Count 1

Statement of Offence

Intentionally or recklessly caused a public nuisance, contrary to section 78 of the Police, Crime, Sentencing and Courts Act 2022

Particulars of Offence

GILLES MARIE PHILIPPE D'ARGOUGES on the 1st day of JANUARY 2023 and on other days between that date and the 31st day of DECEMBER 2023 did an act, namely, acted in the capacity of GROUP CHIEF FINANCIAL OFFICER of PERENCO SA, holding that position formally and contractually, with all of the duties and responsibilities associated with and required by the position, including but not limited to taking part in the direction and oversight and responsibility for, and having knowledge of, the company's activities and the company's policy decisions, and/or acting in an advisory capacity to those making the decisions decisions, including but not limited to the decision and intention to undertake, as well as the act of undertaking, the extraction and distribution and sale and disposal of 174,000,610 barrels of oil (equivalent), in full knowledge that and intending or being reckless that the extraction and distribution and consumption of said barrels of oil by those to whom it was distributed and sold and disposed of would release not less than 85,302,182 tons of carbon dioxide (equivalent) into the atmosphere, and thereby by virtue of the known outcomes associated with CO2 emissions, did create and cause a risk of serious harm to the public or a section of the public, and obstruction to the public or a section of the public in the exercise or enjoyment of a right that may be exercised or enjoyed by the public at large.

Count 2

Statement of Offence

Intentionally or recklessly caused a public nuisance, contrary to section 78 of the Police, Crime, Sentencing and Courts Act 2022

Particulars of Offence

GILLES MARIE PHILIPPE D'ARGOUGES on the 1st day of JANUARY 2023 and on other days between that date and the 24th day of MARCH 2025 did an act, namely, acted in the capacity of GROUP CHIEF FINANCIAL OFFICER of PERENCO SA, holding that position formally and contractually, with all of the duties and responsibilities associated with and required by the position, including but not limited to taking part in the direction and oversight and responsibility for, and having knowledge of, the company's activities and the company's policy decisions, and/or acting in an advisory capacity to those making the decisions, decisions including but not limited to the decision and intention to undertake, as well as the act of undertaking, an increase in the capacity of PERENCO SA to extract and distribute and sell and dispose of oil and other hydrocarbon products, in full knowledge that and intending or being reckless that increasing said capacity would result in increased output by PERENCO SA of oil and other hydrocarbon products, and that the consumption of said oil and other hydrocarbon products by those to whom it was distributed and sold and disposed of would increase the annual release of carbon dioxide (equivalent) into the atmosphere, and thereby by virtue of the known outcomes associated with carbon dioxide emissions, did create and cause a risk of serious harm to the public or a section of the public, and obstruction to the public or a section of the public in the exercise or enjoyment of a right that may be exercised or enjoyed by the public at large.

OUTLINE ARGUMENT IN SUPPORT OF DRAFT INDICTMENT

Item 1

The indicted person as a senior executive of the company named in the Draft Indictment, wholly or in part, leads directs and is responsible for the policy of the company and did so during the time period(s) named in the Draft Indictment.

For evidence refer to Section 1 "Reckless or oblique intention of the individual" in "EVIDENCE IN SUPPORT OF DRAFT INDICTMENT" below.

Item 2

During the time period(s) of the indicted person's tenure as a senior executive of the company named in the Draft Indictment the company named in the Draft Indictment is by its own published reporting and accounting responsible for the emission of the quantity of carbon dioxide named in the Draft Indictment and additionally is by its own published reporting and accounting responsible for ongoing emissions of carbon dioxide at a comparable scale and additionally is actively pursuing increased production and capacity to produce and distribute hydrocarbons and thus future emissions of carbon dioxide at a greater scale.

For evidence refer to Section 2 "Company strategy, operations and business activity" in "EVIDENCE IN SUPPORT OF DRAFT INDICTMENT" below.

Item 3

Carbon dioxide emissions at the scale specified in the Draft Indictment directly cause and are responsible for the phenomenon of global heating.

For evidence refer to Section 3 in "EVIDENCE IN SUPPORT OF DRAFT INDICTMENT" below.

Item 4

Climate change constitutes a public nuisance as defined in Section 78 of the Police, Crime, Sentencing and Courts Act 2022.

For evidence refer to Section 4 in "EVIDENCE IN SUPPORT OF DRAFT INDICTMENT" below.

