-related misinformation since December 2021, yielding 140 pages. These pages fit at least one of the following criteria at the time they were added to the list:

- Pages that posted climate or energy-related misinformation at least once every two weeks.
- Pages with a stated purpose of opposing the established science of climate change that also posted at least once a month.

In order to identify climate-related posts, Media Matters developed an ad hoc dictionary, available in the last section of this appendix. The researchers defined posts as being related to or about energy or climate change if a post had any of the following terms in the message, the included link, article headline, or article description. In the timeframe of analysis (September 1, 2021 - April 1, 2022), 126 pages posted content that contained the terms. The researchers then determined which posts contained misinformation and further analysed the top 100 posts with the most interactions. The researchers then downloaded the top posts and determined which ones contained climate

change or energy-related misinformation, further analysing and coding them manually to identify different trends. Posts were labelled as climate misinformation or disinformation if they fit ISD's suggested unified definition provided in this report.

### Queries/Keyword Dictionaries

*"Hypocritical Elites" attending COP26 narrative:*

(glasgow OR "climate change summit" OR "climate summit" OR "climate conference" OR "climate change conference" OR "cop 26" OR "Powering Past Coal Alliance" OR "High Ambition Coalition" OR unfccc OR "un climate glasgow" OR #unfcc OR "conference of parties" OR cop26) AND (elites OR elitism OR elite OR elitist OR elit\* OR hypocrits OR hypocrisy OR hypocr\*)

*"Renewable energy is unreliable" narrative:*

(renewable\* AND ("not reliable" OR unreliable)) OR (("Lacklustre output" OR "lackluster output") AND (windmills OR "wind turbines" OR solar OR wind)) OR (Unreliable AND ("energy sources" OR solar OR wind OR renewable\*)) OR ("No electricity" AND ("without fossil fuels" OR renewables OR wind OR solar)) OR (("Over-dependence" OR overdependence) AND (renewable\* OR "unreliable energy" OR "unreliable energies")) OR ("Closing down" AND reliable AND ("power sources" OR "energy sources" OR energies)) OR (Wind AND blades AND (recycle OR landfill OR forever OR burying OR aging)) OR (("Little wind" OR "low wind") AND (power OR electricity OR produce OR "need for coal" OR coal)) OR (("Glasgow conference" OR COP OR COP26) AND ("powered by coal" OR "diesel generator" OR "diesel generators" OR "running on coal" OR "keeps lights on")) OR "ration electricity" OR "Freeze without fossil fuels" OR "genocidal consequences of eliminating fossil fuels" OR "Freeze or bake poor in the dark" OR "Renewables are weak" OR "Renewable energy is not reliable" OR "Renewables aren't reliable" NOT ("saying that renewables are unreliable" OR "saying that renewables are not reliable")

*"Absolution" narrative:*

((co2 OR carbon OR emissions OR (coal AND power) OR coalpowered OR (coal AND fired) OR (coal AND energy) OR "coal-fired" OR (coal AND mine) OR ("Paris Climate Treaty")) AND (((china OR chinese OR india OR indian) AND (more OR new OR instead OR rather OR ask OR why OR worlds OR while OR environment)) OR "ccp" OR "xi" OR beijing) NOT (mergatroyd OR murgatroyd OR "carbon copy" OR "carbon-copy" OR fibre OR graphene OR carbonfibre OR carboncopy OR organ OR organs OR transplants OR magnesium OR "wild salmon" OR biochar OR "bio char"))

*"Electric vehicles" narrative:*

((electric AND car) OR (electirc vehicle) OR (electric AND cars) OR (electric AND vehicles) OR "EV" OR "EVs" OR "electric compacts" OR (electric AND firetruck) OR "e-buses") AND ((environment AND (terrible OR horrible OR bad)) OR (gas AND prices) OR "cobalt mining" OR (diesel AND generator) OR (diesel AND generators) OR (really AND green) OR (environmental AND problems) OR (taxpayer AND (money OR cost OR expense)) OR "more emissions" OR (coal AND powered) OR (batteries

