

New Weather Institute complaint to the Advertising Standards Authority

Re: Saudi Aramco and Financial Times ‘advanced fuels’ adverts

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We are writing to lodge a complaint against Saudi Aramco’s recent advertising campaign promoting ‘advanced fuels’ as a solution for decarbonising both Formula One (hereinafter F1) as a sport, and the transport sector more broadly. The climate benefits of these liquid fuels are currently unproven and their mitigation potential is dubious for reasons outlined below. The ads, which we understand to be produced by Saudi Aramco and the Financial Times (hereinafter FT) also misleadingly depict the world’s largest producer of fossil fuels and its partner F1 as climate pioneers.

1. Description of the adverts

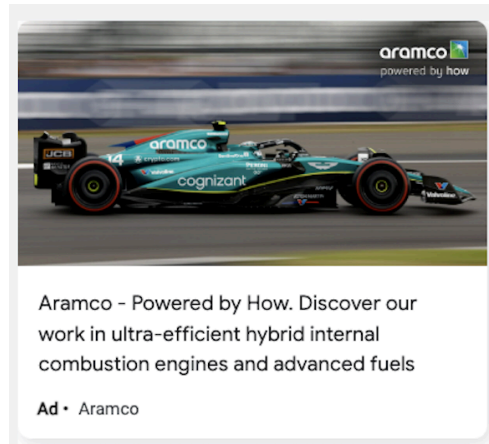
Ad. 1 An initial series of paid-for online display ads targeted UK audiences through Google’s products and publishing partners¹ from Nov. 22nd to Dec. 5th 2023 under the title ‘how can we drive progress on the track and on the road.’² These ads are part of a series of 2,100 ads

¹ Craig Silverman, Ruth Talbot, Jeff Kao and Anna Klühspies, “[How Google’s Ad Business Funds Disinformation Around the World](#)“, *ProPublica* (29 Oct. 2022; last consulted on 7 Feb. 2024).

² See for example The Saudi Arabian Oil company (Saudi Aramco), ads last shown in the UK on [26 Nov. 2023](#); [27 Nov. 2023](#); [29 Nov. 2023](#); [30 Nov. 2023](#); [5 Dec. 2023](#) according to the Google Ads Transparency

pushed by Aramco during COP28 via the Google ad network, according to Climate Action Against Disinformation.³

The ads all depict a racing car from the Aston Martin F1 team. One includes the following mention: “Discover our work in ultra-efficient hybrid internal combustion engines and advanced fuels”.⁴



Under this campaign, a video advert has also been running showing images of F1 races in different eras while a voice-over comments: ‘How can we drive progress on the track and on the road. Progress is a race that has no end. After every finish line, another challenge awaits. How can we continue to push innovation in a sport at the forefront of technology?’ The voice-over then pauses and a contemporary Aston Martin Team’s F1 racing car appears with the voice-over concluding: ‘This is how. Discover how Aramco and the Aston Martin Formula 1 team aim to meet Formula 1 sustainable fuels targets. Aramco Powered by How.’⁵

These ads are part of a broader ‘Powered by How’ campaign. The campaign ‘describes the company’s efforts to tackle questions relating to energy demand...’, according to Desmog.⁶

These ads refer⁷ to a page of Saudi Aramco’s website dedicated to the Aramco and Aston Martin strategic partnership,⁸ which includes several environmental claims, such as ‘The aim —

Center (last consulted on 7 Feb. 2024). Screenshots of the adverts can be viewed here: https://drive.google.com/drive/folders/1qa_z-5qeXpJ_S_X_nZcKx4f2eJ2xr46D?usp=sharing

³ Climate Action Against Disinformation, [COP. Look. Listen - Issue 5](#) (6 Dec. 2023; last consulted on 7 Feb. 2024).

⁴ See [Google Ads Transparency Center](#) (last shown 30 Nov. 2023; no longer accessible as of 7 Feb. 2024, [screenshot available of 1.7](#)).

⁵ A downloaded version of the ad is available [here](#). A longer version of the ad is hosted on YouTube at Aramco, “[How can we drive progress on the track and on the road](#)”, *Youtube* (18 Nov. 2022; last consulted on 7 Feb. 2024).

⁶ Sam Bright and T.J. Jordan, “[McCann to Make New Pitch for Aramco Oil and Gas Advertising Work](#)” *Desmog* (16 Nov. 2023; last consulted on 7 Feb. 2024) about Aramco, [Powered by How](#) (last consulted on 7 Feb. 2024).

⁷ See referral in the description under Aramco, “[How can we drive progress on the track and on the road](#)”, op. cit.

⁸ Aramco, [The Aramco and Aston Martin strategic partnership](#) (last consulted on 7 Feb. 2024).

to produce cars powered entirely by sustainable fuels by 2025 and achieve net zero as a sport by 2030.’

Ad. 2 Following the announcement of a strengthened sponsorship agreement with Aston Martin F1 team in December 2023,⁹ Saudi Aramco sponsored a video on Instagram¹⁰ specifically targeting British audiences.¹¹ The video is entitled: ‘Announcing the new Aston Martin Aramco Formula One Team, which will work on improving car performance, on or off the track, to support the advancement of new mobility solutions.’

A voice-over accompanies images of an F1 racing car with the following text: “Answers are not always straightforward. Sometimes just getting to one involves a few twists and turns. Maybe that’s why so few of us go down this road; much easier to just stay in our lane, never wondering “why”, never questioning “when”, never asking “how”? But then if no one asked questions, where would that get us? Our world is driven by questions and the people who ask them, people who know that the harder the question, the more likely we are to arrive at a potentially groundbreaking solution. Questions like how lighter, more durable components? How could we pioneer fuels that could lower emissions? How can we help with global net zero targets? Sure. There are easier paths to take, simpler questions to answer. But no one ever got anywhere just following everyone else. Introducing the Aston Martin Aramco Formula One® Team.”