EVIDENCE IN SUPPORT OF DRAFT INDICTMENT

1 Reckless or oblique intention of the individual

1.1 Employment

- 1.1.1 Gilles d'Argouges has held senior leadership positions at Perenco SA since 2013
- 1.1.3 By virtue of his position in the company, it is determined that he could not have been unaware of the impacts of the company's activity and thereby, by virtue of his role in it, and of his contribution to the running of the business and the decisions made therein, whether directly or indirectly, he demonstrates reckless and oblique intention.

2 Company strategy, operations and business activity

2.1 Hydrocarbon production

- 2.1.1 In company reporting year 2023 Perenco SA reported production of 174,000,610 barrels of oil equivalent (BOE)
 - Source: Perenco Sustainability Report 2023 (p7)
- 2.1.2 Perenco SA has not yet reported production for company reporting year 2024.

2.2 Carbon dioxide emissions

- 2.2.1 In company reporting year 2023 Perenco SA reported that it was responsible for the emission of a total of 10,481,920 tonnes of carbon dioxide (tCO2) under emission scope 1.
 - Source: Perenco Sustainability Report 2023 (p93)
- 2.2.2 Perenco SA did not report its emissions under scopes 2 and 3 for company reporting year 2023.
- 2.2.3 Extrapolating from the hydrocarbon production reported by Perenco SA for the reporting year 2023, it is calculated that Perenco SA was responsible for the emission of at least 74,820,262 tonnes of carbon dioxide (tCO2) under emissions scope 3 in company reporting year 2023.

Source: Perenco Sustainability Report 2023 (p7)

Source: Greenhouse Gas Equivalencies Calculator, United States Environmental Protection Agency website, accessed March 2025

https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator-calculations-and-references

- 2.2.4 Therefore Perenco SA is responsible for not less than 85,302,182 tonnes of carbon dioxide (tCO2) under emissions scopes 1 and 3 in company reporting year 2023.
- 2.2.5 Perenco SA has not yet reported carbon dioxide emissions for company reporting year 2024 however the scope 3 emissions of carbon dioxide for which the company is responsible are equivalent pro rata to those in company reporting year 2024.

2.3 Increase in hydrocarbon production and emissions

- 2.3.1 Perenco SA has not yet reported production for company reporting year 2024.
- 2.3.2 However Perenco SA has reported investments in new hydrocarbon assets which will substantially increase production - see below.
- 2.3.3 Speaking about exploiting Congo's resources: "Our strategy is to accelerate our exploration [...]. We intend to do it all, accelerate investment in mature fields and accelerate exploration to increase the production of the country. We had ambitious objectives to surpass 100 000 barrels in Congo."
 Source: Sassou News, YouTube, 13 June, 2024 (translation from French)
 - https://www.youtube.com/watch?v=uYp8Vef6xzI
- 2.3.4 "Emeraude [Congo oil field] is a quite amazing oil accumulation the resources of which companies for years have struggled to unlock."
 Source: Upstream Online 6 January 2025
 https://www.upstreamonline.com/production/perenco-unveils-new-plan-of-attack-to-boost-output-from-5-billion-barrel-africa-giant/2-1-1760044
- 2.3.5 "In 2023, Perenco UK was awarded three licenses covering its existing E&P activities in the Southern North Sea (SNS) basin."
 Source: Perenco Sustainability Report 2023 (33)
- 2.3.6 "Perenco UK is pleased to announce the successful start-up of gas production from its C06 well, a near-field discovery within the Ravenspurn South area of the Southern North Sea (SNS). [...] Jo White, General Manager Perenco UK, commented: "These positive results from Ravenspurn South, coming shortly after the recent success at Ravenspurn North, bring a meaningful increase to Perenco UK's operated production, and open the door for the further development of tight gas reservoirs in Perenco's Southern North Sea assets."

