

COP, Look, Listen: Special Edition (2)

The 'False Solutions' Lobby on Social Media

Key Findings

1. **On TikTok, Chevron** is pushing Carbon Capture and Storage (CCS) and their “renewable gasoline blend”, racking up **188 million views on just 34 sponsored videos**. Using known metrics for CPM – cost per 1000 views – we estimate the company has **spent ~\$1.8 million in advertising** such content across the platform.
2. Chevron’s account **imitates the aesthetics and communication style of a low-resource science channel**. The account also **overwhelmingly features women and employees of colour** in speaking roles – this sits in stark contrast to the makeup of Chevron’s board of directors or their executive leadership team.
3. **On Google, searches for ‘carbon capture’ show greenwashing from Chevron, ExxonMobil, Saudi Aramco and BP** at the top of results. This paid-for content appears ahead of any reputable and/or scientific sources on the topic.
4. **On YouTube**, the company Enbridge is advertising on searches for “carbon capture and storage”, and **a video from Shell is a top “organic” result** presented by the platform.
5. On **Facebook, Instagram and X/Twitter**, ‘organic’ discourse is dominated by opposition to CCS, both good-faith and using conspiratorial frames like [‘The Great Reset’](#). Higher-traction content supportive of carbon capture stems almost entirely from politicians and industry PR.
6. **On Twitter**, hardly any high traction, ‘organic’ posts are supportive of CCS, with **pushback coming from accounts both pro- and anti-climate action**. This unusual alignment can prove dangerous, as activists have retweeted unfounded conspiracy theories to oppose CCS.
7. **On Meta**, content supportive of CCS mostly stemmed from **politicians announcing new projects, or the industry’s own self-promotion**. Content criticising the technology ranged from accurate, good-faith criticisms to **unhinged conspiracy theories**, including one that alleged captured carbon is being used in nanotech ‘distributed through vaccines’.
8. According to data on Meta’s Ad Library, campaigns around CCS were mainly localised in the US, UK and Canada. Individual **commercial ads by Sinopec and the Saudi government promoted CCS in relation to COP28**.
9. Several **CCS-related ads have been removed for violating Meta’s advertising standards** or running without appropriate disclaimers. We are unable to establish further details from the data provided, but decisions appear wholly inconsistent even for campaigns with identical copy/images.

Introduction

This Special Edition provides a window into the lobbying activity around [false solutions](#) online, in particular carbon capture and storage. Through various case studies, it shows how companies are trying to control the narrative via both paid-for and ‘organic’ content, and the tactical playbook used to reach a mainstream audience. For the most part, we have looked exclusively at activity immediately preceding or during COP28, making this a partial snapshot – the bigger picture is likely far more widespread and far more concerning.

Context

As the global public becomes [increasingly aware of and concerned about](#) the climate crisis, outright denial has lost its former sheen – except for a [small](#) but [committed set of actors](#). In response, the fossil fuel lobby has been [forced to change tactics](#), adopting language to portray itself as a key part of the solution to climate change, [instead of its chief culprit](#).

One recurrent line of messaging is that carbon emissions can simply be ‘removed, [giving companies](#) “a license to continue to operate” through the rest of the 21st century. Carbon capture and storage (CCS) is now widely touted as a ‘silver-bullet’ solution to reducing overall emissions and achieving the goals of the Paris Agreement; this is despite the technology [consistently and dramatically failing to deliver](#) or [meet expectations](#) in almost every recent example.

Why Does This Matter?

There are [475 CCS lobbyists](#) at COP28, according to the Center for Environmental Law. On Day 1 of the summit, [InfluenceMap reported](#) that **over 80% of corporate engagement on CCS was at odds with IPCC guidance**, tracking over 600 examples from 2021–2023. They also [found](#) that **16 of the G20 countries have adopted positions on CCS that mirror fossil fuel companies**.

Routes like CCS *will* likely be needed for [“hard-to-abate sectors”](#) such as cement, steel and iron production, where reducing emissions is almost impossible through other means. However, carbon capture is used far more broadly to weaken Net Zero targets and justify continued use of (or even expanded investment in) oil, fossil gas and other polluting fuels for decades to come.

Needless to say, roadmaps from the [International Energy Agency](#), [IPCC](#) and [others](#) state that phasing out fossil fuels must happen to keep global warming within a liveable threshold. Public perception, or misperception, around false solutions is vitally important as countries prepare for the next round of [Nationally-Determined Contributions \(NDCs\)](#) for 2025. Climate science is complex and many of us are desperate for a good news story: futuristic-sounding fixes like ‘sucking carbon out of the air’ or terms like [“nature-based solutions”](#) often fit the bill – even though the science is shaky at best.

TikTok: Chevron Makes a Pitch for Gen-Z

CAAD analysed all 34 videos live on Chevron's account as of 6 December, which cumulatively boast 188,357,800 views. This level of reach is only possible because the company has paid-for promotion across its organic content. Given that advertising prices on TikTok start at [\\$10 CPM](#) (cost per 1000 views), Chevron may have spent over USD \$1.8 million on these ads to date.

What do their videos say?

- Chevron's content is rife with false solutions but has **failed to mention climate change or phasing out fossil fuels once**. Instead, the company features videos [like this](#), where a young woman pops jauntily into frame and tells viewers, "Did you know that carbon can be stored underground? Today we're digging into CO2 storage hubs. These deep underground reservoirs provide us a safe place to capture and store CO2."
- [In another video](#), captioned "Meet our favourite DJ 🎧" and with an Afrobeats soundtrack, the same woman discusses the Denver-Julesberg basin in Wyoming, where Chevron claims to be using "groovy technology" to produce the "lower-carbon energy that Colorado needs". The so-called innovation is **using pipelines instead of trucks to transport oil and gas**.

