

SUMMARY

CLIENTEARTH COMPLAINT CONCERNING SAUDI ARABIAN OIL COMPANY (SAUDI ARAMCO) AND THE KINGDOM OF SAUDI ARABIA AND

JP MORGAN, CITI, HSBC, SMBC, CRÉDIT AGRICOLE, MORGAN STANLEY, BNP PARIBAS, GOLDMAN SACHS, MIZUHO, SOCIÉTÉ GÉNÉRALE, AND EIG GLOBAL ENERGY PARTNERS

1. Saudi Aramco is the world's largest oil and gas producer, and it is the largest single corporate emitter of greenhouse gases that cause climate change. The practices and policies of Saudi Aramco contribute to significant climate change-related adverse impacts on many human rights, including particular impacts in the Kingdom of Saudi Arabia (**KSA**).
2. The 2015 Paris Agreement sets out the globally-agreed temperature goal that seeks to limit the worst risks and impacts of climate change: " *Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change*".
3. In its 2018 Special Report on global warming of 1.5°C (the **IPCC Special Report**), the Intergovernmental Panel on Climate Change (**IPCC**) set out a clear scientific consensus on the need to limit warming to 1.5°C to substantially reduce the risk of climate disaster and the urgent emissions reductions to 'net zero' greenhouse gas emissions by around 2050 (hereafter, **Net Zero Transition**) required to do so. The urgency of this warning increased in the IPCC's August 2021 Sixth Assessment Report.
4. Scientists estimate that global average temperatures have already reached 1.1°C above pre-industrial temperatures. Climate change is already causing widespread adverse impacts on individuals around the world, and is projected to lead to further increased risk to human rights for billions of people. The IPCC's Sixth Assessment Report found that human-induced climate change is already affecting weather and climate extremes. Evidence that heatwaves, droughts and cyclones are attributable to human influence has strengthened. Many changes due to past and current greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.
5. The world is presently heading for a catastrophic temperature rise in excess of 3°C. At current emission rates, the estimated global carbon budget for a 'better than even' (67%) chance of limiting warming to 1.5°C will be used up in about 10 years.
6. Fossil fuels account for the large majority of global anthropogenic greenhouse gas emissions which cause climate change. The Net Zero Transition requires the immediate managed, just and equitable wind-down of fossil fuel production and a huge decline in fossil fuel use in favour of renewable energy. Production of oil and gas must decline by at least 4% and 3% per year until 2030. The severely limited global carbon budget for limiting average global warming to 1.5°C does not allow for the development of new oil and gas fields.
7. However, fossil fuel energy consumption and emissions are projected to rise significantly again in 2021, following the 2019 decline caused by the COVID pandemic.
8. Owing to its specific climactic conditions, individuals living in, working in and travelling to KSA are highly vulnerable to the impacts of climate change, including uninhabitable heat extremes beyond human tolerances for more than a few hours and dust storms and food

security issues caused by increased desertification. Climate change also raises human rights risks from heat extremes to the worldwide Muslim community in the context of Muslim pilgrimages to KSA (such as the Hajj), which are normally attended by over 10 million pilgrims. The scientific evidence indicates that under the ‘business as usual’ emissions scenario by the middle of this century heat stress levels categorized as ‘dangerous’ and ‘extremely dangerous’ will be the overwhelming norm during the Hajj.

9. Saudi Aramco’s business activities and plans mean it will increasingly contribute to climate change-related human rights impacts:
 - a. Saudi Aramco is not winding down its production of crude oil, and is presently working to increase production levels. It is actively exploring for new oil and gas reserves, and seeks to grow its particularly carbon-intensive ‘unconventional’ oil and gas extraction operations such as fracking. Saudi Aramco’s massive supply and export of fossil fuels risks impeding decarbonisation efforts in other States.
 - b. As well as its core oil business, Saudi Aramco seeks to double its production of gas by 2029. Although it claims gas is a lower-carbon fuel which will aid the Net Zero Transition, the scientific evidence is that 1.5°C pathways require the rapid reduction of gas production, not its expansion. Gas (and particularly liquefied natural gas) is much higher-carbon than renewables such as solar and wind, and it competes with them as an energy source.
 - c. Saudi Aramco purports to address its contribution to climate change through technology and innovation, rather than reducing oil and gas production in line with climate science. This involves a number of false solutions to the harmful effects of its oil and gas emissions. It plans to use technology to reduce emissions from the *production* of its oil and gas, but the vast majority of its emissions come from its customers’ *use* of its oil and gas products. It is planting saltwater mangrove trees, but its products’ estimated emissions are about 12,000 times more than its trees can absorb. It is investing in ‘carbon capture’ technology, but it only captures 0.08% of its products’ estimated emissions and scaling up carbon capture capacity is expensive and uncertain. It even uses the captured carbon to extract *more* oil and gas, meaning captured carbon leads to *more* emissions. It produces minor amounts of renewable energy, but only for powering the extraction of its oil and gas.
 - d. Saudi Aramco has engaged in a widespread marketing and advertising campaign, including on social media, promoting claims of the sustainability of its business and its work on climate solutions to continued use of oil and gas. Saudi Aramco’s advertising is misleading, in that it presents a picture of its business activities which is inconsistent with the evidence in the complaint. The advertisements are also harmful, in that the false messages impede efforts to reduce reliance on fossil fuels to limit the impacts of climate change. Examples:
 - “*Working towards a sustainable energy future, we aim to achieve a significant impact in reducing emissions*”
 - “*#ClimateChange is a challenge that the #energy industry faces. Learn how we are overcoming such challenge*”
 - “*Hit the [link] to learn more about how we leverage cutting-edge #technology for a more sustainable future*”
 - e. Although it is not an automotive company, Saudi Aramco is also pursuing innovation projects as a purported means of addressing climate change, including by developing

experimental prototype fossil fuel vehicles with in-built carbon capture technology. It has funded scientific research criticising the transport electrification policy in China, which is Aramco's largest customer, and has paid for advertising campaigns promoting its 'mobile carbon capture' prototype. According to climate science, the Net Zero Transition requires the transport sector to switch increasingly rapidly to affordable electric vehicles already in mass production and to phase out the use of the internal combustion engine. Saudi Aramco therefore appears to aim to resist the rise of electric transport in order to preserve the market for its products, obstructing climate action.

10. Saudi Aramco considers it should be the 'last man standing' of the global oil and gas producers, based on its low cost production, as other businesses wind down their production. This approach disregards Saudi Aramco's own responsibility to reduce production to address its human rights impacts. Furthermore, the wider oil and gas sector is not reducing production in line with the Net Zero Transition. Instead of an effective response to its climate change-related human rights impacts, Saudi Aramco's business plan to maintain (or increase) production is set to contribute to the severest of future climate change impacts.
11. Saudi Aramco sells fossil fuels in the knowledge that they are facilitating and encouraging others to continue to make use of fossil fuels. It is failing to reduce its emissions, and oil and gas production, in line with the Net Zero Transition. Its purported means of addressing its contribution to climate change are not effective. It is therefore failing to act to prevent or mitigate the human rights harms caused by its products through climate change. Accordingly, Saudi Aramco is contributing to climate change-related human rights impacts which are both highly salient and severe. Its activities are similar to other large fossil fuel producers which bear salient responsibility for severe climate change-related human rights impacts, if to a greater degree due to its size. Saudi Aramco has not made any public statements in relation to any aspect of its compliance with the UNGPs.
12. KSA controls and regulates Saudi Aramco. KSA does not appear to be taking steps to protect against climate-related human rights abuses by Saudi Aramco. It does not appear to be regulating Saudi Aramco so as to require Saudi Aramco to respect human rights, by ensuring a transition away from fossil fuels. Instead it is approving oil and gas production increases and exploration. The evidence suggests KSA is failing to comply with its international legal obligations as set out in the UNGPs as regards Saudi Aramco's climate-change related adverse human rights impacts.
13. A range of large financial businesses provide support to Saudi Aramco through significant and ongoing business relationships, and are likely to be contributing to these adverse human rights impacts through facilitating Saudi Aramco's activities. This complaint identifies the following financial businesses: JP Morgan, Citi, HSBC, SMBC, Crédit Agricole, Morgan Stanley, BNP Paribas, Goldman Sachs, Mizuho, Société Générale and EIG Global Energy Partners.
14. These businesses support Saudi Aramco by (i) lending funds and investing in Aramco's debt or equity, (ii) supporting, facilitating and/or advising on Saudi Aramco's key financial transactions, and (iii) investing directly in Aramco's oil and gas infrastructure. These financial businesses must comply with their own responsibilities regarding Saudi Aramco's climate-related human rights impacts. There is a serious risk that the above financial businesses are failing to comply with their responsibilities.

COMPLAINT TO

**THE WORKING GROUP ON THE ISSUE OF HUMAN RIGHTS AND TRANSNATIONAL CORPORATIONS AND OTHER BUSINESS ENTERPRISES; AND
THE SPECIAL RAPPOREUR ON THE ISSUE OF HUMAN RIGHTS OBLIGATIONS RELATING TO THE ENJOYMENT OF A SAFE, CLEAN, HEALTHY AND SUSTAINABLE ENVIRONMENT**

CONCERNING

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COMPLAINT

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Note: This complaint is accompanied by a separate summary document.

A. INTRODUCTION

1. There is a well-documented connection between climate change and human rights. UN High Commissioner for Human Rights, Michelle Bachelet, has stated that:

“[T]he global climate emergency presents perhaps the most profound planet-wide threat to human rights that we have seen since World War II. From the right to life, to health, to food, water and shelter, to our rights to be free of discrimination, to development and to self-determination, its impacts are already making themselves felt.”¹

2. This connection between the impacts of climate change and adverse human rights consequences was confirmed by a joint statement from nine Special Procedures mandate-holders in September 2019, including the mandates to which this complaint is addressed:²

“Climate change is already causing increased frequency, intensity and duration of extreme weather events, melting of glaciers and ice sheets, rising sea levels, storm surges, saltwater intrusion, ocean acidification, changes in precipitation, flooding, heatwaves, droughts, wildfires, increased air pollution, desertification, water shortages, the destruction of ecosystems, biodiversity loss and the spread of water-borne and vector-borne disease.

Among the human rights being threatened and violated by climate change are the rights to life, health, food, water and sanitation, a healthy environment, an adequate standard of living, housing, property, self-determination, development and culture.

While fossil fuels have made an enormous contribution to economic prosperity, the environmental and social costs of their use are staggering. Millions of people die prematurely each year because of air pollution, while billions of people are adversely affected by the Earth's changing climate....

A safe climate is a vital element of the right to a healthy environment and is absolutely essential to human life and well-being. In today's global climate emergency, meeting the obligations to respect, protect and fulfil human rights could help to spur the transformative changes that are so urgently required.”³

3. Climate change has been specifically identified by the Office of the High Commissioner for Human Rights (OHCHR) as a “cross-cutting thematic issue” as the “human rights impact of climate change is a critical emerging issue that cuts across several Special Procedures mandates”.⁴ This is because of:

¹ UN High Commissioner for Human Rights, Michelle Bachelet, Statement on Human Rights Day (10 December 2019) <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25403>> All links in this complaint were last accessed in July 2021.

² The nine mandate holders were: Special Rapporteur on human rights and the environment; Special Rapporteur on the right to food; Special Rapporteur on the human rights to safe drinking water and sanitation; Special Rapporteur on the rights of indigenous peoples; Members of the UN Working Group on human rights and transnational corporations and other business enterprises; Special Rapporteur on the right to development; Special Rapporteur on the right to physical and mental health; Special Rapporteur on extreme poverty and human rights; and Special Rapporteur on extrajudicial, summary or arbitrary executions.

³ OHCHR, United Nations Climate Action Summit, Our addition to fossil fuels causes climate emergency, say human rights experts (17 September 2019) <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25003>>

⁴ OHCHR, Cross-cutting Thematic Issues <<https://ohchr.org/EN/HRBodies/SP/Pages/CrosscuttingThematicIssues.aspx>>

“climate change’s negative impact on, among others, the rights to life, water and sanitation, health, food, an adequate standard of living, housing, property, a healthy environment, culture, self-determination, and development”.⁵

4. This complaint cites the UN Guiding Principles on Business and Human Rights (UNGPs) extensively because they are the authoritative global standard of business practice regarding human rights, building on the requirements of States’ national laws. Climate change represents a profoundly significant threat – and ongoing impact - to human rights. The UNGPs set out the authoritative normative framework for managing issues of corporate responsibility for human rights issues.
5. This complaint also cites the Paris Agreement on Climate Change 2015 (Paris Agreement) extensively.⁶ This is because in December 2015, 196 States adopted the Paris Agreement, which is near-universal agreement by states on how to approach climate change.
6. Against this background, in its Key Messages on Human Rights, Climate Change and Business, the OHCHR has stated that “[b]usinesses should set science-based targets throughout their operations to align with limiting global warming to well below 2°C above pre-industrial levels and pursuing efforts towards 1.5°C, with efforts towards net-zero greenhouse gas emissions by 2050, as indicated in the Paris Agreement.”⁷
7. The complaint is brought to the UN Special Procedures, including the Working Group on Business and Human Rights (the Working Group) mandated to promote the effective and comprehensive dissemination and implementation of the UNGPs.⁸ The Working Group’s expertise and role makes it uniquely suited to interpreting, and promoting the implementation of, the UNGPs on the critical issue of climate change.
8. This complaint sets out the existing and potential adverse impacts on and violations of human rights through the practices and policies of a business enterprise regarding climate change, which are not in compliance with international human rights law and standards.
9. This complaint relates to the Saudi Arabian Oil Company (Saudi Aramco), which is headquartered in Dhahran in Saudi Arabia. It is a majority state-owned enterprise of the Kingdom of Saudi Arabia (KSA), with 98.5% of its shares owned by the government of KSA. Saudi Aramco is the world’s largest oil and gas producer, and it is the largest single corporate emitter of greenhouse gases into the atmosphere. Greenhouse gases are the dominant cause of climate change and the related human rights impacts and risks.
10. In light of the evidence in this complaint, ClientEarth submits that Saudi Aramco’s policies and practices clearly contribute to climate change and to the related potential adverse human rights impacts, including particular impacts in KSA. Saudi Aramco is not fulfilling its responsibility to respect human rights with regard to these impacts.
11. The available evidence further suggests that the State of KSA is non-compliant with its own obligations as set out in GPs 3 and 4 as regards its control and regulation of Saudi Aramco in relation to these highly salient and severe adverse impacts.

⁵ Ibid.

⁶ Conference of the Parties, Adoption of the Paris Agreement (12 December 2015) The Paris Agreement, UN Doc. FCCC/CP/2015/L.9/Rev/1 <https://unfccc.int/sites/default/files/english_paris_agreement.pdf>

⁷ OHCHR, Human Rights, Climate Change and Business Key Messages, p7

<<https://www.ohchr.org/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>>

⁸ Human Rights Council resolution 17/4 (July 2011) UN Doc. A/HRC/RES/17/4, as extended by Human Rights Council resolution (17 July 2020) UN Doc. A/HRC/RES/44/15

12. In addition, a number of large multinational financial businesses provide considerable support to Saudi Aramco, facilitating its business practices and policies. These businesses are likely to be contributing to the adverse climate-related human rights impacts of Saudi Aramco. The evidence identified in this complaint shows that a number of financial businesses have significant and ongoing relationships with Saudi Aramco: JP Morgan, Citi, SMBC, Crédit Agricole, Morgan Stanley, BNP Paribas, Goldman Sachs, Mizuho, Société Générale and EIG Global Energy Partners.
13. The support the financial businesses provide takes the form of (i) lending funds and investing in Aramco's debt or equity (ii) supporting, facilitating and/or advising on Saudi Aramco's key financial transactions, and (iii) investing directly in Aramco's oil and gas infrastructure. These financial businesses must account for their responsibility regarding Saudi Aramco's impacts, including in light of their climate commitments. In order to do so credibly, we submit that they should commit to cease business relationships with oil and gas businesses like Saudi Aramco which are not aligned with the goals of the Paris Agreement. There is a serious risk that the financial businesses named in this complaint are not compliant with their human rights responsibilities.
14. This complaint is brought by ClientEarth, an international civil society organisation which is active in over 50 States and is a registered charity/not-for-profit in the United Kingdom, Belgium, China, Germany, Poland and the United States.⁹ It brings considerable relevant experience to this submission due to its combination of expertise in: national and international corporate and environmental legal frameworks (including business and human rights), industry knowledge of the oil and gas sector and the financial sector, scientific and policy knowledge in relation to climate change, and corporate and investor engagement on these issues.

B. THE UNGPS AND CLIMATE CHANGE – INTRODUCTION

15. There are obligations on States and responsibilities on business enterprises in relation to climate change under international human rights law. The UNGPs set out the responsibility of business enterprises to respect human rights wherever they operate, under Pillar II of the three pillars of the UNGPs. The specific elements of this corporate responsibility are set out in Guiding Principles (GPs)¹⁰ 11-24.
16. Climate change leads to significant adverse impacts on the human rights of a wide range of people. While human rights protect individuals, State obligations and business responsibilities address management of human rights impacts (and the risk of potential impacts) across both individuals and groups. Existing international human rights law is therefore fully applicable to this kind of impact. Moreover, it contains the conceptual tools for regulating climate change issues according to norms set by the international community.¹¹ The positive obligations of States applicable to their jurisdictions and/or territories are complemented by the responsibilities of business enterprises to identify, prevent, mitigate and account for how they address their adverse human rights impacts. As the Special Rapporteur on Human Rights and the Environment analyses:

⁹ See: ClientEarth, Who we are webpage <<https://www.clientearth.org/about/who-we-are/>>

¹⁰ In this complaint, the UN Guiding Principles are not referenced in footnotes but are referred to in the main text as “GP [number]” and the accompanying commentary as “*Commentary to GP [number]*”.

¹¹ See, for example, the discussion of *Budayeva v Russia* and other sources in J. Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (1 February 2016) UN Doc. A/HRC/31/52, paras 36-39 <<https://undocs.org/A/HRC/31/52>>

“The human rights obligations related to climate change have been explored by the Human Rights Council, the special procedures, the treaty bodies, Governments, the Inter-American Court of Human Rights and many international agencies. [...] All of these experts have reached two common conclusions: **first, climate change and its impacts threaten a broad range of human rights, and second, as a result, States and private actors have extensive human rights obligations and responsibilities.**”¹²

17. The relevance of the UNGPs to a major fossil fuel producer in relation to climate change has been recognised by a national court in the recent court decision in the Netherlands in *Milieudefensie v Royal Dutch Shell* (the *Shell* case, which has been analysed by ClientEarth¹³).¹⁴ As noted by the Dutch Court regarding Shell, the UNGPs are applicable to Saudi Aramco irrespective of whether the company has committed itself to them.¹⁵ The corporate responsibility to respect human rights applies to Saudi Aramco because the UNGPs apply to all business enterprises and specifically to state-owned enterprises (GPs 4 and 14). The UNGPs therefore apply to Saudi Aramco’s climate change impacts.
18. In applying the UNGPs to climate change issues, the subsequent near-universal adoption of the Paris Agreement is directly relevant. For example, in its Namibia Advisory Opinion, the International Court of Justice confirmed that “... *an international instrument has to be interpreted and applied within the framework of the entire legal system prevailing at the time of the interpretation*”.¹⁶ Systemic interpretation of an international instrument, such as the UNGPs, should include more recent international consensus on climate change in the form of the Paris Agreement. This is consistent with the express understanding of the key drafters of the UNGPs, who have stated publicly that the UNGPs are to be understood in a “*dynamic dimension, such as [the UNGPs]’ capacity to push the development of new norms and practices that go beyond the initial content of the [UN]GPs and improve companies’ compliance with human rights standards*”.¹⁷ It also follows the Commentary to GP 12, which states that “*business enterprises may need to consider additional standards [of human rights]*’ beyond those given in the UNGPs.
19. Moreover, regarding the International Covenant on Civil and Political Rights (ICCPR), amongst the instruments which the UNGPs elaborate and integrate,¹⁸ the UN Human Rights Committee considers that international environmental law informs the ICCPR: “[*o*]bligations of States parties under international environmental law should thus inform the contents of article 6 of the [ICCPR], and the obligation of States parties to respect and ensure the right to life should also inform their relevant obligations under international environmental law”.¹⁹ Equally, international environmental law informs the content of the UNGPs.

¹² D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, Safe Climate report (2019) UN Doc A/74/161, para 55 <<https://undocs.org/A/74/161>>

¹³ ClientEarth, Investor Briefing: Milieudefensie et al. v Royal Dutch Shell – Six takeaways for business climate plans <<https://www.clientearth.org/media/y5ghrwcw/milieudefensie-et-al-v-royal-dutch-shell-six-takeaways-for-business-climate-plans.pdf>>

¹⁴ *Milieudefensie et al. v. Royal Dutch Shell plc.* [2021] C/09/571932, para 4.4.11 <<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>>

¹⁵ Ibid.

¹⁶ International Court of Justice (ICJ), *Advisory Opinion on the Legal Consequences for States of the Continued Presence of South Africa in Namibia*, [21 June 1971], para 53, available at: <<https://www.icj-cij.org/public/files/case-related/53/053-19710621-ADV-01-00-EN.pdf>>

¹⁷ J. Ruggie, C. Rees and R. Davis, Ten Years After: From UN Guiding Principles to Multi-Fiduciary Obligations (2021) 6 BHRJ 179, 181

¹⁸ OHCHR, Guiding Principles on Business and Human Rights: Implementing the United Nations ‘Protect, Respect and Remedy’ Framework (2011) UN Doc A/HRC/17/31, para 14 <https://www.ohchr.org/documents/issues/business/a-hrc-17-31_aev.pdf>

¹⁹ CCPR₂ General Comment No. 36: Article 6 (Right to life), (30 October 2018) UN Doc CCPR/C/GC/36, para 62 <https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf>

20. While the effects of climate change can be differentiated from certain other kinds of business impact on human rights by three factors - climate change effects are global; they are long-term; and they implicate virtually everyone (and every business) - this does not exclude the effects of climate change from the UNGPs. The successive UN Special Rapporteurs on the Environment and Human Rights, Professors John Knox and David Boyd, have closely considered matters of climate change and human rights. Drawing on the prevailing normative environment described above, they have reached the following conclusions pertinent to this complaint:

- a. The UNGPs “*apply to all environmental human rights abuses, including impairments of human rights in relation to climate change*”,²⁰
- b. Business enterprises have a responsibility to adopt legal and institutional frameworks that protect against, and respond to, environmental harm that may or does interfere with the enjoyment of human rights; and²¹
- c. The key main responsibilities of business enterprises specifically related to climate change are:

*“to reduce greenhouse gas emissions from their own activities and their subsidiaries; reduce greenhouse gas emissions from their products and services; minimize greenhouse gas emissions from their suppliers; publicly disclose their emissions, climate vulnerability and the risk of stranded assets; and ensure that people affected by business-related human rights violations have access to effective remedies. In addition, businesses should support, rather than oppose, public policies intended to effectively address climate change”.*²²

21. Regarding State obligations, which are elaborated in Pillar I of the UNGPs and especially relevant given the application of GP 4 to Saudi Aramco, the Special Rapporteurs on the Environment and Human Rights have stated as follows:

- a. Under the International Covenant on Economic, Social and Cultural Rights (ICESCR), States are required to “*take actions “to the maximum of its available resources, with a view to achieving progressively the full realization of the rights [in the ICESCR]”* and under the ICCPR to “*exercise due diligence to prevent and redress the impairment of rights by private persons or entities*”, both of which are relevant to efforts to reduce emissions of greenhouse gases;²³ and
- b. States should wherever possible “*assess the climate effects of major activities within their jurisdiction, “such as programmatic decisions about fossil fuel development, large fossil fuel-fired power plants, and fuel economy standards”*”;²⁴ They also “*must [...] dedicate the maximum available financial and material resources to shift to renewable energy, clean transport and agroecological farming [etc.]*”²⁵

²⁰ J. Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (1 February 2016) UN Doc. A/HRC/31/52, para 66 <<https://undocs.org/A/HRC/31/52>>

²¹ Ibid, para 66

²² D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, Safe Climate report (2019) UN Doc A/74/161, para 72 <<https://undocs.org/A/74/161>>; with reference to the Expert Group on Climate Obligations of Enterprises, *Principles on Climate Obligations of Enterprises: Legal Perspectives for Global Challenges* (Eleven International Publishing 2018) available at: <<https://climateprinciplesforenterprises.files.wordpress.com/2017/12/enterprisesprincipleswebpdf.pdf>>

²³ J. Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (1 February 2016) UN Doc A/HRC/31/52, para 48 and footnote 29 <<https://undocs.org/A/HRC/31/52>>

²⁴ Ibid, para 54, quoting a report by the UN Environment Programme: UNEP, Climate Change and Human Rights (December 2015), p16 <www.unep.org/NewsCentre/default.aspx?DocumentID=26856&ArticleID=35630>

²⁵ D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, Safe Climate report (2019) UN Doc A/74/161, para 70 <<https://undocs.org/A/74/161>>

22. Accordingly, the Paris Agreement forms the key normative environment for the interpretation of the UNGPs regarding climate change, and the UNGPs must be interpreted **in light of, and in accordance with**, the Paris Agreement.²⁶

23. Furthermore, in light of the scientific evidence, the precautionary principle applies to issues of climate change under international law. The principle applies because of the full range of potential dangerous, irreversible or catastrophic effects of climate change and the need to justify prevention of these effects. This was clearly recognised in the UN Framework Convention on Climate Change 1992:

*“The Parties should take **precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects.** Where there are threats of serious or irreversible damage, **lack of full scientific certainty should not be used as a reason for postponing such measures**, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost....”*²⁷

24. Several commentators and governments,²⁸ as well as the Seabed Disputes Chamber of the International Tribunal of the Law of the Sea (ITLOS) in the *Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with respect to Activities in the Area*²⁹ have confirmed that the precautionary principle reflects customary international law.³⁰

25. The precautionary principle is given effect in the Paris Agreement, which enshrines principles of highest possible ambition and ‘common but differentiated responsibilities and respective capabilities’, including in light of different national circumstances – all toward the overarching goals of the Paris Agreement (explained further below). Contributions of emission reductions toward these goals are therefore to be seen in light of historic contributions to climate change and the level of financial and technological capabilities.

26. Whilst these principles apply in international law to States parties to the Paris Agreement, we submit that they have parallels in and are relevant to the business responsibility to respect rights under the UNGPs (not least, regarding a state-owned enterprise).³¹ For example, in line with the precautionary principle, the UNGPs make clear that all business enterprises should not only address actual adverse human rights impacts, they should also address “*potential impacts*” through

²⁶ As Professor Alan Boyle concludes “[t]he important point here is that human rights can be defined and expanded by reference to environmental commitments, including those adopted at Paris [...] human rights commitments could and should require States to implement Paris, and their record in doing so can and should be monitored and assessed by UN human rights bodies in the same way that they would monitor and assess any other set of policies which adversely impact on the fulfilment of human rights.” A. Boyle, *Climate Change, The Paris Agreement and Human Rights* (2018) ICLQ 67(4), 759-777

²⁷ UN General Assembly, *United Nations Framework Convention on Climate Change* (20 January 1994) A/RES/48/18, Article 3

²⁸ See, for example, the arguments by States before the International Court of Justice in *Case concerning Pulp Mills on the River Uruguay (Argentina v Uruguay)* (20 April 2010) ICJ Reports 425, 14

²⁹ The International Tribunal of the Law of the Sea, *Advisory Opinion on Responsibilities and Obligations of States Sponsoring Persons and Entities with respect to Activities in the Area*, No. 17 (1 February 2011), para 135

https://www.itlos.org/fileadmin/itlos/documents/cases/case_no_17/17_adv_op_010211_en.pdf \non-fp01\home\$\EGold\Documents\Autorecover\17_adv_op_010211_en.pdf (itlos.org)

³⁰ See also A. Boyle, *The Environmental Jurisprudence of the International Tribunal for the Law of the Sea* (2007) 22 *International Journal of Marine and Coastal Law* 369, 375, “*No longer is it necessary to show that significant or irreversible harm is certain or likely before requiring that appropriate preventative measures be taken*”.

³¹ For example, see the CESCR’s 2018 Statement that States must “*dedicate the maximum available resources to the adoption of measures that could mitigate climate change*” or risk breaching their obligation to prevent the foreseeable human rights harms caused by climate change. See: CESCR, *Climate change and the International Covenant on Economic, Social and Cultural Rights: Statement of the Committee* (8 October 2018)

<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=23691&LangID=E>

“prevention or mitigation”.³² Similar to the Paris Agreement framework of ‘common but differentiated responsibilities and respective capabilities’, the UNGPs set out the common responsibility to respect human rights and clarify that businesses should tailor their human rights policies and processes according to their contributory responsibility, size, circumstances, operational context and so on (see GPs 14, 17, 18, 19).

27. Therefore, in the interpretation of the UNGPs, it is consistent with international law, and the wishes of its drafters, to include human rights impacts of climate change within its remit. We submit that the UNGPs must be interpreted to give effect to a precautionary approach. The full range of potential human rights impacts, as well as actual human rights impacts, of climate change should be appropriately included within the responsibility of business enterprises to respect human rights. This also means drawing on the normative international legal framework of the Paris Agreement.

C. EVIDENCE - CLIMATE CHANGE

What is climate change?

28. The term climate changes refers to changes in the Earth’s natural climatic systems since pre-industrial times caused by the accumulation of anthropogenic greenhouse gases³³ in the atmosphere, and land use changes such as deforestation.³⁴ The accumulation of greenhouse gases in the atmosphere traps heat from the sun causing an increase in global mean surface temperature (among other measures of global temperature), a phenomenon called global warming. To date, anthropogenic greenhouse gas emissions have caused the Earth’s global mean surface temperature to rise by approximately 1.1°C above pre-industrial levels,³⁵ causing significant changes to the Earth’s climatic zones and weather patterns, increasing extreme weather, causing sea level rise and affecting all natural systems.³⁶ In addition to causing the ocean to warm, increased carbon dioxide in the Earth’s atmosphere is absorbed by the ocean, increasing ocean acidification.³⁷

³² OHCHR, Guiding Principles on Business and Human Rights (2011) Commentary to GP 17, pp 23
<https://www.ohchr.org/documents/publications/guidingprinciplesbusinessshr_en.pdf>

³³ The six greenhouse gases that primarily cause global warming and climate change and that are regulated by the Kyoto Protocol include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆). See: Kyoto Protocol to the United Nations Framework Convention on Climate Change, (10 December 1997) UN Doc. FCCC/CP/1997/7/Add.1, Annex A

³⁴ Climate change is defined in Art.1(2) of the 1992 United Nations Framework Convention on Climate Change (UNFCCC) to mean: “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.”

³⁵ The term “pre-industrial” is defined by the IPCC as “[t]he multi-century period prior to the onset of large-scale industrial activity around 1750”, with “[t]he reference period 1850–1900 ... used to approximate pre-industrial GMST.” See Intergovernmental Panel on Climate Change (IPCC), *Global warming of 1.5 °C: an IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*, (IPCC 1.5°C report) Summary for Policymakers, p26

³⁶ IPCC, 2021: Summary for Policymakers in V. Masson-Delmotte et al. (eds.), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2021)

³⁷ See IPCC 1.5°C report, Chapter 3, p178 (“The ocean has absorbed about 30% of the anthropogenic carbon dioxide, resulting in ocean acidification and changes to carbonate chemistry that are unprecedented for at least the last 65 million years (high confidence). Risks have been identified for the survival, calcification, growth, development and abundance of a broad range of marine taxonomic groups, ranging from algae to fish, with substantial evidence of predictable trait-based sensitivities (high confidence). There are multiple lines of evidence that ocean warming and acidification corresponding to 1.5°C of global warming would impact a wide range of marine organisms and ecosystems, as well as sectors such as aquaculture and fisheries (high confidence).”).

29. The Intergovernmental Panel on Climate Change (IPCC) is an intergovernmental organisation established by the World Meteorological Organisation and the United Nations Environment Programme in 1988 in order to assess the science related to climate change.³⁸ It synthesizes thousands of scientific papers to provide a summary of the causes, impacts and risks of climate change and how adaptation and mitigation can reduce those risks.³⁹ After multiple stages of scientific expert and State review, formal acceptance of IPCC reports indicates that States accept that they represent a comprehensive, objective and balanced view of the subject matter.⁴⁰
30. In August 2021, the IPCC's sixth assessment report (AR6) warned:

“It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred.

The scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years.

Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since the Fifth Assessment Report (AR5). [...]

With further global warming, every region is projected to increasingly experience concurrent and multiple changes in climatic impact-drivers. Changes in several climatic impact-drivers would be more widespread at 2°C compared to 1.5°C global warming and even more widespread and/or pronounced for higher warming levels.

Low-likelihood outcomes, such as ice sheet collapse, abrupt ocean circulation changes, some compound extreme events and warming substantially larger than the assessed very likely range of future warming cannot be ruled out and are part of risk assessment.”⁴¹

Paris Agreement goals

31. In December 2015, 196 States adopted the Paris Agreement on Climate Change 2015 (Paris Agreement).⁴² It sets out a global temperature goal⁴³ intended to limit the worst risks and impacts of climate change, while also prioritising resilience and adaptation to climate change and making finance flows consistent with these objectives (hereafter, the *Paris Goals*):

*“Holding the increase in the global average temperature to **well below 2°C** above pre-industrial levels and pursuing efforts to **limit the temperature increase to 1.5°C** above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;*

³⁸ IPCC, About webpage <<https://www.ipcc.ch/about/>>

³⁹ IPCC, About webpage <<https://www.ipcc.ch/about/>>

⁴⁰ See: IPCC, Factsheet: How does the IPCC approve reports? (July 2021)

<https://www.ipcc.ch/site/assets/uploads/2021/07/AR6_FS_approve.pdf>; and IPCC, Factsheet: How does the IPCC review process work? (July 2021) <https://www.ipcc.ch/site/assets/uploads/2021/07/AR6_FS_review_process.pdf>

⁴¹ IPCC, Sixth Assessment Report Working Group I (AR6 WGI): Headline Statement from Summary for Policymakers (9 August 2021) <https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Headline_Statements.pdf>

⁴² The Paris Agreement, available at <https://unfccc.int/sites/default/files/english_paris_agreement.pdf>

⁴³ For an explanation of why this constitutes a single goal, see paragraph 57.

Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production; and

Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development.⁴⁴

In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty.”⁴⁵

32. For States’ efforts in seeking to achieve the Paris Goals, the Paris Agreement enshrines principles of progression (i.e. non-regression), highest possible ambition and ‘common but differentiated responsibilities and respective capabilities’, including in light of different national circumstances. Under the ‘bottom-up’ approach in Article 4, States parties to the Paris Agreement are required to produce their own successive nationally determined contributions toward the Paris Goals (known as NDCs), which they intend to achieve. The Paris Agreement provides that States’ NDCs:

“will represent a progression beyond the Party’s then current [NDC] and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in light of different national circumstances”⁴⁶

33. In the context of KSA, contributions of emissions reductions toward the Paris Goals must reflect its “*highest possible ambition*” in light of its capabilities and national circumstances, including its financial and technological capabilities.⁴⁷

34. In its 2018 Special Report on global warming of 1.5°C (the *IPCC SR 15*), the IPCC set out a clear scientific consensus on the necessity to limit warming to 1.5°C in order to mitigate climate disaster. The IPCC also described the urgent emissions⁴⁸ reductions required to meet this goal, meaning that global greenhouse gas emissions must be reduced to nearly zero (‘net zero’, taking into account carbon sinks) by around 2050 (hereafter, *Net Zero* and *Net Zero Transition*). It said as follows:

“Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C.”

“[L]imiting global warming to 1.5°C, compared with 2°C, could reduce the number of people both exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050”⁴⁹

⁴⁴ The Paris Agreement, Article 2.1(a)-(c) (emphasis added)

<https://unfccc.int/sites/default/files/english_paris_agreement.pdf>

⁴⁵ Ibid, Article 4.1

⁴⁶ Ibid, Article 4.3

⁴⁷ OHCHR, Frequently Asked Questions on Human Rights and Climate Change: Factsheet No. 38, p63

<https://www.ohchr.org/Documents/Publications/FSheet38_FAQ_HR_CC_EN.pdf>

⁴⁸ Hereafter, this complaint uses ‘emissions’ as a short-hand for anthropogenic greenhouse gas emissions, which refers to seven GHGs covered by the Kyoto Protocol, which are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). See: GHG Protocol, A Corporate Accounting and Reporting Standard (revised edition)

<<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>>

⁴⁹ IPCC, 1.5°C report, Summary for Policymakers, B.5.1

“In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO2 emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net zero around 2050”

“Pathways limiting global warming to 1.5°C with no or limited overshoot would require rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems (high confidence). These systems transitions are unprecedented in terms of scale, but not necessarily in terms of speed, and imply deep emissions reductions in all sectors, a wide portfolio of mitigation options and a significant upscaling of investments in those options.”