Ad. 3 Another video ad is running on the FT website,¹² on Aramco’s ‘partner content’ dedicated page. The FT is headquartered in London¹³ and therefore within ASA’s remit. The video is entitled ‘Technologies shaping the future of transport.’

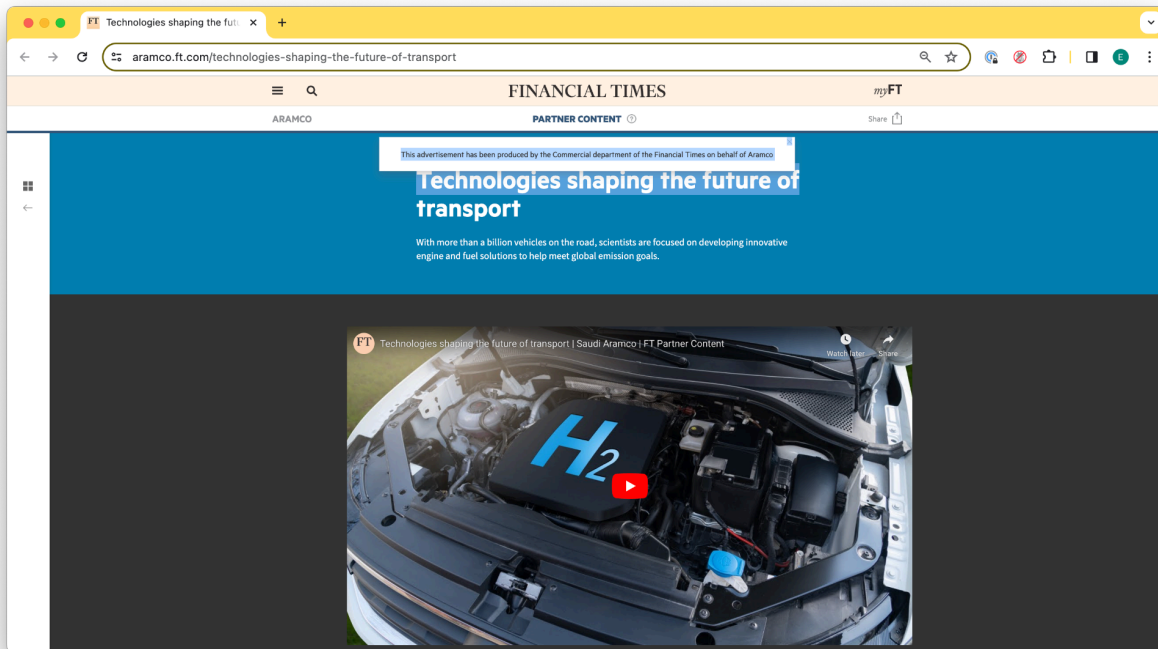
⁹ Aramco, “[Aramco extends successful partnership with Aston Martin Formula One® Team to become official title partner](#)” (Press release, 13 Dec. 2023; last consulted on 7 Feb. 2024).

¹⁰ Aramco, “[Announcing the new Aston Martin Aramco Formula One Team](#)” (20 Dec. 2023; last consulted on 7 Feb. 2024).

¹¹ Data from the [Meta ad library](#) no longer available (last consulted on 8 Jan. 2024; screenshots and recordings available [here](#)) - by clicking on ‘learn more’, the viewer would be referred to Aramco’s instagram account, *ibid*.

¹² FT partner content - Aramco, “[Technologies shaping the future of transport](#)” (last consulted on 7 Feb. 2024). Also visible on [FT partner content’s Youtube account](#) (5 Ap. 2022; last consulted on 7 Feb. 2024).

¹³ FT, [Terms and conditions](#) (last consulted on 7 Feb. 2024) at [1.1](#).



A caption indicates that: 'This advertisement has been produced by the Commercial department of the Financial Times on behalf of Aramco.' Both the FT and Saudi Aramco may therefore be considered as co-authors of this advert.

The video includes testimonies of both Aramco's chief transport technologist, Amer A. Amer, and F1's chief technology officer, Pat Symonds.

The first part deals with Saudi Aramco's role in reducing transport emissions: 'The world is about to witness a rapid rise in alternative powertrains as countries transition to a net-zero future, and this was reflected in the Glasgow Climate Pact signed at the COP26 summit. However, internal combustion engines are still expected to power 80 to 90% of the global road vehicle fleet in 2030. Improving existing engine and fuel technology therefore has an important role to play in reducing transport emissions.'

(Amer A. Amer, Chief transport technologist, Aramco) *"There is no silver bullet to address the challenges of future mobility. Now while electric vehicles have a role to play, they are only as clean as the electricity used to charge them. This is hardly zero emissions."* Aramco believes it's time to concentrate efforts on trying to make vehicles more carbon efficient, and is exploring potential solutions such as mobile carbon capture - where vehicle emissions are captured and stored onboard.

(Amer A. Amer) *"The latest variant of our mobile carbon capture technology can capture up to 40 per cent of Co2 emitted from a vehicle's exhaust. We have done that on a class eight heavy duty truck vehicle."*

The second part is F1-specific: ‘Aramco’s ambition to find tangible emissions solutions for road vehicles comes to the fore in its partnership with F1. It’s become F1’s sixth global sponsor and has also partnered with the Aston Martin F1 team to help the team meet Formula 1’s sustainable fuels goal, as well as develop fuel-efficient engine technologies for road vehicles and more efficient hybrid engines in motorsport.

(Pat Symonds, Chief Technology officer, Formula 1) *“Aramco, in my experience, are incredibly farsighted. So they really have joined our journey to decarbonisation of our sport. They are doing some incredible work on engine efficiency so that whatever fuel is in an engine that you’re using less of it.”* And developing engine technology has to be the driver. If the world really wants to face the current environmental issues, head on.