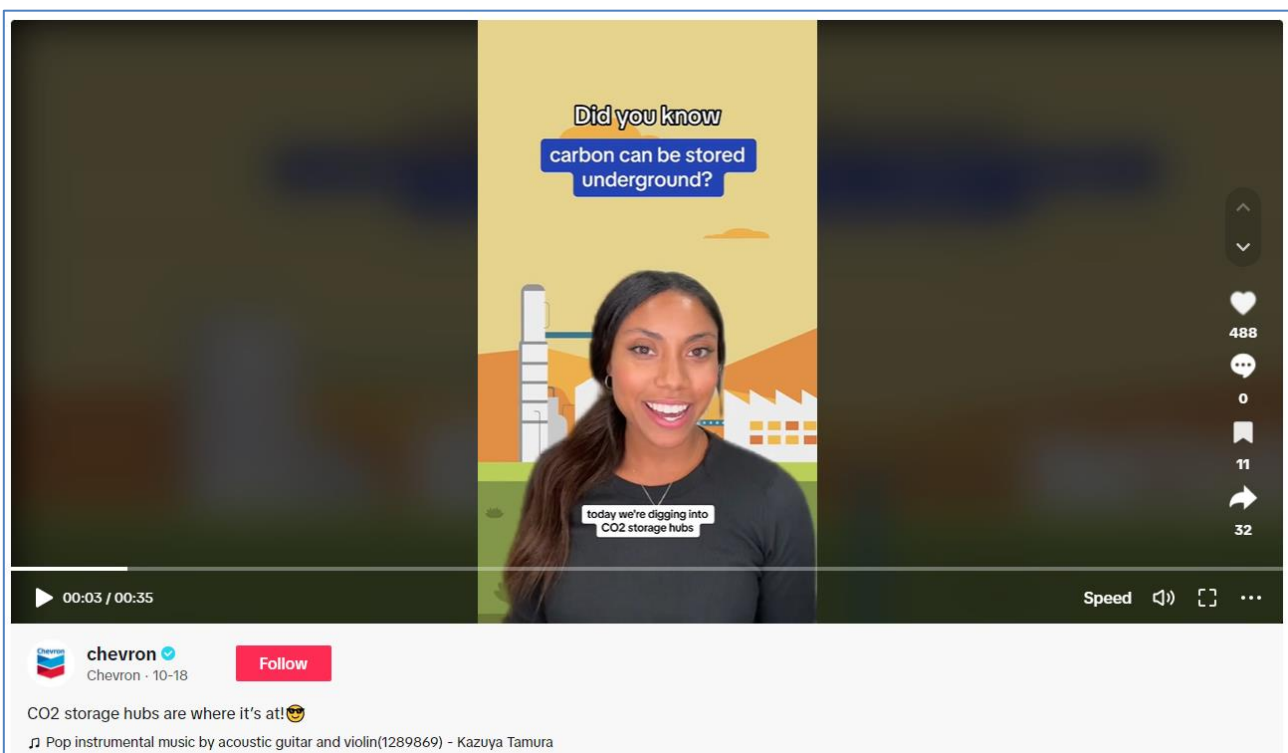
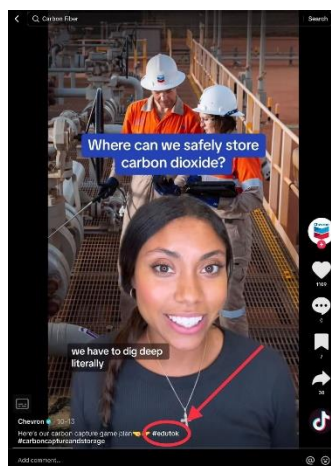
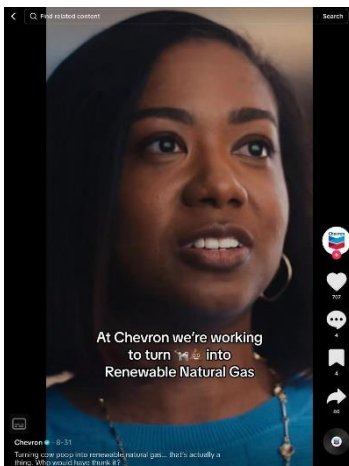


Fig.1. Screenshot from a video on Chevron's official TikTok account captioned "CO2 storage hubs are where it's at! 🎧". The presenter – a young woman of colour – forefronts various videos, alongside other employees from ethnic minorities. The demographic make-up of [Chevron's Board of Directors and Executive Committee](#) appears somewhat different.

- **The company has similar content promoting its “renewable gasoline blend” and sources like soy, corn, and cow manure.** In one video, an employee states: “I’m working here at Chevron to turn vegetable oil like soy into renewable diesel fuel...Renewables are a key part of what we do at Chevron now.” In another, the host laughs that “at Chevron we’re working to turn [cow emoji, poop emoji] into Renewable Natural Gas.”
- Beyond these greenwashing tactics, **Chevron uses a TikTok-friendly communication style and aesthetics.** Most of the company’s videos feature a young woman named Ari, who acts as the face of the account and has a similar image to influencers across the platform. In one video, Ari is ‘green screened’ in front of a CCS animation; in another she attends the Iowa State Fair to discuss using corn in biodiesel production.
- The production values are simple, either using or imitating TikTok’s in-app editing software. Content features the native TikTok font in captions and often communicates via emoji. The **straight-to-camera presentation, use of greenscreens, informal tone and upbeat, royalty-free music all mirror the style of popular ‘edutainment’ on the platform.** In one video promoting CCS, Chevron even includes the hashtag “#edutok” – a term [initially linked](#) to a formal program and in-app challenge to ‘democratise e-learning’. The hashtag has generated over 2 billion views for educational material on TikTok across various topics.
- Considering Chevron’s overall marketing spend, **this ‘low-budget’ aesthetic seems to be a deliberate choice.** By making their videos look rough-and-ready, it brings the company closer to other viral content from influencers and science communicators on the platform and, potentially, increases the appeal for younger users.
- Chevron also appears strategic in their choice of ambassadors on TikTok. **At least 75% of those speaking in videos and 80% of employees featured on the channel are people of colour.** These numbers sit in contrast to [Chevron’s Board of Directors](#), which currently seems to include only two members of colour (16%), or their Executive Committee which includes just four (22%).



Figs 2: Further examples of content from Chevron's TikTok account. The left-hand video is captioned “Turning cow poop into renewable natural gas...that’s actually a thing. Who would have thunk it?”. The right-hand video, with over 1k likes, promotes carbon capture with #edutok in its caption – a hashtag [used by many users to surface educational content](#) and learn about new topics in an engaging, visual manner.