“Without increased and urgent mitigation ambition in the coming years, leading to a sharp decline in greenhouse gas emissions by 2030, global warming will surpass 1.5°C in the following decades, leading to irreversible loss of the most fragile ecosystems, and crisis after crisis for the most vulnerable people and societies.”⁵⁰

35. In the recent *Shell* case, the Dutch court held that:

“[T]he goals of the Paris Agreement represent the best available scientific findings in climate science, which is supported by widespread international consensus. The non-binding goals of the Paris Agreement represent a universally endorsed and accepted standard that protects the common interest of preventing dangerous climate change.”⁵¹

Climate change impacts

36. Climate change is not a future problem. Already, human-caused global average temperature rise is estimated to have reached 1.07°C above pre-industrial temperatures, with some estimates showing 1.3°C warming.⁵²

37. Climate change is already causing widespread impacts on the natural environment and human societies across our planet. According to a July 2021 scientific study warning of the developing climate emergency:

“there has been an unprecedented surge in climate-related disasters since 2019, including devastating flooding in South America and Southeast Asia, record shattering heat waves and wildfires in Australia and the Western United States, an extraordinary Atlantic hurricane season, and devastating cyclones in Africa, South Asia, and the West Pacific”⁵³

38. In September 2021, over 200 leading health journals published a joint editorial calling for emergency action to limit global temperature increases to limit impacts on health, saying:

⁵⁰ IPCC, 1.5°C report, pVI

⁵¹ *Milieudefensie et al. v. Royal Dutch Shell plc.* [2021] C/09/571932, para 4.4.27
<<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>>

⁵² “Global surface temperature was 1.09 [0.95 to 1.20] °C higher in 2011–2020 than 1850–1900 [...] The likely range of total human-caused global surface temperature increase from 1850–1900 to 2010–2019 is 0.8°C to 1.3°C, with a best estimate of 1.07°C.” IPCC, 2021: Summary for Policymakers in V. Masson-Delmotte et al. (eds.), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2021), A.1.2 and A.1.3
<https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf>

⁵³ W. Ripple et al., World Scientists’ Warning of a Climate Emergency 2021 (28 July 2021) 71 *Bio Science* 894-898
<<https://doi.org/10.1093/biosci/biab079>>

“The science is unequivocal; a global increase of 1.5°C above the pre-industrial average and the continued loss of biodiversity risk catastrophic harm to health that will be impossible to reverse. [...] The risks to health of increases above 1.5°C are now well established. Indeed, no temperature rise is “safe.” In the past 20 years, heat related mortality among people aged over 65 has increased by more than 50% [...] Global heating is also contributing to the decline in global yield potential for major crops, falling by 1.8-5.6% since 1981; this, together with the effects of extreme weather and soil depletion, is hampering efforts to reduce undernutrition.”⁵⁴

39. The risk of future climate impacts is the subject of significant scientific work, drawn together by the IPCC. The IPCC analyses key climate change-related risks (“*all of which are identified with high confidence [and] span sectors and regions*”)⁵⁵ arising from the effects of global warming and ocean acidification as follows:⁵⁶

“i) Risk of death, injury, ill-health, or disrupted livelihoods in low-lying coastal zones and small island developing states and other small islands, due to storm surges, coastal flooding, and sea level rise”, caused by melting ice and warming oceans.⁵⁷

“ii) Risk of severe ill-health and disrupted livelihoods for large urban populations due to inland flooding in some regions”, caused by increases in heavy precipitation.⁵⁸

“iii) Systemic risks due to extreme weather events leading to breakdown of infrastructure networks and critical services such as electricity, water supply, and health and emergency services.” Global warming causes more intense and frequent extreme weather events, such as heatwaves, droughts, cyclones and fire weather.⁵⁹

“iv) Risk of mortality and morbidity during periods of extreme heat, particularly for vulnerable urban populations and those working outdoors in urban or rural areas”, where extreme heat crosses the thresholds relevant to human health and causes secondary health impacts.⁶⁰

⁵⁴ The BMJ, Call for emergency action to limit global temperature increases, restore biodiversity and protect health (6 September 2021) 374 <<https://www.bmj.com/content/374/bmj.n1734>>

⁵⁵ “Key risks are potentially severe impacts relevant to Article 2 of the United Nations Framework Convention on Climate Change, which refers to ‘dangerous anthropogenic interference with the climate system.’ Risks are considered key due to high hazard or high vulnerability of societies and systems exposed, or both”. See: IPCC, Fifth Assessment Synthesis Report (AR5) Summary for Policymakers (2014) p13, B-1

⁵⁶ IPCC, AR5, WGII, Summary for Policymakers (2014) p13, B-1. The IPCC analyses these risks across five ‘reasons for concern’, and concluded in 2018 that projected risks increased between AR5 in 2014 and the Special Report on 1.5°C in 2018: “[t]here are multiple lines of evidence that since AR5 the assessed levels of risk increased for four of the five Reasons for Concern (RFCs) for global warming to 2°C (high confidence)” IPCC, SR15, Summary for Policymakers at B.5.7

⁵⁷ IPCC, AR6, Working Group 1: Headline Statement from Summary for Policymakers (9 August 2021) A.4.3 and C.2.5 <https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Headline_Statements.pdf> “Heating of the climate system has caused global mean sea level rise through ice loss on land and thermal expansion from ocean warming. [...] Relative sea level rise contributes to increases in the frequency and severity of coastal flooding in low-lying areas and to coastal erosion along most sandy coasts (high confidence).”

⁵⁸ Ibid, B.3.2 and C.2.3 “A warmer climate will intensify very wet and very dry weather and climate events and seasons, with implications for flooding or drought [...] [a]t 2°C global warming and above [...] [h]eavy precipitation and associated flooding events are projected to become more intense and frequent.”

⁵⁹ Ibid, A.3. “Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened.”

⁶⁰ Ibid, C.2.1 “extreme heat thresholds relevant to agriculture and health are projected to be exceeded more frequently at higher global warming levels (high confidence).” On health impacts, “Analyses of data from 65 million deaths and temperature estimates in nine countries indicate that extreme heat and cold are associated with 17 causes of death—largely cardiorespiratory or metabolic disease, but also suicide and several types of injury.” See: The Lancet, Health in a world of extreme heat (21 August 2021) 398 Issue 10301, p641 <[https://doi.org/10.1016/S0140-6736\(21\)01860-2](https://doi.org/10.1016/S0140-6736(21)01860-2)>

“v) Risk of food insecurity and the breakdown of food systems linked to warming, drought, flooding, and precipitation variability and extremes, particularly for poorer populations in urban and rural settings.”⁶¹

“vi) Risk of loss of rural livelihoods and income due to insufficient access to drinking and irrigation water and reduced agricultural productivity, particularly for farmers and pastoralists with minimal capital in semi-arid regions.”⁶²

“vii) Risk of loss of marine and coastal ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for coastal livelihoods, especially for fishing communities in the tropics and the Arctic”, caused by the effects of warmer, more acidic and less oxygenated oceans on fish and coral reefs.⁶³

“viii) Risk of loss of terrestrial and inland water ecosystems, biodiversity, and the ecosystem goods, functions, and services they provide for livelihoods”, as transforming ecosystems mean species lose climatic conditions in which they can live and are threatened by fires, extreme weather events and invasive species, so become extinct.⁶⁴

40. According to the UN Environment Programme (UNEP), as it disrupts environmental conditions relating to disease development and transmission, climate change is also a major and increasing factor in the emergence of zoonotic diseases such as COVID-19.⁶⁵

41. It is also abundantly clear that impacts (and knock-on effects) will occur disproportionately in the Global South.⁶⁶ The world’s poorest populations will be severely affected. The IPCC finds that populations vulnerable to poverty⁶⁷ will be many times more exposed to climate risks such as drought, water stress, energy demand change, heatwaves, habitat degradation and falling crop

⁶¹ IPCC 1.5°C report, p238, Cross-Chapter Box 6, “Increasing global temperature poses large risks to food security globally and regionally, especially in low-latitude areas (medium confidence), with warming of 2°C projected to result in a greater reduction in global crop yields and global nutrition than warming of 1.5°C (high confidence), owing to the combined effects of changes in temperature, precipitation and extreme weather events, as well as increasing CO₂ concentrations.”

⁶² IPCC 1.5°C report, p244, 3.4.10, “climate change is expected to be a poverty multiplier that makes poor people poorer and increases the poverty head count (Hallegatte et al., 2016; Hallegatte and Rozenberg, 2017). [...] Climate change alone could force more than 3 million to 16 million people into extreme poverty, mostly through impacts on agriculture and food prices”.

⁶³ IPCC 1.5°C report, Summary for Policymakers, B4, B.4.3 and B.4.4, “The level of ocean acidification due to increasing CO₂ concentrations associated with global warming of 1.5°C is projected to amplify the adverse effects of warming, and even further at 2°C, impacting the growth, development, calcification, survival, and thus abundance of a broad range of species, for example, from algae to fish (high confidence). [...] Impacts of climate change in the ocean are increasing risks to fisheries and aquaculture via impacts on the physiology, survivorship, habitat, reproduction, disease incidence, and risk of invasive species (medium confidence) but are projected to be less at 1.5°C of global warming than at 2°C.”

⁶⁴ IPCC 1.5°C report, Summary for Policymakers, B.3.1, “On land, impacts on biodiversity and ecosystems, including species loss and extinction, are projected to be lower at 1.5°C of global warming compared to 2°C [...] Of 105,000 species studied, 6% of insects, 8% of plants and 4% of vertebrates are projected to lose over half of their climatically determined geographic range for global warming of 1.5°C, compared with 18% of insects, 16% of plants and 8% of vertebrates for global warming of 2°C (medium confidence). Impacts associated with other biodiversity-related risks such as forest fires and the spread of invasive species are lower at 1.5°C compared to 2°C of global warming (high confidence).”

⁶⁵ UN Environment Programme (UNEP), Frontiers Report: Emerging Issues of Environmental Concern (2016) pp18-22 <<https://www.unep.org/resources/frontiers-2016-emerging-issues-environmental-concern>>

⁶⁶ IPCC 1.5°C report, Summary for Policymakers, A.3.1 and B.5.1. Also see UN High Commissioner for Refugees, Climate change and disaster displacement webpage <<https://www.unhcr.org/uk/climate-change-and-disasters.html>>; and International Federation of Red Cross and Red Crescent Societies, Responding to disasters and displacement in a changing climate (2020) <https://reliefweb.int/sites/reliefweb.int/files/resources/16032021-Responding-to-Disasters-and-Displacement-in-a-Changing-Climate-final_0.pdf>

⁶⁷ i.e. who receive less than US\$10 per day of income, in 2018 this was estimated at 4.2 billion people. See: E. Byers et al., Global exposure and vulnerability to multi-sector development and climate change hotspots, 13 Environ. Res. Lett. <<https://iopscience.iop.org/article/10.1088/1748-9326/aabf45>>

yields.⁶⁸ Asian and African regions are projected to experience 85-95% of the total global exposure to climate risks, with impacts spreading wider in sub-Saharan Africa, the Middle East and East Asia at average global warming levels above 1.5°C.⁶⁹ Global average temperature rise is not uniform.⁷⁰ For example, one analysis shows present day temperature rise in Saudi Arabia at c. 1.7°C and future rise at 1.9°C to 6.5°C depending on future greenhouse gas concentrations.⁷¹

42. The IPCC estimates the numbers of people exposed and vulnerable to various climate risks, over different global warming temperature outcomes:⁷²

Complaint Figure 1

Table 3.4 | Number of exposed and vulnerable people at 1.5°C, 2°C, and 3°C for selected multi-sector risks under shared socioeconomic pathways (SSPs).
Source: Byers et al., 2018

SSP2 (SSP1 to SSP3 range), millions	1.5°C		2°C		3°C	
	Exposed	Exposed and vulnerable	Exposed	Exposed and vulnerable	Exposed	Exposed and vulnerable
Water stress index	3340 (3032–3584)	496 (103–1159)	3658 (3080–3969)	586 (115–1347)	3920 (3202–4271)	662 (146–1480)
Heatwave event exposure	3960 (3546–4508)	1187 (410–2372)	5986 (5417–6710)	1581 (506–3218)	7909 (7286–8640)	1707 (537–3575)
Hydroclimate risk to power production	334 (326–337)	30 (6–76)	385 (374–389)	38 (9–94)	742 (725–739)	72 (16–177)
Crop yield change	35 (32–36)	8 (2–20)	362 (330–396)	81 (24–178)	1817 (1666–1992)	406 (118–854)
Habitat degradation	91 (92–112)	10 (4–31)	680 (314–706)	102 (23–234)	1357 (809–1501)	248 (75–572)
Multi-sector exposure						
Two indicators	1129 (1019–1250)	203 (42–487)	2726 (2132–2945)	562 (117–1220)	3500 (3212–3864)	707 (212–1545)
Three indicators	66 (66–68)	7 (0.9–19)	422 (297–447)	54 (8–138)	1472 (1177–1574)	237 (48–538)
Four indicators	5 (0.3–5.7)	0.3 (0–1.2)	11 (5–14)	0.5 (0–2)	258 (104–280)	33 (4–86)

43. The IPCC also identified the cataclysmic risks of a temperature rise significantly in excess of 2°C:

“In most scenarios without additional mitigation efforts [...] warming is more likely than not to exceed 4°C above pre-industrial levels by 2100. The risks associated with temperatures at or above 4°C include substantial species extinction, global and regional food insecurity, consequential constraints on common human activities and limited potential for adaptation in some cases (high confidence).”⁷³

Climate change dynamics

⁶⁸ IPCC 1.5°C report, p245, para 3.4.11, “For populations vulnerable to poverty, the exposure to climate risks in multiple sectors could be an order of magnitude greater (8–32 fold) in the high poverty and inequality scenarios (SSP3; 765–1,220 million) compared to under sustainable socio-economic development (SSP1; 23–85 million).”

⁶⁹ IPCC 1.5°C report, p245, para 3.4.11, “Figure 3.19 shows that moderate and large multisector impacts are prevalent at 1.5°C where vulnerable people live, predominantly in South Asia (mostly Pakistan, India and China), but that impacts spread to sub-Saharan Africa, the Middle East and East Asia at higher levels of warming. Beyond 2°C and at higher risk thresholds, the world’s poorest populations are expected to be disproportionately impacted, particularly in cases (SSP3) of great inequality in Africa and southern Asia.”

⁷⁰ IPCC 1.5°C report, p59, para 1.2.2, “Warming is not observed or expected to be spatially or seasonally uniform (Collins et al., 2013). A 1.5°C increase in GMST will be associated with warming substantially greater than 1.5°C in many land regions, and less than 1.5°C in most ocean regions”

⁷¹ Carbon Brief, Mapped: How every part of the world has warmed and could continue to warm (26 August 2018) <<https://www.carbonbrief.org/mapped-how-every-part-of-the-world-has-warmed-and-could-continue-to-warm>>

⁷² IPCC, 1.5°C report, p246, para 3.4.11. ‘SSP’ stands for ‘shared socio-economic pathway’, broadly different socio-economic pathways to transition. ‘Multi-sector exposure’ refers to how many of the 14 indicators regarding water, energy and land (food and environment) are met.

⁷³ IPCC, AR5, Summary for Policymakers at B 3.2. A recent summary by the Economist of projections of a 3°C world is available here: The Economist, Briefing: Three degrees of global warming is quite plausible and truly disastrous (24 July 2021) <<https://www.economist.com/briefing/2021/07/24/three-degrees-of-global-warming-is-quite-plausible-and-truly-disastrous>>

44. In our submission, five aspects of the physical science of climate change are key to understanding the scale and urgency of the climate crisis and assessing the effect and reasonableness of State and corporate (in)action on climate change:
45. *Firstly*, the warming effect of greenhouse gas emissions⁷⁴ are **cumulative**, as they accumulate and persist in the atmosphere for periods up to thousands of years.⁷⁵ Warming is therefore driven by the cumulative ‘stock’ of greenhouse gas emissions build up over time. Delaying climate change mitigation and subsequently seeking to ‘correct’ a temperature increase of more than 1.5°C (known as overshooting) will cause more impacts than keeping temperatures below 1.5°C and may not be possible at all.⁷⁶
46. *Secondly*, climate change at today’s levels involves the risk of triggering ‘**tipping points**’, or large-scale, singular natural events which can result in or be associated with major shifts in climate change. The Special Rapporteur on Human Rights and the Environment identifies the risk that “*natural feedback mechanisms, such as the melting of Greenland and Antarctic ice sheets or methane released from melting permafrost, could trigger catastrophic runaway climate change*”.⁷⁷ The IPCC identifies several critical ‘tipping points’ of this kind, broadly: ice sheet loss that could cause sea level rise of several metres, sea current change, ‘El Niño’ weather patterns and sea carbon absorption capacity.⁷⁸ It also finds that the moderate risk of these events at 1°C of warming increases to a high risk by 2.5°C of global warming.⁷⁹
47. *Thirdly*, global warming involves risk of **long-lasting and irreversible impacts**, such as the loss of entire ecosystems, or the submergence of low lying islands and coastal areas from sea level rise.⁸⁰ Apart from these specific irreversible impacts, the IPCC is also clear that reducing the

⁷⁴ The principal anthropogenic greenhouse gases for the purposes of this complaint are carbon dioxide (CO₂) and methane (CH₄). Carbon dioxide is a long-lived greenhouse gas exerting warming effects for thousands of years. Methane lasts for about a decade, but exerts much more potent warming effects. Greenhouse gases are commonly measured by ‘Global Warming Potential’ (GWP) by reference to CO₂, carbon dioxide. According to this measure, methane has a global warming effect 84-86 times more than carbon dioxide over a 20-year time frame and 28-34 times more over a 100-year timeframe. See IPCC, AR5, WGI, Chapter 8, p714, Table 8.7

⁷⁵ IPCC, 1.5°C report, p64: “*emissions of long-lived greenhouse gases such as CO₂ and nitrous oxide (N₂O) have a very persistent impact on radiative forcing (Myhre et al., 2013), lasting from over a century (in the case of N₂O) to hundreds of thousands of years (for CO₂). The radiative forcing impact of short-lived climate forcers (SLCFs) such as methane (CH₄) and aerosols, in contrast, persists for at most about a decade (in the case of methane).*”

⁷⁶ IPCC, 1.5°C report, p191, “*Overshooting poses large risks for natural and human systems, especially if the temperature at peak warming is high, because some risks may be long-lasting and irreversible, such as the loss of some ecosystems (high confidence)*”; and p179, “*The impacts on natural and human systems would be greater if mitigation pathways temporarily overshoot 1.5°C and return to 1.5°C later in the century, as compared to pathways that stabilize at 1.5°C without an overshoot (high confidence). The size and duration of an overshoot would also affect future impacts (e.g., irreversible loss of some ecosystems) (high confidence).*” See also Carbon Tracker Initiative, Absolute impact: why oil and gas ‘net zero’ ambitions are not enough (27 May 2021) p8 <<https://carbontracker.org/reports/absolute-impact-2021/>>

⁷⁷ D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, Safe Climate report (2019) UN Doc. A/74/161, para 2 <<https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Report.pdf>>; See also “*by 2050, 4 million people, and around 70 per cent of Arctic infrastructure, will be threatened by thawing permafrost*” - the reference in Boyd’s report at footnote 9 is to the UNEP’s report Global Linkages: A graphic look at the changing Arctic (UNEP, 2019) available at https://wedocs.unep.org/bitstream/handle/20.500.11822/27687/Arctic_Graphics.pdf?sequence=1&isAllowed=y; See also IPCC, 1.5°C report, Summary for Policymakers at B.2.2

⁷⁸ “• *the cryosphere: West Antarctic ice sheet, Greenland ice sheet • the thermohaline circulation: slowdown of the Atlantic Meridional Overturning Circulation (AMOC) • the El Niño–Southern Oscillation (ENSO) as a global mode of climate variability • role of the Southern Ocean in the global carbon cycle*” See: IPCC, 1.5°C report, p257, para 3.5.2.5

⁷⁹ IPCC, 1.5°C report, Summary for Policymakers at B.2.2: “*Sea level rise will continue beyond 2100 even if global warming is limited to 1.5°C in the 21st century (high confidence). Marine ice sheet instability in Antarctica and/or irreversible loss of the Greenland ice sheet could result in multi-metre rise in sea level over hundreds to thousands of years. These instabilities could be triggered at around 1.5°C to 2°C of global warming (medium confidence)*”.

⁸⁰ IPCC, 1.5°C report, Summary for Policymakers, p191: “*Overshooting poses large risks for natural and human systems, especially if the temperature at peak warming is high, because some risks may be long-lasting and irreversible, such as the loss of some ecosystems (high confidence)*”; IPCC AR6 WG1 Summary for Policymakers, B.5: “*Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.*”

world's average temperature once global warming has increased is extremely difficult. It would depend on unproven negative emissions technologies or projects, such as bioenergy with carbon capture and storage on an unprecedented scale, or reforestation of significant parts of the Earth's surface, with knock-on risks to food supply.⁸¹ Ceasing carbon dioxide emissions at some later date does not reduce the impacts of climate change – it may only slow further temperature rise, and extreme weather and other impacts will continue to occur as a result of changed climatic conditions.

48. *Fourthly*, there are **significant 'lag' effects** between emissions and impacts of climate change – the effect of inertia in both geophysical and socio-economic systems. Geophysical system inertia for various climate impacts arises from (for example) thawing permafrost, ocean thermal and carbon cycle effects.⁸² In human terms, there is a further lag in transitioning entrenched human systems – building infrastructure, re-training workforces and re-designing regulation – to decarbonize them at the pace required.⁸³ These lag effects mean that emission reductions are required now to prevent future climate impacts. The IPCC has found that “*limiting warming to 1.5°C would require a rapid escalation in the scale and pace of transition, particularly in the next 10–20 years*”.⁸⁴ Conversely, it states that “*delaying GHG [greenhouse gasses] emissions reductions over the coming years also leads to economic and institutional lock-in into carbon-intensive infrastructure, that is, the continued investment in and use of carbon-intensive technologies that are difficult or costly to phase-out once deployed*”.⁸⁵ This phenomenon is known as ‘**carbon lock-in**’, and is particularly relevant to the construction of long-lived fossil fuel infrastructure.⁸⁶
49. *Fifthly*, the IPCC has emphasized that the type of changes needed to limit warming to 1.5°C must involve all relevant companies, industries and stakeholders to support the chance of successful transition (a ‘**whole systems’ approach to emissions reduction**).⁸⁷ This encompasses social and cultural conditions relating to public awareness and acceptability of transition-related changes and also political support and understanding of these changes.⁸⁸

Urgency

50. The IPCC's Special Report has focussed global attention on the target of limiting warming to 1.5°C by reaching Net Zero by 2050 in order to limit or avert the worst impacts of climate

⁸¹ IPCC, 1.5°C report, Summary for Policymakers, p17

⁸² IPCC, 1.5°C report, pp104, 107, 219; and see IPCC, AR5 Working Group 1, p85

⁸³ IPCC, 1.5°C report, p66, “*Since most sources of emissions cannot, in reality, be brought to zero instantaneously due to techno-economic inertia, the current rate of emissions also constitutes a conditional commitment to future emissions and consequent warming depending on achievable rates of emission reductions*”

⁸⁴ IPCC, 1.5°C report, p392, “*To limit warming to 1.5°C, mitigation would have to be large-scale and rapid.*”

⁸⁵ IPCC, 1.5°C report, p126, para 2.3.5

⁸⁶ See also UNEP, The Production Gap Report: Special Report (2020) pV (Production Gap report)

<https://productiongap.org/wp-content/uploads/2020/12/PGR2020_FullRprt_web.pdf> “*The tendency for certain carbon-intensive technological systems to persist over time, “locking out” lower-carbon alternatives, owing to a combination of linked technical, economic, and institutional factors*”; See also G. Unruh, Understanding carbon lock-in (October 2000) 28 Energy Policy 817-830 <<https://www.sciencedirect.com/science/article/abs/pii/S0301421500000707>>

⁸⁷ IPCC, 1.5°C report, p392 “*Because these different actions are connected, a ‘whole systems’ approach would be needed for the type of transformations that could limit warming to 1.5°C. This means that all relevant companies, industries and stakeholders would need to be involved to increase the support and chance of successful implementation. As an illustration, the deployment of low-emission technology (e.g., renewable energy projects or a bio-based chemical plants) would depend upon economic conditions (e.g., employment generation or capacity to mobilize investment), but also on social/cultural conditions (e.g., awareness and acceptability) and institutional conditions (e.g., political support and understanding).*”

⁸⁸ Ibid, “*As an illustration, the deployment of low-emission technology (e.g., renewable energy projects or a bio-based chemical plants) would depend upon economic conditions (e.g., employment generation or capacity to mobilize investment), but also on social/cultural conditions (e.g., awareness and acceptability) and institutional conditions (e.g., political support and understanding).*”

change.⁸⁹ Net Zero is a global goal, but requires individual action. States' and enterprises' present and near-term actions to reduce emissions (or their failures to do so) will determine the extent of climate change in the future. Accordingly, in October 2018 the IPCC's Special Report found that deep and rapid reductions of emissions must commence immediately from that date.⁹⁰

51. Following the Paris Agreement's near-universal adoption and reflecting the notion that every actor must do its part, States, localities, cities and a wide range of business enterprises have committed to the transition to Net Zero by around 2050 in one form or another.⁹¹ Sectoral 'alliances' or groups of business enterprises pledging action toward Net Zero are increasingly common. Net Zero pledges are estimated by the UNFCCC's 'Race to Zero' campaign to cover actors representing over 70% of global GDP.⁹² Commentators analyse that, as a matter of international law, widespread and representative State practice and *opinio juris* following the Paris Agreement gives rise to "a customary norm of international law on emission reduction" pursuant to the Paris Goals.⁹³

52. In June 2021, the International Energy Agency (IEA) noted that:

*"The number of countries that have pledged to reach net-zero emissions by mid-century or soon after continues to grow, but so do global greenhouse gas emissions. This gap between rhetoric and action needs to close if we are to have a fighting chance of reaching net zero by 2050 and limiting the rise in global temperatures to 1.5 °C."*⁹⁴

53. Meanwhile, the world is presently heading for a catastrophic temperature rise in excess of 3°C.⁹⁵ At the end of 2020, UNEP's annual Emissions Gap report⁹⁶ stated:

"The report finds that, despite a brief dip in carbon dioxide emissions caused by the COVID-19 pandemic, the world is still heading for a temperature rise in excess of 3°C this century –

⁸⁹ See IPCC, 1.5°C report, Summary for Policymakers, A3.2, "Future climate-related risks depend on the rate, peak and duration of warming. In the aggregate, they are larger if global warming exceeds 1.5°C before returning to that level by 2100 than if global warming gradually stabilizes at 1.5°C, especially if the peak temperature is high (e.g., about 2°C) (high confidence). Some impacts may be long-lasting or irreversible, such as the loss of some ecosystems (high confidence)" and "[f]uture climate-related risks would be reduced by the upscaling and acceleration of far-reaching, multilevel and cross-sectoral climate mitigation and by both incremental and transformational adaptation (high confidence)."

⁹⁰ IPCC, 1.5°C report, pp32-33

⁹¹ Energy & Climate Intelligence Unit, Net Zero Emissions Race: 2021 Scorecard <<https://eciu.net/netzerotracker/>>; Climate Action 100+, Progress webpage <<https://www.climateaction100.org/progress/net-zero-company-benchmark/>>; UNFCCC, UN Race to Zero Campaign <<https://unfccc.int/climate-action/race-to-zero-campaign/>>; UNEP, Net-Zero Banking Alliance webpage <<https://www.unepfi.org/net-zero-banking/>>; UNEP Finance Initiative (UNEPFI), Net-Zero Alliance webpage <<https://www.unepfi.org/net-zero-alliance/>>; Net Zero Asset Managers webpage <<https://www.netzeroassetmanagers.org/>>; Oil Change International, Net Zero Producers Forum: A catalyst for climate action or yet another delaying tactic? (26 May 2021) <<http://priceofoil.org/2021/05/26/nzpfbriefing/>>

⁹² UNFCCC, Race to Zero: 2020 breakthrough year for climate action webpage (12 December 2020)

<<https://racetozero.unfccc.int/2020-breakthrough-year/>>

⁹³ Sourgens' analysis links the practice and sense of a legal obligation relating to the Paris Agreement to the human right to life, finding "a similar and accelerating movement towards a customary international law rule of emissions reduction in two converging regimes— human rights and international climate law". See: F. Sourgens, Climate Commons Law: The Transformative Force of the Paris Agreement (2018) 50 ILP 885-983 <<https://www.nyujilp.org/wp-content/uploads/2018/07/NYI303.pdf>>; See also ICCPR, General Comment No. 36: Article 6 (Right to life) (30 October 2018) UN Doc. CCPR/C/GC/36

<https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf>; 107

⁹⁴ International Energy Agency (IEA), Net Zero by 2050: A Roadmap for the Global Energy Sector (May 2021) (Net Zero Roadmap) <<https://www.iea.org/reports/net-zero-by-2050>>

⁹⁵ W. Ripple et al., World Scientists' Warning of a Climate Emergency 2021 (28 July 2021) 71 Bio Science 894-898 <<https://doi.org/10.1093/biosci/biab079>>

⁹⁶ "For over a decade, the UNEP Emissions Gap Report has provided a yearly review of the difference between where greenhouse emissions are predicted to be in 2030 and where they should be to avoid the worst impacts of climate change." UNEP, Emission Gap report (9 December 2020) <<https://www.unep.org/emissions-gap-report-2020>>

far beyond the Paris Agreement goals of limiting global warming to well below 2°C and pursuing 1.5°C.”⁹⁷

54. The urgency of emissions reductions is particularly evident in calculations of the remaining scope to emit greenhouse gases in the future whilst meeting the 1.5°C goal. Limiting climate global temperature rise to any level means a finite ‘global carbon budget’, because of the cumulative effect of CO₂ emissions. According to the IPCC’s estimates, the budget for 1.5°C is very small, and dwindling rapidly. In the *Shell* case, the Hague District Court explained this as follows:⁹⁸

“The total global remaining capacity for further greenhouse gas emissions is also known as the carbon budget. Global CO₂ emissions currently run at 40 Gt CO₂ per year. Each year the global CO₂ emissions stay at this level reduces the carbon budget by 40 Gt. If global CO₂ emissions are higher, the carbon budget will decrease by more than 40 Gt. A carbon budget of 580 Gt CO₂ was remained available from 2017 – a best estimate – for a 50% chance of a warming of 1.5°C. Now, three years later, 120 Gt CO₂ of the carbon budget has been used, which means that 460 Gt CO₂ remains. At unchanged emission levels, the carbon budget will have been used up within the foreseeable future.”⁹⁹

55. The IPCC also estimated the remaining carbon budget giving a marginally improved 67% chance of limiting temperatures to 1.5°C, which is a significantly smaller budget of 400 Gt CO₂.¹⁰⁰ The IPCC warns that “[e]very tonne of CO₂ emissions adds to global warming”.¹⁰¹
56. There are just 10 years’ worth of CO₂ emissions at the current rates recorded in the Court’s judgment for a ‘better than even’ 67% chance of limiting warming to 1.5°C.¹⁰²
57. We highlight that the average global temperature provisions in the Paris Goals of “[h]olding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C” lead to the same level of global carbon budget. The IPCC’s 2020 budget for a 50% chance of keeping to 1.5°C (“pursuing efforts”) is 500 Gt CO₂, which is close to the budget of 550 Gt CO₂ for an estimated 83% chance of keeping to 1.7°C (“well below 2°C”).¹⁰³ The Paris Goals do not justify a significantly larger carbon budget.
58. A July 2021 scientific study summarising the state of the climate change emergency contains a grave warning about present trends:

“Three important greenhouse gases, carbon dioxide, methane, and nitrous oxide, all set new year-to-date records for atmospheric concentrations in both 2020 and 2021 (figure 2a–2c). In April 2021, carbon dioxide concentration reached 416 parts per million, the highest monthly global average concentration ever recorded. The year 2020 was the second hottest year on record, and all five of the hottest years on record have occurred since 2015”

“Given the impacts we are seeing at roughly 1.25 degrees Celsius (°C) warming, combined with the many reinforcing feedback loops and potential tipping points, massive-scale climate

⁹⁷ Ibid.

⁹⁸ The German Constitutional Court has also commented that the IPCC’s estimated global carbon budget is a helpful yardstick against which to measure emissions reductions targets. German Constitutional Case - Order of 24 March 2021 1 BvR 2656/18, 1 BvR 96/20, 1 BvR 78/20, 1 BvR 288/20, 1 BvR 96/20, 1 BvR 78/20, para 218

⁹⁹ *Milieudefensie et al. v. Royal Dutch Shell plc.* [2021] C/09/571932, para 2.3.4
<<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>>

¹⁰⁰ IPCC, AR6 WG1, Summary for Policymakers, p38, Table SPM.2

¹⁰¹ IPCC, AR6 WG1, Summary for Policymakers, p 37, Table SPM.10

¹⁰² A more recent analysis of listed companies’ emissions found that there is just 5 years and 8 months of time remaining until listed companies deplete their share of emissions budget for keeping global temperature rise below 1.5°C. see: MSCI, Net Zero Tracker, available at <<https://www.msci.com/documents/1296102/26195050/MSCI-Net-Zero-Tracker.pdf>>

¹⁰³ AR6 WG1, Summary for Policymakers, p38, Table SPM.2

action is urgently needed. The remaining carbon budget for 1.5°C was recently estimated to have a 17% chance of being negative, indicating that we may already have lost the opportunity to limit warming to this level without overshoot or risky geoengineering (Matthews et al. 2021).”¹⁰⁴

59. Put simply, the best available science indicates that we are nearly out of time, and it shows that we are on the wrong track to reach the Paris Goal. The interpretation of the UNGPs and their application to the facts set out in this complaint must proceed from this fundamental starting point.

Fossil fuels and climate change

60. **Fossil fuels account for the majority of global emissions** – estimated to comprise 86% of anthropogenic emissions over the last 10 years.¹⁰⁵ The December 2020 UNEP Production Gap Report¹⁰⁶ analyses that, to limit global warming to 1.5°C or well below 2°C - the goals of the Paris Agreement - there must be a reduction in the combustion of fossil fuel energy products, and the associated production of coal, oil and natural gas. Fossil fuel production must reduce year on year between 2020 and 2030 – 4% per year for oil, and 3% per year for gas.

61. The “*managed, just, and equitable wind-down of fossil fuel production*” and transition away from fossil fuels which the Production Gap Report calls for is not yet happening. Instead, the UNEP Emissions Gap Report notes:

“Global GHG emissions continued to grow for the third consecutive year in 2019 [...] Fossil carbon dioxide (CO₂) emissions (from fossil fuels and carbonates) dominate total GHG emissions including [land use change] (65 per cent) and consequently the growth in GHG emissions. Preliminary data suggest that fossil CO₂ emissions reached a record 38.0 GtCO₂ (range: ±1.9) in 2019”¹⁰⁷ (one GtCO₂ refers to one gigatonne, or one thousand million tonnes, of CO₂).

62. The Production Gap Report depicts this graphically:

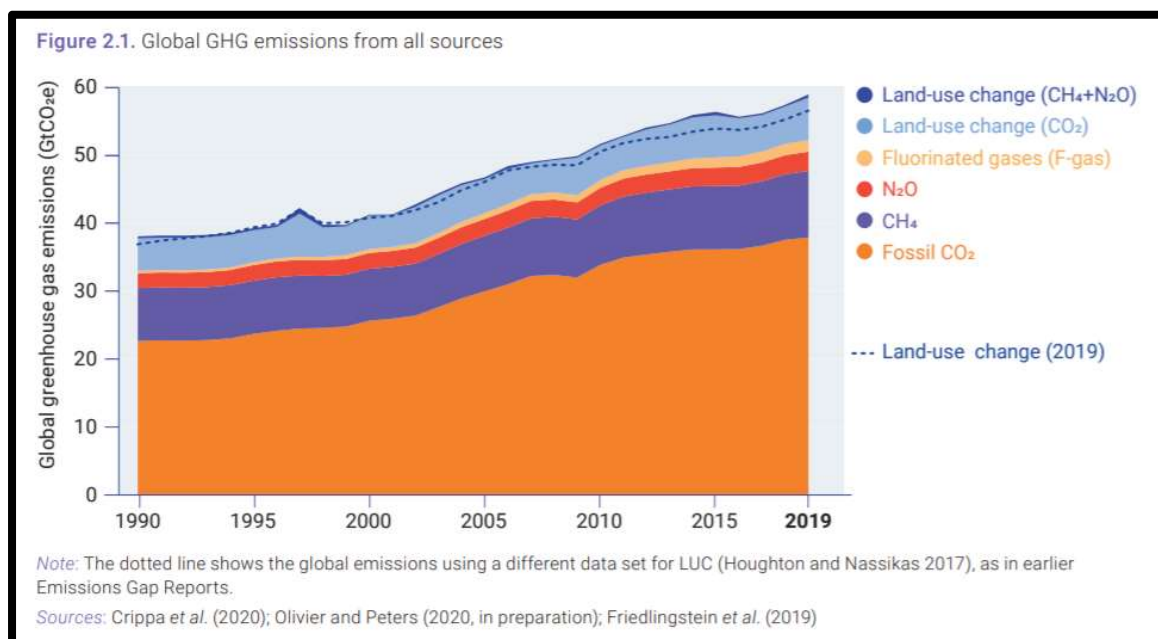
¹⁰⁴ W. Ripple et al., World Scientists’ Warning of a Climate Emergency 2021 (28 July 2021) 71 Bio Science 894-898 <<https://doi.org/10.1093/biosci/biab079>>

¹⁰⁵ See IPCC AR6 Technical Summary, page 46: “Of the total anthropogenic CO₂ emissions, the combustion of fossil fuels was responsible for about 64% ± 15%, growing to an 86% ± 14% contribution over the past 10 years”. As of 2015: “The fossil fuel industry and its products accounted for 91% of global industrial GHGs in 2015, and about 70% of all anthropogenic GHG emissions.” Carbon Disclosures Project, The Carbon Majors Database: Report (2017) p7 <<https://www.cdp.net/en/reports/downloads/2327>>

¹⁰⁶ See UNEP, Production Gap Report, Executive Summary, p6, Figure ES.3

¹⁰⁷ UNEP, Emissions Gap Report (9 December 2020) pIV <<https://www.unep.org/emissions-gap-report-2020>>

Complaint Figure 2



63. In May 2021, the IEA published its ‘Net Zero by 2050: A Roadmap for the Global Energy Sector’, which represents its view of “*the most technically feasible, cost-effective and socially acceptable*” pathway to Net Zero by 2050, in order to limit temperature rise to 1.5°C.¹⁰⁸ In common with other studies,¹⁰⁹ the IEA finds that a rapid phase out of fossil fuels can be balanced by scaling up renewable energy, including for increasing global population:

*“Net zero means a huge decline in the use of fossil fuels. They fall from almost four-fifths of total energy supply today to slightly over one-fifth by 2050 ... [b]eyond projects already committed as of 2021, there are no new oil and gas fields approved for development in our pathway”.*¹¹⁰

The report “sets out clear milestones – more than 400 in total, spanning all sectors and technologies – for what needs to happen, and when, **to transform the global economy from one dominated by fossil fuels into one powered predominantly by renewable energy like solar and wind**”.¹¹¹

64. The expert civil society organisation, Oil Change International, highlights the stark reality behind the IEA’s conclusion – that carbon dioxide from existing reserves of oil and gas blow the global carbon budget for the Paris Goals:

“The oil, gas, and coal in existing fields and mines would push average global temperature rise far beyond 1.5°C, and exceed even a 2°C carbon budget. If global coal use ended

¹⁰⁸ IEA, Net Zero Roadmap, p3

¹⁰⁹ “Renewable energy potential can be scaled up fast enough to ensure energy security and achieve 100% energy access for all [...] All regions, including top fossil fuel producer countries across North America, the Middle East and Asia, have more than enough renewable energy to meet the needs of the individual countries within each region, thereby changing the nature of energy dependency and imports worldwide. The fossil fuel phase out need not leave behind anyone in the dark and without energy access”. See: S. Teske and S. Niklas, Fossil Fuel Exit Strategy: An orderly wind down of coal, oil and gas to meet the Paris Agreement (June 2021) p6 <https://myclimatechangehome.files.wordpress.com/2021/06/fossil_fuel_exit_strategy.pdf>

¹¹⁰ IEA, Net Zero Roadmap, p18

¹¹¹ IEA, Net Zero Roadmap, p3

overnight, already-developed oil and gas reserves would still push the world beyond 1.5°C.¹¹²

65. On 15 July 2021, the IEA’s semi-annual Electricity Market Report assessed that increasing global electricity demand in 2021 will be met in large part with more fossil fuels, particularly in the Asia Pacific region. Despite the progress of renewable energy, fossil fuel power sector emissions are therefore set to rise by 3.5% 2021 and 2.5% in 2022 – “**which would take them to an all-time high**”.¹¹³ This was further confirmed by a July 2021 scientific study, which found that:

*“Likely because of the COVID-19 pandemic, fossil fuel energy consumption has decreased since 2019, along with carbon dioxide emissions, per capita emissions of carbon dioxide, and air transport [...] However, these declines appear to be transient in that 2021 projected estimates show all of these variables significantly rising again. Conversely, solar and wind power consumption increased by 57% between 2018 and 2021, but it is still roughly 19 times lower than fossil fuel consumption.”*¹¹⁴

66. The particular relevance of the activities of Saudi Aramco and the KSA in this situation is made clear by the IEA:

*“What happens depends to a large degree on the strategies adopted by resource-rich governments and their national oil companies. In the [Net Zero Emissions – NZE] it is assumed that, despite having lower cost resources at their disposal, they restrict investment in new fields. This limits the need for the shutting in and closure of higher cost production. The market share of major resource-rich countries nevertheless still rises in the NZE due to the large size and slow decline rates of their existing fields.”*¹¹⁵