(Pat Symonds) *“That’s why we believe in sustainable fuels, in low carbon fuels, because if we can make a fuel that is a true drop-in fuel - in other words, a fuel that can be used in any one of those billion vehicles that are out there - then we really do start to tackle the CO2 problem.”*

2. The audiences targeted by the adverts

All adverts targeted in the present complaint fall within the definition of marketing communications according to Section 2 of ASA’s Code of Non-broadcast Advertising and Direct & Promotional Marketing (hereafter CAP Code), as they are identified as such by both the advertiser, Saudi Aramco, and publishers (Google network, Instagram/Meta and Financial Times).

The placement of these ads reflects Saudi Aramco’s targeting of several audiences: sports (F1) fans through social networks (Instagram) and the Google platform, consumers, business readers and policy-makers through the FT.

As the Director General of the business association FuelsEurope puts it: ‘Motorsport is a great test bed but it’s also a great demonstrator. And it’s a demonstrator that got millions of fans worldwide with great communication channels and those fans are influencers because they’re trusted by other people to talk about cars, mobility, future of energy, etc.’¹⁴

Financially, Saudi Aramco is deeply involved in F1. F1 and Saudi Aramco entered into a sponsorship agreement in 2020, which stipulates, among other things, ‘the advancement of sustainable fuels.’¹⁵ Saudi Aramco has also entered a sponsorship agreement with F1 team

¹⁴ FuelsEurope, [“DG FuelsEurope on the role motorsports can the in the energy transition” Youtube](#), (15 March 2023) at 0:34 and beyond (last consulted on 7 Feb. 2024). Aramco is not a member of FuelsEurope, but its Director General John Cooper’s appearance in another FT-produced advert. See FT partner content - Aramco, [“How the internal combustion engine is key to the transport of tomorrow”](#) (last consulted on 7 Feb. 2024).

¹⁵ F1, [Aramco. Global Energy Partner](#) (last consulted on 7 Feb. 2024).

Aston Martin together with tech firm Cognizant Since December 2023, Saudi Aramco has become the Aston Martin team's sole sponsor to be included as a 'title partner.'¹⁶

As such, F1 provides a platform for Saudi Aramco to spread its messages and access a broad audience, as it claims on the landing page of the first series of ads: 'As global sponsors of Formula 1®, the sporting league adored by more than 1.56 billion people worldwide, we've been able to showcase our drive to push boundaries in fuel performance, and our commitment to produce better, cleaner and future-focused transport technology.'¹⁷ In the UK, the fan base of F1 is reportedly estimated to be more than 3.2 million people according to 2021 data released by BARB and analysed by Motorsport Broadcasting.¹⁸

F1's viewers constitute a prime, high net-worth and influential audience for automotive-related commercial communication. By focusing on the potential for advanced fuels to contribute to road decarbonisation and connecting the improvement of F1 car engine performance to road mobility (Ads 2 and 3), these ads target a wider audience: consumers of automotive industry products. The use of the FT brand of the webpage that hosts the ad may confuse the reader, who may legitimately deem it editorial content. A Boston University study published in 2018 found that fewer than one in 10 people recognized native advertising as advertising, rather than reporting.¹⁹

It is all the more crucial that this communication is clear, accessible and trustworthy, as concluded in ASA and Jigsaw's qualitative research report on environmental claims in advertising.²⁰ The report highlights the difficulties for consumers to navigate advertising in the hybrid and electric motoring sector and the risks for them to be misled, for instance on the type of cars that are displayed, which is particularly pertinent in the case of Saudi Aramco's ads.

Saudi Aramco's 'showcase' of advanced fuels goes beyond F1's fans and also aims at targeting policy-makers²¹ and business audiences, which are the FT's primary audience.²² These commercial campaigns occur in a context whereby investigative journalists exposed Saudi

¹⁶ [Aramco extends successful partnership with Aston Martin Formula One® Team to become official title partner](#), *op. cit.*; Alan Baldwin, "[Aramco becomes Aston Martin's sole F1 title sponsor](#)", *Reuters* (14 Dec. 2023; last consulted on 7 Feb. 2024).

¹⁷ Aramco, [The Aramco and Aston Martin strategic partnership](#), *op. cit.*

¹⁸ David Nelson, "[F1's UK audience figures rise in 2021, but series sees worldwide dip](#)" in *Motorsport Broadcasting* (25 Feb. 2022, last consulted on 7 Feb. 2024).

¹⁹ Michelle A. Amazeen, Bartosz W. Wojdowski, "[The effects of disclosure format on native advertising recognition and audience perceptions of legacy and online news publishers](#)", *Journalism* Vol. 21 No 12 (2018; last consulted on 7 Feb. 2024) p. 2.

²⁰ ASA and JIGSAW Research, [Environmental claims in advertising: Qualitative research report](#) (20 Oct. 2022; last consulted on 7 Feb. 2024) pp. 3-4, 37.

²¹ According to a 2023 EU Media Poll, the Financial Times ranks as the third most influential EU media source in "[EU Media Poll 2023: What Influences the Influencers?](#)", *BCW Belgium* (12 October 2023; last consulted on 7 Feb. 2024).

²² FT, [From corporate to consumers, the FT reaches 22.4 million readers every month](#) (last consulted on 7 Feb. 2024).

Aramco²³ and F1's²⁴ lobbying to slow down the transition to electric vehicles in the transport sector. According to SourceMaterial, citing obtained F1 lobbying documents: 'Formula 1 has deployed resources in Brussels to lobby politicians on issues vital to Saudi interests. Over the past year, the racing group has used closed-door meetings to urge top EU officials to backtrack on climate-friendly plans in favour of "e-fuels" that will help keep the internal combustion engine alive—and an autocratic monarchy in power.'²⁵

Similar to the ASA's finding in the 2023 Repsol ruling, both consumers and business readers 'would be interested in seeking out businesses, including oil and gas companies, who (are) making meaningful progress towards transitioning away from higher-carbon products and services, including those developing alternative, synthetic fuels.'²⁶ Still, these audiences are 'unlikely to be aware of the specific details of such technology',²⁷ for example the limited role that 'advanced fuels' can play in the decarbonisation of road transport.