Meta Advertising: CCS for All

CAAD searched for Carbon Capture and Storage (CCS) and Carbon Dioxide Removal (CDR) keywords on Meta’s Ad Library from 30 November 2023 onwards. The database is generally limited to ads labelled as being [about ‘social issues, elections or politics’ \(SEP\)](#) – **commercial campaigns are only visible when active (i.e. at the time they are running across Facebook or Instagram), but not archived for transparency or research purposes.** Even if you are paying attention in the moment, metadata like ad spend or geographic targeting is never available for ‘non-SEP’ ads; you can only see the ad text, platform and advertising entity. Previous [research has also highlighted](#) the **gaps and problems resulting from mislabelled ads**, which mean data that should be available to view is never included in the Ad Library.

In August, after the EU’s Digital Services Act came into force, [Meta introduced some changes to the system](#) – unfortunately, it remains sorely lacking to scrutinise activity from the fossil fuel lobby in a long-term, systemic manner, especially for contexts outside Europe. With those constraints, here’s what we found:



Fig. 3 Example of SEP ad by ExxonMobil supporting CCS in the US State of Wyoming. This campaign and six other instances ran between 21 and 30 November 2023.

- **The two most prolific advertisers were ExxonMobil and the Houston CCS Alliance.** For the former, campaigns centred on a call to action in Wyoming, encouraging people to contact Governor Gordon and express their support for carbon capture.
- In multiple cases, **Exxon’s pro-CCS ads were flagged for missing labels** and found in breach of [Meta’s advertising standards](#). The same applied to some campaigns discussing the company’s hydrogen projects. No further explanation was available as to why these ads were removed.
- **Ad labelling remains inconsistent and confusing** – in one case, an ad for CCS had been removed due to a ‘missing disclaimer, but the exact same copy appeared to be live on 5 December and was not flagged with the ‘social issues, elections, or politics’ label. By 8 December, the mislabelled ad was shown as ‘removed content’, while its non-SEP version was no longer visible in the Ad Library (perhaps because the campaign had stopped running).

Summary data

2 ad versions

About these ads
Advertisers often use the same image or video and text to create ad campaigns with different start dates, locations or budgets. This section contains the collective data for **2 ads**.

2 ads Any filters that you've applied to the search results are also applied to this group of ads. To adjust the filters, go back to the search results.

Library ID: 730404502361226

Active

Started running on 1 Dec 2023

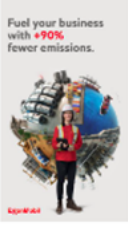
Platforms

This ad has multiple versions

See ad details

ExxonMobil
Sponsored

Carbon capture lets heavy industries use their fuel of choice. That's why we're advancing CCS projects around the world.



CORPORATE.EXXONMOBIL.COM
Let's deliver

Learn More

Library ID: 1011698006759312

Inactive

1 Dec 2023 - 2 Dec 2023

Platforms

Categories

Estimated audience size: **Not available**

Amount spent (USD): **<\$100**

Impressions: **<1K**

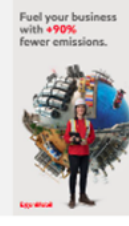
This ad ran without a required disclaimer.

This ad has multiple versions

See ad details

ExxonMobil
Sponsored

Carbon capture lets heavy industries use their fuel of choice. That's why we're advancing CCS projects around the world.



CORPORATE.EXXONMOBIL.COM
Let's deliver

Learn More

Fig. 4: Examples of two ExxonMobil ads running with the same copy. **Left:** a commercial ad launched on 1 December and live as of 4 December. **Right:** a version of the same campaign flagged and removed as running without the required 'social issues, elections and politics' disclaimer.

- **We found 30 active ads mentioning carbon capture from the Houston CCS Alliance since COP28 began.** Given the group's localised nature, their campaigns did not reference the summit explicitly – instead, they focus on promoting CCS technology in Texas. Data suggests a combined spend range of only USD \$3900- 6900 for the live ads, with some running since 14 November.

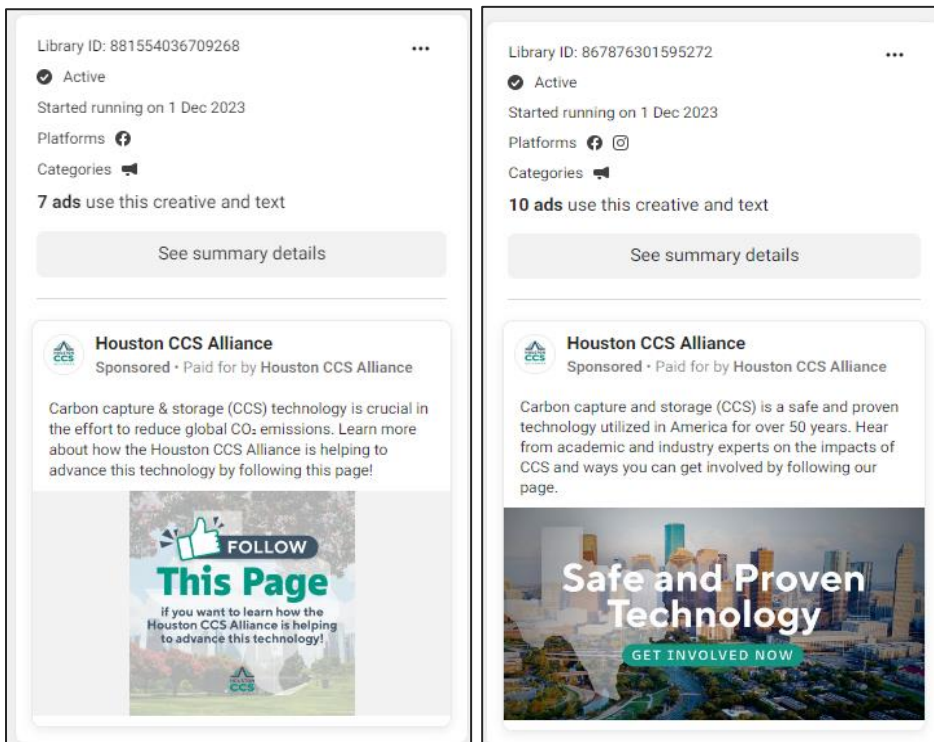


Fig. 5: Two ads labelled as related to 'social issues, elections and politics' on Meta, run by the Houston CCS Alliance since 1 December 2023 (and still live as of 7 December).