Source: "Further SNS gas production gains from drilling success at Perenco's Ravenspurn fields", press release, Perenco, 5 March 2024

2.4 Investment in new hydrocarbon assets

- 2.4.1 Perenco SA reports that the company has invested in new hydrocarbon assets thereby increasing its capacity for hydrocarbon production and thus its potential for carbon dioxide emissions; new oil fields in Congo, Cameroon, Gabon cause rise In company emissions despite 'decarbonisation' commitment "In 2023, our Scope 1 greenhouse gas (GHG) emissions accounted for 69.46 kg CO2 eq per barrel of oil equivalent (boe). This slight increase is linked to a rise in flaring activity, mainly associated with the commencement of production from new oil wells in Congo, Cameroon, and Gabon, as well as the takeover of operations in Chad." Source: Perenco Sustainability Report 2023 (20)
- Perenco acquires oil fields in Brazil from Petrobras: "Perenco Brazil is pleased to announce the acquisition of the Cherne and Bagre concessions from Petróleo Brasileiro S.A. (Petrobras). The deal comprises the Cherne and Bagre fields and two fixed platforms, located 30km from the Pargo Cluster in 120-140m water depth. The PCH-1 and PCH-2 platforms were hibernated by Petrobras in early 2020 and later scheduled for

decommissioning. Following the closing of the transaction, expected in 2025, Perenco Brazil will implement an ambitious redevelopment plan to revitalise the assets, restart production to a target rate of 10,000-15,000 barrels of oil per day and unlock in excess of 50 mmstb of reserves."

Source: "Acquisition of Cherne and Bagre concessions, Campos Basin, Brazil", press release, Perenco, 26 April 2024

Section 3

Carbon dioxide (*CO*₂) emissions at the scale specified in the Draft Indictment Count 1 - Public Nuisance and Section 2 of the Evidence Dossier in support, directly cause and are responsible for the phenomenon of global heating, as substantiated by the following evidence:

3.1.0 First Assessment Report (FAR) of the Intergovernmental Panel on Climate Change (IPCC) (1990)

Source: ipcc 90 92 assessments far full report.pdf

3.1.1 CLIMATE CHANGE: The 1990 and 1992 IPCC Assessments IPCC First Assessment Report Overview and Policymaker Summaries and 1992 IPPC Supplement June. 1992 IPCC First Assessment Report

3.1.1 Excerpt:

Overview

"1.0 Science

- 1.0.1 We are certain of the following:
- There is a natural greenhouse effect which already keeps the Earth warmer than it would otherwise be.
- Emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases: carbon dioxide, methane, chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth's surface. The main greenhouse gas, water vapour, will increase in response to global warming and further enhance it."

Source: IPCC, 1992: Climate Change: The IPCC 1990 and 1992 Assessments. IPCC First Assessment Report Overview and Policymaker Summaries and 1992 IPCC Supplement. P.52

3.2.0 Kyoto Protocol to the United Nations Framework Convention on Climate Change Source: kpeng.pdf

The Kyoto Protocol, adopted in 1997, establishes a clear link between carbon dioxide (CO₂) emissions and global warming by setting legally binding targets for developed countries to reduce greenhouse gas emissions, including CO₂. Its objectives and provisions are based on the understanding that Carbon Dioxide causes global heating. Notably:

- **3.2.1 Article 2, Section 1(a):** "Each Party included in Annex I, in achieving its quantified emission limitation and reduction commitments under Article 3, in order to promote sustainable development, shall... Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:... Enhancement of energy efficiency in relevant sectors of the national economy;... Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies." Source: Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 162 pp.2-3
- **3.2.2 Article 3, Section 1:** "The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts, calculated pursuant to their quantified emission limitation and reduction commitments inscribed in Annex B and in accordance with the provisions of this Article, with a view to reducing their overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012." Source: Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, 2303 U.N.T.S. 162 p.3
- 3.3 IPCC Fourth Assessment Report (2007) Source: IPCC.SPM 5.17.07FINAL.indd
 3.3.1 Summary for Policymakers (SPM) of Working Group I "Understanding and Attributing Climate Change." IPCC, 2007: Summary for Policymakers. In: Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

Understanding and Attributing Climate Change

"Most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations." Source: IPCC, 2007: Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland, 104 pp p.4

3.4.0 IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report.

Contribution of Working Groups I, II and III to the Sixth Assessment Report of the

Intergovernmental Panel on Climate Change

Source: AR6 Synthesis Report: Summary for Policymakers Headline Statements

3.4.1 A. Current Status and Trends

Observed Warming and its Causes

A.1 Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 in 2011-2020. Global greenhouse gas emissions have continued to increase, with unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production across regions, between and within countries, and among individuals (high confidence)."