3. Saudi Aramco and the FT's misleading statements and material omissions in the adverts

We believe these ads are misleading and should be banned for breaching several provisions of the ASA CAP Code and 2023 guidance on Environmental Claims and Social Responsibility²⁸ and General Green Claims,²⁹ which clearly state that adverts making environmental claims are likely to mislead if they omit material information.

The Saudi Aramco ads not only omit significant information about the overall impact of its core business activities, but they also contain misleading and scientifically unsupported claims on the role of 'advanced' fuels in decarbonising both F1 as a sport, and the transport sector as a whole.

3.1 The ads misleadingly depict the world's largest corporate oil producer as a climate pioneer

In these ads, Saudi Aramco uses 'advanced fuels' as a means to appear as a champion of climate action when it states, for instance, that its 'aim(s) to meet Formula 1 sustainable fuels

²³ Hiroko Tabuchi, "[Inside the Saudi Strategy to Keep the World Hooked on Oil](#)", *New York Times* (21 Nov. 2022; last consulted on 7 Feb. 2024).

²⁴ SourceMaterial with Tortoise, "[Trojan Horsepower: Formula 1 and the Saudi oil lobby](#)" (7 Dec. 2023; last consulted on 7 Feb. 2024).

²⁵ Ibid.

²⁶ [ASA Ruling on Repsol SA](#) (7 Jun. 2023; last consulted on 7 Feb. 2024).

²⁷ Ibid.

²⁸ Committee of Advertising Practices, "[The environment: misleading claims and social responsibility in advertising Advertising Guidance \(non-broadcast and broadcast\)](#)" (last consulted on 7 Feb. 2024) pp. 5-6, 13.

²⁹ ASA Environmental claims: General "Green" claims - [Advice online](#) (22 Dec. 2022, last consulted on 7 Feb. 2024).

targets' (ad. 1), 'how can we help with net zero targets' (ad. 2) or when it broadly locates its stated action within the framework of the Glasgow Climate Pact (ad. 3).

Saudi Aramco is Saudi Arabia's national oil company. It is deemed the world's 'largest oil producer'³⁰ and the 'largest corporate greenhouse gas emitter.'³¹ The company is currently targeting a maximum production capacity of 12 million barrels per day.³² Saudi Arabia's climate track record includes attempts to water down, if not undermine, the aforementioned Glasgow Pact.³³ More recently, investigative reporters uncovered an alleged Saudi government plan to artificially raise oil demand worldwide and lock in developing countries to fossil fuel intensive modes of transport.³⁴ Over the years, Saudi Aramco lobbying to lock-in oil and gas infrastructures around the world has repeatedly been publicly exposed.³⁵

In September 2023, Carbon Tracker Initiative published an updated appraisal of the 25 largest listed oil and gas companies' climate targets, in which Saudi Aramco ranked last. The company is described as 'the only (one) to limit emissions reduction targets to assets that it wholly owns and operates. It has set no baselines, pledging only to reduce emissions against amounts forecast under business-as-usual scenarios.'³⁶

The company has a track record of putting forward false or cosmetic solutions as a means to greenwash its business and counter the development of binding regulations.³⁷ In 2020, the company withdrew an advertising campaign fronting its sustainability-related efforts after the

³⁰ FitchRatings, [Saudi Arabian Oil Company](#) (29 Jan. 2024; last consulted on 7 Feb. 2024); Laura He, "[World's largest oil producer plans to deepen its push into China](#)", *CNN Business* (4 Jan. 2024; last consulted on 7 Feb. 2024).

³¹ Maeve O'Connor, "[Oil giant Aramco still doing minimum to tackle emissions](#)", Carbon Tracker Initiative (13 Jul. 2022; last consulted on 7 Feb. 2024); Working Group on the issue of human rights and transnational corporations and other business enterprises et al., [Saudi Arabian Oil Co. JAL. AL OTH 53/2023](#) (26 June 2023; last consulted on 7 Feb. 2024) p. 3.

³² Maha El Dahan and Yousef Saba, "[Saudi Arabia orders Aramco to lower oil capacity target](#)", Reuters (30 January 2024). Aramco, [Aramco receives directive to maintain MSC at 12 MMBD](#) (30 Jan. 2024; last consulted on 7 Feb. 2024).

³³ Joanna Depledge, Kari De Pryck and J. Timmons Roberts, [CSSN Issue Paper: Decades of Systematic Obstructionism: Saudi Arabia's Role in Slowing Progress in UN Climate Negotiations](#) (Nov. 2023; last consulted on 7 Feb. 2024) p. 7; AP, "[Saudi Arabia denies playing climate saboteur at Glasgow](#)" *CNBC* (11. Nov. 2021, last consulted on 7 Feb. 2024).

³⁴ Alex Thomson, "[Undercover filming highlights Saudi plan to artificially raise oil demand](#)", *Channel 4* (27 nov. 2023; last consulted on 7 Feb. 2024).

³⁵ Andrew Kersley, '[Everything You Need to Know About Saudi Aramco](#)', *Desmog* (16 Nov. 2023; last consulted on 7 Feb. 2024). On the company's opposition to 'the energy transition in favor of a continued role for fossil fuels in the future energy mix' see also LobbyMap, [Aramco](#) (last updated in 2023; last consulted on 7 Feb. 2024). On the company's funding of 'research aimed at keeping gasoline cars competitive or casting doubt on electric vehicles', see also Hiroko Tabuchi, "[Inside the Saudi Strategy to Keep the World Hooked on Oil](#)", *op. cit.*

³⁶ Saidrasul Ashrafkhanov, Mike Coffin, "[Absolute Impact 2023](#)", Carbon Tracker Initiative (Sept. 2023; last consulted on 7 Feb. 2024) p. 14.

³⁷ Hiroko Tabuchi, "Inside the Saudi Strategy to Keep the World Hooked on Oil", *op. cit.*; Concawe-Aramco, 'E-fuels: A techno-economic assessment of European domestic production and imports towards 2050', Report no 17/22 (Nov. 2022; last consulted on 7 Feb. 2024).