67. The transition away from fossil fuels to renewable energy is both technologically feasible and economically rational.¹¹⁶ It requires urgent and vital action now, due to the critical nature of climate pathways over the next 10 years. The need for urgent action and the impacts of fossil fuel burning on climate change with adverse human rights consequences was confirmed in the joint statement from nine Special Procedures mandate-holders in September 2019:

¹¹² Oil Change International’s analysis is as of 1 January 2020 and is found in *Unused Tools: How central banks are fueling the climate crisis* (August 2021) <http://priceofoil.org/content/uploads/2021/08/central_bank_report_A4_v06.pdf>; The same conclusion is reached by other studies: J. Leaton, *Unburnable Carbon – Are the World’s Financial Markets Carrying a Carbon Bubble?* (BankTrack, 2011)

<https://www.banktrack.org/download/unburnable_carbon/unburnablecarbonfullrev2.pdf>; C. McGlade and P. Ekins, *The Geographical Distribution of Fossil Fuels Unused When Limiting Global Warming to 2 °C* (2015) 517 *Nature* 187-190 <<https://www.nature.com/articles/nature14016>>; G. Muttitt, *The Sky’s Limit: Why the Paris Climate Goals Require a Managed Decline of Fossil Fuel Production* (Oil Change International 2016) <<http://priceofoil.org/2016/09/22/the-skys-limit-report/>>; B. Hare, *Fossil Fuels and Climate Protection* (Greenpeace 1997) <<https://www.greenpeace.to/greenpeace/?p=378>>; M. Berners-Lee and D. Clark, *The Burning Question* (Profile Books 2013); B. McKibben, *Global Warming’s Terrifying New Math* in *The Rolling Stone* (19 July 2012) <<https://www.rollingstone.com/politics/politics-news/global-warmings-terrifying-new-math-188550/>>

¹¹³ IEA, *Press Release: Global electricity demand is growing faster than renewables driving strong increase in generation from fossil fuels* (15 July 2021) <<https://www.iea.org/news/global-electricity-demand-is-growing-faster-than-renewables-driving-strong-increase-in-generation-from-fossil-fuels>>

¹¹⁴ W. Ripple et al., *World Scientists’ Warning of a Climate Emergency 2021* (28 July 2021) 71 *Bio Science* 894-898 <<https://doi.org/10.1093/biosci/biab079>>

¹¹⁵ IEA, *Net Zero Roadmap*, p52

¹¹⁶ “a 1.5°C-aligned energy pathway is technically feasible, cost-effective, and can be realised with the right leadership and political action [...] while the scenario shows what is possible, it is not a political prognosis. Strong leadership and political action must steer the world on course to drive the emissions cuts required by science in order to catalyse a fair energy and economic transition for all people.” See: S. Teske and S. Niklas, *Fossil Fuel Exit Strategy: An orderly wind down of coal, oil and gas to meet the Paris Agreement* (June 2021) p6

<https://myclimatechangehome.files.wordpress.com/2021/06/fossil_fuel_exit_strategy.pdf>

“Burning coal, oil, and gas produce the vast majority of human-caused greenhouse gas emissions, resulting in the global climate emergency that endangers human rights in every region of the planet.”¹¹⁷

Climate Change Impacts in KSA

68. Given the KSA’s environment and society, climate change gives rise to particular human rights issues in the State. The KSA and the Gulf region as a whole is characterised by vulnerability to climate change. Based on detailed studies, the IPCC finds that:

“The [Gulf] region’s human societies and fragile ecosystems are highly vulnerable to the impacts of climate change, such as water stress (Evans et al., 2004; Shaffrey et al., 2009), desertification (Bayram and Öztürk, 2014), sea level rise affecting vast low coastal lands, and high temperature and humidity with future levels potentially beyond adaptive capacities (Pal and Eltahir, 2016).”¹¹⁸

69. In the IPCC’s 2021 regional assessments, there is high confidence that most areas of the Arabian Peninsula region experience higher than the global average of warming; above 5°C warmer under a high-emissions scenario. With this scenario, dangerous heat stress thresholds will be exceeded much more often by the middle of this century.¹¹⁹ There is high confidence of sea level rise, coastal floods and erosion and increased oceanic acidity for the region.¹²⁰

70. Desertification is the degradation of land, resulting in the loss of productivity, ecological integrity or value to humans.¹²¹ Studies show that *“Saudi Arabia is highly vulnerable to desertification”¹²² and “the rate of desertification is expected to rise”¹²³* if temperatures continue to climb. Desertification in Saudi Arabia has caused increasingly hazardous dust storms, which harm human health and systems.¹²⁴ The risk from desertification has been highlighted by the KSA government.¹²⁵

71. Heat, and so-called ‘heat stress’, presents a particular threat to human rights in KSA owing to its hot climate. The phenomenon of ‘heat stress’ refers to heat in excess of that which the human

¹¹⁷ OHCHR, United Nations Climate Action Summit, Our addiction to fossil fuels causes climate emergency, say human rights experts (17 September 2019) <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=25003>>

¹¹⁸ IPCC, 1.5°C report, Chapter 5, p462, Box 5.2

¹¹⁹ AR6, WG1 Chapter 12, 12.4.2.1 p40

¹²⁰ AR6, WG1 Chapter 12, Table 12.4, p48

¹²¹ IPCC, ‘Chapter 3: Desertification’, in Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (2019) p254, para 3.1.1 <<https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf>>

¹²² IPCC, 1.5°C report, Chapter 6, p264

¹²³ H. Bayram, Global climate change, desertification, and its consequences in the Middle East, Chapter 17 in Global Climate Change and Public Health, Respiratory Medicine book series (Humana Press 2013) pp293-305; and expressed in Second National Communication Kingdom of Saudi Arabia (2011), available at: <<https://unfccc.int/resource/docs/natc/saunc2.pdf>>

¹²⁴ *“the dust storm on 10 March 2009 over Riyadh was assessed to be the strongest in the previous two decades in Saudi Arabia, causing limited visibility, airport shutdown and damages to infrastructure and environment across the city (Maghrabi et al. 2011)”* in IPCC, Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (2019) pp274-275, paras 3.4.2.3 and 3.4.2.7 <<https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf>>

¹²⁵ According to Crown Prince Mohammed bin Salman, *“The kingdom and the region are facing many environmental challenges, such as desertification, which poses an economic threat to the region, as it is estimated that \$13 billion are drained by sandstorms in the region every year and air pollution from greenhouse gases is estimated to have reduced the average age of citizens by one and a half years.”* See: The National, Saudi Green Initiative: everything you need to know about plan to plant 50 billion trees (5 April 2021) <<https://www.thenationalnews.com/gulf/saudi-arabia/saudi-green-initiative-everything-you-need-to-know-about-plan-to-plant-50-billion-trees-1.1194931>>

body can tolerate without physiological impairment.¹²⁶ Heat stress is commonly measured in the ‘wet bulb globe temperatures’ (‘TW’) metric which combines temperature, humidity, wind and radiative heat¹²⁷ to give combined “*measures of human discomfort and heat*”¹²⁸. The “‘*dangerous*’ and ‘*extremely dangerous*’ TW thresholds are 24.6 °C TW and 29.1 °C TW respectively”.¹²⁹ There are various scientific studies which indicate that global warming will take TW levels to and well beyond these dangerous thresholds in KSA under high emissions scenarios.

72. Current TW levels in KSA pose a significant threat to the health of the working population.¹³⁰ KSA hosts the third largest migrant population in the world.¹³¹
73. Even if global temperature rises are kept to 1.5°C, there is an increased probability of exceeding the dangerous and extremely dangerous thresholds in summer months in KSA – with much increased probability if global average temperature is allowed to rise to 2°C.¹³²
74. Under a higher emissions pathway, future TW levels in KSA are projected to exceed 35°C TW, at which point temperatures are lethal to human life.¹³³ A 2015 study by Pal and Eltahir stated: “[w]e project using an ensemble of high-resolution regional climate model simulations that extremes of wet-bulb temperature in the region around the Arabian Gulf are likely to approach and exceed this critical threshold under the business-as-usual scenario of future greenhouse gas concentrations. Our results expose a specific regional hotspot where climate change, in the absence of significant mitigation, is likely to severely impact human habitability in the future.”¹³⁴ Another 2018 study using the same high emissions scenario found that mortality risk for those over 65 years of age from heat stress will increase 8-20 times.¹³⁵

¹²⁶ IPCC, ‘Chapter 3: Desertification’, in Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems (2019) p300, para 3.7.4 <<https://www.ipcc.ch/site/assets/uploads/2019/11/SRCCL-Full-Report-Compiled-191128.pdf>>; and International Labour Organisation (ILO), Working on a warmer planet: The impact of heat stress on labour productivity and decent work (1 July 2019) p4 <https://www.ilo.org/global/publications/books/WCMS_711919/lang--en/index.htm>

¹²⁷ Ibid, pp52, 90

¹²⁸ F. Saeed et. al, From Paris to Makkah: heat stress for Muslim pilgrims at 1.5°C and 2°C (2019) 16 Environmental Research Letters p3 <<https://iopscience.iop.org/article/10.1088/1748-9326/abd067/pdf>>

¹²⁹ Ibid, p4

¹³⁰ The escalation and persistence of hot weather during the summer currently poses a significant threat to the health and safety of the working population in Saudi Arabia. See: Jefri et al., Heat stress assessment in the industrial facilities (a case study) (1990) 25 J Environ Sci Health A 209–30; Noweir et al., Study of heat exposure in the work environment (1996) 40 Jeddah. Environ Monit Assess 225–37; and Noweir and Bafail, Study of summer heat exposure at the ground services operations of a main international airport in Saudi Arabia (2008) 145 Environ Monit Assess 103–11. In 2016, “*the intensity and duration of heat stress exposure among workers in [Saudi Arabia] were very high throughout the majority of the workday, both indoors and outdoors*”, M. Al-Bouwarthan et al., Assessment of heat stress exposure among construction workers in the hot desert climate of Saudi Arabia (2019) 63 Annals Work Expo Health 505-520

¹³¹ ILO, Labour Migration webpage <<https://www.ilo.org/beirut/areasofwork/labour-migration/lang--en/index.htm>>

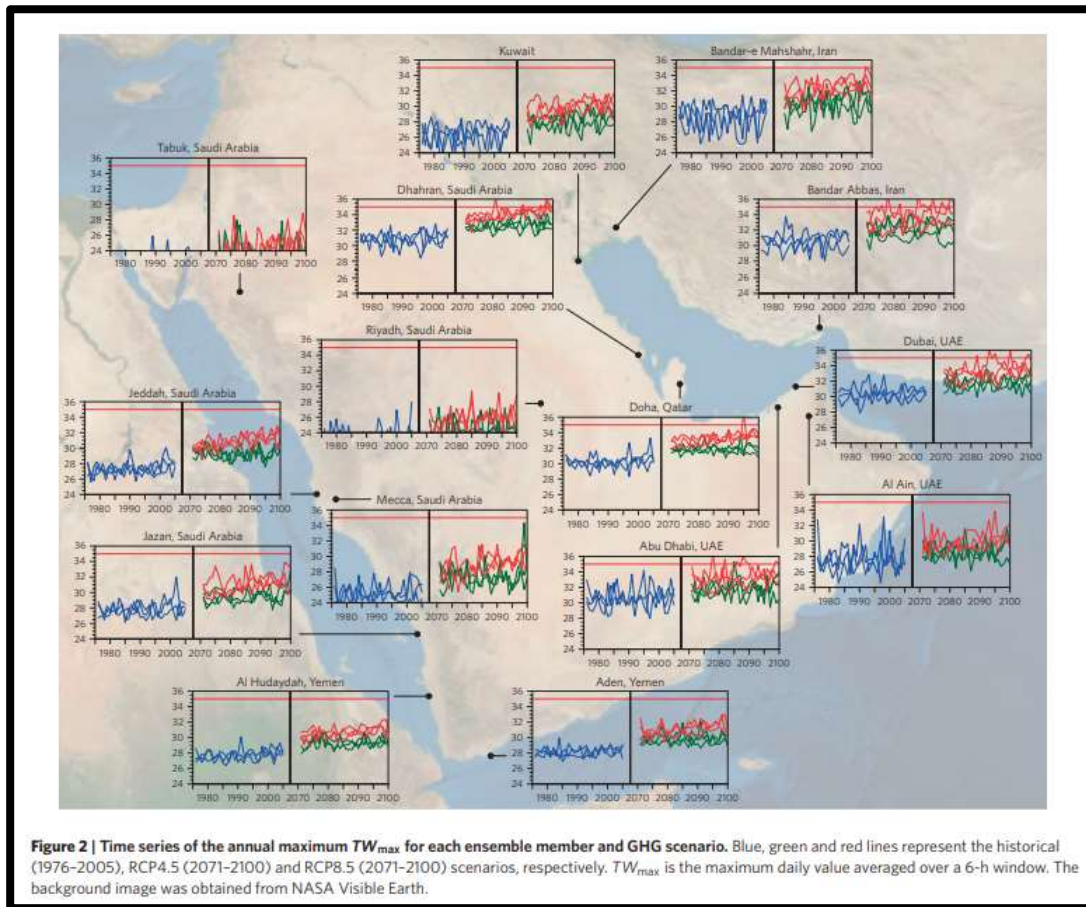
¹³² “*An increase in exceedance probability of dangerous threshold is projected by two and three times in 1.5 °C and 2 °C warmer worlds respectively for May as compared to the reference climate. September shows the highest increase in the exceedance probability of extremely dangerous threshold which is increased to 4 and 13 times in 1.5 °C and 2 °C warmer worlds respectively.*” F. Saeed et. al, From Paris to Makkah: heat stress for Muslim pilgrims at 1.5°C and 2°C (2021) 16 Environmental Research Letters, Abstract <<https://iopscience.iop.org/article/10.1088/1748-9326/abd067/pdf>>

¹³³ “*When wet-bulb temperatures reach 35°C, the human body cannot cool itself enough to survive more than a few hours*”, S. Kang et. al., Future Heat Stress During Muslim Pilgrimage (Hajj) Projected to Exceed Extreme Danger Levels (2019) 46 Geophysical Research Letters 10094 <<https://doi.org/10.1029/2019GL083686>>

¹³⁴ J. Pal and E. Eltahir, Future temperature in southwest Asia projected to exceed a threshold for human adaptability (2016) 6 Nature 197-200 <<https://www.nature.com/articles/nclimate2833>>

¹³⁵ A. Ahmadalipour and H. Moradkhani, Escalating heat stress mortality risk due to global warming in the Middle East and North Africa (2018) Environ Int. <<https://pubmed.ncbi.nlm.nih.gov/29763817/>>

Complaint Figure 3



75. A study in March 2021 into summer heat extremes in the Middle East and North Africa concludes that:

“[o]ur results, for a business-as-usual [emissions] pathway, indicate that in the second half of this century unprecedented super- and ultra-extreme heatwave conditions will emerge. These events involve excessively high temperatures (up to 56 °C and higher) and will be of extended duration (several weeks), being potentially life-threatening for humans. By the end of the century, about half of the [Middle East and North Africa] population (approximately 600 million) could be exposed to annually recurring super- and ultra-extreme heatwaves”.¹³⁶

76. The projected incidence of TW heat extremes at various locations in KSA and the consequences of failing to cut emissions substantially can be seen graphically in Pal and Eltahir’s 2015 study.¹³⁷ The blue line represents real-life historical TW temperatures over 1976–2005, the green line represents future temperatures under a 2071–2100 scenario with emission reduction efforts, and the red line represents future temperatures under a ‘business as usual’ 2071–2100 scenario with high emissions.¹³⁸ The green ‘emissions reduction efforts’ line reaches TW temperatures above

¹³⁶ G. Zittis et al., Business-as-usual will lead to super and ultra-extreme heatwaves in the Middle East and North Africa (2021) 4 npj Clim Atmos Sci 20 <<https://doi.org/10.1038/s41612-021-00178-7>>

¹³⁷ J. Pal and E. Eltahir, Future temperature in southwest Asia projected to exceed a threshold for human adaptability (2016) 6 Nature, p3, Figure 2 <<https://www.nature.com/articles/nclimate2833>>

¹³⁸ The scenarios are Representation Concentration Pathway (RCP) 4.5 and RCP8.5. See IPCC, AR5 Summary for Policymakers, para 2.1. M. Kormucu et. al, Mid-century changes in the mean and extreme climate in the Kingdom of Saudi Arabia and implications for water harvesting and climate adaptation (2020) 11 Atmosphere 1068 <<https://globalchange.mit.edu/publication/17504>> referring to J. Pal and E. Eltahir, Future temperature in southwest Asia

29.1°C ('extremely dangerous') much more often than the blue historic line. The red 'business as usual' line exceeds 35°C in a number of the surveyed KSA locations.

77. Climate impacts in KSA also directly implicate the global Muslim community, because of the mass pilgrimages to holy sites in KSA – such as the Hajj. The Hajj is one of the five pillars of Islam, considered obligatory for all adult Muslims who are capable of travelling to Mecca in Saudi Arabia to visit the Islamic faith's holiest sites.¹³⁹ Along with the minor pilgrimage towards Mecca called Umrah, the Hajj is normally attended by over 10 million Muslim pilgrims – and these numbers are planned to increase under the KSA's Vision 2030 national policy.¹⁴⁰ Prolonged periods are spent outdoors, including performing physically demanding rites and many of the visitors are elderly.¹⁴¹ In the past, large numbers of pilgrims have died in crushes during the pilgrimage, including in heat of over 43°C.¹⁴² Heat stress, even from TW levels of just 21°C, is estimated to have resulted in over 100 pilgrims falling victim to heat stroke in the past.¹⁴³ In July 2021, as pilgrims flocked to Mecca for the Hajj, KSA forecast temperature highs of 44°C following an extremely high May 50°C heatwave.¹⁴⁴
78. The scientific evidence shows that by the middle of this century dangerous and extremely dangerous heat stress levels will be the overwhelming norm of the Hajj:
- under the 'business as usual' emissions scenario, "*heat stress levels are projected to exceed the extreme danger threshold 6%, 20%, and 42% and the danger threshold 73%, 88%, and 100% sometime during Hajj events in the periods up to 2020, 2045–2053, and 2079–2086, respectively.*"¹⁴⁵ Emissions reduction efforts are projected to substantially reduce these occurrences.
 - Another study into heat stress risks for Muslim pilgrims in KSA finds that the "*risk of life threatening heat stroke is projected to increase significantly especially towards higher temperatures in each summer month. However stringent climate action to limit the global mean temperatures to 1.5 °C is projected to reduce these risks to half as compared to the 2 °C warmer world.*"¹⁴⁶
79. Owing to its specific climactic conditions, individuals living in, working in and travelling to KSA are highly vulnerable to the impacts of climate change, including uninhabitable heat extremes and

projected to exceed a threshold for human adaptability (2016) 6 Nature, p3, Figure 2

<<https://www.nature.com/articles/nclimate2833>>

¹³⁹ F. Saeed et. al., From Paris to Makkah: heat stress for Muslim pilgrims at 1.5°C and 2°C (2021) 16 Environmental Research Letters, p2 <<https://iopscience.iop.org/article/10.1088/1748-9326/abd067/pdf>>

¹⁴⁰ "Saudi Arabia's plan to host substantially increased number of Hajj pilgrims by 2030 (Yezliet al 2017), also to accommodate an ever growing muslim population worldwide, makes the future heat stress risks due to global warming an issue of paramount importance (Pew Research Center 2011)." F. Saeed et. al., From Paris to Makkah: heat stress for Muslim pilgrims at 1.5°C and 2°C (2021) 16 Environmental Research Letters

<<https://iopscience.iop.org/article/10.1088/1748-9326/abd067/pdf>>

¹⁴¹ "The ritual of Hajj involves spending roughly 20–30 hr outdoors over a period of about 5 days." S. Kang et. al., Future Heat Stress During Muslim Pilgrimage (Hajj) Projected to Exceed Extreme Danger Levels (2019) 46 Geophysical Research Letters 10094 <<https://doi.org/10.1029/2019GL083686>>

¹⁴² Vanity Fair, The Mecca stampede that made history (9 January 2018) <<https://www.vanityfair.com/news/2018/01/the-mecca-stampede-that-made-history-hajj>>

¹⁴³ This is the case even with facilities and efforts to protect pilgrims. See: F. Saeed et. al, From Paris to Makkah: heat stress for Muslim pilgrims at 1.5°C and 2°C (2021) 16 Environmental Research Letters p2

<<https://iopscience.iop.org/article/10.1088/1748-9326/abd067/pdf>>

¹⁴⁴ Bloomberg Green, Heatwaves Ease for Second Pandemic-Era Hajj Pilgrimage (20 July 2021)

<<https://www.bloomberg.com/news/articles/2021-07-20/heatwaves-ease-for-second-pandemic-era-hajj-pilgrimage>>

¹⁴⁵ S. Kang et. al., Future Heat Stress During Muslim Pilgrimage (Hajj) Projected to Exceed Extreme Danger Levels (2019) 46 Geophysical Research Letters 10094 <<https://doi.org/10.1029/2019GL083686>>

¹⁴⁶ F. Saeed et. al, From Paris to Makkah: heat stress for Muslim pilgrims at 1.5°C and 2°C (2021) 16 Environmental Research Letters p7 <<https://iopscience.iop.org/article/10.1088/1748-9326/abd067/pdf>>

desertification. Climate change also raises specific and clear human rights risks from heat extremes to the worldwide Muslim community in the context of the Hajj.

D. EVIDENCE - SAUDI ARAMCO'S BUSINESS ACTIVITIES

Saudi Aramco

80. Saudi Aramco is a primarily State-owned enterprise, with 98.5% of its shares owned by the government of KSA. The remaining 1.5% of shares were sold when Saudi Aramco was listed on the Saudi Arabian stock exchange in 2019, which raised \$25.6 billion and valued the business enterprise at about \$1.7 trillion. This made Saudi Aramco the most valuable business enterprise in the world at the time.¹⁴⁷
81. KSA and Saudi Aramco are inextricably linked by control, management and finances:
- a. The Basic Law of Saudi Arabia (Royal Decree No. A/90) vests all of the KSA's oil and gas wealth in the government;¹⁴⁸
 - b. Saudi Aramco is granted by KSA “*the exclusive right to explore, drill, prospect, appraise, develop, extract, recover and produce hydrocarbons... [and] the exclusive right to market and distribute hydrocarbons, petroleum products and liquid petroleum gas*”;¹⁴⁹
 - c. Saudi Aramco is directly overseen by the highest levels of the KSA government, as any significant decisions made by Saudi Aramco must first be approved by a hierarchy of two KSA councils: the Council of Economic and Development Affairs (CEDA), established and chaired by the KSA Crown Prince; and the Supreme Council of Saudi Aramco (SCSA), which is composed of 10 members who meet annually under the primary chairmanship of the KSA Crown Prince to make key decisions about Aramco's future, apparently at the direction of CEDA;¹⁵⁰
 - d. Saudi Aramco's board of directors is appointed under the direction of the SCSA and confirmed by Royal Decree and the KSA Crown Prince is the Head of the Supreme Council for Saudi Aramco. There are extensive links between KSA government personnel and the management of Saudi Aramco, with many individuals holding high-ranking positions in both;¹⁵¹
 - e. Saudi Aramco itself confirms that KSA has direct control over key production decisions. For example, in Saudi Aramco's 2020 Annual report, it states: “*the [KSA] Government may in its sole discretion increase or decrease the Kingdom's maximum hydrocarbon production levels at any time based on its strategic energy security goals or for any other reason. Therefore, Aramco's results of operations may depend in part on these sovereign decisions with respect to production levels*”;¹⁵² and
 - f. The government of KSA also may direct Saudi Aramco in other respects: “*the Government has directed, and may in the future direct, Aramco to undertake projects or provide assistance for initiatives outside Aramco's core business in furtherance of the*

¹⁴⁷ Reuters, Factbox: Saudi Aramco - the oil colossus (5 December 2019) <<https://www.reuters.com/article/us-saudi-aramco-ipo-factbox-idUSKBN1Y92I5>>

¹⁴⁸ Article 14, The Basic Law of Saudi Arabia (Royal Decree No. A/90 dated 27/8/1412 H (1 March 1992))

¹⁴⁹ Saudi Aramco, Annual Report (2020) p50 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁵⁰ A former KSA Minister for Oil is currently head of Saudi Aramco's upstream business. See: Shearman & Sterling, Oil and Gas in the Kingdom of Saudi Arabia – An Overview (September 2016) p2

<<https://www.shearman.com/Perspectives/2016/09/Saudi-Arabia-publications/Oil-and-Gas-in-the-Kingdom-of-Saudi-Arabia>>

¹⁵¹ See Saudi Aramco, Annual Report (2020) pp 108-117 for biographies <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁵² Ibid, pp104, 40 (emphasis added)

*Government’s macroeconomic, social or other objectives, leveraging Aramco’s know-how, resources and operational capabilities”.*¹⁵³

82. Saudi Aramco principally engages in the following business activities across much of the oil and gas value chain:¹⁵⁴
- a. the exploration, extraction and production of oil and gas;¹⁵⁵
 - b. the refining of oil and gas and manufacture of petrochemicals, base oils and lubricants from oil and gas;
 - c. the distribution and sale of oil and gas, refined products and petrochemicals;
 - d. the trading (buying and selling) of crude oil, refined oil products, and petrochemicals;
 - e. the generation (and through equity interests the sale) of electricity from oil and/or gas.¹⁵⁶
83. Greenhouse gas emissions are not limited to one part of oil and gas company business models, with significant emissions produced throughout the value chain. The extraction and production of crude oil or gas causes emissions, through energy use, methane leakage and routine venting and flaring. The burning of fossil fuels (i.e. their use) for energy or transport produces even more emissions overall. The manufacture and disposal of goods made from oil and gas, such as refined products, petrochemicals and plastics, also causes the release of greenhouse gases during industrial processes.¹⁵⁷
84. Saudi Aramco’s contribution to climate change is therefore of the same kind attributable to other large oil and gas producing companies, although the quantity of its emissions are greater, both historically and on the basis of its planned production. A study examining industrial emissions since climate change was officially recognized in 1988, shows that over half of those emissions can be traced to a concentration of just 25 fossil fuel business enterprises, with Saudi Aramco ranking as the largest greenhouse gas emitter.¹⁵⁸ An ‘integrated’ company active - as Saudi Aramco is - in much of the oil and gas value chain is implicated in impacts on climate change throughout its operations.
85. Saudi Aramco organises its business operations pursuant to an overarching seven-part business strategy, namely:¹⁵⁹

¹⁵³ Ibid, p105

¹⁵⁴ Ibid p201

¹⁵⁵ Used here to include crude oil, natural gas and natural gas liquids.

¹⁵⁶ Saudi Aramco owns 17 power plants, but does not appear to engage in the commercial sale of electricity itself, but owns stakes in the Saudi Electric Company (6.9%) and Marafiq (a KSA utility company, 42.2%). The majority of electricity generation is used to meet the power demands of Saudi Aramco’s oil and gas operations, with excess transferred to the KSA national grid, and the Saudi Electricity Company. Saudi Aramco, Annual Report (2020) p67 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁵⁷ In June 2020, Saudi Aramco expanded its petrochemicals business by buying a 70% equity share in Saudi Basic Industries Corporation (SABIC), a massive petrochemicals conglomerate, for US\$69.1 billion. The company described this as “a significant leap forward” for the company’s “ambition to expand further downstream” in the oil and gas value chain. SABIC itself disclosed 54.9 million tonnes of CO₂e in 2019. The rapidly increasing carbon intensive manufacture of petrochemicals, much of which are used for plastic, has itself been found to risk climate goals. Globally, plastics production is forecast to consume 10% of the global carbon budget on current growth rates. See: Aramco, Annual Report (2020) p27 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>; SABIC, Climate Change and Greenhouse Gas <<https://www.sabic.com/en/reports/sustainability-2019/energy-efficiency/greenhouse-gas>>; CIEL, Plastics and Climate (2019) p2 <<https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf>>

¹⁵⁸ See Carbon Disclosures Project, The Carbon Majors Database: Report (2017) p10 <<https://www.cdp.net/en/reports/downloads/2327>>

¹⁵⁹ Saudi Aramco, Annual Report (2020) p29 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

“1 Maintain its position as the world’s largest crude oil producer by production volume and one of the lowest cost producers, while providing reliable, low carbon intensity crude oil supply to customers.

2 Capture value from further strategic integration and diversification of its operations.

3 Expand gas activities.

4 Expand global recognition of Aramco’s brands.

5 Efficiently allocate capital and maintain a prudent and flexible balance sheet.

6 Deliver sustainable dividends through crude oil price cycles.

7 Operate sustainably by leveraging technology and innovation.” (emphasis added)

86. As is explained in each of the subsections below, Saudi Aramco’s contribution to climate change and failure to align with the Paris Goals can be analysed in relation its own business strategy points emphasized above.

Saudi Aramco’s maintained crude oil production

87. Saudi Aramco has the primary strategy to “[m]aintain its position as the world’s largest crude oil producer by production volume and one of the lowest cost producers, while providing reliable, low carbon intensity crude oil supply to customers.”¹⁶⁰ Saudi Aramco’s ‘upstream’ production of crude oil for sale constitutes its most significant contribution to climate change.

88. Instead of reducing its production in line with the Paris Goals and the imperatives of climate science,¹⁶¹ the company aims to maintain sales of its purportedly “*low carbon intensity*” crude oil. It positions this as action to address climate change.¹⁶²

89. The “*low carbon intensity*” claim is based on Saudi Aramco’s greenhouse gas emissions disclosure. Emissions of greenhouse gasses are converted using standard factors into units of CO₂ equivalent (or ‘CO₂e’) which expresses the ‘Global Warming Potential’ of each type of greenhouse gas by reference to CO₂, carbon dioxide.¹⁶³ Saudi Aramco discloses that it produced estimated emissions of **67 million tonnes of CO₂e** in 2020. These are the ‘direct’ emissions produced from sources owned or controlled by Saudi Aramco (Scope 1 emissions)¹⁶⁴ and ‘indirect’ emissions produced through the generation of electricity which Saudi Aramco purchases to power its operations (Scope 2 emissions). Saudi Aramco also calculates and discloses a ‘carbon intensity’ figure of emissions per unit of production, which is 10.6kg of CO₂e per barrel of oil equivalent (‘boe’).¹⁶⁵

90. Saudi Aramco’s accounting for its emissions omits the vast bulk of the emissions for which it is responsible. This is principally¹⁶⁶ because it omits the emissions resulting from the sale and use of

¹⁶⁰ Saudi Aramco, Annual Report (2020) p30 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁶¹ See paragraph 67

¹⁶² Saudi Aramco, Investors, Environment and climate change <<https://www.aramco.com/en/investors/investors/environment-and-climate-change#>>; and see Saudi Aramco, Annual Report (2020), p9 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁶³ See IPCC, AR5, Working Group 1, Chapter 8, p714, Table 8.7

¹⁶⁴ The global standard for emissions accounting, the GHG Protocol, divides an organisation’s emissions along its value chain into three Scopes, each of which consists of separate sub-categories. See: GHG Protocol, A Corporate Accounting and Reporting Standard (revised edition) <<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>>

¹⁶⁵ The metric of ‘barrel of oil equivalent’ or boe is used because it may encompass both oil and gas and other fossil fuel products. Saudi Aramco, Second quarter and half year interim report (2021) p4 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-q2-2021-interim-report-english.pdf>>

¹⁶⁶ Saudi Aramco has been criticized for excluding parts of its business from emissions disclosure altogether. Its disclosed Scope 1 and 2 emissions figures are limited to its KSA operations and certain subsidiaries but exclude joint ventures in KSA and abroad, which Bloomberg estimates could add a further 28 million tonnes of CO₂e of Scope 1 emissions alone. Bloomberg Green, Aramco’s new disclosures still exclude the vast majority of emissions (6 April 2021)

its products, known as Scope 3 emissions. Scope 3 emissions are ‘other indirect’ emissions which “are a consequence of the activities of the company”.¹⁶⁷ One of the categories of Scope 3 emissions is the “use of sold products”.¹⁶⁸ For oil and gas companies, the emissions from the use (e.g. combustion) of their fossil fuel products comprise the vast bulk (typically, 70-90%)¹⁶⁹ of their overall GHG footprint.¹⁷⁰

91. Despite claiming that its emissions reporting is “based on” the GHG Protocol, Saudi Aramco does not disclose its Scope 3 emissions. This is inconsistent with the GHG Protocol and is contrary to the Task Force on Climate-related Financial Disclosure (TCFD) standards, which represent best practice in business climate risk reporting.¹⁷¹ Saudi Aramco’s Scope 3 emissions have nevertheless been estimated by Bloomberg at **1,600 million tonnes of CO₂e** – which may itself be a substantial under-estimate.¹⁷² To put this in perspective, Saudi Aramco’s 2020 disclosed emissions are about 4.2% of this estimated Scope 3 emissions figure. Saudi Aramco’s ‘carbon intensity’ figures similarly avoid Scope 3 emissions, by selecting the label “Upstream carbon intensity” and so avoiding the emissions from its products.¹⁷³ The enterprise’s approach to disclosure contravenes the OHCHR’s view that a rights-based approach requires that “[b]usinesses should ensure adequate and accurate disclosure and reporting of their climate impacts in an accessible manner”.¹⁷⁴
92. In order to achieve its strategic aims, including of maintaining its position as the world’s largest crude oil producer, Saudi Aramco has been and is undertaking the following activities (where “mmbpd” means millions of barrels of oil per day).

<https://www.bloomberg.com/news/articles/2021-04-06/aramco-s-new-disclosures-still-exclude-vast-majority-of-its-emissions>

¹⁶⁷ GHG Protocol, A Corporate Accounting and Reporting Standard (revised edition) p25

<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>

¹⁶⁸ Ibid, p32

¹⁶⁹ “downstream emissions from burning fossil fuels are the major source of emissions from oil and gas, accounting for roughly 70 to 90 per cent of lifecycle emissions from oil products and 60 to 85 per cent of those from natural gas” LSE, Commentary: Emissions targets in the oil and gas sector: How do they stack up? (3 June 2020)

<https://www.lse.ac.uk/granthaminstitute/news/emissions-targets-in-the-oil-and-gas-sector-how-do-they-stack-up/>

¹⁷⁰ Another category of emissions which Saudi Aramco excludes is the ‘end of life’ emissions of the products of its massively expanded petrochemical business (see paragraph 83) – for example, studies show that waste plastics incineration and degradation generates significant emissions. See: CIEL, Plastics and Climate (2019) p58, Fig. 13, and p69 and following <https://www.ciel.org/wp-content/uploads/2019/05/Plastic-and-Climate-FINAL-2019.pdf>

¹⁷¹ Saudi Aramco, Annual Report (2020) p76 <https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>; p6, Table 1.1 in the GHG Protocol Scope 3 Standard provides a reporting option of “Report in conformance with the GHG Protocol Corporate Standard and the GHG Protocol Scope 3 Standard” under which “Required: Companies shall report scope 3 emissions following the requirements of the Scope 3 Standard”. GHG Protocol, A Corporate Accounting and Reporting Standard (revised edition) <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf>; The recommendations of the Task Force on Climate-related Financial Disclosure are the benchmark for disclosing climate risk and states that Scope 3 emissions are to be reported “if appropriate”. For oil and gas businesses, Scope 3 emissions are clearly material, and so disclosure is expected, as confirmed by the July 2021 draft TCFD Guidance: “Disclosure is particularly important for organizations for which Scope 3 emissions account for 40% or more of the total emissions of the organization or for which Scope 3 emissions have been deemed a significant risk in their value chain”. See TCFD, Proposed Guidance on Climate-related Metrics, Targets, and Transition Plans (2021) p17 https://assets.bbhub.io/company/sites/60/2021/05/2021-TCFD-Metrics_Targets_Guidance.pdf

¹⁷² Bloomberg is an internationally leading business news and analysis provider. The same analysis estimated ExxonMobil’s Scope 3 emissions at 538 Mt/CO₂e, but the company subsequently disclosed the higher amount of 730 Mt/CO₂e. Bloomberg, The Biggest Polluters are Hiding in Plain Sight (30 September 2020)

<https://www.bloomberg.com/graphics/2020-opinion-climate-global-biggest-polluters-scope-3-emissions-disclosures/>

¹⁷³ Saudi Aramco, Annual Report (2020) p76 <https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>

¹⁷⁴ OHCHR, Human Rights, Climate Change and Business Key Messages, p7

<https://www.ohchr.org/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>

- a. Historic growth in oil and gas production - According to BP's Statistical Review of World Energy, the KSA's oil production has grown at 2% per annum in the 10 years preceding 2019, and gas production has grown at 4.1% in the same period.¹⁷⁵
- b. Maintained oil and gas production - Saudi Aramco is not declining its production, and there is no sign that it intends to permanently decline its production in the future. In fact, recently it has been extracting and producing oil and gas faster. In April 2020, Saudi Aramco recorded its highest ever single day's production of crude oil (12.1 mmbpd). The company set this record by "*rapidly increasing production in March 2020, from 8.9 mmbpd up to the [maximum sustainable capacity] level of 12.0 mmbpd, a remarkable increase of approximately 35% that was achieved within a few weeks*".¹⁷⁶ Its most recent results talk of continuing "*to execute its Upstream growth plans, progressing with multiple projects to unlock the value creation potential of the Kingdom's hydrocarbon reserves*".¹⁷⁷ In August 2020, the company recorded its highest ever single day's production of natural gas (10.7bscfd)¹⁷⁸.¹⁷⁹ The company is increasing its 'maximum sustainable capacity' for producing crude oil from 12.0 to 13.0 mmbpd, and the CEO is reported as saying: "*[s]eeing that there is a lot of under-investment in [oil] supply it's a great opportunity for us [...] [w]e are diligently working to increase capacity*".¹⁸⁰
- c. Exploration for more oil and gas reserves – The company has access to vast oil and gas reserves - 336.9 billion barrels of oil equivalent ('boe') as of December 2020.¹⁸¹ At its high current production rates, Saudi Aramco says its reserves could produce oil and gas until 2076.¹⁸² A simple calculation shows that, if Saudi Aramco's reserves are burned, this would consume one quarter of the remaining global carbon budget of 500 GtCO₂ giving (just) an estimated 50% chance of limiting warming to 1.5°C.¹⁸³ Despite this, Saudi Aramco is exploring increasing its stock of oil and gas reserves for future extraction.¹⁸⁴ It

¹⁷⁵ For context, Egypt produced 9.7 TWh, and China produced 863 TWh. See: BP, Statistical Review of World Energy data (2021) <<https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/xlsx/energy-economics/statistical-review/bp-stats-review-2021-all-data.xlsx>>

¹⁷⁶ Saudi Aramco, Annual Report (2020) p54 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁷⁷ Saudi Aramco, Second quarter and half year interim report (2021) p3 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-q2-2021-interim-report-english.pdf>>

¹⁷⁸ "bscfd" refers to Billion Standard Cubic Feet per Day.

¹⁷⁹ Saudi Aramco, Annual Report (2020) p11 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁸⁰ Financial Times, Saudi Aramco looks at raising production capacity as profits surge (8 August 2021) <<https://www.ft.com/content/54635a4b-55b5-4b5a-8b84-d0b732586694>>

¹⁸¹ Saudi Aramco, Annual Report (2020) p141 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>; The reserves amount actually owned by Saudi Aramco is subject to the length of time left in the KSA Concession awarded to Saudi Aramco, so Saudi Aramco's owned reserves are lesser: 255.2 billion boe. However, there is no reason to expect that KSA will not extend the Concession, so a more accurate description is given through the reserves in the fields which Saudi Aramco operates.