Source: Core Writing Team, H. Lee and J. Romero (eds.) IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001 p.4

3.4.2 A. Current Status and Trends

Observed Changes and Impacts

A.2 Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred. Human-caused climate change is already affecting many weather and climate extremes in every region across the globe. This has led to widespread adverse impacts and related losses and damages to nature and people (high confidence). Vulnerable communities who have historically contributed the least to current climate change are disproportionately affected (high confidence).

Source: Core Writing Team, H. Lee and J. Romero (eds.)

IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001 p.5

3.4.3 C. Responses in the near term

<u>Urgency of near-term integrated climate action</u>

C.1 Climate change is a threat to human well-being and planetary health (very high confidence). There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all (very high confidence)."

Source: Core Writing Team, H. Lee and J. Romero (eds.)

IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001 p.24

3.4.4 C. Responses in the near term

The Benefits of Near-Term Action

C.2 Deep, rapid, and sustained mitigation and accelerated implementation of adaptation actions in this decade would reduce projected losses and damages for humans and ecosystems (very high confidence), and deliver many co-benefits, especially for air quality and health (high confidence). Delayed mitigation and adaptation action would lock in high-emissions infrastructure, raise risks of stranded assets and cost-escalation, reduce feasibility, and increase losses and damages (high confidence). Near-term actions involve high up-front investments and potentially disruptive changes that can be lessened by a range of enabling policies (high confidence)."

Source: Core Writing Team, H. Lee and J. Romero (eds.)

IPCC, Geneva, Switzerland, pp. 1-34, doi: 10.59327/IPCC/AR6-9789291691647.001 p.25

3.4.5 Limiting warming to 1.5°C and 2°C involves rapid, deep and in most cases immediate greenhouse gas emission reductions

Source: Core Writing Team, H. Lee and J. Romero (eds.)

3.5.0 Climate Change Act 2008

Source: Climate Change Act 2008

The Climate Change Act 2008 establishes legally binding targets for reducing greenhouse gas emissions to mitigate climate change.

3.5.1 Section 1: This section sets the UK's long-term target for reducing greenhouse gas emissions. Initially, the Act committed the UK to an 80% reduction in greenhouse gas emissions by 2050, compared to 1990 levels. However, this target was amended in 2019 to a 100% reduction, effectively setting a net-zero emissions goal by 2050.

The target for 2050

- (1) It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least [F1100%] lower than the 1990 baseline.
- (2) The 1990 baseline" means the aggregate amount of—
- (a) net UK emissions of carbon dioxide for that year, and
- (b) net UK emissions of each of the other targeted greenhouse gases for the year that is the base year for that gas.

Source: Climate Change Act c.1

- **3.5.2 Section 4**: This section requires the government to set carbon budgets, which are legally binding limits on the total amount of greenhouse gases the UK can emit over a 5-year period. These budgets are designed to ensure that the UK stays on track to meet its long-term emissions reduction targets.
 - (1) It is the duty of the Secretary of State—
 - (a) to set for each succeeding period of five years beginning with the period 2008-2012 ("budgetary periods") an amount for the net UK carbon account (the "carbon budget"), and
 - (b) to ensure that the net UK carbon account for a budgetary period does not exceed the carbon budget.
 - (2) The carbon budget for a budgetary period may be set at any time after this Part comes into force, and must be set—
 - (a) for the periods 2008-2012, 2013-2017 and 2018-2022, before 1st June 2009;
 - (b) for any later period, not later than 30th June in the 12th year before the beginning of the period in question."

Source: Climate Change Act c.4

3.5.3 Section 56: This section mandates that the Secretary of State regularly reports to Parliament on the impacts of climate change on the United Kingdom. These reports are designed to inform the government's strategies for adaptation and mitigation.

(1) It is the duty of the Secretary of State to lay reports before Parliament containing an assessment of the risks for the United Kingdom of the current and predicted impact of climate change." Climate Change Act c.56

3.6 Paris Agreement

Source: The Paris Agreement /unfccc.int/sites/default/files/english_paris_agreement.pdf
The Paris Agreement, adopted in 2015, emphasizes the urgent need to address greenhouse
gas emissions to combat global warming. It refers broadly to "greenhouse gases," among which
CO₂ is the most prevalent greenhouse gas. Key excerpts from the agreement include:

3.6.1 Preamble: Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights... as well as gender equality, empowerment of women and intergenerational equity." Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 p.2

3.6.2 Article 2, Section 1:

This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of poverty, including by: climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

(a) 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"

Source: Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 p.3

3.6.3 Article 3:

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.