ASA received 61 complaints.³⁸ In June 2023, the UN Working Group on Business and Human Rights and several UN Special Rapporteurs sent communications to Saudi Aramco and its main financiers in which they expressed their ‘most serious concern regarding the adverse impacts on human rights caused by activities such as the exploitation of fossil fuels which contribute to climate change. Furthermore, we are concerned about how Saudi Aramco’s actions may contribute to undermining the Paris Agreement and international cooperation in the face of the existential threat to human rights posed by climate change (...) We are also concerned by the allegations of greenwashing, in view of the negative impacts that misinformation and disinformation on climate change can have on mitigation and adaptation efforts—as well as on the wider enjoyment of all human rights. Businesses should refrain from supporting and/or engaging in public information campaigns based on inaccurate, misleading, and unfounded assertions that harm the ability of States and the public to make informed decisions pertaining to climate change.’³⁹

Saudi Aramco nonetheless continues to engage in public disinformation, as illustrated by these marketing campaigns promoting Saudi Aramco’s development of ‘advanced fuels’ as ‘low-carbon’ or ‘sustainable’. The specific advertising of this technology suggests it is an essential element of its sustainability strategy. Yet, according to Saudi Aramco’s last 2022 sustainability report, the development of synthetic fuels is one of the many focus areas covered by a \$1.5 billion Sustainability Fund,⁴⁰ which is meant to support the company’s achievement of its 2050 net-zero target (covering only its scope 1 and 2 emissions). Within the fossil fuel industry, Scope 3 emissions tend to account for between 80 and 95% of individual companies’ total carbon emissions.⁴¹ The multi-year Sustainability Fund amounts to less than 1% of Saudi Aramco’s \$161.1 billion annual net income for 2022 only.⁴² Saudi Aramco’s 2022 annual report provides no information to investors of any actual plans to start commercial-scale production of either advanced fuels, synthetic fuels or e-fuels any time soon, which counters the impression created through the advertising campaign.⁴³

The adverts make no balancing or qualifying claims about the proportion of Saudi Aramco’s business that is ‘green’ compared to environmentally harmful practices, and use creative content that strengthens viewers’ perceptions that the company is a climate pioneer (see below). There is no information regarding climate and environmental harms necessarily associated with Saudi Aramco’s oil production in the ads.

³⁸ Matthew Taylor, “[Saudi Aramco removes 'sustainable' oil adverts after complaints](#)”, *The Guardian* (29 Ap. 2020; last consulted on 7 Feb. 2024). See also [ASA rulings re Aramco Overseas Oil Company BV](#) (last consulted on 7 Feb. 2024).

³⁹ [Saudi Arabian Oil Co. JAL. AL OTH 53/2023](#), op. cit., p. 6.

⁴⁰ Aramco [Sustainability Report 2022](#) (last consulted on 7 Feb. 2024) p. 31.

⁴¹ Wood Mackenzie, “[Few oil and gas companies commit to Scope 3 net zero emissions as significant challenges remain](#)”, Wood Mackenzie (28 October 2022).

⁴² Aramco, [Annual report 2022](#), p. 8 (our calculation).

⁴³ The only significant mention of synthetic fuels can be found in the Chairman of the Board of Directors’ message, as a means to support ‘customers’ efforts to decarbonise’ in [Annual report 2022](#), Ibid. p. 9.

Such omissions sharply contrast with ASA's Guidance on Misleading Environmental Claims and Social Responsibility, which makes it clear that “where businesses are responsible for a significant amount of harmful emissions or other environmental harm, ads which reference specific environmentally beneficial initiatives are more likely to mislead if they do not include balancing information about the business’s significant ongoing contribution to emissions or other environmental harm.”⁴⁴

3.2 The ads promote various concepts under the broad category of ‘advanced fuels’ in an interchangeable and confusing manner

The ads refer to a mix of fuel-related concepts, as though they were the same: ‘advanced fuels’ in [Ad. 1.7](#), that are defined as ‘including low carbon synthetic or E-Fuels’ on the Aramco and Aston Martin strategic partnership webpage, which the ads refer to⁴⁵; ‘fuels that could lower emissions in Ad. 2; ‘drop-in fuels’, ‘sustainable fuels’ and ‘low carbon fuels’ in Ad. 3.

Some of these terms are meant to refer to technological features (‘synthetic’ and ‘e-fuels’) while others constitute either environmental (‘low-carbon’ and ‘sustainable’) or performance (‘advanced’) claims. ‘Synthetic fuels’ and ‘e-fuels’ are actually not synonymous. Synthetic fuels broadly cover ‘liquid fuels that basically have the same properties as fossil fuels but are produced artificially’, such as biofuels, solar fuels and e-fuels.⁴⁶ The e-fuels category is itself far from being a homogenous category, as acknowledged by Saudi Aramco itself in a 2022 report co-authored with the fossil fuel-funded think tank Concawe.⁴⁷ The carbon footprint of these different fuels depends on the type of energy used to produce their various components, as they may not necessarily be made out of renewable energy (see section 3.3 below).

The ads channel the idea that ‘advanced’ fuels amount to a climate change benefit. Yet, there is no automatic connection between the technological and environmental performance of these fuels. In this regard, the ads contain important material omissions, as none of these concepts are ever defined and are used interchangeably.

⁴⁴ CAP, [The environment: misleading claims and social responsibility in advertising Guidance](#), op. cit. p. 8 (last consulted on 7 Feb. 2024).

⁴⁵ Aramco, [The Aramco and Aston Martin strategic partnership](#), op. cit.

⁴⁶ Synhelion, [Synthetic fuels explained](#) (last consulted on 7 Feb. 2024); Vishal Ram and Surender R. Salkuti, “[An Overview of Major Synthetic Fuels](#)”, *Energies*, Vol. 16 No. 6 (2023, last consulted on 7 Feb. 2024) 16 p. 2834.