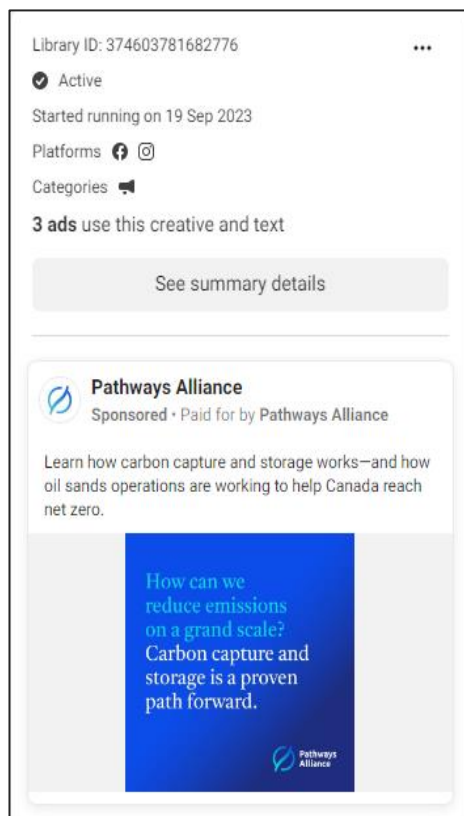


Fig. 6: Indicative advert from Pathways Alliance, a group consisting of oil companies Canadian Natural, Cenovus Energy, ConocoPhillips Canada, Imperial, MEG Energy and Suncor Energy.

- The **Pathways Alliance** – an initiative of Canada’s six largest oil sands producers – had 12 ads running at the time of analysis, with two using similar framing on CCS. Both are part of a longer campaign, active since 19 September and only targeting Canada. The spend range for these campaigns adds up to between CAD \$79,000 and 100,000 over the 3 months.
- The **Drax Group**, owner of the [UK’s largest power plant](#), had ads promoting [carbon capture solutions they plan to employ via ‘BECCS’](#) (bio energy with carbon capture). This campaign showed low spend – between GBP £800-1400 – for 6 ads online since 20 October, and focussed on the claimed regional benefits of deploying BECCS.
- We also found examples of ads *not* labelled as ‘social issues, elections or politics’ (SEP) and promoting false solutions. ‘SEP’-labelled content was often Anglo-centric or more general in nature – in contrast, a manual search revealed **COP-specific campaigns from the Chinese state-owned company Sinopec and the Saudi Ministry of Energy.**

- Sinopec advertised its COP28 pavilion in Dubai, which showcases a project on carbon capture and utilisation (CCUS); Saudi Arabia advertised its COP28 side event, **highlighting CCUS as one of Saudi Arabia’s key contributions to climate action.**

Library ID: 362748072968896

Active

Started running on 5 Dec 2023

Platforms

[See ad details](#)

Sinopec
Sponsored

On December 5th, SINOPEC announced on #COP28 China's Pavilion Side Events its practice in CCUS demonstration project and its scalable application across the whole CCUS industry chain, while releasing the first Report on Sinopec's 10-year Performance in Contributing to Joint Development of the Belt and Road, namely "CCUS Progress in China" and "The 3rd World Conference on Best Practices in Carbon Neutrality", presenting SINOPEC's CCUS development achievements and green and low-carbon actions for "Belt and Road".

As one of the co-organizers of "CCUS Progress in China" side event, SINOPEC also set up a CCUS sand table in the core area of COP28 UAE, which attracted visitors from all over the world. #SinopecNews



Library ID: 313637798221950

Active

Started running on 3 Dec 2023

Platforms

6 ads use this creative and text

[See summary details](#)

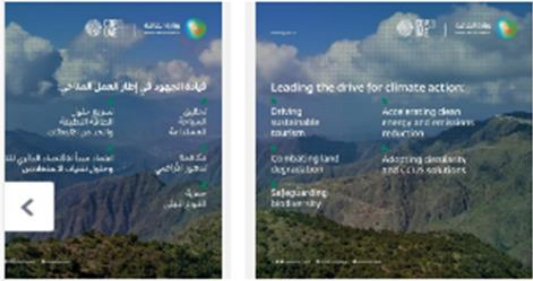
Ministry of Energy - Kingdom of Saudi Arabia
وزارة الطاقة
Sponsored

تعمل المملكة العربية السعودية بشكل دؤوب على عدة جبهات لقيادة العمل المناخي الطموح، على المستوى الوطني وداخل المنطقة.

سيتم تناول سلسلة من الموضوعات المهمة ضمن الجلسات الجانبية لـ #كوب28 للمملكة العربية السعودية، وإظهار جهود المملكة في العمل المناخي وقيادة حلول المستقبل.

Saudi Arabia is diligently working on several fronts to lead ambitious climate action, nationally and within the region.

A diversity of overarching themes will be covered within KSA's #COP28 side events, showcasing its efforts in generating climate action and driving the solutions of the future.



M.COM [Learn More](#) INSTAGRAM.COM [Learn More](#)

Fig. 7: Commercial ads placed by Sinopec (left) and the Saudi Energy Ministry (right) advertising CCUS as part of their COP28 presence. Screenshots are dated 6 December - commercial ads are not archived when no longer running on Facebook or Instagram.

Google and YouTube Search Results: Greenwash First, Science Later

- CAAD tested Google search results for terms like "carbon capture", using a VPN to locate the user in either the UK or US and clearing browser history to avoid biased results. **Before reaching any 'organic' results, we had to scroll past four 'sponsored posts' from fossil fuel companies like Saudi Aramco, Chevron, BP and ExxonMobil (among others).** Credible sources like MIT, Reuters, Wikipedia or Climate Home News were only served next to or after the industry content, much of which contained active greenwashing and/or misinformation about CCS.
- On YouTube, a search for "carbon capture and storage" featured a sponsored post from Enbridge with the [greenwashing phrase](#) "Lower-Carbon" in the headline. In tandem, [a Shell video](#) was consistently served among the top 'organic' search results in multiple geographies, including the US, UK, Canada, and Australia.