Source: Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 p.3

3.6.4 Article 4, Section 1:

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.

Source: Paris Agreement to the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 p.4

3.7 Climate Change Act 2008 (2050 Target Amendment) Order 2019 (Net Zero Act)

Source: www.legislation.gov.uk/ukdsi/2019/9780111187654

The Climate Change Act 2008 (2050 Target Amendment) Order 2019 (SI 2019/1056) made the UK's net-zero target legally binding.

The Climate Change Act 2008 (2050 Target Amendment) Order 2019 focuses on strengthening the UK's commitment to reducing greenhouse gas emissions by amending the original Climate Change Act 2008. Specifically, it replaces the previous target of an 80% reduction in greenhouse gases by 2050 with a more ambitious goal of achieving a 100% reduction, effectively setting a net-zero emissions target.

The rationale behind this amendment is grounded in scientific evidence that associates CO₂ and other greenhouse gas emissions with global warming and climate change. The amendment reflects the UK's policy response to the established link between greenhouse gas emissions and global warming.

3.7.1 Article 2 of this Order amends section 1 of the Climate Change Act <u>2008 (c. 27)</u> by altering the percentage amount in subsection (1). Section 1(1) imposes a duty on the Secretary of State as to the level of the "net UK carbon account" (the amount of net UK emissions of targeted greenhouse gases for a period adjusted by the amount of carbon units credited or debited to the account) for the year 2050. The duty is to ensure that the net UK carbon account is lower than the "1990 baseline" (the baseline of net UK emissions of targeted greenhouse gases against which the percentage amount in subsection 1(1) is applied) by a minimum percentage amount.

The amendment in this Order has the effect that the minimum percentage by which the net UK carbon account for the year 2050 must be lower than the 1990 baseline is increased from 80% to 100%

Source: The Climate Change Act 2008 (2050 Target Amendment) Order 2019 (SI 2019/1056)

3.8 Climate Emergency Declaration

Source: www.valerievazmp.co.uk/parliament-declares-environment-and-climate-emergency/ **3.8.1 Excerpt:** That this House declares an environment and climate emergency following the finding of the Inter-governmental Panel on Climate Change that to avoid a more than 1.5°C rise in global warming, global emissions would need to fall by around 45 per cent from 2010 levels by 2030, reaching net zero by around 2050.

Source: UK Parliament, May 2019

3.9 United Kingdom of Great Britain and Northern Ireland's 2035 Nationally Determined Contribution 2025

Source: unfccc.int/sites/default/files/2025-01/UK%27s%202035%20NDC%20ICTU.pdf
United Kingdom of Great Britain and Northern Ireland's 2035 Nationally Determined Contribution
Presented to Parliament by the Secretary of State for Energy Security and Net Zero by
Command of His Majesty January 2025

"On 12 November 2024 at COP29, the Prime Minister announced the UK's ambitious and credible NDC target to reduce all greenhouse gas emissions by at least 81% by 2035, compared to 1990 levels (excluding international aviation and shipping emissions) – three months ahead of the 10 February deadline. In compliance with Article 4, paragraph 8 of the Paris Agreement and Decision 4/CMA.1, the UK now submits this information to facilitate clarity, transparency and understanding of its ambitious 2035 NDC. The target is in line with the advice from the Climate Change Committee who state that it is a credible contribution towards limiting warming to 1.5 °C and it sits within a range of Paris consistent equity metrics 1 . The target is also in line with the UK's Carbon Budget 6 which is set in domestic legislation (this carbon budget includes international aviation and shipping emissions). The NDC is informed by the outcomes of the COP28 Global Stocktake (GST) - it is a 1.5°C aligned, economy-wide target, covering all greenhouse gases, sectors and categories, informed by the latest science."