⁴⁷ Concawe-Aramco, [‘E-fuels: A techno-economic assessment of European domestic production and imports towards 2050’](#), Report no 17/22 (Nov. 2022; last consulted on 7 Feb. 2024) xii: the report considers ‘different e-fuels pathways (...): ‘e-hydrogen (liquefied and compressed), e-methane (liquefied and compressed), e-methanol, epolyoxymethylene dimethyl ethers (abbreviated as OME3-5), e-methanol to gasoline, e-methanol to kerosene, e-ammonia, and e-Fischer-Tropsch kerosene/diesel (low temperature reaction).’ About Concawe’s ties with the fossil fuel industry see Concawe, [who we are](#) (last consulted on 7 Feb. 2024).

3.3 The ads spread disinformation on the role of low-carbon fuels' in decarbonising the transport sector

The FT ad (ad. 3) also fronts chief engineers who speak with authority about the topic and are likely to inspire the audience's trust. Amer A. Amer, Saudi Aramco's chief transport technologist, states: 'There is no silver bullet to address the challenges of future mobility. Now while electric vehicles have a role to play, they are only as clean as the electricity used to charge them. This is hardly zero emissions.' This is followed by (voiceover): 'Aramco believes it's time to concentrate efforts on trying to make vehicles more carbon efficient.' F1's Chief technology officer later concludes by praising 'sustainable fuels, (...) low carbon fuels' as a technology that is key for 'tackl(ing) the CO2 problem.'

The scientific language, as well as both the content and the imagery, give consumers the impression that the ads are science-based.

Unlike for electric vehicles (hereinafter EVs), the video does not at all address the source of energy used for the production of what seem to be e-fuels, in light of the displayed hydrogen engine. The most frequent types of synthetic fuels are 'drop-in' fuels that combine captured CO2 (or carbon dioxide) with hydrogen. Hydrogen may be either derived from renewable sources of energy or fossil fuels, such as gas-made 'blue hydrogen'.⁴⁸ The process of capturing CO2 may also be derived from the production of fossil fuels or byproducts. 95% of all hydrogen globally is produced from fossil fuels.⁴⁹

The context of the ads implies through a futuristic tone and imagery, as well as the references to 'low carbon' and 'sustainable' fuels, that the source of the fuels is renewable. This is not substantiated by any material information about the sources of energy used to produce either component of the synthetic fuel.

As such, the video makes an unbalanced comparison between an implied version of electric propulsion that does not come from clean energy and a combustion engine run with e-fuels, the characteristics of which are not revealed. Yet, according to the US Department of Energy, EVs use significantly less energy than conventional combustion engine vehicles to cover the same distance, notwithstanding the source of grid power.⁵⁰ According to Transport & Environment,

⁴⁸ Aramco, [How can we deliver one of the fuels of the future](#) (last consulted on 7 Feb. 2024).

⁴⁹ US Office of energy efficiency and renewable energy, [Hydrogen Fuel Basics](#) (last consulted on 7 Feb. 2024).

⁵⁰ US Department of energy's fuel economy data, EVs convert over 77% of the electrical energy from the grid to power at the wheels (in "[All-Electric Vehicles](#)"). Conventional gasoline vehicles only convert about 12%–30% of the energy stored in gasoline to power at the wheels (in "[Where the Energy Goes: Gasoline Vehicles](#)"). EVs have further been found to have lower emissions on a lifecycle basis than conventional combustion engine vehicles, across a wide range of fossil-fuel dependent grids globally, and this emissions gap will only widen as grids decarbonise. See George Bieker, "[A global comparison of the life-cycle greenhouse gas emissions of combustion engine and electric passenger cars](#)", *ICCT* (20 Jul. 2021, last consulted on 7 Feb. 2024).

grid-powered EVs produce 5 times less emissions than grid-produced e-fuels, simply through better energy efficiency⁵¹ - a comparison that Saudi Aramco omits.

The comparison is further misleading as, by solely focusing on CO₂ emissions, Saudi Aramco and the FT omit to address other types of emissions that contribute to environmental harm. Synthetic e-fuels have been shown to emit equal amounts of nitrogen oxides (NO_x) as standard fossil road fuels in laboratory tests.⁵² As such, this fuel type provides no solution to the air pollution problem that kills hundreds of thousands of people a year,⁵³ and is just as much a reason for the policy drive towards electric vehicles alongside decarbonisation.⁵⁴ The Concawe-Aramco report also describes ammonia, which can be a component of e-fuels, as 'highly toxic and harmful to human life as well as presenting risks to the environment through its toxicity to aquatic life.'⁵⁵ To mitigate risks related to the social acceptance of e-fuels, the report identifies as a key message the need for 'significant changes to safety, security and environmental regulations.'⁵⁶

The adverts also create confusion between the decarbonisation of fuels and the decarbonisation of road transportation. A hypothetical synthetic fuel made out of 100% renewable energy does not mean that road transportation would be 100% decarbonised. As 'drop-in fuels', these fuels are intended to co-exist with regular fuels, thus locking in road transport into oil and combustion engines.⁵⁷

The benefit of reusing existing production assets and combustion engines has clearly been stated by the company's Chief of Research & Development at an industry conference alongside a Motors Festival in the South of France. During his intervention, Gérard de Nazelle explained that synthetic fuels can be produced by Saudi Aramco at a competitive price by reusing existing fossil fuel assets, contrary to synthetic fuels made out of green hydrogen, which would not be competitive in the short term.⁵⁸ The above mentioned Concawe-Aramco report is explicit on maintaining combustion engines: 'One critical benefit from the use of liquid e-fuels is that it minimises the need for change on the part of the end-use. E-gasoline, e-kerosene and e-diesel can be produced as drop-in fuels and obviate the need for changes to end-use applications using internal combustion engines.'⁵⁹

⁵¹ The efficiency gap between EVs and cars fueled with renewable synthetic fuels is meant to increase by 2050, in T&E, [Rewarding renewable efficiency](#) (Feb. 2022; last consulted on 7 Feb. 2024) p. 2.