¹⁸² "*Based on Aramco's reserves data, as at December 31, 2020, Aramco's oil equivalent reserves were sufficient for proved reserves life of 56 years*". Reserves life is "*Calculated on a barrel of oil equivalent basis by dividing proved reserves as at a given year-end by production for that year.*" Saudi Aramco, Annual Report (2020) pp141, 162 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁸³ Based on IPCC guidelines, burning a barrel of crude oil releases on average 0.42 tonnes of CO₂. Burning 1 bcf of gas releases 59,700 tonnes. Hence: Saudi Aramco's 261.5 billion barrels of oil would result in 110 GtCO₂, and the company's 237.4 billion standard cubic feet of gas would result in 14 GtCO₂, meaning a total of 124 GtCO₂. 124 GtCO₂ is c. 25% of the carbon budget of 500 GtCO₂. This calculation excludes Saudi Aramco's reserves of 'natural gas liquids', and excludes emissions from the rest of the oil and gas lifecycle (extraction, processing, transport etc), whilst not accounting for minor non-emitting uses of oil and gas such as asphalt. IPCC, Guidelines for National Greenhouse Gas Inventories (2006), Tables 1.2 and 1.3

<https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf>

¹⁸⁴ Saudi Aramco, Annual Report (2020) p26 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

discloses a strategic objective of finding additional fossil fuel reserves¹⁸⁵ and reports that “*Aramco’s exploration activities led to the discovery of seven new fields and one new reservoir in 2020*”.¹⁸⁶ Its August 2021 half-year report highlighted work on four new crude oil reservoirs to increase its production capacity.¹⁸⁷ According to BP’s Statistical Review of World Energy, the KSA’s proved reserves over which Aramco has exclusive rights have increased substantially since the Paris Agreement - from 266.5 gigatonnes of barrels of oil equivalent (Gtboe) in 2015 to 297.6 Gtboe in 2020.¹⁸⁸

- d. Expansion of carbon-intensive types of oil and gas production – Saudi Aramco is also expanding its operations in the most carbon-intensive forms of fossil fuel extraction – using fracking to access so-called ‘unconventional’ resources, also known as ‘shale’ oil and gas.¹⁸⁹ Of the seven new oil and gas fields and one additional reservoir which the company worked to discover in 2020 alone, five are ‘unconventional’.¹⁹⁰ In February 2020, Saudi Aramco received regulatory approval from the KSA government for the development of the Jafurah unconventional gas field, the largest non-associated¹⁹¹ gas field in KSA to date.¹⁹² Saudi Aramco’s CEO announced that “[a] new shale revolution is taking place (in Saudi Arabia)”.¹⁹³ These “unconventional” resources, are extracted through especially highly polluting and carbon intensive processes, owing to the additional energy required to extract such resources and the methane emissions of the process.¹⁹⁴ After the Committee on Economic, Social and Cultural Rights recommended that Argentina reconsider plans to explore shale oil and gas,¹⁹⁵ the Special Rapporteur on the Environment and Human Rights called for developed States to prohibit “*the expansion of the most polluting and environmentally destructive types of fossil fuel extraction, including oil and gas produced from hydraulic fracturing (fracking), oil sands, the Arctic or ultra-deepwater.*”¹⁹⁶

93. In light of the above, Saudi Aramco’s claim to have “*low carbon intensity*” crude oil risks being misleading. Even if its Scope 1 and 2 emissions are comparatively lower than some of the

¹⁸⁵ Ibid, p57

¹⁸⁶ Ibid, p26

¹⁸⁷ The four reservoirs are expected to add 0.725 mmbpd production capacity. Saudi Aramco, Second quarter and half year interim report (2021) p3 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-q2-2021-interim-report-english.pdf>>

¹⁸⁸ For context, Egypt produced 9.7 TWh, and China produced 863 TWh. See: BP, Statistical Review of World Energy data (2021) <<https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/xlsx/energy-economics/statistical-review/bp-stats-review-2021-all-data.xlsx>>

¹⁸⁹ Whilst the Annual Report 2020 avoids the words ‘shale’ oil and gas or hydraulic fracturing, it defines “*Unconventional oil and gas*” as “*Term refers to the oil and gas resources which cannot be explored, developed and produced by conventional processes just in using the natural pressure of the wells and pumping or compression operations*”, referring to the need for hydraulic fracturing (fracking) to extract the oil and gas. Saudi Aramco, Annual Report (2020) p162 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁹⁰ Ibid, p56

¹⁹¹ A ‘non-associated’ gas field is a reservoir solely of gas – as oil reservoirs also contain certain amounts of gas.

¹⁹² Saudi Aramco, Annual Report (2020) p12 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

¹⁹³ Reuters, Saudi Aramco launches largest shale gas development outside US (24 February 2020) <<https://www.reuters.com/article/us-saudi-shale-gas-idUSKCN20I29A>>

¹⁹⁴ New Scientist, Fracking wells in the US are leaking loads of planet-warming methane (22 April 2020) <<https://www.newscientist.com/article/2241347-fracking-wells-in-the-us-are-leaking-loads-of-planet-warming-methane/>>; and see para 2.5.10 of the *Shell* case judgment, *Milieudefensie et al. v. Royal Dutch Shell plc*. [2021] C/09/571932 <<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>>; Fracking is also linked to groundwater contamination, health issues and earthquake activity.

¹⁹⁵ Because those plans ran “*counter to the State party’s commitments under the Paris Agreement and would have a negative impact on global warming and on the enjoyment of economic and social rights by the world’s population and future generations*”. See: CESCR, Concluding observations on the fourth periodic report of Argentina (1 November 2018) UN Doc. E/C.12/ARG/CO/4 <<https://undocs.org/en/E/C.12/ARG/CO/4>>

¹⁹⁶ D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, Safe Climate report (2019) UN Doc. A/74/161, para 78(d) <<https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Report.pdf>>

competing producers, the difference is marginal in view of the massive Scope 3 emissions in oil production of any carbon intensity.

94. Nor does the potentially misleading claim provide a basis for maintaining or increasing production or for seeking new reserves of oil on top of Saudi Aramco's massive existing reserves. The severely limited global carbon budget for limiting average global warming to 1.5°C requires a decrease of (at least) 4% in oil production and 3% in gas production each year until 2030, and permits no new oil and gas fields.¹⁹⁷ The IEA confirms this basic fact of the Net Zero Transition in its Net Zero Roadmap:

*“The rapid drop in oil and natural gas demand in the NZE means that **no fossil fuel exploration is required and no new oil and natural gas fields are required** beyond those that have already been approved for development.”* (emphasis added)¹⁹⁸

95. Saudi Aramco cannot argue that reducing its own production would make no difference. Economic studies show that reduced production is not fully replaced by competitors – there is not a perfect substitution of supply – so reducing production leads to a reduction of consumption, and less Scope 3 emissions from burning oil.¹⁹⁹ Accordingly, the same argument was comprehensively dismissed by the Court in the *Shell* case.²⁰⁰
96. The need to reduce production and cease exploration is made even clearer by the World Benchmarking Alliance's finding that current oil and gas reserves are already too much. The analysis finds that using current reserves will produce fully one-third more emissions than are implied by 1.5°C pathways: *“Our analysis shows that, from 2019 to 2050, the collective locked-in combustion emissions of the oil and gas companies in our sample is set to reach 393 gigatons (Gt). This is based on the emissions that will be produced from the combustion of the oil and gas projected to be extracted from the existing and already approved upstream assets of the companies in our sample. Under the 1.5°C scenario, the remaining budget for such combustion emissions – for the whole oil and gas sector – is significantly lower, at 292 Gt. This means the 80 extracting companies in our sample are already expecting to blow the whole sector's budget by more than a third”*.²⁰¹ The same conclusion is recorded regarding fossil fuels generally by the UN Special Rapporteur on Human Rights and the Environment.²⁰²

¹⁹⁷ UNEP, Production Gap Report

¹⁹⁸ IEA, Net Zero Roadmap, p51

¹⁹⁹ “Restricting the supply of a product, all else equal, increases the market price of that product. Restricting fossil fuel supply will thus raise the absolute and relative price of products that use fossil fuels as inputs. To the extent that higher prices discourage consumption (the premise on which restrictive demand-side policies such as carbon pricing is based), the higher fossil fuel prices will cause a reduction in the quantity consumed.” F. Green and R. Denniss, Cutting with both arms of the scissors: the economic and political case for restrictive supply-side climate policies (2018) 150 *Climate Change* 73-87 <<https://link.springer.com/article/10.1007/s10584-018-2162-x>>; “this argument of perfect substitution defies basic economics of supply and demand [...] studies using elasticities from the economics literature have shown that for oil, each barrel left undeveloped in one region will lead to 0.2 to 0.6 barrels not consumed globally over the longer term”. See: UNEP, The Production Gap Report: Special Report (2019) p50 <https://productiongap.org/wp-content/uploads/2020/12/PGR2020_FullRprt_web.pdf>

²⁰⁰ *Milieudefensie et al. v. Royal Dutch Shell plc.* [2021] C/09/571932, para 4.4.49

<<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>>

²⁰¹ World Benchmarking Alliance, Climate and Energy Benchmark in Oil and Gas: Insights Report (2021)

<<https://assets.worldbenchmarkingalliance.org/app/uploads/2021/07/Oil-and-Gas-Benchmark-Insights-Report-2021.pdf>>

²⁰² “In 2012, the International Energy Agency estimated that two thirds of proven fossil fuel reserves must not be burned if we are to limit warming to 2°C. A similar study published in 2015 concluded that 82 per cent of known coal reserves, 49 per cent of gas reserves and 33 per cent of oil reserves cannot be burned if we are to avoid dangerous climate change of more than 2°C. The future greenhouse gas emissions contained in known reserves of fossil fuels are three times larger than the 2°C carbon budget”. See: D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, Safe Climate report (2019) UN Doc. A/74/161, para 24 <<https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Report.pdf>>

97. Saudi Aramco’s plan to maintain crude oil production appears to be based on the premise that it can maintain or increase production because the rest of the oil and gas industry will reduce production rapidly in line with climate goals (including taking up Saudi Aramco’s substantial share of reductions). Accordingly, **Saudi Aramco has stated that given its low production costs it should be the ‘last man standing’ of the oil and gas producers.**²⁰³ **This premise is fundamentally flawed.** As explained at paragraph 65 above, the wider oil and gas industry is very far from reducing production in line with climate goals, nor are markets currently compelling them to do so.²⁰⁴ Saudi Aramco’s ‘last man standing’ strategy comprises a gamble that it will fuel the severest of future climate change impacts, rather than a rights-respecting response to its contribution to climate change human rights impacts.
98. In addition to the emissions attributable to its production of oil and gas, Saudi Aramco’s supply and export of these fossil fuels has the knock-on effect of impeding decarbonisation efforts by its customers. This is because – as a matter of basic economic theory - more supply drives lower prices, which in turn maintains demand.²⁰⁵ It also risks ‘carbon lock-in’. According to the IPCC, key characteristics of 1.5°C pathways include a “*rapid and profound near-term decarbonisation of energy supply*” with a reduction of unabated fossil fuels of the type that Saudi Aramco trades and markets in favour of renewable energy, and a switch from fossil fuels to electricity in transport and residential end-use.²⁰⁶ These changes are characterised by a ‘whole systems approach’, in which all actors must cooperate.²⁰⁷ Oil and gas competes with clean energy.²⁰⁸ Saudi Aramco’s plans for maintained production far into the future²⁰⁹ risk impeding decarbonisation efforts and contributing to ‘carbon lock-in’, for the reason that the strategy seeks to preserve the sale of oil and gas at the moment when rapidly declining use of deeply entrenched fossil fuels is urgently necessary to meet climate goals.²¹⁰ As the Special Rapporteur for Human Rights and the Environment notes, “*large*

²⁰³ See for example the Aramco CEO statement at Davos in 2019: “*I don’t see peak [oil] demand happening in 10 years or even by 2040 [...] There will continue to be growth in oil demand ... We are the lowest cost producer and the last barrel will come from the region.*” <https://edition.cnn.com/business/live-news/davos-2019-live-updates/h_c675906ad1ab2fcdd81301f6766fd8f> See also the KSA Energy Minister: “*We (Saudi Arabia) are ... producing oil and gas at low cost and producing renewables. I urge the world to accept this as a reality: that we’re going to be winners of all of these activities*”. Reuters, OPEC: Russia seen gaining from climate activist wins (1 June 2021) <<https://www.reuters.com/business/sustainable-business/opec-russia-seen-gaining-more-power-with-shell-dutch-ruling-2021-06-01/>>; The Energy Minister is reported as saying in June 2021 at a private event organized by Bank of America, “*We are still going to be the last man standing, and every molecule of hydrocarbon will come out*”. See: Bloomberg, The Saudi Prince of oil prices vows to drill ‘every last molecule’ (22 July 2021) <<https://www.bloomberg.com/news/features/2021-07-22/saudi-prince-abdulaziz-bin-salman-seeks-to-tame-oil-prices-opec-russia?sref=tghVnhKI>>

²⁰⁴ “*there is increasingly persuasive evidence that market prices systematically fail to capture the inevitably significant increase in the cost of emissions that will have to be borne by companies on all transition paths to net zero*”. Bank of England, Options for greening the Bank of England’s Corporate Bond Purchase Scheme (May 2021) p16 <<https://www.bankofengland.co.uk/-/media/boe/files/paper/2021/options-for-greening-the-bank-of-englands-corporate-bond-purchase-scheme-discussion-paper.pdf?la=en&hash=9BEA669AD3EC4B12D000B30078E4BE8ABD2CC5C1>>

²⁰⁵ Oil Change International confirm this by comparison to recent oil market dynamics. See: Oil Change International, The Sky’s Limit: Why the Paris Climate Goals require a Managed Decline of Fossil Fuel Production (September 2016) pp33-35 <http://priceofoil.org/content/uploads/2016/09/OCI_the_skys_limit_2016_FINAL_2.pdf>

²⁰⁶ IPCC, 1.5°C report, p129

²⁰⁷ IPCC, 1.5°C report, p137, “[t]here are interdependencies among the end-use sectors and between energy-supply and end-use sectors, which elevate the importance of a wide, systematic approach.” Further, “*There is broad consensus that achieving net zero for any actor will almost always depend to varying degrees on the actions of other actors. These interlinkages are operationalized in different ways. Net zero is a collective goal, and so cooperation between different actors is essential.*” See also: University of Oxford, Mapping of Current Practices Around Net Zero Targets (May 2020) <https://4bafc222-18ee-4db3-b866-67628513159f.filesusr.com/ugd/6d11e7_347e267a4a794cd586b1420404e11a57.pdf>

²⁰⁸ “*maximising global supplies of oil will disincentivise consumers from switching from petrol or diesel cars to electric, companies from electrifying lorry fleets, or entrepreneurs from investing in new zero-carbon technologies.*” Oil Change International, Sea Change: Climate emergency, jobs and managing the phase-out of UK oil and gas extraction (May 2019) p58 <<http://priceofoil.org/content/uploads/2019/05/SeaChange-final-r3.pdf>>

²⁰⁹ See Saudi Aramco’s projected demand for fossil fuels on 2019 Prospectus, p30. The Prospectus also sets out Saudi Aramco’s position it will continue to sell more fossil fuels even in a global transition away from fossil fuels. See: Saudi Aramco, Prospectus (2019) p34 <<https://www.aramco.com/-/media/images/investors/saudi-aramco-prospectus-en.pdf>>

²¹⁰ As Oil Change International puts it, “*once the [fossil fuels] project has been developed, the economic incentives push for continued production*” and “*Governments tend to act more strongly to protect existing industries than to stimulate future*

*corporations are deeply invested in the status quo and use their immense economic and political power to resist the societal transformations needed to successfully address climate change”.*²¹¹

99. In conclusion, Saudi Aramco’s strategy to maintain (or increase) its already massive levels of oil and gas production (including increased carbon-intensive ‘unconventional’ operations) mean that the company plans to increasingly contribute to climate change in conflict with the Paris Goals. Its plans also risk inhibiting the wider transition away from fossil fuels.

Saudi Aramco’s expansion into fossil fuel gas

100. Alongside continuing crude oil production, Saudi Aramco’s third business strategy is to “[e]xpand gas activities” both in the KSA and internationally, through ambitions to develop an integrated global gas business.²¹² It plans to double its gas production by 2029.²¹³

101. Saudi Aramco calls gas power “*cleaner energy*” for the KSA, through which it states that it will operate sustainably. It calls gas a “*lower carbon intensity*” fuel.²¹⁴ The company’s Asia President claimed that expanding its sales of gas will aid transition: “[o]ur expansion into international gas and [liquefied natural gas, LNG] is one avenue through which we can help Asia meet its growing need for more energy with fewer emissions. We are serious about low-carbon energy solutions...”²¹⁵

102. This claim is based on the assertion that gas is lower-carbon than oil or coal. However, whether gas actually accounts for less climate impact than oil or coal is highly uncertain - because it in turn depends on an uncertain level of methane leakage across the gas life-cycle. Gas produces fewer carbon dioxide emissions than coal or oil when burned, but the overall climate impact of gas is increased by methane leaks during production, transportation and distribution *prior* to the point of combustion.²¹⁶ Methane is an especially potent greenhouse gas,²¹⁷ and when leakage reaches levels which may already be exceeded in some gas systems, gas power has a greater climate

ones, because of the political clout of real jobs held by identifiable people (as opposed to abstract numbers), and because of the lobbying power of dominant industries”. See: Oil Change International, *The Sky’s Limit: Why the Paris Climate Goals require a Managed Decline of Fossil Fuel Production* (September 2016) p34

<http://priceofoil.org/content/uploads/2016/09/OCI_the_skys_limit_2016_FINAL_2.pdf>

²¹¹ D. Boyd, Report of the Special Rapporteur on Human Rights and the Environment, *Safe Climate report* (2019) UN Doc. A/74/161, para 16 <<https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Report.pdf>>

²¹² See this claim repeated in Saudi Aramco’s Annual Report (2020) pp31, 34 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²¹³ Bloomberg, *Saudi Aramco sees shale gas as Kingdom’s next energy bonanza* (29 April 2019) <<https://www.bloomberg.com/news/articles/2019-04-29/saudi-aramco-sees-shale-gas-as-kingdom-s-next-energy-bonanza?sref=tghVnhKl>>; Saudi Aramco, Annual Report (2020) p57 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²¹⁴ *Ibid*, pp31, 95

²¹⁵ Nikkei Asia, *Aramco Asia says there is cause for optimism* (22 June 2021) <<https://asia.nikkei.com/Opinion/Aramco-Asia-says-there-is-cause-for-optimism>>

²¹⁶ International Institute for Sustainable Development, *Step off the Gas: International public finance, natural gas, and clean alternatives in the Global South* (June 2021) p14 <<https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf>>

²¹⁷ UNEP, *Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions* (2021) p11 <https://www.ccacoalition.org/en/file/7941/download?token=q_bCnFYV>; Gas caused 35% of global methane emissions in 2020, according to the IEA’s Methane Tracker. See: IEA, *Global methane emissions and gas* (31 March 2020) <<https://www.iea.org/articles/global-methane-emissions-from-oil-and-gas>>

impact than oil or even coal.²¹⁸ Leakage across gas supply chains is notoriously difficult to measure accurately, with new satellite studies indicating more leakage than is being measured.²¹⁹

103. Saudi Aramco does not explain how it measures methane leakage or whether it uses satellite or aerial measurements to detect leaks, but states that its “[e]stimated” methane intensity has not changed between 2019 and 2020.²²⁰ It also aims for ‘zero routine flaring’ (the deliberate and near-continuous²²¹ burning of excess leaked gas during production processes) but only by 2030.²²² In the meantime, its flaring levels are increasing.²²³
104. Saudi Aramco’s gas expansion plans also involve growing an LNG business. Gas is transported and sold as either conventional pipeline gas or liquefied natural gas (known as LNG). LNG involves a significant *additional* climate impact over pipeline gas owing to the energy requirements of liquefaction and additional methane leakage (including evaporation) during liquefaction, transport, and regasification.²²⁴
105. Overall, gas is not a low-carbon energy solution as Saudi Aramco claims.²²⁵ 1.5°C pathways require the rapid *reduction* of gas production, not its expansion. The small remaining carbon budget for limiting average global warming to 1.5°C requires a rapid decline in the use of all fossil fuels – including gas - with new energy investments focused on genuinely low-carbon renewables, which are cheaper than fossil fuels in most of the world today.²²⁶ The UN Production Gap report states that between 2020 and 2030, global gas production would have to decline annually by 3% to be consistent with a 1.5°C pathway.²²⁷ The IEA’s Net Zero Roadmap finds that:

“No new natural gas fields are needed in the NZE beyond those already under development. Also not needed are many of the liquefied natural gas (LNG) liquefaction facilities currently under construction or at the planning stage. Between 2020 and 2050, natural gas traded as LNG falls by 60% and trade by pipeline falls by 65%. During the 2030s, global natural gas

²¹⁸ “Above a given “break-even” leakage rate, gas will be no better for the climate than coal. This break-even rate varies with the differing coal emissions in different sectors and applications; methane leakage has been observed to exceed this rate in some cases (Howarth, 2015; Qin et al., 2017)”. International Institute for Sustainable Development, Step off the Gas: International public finance, natural gas, and clean alternatives in the Global South (June 2021) p14

<<https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf>>; and see E3G, Report: Gas, Climate and Development (November 2020) <<https://www.e3g.org/wp-content/uploads/E3G-Gas-and-Development-Report.pdf>>

²¹⁹ The European Space Agency, Mapping methane emissions on a global scale (4 May 2020)

<https://www.esa.int/Applications/Observing_the_Earth/Copernicus/Sentinel-5P/Mapping_methane_emissions_on_a_global_scale>; IEA, Global methane emissions from oil and gas (31 March 2020)

<<https://www.iea.org/articles/global-methane-emissions-from-oil-and-gas>>; Climate Action Tracker, Foot off the gas: Increased reliance on gas in the power sector risks an emissions lock-in (June 2017) <<https://climateanalytics.org/media/cat-decarbonisationseries-naturalgas.pdf>>

²²⁰ Saudi Aramco, Annual Report (2020) pp76, 163 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²²¹ IEA, Putting gas flaring in the spotlight (9 December 2020) <<https://www.iea.org/commentaries/putting-gas-flaring-in-the-spotlight>>

²²² Saudi Aramco, Annual Report (2020) p76 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²²³ Saudi Aramco disclosed flaring intensity figures in standard cubic feet of gas burned per barrel of oil equivalent of 5.88 in 2019, rising to 5.95 in 2020.

²²⁴ How much more carbon-intensive varies with source and processing infrastructure, but IISD’s study refers to example measurements that LNG causes twice as many emissions as pipeline gas. International Institute for Sustainable Development, Step off the Gas: International public finance, natural gas, and clean alternatives in the Global South (June 2021) p15 <<https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf>>

²²⁵ Climate Action Network (CAN), CAN International Position: Fossil Gas (May 2021) <https://climatenetwork.org/wp-content/uploads/2021/05/CAN-International-Position_Fossil-Gas_May-2021-2.pdf>

²²⁶ IISD, Step off the Gas: International public finance, natural gas, and clean alternatives in the Global South (June 2021) pp14-15 and 23 <<https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf>>

²²⁷ The UN Production Gap Report

*demand declines by more than 5% per year on average, meaning that some fields may be closed prematurely or shut in temporarily”.*²²⁸

106. Instead, additional gas supply (and investment in long-lived gas infrastructure) competes with and displaces renewables, which risks slowing the transition to a decarbonized energy system.²²⁹ Saudi Aramco’s plans to expand gas business activities are therefore dangerously inconsistent with the clear message of climate science.

Saudi Aramco’s greenwashing activities

107. One of Saudi Aramco’s seven business strategy points, in support of its oil and gas and petrochemicals expansion plans and consequent proliferation of customers, is to “[e]xpand global recognition of Aramco’s brands”, including through sponsorship of Formula 1.²³⁰

108. In furtherance of this strategy, Saudi Aramco has engaged in a widespread publicity campaign which is focussed on promoting the sustainability of its business. Saudi Aramco’s corporate disclosures recognise that “*climate change concerns manifested in public sentiment, government policies, laws and regulations*” are a key threat to ongoing demand for its fossil fuel products and therefore for its business model and strategy.²³¹ A key plank of the company’s response to this is its sustained greenwashing publicity campaign, which aims to preserve the demand for its current products.

109. A range of Saudi Aramco’s advertisements appear in influential and widely-read press publications and are disseminated through algorithms on social media. A selection of these advertisements are analysed in **Annex A** to this submission. Among the messages promoted by Saudi Aramco are:

- a. “*real sustainability doesn’t wait until tomorrow*”
- b. “*Today, as we open up to the world, we know more than ever before that we must continue towards a sustainable future*”
- c. “*We are driven by our commitment to preserving the environment because protecting our planet is one of our most important values.*”
- d. “*#ClimateChange is a challenge that the #energy industry faces. Learn how we are overcoming such challenge*”

²²⁸ IEA, Net Zero Roadmap, pp102-103

²²⁹ “*with renewables now competitive, additional gas tends to displace renewable energy as well as coal (McJeon et al., 2014; Zhang et al., 2016). For example, in Egypt, renewable energy is cheaper than gas, but its development has been stalled in order to focus investments on more gas*”. International Institute for Sustainable Development, Step off the Gas: International public finance, natural gas, and clean alternatives in the Global South (June 2021) p15 <<https://www.iisd.org/system/files/2021-06/natural-gas-finance-clean-alternatives-global-south.pdf>>; “*the expansion of natural gas risks a delay in the introduction of near-zero emission energy systems, possibly offsetting the potential climate benefits of a gas-for-coal substitution*”. X. Zhang et al., Climate benefits of natural gas as a bridge fuel and potential delay of near-zero energy systems (1 April 2016) 167 Applied Energy 317-322 <<https://doi.org/10.1016/j.apenergy.2015.10.016>>

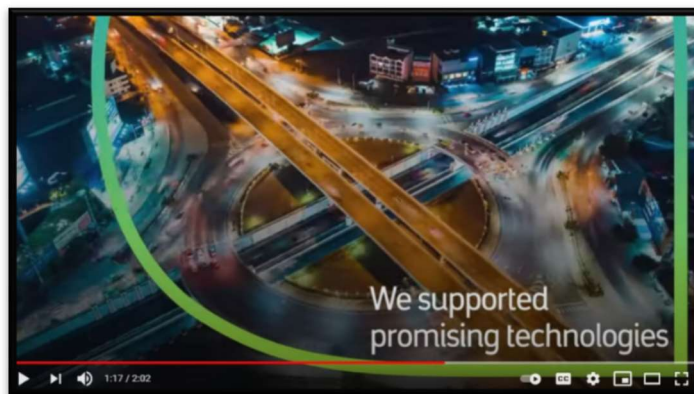
²³⁰ Saudi Aramco, Annual Report (2020) p32 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>; Formula 1, F1 announces long-term global partnership with Aramco (10 March 2020) <<https://www.formula1.com/en/latest/article.formula-1-announces-long-term-global-partnership-with-aramco.6GwAyyFOyBtqkyHwdXj0NA.html>>

²³¹ “*Aramco’s results of operations and cash flow are significantly impacted by international crude oil supply and demand and the price at which it sells crude oil*”. Saudi Aramco, Annual Report (2020) p95 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

- e. “The future holds many challenges, but at Saudi Aramco we know we have a duty to those around us. In harmony with the environment we are finding reliable, sustainable solutions that really make a difference”
- f. “Working towards a sustainable energy future, we aim to achieve a significant impact in reducing emissions”
- g. “Hit the [link] to learn more about how we leverage cutting-edge #technology for a more sustainable future”²³²

110. The unifying theme of Saudi Aramco’s advertising is distraction from the urgent scientific imperative to reduce the production and consumption of fossil fuels.²³³ The advertising instead promotes the various activities the company says it is taking to address climate change. These activities are false solutions to climate change, in that they are by themselves incapable of addressing climate change (see from paragraph 120). For example, in one slick social media video advertisement (‘2021, We Are Ready’) released in January 2021, the company refers to its mangroves, carbon capture and ‘blue’ ammonia projects, which are not capable of effectively addressing its contribution to climate change and some of which themselves risk inhibiting the Net Zero Transition (as explained at paragraph 122):

“... building momentum around our sustainability agenda, we added 2 million mangroves to reduce our carbon footprint, reaching more than 4 million mangroves planted by the company. We also supported the most promising technologies, such as carbon capture, utilisation, and storage, to reduce, reuse, recycle and remove carbon emissions while contributing to economic development. And we demonstrated one of the many solutions needed to contribute to addressing climate change, delivering the world’s first shipment of **high-grade blue ammonia for use in zero-carbon power generation**” (emphasis added).²³⁴



111. Saudi Aramco’s advertising is **misleading**, in that it presents its business activities in stark variance with the evidence set out in this complaint.²³⁵ The advertisements are also **harmful**, in that they impede efforts to reduce reliance on fossil fuels to limit the impacts of climate change.

112. Greenwashing of this kind is an increasingly common tactic of fossil fuel company marketing – a study found that oil and gas adverts containing greenwashing themes were viewed 431 million times in the US on Facebook online platforms in 2020.²³⁶ Another recent study revealed how use

²³² These quotations are taken from **Annex A**

²³³ See paragraph 63

²³⁴ Saudi Aramco, We are Ready (2021) <<https://www.youtube.com/watch?app=desktop&v=eIOZaVcviCQ>>

²³⁵ In April 2020, Saudi Aramco withdrew its advertisement campaign in the UK in which it claimed to be “powering a more sustainable future” after over 60 complaints were made to the UK advertising regulator, including complaints that the adverts were misleading in the context of an advertisement for an oil company. See the Guardian, Saudi Aramco removes ‘sustainable’ oil adverts after complaints (29 April 2020) <<https://www.theguardian.com/business/2020/apr/29/saudi-aramco-removes-sustainable-oil-adverts-after-complaints>>

²³⁶ InfluenceMap’s August 2021 report found 25,147 adverts from just 25 oil and gas sector organizations on Facebook’s US platforms in 2020, which have been seen over 431 million times, and found that many of the adverts either contained misleading content or presented information that was misaligned with climate science according to the IPCC and IEA. See

of language in fossil fuel company adverts seeks to shape public discourse regarding climate change.²³⁷

113. Greenwashing inhibits climate action where the messages promoted oppose or distract from the urgent need to wean global society off fossil fuels. Against increasing public information, misinformation and concern regarding climate change, greenwashing aims to sow enough doubt to diffuse calls for the radical public policy changes required to implement transition to Net Zero.²³⁸

It has been analysed to “[subvert] the Paris objective in multiple ways”.²³⁹

- a. It stimulates demand for fossil fuels, as “[f]ossil fuel advertising plays a crucial role in maintaining and reinforcing the vicious cycle of the carbon lock-in.”²⁴⁰
- b. It undermines public understanding of climate change, as “fossil fuel advertising undermines public understanding of and support for the necessary rapid energy transition, creating doubts about the enormously harmful effects of fossil fuels.”²⁴¹
- c. It normalises fossil fuel activity, as “The presence of advertising in the public sphere is liable to be viewed as “social proof” that the production and use of fossil fuels continues to be acceptable and normal, even though it is not.”²⁴²
- d. It reduces consumer actions to reduce emissions, as the IEA estimates that “around 55% of the cumulative emissions reductions in the [net zero] pathway are linked to consumer choices.”²⁴³

114. According to the IPCC, meeting the 1.5°C goal of the Paris Agreement will require “reducing consumption emissions to a per capita lifestyle carbon footprint of around 2 to 2.5 tons of CO₂e by 2030, and an even smaller 0.7 tons by 2050.”²⁴⁴ The IEA estimates that “around 55% of the cumulative emissions reductions in the [net zero] pathway are linked to consumer choices.”²⁴⁵ The IPCC notes that “[e]ducation, information, and community approaches [...] can accelerate the wide-scale behaviour changes consistent with adapting to and limiting global warming to 1.5°C”, but warns that “[p]ublic acceptability can enable or inhibit the implementation of policies and measures to limit global warming to 1.5°C and to adapt to the consequences.”²⁴⁶ Fossil fuel-

InfluenceMap, Climate Change and Digital Advertising (August 2021) <<https://influencemap.org/EN/report/Climate-Change-and-Digital-Advertising-a40c8116160668aa2d865da2f5abe91b#6>>

²³⁷ “We find that [ExxonMobil] has publicly overemphasized some terms and topics while avoiding others. Most notably, they have used rhetoric of climate “risk” and consumer energy “demand” to construct a “Fossil Fuel Savior” (FFS) frame that downplays the reality and seriousness of climate change, normalizes fossil fuel lock-in, and individualizes responsibility [...] The FFS frame describes [global warming] as the inevitable (and implicitly acceptable) risk of meeting consumer energy demand with fossil fuels for the foreseeable future, and presents technological innovation as the long-term solution.” See G. Supran and N. Oreskes, Rhetoric and frame analysis of ExxonMobil’s climate change communications (21 May 2021) 4 One Earth 696 – 719 <<https://doi.org/10.1016/j.oneear.2021.04.014>>

²³⁸ T. Lyon and A. Montgomery, The Means and End of Greenwash (23 March 2015) 28 Organization & Environment p243 <<https://doi.org/10.1177/1086026615575332>>; Beder, ‘Greenwash’ in International Encyclopedia of Environmental Politics, edited by J. Barry and E. Frankland, (Routledge 2001) pp11, 253

²³⁹ C. Kaupa, Smoke gets in your eyes: misleading fossil fuel advertisement in the climate crisis (16 February 2021) 1 EuCML p1 <<http://dx.doi.org/10.2139/ssrn.3786647>>

²⁴⁰ Ibid, p1; See also G. Unruh, ‘Understanding carbon lock-in’ (2000) 28 Energy Policy 817-830, 817 <[https://doi.org/10.1016/S0301-4215\(00\)00070-7](https://doi.org/10.1016/S0301-4215(00)00070-7)>

²⁴¹ C. Kaupa, Smoke gets in your eyes: misleading fossil fuel advertisement in the climate crisis (16 February 2021) 1 EuCML p2 <<http://dx.doi.org/10.2139/ssrn.3786647>>

²⁴² Ibid, p24

²⁴³ IEA, Net Zero Roadmap, p17

²⁴⁴ IPCC 1.5°C report; Institute for Global Environment Strategies et al. 2019 D. Ivanova et al., Quantifying the potential for climate change mitigation of consumption options (2020) 15 Environ. Res. Lett. <<https://iopscience.iop.org/article/10.1088/1748-9326/ab8589/pdf>>

²⁴⁵ IEA, Net Zero Roadmap, p17; See also UNEP, Emissions Gap Report (9 December 2020) p71 <<https://www.unep.org/emissions-gap-report-2020>>

²⁴⁶ IPCC 1.5°C report, p22, D.5.6

related greenwashing risks obstructing the critical public behavioural change necessary to this transition.²⁴⁷

115. Saudi Aramco’s greenwashing activities are squarely inconsistent with developing standards. The 2013 Guide for Responsible Corporate Engagement in Climate Policy produced by the UN Global Compact, the UNFCCC secretariat, UNEP and others called for companies to adhere to five core elements of responsible corporate engagement in climate policy: legitimacy, opportunity, consistency, accountability and transparency. As well as lobbying, the report categorised marketing and advertising and financing research as types of activities to inform or influence public policy.²⁴⁸ It stated that:

*“Defining factors for legitimacy include: [...] Doing no harm. Several executives and thought leaders suggest responsible companies will avoid any direct or indirect support for policies or positions that further increase the risks and impacts of climate change.”*²⁴⁹

*“Staying true to climate science and objective analysis. Responsible engagement means that a company’s policy positions match up with: [...] the pace and scale of GHG reductions required to minimize climate system disruption (e.g., the internationally-agreed target of limiting average warming to 2°C).”*²⁵⁰

*“It is important to disclose direct influences, as well as acknowledge or clarify indirect influences through trade associations, research funding, or other connections to groups shaping climate policy.”*²⁵¹

116. This 2013 statement has since been elaborated. The 2021 edition of the expert-drafted Principles on Climate Obligations of Enterprises highlights specific principles to limit the harmful effects of climate change-related greenwashing: *“Advertising excessively GHG emitting products, or products of which the manufacturing caused excessive GHG emissions, requires a compelling justification. [...] [a]n enterprise must not misrepresent its carbon footprint or the carbon footprint of its products and services as such or in relation to its competitors.”*²⁵²

117. The most recent UNEP Emissions Gap report calls for governments to drive behavioural change by restricting or prohibiting the advertising of high-carbon private vehicles, aviation and high-carbon food.²⁵³ These calls are being met with increasing legislative and regulatory action. Civil society, democratic climate assemblies and governmental initiatives around the world are

²⁴⁷ “the wholesale transformation of the energy sector in the net zero scenario cannot be achieved without the active and willing participations of citizens.” IEA, Net Zero Roadmap, p67

²⁴⁸ UN Global Compact, UNFCCC and UNEP Guide for Responsible Corporate Engagement in Climate Policy (2013) p6 <https://d306pr3pise04h.cloudfront.net/docs/issues_doc%2FEnvironment%2Fclimate%2FGuide_Responsible_Corporate_Engagement_Climate_Policy.pdf>

²⁴⁹ From the section on ‘legitimacy’. See the UN Global Compact, UNFCCC and UNEP Guide for Responsible Corporate Engagement in Climate Policy, which includes marketing and financial contributions to research organisations within the definition of engagement, p20

<https://d306pr3pise04h.cloudfront.net/docs/issues_doc%2FEnvironment%2Fclimate%2FGuide_Responsible_Corporate_Engagement_Climate_Policy.pdf>

²⁵⁰ From the section on ‘consistency’. Ibid, p22

²⁵¹ From the section on ‘transparency’. Ibid, p25

²⁵² Expert Group on Climate Obligations of Enterprises, Principles on Climate Obligations of Enterprises 2ed. (2020) p12 <<https://climateprinciplesforenterprises.files.wordpress.com/2021/01/epwebpdf2.pdf>>; The first edition of these Principles are cited by D.Boyd’s Special Rapporteur for Human Rights and the Environment ‘safe climate’ report in 2019 (UN Doc. A/74/161, paragraph 72) and is endorsed by UN Principles for Responsible Investment (UNPRI), who in their endorsement note the document’s “over 80 distinguished endorsers and the prefaces by eminent experts from the financial, political and judicial community” as evidence of its credibility. See UNPRI, Principles on Climate Obligations for Enterprises <<https://collaborate.unpri.org/group/5526/stream>>

²⁵³ UNEP, Emissions Gap Report (9 December 2020) pp66, 67 and 69 <<https://www.unep.org/emissions-gap-report-2020>>

moving to similar restriction on advertising.²⁵⁴ For example, the French National Assembly has moved to ban advertisements of fossil fuel products.²⁵⁵

118. The OHCHR considers that a rights-based approach to business activities related to climate change includes “refrain[ing] from supporting public information campaigns based on inaccurate, misleading and unfounded assertions which harm the ability of States and the public to make informed decisions regarding climate change”.²⁵⁶

119. Saudi Aramco’s greenwashing activities, which are aimed at maintaining the demand for its harmful products, risk impeding the Net Zero Transition.