Source: United Kingdom of Great Britain and Northern Ireland's 2035 Nationally Determined Contribution Presented to Parliament by the Secretary of State for Energy Security and Net Zero by Command of His Majesty January 2025 p.6

Section 4

Climate change constitutes a public nuisance, interfering with public rights and welfare by causing widespread environmental harm, endangering public health, and disrupting essential resources such as air, water, and land. The emission of greenhouse gases contribute to rising temperatures, extreme weather events, and sea level rise, which collectively impose substantial harm on communities, economies, and ecosystems. As a pervasive and ongoing threat, climate change meets the legal criteria of a public nuisance by unreasonably interfering with the public's right to a stable and habitable environment. The fact that climate change constitutes a public nuisance in the United Kingdom is evidenced below.

Appendix [A] - Legal Definition - Public Nuisance

4.1 Crop Failure (Domestic)

4.1.1 Tom Lancaster, land, food and farming analyst, Energy and Climate Intelligence Unit (ECIU) "This year's harvest was a shocker, and climate change is to blame. While shoppers have been partly insulated by imports picking up some of the slack, Britain's farmers have borne the brunt of the second worst harvest on record. It is clear that climate change is the biggest threat to UK food security. And these impacts are only going to get worse until we reduce our greenhouse gas emissions."

Source: Butler, Sarah. "Harvest in England the second worst on record because of wet weather." The Guardian, 10 October 2024

https://www.theguardian.com/environment/2024/oct/10/harvest-in-england-the-second-worst-on-record-because-of-wet-weather

4.1.2 England has suffered its second worst harvest on record – with fears growing for next year – after heavy rain last winter hit production of key crops including wheat and oats...On staple crops, England's wheat haul is estimated to be 10m tonnes, or 21%, down on 2023, according to analysis of the latest government data by the Energy and Climate Intelligence Unit (ECIU). Winter barley was 26% down on last year, and the winter oilseed rape harvest was down 32%, in data released by the Department for Environment Food and Rural Affairs on Thursday. The ECIU estimates that farmers could lose £600m on five key crops – wheat, winter and spring barley, oats and oilseed rape – where production was down 15% in total.

Source: Butler, Sarah. "Harvest in England the second worst on record because of wet weather." The Guardian, 10 October 2024

https://www.theguardian.com/environment/2024/oct/10/harvest-in-england-the-second-worst-on-record-because-of-wet-weather

4.1.3 Colin Chappell, Arable Farmer, Lincolnshire "We are now on a knife-edge. Last week we had almost two inches of rain within 36 hours here and we're not the worst off. Some farms in southern England have lost their crops for the second year in a row. Many will now be relying on spring wheat once again this year, which only produces about half as much as winter wheat. We're getting into a situation where autumn planting is becoming unviable due to flooding and spring planting is risky because of drought."

Source: Butler, Sarah. "Harvest in England the second worst on record because of wet weather." The Guardian, 10 October 2024

https://www.theguardian.com/environment/2024/oct/10/harvest-in-england-the-second-worst-on-record-because-of-wet-weather

- **4.1.4** New analysis [1] from the Energy and Climate Intelligence Unit (ECIU) reveals today that arable farmers face losing nearly a billion in revenue as a result of the wet winter. The analysis comes as a new study from the Met Office, World Weather Attribution (WWA) and others shows that the autumn and winter rainfall in the UK was made 15% heavier by climate change. Source: Smeeton, George. "Farmers count costs of climate change, as wet winter knocks nearly a billion pounds off revenues." Energy and Climate Intelligence Unit, 22.10.24 https://eciu.net/media/press-releases/2024/farmers-count-costs-of-climate-change-as-wet-winter-knocks-nearly-a-billion-pounds-off-revenues
- **4.1.5** The country suffered the wettest 18 months <u>since records began</u> across the 2023-24 growing year, leaving soil waterlogged and some farms <u>totally underwater</u>. The impact on harvests has been disastrous. Data from the Department for Environment, Food and Rural Affairs shows that year-on-year vegetable yields decreased by 4.9% to 2.2m tonnes in 2023, and the production volumes of fruit decreased by 12% to 585,000 tonnes. Scientists say that climate breakdown caused by the burning of fossil fuels is likely to bring more <u>extreme weather</u> to the UK, including more frequent <u>floods and droughts</u>.