AND (recycled OR discarded)) OR (pollution AND worse AND than) OR (pollution AND batteries) OR (COP26 AND generators) OR (fire AND hazard) OR “no power”)

*Case study on climate deniers vs authoritative pages:*

Cop26 OR climate OR climate change OR CO2 OR carbon OR greenhouse gas OR global warming OR green new deal OR carbon dioxide OR climate summit OR decarbonise OR emission OR hydrogen OR paris agreement OR renewable OR solar OR thunberg OR greta OR wind OR glacier OR environment OR weather OR ice sheet OR net zero OR wildfire OR pollution OR natural resources OR Glasgow.

“climate change” OR “global warming” OR “blame climate change” OR “blame global warming” OR “Climate alarmism” OR “Climate alarmists” OR “climate change hoax” OR “climate hysteria” OR “climatechangepanic” OR “climatehoax” OR “climatepanic” OR “climatefearmongering” OR “climate deception” OR “climate lies” OR “agw fraud” OR agw hoax” OR “#climatefraud” OR “#fakeweather” OR “#climatebrawl” OR “#gretathunbergexposed” OR “#noclimateemergency” OR “#smartdust” OR “#climatescam” OR “#globalwarmingfraud” OR “#cloudseeding” OR “#stopchemtrails” OR “#climateconspiracy” OR “#chematrailawareness” OR “#forcedclimatechange”, “#weathercontrol” OR “#globalcooling” OR “#climatehoax” OR “#climatecult” OR “#carbonkleptomania” OR “#alarmism” OR “Green New Deal” OR “VCEA” OR “Virginia Clean Economy Act” OR “Climate change” OR “net-zero” OR “net zero” OR “emissions” OR “energy” OR “carbon” OR “Build Back Better” OR “BBB” OR “climate bill” OR “social welfare spending” OR “social spending bill”, “climate agenda” OR “social spending package” OR “climate spending agenda” OR “anti-china bill” OR “china bill” OR “America Concedes” OR “Paris Agreement” OR “Paris Climate Agreement” OR “Paris Climate Accords” OR “EV” OR EVs” OR “Electric Vehicle” OR “Electric Vehicles” OR “Electric car” OR “Electric cars” OR “electric bus” OR “electric bus fleet” OR “electric trucks” OR “electric truck” OR “Net zero” OR “Net-zero” OR “solar power” OR “solar panels” OR “wind turbine” OR “windmills” OR “renewable energy” OR “renewables” OR “green energy” OR “clean energy” OR “battery storage” OR “baseload” OR “power grid” OR “energy grid” OR “forced electrification” OR “intermittency” OR “energy costs” OR “rising energy costs” OR “rising energy prices” OR “biden energy policy” OR “biden energy policies” OR “biden energy costs” OR “biden energy prices” OR “energy inflation” OR “gas prices” OR “high energy costs” OR “higher energy costs” OR “keystone” OR “keystone XL” OR “energy security” OR “energy independence” OR “affordable energy” OR “reliable energy” OR “energy independent” OR “woke capital” OR “ESG” OR “BlackRock” OR “woke capitalism” OR “boycott”, “divestment” OR “ESG” OR “energy” OR “fossil fuels” OR “oil” OR “gas” OR “natural gas” OR “China” OR “polluter” OR “pollution” OR “emissions” OR “carbon” OR “COP” OR “COP27” OR “#FLOP26” OR “FLOP26” OR “global elites” OR “elites” OR “private jets” OR “globalists” OR “hypocrites” OR “waste” OR “failure” OR “climate hypocrisy” OR “the great reset” OR “Authoritarianism” OR “authoritarian” OR “climate” OR “climate change” OR “climate lockdown” OR “climate lock down” OR “global warming” OR “climate lockdown” OR “democracy” OR “climate emergency” OR “climate crisis”.