Saudi Aramco’s false solutions to climate change

120. Through its final strategy point, Saudi Aramco says it will address its contribution to climate change: “*Aramco’s climate change strategy aims to grow its business sustainably by leveraging technology and innovation to lower its climate impact*”.²⁵⁷ The company’s focus on innovation as a means of addressing its climate impact is inconsistent with the IEA’s finding that “[a]ll the technologies needed to achieve the necessary deep cuts in global emissions by 2030 already exist, and the policies that can drive their deployment are already proven” – provided there is a huge decline in fossil fuels.²⁵⁸

121. The company’s website adds, “[f]or some, the idea of an oil and gas company positively contributing to the climate challenge is a contradiction. We don’t think so. As a world leading energy business, we are especially qualified to make effective contributions to the overall solution.”²⁵⁹ However, Saudi Aramco’s purported means of addressing its contribution to climate change are not effective – they are false solutions, which cannot suffice to get Saudi Aramco (or any oil and gas company) to Net Zero or to justify a claim of addressing climate change, or of alignment with Net Zero or the Paris Goals.²⁶⁰

122. Saudi Aramco refers to various activities which purportedly address its part in climate change: mangroves, carbon capture, ‘blue’ ammonia and renewable energy.

- a. Mangrove trees – As of 2020, Saudi Aramco had planted 5.3 million mangroves (saltwater trees) in KSA (“*one of the most notable achievements in 2020*”) to absorb carbon dioxide.²⁶¹ The company calls mangroves “*a massive natural carbon sink for carbon*

²⁵⁴ See a list of such initiatives here: <https://verbiedfossielereclame.nl/only-words/>. In addition: the UK Climate Assembly “backed ‘advertising bans and restrictions’ on high emissions products or sectors (74%)”, Climate Assembly UK, The path to net zero, p22, <<https://www.climateassembly.uk/report/read/final-report.pdf>>; and see also the European Commission’s June 2021 registration of a European Citizen’s Initiative for a fossil fuels advertising ban, Insight EU Monitoring, EU Commission registers ‘Ban Fossil Fuel Advertising and Sponsorships’ citizens initiatives (16 June 2021) <<https://portal.ieu-monitoring.com/editorial/eu-commission-registers-ban-fossil-fuel-advertising-and-sponsorships-citizens-initiative/>>

²⁵⁵ See Projet de loi n° 602, portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets”. Article 4, which amend Articles L. 229-60 and L. 229-61 of the Environmental Code as follows: “*Advertising relating to the marketing or promoting fossil fuels is prohibited*”. <https://www.assemblee-nationale.fr/dyn/15/textes/115t0602_texte-adoptee-seance>

²⁵⁶ OHCHR, Human Rights, Climate Change and Business Key Messages, p7 <<https://www.ohchr.org/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>>

²⁵⁷ Saudi Aramco, Annual Report (2020) p33 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁵⁸ IEA, Net Zero Report, p14

²⁵⁹ Saudi Aramco, Sustainability: Climate Change webpage <<https://www.aramco.com/en/sustainability/climate-change>>

²⁶⁰ ClientEarth, Principles for Paris-Aligned business plans <<https://www.clientearth.org/latest/latest-updates/news/our-principles-for-paris-aligned-business-plans/>>

²⁶¹ Saudi Aramco, Annual Report (2020) p81 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

dioxide [...] front-line climate warriors”, estimating that each mangrove sequesters “up to 1.5 metric tons of carbon over its average 60-year lifetime”.²⁶² This equates to about 130,000 tonnes CO₂e per year – Saudi Aramco’s Scope 3 emissions are about 12,000 times more than this. For various reasons, restoring or planting trees simply cannot address continued fossil fuel production.²⁶³

- b. Carbon Capture, Utilization & Storage – Saudi Aramco’s website promotes carbon capture as part of a ‘circular carbon economy’ concept through which “we may help restore the balance of carbon and achieve the greatest impact in reducing global emissions.”²⁶⁴ Globally, there is c.39 million tonnes of CO₂ per annum (Mtpa) of operational carbon capture capacity, and 75 Mtpa under development.²⁶⁵ The IEA considers that “the prospects for the rapid scaling up of CCUS are very uncertain for economic, political and technical reasons”.²⁶⁶ A recent study finds that carbon capture deployment is now likely too slow for climate goals.²⁶⁷
- c. Saudi Aramco’s carbon capture projects, the Hawiyah Natural Gas Liquids plant and Jubail ethylene plants account for 1.3 Mtpa of capture capacity – or 0.08% of Aramco’s estimated Scope 3 emissions.²⁶⁸ By capturing CO₂, Saudi Aramco also **causes more emissions**. The Hawiyah plant injects captured CO₂ into the Uthmaniyah oil field in order to extract more oil in a process known as ‘enhanced oil recovery’.²⁶⁹ This leads to more emissions from the processing and use of the extracted oil.²⁷⁰ Carbon capture cannot address continuing fossil fuel production. The 2020 Production Gap Report assumed 1,000 Mtpa of carbon capture and permanent storage by 2030 (which does not appear likely at present) and *still* found that oil and gas production must decline by 4% and 3% per year.²⁷¹

²⁶² Saudi Aramco, 2 million mangroves added to the carbon front line webpage

<<https://europe.aramco.com/en/magazine/elements/2020/2-million-mangroves-added-to-the-carbon-front-line>>

²⁶³ As well as risk of fire, pest and disease over the hundreds of years CO₂ emissions last in the atmosphere, mangroves (and the CO₂ they store) are also under severe threat from climate change itself, IPCC 1.5°C report, paras 3.4.4.3 and 3.4.4.8. Another study calculates that about 60% of the world’s arable land would be needed to sequester 1,100 to 3,300 MtCO₂ per year. See: European Academies Science Advisory Council, Negative emission technologies: What role in meeting Paris Agreement targets? (2018) p7

<https://easac.eu/fileadmin/PDF_s/reports_statements/Negative_Carbon/EASAC_Report_on_Negative_Emission_Technologies.pdf>

²⁶⁴ Saudi Aramco, Carbon Capture, Utilisation & Storage webpage <<https://www.aramco.com/en/making-a-difference/planet/carbon-capture-utilization-and-storage>>

²⁶⁵ The CCS Institute states that “Some estimates of CCS project numbers include volumes of CO₂ captured rising from around 2 Mtpa in 2019 to over 100 Mtpa by 2040” across the GCC states, which would still comprise a small minority of Saudi Aramco’s estimated Scope 3 emissions. See: The CCS Institute, Global Status of CCS 2020, pp17, 51 <<https://www.globalccsinstitute.com/wp-content/uploads/2021/03/Global-Status-of-CCS-Report-English.pdf>>

²⁶⁶ IEA, Net Zero Report, p94

²⁶⁷ “with supra-national and national targets to cut emissions by over 50% against 1990 levels by 2030 [i.e. pathways to 1.5°C] – through which the energy sector would change significantly - CCS deployment is likely now too slow”. Friends of the Earth Scotland, Report: Fossil Fuel Carbon Capture & Storage (11 January 2021) <<https://foe.scot/resource/report-carbon-capture-storage-energy-role/>>

²⁶⁸ The CCS Institute, Global Status of CCS (2020) p17 <<https://www.globalccsinstitute.com/wp-content/uploads/2021/03/Global-Status-of-CCS-Report-English.pdf>>

²⁶⁹ Ibid.

²⁷⁰ Saudi Aramco’s website says that this is “allowing us to remove CO₂, increase our oil production sustainably, and reduce operational costs”. Saudi Aramco, Carbon Capture, Utilisation & Storage webpage <<https://www.aramco.com/en/making-a-difference/planet/carbon-capture-utilization-and-storage>>; The IPCC says enhanced oil recovery “is a technique that uses CO₂ to mobilize more oil out of depleting oil fields, leading to additional CO₂ emissions by combusting the additionally recovered oil (Cooney et al, 2015)”, IPCC 1.5°C report, p327

²⁷¹ “If such technologies (or CDR practices, such as afforestation) fail to succeed at scale, or if their political appeal deters other near-term mitigation solutions (Anderson and Peters 2016; McLaren 2020), then the reductions in fossil fuels would need to be even more rapid, and the production gap would be even wider than estimated here.” See: The UN Production Gap Report, p16. The IEA finds there is no case for further oil and gas fields even with a *higher still* assumed CCS capacity of 1,700 Mtpa by 2030. See: IEA, Net Zero Report, p79

- d. 'Blue' ammonia – In June 2020, Saudi Aramco exported a world first trial cargo of 40 tonnes of 'blue' ammonia “for use to generate power with a zero-carbon footprint”²⁷² thus apparently opening a “new route to a sustainable future”.²⁷³ Saudi Aramco’s CEO states that “Another promising area is the conversion of hydrocarbons to hydrogen and then to ammonia, while capturing the CO₂ created during the process”.²⁷⁴ 'Blue' ammonia is a method of transporting energy made from fossil fuel gas with carbon capture, which will involve the capture of some of the CO₂, although not methane leaked or power used during production). It is not 'zero-carbon'.²⁷⁵ It is not 'green' ammonia or hydrogen, which is made from renewables.²⁷⁶ As the purported climate benefit relies on carbon capture, 'blue' ammonia is also affected by the non-feasibility of scaling carbon capture (see sub-paragraph c above). Worse still, an August 2021 scientific study finds that the lifecycle emissions for 'blue' hydrogen (comparable to 'blue' ammonia) actually make it *more* carbon-intensive than using ordinary fossil fuels because of the additional gas (and so additional methane leakage) needed to power carbon capture.²⁷⁷ The 'blue' ammonia trial shipment was delivered to Japan, where there are plans to use 'blue' ammonia to burn alongside coal in power plants (called 'co-firing').²⁷⁸ A Greenpeace Japan analysis finds this to be an expensive delaying tactic for coal power which does nothing to establish a genuinely low-carbon 'green' hydrogen supply chain.²⁷⁹
- e. Renewable energy to support oil and gas – in the IEA’s view, a key element of Net Zero Transition is a “massive clean energy expansion” which is “to transform the global economy from one dominated by fossil fuels into one powered predominantly by renewable energy like solar and wind”.²⁸⁰ Under the IEA’s 1.5°C pathway, wind and solar electricity capacity additions are to quadruple from 2020, itself a record year, by 2030.²⁸¹ Saudi Aramco appears to use renewable energy to power the extraction of more oil and gas, to power one of its corporate offices and as 'off-grid' power supply for remote facilities.²⁸² Despite KSA’s high potential for the deployment of renewables,²⁸³ Saudi

²⁷² Saudi Aramco, Annual Report (2020) p33, 61 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁷³ Saudi Aramco, World’s first blue ammonia shipment of opens new route to sustainable future (27 September 2020) <<https://www.aramco.com/en/news-media/news/2020/first-blue-ammonia-shipment>>

²⁷⁴ Saudi Aramco, Annual Report (2020) p9 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁷⁵ E3G Hydrogen Factsheet (2021) <https://9tj40250l53byww26jdkao0x-wpengine.netdna-ssl.com/wp-content/uploads/E3G_2021_Hydrogen-Factsheet_Supply_final-2.pdf>; Committee on Climate Change, Hydrogen in a low-carbon economy (November 2018) <<https://www.theccc.org.uk/wp-content/uploads/2018/11/Hydrogen-in-a-low-carbon-economy.pdf>>

²⁷⁶ E3G Hydrogen Factsheet, *ibid*; The Royal Society, Ammonia: zero-carbon fertiliser, fuel and energy store (2020) <<https://royalsociety.org/-/media/policy/projects/green-ammonia/green-ammonia-policy-briefing.pdf>>

²⁷⁷ “Perhaps surprisingly, the greenhouse gas footprint of blue hydrogen is more than 20% greater than burning natural gas or coal for heat and some 60% greater than burning diesel oil for heat [...] Our analysis assumes that captured carbon dioxide can be stored indefinitely, an optimistic and unproven assumption. Even if true though, the use of blue hydrogen appears difficult to justify on climate grounds.” R. Howarth and M. Jacobson, How green is blue hydrogen? (12 August 2021) Energy Science & Engineering <<https://doi.org/10.1002/ese3.956>>

²⁷⁸ Saudi Aramco, World’s first blue ammonia shipment of opens new route to sustainable future (27 September 2020) <<https://www.aramco.com/en/news-media/news/2020/first-blue-ammonia-shipment>>

²⁷⁹ Greenpeace, JERA and Japan seek costly dirty alternative to renewable energy (25 March 2021) <https://www.greenpeace.org/static/planet4-japan-stateless/2021/03/eb440b96-ammonia-co-firing-analysis_eng.pdf>

²⁸⁰ IEA, Net Zero Roadmap, p3

²⁸¹ IEA, Net Zero Roadmap, p14

²⁸² Saudi Aramco, Prospectus (2019) p84 <<https://www.aramco.com/-/media/images/investors/saudi-aramco-prospectus-en.pdf?la=en&hash=8DE2DCD689D6E383BB8F4C393033D8964C9F5585>>; Saudi Aramco, Using renewables to power unconventional gas wells in Wa’ad Al-Shamal (19 September 2019) <<https://www.aramco.com/en/news-media/news/2019/renewables-powering-gas-wells-waad-al-shamal>>

²⁸³ The Gulf Cooperation Council States, including KSA, “lie in the so-called Global Sunbelt and boast some of the highest solar irradiances in the world” which combine with factors such as population density, topography, land cover and protected areas such that “analysis indicates vast areas suitable for solar PV deployment throughout the region”. The same conclusion

Aramco's strategy does not include transitioning away from fossil fuels to renewable energy.²⁸⁴ Instead, the company finds increasing renewable energy to be a risk to its fossil fuel business, and says that it is looking at some renewable energy investments "as a complement to its own [fossil fuels] energy products".²⁸⁵ At the time of writing, Saudi Aramco's recently announced investment of 30% in a US\$907 million solar project in KSA is dwarfed by negotiations for a US\$25 billion investment into the Indian oil refining and petrochemicals giant Reliance Industries.²⁸⁶ Moreover, Saudi Aramco describes its renewables investment as for the purpose of 'freeing up' oil and gas for export, not to replace oil and gas production.²⁸⁷

Saudi Aramco's obstruction of road transport decarbonisation

123. In addition to the above false solutions, Saudi Aramco also refers to its research and development projects on internal combustion engine (ICE) transport as one of its means of addressing climate change:²⁸⁸

*"Cleaner transport solutions play a critical role in building a more sustainable future, and Aramco is working closely with leading global automotive manufacturers and technology partners to drive efficiency and reduce GHG emissions. Aramco is helping to develop low-emitting, efficient and cost-competitive transport propulsion systems, from new combustion methods and alternative engine architectures to low climate impact fuels and innovative after-treatment technologies, such as mobile carbon capture."*²⁸⁹

124. Electric vehicles (EVs) are around three times more efficient than internal combustion engine (ICE) vehicles, but oil products accounted for over 90% of transport energy in 2020.²⁹⁰ The severely constrained global carbon budget for 1.5°C warming and the relative affordability of fully decarbonising transport through increasingly renewable energy-powered EVs means that there is no room for ICE car growth, whether efficient or not. According to the IEA, switching transport from fossil fuels to electricity needs to happen rapidly and at a much increased rate – from 5% of car sales globally in 2020 to more than 60% by 2030. By 2035 no new ICE cars are sold globally.

is reached for wind energy installations. See: International Renewable Energy Agency, Renewable Energy Market Analysis: The GCC Region (January 2016) p13 and detail at p43 <<https://irena.org/publications/2016/Jan/Renewable-Energy-Market-Analysis-The-GCC-Region>>; See also IPCC 1.5°C report, p462, Box 5.2

²⁸⁴ The company's seven-point strategy does not include or reference renewable energy. Saudi Aramco's 2020 Annual Report describes the company's 17 power plants as "primarily designed to provide electricity to Aramco's oil and gas production facilities, gas processing plants and wholly owned refineries" with excess 'spill power' transferred to the national grid or the Saudi Electricity Company. See: Saudi Aramco, Annual Report (2020) p67 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁸⁵ Saudi Aramco, Annual Report (2020) pp94-95 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>; Saudi Aramco, Second quarter and half year interim report (2021) p3 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-q2-2021-interim-report-english.pdf>>

²⁸⁶ World Energy, Saudi Aramco joins local 1.5GW solar project with a 30% stake in renewables push (16 August 2021) <<https://www.world-energy.org/article/19701.html>>; S&P Global Platts, Reliance, Saudi Aramco closer than ever in sealing their marriage (30 June 2021) <<https://www.spglobal.com/platts/en/market-insights/latest-news/oil/063021-reliance-saudi-aramco-closer-than-ever-in-sealing-their-marriage>>

²⁸⁷ The company says that since the 1980s it "has used renewable energy to produce oil and gas, and to reserve hydrocarbon resources for better economic use". See: Saudi Aramco, Annual Report (2020) p4 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁸⁸ Saudi Aramco, Annual Report (2020) p77 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>; See also the Saudi Aramco, Transport Technologies webpage <<https://www.aramco.com/en/creating-value/technology-development/transport-technologies>>

²⁸⁹ Saudi Aramco, Annual Report (2020) p77 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁹⁰ IEA Net Zero Roadmap, pp44, 133

By 2040 60% of cars on the roads must be electric.²⁹¹ These changes require rapid and significant market shifts.

125. Accordingly, States around the world (and the EU) are considering or have committed to bans on new sales of the internal combustion engine over the 2020s and 2030s.²⁹² States are also taking measures to encourage EV sales. One analysis notes that “*Amongst all the efforts, China stands out as being one of the most successful in boosting EV production and sales. According to EV-volumes, in 2019, China continued to represent more than half of the world’s electric car market with nearly 1.2 million electric cars sold*”.²⁹³ China is Saudi Aramco’s largest export customer.²⁹⁴

126. For its part, Saudi Aramco discloses transport electrification as a threat to its fossil fuel business, which includes interests in over 10,000 car fuel service stations in the USA, China, South Korea and Japan.²⁹⁵ The company’s Chief Technology Officer Ahmed Khowaiter spoke to the press in February 2021: “*Khowaiter called plans by several countries to ban or phase out internal combustion engines “counterproductive.” “We see huge potential in improving [the] efficiency of [the] internal combustion engine.”*²⁹⁶ Saudi Aramco states that “*We believe that in the short to medium term, advanced, efficient ICEs are the most effective way we can reduce CO₂”*²⁹⁷ and “*that oil and gas, supported by technological innovations, will prove to be essential in achieving an orderly global energy transition.*”²⁹⁸

127. Saudi Aramco’s most publicised venture to reduce emissions from ICE vehicles is its prototype vehicles modified with carbon capture technology. Saudi Aramco has promoted its prototype truck with carbon capture technology, which it says caught 40% of CO₂ from the tailpipe in lab tests, in advertisements in *The Economist* magazine which state that Saudi Aramco is “*innovating for a better future*”.²⁹⁹ It has paid for press content in the Financial Times arguing for investment in ICE vehicles (but without addressing the cost of more efficient ICE vehicles against EVs).³⁰⁰ Investment bank research predicts that EVs will become cheaper than

²⁹¹ IEA Net Zero Roadmap pp14, 66; and IEA, Electric car sales in the net zero pathway, 2020-2030 (updated 19 May 2021) <<https://www.iea.org/data-and-statistics/charts/electric-car-sales-in-the-net-zero-pathway-2020-2030>>. See also the IPCC 1.5°C report, p129, Table 2.5, “*Both in the transport and the residential sector, electricity covers markedly larger shares of total demand by mid-century*”.

²⁹² Euroactiv, EU plotting ban on internal combustion engine as of 2025 (2 March 2021) <<https://www.euractiv.com/section/circular-economy/news/eu-plotting-ban-on-internal-combustion-engine-as-of-2025-industry/>> and Coltura, Gasoline vehicle phase-out advances around the world (June 2021) <<https://www.coltura.org/world-gasoline-phaseouts>>

²⁹³ Sustainalytics, How China’s Electric Vehicle Policies have Shaped the Energy Market (31 July 2020) <[https://www.sustainalytics.com/esg-research/resource/investors-esg-blog/how-china-s-electric-vehicle-\(ev\)-policies-have-shaped-the-ev-market](https://www.sustainalytics.com/esg-research/resource/investors-esg-blog/how-china-s-electric-vehicle-(ev)-policies-have-shaped-the-ev-market)>

²⁹⁴ In 2019, 19% of Saudi Aramco’s total exports were to China. This is the largest share by far (seconded by the United Arab Emirates at 9%). See UN COMTRADE Database: <<https://comtrade.un.org/data>>

²⁹⁵ Saudi Aramco, Annual Report (2020) p97 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>; Saudi Aramco, Prospectus, p74 <<https://www.aramco.com/-/media/images/investors/saudi-aramco-prospectus-en.pdf>>

²⁹⁶ S&P Global Platts, Saudi Aramco sees hydrogen market gaining momentum after 2030 (22 February 2021) <<https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/022221-saudi-aramco-sees-hydrogen-market-gaining-momentum-after-2030>>

²⁹⁷ Saudi Aramco, Transport Technologies webpage <<https://www.aramco.com/en/creating-value/technology-development/transport-technologies>>

²⁹⁸ Saudi Aramco, Annual Report (2020) p7 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

²⁹⁹ Twitter, Marcus Leroux (8 December 2020) <<https://twitter.com/marcusleroux/status/1336245042047045632>>; Saudi Aramco, Transport Technologies: Mobile Carbon Capture Storage webpage <<https://www.aramco.com/en/creating-value/technology-development/transport-technologies/mobile-carbon-capture>>

³⁰⁰ Financial Times, Why electric vehicles are only part of the solution (Partner content) <<https://aramco.ft.com/why-electric-vehicles-are-only-part-of-the-transport-emissions-solution>>

conventional ICE vehicles (without carbon capture) from 2024.³⁰¹ Saudi Aramco’s marketing does not compare the prototype truck’s emissions or cost with EVs, nor explain how captured carbon would be stored or utilised. Aramco offers no evidence that mobile carbon capture is commercially realizable at all, let alone a cost-effective alternative to EVs.

128. The IEA makes no reference to any form of mobile carbon capture as part of its pathway to Net Zero. Instead it stresses the need to focus on the take-up of electric or fuel cell EVs and the increased use of non-fossil fuels (biofuels, green hydrogen).³⁰² Similarly, the IPCC specifically omitted “CO₂ emissions in the...transportation sector” from analysis underpinning their Special Report on Carbon Capture and Storage “because these emission sources are individually small and often mobile, and therefore unsuitable for capture and storage.”³⁰³

129. Saudi Aramco has also fought to maintain societal acceptance of ICE transport by funding academic literature and research that questions the decarbonising potential of transport electrification.³⁰⁴ The senior executive of one of Saudi Aramco’s research centres, the Aramco Detroit Centre, is blunt: “[the] company’s goal with its research is to preserve the market for fuel”.³⁰⁵ Saudi Aramco-funded academic research states as follows:

“Rapidly increased EV production [in China] would create more pollution than a shift to more efficient gasoline engines” and “a significant reduction in GHG emissions is possible if more efficient internal combustion engines continue to be part of the technology mix.”³⁰⁶

“Gasoline-powered vehicles are the only products with a significant market share in the current passenger vehicle market, and this trend could continue for at least another decade in China. [...] This study may contribute valuable information to researchers and policy makers in surveying vehicle pricing and vehicle technology trends, analyzing the impacts on fuel economy and engine power in the passenger vehicle market, and evaluating the market penetration of highly fuel-efficient vehicles in China”.³⁰⁷

“Actually, CO₂ production will not be slower with EVs, as most of the countries with an electric car program are still generating electricity from coal.”³⁰⁸

Plug-in electric vehicles “sold in 2012–2025 in the three markets [China, USA and EU] will result in greenhouse gas emission increases of more than 1 billion tonnes of CO₂ equivalent through 2050.”³⁰⁹

³⁰¹ “We conclude that most players are in striking distance of battery cost parity with a gasoline powertrain at \$100/kWh in 2021-22 [...] [t]otal cost gap with conventional cars is merely \$1.9k in 2022, and we expect it to fully close by 2024” <<https://www.ubs.com/global/en/investment-bank/in-focus/2020/heart-of-electric-car.html>>

³⁰² IEA Net Zero Roadmap, pp132, 140: “In the NZE, decarbonisation of road transport occurs primarily via the adoption of plug-in hybrid electric vehicles (PHEVs), battery electric vehicles (BEVs), fuel cell electric vehicles (FCEVs) and advanced biofuels”.

³⁰³ IPCC, Special Report on Carbon Dioxide Capture and Storage (2005) p22 <<https://www.ipcc.ch/report/carbon-dioxide-capture-and-storage/>>

³⁰⁴ The academic publications database Crossref shows 472 academic journal articles published from research sponsored by Saudi Aramco since 2015. See Crossref: <<https://search.crossref.org/>>

³⁰⁵ Head of Aramco Detroit Centre, David Cleary, quoted in the Wall Street Journal, Oil, Utilities fight to fuel vehicles of the future (15 July 2018) <<https://www.wsj.com/articles/fill-cr-up-or-plug-it-in-oil-utilities-fight-to-fuel-vehicles-of-the-future-1531656000>>

³⁰⁶ X. He et al., Greenhouse gas consequences of the China dual credit policy (2020) 11 Nat Commun 5212 <<https://doi.org/10.1038/s41467-020-19036-w>>

³⁰⁷ S. Ou, et al., Relationships between Vehicle Pricing and Features: Data Driven Analysis of the Chinese Vehicle Market (2020) 13 Energies 3088, p5 <<https://doi.org/10.3390/en13123088>>

³⁰⁸ O. Muraza, Highlighting the greener shift in transportation energy and fuels based on novel catalytic materials (18 December 2020) 35 Energy Fuels, 25-44 <<https://pubs.acs.org/doi/10.1021/acs.energyfuels.0c03105>>

³⁰⁹ Gan et al, Taking into account greenhouse gas emissions of electric vehicles for transportation decarbonisation (2021) 155 Energy Policy 112353 <<https://doi.org/10.1016/j.enpol.2021.112353>>

130. Saudi Aramco’s strategies to resist the rise of electric transport are evident. It pays for international press advertisements and content which falsely suggest that there is an effective alternate ‘solution’ to decarbonizing the transport sector other than EVs – including the un-costed, non-scalable and experimental idea of putting carbon capture technology in road transport vehicles. This distracts public, commercial and policymaker attention (and risks diverting resources) away from the scientific consensus solution of road transport electrification, at the very moment when EV production and use must upscale exponentially. Saudi Aramco also funds research which may serve to undermine the case for electrification of transport, a tactic also adopted by other fossil fuel companies.³¹⁰ This provides actors (including Saudi Aramco itself) a pretext - a ‘scientifically backed’ rationale - to delay or resist the radical transformations the IPCC and IEA say are required to follow 1.5°C pathways. Saudi Aramco is deliberately acting to obstruct the decarbonisation of transport.

131. The evidence above shows that Saudi Aramco bears – in multiple respects – responsibility for actual and potential climate change-related impacts on human rights. It also indicates that Saudi Aramco is not committed to reduction of its emissions at all, let alone in a manner aligned with the Paris Goals. As the next section analyses in more detail, no compliant due diligence process could reach an alternative conclusion.

E. LEGAL ANALYSIS - SAUDI ARAMCO’S NON-COMPLIANCE WITH ITS RESPONSIBILITY TO RESPECT HUMAN RIGHTS

Saudi Aramco’s contribution to climate change-related human rights impacts

132. The responsibility to respect human rights requires that Saudi Aramco, by virtue of GP 13:

*“(a) Avoid causing or contributing to adverse human rights impacts through its own activities, and address such impacts when they occur; and
(b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to its operations, products or services by its business relationships, even if it has not contributed to those impacts”* (emphasis added).

133. In common with other large oil and gas businesses, Saudi Aramco is responsible for climate change through its business activities and products. This responsibility encompasses Saudi Aramco’s historic emissions, plans for future emissions and activities which serve to obstruct the Net Zero Transition, such as the greenwashing and climate action obstruction discussed above from paragraph 107. Saudi Aramco is – like all oil and gas businesses - squarely responsible for the value chain Scope 3 emissions produced when the oil and gas products it sells to customers for their use are, in fact, used.³¹¹ The size, sector, operational context, ownership and structure of Saudi Aramco, as well as the severity of the human rights impacts of climate change, engender a heightened expectation that it should meet its responsibility (Commentary to GP 14). The enterprise cannot claim a lack of knowledge of publicly available scientific analysis of climate change and Net Zero Transition. One of its staff is listed as an ‘expert reviewer’ of the IPCC’s Special Report on warming of 1.5°C.³¹²

³¹⁰ “Research and innovation coming out of the world’s leading academic institutions play a critical role in setting the bar for what climate ambition looks like, as well as in shaping national and international climate policy. [...] Some of the world’s most known academic institutions have deep ties to some of the world’s biggest polluters, even receiving hundreds of millions of dollars in funding for climate or “net zero”-related research”. See: Corporate Accountability, The Big Con (June 2021) <https://www.corporateaccountability.org/wp-content/uploads/2021/06/The-Big-Con_EN.pdf>

³¹¹ As found in the *Shell case, Milieudefensie et al. v. Royal Dutch Shell plc*. [2021] C/09/571932, paras 4.4.18-19 <<https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339>>

³¹² IPCC, 1.5°C report, p582, Annex IV

134. Through its historic emissions Saudi Aramco has *already* contributed to climate change, the effects of which will worsen over time.
135. Independent analysis assesses that Saudi Aramco is responsible for 61.143 GtCO₂e³¹³ between 1965 and 2018, or 4.33% of global emissions of carbon dioxide and methane from fossil fuels and cement over this period.³¹⁴
136. The same analysis finds that 63% of all carbon dioxide and methane emitted from pre-industrial times to 2010 are attributed to just 90 corporate entities, including 50 investor-owned companies such as Chevron, Shell, BP, Total, ExxonMobil and 31 (largely) state-owned enterprises such as Saudi Aramco and Statoil (now Equinor).³¹⁵ The largest twenty corporate emitters are responsible for 34% of global emissions between 1965 and 2018, and nearly all of them are oil and gas companies, both privately and state-owned.³¹⁶
137. By deciding to maintain, and even increase, its emissions, Saudi Aramco's plans will *increasingly* contribute to climate change.
138. Rather than aligning its business strategy with the Paris goals,³¹⁷ and cutting fossil fuel production and so its emissions at the rapid rate necessary to meet the 1.5°C climate goal,³¹⁸ as shown above, Saudi Aramco's business strategy is maintaining (currently, increasing) its fossil fuel production, and exploring for more oil and gas reserves so as to be able to produce oil and gas in the future. As a consequence, Saudi Aramco will increasingly diverge from internationally agreed climate targets and the company will increasingly contribute to climate change impacts, including by increasing global consumption of oil and gas.
139. The current global emissions trajectory is toward a significant overshoot of the 1.5°C carbon budget, with global plans to produce significantly more fossil fuels than is consistent with a 1.5°C scenario.³¹⁹ The vast majority of other oil and gas companies are not reducing their production year-on-year in line with 1.5°C pathways.³²⁰ Using current reserves will exceed the 1.5°C global

³¹³ As explained above in paragraph 61, this refers to gigatonnes, here of greenhouse gases measured by the CO₂ equivalent metric.

³¹⁴ See: Climate Accountability Institute, Carbon Majors webpage <<https://climateaccountability.org/carbonmajors.html>>; and Saudi Aramco data at Climate Accountability Institute, Carbon Majors (2020) <<https://climateaccountability.org/pdf/CarbonMajorsPDF2020/Each&Every/1.%20Saudi%20Aramco%201938-2018%204p.pdf>>

³¹⁵ Climate Accountability Institute, Carbon Majors webpage <<https://climateaccountability.org/carbonmajors.html>>

³¹⁶ Climate Accountability Institute, Table: 20 largest corporate emitters <<https://climateaccountability.org/pdf/CarbonMajorsPDF2020/Top%20Twenty%20graphics/Top%20Twenty%20graphics/Top%20Twenty%201965-2018%20Table.png>>

³¹⁷ See the ClientEarth Principles for Paris-Aligned business plans, <<https://www.clientearth.org/latest/latest-updates/news/our-principles-for-paris-aligned-business-plans/>>; and the UN Race to Zero process criteria, <<https://racetozero.unfccc.int/wp-content/uploads/2021/04/Race-to-Zero-Criteria-2.0.pdf>>

³¹⁸ According to the UNEP (et al), to follow a 1.5°C-consistent pathway the world will need to decrease oil production by at least 4% per year and gas production by at least 3% per year between 2020 and 2030. See UNEP, Production Gap Report <https://productiongap.org/wp-content/uploads/2020/12/PGR2020_FullRprt_web.pdf>

³¹⁹ See Oil Change International's analysis at paragraph 64. See also p3 of The UN Production Gap Report <https://productiongap.org/wp-content/uploads/2020/12/PGR2020_FullRprt_web.pdf>

³²⁰ The investor group, the Climate Action 100+, produced a detailed analysis of major company climate targets and business operations as of January 2021 in its Net Zero Benchmark. The analysis shows that none of the 41 companies in oil and gas sectors included disclose a short-term, medium-term and long-term GHG reduction target aligned with the Paris Agreement goals. Climate Action 100+, Progress webpage <<https://www.climateaction100.org/progress/net-zero-company-benchmark/>>; This corroborates the findings of The UN Production Gap Report, and is also confirmed by the July 2021 World Benchmarking Alliance's Oil and Gas Benchmark Insights Report, which finds that: "Out of the 100 companies, just three have set comprehensive emissions reduction targets [...] Given how much carbon they are responsible for, if these companies do not radically change their actions, we cannot achieve the Paris Agreement goal", pp6-7 <<https://www.worldbenchmarkingalliance.org/research/oil-and-gas-benchmark-insights-report/>>

carbon budget by as much as one third.³²¹ Hence, Saudi Aramco’s refusal to reduce its production of oil and gas – and continued exploration for *more* oil and gas - contributes to the risk of overshoot, with resultant significantly worsened climate change impacts. In addition to its own production of oil and gas products, Saudi Aramco’s business activities, greenwashing and funding scientific research risk impeding emission reduction efforts by others.³²²

140. By contributing to impacts of climate change, fossil fuel business activities bear responsibility for both actual (ongoing, see from paragraph 3715) and potential (future, see from paragraph 39) climate change-related adverse human right impacts for the purposes of the UNGPs. These human rights impacts are of the utmost severity and of an unprecedented scale.³²³ They impact on a very wide spectrum of internationally recognized human rights (GP 12), including rights to life, water and sanitation, health, food, a healthy environment, an adequate standard of living, housing, property, culture, self-determination, indigenous people, women, and development.³²⁴ Saudi Aramco is accordingly responsible for climate change-related human rights impacts.

141. The vast majority of Saudi Aramco’s climate impact is via its products (its ‘Scope 3 emissions’), which could fall into ‘contribution’ or ‘direct linkage’ under the UNGPs. Contribution implies some element of causality which is more than trivial or minor.³²⁵ Another relevant factor is the type of action taken by the business. This can be seen in the comment by John Ruggie, the main author of the UNGPs: “*the extent to which a business enabled, encouraged, or motivated human rights harm by another; the extent to which it could or should have known about such harm; and the quality of any mitigating steps it has taken to address it*”.³²⁶ Thus the more that Saudi Aramco enabled, encouraged or motivated others to act in ways that lead to human rights harm and the more it knew about such harm and the less it took effective mitigation of that harm, then the more Saudi Aramco is properly analysed as having contributed to that human rights harm, for the purpose of the UNGPs.

142. The evidence set out above shows that, in every relevant respect, Saudi Aramco’s responsibility for the climate impacts of its products goes beyond a case of being “*involved solely because the impact is directly linked to its operations, products or services by a business relationship*” (GP 19(b)). It has clearly contributed to climate change impacts.

³²¹ “Production from already approved oil and gas fields of the 100 companies will burn through and breach the 1.5°C carbon budget of the sector by 2037. Despite this calamitous trajectory, the most influential companies in the sector are purposefully going in the opposite direction”. Ibid, p6

³²² See UNFCCC, UN Race to Zero Campaign <<https://unfccc.int/climate-action/race-to-zero-campaign>>

³²³ See from paragraph 34

³²⁴ See, for example, paragraph 1

³²⁵ “For example, a bank that provides financing to a client for an infrastructure project that entails clear risks of forced displacements may be considered to have facilitated—and thus contributed to—any displacements that occur, if the bank knew or should have known that risks of displacement were present, yet it took no steps to seek to get its client to prevent or mitigate them”. OHCHR, Response to request from BankTrack for advice regarding the application of the UNGPs on Business and Human Rights in the context of the banking sector (12 June 2017) p5-6

<<https://www.ohchr.org/Documents/Issues/Business/InterpretationGuidingPrinciples.pdf>>

³²⁶ J. Ruggie, Comments on Thun Group of Banks Discussion Paper on the Implications of UN Guiding Principles 13 and 17 in a Corporate and Investment Banking Context (21 February 2017)

<https://www.banktrack.org/download/comments_on_thun_group_of_banks_discussion_paper/thunfinal.pdf>

143. Saudi Aramco also sells fossil fuel products in the **knowledge**,³²⁷ if not with the intention, that they are used - burned. It is therefore also **facilitating**³²⁸ and **encouraging**³²⁹ others to make increasing use of its oil and gas products. This is wholly at odds with international climate goals to reduce emissions. At the same time, its promotional activities downplay the harms of its business and products.³³⁰

- a. The evidence shows that Saudi Aramco’s practices and policies are to maintain (or increase) oil and gas production; explore to increase its oil and gas reserves; to engage in extensive greenwashing activities and to obstruct the decarbonisation of transport (see the sections from paragraphs 107 and 123). By adding to global oil and gas supply levels, Saudi Aramco is increasing global consumption of oil and gas and the associated emissions (see paragraph 98). The steps Saudi Aramco seeks to portray as addressing its emissions (the false solutions analysed above) are not effective. Worse, the promotion of these false solutions to continuing oil and gas use entrenches reliance on fossil fuels, thereby actively causing harm.³³¹
- b. As well as the need to interpret the UNGPs against the normative environment, the Commentary to GP 12 is clear that “[d]epending on the circumstances, business enterprises may need to consider additional standards”. The scientific evidence and the normative environment regarding climate change provides the key (additional) standard for action to prevent and mitigate climate impacts – alignment with the Paris Goals. Under the UNGPs, effective prevention and mitigation of climate change impacts requires all enterprises to reduce their emissions in line with the internationally agreed Paris Goals.³³²
- c. Wholly apart from the interpretation of the UNGPs, alignment with the Paris Goals can become a *requirement* of general corporate law for business enterprises under national law. Specifically, Paris-alignment arguably flows from obligations on directors to (broadly) act in the best interests of a company and to promote its success (including in light of obligations to have regard to wider stakeholder interests).³³³ With the *Shell* case, courts have already begun to directly enforce this standard on business enterprises through another area of national law – duties of care toward third parties.³³⁴

³²⁷ This is the case, at least, since fossil fuels’ role in climate change was widely understood in the late 1980s following the 1988 testimony of Dr. James Hansen to the US Senate Energy and Natural Resources Committee and the establishment of the IPCC further to UN General Assembly Resolution 43/53 of 6 December 1988. See UN Foundation, *The Historic 1988 Climate Hearing: 30 Years Later* <<https://unfoundation.org/blog/post/the-historic-1988-senate-climate-hearing-30-years-later/>>; and IPCC, *History of the IPCC* <<https://www.ipcc.ch/about/history/>>. It can also be inferred from Saudi Aramco’s own recognition that climate action will negatively affect its business practices and its current and potential involvement in climate change litigation seeking remedies for its involvement in climate change. See: Saudi Aramco, *Annual Report (2020)* pp95, 100 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

³²⁸ By selling fossil fuels, creating the conditions for them to be burned.