⁵² Anna Krajinska, "[Magic green fuels](#)", *Transport & Environment* (2021, last consulted on 7 Feb. 2024) pp. 3-4; T&E, [E-fuel cars are not zero emission](#) (Oct. 2023; last consulted on 7 Feb. 2024) p. 4.

⁵³ Susan Anenberg, Joshua Miller, Daven Henze, Ray Minjares, "[A Global Snapshot of the Air Pollution-Related Health Impacts of Transportation Sector Emissions in 2010 and 2015](#)", *ICCT* (26 Feb. 2019; last consulted on 7 Feb. 2024) p. i.

⁵⁴ Anna Krajinska, *Ibid.*

⁵⁵ Concawe-Aramco, *op. cit.*, p. 140.

⁵⁶ *Ibid.*

⁵⁷ A similar conclusion can be drawn from Aramco's corollary 'focus on the production of ultra-efficient hybrid internal combustion engine', as mentioned in the ads and on [The Aramco and Aston Martin strategic partnership](#), *op. cit.*

⁵⁸ Pau Motors Festival, [Second edition of the high-level European forum for the future of mobilities](#) (12 May 2023; last consulted on 7 Feb. 2024) at 3:33:30.

⁵⁹ Concawe-Aramco, *op. cit.*, p. 140.

If Saudi Aramco were serious about producing synthetic fuels from renewable energies as a solution for decarbonising road transportation, it would consider them as a material risk for the company and its investors, due to their capacity to reduce oil demand. Yet, the company is silent about it in its annual report, while it deems the electrification of transportation a material risk for its business operations.⁶⁰

The mentions of ‘future mobility’ in the FT ads in a broad sense, and the use of scenes of traffic lead the viewer to think that liquid fuels and other mentioned technologies could be applied at scale within a reasonable timeframe to decarbonise road transportation. However, the production of e-fuels requires immense amounts of energy to produce. A study by the International Council on Clean Transportation shows that 48% of this energy is lost in the conversion process to a liquid fuel,⁶¹ which means diverting renewable energy away from the grid and EVs to produce e-fuels would disrupt progress in reducing emissions. From an economic perspective, decarbonising cars with e-fuels would cost five times as much as the battery-electric route, according to Transport & Environment.⁶² Saudi Aramco and Concawe explicitly identify that the risk for e-fuels production cost to be higher than biofuels or fossil fuels is likely to be high for road transportation, which they intend to mitigate via ‘lobbying for support policies and investments to reduce costs.’⁶³ Against this background, it contradicts basic energy economics to think that e-fuels are the ‘future of transport’, as claimed in the title of the FT video.

All these misleading statements and material omissions contrast with the IPCC’s unambiguous conclusions in the 2022 Working Group 3 report on mitigation options. The scientists found that in order to meet safe temperature goals as described in the Paris Agreement, we need to end sales of vehicles with combustion engine technology, and replace them with electric mobility (public and private) and active mobility (e.g. cycling and walking).⁶⁴ Electric vehicles powered by low-emissions electricity offer the largest decarbonisation potential for land-based transport, on a life cycle basis (high confidence). Synthetic fuels are not considered central to decarbonising road transport, since the IPCC notes ‘that the total energy efficiency (of synthetic fuels) is lower than that of electric vehicles.’⁶⁵

By presenting its work on liquid fuels as a potentially better solution than EVs for the decarbonisation of road transportation, Saudi Aramco therefore ignores the broad scientific consensus on the need to rapidly phase out internal combustion engine vehicles. Instead, Saudi

⁶⁰ [Annual report 2022](#), op. cit.,p. 72

⁶¹ Stephanie Searle “[E-fuels won’t save the internal combustion engine](#)”, *ICCT* (23 Jul. 2020, last consulted on 7 Feb. 2024).

⁶² Transport & Environment, [E-fools: why e-fuels in cars make no economic or environmental sense](#) (Apr. 2021, last consulted on 7 Feb. 2024) p.1.

⁶³ Concawe-Aramco, op. cit. pp. 144-5.

⁶⁴ IPCC Working Group III, [Climate Change 2022 - Mitigation of Climate Change](#) (last consulted on 7 Feb. 2024) Summary for policy-makers, C.8, p. 32 and C. 10.4, p. 34.

⁶⁵ *Ibid.* p. 1068.

Aramco advocates for a supposed solution that better suits its commercial interests, presumably to keep the road transportation sector reliant on oil.

3.4 The ads over-state the contribution of synthetic fuels to the decarbonisation of F1

In its ads, Saudi Aramco puts its involvement in F1 at the forefront of its supposed sustainability efforts, which mostly revolve around the development of ‘advanced sustainable fuels’⁶⁶ or ‘e-fuels’.⁶⁷ The Powered by How video ad could give the viewer the impression that the Aston Martin F1 racing car is powered by such fuels. To the question ‘How can we continue to push innovation in a sport at the forefront of technology?’, the answer given is provided in the present tense with the appearance of Aston Martin F1’s racing car.

Despite the various claims related to advanced fuels in the context of F1, the Aston Martin Team’s most recent racing car, the AMR23, does not seem to be powered by any such ‘advanced fuels’, as there is no mention of e-fuels in F1’s profile on this car.⁶⁸ In other Saudi Aramco-sponsored content available on YouTube, when asked about the future of F1 fuel, Dan Fallows, Aston Martin’s Technical Director replies: ‘synthetic fuel is being discussed a lot at the moment’, while his colleague, Tom McCullough adds: ‘With time the Formula One is going to get a lot closer to the regular road car fuel with the ethanol content and the view to sustainability going forward.’⁶⁹ Blending ethanol with regular fuel does not amount to a synthetic fuel. These statements confirm the marginal role that synthetic fuels currently play in the decarbonisation of F1. Saudi Aramco’s ads therefore give viewers the false impression that e-fuels are already a working reality in F1 when they are not. In general, synthetic e-fuels are aspirational in the F1 context. The introduction of ‘100% sustainable fuels’ is currently scheduled for 2026 and it is unclear how the so-called ‘sustainable fuels’ will be produced.⁷⁰

The Aramco and Aston Martin’s strategic partnership webpage, which Ad. 2 refers to, does not clarify the actual contribution of advanced fuels to F1. Saudi Aramco’s claim that it aims ‘to produce cars powered entirely by sustainable fuels by 2025 and achieve net zero as a sport by 2030’⁷¹ seems like an over-statement, in light of the 0.7% of share of power unit emissions of the estimated 256.551 tCO₂e globally generated by Formula 1 per year.⁷²

⁶⁶ F1, [Aramco. Global Energy Partner](#) (last consulted on 7 Feb. 2024).