Source: Horten, Helena. "Disastrous fruit and vegetable crops must be 'wake-up call' for UK, say farmers." The Guardian, 2.7.24

https://www.theguardian.com/environment/article/2024/jul/03/disastrous-fruit-and-vegetable-crops-must-be-wake-up-call-for-uk-say-farmers

4.2 Flooding

- **4.2.1** Autumn and winter storm rainfall in the UK and Ireland was made about 20% heavier by human-caused climate change Human-induced climate change made the heavy storm downpours that caused devastating flooding across the UK and Ireland between October 2023 and March 2024 about 20% more intense, according to a rapid attribution analysis by an international team of leading climate scientists as part of the World Weather Attribution group. The study also highlights how the floods had cascading effects in the population, impacting human health and food production, as well as contributing to further increase the cost of living. Source: World Weather Attribution. "Autumn and winter storm rainfall in the UK and Ireland was made about 20% heavier by human-caused climate change" [Press release]. 22.06.24 https://mcusercontent.com/854a9a3e09405d4ab19a4a9d5/files/594a4959-a099-1a31-9516-08f 22f073e89/UK_winter_storms_press_release.pdf
- **4.2.2** The seemingly "never-ending" rain last autumn and winter in the UK and Ireland was made 10 times more likely and 20% wetter by human-caused global heating, a study has found. More than a dozen storms battered the region in quick succession between October and March, which was the second-wettest such period in nearly two centuries of records. The downpour led

to severe floods, at least 20 deaths, severe damage to homes and infrastructure, power blackouts, travel cancellations, and heavy losses of crops and livestock.

Source: Carrington, Damian "Never-ending" UK rain made 10 times more likely by climate crisis, study says." 22.05.24

https://www.theguardian.com/world/article/2024/may/22/never-ending-uk-rain-10-times-more-lik ely-climate-crisis-study

4.2.3 Our updated assessment shows there are 6.3 million properties in England in areas at risk of flooding from rivers, the sea or surface water. When we account for the latest climate projections, one in four properties could be in areas at risk of flooding by the middle of the century.

Source: Environment Agency "Environment Agency publishes major update to national flood and coastal erosion risk assessment" [press release] 17.10.24

https://www.gov.uk/government/news/environment-agency-publishes-major-update-to-national-flood-and-coastal-erosion-risk-assessment#:~:text=Environment%20Agency%20publishes%20major%20update%20to%20national%20flood%20and%20coastal%20erosion%20risk%20assessment,-Data%20shows%206.3&text=The%20Environment%20Agency%20has%20today,the%20sea%20and%20surface%20water.

4.3 Property Damage

4.3.1 The Environment Agency has today (Tuesday 17 December) published new data showing 6.3 million properties across England are based in areas at risk of flooding from one or a combination of rivers, the sea and surface water.

Source: Environment Agency "Environment Agency publishes major update to national flood and coastal erosion risk assessment" [press release] 17.10.24

https://www.gov.uk/government/news/environment-agency-publishes-major-update-to-national-flood-and-coastal-erosion-risk-assessment#:~:text=Environment%20Agency%20publishes%20major%20update%20to%20national%20flood%20and%20coastal%20erosion%20risk%20assessment,-Data%20shows%206.3&text=The%20Environment%20Agency%20has%20today,the%20sea%20and%20surface%20water.

4.3.2 The Environment Agency has used cutting-edge methods to create new, bespoke software to integrate detailed local flood risk models – both its own and those of local authorities – into a national picture. For the first time, both NaFRA and NCERM account for the latest UK climate projections from the Met Office. These updated assessments provide a clearer understanding of flood risk around the country and the data will be used by the government, Environment Agency and local communities to plan for and improve flood resilience in areas at risk. The data shows that a total of 6.3 million properties in England are in areas at risk of flooding from one or a combination of rivers, the sea and surface water. Around 4.6 million of those properties are in areas at risk of flooding from surface water, where there is so much rainwater that drainage systems are overwhelmed, causing surface water runoff, also known as flash flooding. This is a 43% increase on the Environment Agency's previous assessment. These changes are almost entirely due to significant improvements in the Environment Agency's data, modelling and use of technology providing a more accurate assessment of surface water

flood risk. Around 2.4 million properties are in areas at risk of flooding from rivers and the sea. While the total number of properties at risk is not increasing, there is an 88% increase in the number of properties at the highest levels of risk, where an area has a greater than one in 30 chance of flooding in any given year. There are a variety of reasons for this change in risk, the most notable being improved data and modelling methods for assessing the likely frequency of flooding.