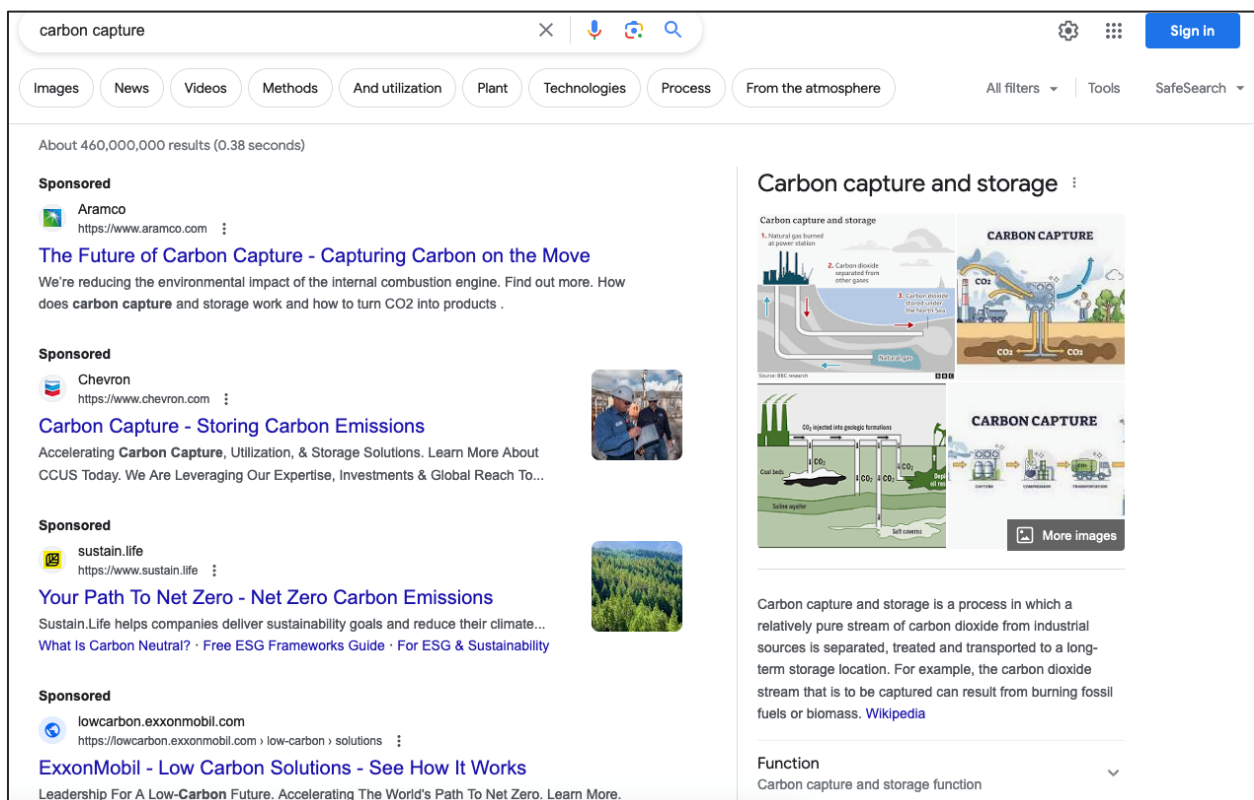


Fig. 8: Google search results for the term "carbon capture" when VPN locates user in the US -- top results include sponsored content from oil and gas companies Saudi Aramco, Chevron and ExxonMobil.

Space for Briefing Title

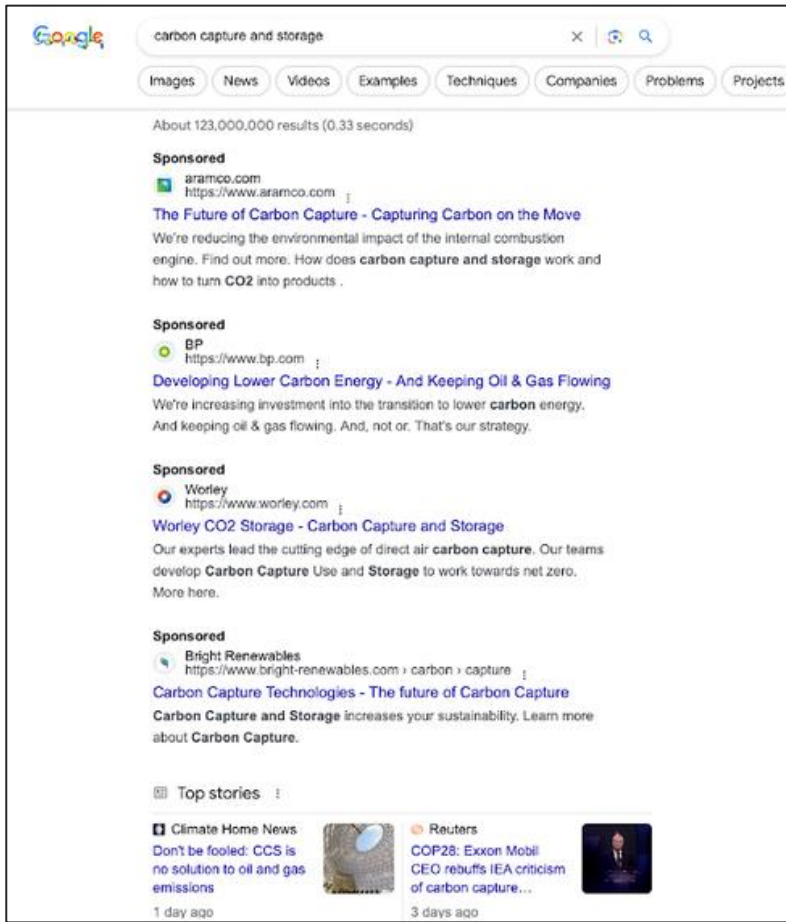


Fig. 9: Google search results for the term "carbon capture and storage" when VPN locates user in the UK – top results include sponsored content from oil and gas companies Saudi Aramco and BP.