³²⁹ See paragraph 98 and from paragraph 107

³³⁰ See from paragraph 107

³³¹ See from paragraph 113

³³² For what this means in practice, see the ClientEarth Principles for Paris-Aligned business plans, <<https://www.clientearth.org/latest/latest-updates/news/our-principles-for-paris-aligned-business-plans/>>; A comparative resource is the UN Race to Zero process criteria, <<https://racetozero.unfccc.int/wp-content/uploads/2021/04/Race-to-Zero-Criteria-2.0.pdf>>

³³³ For example, “*Developing a credible Paris-aligned strategy with targets to reduce its exposure to fossil fuel assets is in HSBC’s best interests*”. ClientEarth, Letter to Noel Quinn of HSBC (February 2021) <<https://www.clientearth.org/media/10nf01r5/2021-02-letter-from-clientearth-to-noel-quinn-of-hsbc.pdf>>

³³⁴ See for example, ClientEarth, *Investor Briefing: Milleudéfensie et al. v Royal Dutch Shell – Six takeaways for business climate plans* <<https://www.clientearth.org/media/y5ghrwcw/milleudéfensie-et-al-v-royal-dutch-shell-six-takeaways-for-business-climate-plans.pdf>>

- d. For fossil fuel companies it is abundantly clear that this means (among other things) reducing fossil fuel production year on year in line with climate science.³³⁵ There are examples of other state-owned oil and gas companies which have committed to net zero³³⁶ and those that have transitioned to renewable energy³³⁷ and examples of companies committing to reduce oil and gas production (even if the rate of reduction is not sufficient).³³⁸
- e. In light of State and business practice,³³⁹ international environmental law³⁴⁰ and the best available science³⁴¹ in this respect the UNGPs should be interpreted as amounting to an obligation of result – aligning with the Paris Goals. As this complaint demonstrates (see from paragraph 87), Saudi Aramco is very far from aligned with the Paris Goals, and the Net Zero Transition.³⁴² Consequently, Saudi Aramco is **failing to act to prevent or mitigate** human rights harms caused by its products through climate change.

144. Compliance with the UNGPs requires aligning Saudi Aramco’s activities and plans with the Paris Goals, which it has not done. Instead, Saudi Aramco appears to be conducting its business counter to the Paris Goals. Accordingly, Saudi Aramco’s actions in relation to climate change-related human rights impacts for the purposes of the UNGP is one of *contribution*. The same is very likely to apply to many large oil and gas companies which are not validly transitioning their business in line with the Net Zero Transition.³⁴³

³³⁵ See from paragraph 60. As the Climate Accountability Institute says, “[t]hese companies have significant moral, financial, and legal responsibility for the climate crisis, and a commensurate burden to help address the problem [...] It is incumbent on companies that value their social license to operate to respect climate science, manage corporate risks accordingly, commit to reducing future production of carbon fuels and their emissions in alignment with the Paris Agreement pathway under 1.5°C (net zero by 2050).” Climate Accountability Institute, Press Release: Update of Carbon Majors (9 December 2020) <<https://climateaccountability.org/pdf/CAI%20PressRelease%20Dec20.pdf>>

³³⁶ The state-owned Colombian oil company Ecopetrol has committed to achieve net zero emissions by 2050: “Under this new ambitious goal, the Company ratifies its responsibility with the Sustainable Development Goals (SDGs) and with the Paris Agreement’s purpose of curtailing global warming.” Ecopetrol, Ecopetrol announces its commitment and plan to achieve net zero emissions by 2050 (2021) <https://www.ecopetrol.com.co/wps/portal/Home/en/?Idmy&page=detailNews&urile=wcm:path:/ecopetrol_wcm_library/as_en/news/noticias-2021/emissions-reduction>

³³⁷ Such as the state-owned enterprise Ørsted, formerly Danish Oil and Natural Gas. See: Science Based Targets, Case Study Ørsted <<https://sciencebasedtargets.org/companies-taking-action/case-studies/orsted>> and “notable exceptions include Pertamina, which is targeting 3.4 GW of renewable capacity and 1,300 million megawatt-hours (MWh) of battery product capacity by 2026, PTT, which is targeting 8 GW of renewable capacity by 2030 as well as EV charging and energy solutions services, and Equinor, which has set out time-bound plans with deployment schedules to develop renewables, carbon capture and storage (CCS) and hydrogen.” World Benchmarking Alliance, Oil and Gas Benchmark Insights Report (2021) p18 <<https://assets.worldbenchmarkingalliance.org/app/uploads/2021/07/Oil-and-Gas-Benchmark-Insights-Report-2021.pdf>>

³³⁸ For example: BP has committed to reduce oil and gas production by 30-40% by 2030 (albeit excluding its stake in Rosneft). See: BP, Press Release (4 August 2020) <<https://www.bp.com/en/global/corporate/news-and-insights/press-releases/from-international-oil-company-to-integrated-energy-company-bp-sets-out-strategy-for-decade-of-delivery-towards-net-zero-ambition.html>>; Eni targets a cut of 25% in emissions by 2030, and says that “Eni’s decarbonization strategy envisages a progressive reduction in hydrocarbon production in the medium term”. See Eni, Strategy on Climate Change webpage <<https://www.eni.com/en-IT/low-carbon/strategy-climate-change.html>>

³³⁹ See paragraph 51

³⁴⁰ See from paragraph 31 and paragraph 18

³⁴¹ See paragraph 29 and from paragraph 34

³⁴² For a fuller analysis of alignment, see the Climate Action 100+ Net Zero Company Benchmark <<https://www.climateaction100.org/progress/net-zero-company-benchmark/>>

³⁴³ Not one of the 41 oil and gas distribution companies included in the January 2021 analysis by the investor group, the Climate Action 100+, was assessed to have short-term (up to 2025) Net Zero (1.5°C) emissions reduction targets covering the most relevant Scope 1, 2 and 3 emissions. Only one company was assessed to have Net Zero emission reduction targets for the medium and long-term periods (2026-2050). Climate Action 100+, Progress webpage <<https://www.climateaction100.org/progress/net-zero-company-benchmark/>>

Lack of policy commitment

145. In order to meet their responsibility to respect human rights Saudi Aramco should have in place policies and processes in accordance with GP 16.³⁴⁴
146. Saudi Aramco's Code of Business Conduct³⁴⁵ includes a section entitled 'Our Commitment to the Communities Where We Operate' which states "*We are committed to being a good corporate citizen everywhere we do business.*" This Code of Business Conduct contains a subsection titled 'Human Rights'.
147. In its 2020 Annual Report, there is **no reference at all to any human rights policy**. This clearly does not meet the requirements of GP16. This is despite the acknowledgement by Saudi Aramco in its 2020 Annual Report about its litigation risks from its failure to address its contribution to climate.³⁴⁶ This lack of reported human rights policy in 2020 is a regressive step, as in its 2019 Annual Report, Saudi Aramco made two references to human rights:

*"The Company is dedicated to the health, safety, wellness and overall human rights of its contractors."*³⁴⁷

*"Saudi Aramco's Supplier Code of Conduct promotes the Company's values and extends and maintains its ethical standards across the supplier network, enabling long-term, mutually beneficial partnerships. This requires that the Company's vendors and suppliers, and those of the Company's subsidiaries, meet the required standards of ethics when it comes to anti-bribery and anti-corruption, as well as compliance with all local legislation around human rights."*³⁴⁸

148. These statements in 2019 by Saudi Aramco **do not comply with the requirements of GP 16** for the following reasons:
- Its Code of Conduct 'Human Rights' policy is limited to employee and supplier health and safety, and labour rights, and to country of origin legal compliance. It does not include policies in relation to other rights-holders affected by its activities, such as local communities and consumers, or other human rights.

³⁴⁴ GP 16 provides: "*As the basis for embedding their responsibility to respect human rights, business enterprises should express their commitment to meet this responsibility through a statement of policy that:*

(a) Is approved at the most senior level of the business enterprise;

(b) Is informed by relevant internal and/or external expertise;

(c) Stipulates the enterprise's human rights expectations of personnel, business partners and other parties directly linked to its operations, products or services;

(d) Is publicly available and communicated internally and externally to all personnel, business partners and other relevant parties;

(e) Is reflected in operational policies and procedures necessary to embed it throughout the business enterprise." OCHR, Guiding Principles on Business and Human Rights (2011) pp16-17

<https://www.ohchr.org/documents/publications/guidingprinciplesbusinessshr_en.pdf>

³⁴⁵ Saudi Aramco, Our Code of Business Conduct webpage

<https://www.aramco.com/-/media/downloads/who-we-are/our-governance/code_of_business_conduct-2.pdf?la=en&hash=92A6FC3DD51F4036E030BF83B6826D982BBDDF21>

³⁴⁶ Saudi Aramco, Annual Report (2020) p100 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

³⁴⁷ Saudi Aramco, Annual Report (2019) p78 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2019-english.pdf>>

³⁴⁸ Saudi Aramco, Annual Report (2019) p85 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2019-english.pdf>>

- b. Its statements in its Annual Report about human rights are limited to its contractors and subsidiaries, and make no reference to the human rights of its employees, local communities or others.
- c. Its statements in its Annual Report refer to “*compliance with all local legislation around human rights*”. This is not what is expected of business enterprises under the UNGPs. UNGP 23 makes clear that a business enterprise is expected to respect and honour internationally recognised human rights at all times beyond local legislation about human rights.³⁴⁹

149. There is no policy about conducting human rights due diligence or processes to enable remediation, as set out in GP15. There is no evidence provided that any human rights policy is embedded throughout its business as reflected in operational policies and procedures.

150. In addition, there is no reference in Saudi Aramco’s human rights policies to its highly salient climate change impacts. This is despite the compelling evidence provided above about its activities, including maintaining its fossil fuel production, exploring for new fossil fuel reserves, greenwashing and obstructing the decarbonisation of transport.

Lack of human rights due diligence

151. Human rights due diligence (HRDD) is a core aspect of the responsibility of a business enterprise to respect human rights and is set out in GP 17.³⁵⁰ The four key elements of HRDD are: identifying actual and potential human rights impacts, normally through a human rights impact assessment, throughout their value chain and business relationships; integrating and acting upon the findings of the assessment; tracking responses to inform new assessments; and communicating publicly the outcomes. These are expanded upon in GPs 18-21.

152. In relation to climate change impacts and HRDD, the Working Group has expressly stated that:

“business enterprises may not be able to discharge their responsibility to respect all internationally recognised human rights unless they integrate climate change considerations into their human rights due diligence processes.”³⁵¹

This is consistent with the analysis produced by the OHCHR, in its publications ‘Frequently Asked Questions on Human Rights and Climate Change’ and ‘Human Rights, Climate Change and Business, Key Messages’.³⁵²

³⁴⁹ See Arianne Griffith, Lise Smit and Robert McCorquodale, Responsible Business Conduct and State Laws: Addressing Human Rights Conflicts (2020) 20 HRLR 641

³⁵⁰ “In order to identify, prevent, mitigate and account for how they address their adverse human rights impacts, business enterprises should carry out human rights due diligence. The process should include assessing actual and potential human rights impacts, integrating and acting upon the findings, tracking responses, and communicating how impacts are addressed. Human rights due diligence:

(a) Should cover adverse human rights impacts that the business enterprise may cause or contribute to through its own activities, or which may be directly linked to its operations, products or services by its business relationships;
 (b) Will vary in complexity with the size of the business enterprise, the risk of severe human rights impacts, and the nature and context of its operations;

(c) Should be ongoing, recognizing that the human rights risks may change over time as the business enterprise’s operations and operating context evolve.” OCHR, Guiding Principles on Business and Human Rights (2011) pp17-18 <https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf>

³⁵¹ OHCHR, Climate Change and the UNGPs <<https://www.ohchr.org/EN/Issues/Business/Pages/Climate-Change-and-the-UNGPs.aspx>>

³⁵² OHCHR, Frequently Asked Questions on Human Rights and Climate Change: Factsheet No. 38 p36 <https://www.ohchr.org/Documents/Publications/FSheet38_FAQ_HR_CC_EN.pdf>; OHCHR, Human Rights, Climate

153. These statements indicate that climate change is squarely within the scope of HRDD and so business enterprises, in undertaking HRDD, must assess their emissions. This position has been supported by research, based on strong evidence, that climate change is part of HRDD.³⁵³
154. GP 17(c) provides that HRDD should be ongoing, recognizing that human rights risks may change over time as an enterprise’s operating context evolves. Today, the operating context includes the Net Zero Transition (see paragraph 51). Accordingly, an HRDD process inclusive of climate change must – particularly for fossil fuel businesses like Saudi Aramco - include consideration of Scopes 1, 2 and 3 emissions, encompassing their value chains and business relationships. HRDD must also extend to a business’ influence on the wider Net Zero Transition, whether through promotional activities such as advertising, funding scientific research or public policy activities (lobbying).³⁵⁴
155. In light of their sector and operational context, for fossil fuel business enterprises³⁵⁵ climate-change related human rights risk will in all likelihood be the most salient human rights issue.³⁵⁶ The crystallisation of this risk into impacts has begun and as climate science indicates, it is (at the very least) highly probable that those impacts will worsen in the future. Climate change-related human rights impacts qualify for treatment as *severe* human rights impacts in light of their vast scale, scope and the irremediable character (explored in more detail from paragraph 36). This is particularly in the case of any further delay in transitioning away from fossil fuels.³⁵⁷ Under the UNGPs, severe climate change-related human rights impacts and risks require prioritisation (where prioritisation is necessary), formal reporting and treatment as a (mandatory) legal compliance issue.³⁵⁸
156. The Paris Agreement makes preambular reference to “[r]ecognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge” and operationalizes this concept in Art. 4(1), where States parties “aim [...] to undertake rapid reductions [after greenhouse gas emissions peak globally] in accordance with best available science”.³⁵⁹ Business action on climate change-related impacts on human rights similarly requires referring to the increasing body of expert resources in the form of the best available science.³⁶⁰ Translating this to the context of individual businesses means looking at sectoral decarbonisation pathways – which for the oil and gas industry are the subject of detailed

Change and Business Key Messages,

<<https://www.ohchr.org/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>>

³⁵³ C. Macchi, *The Climate Change Dimension of Business and Human Rights: The Gradual Consolidation of a Concept of ‘Climate Due Diligence’* (2020) BHRJ 1, especially at p26.

³⁵⁴ See the UN Global Compact, UNFCCC and UNEP Guide for Responsible Corporate Engagement in Climate Policy, which includes marketing and financial contributions to research organisations within the definition of engagement, p7 <https://d306pr3pise04h.cloudfront.net/docs/issues_doc%2FEnvironment%2Fclimate%2FGuide_Responsible_Corporate_Engagement_Climate_Policy.pdf>

³⁵⁵ I.e., a business that engages in the exploration, production, refinement, and distribution of coal, oil or gas.

³⁵⁶ “factors of sector and operational context are therefore especially relevant, or salient, in determining which human rights are at greatest risk from a particular enterprise’s operations” Q15, OHCHR, *The Corporate Responsibility to Respect Human Rights: An Interpretive Guide* (2012) p21 <https://www.ohchr.org/documents/publications/hr.pub.12.2_en.pdf>

³⁵⁷ OHCHR, *The Corporate Responsibility to Respect Human Rights: An Interpretive Guide*, (2012) p8 <https://www.ohchr.org/documents/publications/hr.pub.12.2_en.pdf>

³⁵⁸ OHCHR, *Guiding Principles on Business and Human Rights* (2011) Commentary to GP 21, 23 and 24, pp24-26 <https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf>

³⁵⁹ The Paris Agreement, Article 4(1)

³⁶⁰ As explained by the Commentary to GP 19, which recommends the use of independent expert advice on addressing impacts: “more complex the situation and its implications for human rights, the stronger is the case for the enterprise to draw on independent expert advice in deciding how to respond”. OHCHR, *Guiding Principles on Business and Human Rights* (2011) p22

work underpinning clear thresholds,³⁶¹ such as the constraint on new oil and gas fields and the need to reduce oil and gas production by at least 4% and 3% per year (see paragraph 60).

157. Although it claims that it is “*reducing harmful emissions*”,³⁶² Saudi Aramco has no express HRDD process and procedures publicly available which show how Saudi Aramco deals with the actual and potential adverse climate change-related human rights impacts of its activities.³⁶³ **This is contrary to GPs 17 and 21.**

158. GP 17 states that HRDD will vary in complexity depending on the size of the business enterprise, the risk of severe human rights impacts and the nature and context of its operations. HRDD is an ongoing expectation on all business enterprises. The size, sector, operational context and ownership and structure of Saudi Aramco, as well as the severity of the human rights impacts of climate change, means that there is significantly heightened expectation that it should meet its responsibility. This is consistent with the requirement in the Paris Agreement that emission reduction efforts reflect ‘common but differentiated responsibilities and respective capabilities, in the light of different national circumstances’ – such as financial and technological capabilities, which in Saudi Aramco’s case are significant.³⁶⁴

159. There is no publicly available evidence to indicate that Saudi Aramco has ever conducted a human rights impact assessment in purported accordance with GP 18 and implemented the other elements of human rights due diligence, let alone by incorporating the climate change-related impacts of its business activities.

Lack of Prevention, Mitigation and Remediation

160. GP 19 sets out the actions which a business enterprise should do to prevent and mitigate their adverse human rights impacts.³⁶⁵ GP 22 deals with the issues of remediation.³⁶⁶ There is also extensive consideration of remedies in Pillar 3 of the UNGPs, including the creation of operational grievance mechanisms (GP 29).

161. As explained at paragraph 143 above, Saudi Aramco is **not acting to prevent and mitigate** its potential and actual climate change-related human rights impacts by reducing its emissions in line with the Paris Goals, and Net Zero Transition (an obligation of result).

³⁶¹ Such as the UNEP, The Production Gap Report and IEA, Net Zero Roadmap.

³⁶² On its corporate website, Saudi Aramco states “*Delivering the energy the world needs while reducing harmful emissions. That’s the challenge we take on every day.*” See: Saudi Aramco, Making a Difference webpage <<https://europe.aramco.com/en/making-a-difference/planet/>>

³⁶³ The Corporate Human Rights Benchmark has consistently rated Saudi Aramco at zero (out of 12) in terms of its category of “*embedding respect and human rights due diligence*”. See: World Benchmarking Alliance, Measuring 230 global companies on their human rights performance <<https://www.worldbenchmarkingalliance.org/publication/chr/b/>>

³⁶⁴ The Paris Agreement, Art. 4(3)

³⁶⁵ *In order to prevent and mitigate adverse human rights impacts, business enterprises should integrate the findings from their impact assessments across relevant internal functions and processes, and take appropriate action.*

(a) *Effective integration requires that:*

(i) *Responsibility for addressing such impacts is assigned to the appropriate level and function within the business enterprise;*

(ii) *Internal decision-making, budget allocations and oversight processes enable effective responses to such impacts.*

(b) *Appropriate action will vary according to:*

(i) *Whether the business enterprise causes or contributes to an adverse impact, or whether it is involved solely because the impact is directly linked to its operations, products or services by a business relationship;*

(ii) *The extent of its leverage in addressing the adverse impact.”*

OHCHR, Guiding Principles on Business and Human Rights (2011) p20-21

<https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf>

³⁶⁶ “*Where business enterprises identify that they have caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes.*” Ibid, p24

162. Further, Saudi Aramco is not fulfilling the process requirements spelled out by the GPs 19 and 20, which apply in taking steps to reduce emissions in line with the Net Zero Transition. Saudi Aramco must integrate the findings from its GP 17-compliant human rights impact assessment into its internal functions and processes. This requires as follows;

- a) assigning responsibility for preventing/mitigating potential climate impacts and addressing ongoing impacts to the appropriate level/function, here the Board of Directors;
- b) internal decision-making, budget allocations and oversight processes to enable effective responses to such impacts; and
- c) the assessment findings are properly understood, given due weight, and acted upon (Commentary to GP19).

There is no evidence that Saudi Aramco has taken these steps.

163. Similarly, in relation to remediation, Saudi Aramco has not provided any specific information as to the actions it has taken to remediate its significant historic impact on climate change-related human rights impacts. As the Commentary to GP 22 notes: “*responsibility to respect human rights requires active engagement in remediation, by itself or in cooperation with other actors*”. Saudi Aramco should also provide information of what, if any, operational grievance mechanisms it has in place.

164. As explained above in paragraph 95, Saudi Aramco cannot seek to disregard its own responsibility by arguing that other oil and gas producers will step in to replace any declining production. Saudi Aramco also cannot claim that it can address ongoing impacts and prevent potential ones by being the ‘last man standing’ oil company owing to its low cost and low-carbon intensity production – this approach does not discharge Saudi Aramco’s responsibility and in practice simply risks much worsened climate change, as explained above.³⁶⁷

165. Similarly, Saudi Aramco cannot rely on complying with KSA law to excuse its actions. This is because GP 23 makes it clear that this is not sufficient as business enterprises should “*seek ways to honour the principles of internationally recognized human rights when faced with conflicting requirements*”, such as State law.³⁶⁸ The OHCHR states that the responsibility to respect human rights “*applies even in the absence of clear domestic climate obligations [,] exists independently of States’ ability and/or willingness to respect, protect and fulfil human rights including in the context of climate change [and] exists over and beyond compliance with applicable laws*”.³⁶⁹ This was further confirmed in the *Shell* case, where the court held that Shell “*must do more than monitoring developments in society and complying with the regulations in the countries where the Shell group operates*”.³⁷⁰

166. On this basis, Saudi Aramco needs to provide clear evidence in compliance with GP 21, as to what actions it has taken and is taking in relation to the prevention, mitigation and remediation of the climate change-related human rights impacts of its activities, and those of its products, as set out in this complaint. Specifically, to prevent and mitigate the potential impacts of its activities, Saudi Aramco at a minimum align with the Paris Goals.

F. LEGAL ANALYSIS - KSA'S NON-COMPLIANCE WITH ITS HUMAN RIGHTS

³⁶⁷ See paragraph 98

³⁶⁸ See Arianne Griffith, Lise Smit and Robert McCorquodale, *Responsible Business Conduct and State Laws: Addressing Human Rights Conflicts* (2020) 20 HRLR 641

³⁶⁹ OHCHR, *Human Rights, Climate Change and Business Key Messages*, p4
<<https://www.ohchr.org/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>>

³⁷⁰ *Milieudefensie et al. v. Royal Dutch Shell plc*. [2021] C/09/571932, para 4.4.52

OBLIGATIONS REGARDING SAUDI ARAMCO

KSA's obligations to regulate the oil and gas sector

167. The UNGPs set out clear legal obligations in relation to State duties concerning the human rights impacts of business enterprises which States regulate under national law. GP 1 provides:

*“States **must** protect against human rights abuse within their territory and/or jurisdiction by third parties, including business enterprises. This requires taking appropriate steps to prevent, investigate, punish and redress such abuse through effective policies, legislation, regulations and adjudication.”*

168. This is clearly a mandatory obligation on KSA, applicable to its regulation of Saudi Aramco. Irrespective of KSA's ratification of international human rights treaties, GP 1 represents customary international law,³⁷¹ and the UNGPs incorporate the International Bill of Human Rights (including the ICCPR and ICESCR – see GP 12).

169. KSA ratified the Paris Agreement on 3 November 2016. The Paris Agreement obliges State parties to do the following, amongst other obligations:

*“As nationally determined contributions to the global response to climate change, all Parties are to undertake and communicate ambitious efforts as defined in Articles 4, 7, 9, 10, 11 and 13 with the view to achieving the purpose of this Agreement as set out in Article 2. The efforts of all Parties will represent a progression over time,”*³⁷²

*“Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.”*³⁷³

170. These obligations require the KSA to communicate an NDC “with a view to achieving” the Paris Goals, which reflects its “highest possible ambition”. KSA's successive NDCs are to represent *progression* in emissions reductions, and it cannot ‘go backwards’ in its ambition.

171. This standard of conduct, as expressed in the Paris Agreement, informs the content of States' positive human rights obligations, as explained in paragraph 18. The Inter-American Court of Human Rights also made this clear in its decision in *Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina*:³⁷⁴

“[The] Court has indicated that, at times, the States have the obligation to establish adequate mechanisms to monitor and supervise certain activities in order to ensure human rights....Specifically with regard to the environment, it should be stressed that the principle of prevention of environmental harm forms part of customary international law and entails the State obligation to implement the necessary measures ex ante damage is caused to the

³⁷¹ R. McCorquodale and P. Simons, *Responsibility Beyond Borders: State Responsibility for Extraterritorial Violations by Corporations of International Human Rights Law* (2007) 70 MLR 599; and see *Social and Economic Rights Action Centre v Nigeria*, where the African Commission on Human and People's Rights held that “*Contrary to its [African] Charter obligations and despite such internationally established principles, the Nigerian Government has given the green light to private actors, and the oil companies in particular, to devastatingly affect the well-being of the Ogonis. By any measure of standards, its practice falls short of the minimum conduct expected of governments*”: *Social and Economic Rights Action Centre v Nigeria* (2001) AHRLR 60 (ACHPR 2001), para 58

³⁷² The Paris Agreement, Article 3

³⁷³ The Paris Agreement, Article 4

³⁷⁴ *Indigenous Communities of the Lhaka Honhat (Our Land) Association v. Argentina*, Judgment of 15 February 2020

environment, taking into account that, owing to its particularities, after the damage has occurred, it will frequently not be possible to restore the previous situation.... This obligation must be fulfilled in keeping with the standard of due diligence, which must be appropriate and proportionate to the level of risk of environmental harm.... Even though it is not possible to include a detailed list of all the measures that States could take to comply with this obligation, the following are some measures that must be taken in relation to activities that could potentially cause harm: (i) regulate; (ii) supervise and monitor; (iii) require and approve environmental impact assessments; (iv) establish contingency plans, and (v) mitigate, when environmental damage has occurred.”³⁷⁵

172. This means that KSA should take all appropriate and necessary measures to address the actions of business enterprises, including adopting necessary regulatory measures, their monitoring and as well as their enforcement, in relation to climate change. This was established by the International Court of Justice (ICJ) in *Pulp Mills on the River Uruguay (Argentina v Uruguay)*,³⁷⁶ in relation to environmental impacts, and is elaborated by the Committee on Economic, Social and Cultural Rights, which stated that “[i]n order to act consistently with their human rights obligations, the NDCs should be revised to better reflect the « highest possible ambition » referred to in the Paris Agreement”.³⁷⁷

173. In a series of cases against governments in different parts of the world, courts have repeatedly stated that governments have specific and wide obligations in relation to climate change. For example:

- a. In *The Netherlands v Urgenda*,³⁷⁸ the Dutch Supreme Court held that the State must reduce greenhouse gases by the end of 2020 by at least 25% compared to 1990. They reached this decision on the basis of international consensus on climate change action with the urgent necessity for a reduction of 25-40% in 2020. The Court held that this also applies to the Netherlands on an individual basis, as a State cannot escape its own share of the responsibility to take measures by arguing that compared to the rest of the world, its own emissions are relatively limited in scope and that a reduction of its own emissions would have very little impact on a global scale.
- b. More recently, the German Federal Constitutional Court held,³⁷⁹ that Germany’s Climate Protection Act of December 2019 was not sufficient to meet Germany’s international obligations concerning climate change. It held that the German government has to do more in relation to both extraterritorial and intergenerational impacts, and the Court qualified the Paris Goals as the “*constitutionally relevant temperature limit*”, which “*can, in principle, be converted into a corresponding global CO2 emission amount which can then be allocated to states*”.³⁸⁰ It then relied on the carbon budget concept (despite the degree of uncertainty inherent in the estimate) to find that the German legislator was required to determine emission reductions for the period after 2030, in order to ensure fair distribution of reductions over generations.

³⁷⁵ Ibid, paras 207-208; translation by Christina Voigt, The Climate Change Dimension of Human Rights (3 May 2021) <<https://ssrn.com/abstract=3839012>>

³⁷⁶ Report of the ICJ: General Assembly (2010) UN Doc. A/65/4, Sixty-fifth Session, Supplement No.4, pp14, 77, para 187

³⁷⁷ CESCR, Climate change and the International Covenant on Economic, Social and Cultural Rights: Statement of the Committee (8 October 2018), paras 6

<<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=23691&LangID=E>>

³⁷⁸ *The Netherlands v Urgenda* [2019] Supreme Court 19/00135

³⁷⁹ German Constitutional Court, BVerfG, Order of the First Senate of 24 March 2021, 1 BvR 2656/18; (English translation) <https://www.bundesverfassungsgericht.de/SharedDocs/Entscheidungen/EN/2021/03/rs20210324_1bvr265618en.html;jsessionid=7B77A606F60E2BBA0FB4544CE6207902.2_cid377>

³⁸⁰ Ibid, paras 215, 216

- c. In the Federal Court of Australia,³⁸¹ the Court held that a government minister must exercise her powers under environmental legislation with reasonable care to not cause children harm resulting from the extraction of coal and emission of CO₂ into the Earth's atmosphere. This was held even though the Court considered that the foreseeability of the probability of harm from the minister's conduct in allowing fossil fuel production may be small, because it was considered that, should the risk of harm crystallise, it would be catastrophic.

174. The UN human rights treaty bodies have recommended that States limit fossil fuel use and greenhouse gas emissions in order to discharge their duty to protect against the differentiated impacts of climate harms, including through their regulation of business, in general comments, statements and across a number of Concluding Observations.³⁸² Furthermore, the Special Rapporteur on the Environmental and Human Rights has set out specific measures which States are to take in relation to fossil fuels, including to protect against climate change impacts by business enterprises in their territory and/or jurisdiction:

“To address society’s addiction to fossil fuels, all States should:

(a) Immediately terminate all fossil fuel subsidies, except for clean cookstove programmes; [...]

(c) Enact laws that phase in zero-carbon transportation, including zero-emission vehicle mandates and low-carbon fuel standards, and laws that phase out the sale of new diesel and gasoline passenger vehicles;

(d) Limit fossil fuel businesses and their industry associations from influencing climate, energy and environmental policies, in light of their responsibility for the majority of emissions and their well-known efforts to subvert and deny scientific evidence of climate change. This is a key element of the WHO Framework Convention on Tobacco Control, which limits the involvement of tobacco companies in health policy.”³⁸³

(e) “States that have substantial fossil fuel industries should incorporate strategies for a just transition, including social and economic impact assessments as well as policies and programmes for skills development, retraining and adult education.”³⁸⁴

175. The obligation on a State to take these measures exists even when it is highly dependent on fossil fuel production, as is the case with KSA. The IPCC acknowledges that there are *“specific challenges for aligning mitigation towards 1.5°C-consistent trajectories [in the Gulf Cooperative Council (GCC) – being Bahrain, Kuwait, Oman, Qatar, KSA and the United Arab Emirates],*

³⁸¹ *Sharma by her litigation representative Sister Marie Brigid Arthur v Minister for the Environment* [2021] FCA 560

³⁸² ICCPR, General Comment No. 36: Article 6 (Right to life) (30 October 2018) UN Doc. CCPR/C/GC/36, para 63 <https://tbinternet.ohchr.org/Treaties/CCPR/Shared%20Documents/1_Global/CCPR_C_GC_36_8785_E.pdf>; CEDAW, General Recommendation No. 37: Gender-related dimensions of disaster risk reduction in the context of climate change (7 February 2018) UN Doc. CEDAW/C/GC/37, paras 14, 47-49 <https://tbinternet.ohchr.org/Treaties/CEDAW/Shared%20Documents/1_Global/CEDAW_C_GC_37_8642_E.pdf>; CESCR, Climate change and the International Covenant on Economic, Social and Cultural Rights: Statement of the Committee (8 October 2018), paras 8-9 <<https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=23691&LangID=E>>; For a synthesis of business and climate change-related Concluding Observations from CEDAW, CRC (both of which interpret instruments which KSA has ratified) CCPR and CESCR - see CIEL, States’ Human Rights Obligations in the Context of Climate Change (2019) pp10-13 <<https://www.ciel.org/wp-content/uploads/2019/03/HRTB-Feb.-2019-update-2019-03-25.pdf>>

³⁸³ D. Boyd, Special Rapporteur on the Environmental and Human Rights, Safe Climate report (2019) UN Doc. A/74/161, para 77 <<https://www.ohchr.org/Documents/Issues/Environment/SREnvironment/Report.pdf>>; There are also specific obligations in relation to developed States.

³⁸⁴ *Ibid*, para 82

which would require strong energy efficiency and economic development for the region.”³⁸⁵ This does not mean that these States do not still have their climate change obligations. Rather, it means that they need to take actions which are consistent, at a minimum, with the move “towards a 1.5°C-consistent trajectories”.

176. The IEA Net Zero Roadmap echoes the scientific consensus that the Net Zero Transition involves a move to “an energy sector dominated by renewables”, whilst “Net zero means a huge decline in the use of fossil fuels”.³⁸⁶ It summarises: “[m]ake the 2020s the decade of massive clean energy expansion”.³⁸⁷ Specifically, in the IEA scenario: “[t]he share of renewables in total electricity generation globally increases from 29% in 2020 to over 60% in 2030 and to nearly 90% in 2050. To achieve this, annual capacity additions of wind and solar between 2020 and 2050 are five-times higher than the average over the last three years”.³⁸⁸

177. A range of the possible actions for KSA and other GCC States have been set out in scientific and policy reports. For example:

- a. UNEP’s Production Gap report suggests that KSA may benefit from “multilaterally-agreed accommodations regarding energy markets, market share, and prices”,³⁸⁹ and includes an appendix highlighting examples of actions that can support a managed wind-down of fossil fuel production. KSA has not adopted any of these actions.
- b. The IEA stated: “the [GCC] region is well positioned to benefit from increased energy efficiency measures, while world-class renewable resources could help meet growing [energy] demand... [D]iversification strategies that seek to deploy these strengths...towards **clean energy industries could yield significant benefits.**”³⁹⁰
- c. There is significant potential for wind and solar energy in Gulf States such as KSA, owing to regional environmental conditions.³⁹¹
- d. The IPCC has acknowledged KSA’s “strategic vision documents, such as Saudi Arabia’s ‘Vision 2030’” as an example of some progress on the GCC’s transition. The panel recognises that Vision 2030 helps to “identify emergent opportunities for energy price reforms, energy efficiency, turning emissions into valuable products, and deployment of renewables and other clean technologies” **but only** “if accompanied with appropriate policies to manage the transition and in the context of economic diversification” away from reliance on oil and gas exports.³⁹²

178. The evidence to date is that the KSA’s action on climate change has yet to fulfil this potential:

³⁸⁵ IPCC 1.5°C report, Chapter 5, p462, Box 5.2

³⁸⁶ IEA Net Zero Energy Roadmap, p18

³⁸⁷ Ibid, p14

³⁸⁸ Ibid, p73

³⁸⁹ UNEP, Production Gap Report (2020) p37 <<https://www.unep.org/resources/report/production-gap-2020>> citing Peszko et al., The World Bank, Diversification and Cooperation in a Decarbonizing World: Climate Strategies for Fossil Fuel-Dependent Countries (2020)

³⁹⁰ International Energy Agency, Commentary: The case for energy transitions in major oil and gas producing countries (18 November 2020) <<https://www.iea.org/commentaries/the-case-for-energy-transitions-in-major-oil-and-gas-producing-countries>>

³⁹¹ The Gulf Cooperation Council States, including KSA, “lie in the so-called Global Sunbelt and boast some of the highest solar irradiances in the world” which combine with factors such as population density, topography, land cover and protected areas such that “analysis indicates vast areas suitable for solar PV deployment throughout the region”. The same conclusion is reached for wind energy installations. See: International Renewable Energy Agency, Renewable Energy Market Analysis: The GCC Region (January 2016) p13 and detail at p43 <<https://irena.org/publications/2016/Jan/Renewable-Energy-Market-Analysis-The-GCC-Region>>; See also IPCC, 1.5°C report, p462, Box 5.2

³⁹² IPCC, 1.5°C report, Chapter 5

- a) It is estimated that KSA's emissions³⁹³ contributed to 2% of global greenhouse gas emissions (emissions) in 2020, the equivalent of 0.62 GtCO₂.³⁹⁴ The State's emissions are expected to reach a 75–95% increase above 2010 levels in 2030;³⁹⁵
- b) Climate Action Tracker (CAT), the leading analyst of States' NDCs based on consistency with global emissions pathways and equity considerations, ranks the KSA's NDC in the lowest category of “critically insufficient”. NDCs with this ranking: “fall well outside of a country's “fair share” range and are not at all consistent with holding warming to below 2°C let alone with the Paris Agreement's stronger 1.5°C limit. If all government NDCs were in this range, warming would exceed 4°C.”³⁹⁶ As well as falling far short of the emissions reductions required of a State of the KSA's level of economic development, the KSA's NDC is also not fit for purpose as it fails to include an emissions baseline corresponding to its NDC target, making it impossible to track progress against the target;
- c) Despite policy statements, such as the Saudi Green Initiative³⁹⁷ and Vision 2030,³⁹⁸ there is insufficient evidence of these being put into practice. KSA's domestic energy is almost entirely reliant on oil and gas. KSA has long-provided residents with tax-free or low tax consumption and subsidised energy rates, though without incentives for renewable energy;³⁹⁹
- d) Since 2017, KSA has planned the construction of a new \$500 billion ‘mega city’ called NEOM, which it is said will be powered 100% by renewable energy and offer a new model of sustainable living.⁴⁰⁰ It is reported that construction is to commence in 2021, and that as of March 2021 the project employs around 750 people;⁴⁰¹ and
- e) In 2018, the KSA Energy Minister announced that “renewables will be able to provide 10% of [KSA's] power generation by the end of 2023... [and] the government set up a new unit to drive this investment, and drew much of the staff from Aramco”.⁴⁰² However, by 2020, against the revised target of 3.45 gigawatts (GW) of renewable capacity, KSA's total renewable capacity reached just 0.397 GW – which remains a very small fraction (0.5%) of KSA's total electricity production of 68.8 GW.⁴⁰³ According to BP's Statistical Review of World Energy, in 2020 KSA produced just 1.0 Terawatt hour (TWh) of renewable power in 2020, roughly the same as each of Luxembourg (0.9 TWh) and Singapore (1.0 TWh).⁴⁰⁴ There do not yet appear to be effective legal and regulatory frameworks in KSA for the deployment of renewable energy.

³⁹³ This refers to ‘territorial emissions’, thus? excluding the emissions from exports of oil and gas.

³⁹⁴ Union of Concerned Scientists, Each country's share of CO₂ emissions (updated 12 August 2020) <<https://www.ucsusa.org/resources/each-countrys-share-co2-emissions>>; Data sourced from the IEA's Atlas of Energy (2019) <<http://energyatlas.iea.org/#/tellmap/1378539487>>

³⁹⁵ Climate Action Tracker [source quoted in UN documents], Saudi Arabia: Country Summary webpage <<https://climateactiontracker.org/countries/saudi-arabia/>>

³⁹⁶ Ibid, “Saudi Arabia's 2030 climate commitment is highly unclear, due to a lack of data availability, including the absence of any national emissions projections and the fact that Saudi Arabia has not published the baseline corresponding to its Paris Agreement target.”