⁶⁷ See the definition of ‘sustainable synthetic fuels’ which are ‘sometimes called e-fuels, sometimes called synthetic fuels’ in F1 TM, [Letter addressed to the EU Commissioner for for economy](#) (27 Jul. 2022; last consulted on 7 Feb. 2024) p. 2, fn.1 (our translation).

⁶⁸ Aston Martin Aramco Formula One® Team, [Introducing the AMR23](#) (last consulted on 7 Feb. 2024).

⁶⁹ Aston Martin Aramco Cognizant F1 team, [The Incredible Science of F1: Fluids | Aramco](#), *Youtube* (16 June 2023; last consulted on 7 Feb. 2024) at 1:55.

⁷⁰ F1, [Watch: What are sustainable fuels, how are they made – and how could this affect you?](#) (24 April 2023; last consulted on 7 Feb. 2024).

⁷¹ The Aramco and Aston Martin strategic partnership, op. cit.

⁷² F1, [Sustainability Strategy](#) (2019) p. 9 (last consulted on 7 Feb. 2024). Power unit emissions are defined as ‘all emissions associated with the fuel usage of the power units across all 10 teams, at all 21 Grands Prix, and at pre-, mid-or post-season testing.’

This makes the contribution of ‘advanced fuels’ not only small but also unlikely to ‘decarbonise our sport’ (Ad. 3) or achieve ‘net-zero as a sport by 2030’ as claimed on the strategic partnership webpage to which Ad. 1 refers.⁷³

Saudi Aramco’s misleading and unsubstantiated claims about its contribution to the decarbonisation of F1 here again contrast with the CAP Guidance on Misleading environmental claims and social responsibility, which provides: ‘Claims based on future goals relating to reaching net zero or achieving carbon neutrality should be based on a verifiable strategy to deliver them.’⁷⁴

4. Breaches of CAP Code

Against this background, Saudi Aramco’s ads breach several provisions of the CAP Code.

By focusing on a small fraction of Saudi Aramco’s business that is supposedly lower carbon and failing to mention that the large part of its business operations and investments are in substantial, ongoing fossil fuel production, they are misleading based on Rule 3.1 and omit significant environmental information, as provided by Rules 3.3 and 11.1, as found by the ASA in previous rulings.⁷⁵

The terminology of ‘advanced fuels’, used interchangeably with ‘synthetic’, ‘drop-in’, ‘low-carbon’, ‘renewable’, ‘sustainable’ or ‘e-’ fuels, is not clear to consumers in light of Rule 11.2.

Saudi Aramco’s claimed contribution to decarbonising both F1 as a sport and the transport sector is misleading, as it contains no information on the type of energy used for their various components and therefore on their full life cycle, as provided by Rule 11.4. This claimed contribution to decarbonising F1 as a sport is itself misleading in light of Rule 3.1 and 11.1 of the CAP Code.

The scientific tone of both the Powered by How and FT ads further breaches Rule 11.5, as the authoritatively asserted environmental claims are misaligned with the scientific consensus that prevails concerning decarbonising the transport sector.

By unfaithfully discrediting electric vehicles, the FT ad finally breaches Rule 11.7, by misleading consumers about the environmental benefit that advanced fuels allegedly offer.

⁷³ [The Aramco and Aston Martin strategic partnership](#), op. cit.

⁷⁴ Committee of Advertising Practices, [The environment: misleading claims and social responsibility in advertising](#), op. cit., p. 13.

⁷⁵ [ASA Ruling on HSBC UK Bank plc](#). (19 Oct. 2022; last consulted on 7 Feb. 2024); [ASA Ruling on Repsol SA](#), op. cit.; [ASA Ruling on Shell UK Ltd t/a Shell](#) (7 June 2023; last consulted on 7 Feb. 2024); [ASA Ruling on Petroliaam Nasional Berhad t/a PETRONAS](#) (7 June 2023; last consulted on 7 Feb. 2024).

5. Requests to the ASA

In light of the seriousness of the breaches, we are respectfully requesting the Advertising Standard Authority to take action and ban these ads, and adopt any measures to prevent Saudi Aramco and the Financial Times from making such claims in the future, including through encouraging consumers to access misleading and biased information on the Financial Times or Saudi Aramco's website.

The confusing language used for synthetic fuels is an emerging problem, as illustrated by the current complaint and ASA's previous Repsol ruling.⁷⁶ As such, it would be welcome that the ASA takes action and updates section 3.2 of its guidance for advertisers on environmental claims and social responsibility.

We also hope that ASA's ruling will address the role of the platforms that have allowed Saudi Aramco's disinformation to spread in the UK. Saudi Aramco and the Financial Times' advertisements are also in violation of Google's publisher policy, which explicitly forbids 'content that contradicts authoritative scientific consensus on climate change.'⁷⁷ Additionally, these advertisements are in conflict with Meta's pledges to tackle climate misinformation on its platforms.⁷⁸

⁷⁶ Ibid.

⁷⁷ See section on misrepresentative content in [Google publisher policies](#) (last updated on 23 March 2022; last consulted on 7 Feb. 2024).

⁷⁸ Meta, [Sharing Our Progress on Combating Climate Change](#) (6 Nov. 2022; last consulted on 7 Feb. 2024).