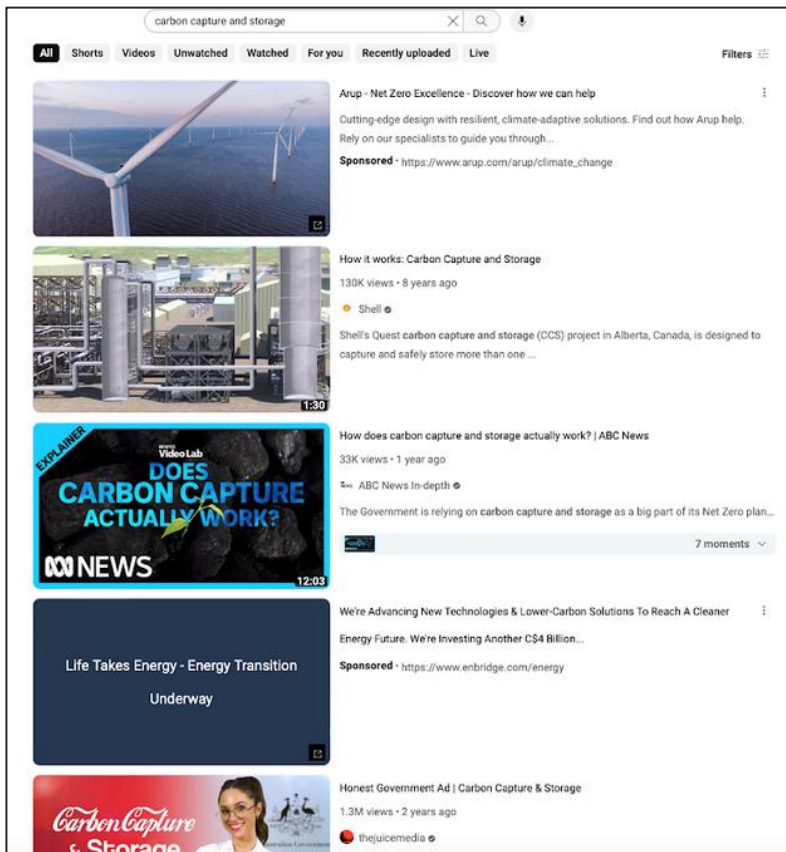


Fig. 10: YouTube search for "carbon capture and storage" surfaces a (non-paid-for) video from Shell as the second result, and sponsored content from Enbridge within the first page.

Facebook, Instagram and X/Twitter: Capturing Carbon, Not Capturing Hearts

Aside from well-worn critiques of renewable energy and electric vehicles, **discussion around climate solutions is rarely able to compete with broader ‘culture wars’ content that opposes climate action** – a trend observed for all three platforms in our research. Even so, CAAD pulled data for all mentions of false solutions keywords¹ across Facebook, Instagram and X/Twitter from 1 November 2023 onwards, to see who was engaged in this discussion and how.

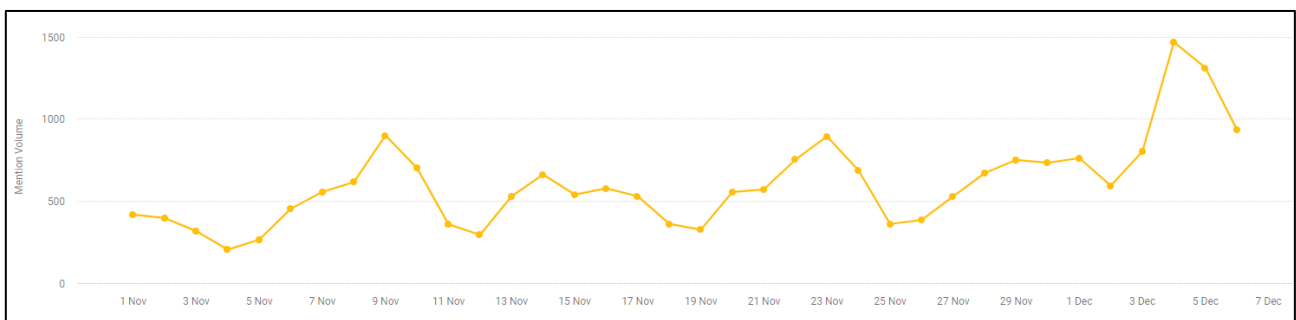


Fig. 11: Number of organic X/Twitter posts containing ‘false solutions’ keywords per day from 1 November–6 December.

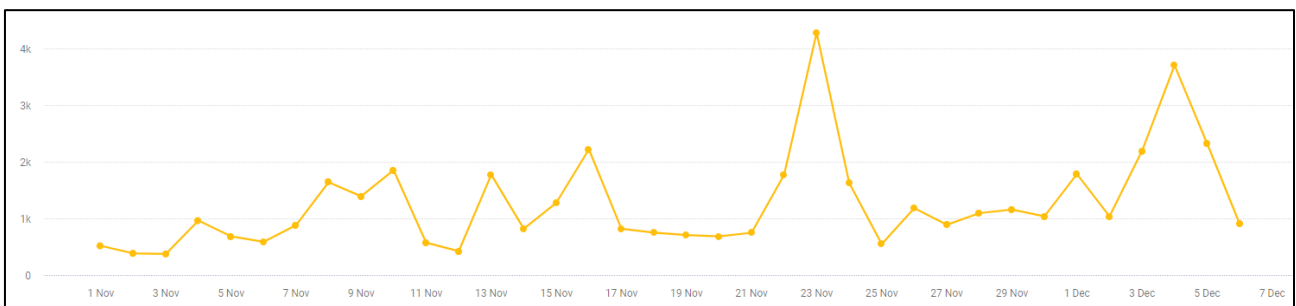


Fig. 12: Retweets of posts on X/Twitter containing ‘false solutions’ keywords per day from 1 November–6 December.

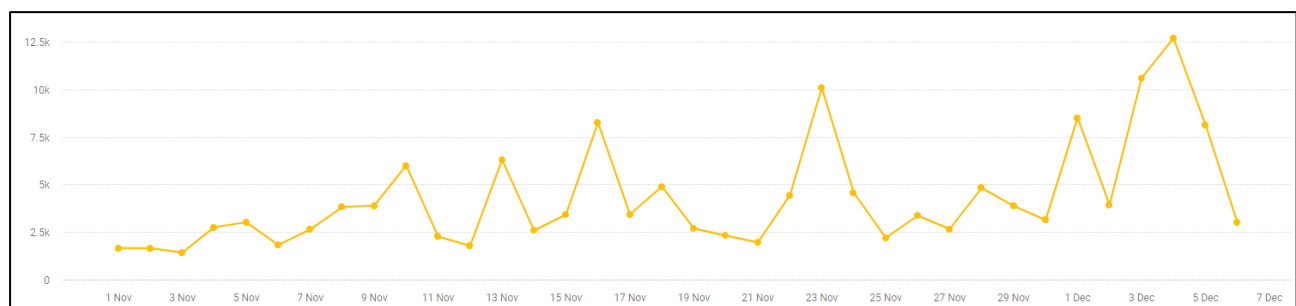


Fig. 13: Like of posts on X/Twitter containing ‘false solutions’ keywords per day from 1 November–6 December.