³⁹⁷ See Saudi Arabia Green Initiative webpage <<https://www.saudigreeninitiative.org/>>

³⁹⁸ KSA, Vision 2030 webpage, “KSA Vision 2030 Strategic Objectives and Vision Realization Programs” <<https://www.vision2030.gov.sa/v2030/vrps/>>; The Atlantic Council, Assessing Saudi Vision 2030: A 2020 Review (June 2020) <<https://www.atlanticcouncil.org/in-depth-research-reports/report/assessing-saudi-vision-2030-a-2020-review/>>

³⁹⁹ International Institute for Sustainable Development, G20 Stories, “Story 7: Increasing Taxes on Fossil Fuel Consumption” (November 2018) p2 <<https://www.iisd.org/system/files/publications/stories-g20-saudi-arabia-china-south-africa-en.pdf>>

⁴⁰⁰ NEOM, The Future of Energy webpage <<https://www.neom.com/en-us/sectors/energy>>

⁴⁰¹ Reuters, Saudi prince pushes on with \$500bn megacity as US points the finger over Khashoggi killing (4 March 2021) <<https://www.reuters.com/article/us-saudi-neom-idUSKBN2AW1HY>>; There are photos of a new construction camp as of April 2021. See: Resortx Construction Board, NEOM Saudi Arabia webpage <<https://www.resortx.com/neom-saudi-arabia>>

⁴⁰² Valerie Marcel, National Oil Companies of the Future (2019) 3 Responsabilité et environnement No.95 133 – 136, 133

⁴⁰³ International Renewable Energy Agency, Renewable Capacity Statistics (2020) p18 <<https://irena.org/publications/2020/Mar/Renewable-Capacity-Statistics-2020>>

⁴⁰⁴ For context, Egypt produced 9.7 TWh, and China produced 863 TWh. BP Statistical Review of World Energy data. See: BP, Energy Economics Statistical Review (2021) <<https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/xlsx/energy-economics/statistical-review/bp-stats-review-2021-all-data.xlsx>>

179. The Special Rapporteur on Human Rights and the Environment noted that “[k]eeping the increase in global temperature to well below 2°C requires States to move rapidly and steadily towards a world economy that no longer obtains energy from fossil fuels.”⁴⁰⁵ The evidence shows that KSA’s as yet unfulfilled plans for renewable energy growth are not matched by any indication of a move away from fossil fuels.

180. KSA is not presently taking any of the policy and practice measures identified by the Special Rapporteur on Human Rights and the Environment, as set out above, in its regulation of Saudi Aramco’s operations.⁴⁰⁶ Instead it appears that KSA’s policy is to maintain production of fossil fuels. In 2021, the KSA Energy Minister reportedly confirmed this in a private event organized by Bank of America, where he said “[w]e are still going to be the last man standing, and every molecule of hydrocarbon will come out”.⁴⁰⁷ The Minister also described the IEA’s Net Zero Roadmap as fantasy, calling it “a sequel of the *La La Land* movie”.⁴⁰⁸

181. The available evidence of Saudi Aramco activities and KSA’s policies suggests that KSA is not complying with its international legal obligations as regards its regulation of Saudi Aramco in relation to climate change-related impacts on human rights.

KSA’s obligations as controlling owner of Saudi Aramco

182. In addition to KSA’s obligations regarding its regulation of Saudi Aramco, KSA controls the company as its majority owner. Accordingly, GP 4 applies and provides that States should take additional steps to protect against human rights abuses. The Commentary to GP 4 states:

*“Where a business enterprise is controlled by the State or where its acts can be attributed otherwise to the State, an abuse of human rights by the business enterprise may entail a violation of the State’s own international law obligations. Moreover, **the closer a business enterprise is to the State, or the more it relies on statutory authority or taxpayer support, the stronger the State’s policy rationale becomes for ensuring that the enterprise respects human rights...**A requirement for human rights due diligence is most likely to be appropriate where the nature of business operations or operating contexts pose significant risk to human rights.”*

183. KSA owns 98.5% of Saudi Aramco. As set out above at paragraph 81, KSA and Saudi Aramco are inextricably linked by control, management and finances. Indeed, KSA’s ability to direct Saudi Aramco as to its human rights responsibilities is highlighted by the company itself, which states that the KSA government “*may in the future direct, Aramco to undertake projects or*

⁴⁰⁵ J. Knox, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (1 February 2016) UN Doc. A/HRC/31/52, para 77 <<https://undocs.org/A/HRC/31/52>>

⁴⁰⁶ D. Boyd, Human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (15 July 2019) A/74/161 <<https://undocs.org/A/74/161>>

⁴⁰⁷ Bloomberg, The Saudi Prince of oil prices vows to drill ‘every last molecule’ (22 July 2021) <<https://www.bloomberg.com/news/features/2021-07-22/saudi-prince-abdulaziz-bin-salman-seeks-to-tame-oil-prices-opecc-russia?sref=tghVnhKl>>; See also the statement by the KSA Minister for Oil Al-Falih that: “*Saudi Arabia is the most prolific basin for oil and gas. We have the best resources and the best capabilities, and we are going to produce the last drop of oil*” Financial Times, Oil Groups Face Dilemma on Climate Change (13 March 2019) <<https://www.ft.com/content/ec42c3d8-4540-11e9-b168-96a37d002cd3>>

⁴⁰⁸ Bloomberg, The Saudi Prince of oil prices vows to drill ‘every last molecule’ (22 July 2021) <<https://www.bloomberg.com/news/features/2021-07-22/saudi-prince-abdulaziz-bin-salman-seeks-to-tame-oil-prices-opecc-russia?sref=tghVnhKl>>

provide assistance for initiatives outside Aramco's core business in furtherance of the Government's macroeconomic, social or other objectives".⁴⁰⁹

184. In this instance of control of a business enterprise, KSA has legal obligations under customary international law, as is clarified by both Pillar I of the UNGPs and by the Special Rapporteurs on the Environment and Human Rights. These legal obligations are both mandatory (see GPs 1 and 25) and extensive, including enforcing the corporate responsibility to respect human rights (GP 3) and, as set out above, doing so in relation to climate change-related adverse human rights impacts. As highlighted above at paragraph 66, State obligations regarding the climate-related human rights impacts of state-owned oil and gas companies are a particularly relevant issue.⁴¹⁰
185. It may safely be inferred that KSA is directing Saudi Aramco business activities and strategy, and its non-compliance with its responsibility to respect human rights as detailed in this complaint. There is evidence of various specific actions of the KSA government in this regard. These include:
- a. In February 2020, Saudi Aramco received regulatory approval from KSA government for the development of the Jafurah unconventional gas field, the largest non-associated gas field in KSA to date (see above regarding the expansion of Aramco's gas activities from paragraph 100);⁴¹¹
 - b. Saudi Aramco increased its 'maximum sustainable capacity' in 2021 from 12.0 mmbpd to 13.0 mmbpd following direction from the KSA government (see above at paragraph 92.b);⁴¹² and
 - c. On 16 June 2020 Saudi Aramco acquired a 70% equity share in SABIC, from the sovereign wealth fund of KSA, massively expanding into petrochemicals and locking in polluting uses for oil and gas (see paragraph 83).⁴¹³

186. Under GP 4, KSA is to ensure Saudi Aramco implements respect for human rights. The available evidence of Saudi Aramco's activities and KSA's control over the business suggests that KSA is not complying with its international legal obligations as regards its control of Saudi Aramco in relation to climate change-related impacts on human rights.

G. FINANCIAL BUSINESSES

Saudi Aramco's business relationships with financial businesses

187. In undertaking the activities which contribute to adverse impacts on climate change-related human rights, Saudi Aramco has benefitted from the support of a number of large financial businesses. Under the UNGPs, these businesses have their own responsibilities to respect human rights which apply to Saudi Aramco's climate change human rights impacts.
188. Financial businesses have supported Saudi Aramco's business activities in a range of ways, including but not limited to (i) lending to Saudi Aramco, (ii) supporting, facilitating and/or

⁴⁰⁹ Saudi Aramco, Annual Report (2020), p105 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

⁴¹⁰ See: World Benchmarking Alliance, Oil and Gas Benchmark Insights Report (2021) pp17-18, "*National oil companies account for majority of current and expected emissions [...] NOCs and INOCs are laggards in transition planning [...] Sparse signs of low-carbon diversification*". <<https://assets.worldbenchmarkingalliance.org/app/uploads/2021/07/Oil-and-Gas-Benchmark-Insights-Report-2021.pdf>>

⁴¹¹ Saudi Aramco, Annual Report (2020) p12 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

⁴¹² Ibid, p26

⁴¹³ Ibid, p27

advising on Saudi Aramco's bond⁴¹⁴ issuances and initial public offering (IPO), (iii) purchasing Aramco's bonds and equities (i.e. shares), and (iv) investing in oil pipelines as part of a lease and lease-back deal. Each of these types of financial transactions are for the purpose of Saudi Aramco obtaining funds to facilitate its business activities and strategy.

189. Saudi Aramco has increasingly turned toward outside, private financial support in recent years to support its business, including its massive expansion into petrochemicals and its payments of dividends, largely to its 98.5% owner, KSA. Over the period from April 2019 to June 2021, this comprises six major financial transactions.

- a. April 2019 US\$12bn bond issuance - In April 2019, Saudi Aramco issued corporate bonds on the London Stock Exchange (LSE) to the value of \$US12bn. While it was stated that the funds raised thereby would be used for general corporate purposes, it was reported that the company would use the proceeds to pay part of the acquisition of a 70% stake in petrochemical company SABIC from KSA's sovereign wealth fund, which Saudi Aramco then purchased in 16 June 2020 for \$US69.1bn.⁴¹⁵
- b. December 2019 US\$29.4bn IPO - In December 2019, Saudi Aramco made a public offering of just over 1.5% of KSA's shareholding in Saudi Aramco. The shares were listed on the Tadawul (Saudi Arabia's stock exchange), with a final value of US\$29.4bn (thereby valuing Saudi Aramco at US\$1.7tn).⁴¹⁶ The proceeds were all received by KSA government.
- c. May 2020 US\$10bn Loan - In May 2020, Saudi Aramco sought a loan of \$US10bn for one year from 10 financial businesses.⁴¹⁷ It was reported that when the bond market stabilised, it would replace the loan by issuing new bonds in the market (see below). While it was stated that the funds would be used for general corporate purposes, it was reported that the company would use the proceeds to pay for a further part of the acquisition of a 70% stake in petrochemical company SABIC from Saudi Arabia's sovereign wealth fund, which it eventually did in June 2020 for a total of \$US69.1bn.⁴¹⁸
- d. November 2020 US\$8bn bond issuance - In November 2020, Saudi Aramco issued a second bond of \$US8bn on the LSE. While it was stated that the funds would be used for general corporate purposes, it was reported that the company would use the proceeds to

⁴¹⁴ A corporate bond is debt issued by a business enterprise in order for it to raise capital, with the investor who buys a corporate bond effectively lending money to the business enterprise in return for a series of interest payments (and such instruments can be traded on a stock market).

⁴¹⁵ See: Base Prospectus (1 April 2019) <<https://www.investegate.co.uk/saudi-arabian-oil-co/rms/establishment-of-global-medium-term-note-programme/201904011057506727U/>>; Final Terms (12 April 2019) (notes due 2022, by way of example) <<https://data.fca.org.uk/artefacts/NSM/data-migration/218431850.pdf>>; Bloomberg, Aramco sells \$12 billion of Bonds in Unprecedented Debut (9 April 2019) <https://www.bloomberg.com/news/articles/2019-04-09/saudi-aramco-sells-12-billion-of-bonds-in-unprecedented-debut>

⁴¹⁶ See: IPO Prospectus (9 November 2019) <<https://www.aramco.com/-/media/images/investors/saudi-aramco-prospectus-en.pdf?la=en&hash=8DE2DCD689D6E383BB8F4C393033D8964C9F5585>>; Post-Stabilisation Announcement (9 January 2020) <<https://www.aramco.com/-/media/images/investors/saudi-aramco-post-stabilisation-announcement-and-exercise-of-the-over-allotment-option.pdf?la=en&hash=95F109B7CBAAA2F9E89A91A59106066746D61E85>>; Brookings, The Saudi Aramco IPO breaks records, but falls short of expectations (11 December 2019) <<https://www.brookings.edu/blog/order-from-chaos/2019/12/11/the-saudi-aramco-ipo-breaks-records-but-falls-short-of-expectations/>>. It seems that Saudi Aramco wanted to list its public offering on an international market, such as the London Stock Exchange. It ultimately did not do so apparently because international investors would have valued the company at \$1.1-1.7tn which was lower than desired.

⁴¹⁷ The selected financial businesses were HSBC, SMBC, First Abu Dhabi Bank, BNP Paribas, Citi, Credit Agricole, JP Morgan, Mizuho, MUFG and Société Générale.

⁴¹⁸ See: Bloomberg Terminal; Reuters, Saudi Aramco closes US\$10bn loan (12 May 2020) <<https://www.reuters.com/article/saudi-aramco-closes-us10bn-loan-idUSL8N2CU50Q>>; Aramco, Annual Report (2020), p13 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-ara-2020-english.pdf>>

fund its dividends to KSA and to cover part of the acquisition of its purchase of SABIC.⁴¹⁹

- e. April 2021 US\$12.5bn pipeline leasing - In April 2021, Saudi Aramco announced an oil pipelines lease and lease-back deal which closed in June 2021. Under this lease and lease-back deal, Saudi Aramco sold a 49% interest in its subsidiary company Aramco Oil Pipelines Company to EIG Pearl Holdings Sarl, an entity controlled by EIG Global Energy Partners, the leader of a consortium of investors from North America, the Middle East and Africa. As a consequence, Aramco Oil Pipelines Company will receive a lease to use Saudi Aramco's stabilised crude oil pipelines for 25 years, and will grant back to Saudi Aramco the exclusive right to use, operate and maintain that pipeline over that period in exchange for a volume-based tariff payable by Saudi Aramco. To protect the cashflows under the new structure, minimum volume commitments with certain levels of oil flow in the pipeline system were agreed, thus apparently 'locking in' the transportation of specific volumes of oil flow until 2046, shortly before targeted global Net Zero emissions. The investors paid Saudi Aramco \$US12.4bn for the share in these its oil pipeline system.⁴²⁰ Saudi Aramco's CEO stated "[o]ur historic \$12.4 billion pipeline deal was an endorsement of our long-term business strategy by international investors".⁴²¹
- f. June 2021 US\$6bn sukuk issuance - In June 2021, Saudi Aramco issued a sukuk, which is a shari'ah compliant bond for \$US6bn on the LSE – the CEO called this "[o]ur landmark \$6 billion Sukuk" which "reinforced our balance sheet".⁴²² It is Saudi Aramco's first US\$ denominated sukuk issuance. While it is stated that the funds will be used for general corporate purposes, analysts expect it will be used in part to fund Saudi Aramco's dividends.⁴²³

190. At the time of writing, Saudi Aramco is reported to be planning a second major asset lease and lease-back deal, this time of its gas pipelines system, and certain of the financial businesses listed below (JP Morgan, Goldman Sachs) are rumoured to be likely to act as financing advisor on the transaction.⁴²⁴ It also plans a further sale of its shares to the public.⁴²⁵

⁴¹⁹ See: Aramco, Base Prospectus (16 November 2020) <<https://www.investegate.co.uk/saudi-arabian-oil-co-64ez-rms/publication-of-a-base-prospectus/202011160843194106F/>>; Aramco, Final Terms (17 June 2021) <<https://www.londonstockexchange.com/news-article/market-news/publication-of-final-terms/15022447>> (notes due 2023, by way of example)

⁴²⁰ See: Aramco signs \$12.4 billion infrastructure investment deal with EIG-led consortium (9 April 2021) <<https://www.aramco.com/en/news-media/news/2021/aramco-signs-infrastructure-investment-deal-with-eig-led-consortium>>; Tadawul Announcement (11 April 2021) < >; [Bloomberg Article](#) (11 April 2021); [Reuters Article](#) (15 April 2021); [Bloomberg Article](#) (22 April 2021); [Bloomberg Article](#) (26 April 2021); [Bloomberg Article](#) (19 May 2021); 8 June 2021 [Reuters Article](#); [LSE Announcement](#) (21 June 2021); [Bloomberg Article](#) (23 June 2020); [Bloomberg Article](#) (5 May 2021). It is reported that Saudi Aramco helped put together a \$10.5bn loan for the investors to fund the transaction (with lenders including BNP Paribas, Citigroup, HSBC and Mizuho), and that EIG Global Energy Partners, the leader of a consortium of investors, will refinance the loan with bonds in future. EIG was advised by HSBC on the deal.

⁴²¹ Aramco, CEO's Statement: Second quarter and half-year interim report (2021) p2 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-q2-2021-interim-report-english.pdf>>

⁴²² Ibid.

⁴²³ See: [Pre-Stabilisation Notice](#) (9 June 2021); [Tadawul Announcement](#) (7 June 2021); [Second Tadawul Announcement](#) (7 June 2021); [Base Prospectus](#) (7 June 2021); [Reuters Article](#) (7 June 2021); [Reuters Article](#) (9 June 2021); and [LSE Announcement of Final Terms](#) (17 June 2021)

⁴²⁴ Reuters, Saudi Aramco seeks financing advisor for gas pipeline deal – sources (29 June 2021) <<https://www.reuters.com/business/energy/saudi-aramco-seeks-financing-advisor-gas-pipeline-deal-sources-2021-06-29/>>; Reuters, Saudi Aramco drops Morgan Stanley on gas pipelines deal – sources (12 July 2021) <<https://www.reuters.com/business/energy/saudi-aramco-drops-morgan-stanley-gas-pipelines-deal-sources-2021-07-12/>>

⁴²⁵ S&P Global Platts, Feature: Plans for second Aramco share sale increase oil price pressure on Saudi Arabia (16 February 2021) <<https://www.spglobal.com/platts/en/market-insights/latest-news/oil/021621-feature-plans-for-second-aramco-share-sale-increase-oil-price-pressure-on-saudi-arabia>>

191. After research by ClientEarth, the table given in **Annex B** identifies 11 large financial businesses involved in the above financial transactions. **Annex B** is not exhaustive of the financial business relationships with Saudi Aramco. It identifies:

- a. The financial businesses that played a role in each financing transaction, by entity, branch, location and role in the transaction, where the data is available;
- b. For the financial businesses identified, those that hold Saudi Aramco shares or bonds from the 2019 and 2020 issuances.⁴²⁶ The financial businesses identified in the table are the top level entity on the Bloomberg lists, meaning that the shares or bonds may in fact be held by subsidiary entities; and
- c. Where possible, data has been taken from the deal documents themselves and supplemented where necessary with data from other sources, such as the Bloomberg Terminal, company announcements on the LSE and Tadawul, and news reports.

192. The paragraphs below summarise the key relationships between Saudi Aramco and the 11 financial businesses, comprising 10 international financial institutions - JP Morgan, Citi, HSBC, SMBC, Crédit Agricole, Morgan Stanley, BNP Paribas, Goldman Sachs, Mizuho and Société Générale - and EIG Global Energy Partners. See **Annex B** for further details.

JP Morgan

- a. J.P. Morgan Securities plc (London) – Arranger / Dealer / Manager / Stabilising Manager / Bookrunner / Underwriter / Coordinator roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and June 2021 sukuk issuance
- b. J.P. Morgan Saudi Arabia (Saudi Arabia) – Joint Financial Advisor role for Dec 2019 IPO
- c. J.P. Morgan (branch / entity not specified) – Lender / Bookrunner / Mandated Lead Arranger / Manager roles for May 2020 term loan and June 2021 sukuk issuance
- d. J.P. Morgan Chase & Co (New York) – larger shareholder and bondholder

Citi

- a. Citigroup Global Markets Limited (London) – Dealer / Manager / Bookrunner / Underwriter / Stabilisation Manager / Coordinator / Arranger roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and June 2021 sukuk issuance
- b. Citibank NA (London) – Trustee / Principal Paying Agent / Transfer Agent / Calculation Agent roles for April 2019 / Nov 2020 bond issuances
- c. Citigroup Global Markets Europe AG (Germany) – Registrar role for April 2019 / Nov 2020 bond issuances
- d. Citibank NA (UAE) – Lender / Bookrunner / Lead Arranger for May 2020 term loan
- e. Citigroup Saudi Arabia (Saudi Arabia) – Joint Financial Advisor role for Dec 2019 IPO
- f. Citi (branch / entity not specified) – Manager / Bookrunner roles for June 2021 sukuk issuance

HSBC⁴²⁷

- a. HSBC Bank plc (London) – Dealer / Manager / Bookrunner / Underwriter / Stabilisation Manager / Principal Paying Agent / Arranger / Transfer Agent / Registrar roles for April 2019 / Nov 2020 bond issuances and June 2021 sukuk issuance

⁴²⁶ Comprehensive data for the 2021 US\$ sukuk issuance was not available at the time of drafting.

⁴²⁷ On 1 July 2021, Stuart Gulliver, the former Group CEO of HSBC, was appointed to the Board of Directors of Aramco. See: Aramco, Second quarter and half year interim report (2021) p4 <<https://www.aramco.com/-/media/publications/corporate-reports/saudi-aramco-q2-2021-interim-report-english.pdf>>

- b. HSBC Saudi Arabia (Saudi Arabia) – Joint Financial Advisor / Coordinator / Bookrunner / Underwriter / Settlement Agent roles for Dec 2019 IPO
- c. HSBC Corporate Trustee Company (UK Limited (London) – Delegate role for June 2021 sukuk issuance
- d. HSBC Bank USA, National Association (New York) – Paying Agent / Registrar / Transfer Agent roles for June 2021 sukuk issuance
- e. HSBC (branch / entity not specified) – Lender / Global Coordinator / Bookrunner / Mandated Lead Arranger / Manager roles for May 2020 term loan and June 2021 sukuk issuance
- f. HSBC Holdings plc (London) – large shareholder and bondholder
- g. The Saudi British Bank (Saudi Arabia) – large shareholder
- h. HSBC Investments Bermuda Ltd (Bermuda) – bondholder

SMBC

- a. SMBC Nikko Capital Markets Limited (branch not specified, but assume London) – Manager / Bookrunner / Underwriter roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and June 2021 sukuk issuance
- b. Sumitomo Mitsui Banking Corporation (branch not specified) – Lender / Coordinator / Bookrunner / Lead Arranger roles for May 2020 term loan

Crédit Agricole

- a. Crédit Agricole Corporate and Investment Bank (branch not specified, but assume France) – Manager / Bookrunner / Underwriter / Lead Arranger / Lender roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and May 2020 term loan
- b. Crédit Agricole Group – large shareholder and bondholder

Morgan Stanley

- a. Morgan Stanley & Co International plc (London) – Arranger / Dealer / Manager / Bookrunner / Underwriter / Stabilisation Manager / Coordinator roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and June 2021 sukuk issuance
- b. Morgan Stanley Saudi Arabia (Saudi Arabia) – Joint Financial Advisor role for Dec 2019 IPO
- c. Morgan Stanley (branch / entity not specified) – Manager / Bookrunner roles for June 2021 sukuk issuance
- d. Morgan Stanley (New York) – bondholder

BNP Paribas

- a. BNP Paribas (branch / entity not specified, but assume France) – Manager / Bookrunner / Underwriter roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and June 2021 sukuk issuance (assume France)
- b. BNP Paribas (Saudi Arabia) – Lender / Bookrunner / Lead Arranger for May 2020 term loan
- c. BNP Paribas SA (France) – bondholder

Goldman Sachs

- a. Goldman Sachs International (London) – Dealer / Manager / Bookrunner / Underwriter / Stabilisation Manager / Coordinator roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and June 2021 sukuk issuance
- b. Goldman Sachs Saudi Arabia (Saudi Arabia) – Joint Financial Advisor / Stabilising Manager roles for Dec 2019 IPO
- c. Goldman Sachs (branch / entity not specified) – Manager / Bookrunner roles for June 2021 sukuk issuance
- d. The Goldman Sachs Group Inc (New York) – large shareholder and small bondholder

Mizuho

- a. Mizuho International plc (branch not specified) – Manager / Bookrunner / Underwriter / Arranger / Lender roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and May 2020 term loan
- b. Mizuho Financial Group Inc (Japan) – shareholder

Société Générale

- a. Société Générale (branch / entity not specified, but assume France) – Manager / Bookrunner / Underwriter / Lender / Lead Arranger roles for April 2019 / Nov 2020 bond issuances, Dec 2019 IPO and May 2020 term loan

EIG

- a. EIG Pearl Holdings Sarl - Purchased 49% shareholding in Aramco Oil Pipelines Co for April 2021 oil pipelines lease & lease back deal
- b. EIG (entity not specified) - Leader of investor consortium for April 2021 oil pipelines lease & lease back deal

Serious risk of financial businesses’ non-compliance with their responsibility to respect human rights

193. The financial businesses listed above have their own responsibilities under the UNGPs. Those responsibilities include both when the financial business is directly linked through its business relationships (such as provision of finance to them) and also when, by their actions the financial businesses contribute to the human rights harm.⁴²⁸ The latter is important, as it indicates that the financial business must actively avoid and address potential and actual human rights impacts (GP 13). The difference is set out by John Ruggie, the main author of the UNGPs:

“For example, [a financial business] providing a general corporate loan to a private prison company that is alleged to engage in severe human rights abuses ought to require a very deep dive by the bank, coupled with the imposition of strict conditions if it decides to go ahead with the loan. If the bank does neither and yet proceeds, then it is squarely in “contribution” territory for any adverse impacts, even though the loan is not asset or project specific. Where the real challenge to banks lies is in their need to obtain sufficient information in the case of a company that is not as obviously high-risk from a human rights perspective as in this example. That may well call for more effort to be dedicated to human rights due diligence in some instances. But the concern cannot simply be excluded based on the type of financing involved.”⁴²⁹

194. A further example is given in a statement by the OHCHR in June 2017 (OHCHR Statement 2017).⁴³⁰ It stated:

“In practice, there is a continuum between ‘contributing to’ and having a ‘direct link’ to an adverse human rights impact: a bank’s involvement with an impact may shift over

⁴²⁸ See J. Ruggie, Comments on Thun Group of Banks Discussion Paper on the Implications of UN Guiding Principles 13 and 17 in a Corporate and Investment Banking Context (21 February 2017) pp1-3 (emphasis in original) <https://www.banktrack.org/download/comments_on_thun_group_of_banks_discussion_paper/thunfinal.pdf>; See also J. Ruggie, Letter to OECD towards its Workshop on Understanding relationships to impact under the OECD Guidelines for Multinational Enterprises: Considering "Cause", "Contribute" and "Directly Linked" (6 March 2017) p2 <https://media.business-humanrights.org/media/documents/files/documents/OECD_Workshop_Ruggie_letter_-_Mar_2017_0.pdf>

⁴²⁹ J. Ruggie, Comments on Thun Group of Banks Discussion Paper on the Implications of UN Guiding Principles 13 and 17 in a Corporate and Investment Banking Context (21 February 2017) p3, Footnote 419

⁴³⁰ OHCHR, Response to request from BankTrack for advice regarding the application of the UNGPs on Business and Human Rights in the context of the banking sector (12 June 2017) p6-7 <<https://www.ohchr.org/Documents/Issues/Business/InterpretationGuidingPrinciples.pdf>>

time, depending on its own actions and omissions. For example, if bank identifies or is made aware of an ongoing human rights issue that is directly linked to its operations, products or services through a client relationship, yet over time fails to take reasonable steps to seek to prevent or mitigate the impact—such as bringing up the issue with the client’s leadership or board, persuading other banks to join in raising the issue with the client, making further financing contingent upon correcting the situation, etc.— it could eventually be seen to be facilitating the continuance of the situation and thus be in a situation of ‘contributing.’”

195. The position has been clarified in the OECD Guidance on Due Diligence for Responsible Corporate Lending and Securities Underwriting 2019 (OECD Finance RBC).⁴³¹ It states the following (emphasis added):

- a. *“Where the bank is **directly linked** to an adverse impact through a client, but does not cause or contribute to it, the bank will not be responsible for remedying the impact. However, it still has a responsibility to seek to prevent or mitigate the impact, using its leverage, which may involve efforts to influence the client to provide remediation.”*
- b. *“Where the adverse impacts are directly linked to a bank’s lending or securities underwriting through a client, it should also use its leverage to seek to prevent and mitigate those impacts. This is not intended to shift responsibility from the client who is causing or contributing an adverse impact to the bank. The responsibility for ceasing, mitigating and remedying the impact remains with the client who is causing or contributing to the impacts.”*

196. Similar guidance applies to asset owners and investors.⁴³² This approach by the OECD of explaining that “directly linked” extends beyond the first tier in the finance sector has been applied by the OECD National Contact Points (NCPs). For example, the Norwegian NCP concluded:

*“If [an investor], after investing, learns of a portfolio company’s human rights impacts, it still has a number of tools available, including shareholder proposals, engagement with management, and the threat of divestment”.*⁴³³

197. As a consequence, it criticised the investor for not undertaking human rights due diligence as to the human rights impacts of the activities of the companies in which it invested.

198. Further, in *Society for Threatened Peoples Switzerland Complaint to Swiss NCP regarding UBS Group AG (STP and UBS)*,⁴³⁴ the complaint concerned possible human rights violations in the context of the provision of financial services through investment by a financial business – UBS – in shares in a Chinese company Hikvision. It was claimed that Hikvision manufactures technology used for surveillance of the Uyghurs and other Turkic minorities living in the Xinjiang Uyghur Autonomous Region in China. In its Initial Assessment accepting the complaint, the Swiss NCP stated:

⁴³¹ OECD, Due Diligence for Responsible Corporate Lending and Securities Underwriting (2019), pp19, 49
<<https://www.oecd.org/investment/due-diligence-for-responsible-corporate-lending-and-securities-underwriting.htm>>

⁴³² OECD, Responsible business conduct for institutional investors: key considerations for due diligence, pp34-40
<<https://mneguidelines.oecd.org/RBC-for-Institutional-Investors.pdf>>

⁴³³ OECD NCP Norway, Complaint from Lok Shakti Abhiyan, Korean Transnational Corporations Watch, Fair Green and Global Alliance and Forum for Environment and Development vs. Posco (South Korea), Abp/Apg (Netherlands) And Nbim (Norway), Final Statement (27 May 2013) p8

⁴³⁴ Switzerland OECD NCP, Information on Specific Cases webpage
<https://www.seco.admin.ch/seco/en/home/Aussenwirtschaftspolitik_Wirtschaftliche_Zusammenarbeit/Wirtschaftsbeziehungen/NKP/Statements_zu_konkreten_Faellen.html>

“By investing in shares of Hikvision, the UBS fund contributes to the funding of Hikvision. As the state of China is an important shareholder of Hikvision, the NCP assumes, that a direct link between the UBS Fund and the alleged human rights violations could not be excluded, when Hikvision shares were part of the fund.”⁴³⁵

199. This is a clear statement by the NCP that a financial business, through investing in a business enterprise, was directly linked by that business relationship to potential adverse human rights impacts by that business enterprise. The financial business had a first tier relationship with the business enterprise but it had no control over the business enterprise’s activities. Yet, through its investment in the business enterprise, the financial business potentially enabled those adverse human rights impacts to occur. The decision is directly relevant to the interpretation of the UNGPs, as the OECD Guidelines deliberately incorporate the terminology of the UNGPs.

200. It is also beyond doubt that business responsibility regarding leverage extends to climate change. The OHCHR publication ‘Frequently Asked Questions on Human Rights and Climate Change’ states under “[w]hat are the responsibilities of businesses related to human rights and climate change?” that “in the event that a business has the ability to effect change in relation to another entity’s harmful practice, for example because it has a business relationship with this entity or has control over it, it is expected to exercise leverage to mitigate and/or cease the adverse human rights impact.”⁴³⁶

201. More recently, the Dutch NCP has mediated an agreed settlement of an action by some NGOs against ING, a financial business, in which ING agreed to measure, set targets for and steer their indirect climate change impact.⁴³⁷ In the course of their Final Report, the Dutch NCP stated:

“[T]he NCP observes that the OECD Guidelines demand that ING, and other commercial banks, put effort into defining, where appropriate, concrete targets to manage its impact towards alignment with relevant national policies and international environmental commitments. Regarding climate change, the Paris Agreement is currently the most relevant international agreement between states, a landmark for climate change, signed by the State of the Netherlands. The NCP is sensitive to the argument that financed emissions are indirect and thus more difficult to measure and control. The NCP considers that impact measurement of financed emissions is a new field of expertise, and recognizes the fact that ING, and banks like ING, face considerable challenges in developing an appropriate methodology, including the setting of intermediate targets...

*According to the [parties to the settlement], **the point of reference when steering business and banking activities towards climate resilience should therefore be a 1.5°C scenario with a high probability rate, and which does not rely on using negative emissions technology to achieve this goal....** The NCP recognizes that banks like ING face considerable challenges in developing an appropriate methodology, including target setting. The NCP appreciates ING’s commitment made to steer its portfolio towards the goals of the Paris Agreement. The NCP also appreciates ING’s intention to come to intermediary targets and encourages ING to establish and disclose these intermediary targets.”⁴³⁸*

⁴³⁵ OECD NCP Norway, Complaint from Lok Shakti Abhiyan, Korean Transnational Corporations Watch, Fair Green and Global Alliance and Forum for Environment and Development vs. Posco (South Korea), Abp/Apg (Netherlands) And Nbim (Norway), Final Statement (27 May 2013) pp7-8

⁴³⁶ OHCHR, Frequently Asked Questions on Human Rights and Climate Change: Factsheet No. 38, p36 <https://www.ohchr.org/Documents/Publications/FSheet38_FAQ_HR_CC_EN.pdf>

⁴³⁷ The Netherlands OECD NCP, *Oxfam and others v ING* (19 April 2019)

<<<https://www.oecdguidelines.nl/documents/publication/2019/04/19/ncp-final-statement-4-ngos-vs-ing>>>

⁴³⁸ Ibid, pp5-6 <<https://www.oecdguidelines.nl/documents/publication/2019/04/19/ncp-final-statement-4-ngos-vs-ing>>

202. The OHCHR has given examples of financial business ‘contribution’, including “if the bank knew or should have known that risks of [impacts] were present, yet it took no steps to seek to get its client to prevent or mitigate them” – and moving to contribution may occur over time.⁴³⁹ The OHCHR comments that “a bank may facilitate a client or other entity to cause harm, **if it knows or should have known that there is human rights risk associated with a particular client or project**, but it omits to take any action to require, encourage or support the client to prevent or mitigate these risks” (original emphasis).⁴⁴⁰

203. Thus a financial business can move from being directly linked to an adverse human rights impact to contributing to that impact if it does not take action to prevent or mitigate the business relationship to which it is directly linked, including by undertaking human rights due diligence.⁴⁴¹ This understanding of the relationships between these participatory terms is relevant in terms of the remediation which is necessary when a financial business is considered to be contributing to the adverse human rights impact.

204. A financial business is required to consider ending a business relationship where it lacks leverage and cannot increase its leverage (Commentary to GP 19). The need for action by a financial business is particularly important where the severity of the adverse human rights impact requires an enterprise to terminate its business relationship. According to the Commentary on the UNGPs: “*the more severe the abuse, the more quickly the enterprise will need to see change before deciding whether to continue the relationship*”.⁴⁴² The Commentary makes clear that for an enterprise to maintain the relationship despite ongoing impacts “[it] should be able to demonstrate ... ongoing efforts to mitigate the impact and be prepared to accept any consequences – reputational, financial or legal – of the continuing connection”.⁴⁴³

205. There is a clear acceptance that financial businesses have responsibilities under the UNGPs. These responsibilities include their actions when financing, supporting or investing in business enterprises which may act in ways that have adverse human rights impacts. In this instance, those adverse human rights impacts are in relation to climate change. These impacts are very well known and so the financial businesses cannot claim lack of awareness of them.⁴⁴⁴ Further, the fact that many of the financial businesses continue to provide support to Saudi Aramco over a number of years (see paragraph 192 above), and the limited scope for credibly exerting leverage over Saudi Aramco, indicates that the financial businesses are likely to be **contributing** to Saudi Aramco’s adverse human rights impacts.

206. The financial businesses named above have made various climate-related commitments. Six of the 10 financial institutions identified as having key financial relationships with Saudi Aramco (BNP Paribas, Citi, Crédit Agricole, HSBC, Morgan Stanley and Société Générale) have recently

⁴³⁹ “if bank identifies or is made aware of an ongoing human rights issue that is directly linked to its operations, products or services through a client relationship, yet over time fails to take reasonable steps to seek to prevent or mitigate the impact—such as bringing up the issue with the client’s leadership or board, persuading other banks to join in raising the issue with the client, making further financing contingent upon correcting the situation, etc.—it could eventually be seen to be facilitating the continuance of the situation and thus be in a situation of ‘contributing.’” See: OHCHR, Advice on the application of the UNGPs on Business and Human Rights in the context of the banking sector, pp6-7
<<https://www.ohchr.org/Documents/Issues/Business/InterpretationGuidingPrinciples.pdf>>

⁴⁴⁰ Ibid, p8

⁴⁴¹ See Tara Van Ho, Defining the Relationships: “Cause, Contribute, and Directly Linked to” in the UN Guiding Principles on Business and Human Rights (2021) 43 Human Rights Quarterly (forthcoming)

⁴⁴² OHCHR, Guiding Principles on Business and Human Rights (2011) Commentary to GP 19, p22

<https://www.ohchr.org/documents/publications/guidingprinciplesbusinessshr_en.pdf>

⁴⁴³ Ibid.

⁴⁴⁴ See: the Guardian, Big banks’ trillion-dollar finance for fossil fuels ‘shocking’, says report (24 March 2021)

<<https://www.theguardian.com/environment/2021/mar/24/big-banks-trillion-dollar-finance-for-fossil-fuels-shocking-says-report>>

made commitments as part of their membership of the New Zero Banking Alliance.⁴⁴⁵ This includes a commitment to transitioning the operational and attributable greenhouse gas emissions from their lending and investment portfolios to align with the pathways to net zero by 2050 or sooner. Of the remaining financial institutions: two (Goldman Sachs and Mizuho) are signatories to the Principles for Responsible Banking, which includes a principle on aligning their business strategy to be consistent with and contribute to individuals' needs and society's goals, as expressed in the Sustainable Development Goals, the Paris Climate Agreement and relevant national and regional frameworks;⁴⁴⁶ JP Morgan has announced a commitment to align key sectors of its financing portfolio with the goals of the Paris Agreement;⁴⁴⁷ and SMBC has announced that will strive to achieve greenhouse gas emissions reductions in line with the goals of the Paris Agreement.⁴⁴⁸ However, it is not clear what processes and policies these financial institutions have implemented to ensure that their business relationships with Saudi Aramco are consistent with their commitments.

207. EIG, identified for its investment role in Saudi Aramco's 2021 oil pipelines lease and lease-back deal, is a signatory of the UNEP Principles for Responsible Investment, which includes principles to incorporate Environmental, Social and Governance (ESG) issues into investment analysis and decision-making processes and being active owners and incorporating ESG issues into its ownership policies and practices. Similar to the financial institutions, it is not clear what processes and policies EIG has implemented to ensure that its business relationship with Saudi Aramco is consistent with those principles.