¹ Keywords used to collect data included the exact terms: carbon capture; carbon storage; carbon utilisation; carbon utilization; CO2 capture; CO2 storage; CO2 utilisation; CO2 utilization; capture and storage; capture & storage; carbon capture and storage; carbon dioxide removal; carbon removal; and direct air capture. We also collected content mentioning the terms ‘fossil’, ‘oil’, ‘gas’, ‘hydrogen’, ‘LNG’, ‘CO2’, ‘carbon’, ‘climate’, ‘greenwashing’ and/or ‘electricity’ when combined with ‘CCS’, ‘DAC’ and/or ‘CDR’. The acronyms by themselves are widely used across various fields and sectors, with no relation to carbon capture – as such, collecting only for those terms was not feasible.

Here's what we found:

- **For X/Twitter, engagement on 'organic' content was minimal, with hardly any posts crossing 1000 retweets.** The daily volume only increased significantly on 4 December, but there was a spike in retweeting a week before the summit started (23 November) – this was primarily driven by five posts *opposing* carbon capture and removal.
- Notably, two of these posts **did not oppose CCS for being a false solution, but rather condemned it as part of the wider 'cult of Net Zero' and conspiracies involving the World Economic Forum.** These were shared by Wide Awake Media (280k followers), [a popular account frequently posting conspiratorial content](#), and Australian Senator Malcolm Roberts (94k Followers) who has a [long history](#) of [statements](#) denying climate change. Their content was shared by other prominent or high-traction accounts, including a quote tweet from [Indian eco-activist Vandana Shiva](#) also opposing CCS. This highlights how quickly **conspiratorial content can jump into more mainstream discourse by successfully exploiting anti-corporate sentiments.**

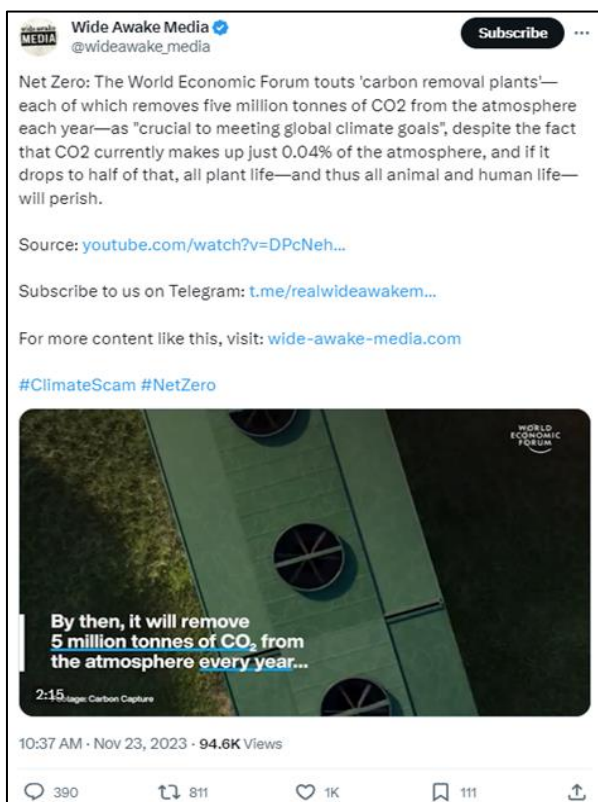
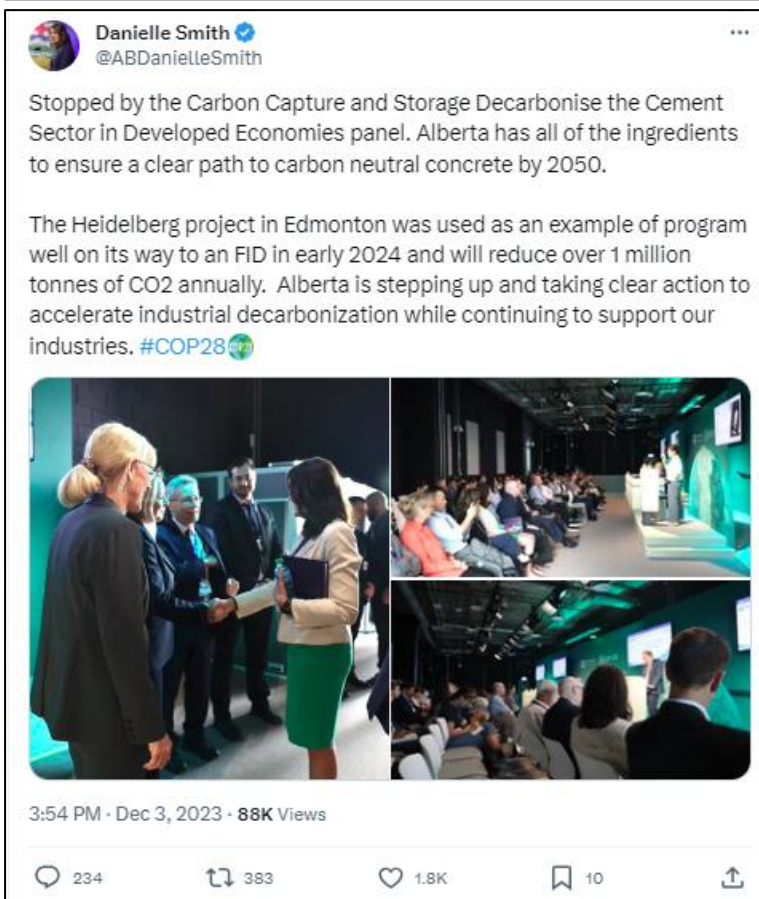


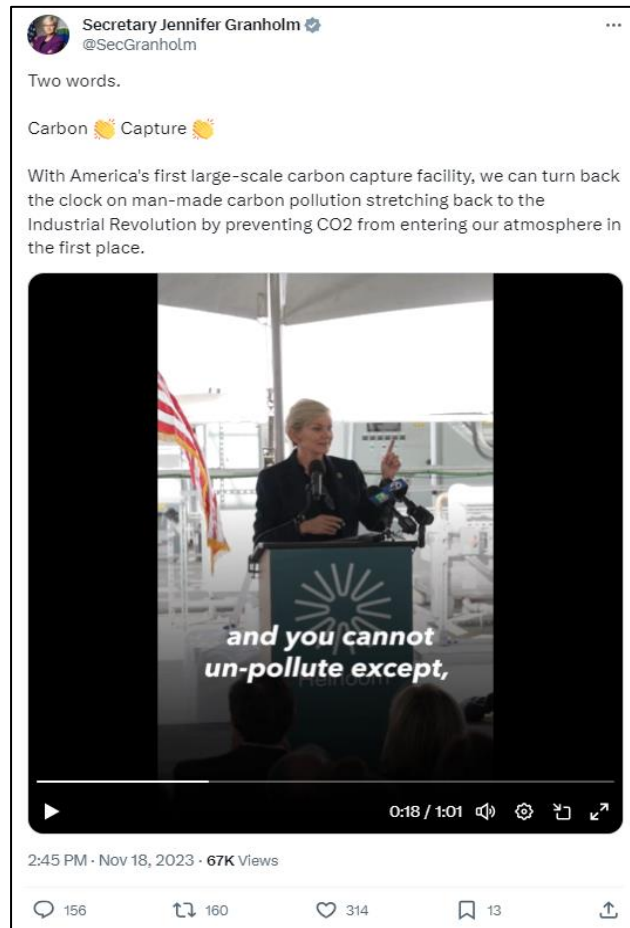
Fig. 14: High-traction posts on X/Twitter opposing CCS, but through a conspiratorial or misinformative lens. The left-hand image is from viral account Wide Awake Media (285k followers), which featured in [Deny, Deceive, Delay Vol.3](#) as a key amplifier of the hashtag #climatescam. The right-hand image is from Australian Senator and [climate sceptic](#) Malcolm Roberts (95k followers).

- On 3 and 4 December, as world leaders gathered in Dubai, some content discussing CCS gained higher levels of engagement on X/Twitter. This includes two supportive posts by [physicist and science YouTuber Sabine Hossenfelder](#), and Danielle Smith, [Premier of Canada's main oil-producing province of Alberta](#), respectively.
- The most liked post within this peak came from **US Republican Presidential candidate and climate denier Vivek Ramaswamy** (1.5m followers), who **opposed carbon capture via the unfounded 'Great Reset' conspiracy**. It focussed on a specific case in Iowa, where controversy around CCS mostly centres on the issue of ['eminent domain'](#). At time of writing, the post has 305k views, 9.9k likes and 2.5k retweets.



- Other prominent figures supporting carbon capture on X/Twitter were Scott Moe, Premier of Saskatchewan; US Energy Secretary Jennifer Granholm; and Indonesian President Joko Widodo. Those opposing CCS generally belonged to three broad groups: (1) academics, political figures, journalists and activists underlining the limitations of the technology and its use as a fig leaf by the fossil fuel industry; (2) a small group of activists arguing for natural carbon sinks instead of CCS; and (3) the aforementioned group of climate sceptics, for whom CCS or CDR are not necessary since 'climate change is not a problem'.

Fig. 15: Higher-traction posts supporting carbon capture posted in the opening days of COP28. The top image is from physicist and science YouTuber Sabine Hossenfelder (134.8k followers) and the bottom image from Albertan Premier (231.4k followers).



*Fig. 16: Organic posts supportive of carbon capture on X/Twitter. **Left:** Indonesian President Joko Widodo (20.2m followers) with 539.8k views, 2.5k likes and 350 retweets at the time of writing. **Right:** US Energy Secretary Jennifer Granholm (127.8k followers) promotes 'direct air capture' in a video from the Department of Energy, garnering 67k views, 314 likes and 160 retweets at the time of writing. In the video, Granholm states "we have been polluting with carbon our atmosphere since the Industrial Revolution, and you cannot un-pollute, except with this."*

- **On Facebook and Instagram, we found only 5,840 posts from 3,522 users containing our 'false solutions' keywords since 1 November 2023.** The vast majority were on Facebook and had garnered just 11,506 shares overall in that period – the content itself included both pro- and anti-CCS talking points.
- **Pro-CCS content was not generally popular across either platform.** However, one high-traction Instagram post included a screenshot claiming: "carbon capture is being used to create graphene oxide which then goes into the vaccines [needle emoji] to create nanotech . Trans humanism. Say no to graphine oxide!!!!". It has over 2.6k likes and was not unique in its '[screenshot-of-conspiracy-tweet](#)' format.
- **Posts from local news stations and politicians appeared on both platforms,** albeit with low engagement. This included [those supportive of](#) and [opposed to carbon capture](#) for various reasons.



Fig. 17: One of the few high-traction posts discussing carbon capture on either Facebook or Instagram, from account theofleury14 (43.9k followers). While opposed to the technology, pushback is framed through a false and harmful conspiracy involving the World Economic Forum and vaccine mandates.



- **Industry self-promotion was frequent, especially through lobby groups.** One prime example was an ExxonMobil Facebook post linking to a [press release](#) on carbon capture (see left). Replies included criticism (e.g. someone stating that "the cost of extracting fossil fuels plus the carbon capture is higher than generating energy from renewable sources") and support (e.g. two accounts echoing Exxon's talking points for reasons that are not immediately apparent).

Fig. 18: Example of an organic Facebook post from ExxonMobil promoting carbon capture.

Conclusion

Unfortunately, those genuinely committed to solving the climate crisis struggle to compete with the sheer spending power of the fossil fuel lobby. That makes it more vital than ever to have **governance, transparency and accountability regimes that insulate policymaking from corporate influence**. It is also why we need far more stringent criteria and safeguards around fossil fuel advertising, both on- and offline. Public understanding must be informed by the science, not warped by special interests. As for social media platforms, we should question why and where they profiteer off Big Oil and Gas, even if it remains the highest bidder.