208. Increasing numbers of financial businesses are setting specific policies to exclude or restrict fossil fuel business relationships, in order to meet their own commitments of alignment with the Paris Goals. A wide range of financial businesses have declared that they will restrict or end business relationships involving coal and fracking, tar sands and Arctic oil and gas.⁴⁴⁹ In light of the Paris Goals and the scientific consensus that oil and gas production and use must decline rapidly, banks and insurers have also started to set exclusion policies for financing oil and gas projects and oil and gas companies which are not aligned with the Paris Goals.⁴⁵⁰ Civil society organisations consider that, in order to be aligned with the Paris Goals, financial institutions (among other principles):⁴⁵¹

⁴⁴⁵ UNEP, Net Zero Banking Alliance (2021) <<https://www.unepfi.org/net-zero-banking/>>

⁴⁴⁶ UNEPFI, Principles for Responsible Banking <https://www.unepfi.org/wordpress/wp-content/uploads/2019/07/PrinciplesOverview_Infographic.pdf>

⁴⁴⁷ JP Morgan, Sustainability: Our Commitments <<https://www.jpmorganchase.com/impact/sustainability/es-commitments>>

⁴⁴⁸ Sumitomo Mitsui Financial Group, Response to Climate Change (Working on TCFD Recommendations) <<https://www.smfg.co.jp/english/sustainability/materiality/environment/climate/>>

⁴⁴⁹ See: IEEFA, Finance is Leaving Oil and Gas, 'Exclusion table fossil fuel expansion' <<https://ieefa.org/finance-exiting-oil-and-gas/>>; Banktrack, Banks and Fossil Fuel Expansion <https://www.banktrack.org/campaign/banks_and_fossil_fuel_expansion>; and Reclaim Finance, Coal Policy Tool <https://reclaimfinance.org/site/en/coal_policy_tool/>

⁴⁵⁰ The European Investment Bank (EIB) will exclude oil and gas project financing from the end of 2021. See: EIB, <<https://www.eib.org/en/projects/sectors/energy/elp-at-a-glance/index.htm>>; Danske Bank excludes project finance for the expansion of oil and gas exploration and production and will also exclude exploration and production companies that do not set a credible Paris-aligned transition plan by 2023. See: Danske Bank, Position Statement on Fossil Fuels (March 2021) p5 <<https://danskebank.com/-/media/danske-bank-com/file-cloud/2017/5/danske-bank-position-statement-fossil-fuels.pdf>>; NatWest excludes project finance for the exploration of new oil and gas reserves and will also exclude 'major' oil and gas companies that do not set a credible Paris-aligned transition plan by the end of 2021. See: NatWest, Climate-related Disclosures Report (2020) p2 <<https://investors.natwestgroup.com/~media/Files/R/RBS-IR-V2/results-center/19022021/2020-climate-related-disclosure-report.pdf>>

⁴⁵¹ These principles are supported by a long list of civil society actors. See: RAN, Principles for Paris-Aligned Financial Institutions (16 September 2020) p4 <https://www.ran.org/wp-content/uploads/2020/09/RAN_Principles_for_Paris-Aligned_Financial_Institutions.pdf#:~:text=PRINCIPLES%20Financial%20institutions%20%28FIs%29%20that%20commit%20to%20%E2%80%9CParis%20alignment%E2%80%9D,climate%20commitments%20must%20also%20align%20with%20his%20goal>

“must immediately cease finance [452] for any company that is expanding fossil extraction or infrastructure, or exploring for new reserves. The FI must require all of its fossil clients to publish plans by COP26 at latest to wind down fossil fuel operations on a timeline aligned with, at minimum, SRI.5 pathway 1. Financing must be withdrawn from companies that refuse to publish or comply with fossil phase out plans.”

“must make explicit what it is requiring of fossil fuel [...] clients, by when, and what consequences follow from failing to meet those requirements. The FI must be transparent about the basis for any claims that continued support for such clients accelerates the client’s transition towards climate alignment. Companies expanding the production and use of fossil fuels [...], cannot be regarded as transitioning toward climate alignment.”

209. In our submission, in light of the normative environment, financial businesses should move to implement the above fossil fuel exclusion measures – whilst complying with their contractual obligations - in order to credibly comply with their responsibility to protect human rights under the UNGPs in relation to climate change. Conversely, it is very difficult to see how a financial business can credibly claim to be exercising leverage to prevent or mitigate the adverse human rights climate impacts of a non-transitioning oil and gas business⁴⁵³ *without* following the measures set out above. Saudi Aramco is not aligned with the Paris Goals, it is expanding its oil and gas business activities and it is actively exploring for new fossil fuel reserves. The financial businesses named in this complaint appear to continue to work with companies like Saudi Aramco which are expanding fossil fuel extraction.

210. It is evident that through their business relationships with Saudi Aramco, these financial businesses bear responsibility for Saudi Aramco’s climate change adverse human rights impacts. The financial businesses involved must set out what human rights due diligence they have undertaken in relation to their relationships with Saudi Aramco, and other oil and gas companies with comparable business activities. They must also show what efforts they are making to mitigate the impact and to remediate it. In light of the evidence in this complaint, there is a serious risk these businesses are non-compliant with their responsibilities to respect human rights.

211. Further, in order to respect human rights, the financial businesses should move to cease business relationships with oil and gas businesses which are not credibly aligned with the Paris Goals, as set out above – or account for why they are not doing so in light of their responsibility to respect human rights.

H. CONCLUSIONS

212. The production of fossil fuels, including oil and so-called ‘natural’ gas, produces the vast majority of human-caused greenhouse gas emissions, which lead to climate change. Climate change has widespread adverse human rights impacts. The obligations and responsibilities on States and business enterprises under the UNGPs encompass the business-related adverse human rights impacts of climate change.

213. Saudi Aramco, a business enterprise regulated and effectively controlled by the government of KSA, is the world’s largest producer of fossil fuels. It is also the largest single corporate emitter of greenhouse gases, which cause climate change. Its activities are similar to other large fossil fuel producers which bear salient responsibility for severe climate change-related human rights impacts, albeit that Saudi Aramco’s responsibility is even greater due to the scale of its emissions.

⁴⁵² Finance for these purposes includes the support provided by the financial businesses to Saudi Aramco analysed in this complaint, as it “refer[s] to lending, underwriting, investments, insurance and advisory and other financial services, including indirect finance through intermediaries.” See: Ibid, p4, Footnote 13

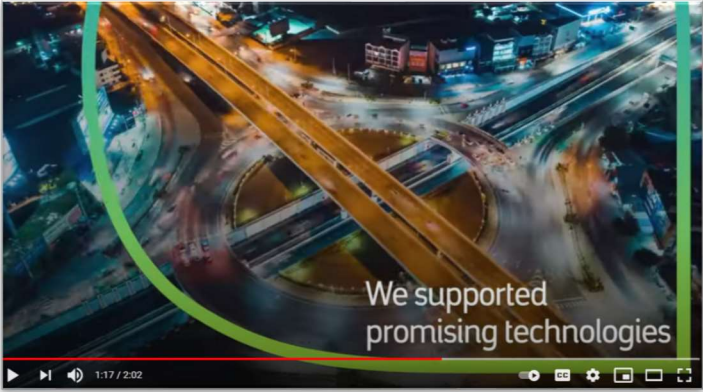
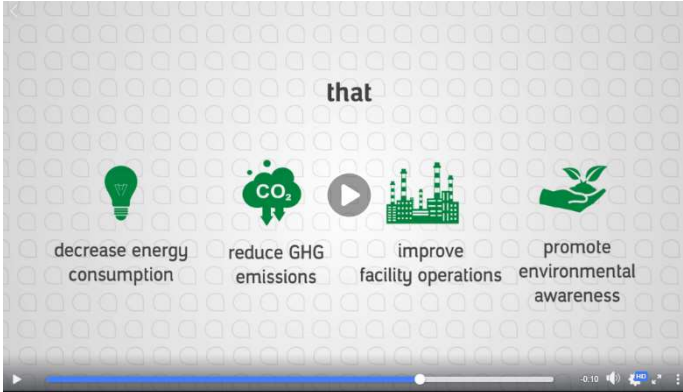
⁴⁵³ OHCHR, Guiding Principles on Business and Human Rights (2011) Commentary to GP 19, p21
<https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf>

214. In light of the evidence in this complaint, ClientEarth submits that Saudi Aramco's policies and practices clearly contribute to climate change and to the related adverse human rights impacts. ClientEarth further submits that the available evidence shows KSA to be non-compliant with its international obligations concerning climate change in regard to its regulation and control of Saudi Aramco.
215. ClientEarth also considers that the key financial businesses which have provided support to Saudi Aramco are directly linked – and are likely to contribute to – the adverse climate-related human rights impacts of Saudi Aramco. Where leverage fails, these businesses must move to cease business relationships with oil and gas businesses such as Saudi Aramco which are not credibly aligned with the Paris Goals. There is a serious risk these financial businesses are non-compliant with their responsibilities under the UNGPs.
216. Saudi Aramco has not made any public statements in relation to any aspect of its compliance with the UNGPs. Questions need to be asked of it in relation to its activities which contribute or are linked to potential and actual climate change-related adverse human rights impacts by its business relationships.
217. Questions also need to be asked of the government of KSA as to its actions in relation to its obligations as set out in the UNGPs, including regarding potential and actual climate change-related adverse human rights impacts of Saudi Aramco.
218. Finally, questions need to be asked of the financial businesses in significant and ongoing business relationships with Saudi Aramco regarding their actions to meet their responsibility to respect human rights in relation to Saudi Aramco.

ANNEX A

SAUDI ARAMCO CLIMATE CHANGE-RELATED ADVERTISING

Note: this Annex sets out a selection of Saudi Aramco’s advertisements identified through ClientEarth’s research, along with a brief analysis of the messages in those advertisements by reference to the main body of the complaint.

ADVERTISEMENT	ANALYSIS
<p>1. 2021, We Are Ready - YouTube</p>  <p>00.56 - 01.29 “... building momentum around our sustainability agenda, we added 2 million mangroves to reduce our carbon footprint, reaching more than 4-million mangroves planted by the company. We also supported the most promising technologies, such as carbon capture, utilisation, and storage, to reduce, reuse, recycle and remove carbon emissions while contributing to economic development. And we demonstrated one of the many solutions needed to contribute to addressing climate change, delivering the world’s first shipment of high-grade blue ammonia for use in zero-carbon power generation”</p>	<p>Saudi Aramco’s mangroves, carbon capture and ‘blue’ ammonia projects are not effective to address its contribution to climate change.</p> <p>See paragraph 122 in the main body of the complaint.</p>
<p>2. Aramco - At #Aramco, we seek to enhance energy efficiency... (facebook.com)</p>  <p>00.13 - 00.29 - “With over 200 initiatives implemented in 2019, that contributed to energy efficiency, CO2 emissions reduction and introduced highly efficient technologies that decrease energy consumption, reduce GHG emissions, improve facility operations, promote environmental awareness”</p>	<p>Saudi Aramco’s efforts to reduce Scope 1 and Scope 2 emissions are not effective to address its contribution to climate change.</p> <p>See paragraph 91 in the main body of the complaint.</p>

	ADVERTISEMENT	ANALYSIS
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3. [2021, Supplying energy to the world – Facebook](#)

Active
Started running on 6 Jul 2021
ID: 1129764611188506

Aramco
Sponsored

Hit the 🎯 to learn more about how we advance the industry and supply #energy to the world
#Aramco



Aramco
Energy Company
3,833,147 people like this

Like Page

This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Facebook.

Facebook does not disclose the numbers of people who saw this advertisement because it was not tagged as relating to “*social issues, elections or politics*”.

Saudi Aramco’s business does not advance the oil and gas industry in a responsible manner in compliance with the UNGP because it contributes to climate change on a global scale, and it is not effectively addressing this contribution.


See paragraph 212 and following in the main body of the complaint.

4. <https://www.facebook.com/ads/library/?id=596128854729593>

Active
Started running on 31 Aug 2021
ID: 596128854729593

Aramco
Sponsored

Like our page to learn more about how we implement #sustainable solutions to the world’s challenges
#Aramco



This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Facebook.

Facebook does not disclose the numbers of people who saw this advertisement because it was not tagged as relating to “*social issues, elections or politics*”.

Aramco is not implementing sustainable solutions to oil and gas production.

See paragraph 122 in the main body of the complaint.

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5. <https://www.facebook.com/ads/library/?id=643571866607039>

Active
Started running on 31 Aug 2021
ID: 643571866607039

Aramco
Sponsored

Hit the 📺 to learn more about our efforts to protect the planet's #biodiversity and ecosystems
#Aramco
Follow us to find out more about our environmental initiatives!



This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Facebook.

Facebook does not disclose the numbers of people who saw this advertisement because it was not tagged as relating to “social issues, elections or politics”.

The company’s biodiversity initiatives cannot compensate for its contribution to climate change, and climate-change-related impacts on biodiversity.

See paragraph 39 in the main body of the complaint.


6. [2020, Sustainable energy future – Facebook, FAK, Messenger](https://www.facebook.com/ads/library/?id=333500777726562)

Inactive
Sep 29, 2020 - Oct 7, 2020
ID: 333500777726562

This ad ran without a disclaimer. ⓘ

Aramco
Sponsored

Working towards a sustainable energy future, we aim to achieve a significant impact in reducing emissions. The #CircularCarbonEconomy allows us to Reduce ♠ Reuse ♠ Recycle ♠ Remove ♠ cart
Watch this video 📺 to learn about it!



3 ads use this creative and text

This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Facebook, to third party mobile apps through Facebook Audience Network, and on Facebook Messenger.

The accompanying data in the record shows that it was viewed between 400,000 and 450,000 times and had a potential reach of over 1 million people.

Saudi Aramco is not working towards a sustainable energy future according to climate science, is not reducing its emissions in line with the Net Zero Transition and its carbon capture projects are not effective to address its contribution to climate change.

See paragraphs 92 and 122(b) in the main body of the complaint.

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7. [2021, Carbon curing – Facebook, FAK, Instagram](#)

This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Facebook, on Instagram, on third party mobile apps (through Facebook Audience Network).




The accompanying data in the record shows that it was viewed between over 1 million times and had a potential reach of over 1 million people.

Saudi Aramco’s carbon capture projects, and its uses of captured CO2, are not effective to address its contribution to climate change.

See paragraph 122(b) in the main body of the complaint.

8. [2021, Biodiversity – Twitter](#)

This advertisement on Twitter is one example of a series of tweets that promote Aramco’s actions to protect ecosystems and biodiversity.



The company’s biodiversity initiatives cannot compensate for its contribution to climate change, and climate-change-related impacts on biodiversity.

See paragraph 39 in the main body of the complaint.

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9. <https://www.facebook.com/ads/library/?id=617780852497150>

This Facebook Ad Library record demonstrates that Aramco paid for this Financial Times advertisement to be disseminated on Facebook.

The accompanying data in the record shows that it was viewed between 175,000 – 200,000 times and had a potential reach of over 1 million people.

Saudi Aramco’s innovation projects are not effective to address its contribution to climate change.

See paragraphs 120 and following and in the main body of the complaint.

10.

This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Instagram.

The accompanying data in the record shows that it was viewed between 100,000 – 125,000 times and had a potential reach of over 1 million people.

Saudi Aramco’s innovation projects regarding plastic are not effective to address its contribution to climate change, including through petrochemicals and plastics.

See paragraph 83 in the main body of the complaint.

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11. [2021, Revolutionizing the future - Facebook](#)



This Facebook Ad Library record demonstrates that Aramco paid for this advertisement to be disseminated on Facebook owned platforms.

Facebook does not disclose the numbers of people who saw this advertisement because it was not tagged as relating to “social issues, elections or politics”.

Aramco’s innovation projects are not sufficient to address the company’s contribution to climate change.

See paragraph 120 and following in the main body of the complaint.

12.



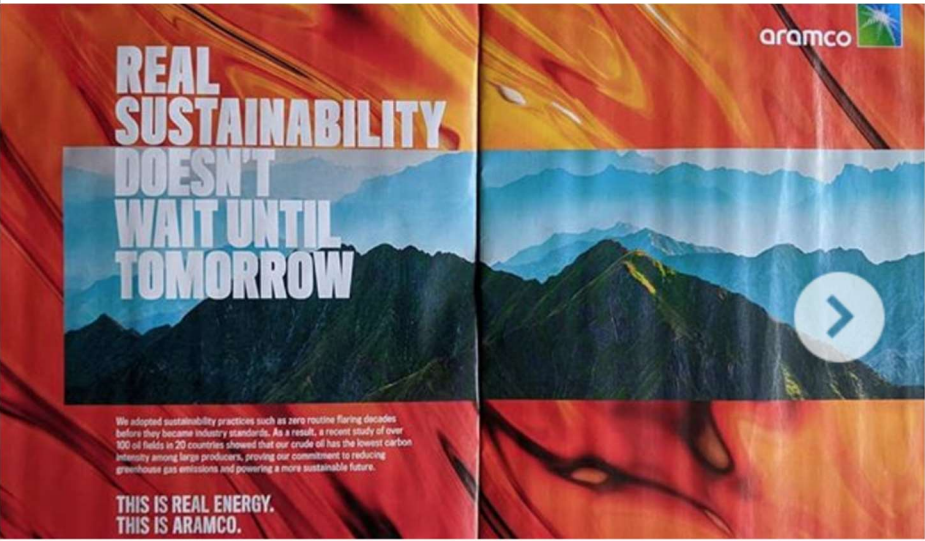

[2019, Real energy - Facebook](#)

This Facebook Library Ad record demonstrates that Aramco paid for this advertisement to be shown on Facebook platforms.



Facebook does not disclose the numbers of people who saw this advertisement because it was not tagged as relating to “social issues, elections or politics”.

Saudi Aramco’s corporate social responsibility actions are not effective to address its contribution to climate change.



See paragraph 143 in the main body of the complaint.

ADVERTISEMENT	ANALYSIS
<p>13. 2020, Real sustainability - print</p>  <p>advertisement was spotted in February 2020¹ and asserts that Aramco's products have been found to have <i>"the lowest carbon intensity of large producers"</i>.</p>	<p>Aramco's fossil fuels are high-carbon in comparison to renewable energy, and maintain their production is not sustainable according to climate science.</p> <p>See paragraphs 63 and 93 in the main body of the complaint.</p> <p>This print</p>
<p>14. 2015, Energy is opportunity - YouTube</p>  <p>This advertisement aired in 2015 and remains on Aramco's YouTube channel under the title, 'Energy is opportunity'.</p> <p>02.08 - 02.15 - <i>"The future holds many challenges, but at Saudi Aramco we know we have a duty to those around us. In harmony with the environment we are finding reliable, sustainable solutions that really make a difference"</i>.</p>	<p>Saudi Aramco is not addressing its contribution to climate change, and its business activities are not sustainable.</p> <p>See paragraph 212 and following in the main body of the complaint.</p>



¹ [Print advert \(reported on Instagram, Feb 2020\)](#)

ADVERTISEMENT	ANALYSIS
<p>15. 2019, Real-world solutions - YouTube</p>  <p>This advertisement aired in May 2019 and remains on Aramco’s official YouTube channel under the title ‘Real-world solutions’.</p> <p>00.47 - 00.56 - <i>“Since the 1970s, when we first began capturing associated gas, we’ve steadily been minimising our emissions of greenhouse gases from our production facilities. Today, set against the volume we produce, our emissions are among the lowest in the industry.”</i></p>	<p>Saudi Aramco is not reducing its emissions in line with the Net Zero Transition.</p> <p>See paragraph 91 and following in the main body of the complaint.</p>
<p>16. 2020, Protecting our planet - YouTube</p> <p>This advertisement aired in September 2020 and remains available on Aramco’s official YouTube channel.²</p>  <p>00.30 - 00.39 - <i>“We are driven by our commitment to preserving the environment because protecting our planet is one of our most important values.”</i></p>	<p>Saudi Aramco is contributing to climate change and is not addressing this contribution.</p> <p>See paragraph 143 in the main body of the complaint.</p>



² [2020, Protecting our planet - YouTube](#)

	ADVERTISEMENT	ANALYSIS
<p>17.</p>	<p>2020, Our people, our heroes - YouTube</p>  <p>This advertisement aired in August 2020 and remains on Aramco’s official YouTube channel.</p> <p>00.0 - 00.11 - <i>“For almost 90 years, we’ve helped shape the energy landscape of the world.”</i></p> <p>00.22 - 00.25 <i>“Enhancing lives, building opportunities for today and for future generations.”</i></p>	<p>Saudi Aramco is contributing to climate change, which is negatively impacting and will negatively impact on people across our planet. Saudi Aramco is not addressing this contribution.</p> <p>See paragraph 143 in the main body of the complaint.</p>
<p>18.</p>	<p>2020, Real sustainability answers - print</p>  <p>This advertisement was spotted in print in February 2020.³ The ad claims that Aramco’s <i>“crude oil has the lowest carbon intensity among large producers, proving our commitment to reducing greenhouse gas emissions and powering a more sustainable future.”</i></p>	<p>Aramco’s fossil fuels are high-carbon in comparison to renewable energy, and maintaining their production is not sustainable according to climate science.</p> <p>See paragraphs 63 and 93 in the main body of the complaint.</p>

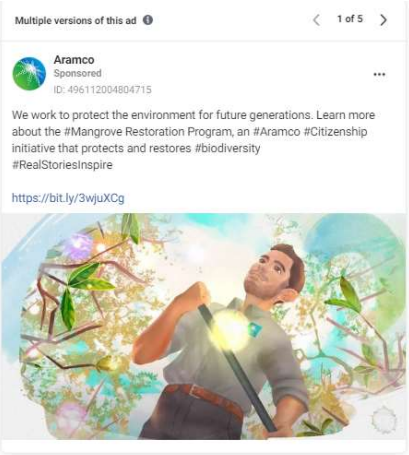

³ [Print ad \(Instagram, 2020\)](#)

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<p>19.</p>	<p>2020, A better future - YouTube</p>  <p>This advertisement ran in November 2020 and remains on Aramco’s official YouTube channel under the title ‘Mobile Carbon Capture – A Better Future.’</p> <p>00:30 - 00:55 - <i>“If every heavy-duty truck in the world had our [mobile carbon capture] technology we could reduce emissions by up to 473 million tons of CO2 a year. Equivalent to planting 80 billion new trees. Next: adapting the technology with partners to use on ships and developing new ways to reuse or store captured carbon underground. We continue innovating for a better future.”</i></p>	<p>Saudi Aramco’s carbon capture projects do not address its contribution to climate change.</p> <p>See paragraphs 122(b) in the main body of the complaint.</p>
<p>20.</p>	<p>2020, Partner of Formula 1 – YouTube</p>  <p>This advertisement aired in September 2020.⁴</p> <p>00:03 – 00:14 - <i>“The world’s most efficient combustion engines are found in just 20 cars. How can we make that 1.4 billion? See how we’re re-engineering vehicle power trains at aramco.com”</i></p>	<p>Aramco’s projects relating to internal combustion engines are not effective to address its contribution to climate change and are inconsistent with the Net Zero Transition.</p> <p>See paragraph 123 and following in the main body of the complaint.</p>

⁴ [2020, Partner of Formula 1 – YouTube](#)

	ADVERTISEMENT	ANALYSIS
21.	<p>2019, Zero emissions how? - YouTube</p> 	<p>Saudi Aramco’s carbon capture projects and flaring reduction activities are not effective to address its contribution to climate change.</p> <p>See paragraphs 103 and 122(b) in the main body of the complaint.</p> <p>This advert was published on Twitter in August 2019.</p>
22.	<p>2021, Today’s choices - Twitter</p> 	<p>Saudi Aramco contributes to climate change and is not addressing its contribution to climate change in line with climate science. Climate change will negatively impact on oceans.</p> <p>See paragraphs 39 and 143 in the main body of the complaint.</p> <p>This Tweet was published in June 2021 in the occasion of World Ocean Day.⁵</p>

⁵ [Twitter \(June 2021\)](#)

	ADVERTISEMENT	ANALYSIS
23.	<p>2021, Mangrove restoration program - Facebook</p>   <p>This advertisement is currently active on Facebook⁶ and Twitter. The hyperlinked promotional ‘story’ to this advert introduces Hassan, an Aramco worker and mangrove enthusiast. According to this, Aramco claims that:</p> <p><i>“thanks to Hassan’s efforts, future generations will enjoy the natural splendour of vibrant mangrove ecosystems—as well as the bounty they produce—just like he did when he was a child.”</i></p> <p>There are several other examples of mangroves-related posts on Twitter.⁷</p>	<p>Saudi Aramco’s mangroves projects are not effective to address its contribution to climate change, and mangroves are at significant risk from climate change.</p> <p>See paragraph 122(a) in the main body of the complaint.</p>

⁶ [2021, Mangrove restoration program - Facebook](#)

⁷ <https://mobile.twitter.com/aramco/status/1348670158555000833>
<https://mobile.twitter.com/Aramco/status/1411754131434397699>
<https://twitter.com/aramco/status/1349023523520606210?lang=en>
<https://twitter.com/aramco/status/1351088525891022849?lang=en-gb>
<https://mobile.twitter.com/aramco/status/1349385975219122176>
<https://mobile.twitter.com/Aramco/status/1412078825949761536>

ANNEX B

TABLE OF SAUDI ARAMCO FINANCING BUSINESS RELATIONSHIPS

	Financial business	Transaction details	\$ value of transaction	Position held (shares / bonds)	Type of business relationship	Sources
1	BNP Paribas (HQ in France)					
	<ul style="list-style-type: none"> - Entities include BNP Paribas SA - Branches include France and Saudi Arabia 	April 2019 bond issuance	\$12bn	n/a	Manager	12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Bookrunner / Underwriter	9 Nov 2019 IPO Prospectus
		May 2020 term loan	\$10bn	n/a	Lender / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Passive Joint Bookrunner	20 Nov 2020 Final Terms
		June 2021 sukuk issuance	\$6bn	n/a	Manager / Active Joint Bookrunner	7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement
		Holdings of Saudi Aramco bonds	n/a	4,200 bonds (April 2019 issuance, 3y) 2,900 bonds (April 2019 issuance, 10y)	Bondholder	Bloomberg Data as at 9 June 2021
2	Citi (HQ in New York)					
	<ul style="list-style-type: none"> - Entities include Citigroup Global Markets Limited, Citibank N.A., Citigroup Global Markets Europe AG, Citigroup Saudi Arabia - Branches include UK, Germany, Saudi Arabia and United Arab Emirates 	April 2019 bond issuance	\$12bn	n/a	Dealer / Manager / Trustee / Principal Paying Agent / Transfer Agent / Calculation Agent / Registrar	1 April 2019 Base Prospectus 12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Global Coordinator / Joint Bookrunner / Joint Financial Advisor / Underwriter	9 Nov 2019 IPO Prospectus
		May 2020 term loan	\$10bn	n/a	Lender / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Dealer / Active Joint Bookrunner / Underwriter / Stabilisation Manager / Trustee / Principal Paying Agent / Transfer Agent / Calculation Agent / Registrar	16 Nov 2020 Base Prospectus 20 Nov 2020 Final Terms 16 Nov 2020 Tadawul Announcement 17 Nov 2020 Stabilisation Notice
		June 2021 sukuk issuance	\$6bn	n/a	Arranger / Dealer / Manager / Active Joint Bookrunner	7 June 2021 Base Prospectus 7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement
3	Crédit Agricole (HQ in France)					
		April 2019 bond issuance	\$12bn	n/a	Manager	12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Bookrunner / Underwriter	9 Nov 2019 IPO Prospectus

	Financial business	Transaction details	\$ value of transaction	Position held (shares / bonds)	Type of business relationship	Sources
	<ul style="list-style-type: none"> - Entities include Crédit Agricole Corporate and Investment Bank and Crédit Agricole Group - Branches include France 	May 2020 term loan	\$10bn	n/a	Lender / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Passive Joint Bookrunner	20 Nov 2020 Final Terms
		Holdings of Saudi Aramco equity	n/a	2,807,613 shares	Shareholder	Bloomberg Data as at 9 June 2021
		Holdings of Saudi Aramco bonds	n/a	438 bonds (April 2019 issuance, 5y) 10,360 bonds (April 2019 issuance, 10y) 5,438 bonds (April 2019 issuance, 20y) 7,710 bonds (April 2019 issuance, 30y) 200 bonds (Nov 2020 issuance, 10y)	Bondholder	Bloomberg Data as at 9 June 2021
4	EIG (HQ in Washington DC)					
	<ul style="list-style-type: none"> - Entities include EIG Pearl Holdings S.à r.l and EIG Global Energy Partners - Branches not specified 	April 2021 oil pipelines lease & lease-back	\$12.4bn	n/a	Purchased 49% shareholding in Aramco Oil Pipelines Co / Leader of Investor Consortium	11 April 2021 Tadawul Announcement
5	Goldman Sachs (HQ in New York)					
	<ul style="list-style-type: none"> - Entities include Goldman Sachs International, Goldman Sachs Saudi Arabia and The Goldman Sachs Group Inc - Branches include London, Saudi Arabia and New York 	April 2019 bond issuance	\$12bn	n/a	Dealer / Manager	1 April 2019 Base Prospectus 12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Global Coordinator / Joint Bookrunner / Underwriter / Joint Financial Advisor / Stabilising Manager	9 Nov 2019 IPO Prospectus
		November 2020 bond issuance	\$8bn	n/a	Dealer / Active Joint Bookrunner / Underwriter / Stabilisation Manager	16 Nov 2020 Base Prospectus 20 Nov 2020 Final Terms 16 Nov 2020 Tadawul Announcement 17 Nov 2020 Stabilisation Notice
		June 2021 sukuk issuance	\$6bn	n/a	Dealer / Manager / Active Joint Bookrunner	7 June 2021 Base Prospectus 7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement
		Holdings of Saudi Aramco equity	n/a	906,092 shares	Shareholder	Bloomberg Data as at 9 June 2021
		Holdings of Saudi Aramco bonds	n/a	300 bonds (Nov 2020 issuance, 10y)	Bondholder	Bloomberg Data as at 9 June 2021
6	HSBC (HQ in London)					
	<ul style="list-style-type: none"> - Entities include HSBC Bank plc, HSBC Saudi Arabia, HSBC Corporate Trustee Company (UK) Limited, HSBC Bank USA 	April 2019 bond issuance	\$12bn	n/a	Dealer / Manager	1 April 2019 Base Prospectus 12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Financial Advisor / Joint Global Coordinator / Joint Bookrunner /	9 Nov 2019 IPO Prospectus

	Financial business	Transaction details	\$ value of transaction	Position held (shares / bonds)	Type of business relationship	Sources
	National Association, The Saudi British Bank, HSBC Holdings plc and HSBC Investments Bermuda Ltd - Branches include UK, Saudi Arabia, New York and Bermuda				Underwriter / International Settlement Agent	
		May 2020 term loan	\$10bn	n/a	Lender / Global Coordinator / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Dealer / Active Joint Bookrunner / Underwriter / Stabilisation Manager	16 Nov 2020 Base Prospectus 20 Nov 2020 Final Terms 16 Nov 2020 Tadawul Announcement 17 Nov 2020 Stabilisation Notice
		June 2021 sukuk issuance	\$6bn	n/a	Arranger / Dealer / Principal Paying Agent / Reg S Registrar / Reg S Transfer Agent / Stabilising Manager / Manager / Active Joint Bookrunner / Delegate / Paying Agent / Rule 144A Registrar / Rule 144A Transfer Agent	7 June 2021 Base Prospectus 7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement 9 June 2021 Pre-Stabilisation Notice
		Holdings of Saudi Aramco equity	n/a	2,289,514 shares	Shareholder	Bloomberg Data as at 9 June 2021
		Holdings of Saudi Aramco bonds	n/a	10,000 bonds (April 2019 issuance, 5y) 200 bonds (April 2019 issuance, 10y) 1,000 bonds (April 2019 issuance, 20y) 2,000 bonds (April 2019 issuance, 30y) 500 bonds (Nov 2020 issuance, 3y)	Bondholder	Bloomberg Data as at 9 June 2021
7		JP Morgan (HQ in New York)				
	- Entities include J.P. Morgan Securities plc, J.P. Morgan Saudi Arabia Company, J.P. Morgan Chase & Co - Branches include UK, Saudi Arabia and New York	April 2019 bond issuance	\$12bn	n/a	Arranger / Dealer / Manager / Stabilising Manager	1 April 2019 Base Prospectus 12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Global Coordinator / Joint Bookrunner / Underwriter / Joint Financial Advisor	9 Nov 2019 IPO Prospectus
		May 2020 term loan	\$10bn	n/a	Lender / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Arranger / Dealer / Active Joint Bookrunner / Stabilisation Coordinator / Underwriter	16 Nov 2020 Base Prospectus 20 Nov 2020 Final Terms 16 Nov 2020 Tadawul Announcement 17 Nov 2020 Stabilisation Notice
		June 2021 sukuk issuance	\$6bn	n/a	Arranger / Dealer / Manager / Active Joint Bookrunner	7 June 2021 Base Prospectus 7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement

	Financial business	Transaction details	\$ value of transaction	Position held (shares / bonds)	Type of business relationship	Sources
		Holdings of Saudi Aramco equity	n/a	342,334 shares	Shareholder	Bloomberg Data as at 9 June 2021
		Holdings of Saudi Aramco bonds	n/a	1,179 bonds (April 2019 issuance, 3y) 48,594 bonds (April 2019 issuance, 10y) 2,000 bonds (April 2019 issuance, 20y) 10,268 bonds (Nov 2020 issuance, 3y) 7,251 bonds (Nov 2020 issuance, 5y) 397 bonds (Nov 2020 issuance, 10y) 350 bonds (Nov 2020 issuance, 30y) 5,220 bonds (Nov 2020 issuance, 50y)	Bondholder	Bloomberg Data as at 9 June 2021
8	Mizuho (HQ in Japan)					
	<ul style="list-style-type: none"> - Entities include Mizuho International plc and Mizuho Financial Group Inc - Branches include UK and Japan 	April 2019 bond issuance	\$12bn	n/a	Manager	12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Bookrunner / Underwriter	9 Nov 2019 IPO Prospectus
		May 2020 term loan	\$10bn	n/a	Lender / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Passive Joint Bookrunner	20 Nov 2020 Final Terms
		Holdings of Saudi Aramco equity	n/a	159,706 shares	Shareholder	Bloomberg Data as at 9 June 2021
9	Morgan Stanley (HQ in New York)					
	<ul style="list-style-type: none"> - Entities include Morgan Stanley & Co. International plc, Morgan Stanley Saudi Arabia - Branches include UK, New York and Saudi Arabia 	April 2019 bond issuance	\$12bn	n/a	Arranger / Dealer / Manager	1 April 2019 Base Prospectus 12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Global Coordinator / Joint Bookrunner / Underwriter / Joint Financial Advisor	9 Nov 2019 IPO Prospectus
		November 2020 bond issuance	\$8bn	n/a	Arranger / Dealer / Active Joint Bookrunner / Underwriter / Stabilisation Manager	16 Nov 2020 Base Prospectus 20 Nov 2020 Final Terms 16 Nov 2020 Tadawul Announcement 17 Nov 2020 Stabilisation Notice
		June 2021 sukuk issuance	\$6bn	n/a	Arranger / Dealer / Manager / Active Joint Bookrunner	7 June 2021 Base Prospectus 7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement
		Holdings of Saudi Aramco bonds	n/a	5,900 bonds (April 2019 issuance, 5y) 690 bonds (April 2019 issuance, 10y)	Bondholder	Bloomberg Data as at 9 June 2021

	Financial business	Transaction details	\$ value of transaction	Position held (shares / bonds)	Type of business relationship	Sources
				1,220 bonds (Nov 2020 issuance, 10y) 1,160 bonds (Nov 2020 issuance, 30y)		
10	SMBC (HQ in Japan)					
	<ul style="list-style-type: none"> - Entities include SMBC Nikko Capital Markets Limited and Sumitomo Mitsui Banking Corporation - Branches include UK 	April 2019 bond issuance	\$12bn	n/a	Manager	12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Bookrunner / Underwriter	9 Nov 2019 IPO Prospectus
		May 2020 term loan	\$10bn	n/a	Lender / Global Coordinator / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Passive Joint Bookrunner	20 Nov 2020 Final Terms
		June 2021 sukuk issuance	\$6bn	n/a	Manager / Active Joint Bookrunner	7 June 2021 Tadawul Announcement 7 June 2021 Second Tadawul Announcement
11	Société Générale (HQ in France)					
	<ul style="list-style-type: none"> - Entities include Société Générale - Branches include France 	April 2019 bond issuance	\$12bn	n/a	Manager	12 April 2019 Final Terms
		December 2019 IPO	\$29.4bn	n/a	Joint Bookrunner / Underwriter	9 Nov 2019 IPO Prospectus
		May 2020 term loan	\$10bn	n/a	Lender / Bookrunner / Mandated Lead Arranger	12 May 2020 Reuters Article Bloomberg Data as at 9 June 2021
		November 2020 bond issuance	\$8bn	n/a	Passive Joint Bookrunner	20 Nov 2020 Final Terms

Sources referenced:

- 1 April 2019 Base Prospectus: https://www.rns-pdf.londonstockexchange.com/rns/6727U_1-2019-4-1.pdf
- 12 April 2019 Final Terms: <https://data.fca.org.uk/artefacts/NSM/data-migration/218431850.pdf> (notes due 2022, by way of example)
- 9 Nov 2019 IPO Prospectus: <https://www.aramco.com/-/media/images/investors/saudi-aramco-prospectus-en.pdf>
- 12 May 2020 Reuters Article: <https://www.reuters.com/article/saudi-aramco-closes-us10bn-loan-idUSL8N2CU50Q>
- 16 Nov 2020 Base Prospectus: <https://www.aramco.com/-/media/publications/corporate-reports/bonds/saudi-aramco-bond-base-prospectus-2020.pdf>
- 16 Nov 2020 Tadawul Announcement: [Saudi Arabian Oil Company \(Aramco\) announces the start of issuing international bonds](#)
- 17 Nov 2020 Stabilisation Notice: <https://www.londonstockexchange.com/news-article/market-news/stabilisation-notice/14758670?lang=en>
- 20 Nov 2020 Final Terms: <https://data.fca.org.uk/artefacts/NSM/Portal/NI-000014887.pdf> (notes due 2023, by way of example)
- 11 April 2021 Tadawul Announcement: [Saudi Arabian Oil Company \(Saudi Aramco\) Announces the Signing of a Deal to Sell an Equity Stake in One of its Newly-Formed Subsidiaries](#)
- 7 June 2021 Base Prospectus: http://www.rns-pdf.londonstockexchange.com/rns/0904B_1-2021-6-7.pdf
- 9 June 2021 Pre-Stabilisation Notice: <https://www.londonstockexchange.com/news-article/63AS/pre-stabilisation-notice/15010490?la=en&hash=8DE2DCD689D6E383BB8F4C393033D8964C9F5585>
- 7 June 2021 Tadawul Announcement: [Saudi Arabian Oil Company \(Saudi Aramco\) announces the start of issuing U.S.\\$ denominated international trust certificates under its Trust Certificate Issuance Programme](#)
- 7 June 2021 Second Tadawul Announcement: [Saudi Arabian Oil Company \(Saudi Aramco\) announces its intention to issue international trust certificates pursuant to its Trust Certificate Issuance Programme](#)
- 8 June 2021 Reuters Article: <https://www.reuters.com/business/energy/abu-dhabis-mubadala-joins-eig-led-consortium-buying-aramco-pipeline-stake-2021-06-08/>