Source: Environment Agency "Environment Agency publishes major update to national flood and coastal erosion risk assessment" [press release] 17.10.24

https://www.gov.uk/government/news/environment-agency-publishes-major-update-to-national-flood-and-coastal-erosion-risk-assessment#:~:text=Environment%20Agency%20publishes%20major%20update%20to%20national%20flood%20and%20coastal%20erosion%20risk%20assessment,-Data%20shows%206.3&text=The%20Environment%20Agency%20has%20today,the%20sea%20and%20surface%20water.

4.3.3 More than 10,000 people were evacuated from homes and properties, with hundreds being made homeless as towns and cities across the country were ravaged by Storm Babet, causing at least £500 million of property damage.

Source: HM Coastguard. "'A risk to life': Remembering Storm Babet one year on" HM Coastguard 18.10.24 https://hmcoastguard.uk/news/risk-life-remembering-storm-babet-one-year

4.3.4 According to an Environment Agency report published in December, 6.3 million homes and businesses in England are now in areas at risk of flooding, up from 5.5 million in 2018. By the middle of the century, the number of properties at risk is expected to rise to eight million — one in every four homes in the country.

Source: Spencer, Ben. "We've failed to stop climate change — this is what we need to do next." The Times 6.3.25

https://www.thetimes.com/uk/environment/article/climate-change-adaptation-decarbonisation-times-earth-93jln78vd?

4.4 Coastal Erosion

"The Environment Agency has also updated the National Coastal Erosion Risk Map (NCERM) for the first time since 2017. This provides the most up to date national picture of the current and future coastal erosion risk for England using the best available evidence from the National Network of Regional Coastal Monitoring Programmes."

Source: Environment Agency "Environment Agency publishes major update to national flood and coastal erosion risk assessment" [press release] 17.10.24

https://www.gov.uk/government/news/environment-agency-publishes-major-update-to-national-flood-and-coastal-erosion-risk-assessment#:~:text=Environment%20Agency%20publishes%20major%20update%20to%20national%20flood%20and%20coastal%20erosion%20risk%20assessment,-Data%20shows%206.3&text=The%20Environment%20Agency%20has%20today,the%20sea%20and%20surface%20water.

4.5 Rising House Insurance

Dr Ellie Murtagh, UK Climate Adaptation Lead, British Red Cross "Storms and flooding had caused weather-related home insurance claims in the UK to rise by over a third, reaching a record-breaking £573m worth of claims. One in seven people do not have insurance, with many saying they are unable to afford it."

Source: Carrington, Damian "Never-ending" UK rain made 10 times more likely by climate crisis, study says." 22.05.24

https://www.theguardian.com/world/article/2024/may/22/never-ending-uk-rain-10-times-more-lik ely-climate-crisis-study

4.6 Pests

The UK is very vulnerable to pests and diseases arriving through the horticulture trade, particularly as climate breakdown brings warmer and more humid temperatures enjoyed by insects and diseases."

Source: Horten, Helena "Colombian tree frog found by Sheffield florist highlights invasive species threat." The Guardian, 17.01.25

https://www.theguardian.com/environment/2025/jan/17/colombian-tree-frog-sheffield-florist-invas ive-species-threat

4.7 Food insecurity

Numbers of hungry and malnourished households in the UK are on the rise because of climate breakdown and inflation, government figures show, with poorer, younger and disabled people hit hardest.

Source: Horten, Helena "Food insecurity rising in UK because of climate breakdown, Defra report finds." The Guardian, 11.12.24

https://www.theguardian.com/environment/2024/dec/11/food-insecurity-rising-uk-climate-breakd own-inflation-brexit-defra-report#:~:text=Food%20insecurity%20rising%20in%20UK%20becaus e%20of%20climate%20breakdown%2C%20Defra%20report%20finds,-This%20article%20is&text=Numbers%20of%20hungry%20and%20malnourished,and%20disabled%20people%20hit%20hardest.

4.8 Rising Inflation and Increases to the Cost of Living

4.8.1 The impacts of COVID, conflict, and climate change have driven consumer prices higher around the world, increasing the cost of living. As a result, there were an estimated 12,500 protests across 148 countries during 2022. The UK faced regular strikes over pay and working conditions. Climate change impacts will continue to worsen driving climate-related increases in cost-of-living in the UK and internationally. These impacts can be directly experienced by consumers, such as crop failures driving up food prices. They can also be indirect, such as flood-induced infrastructural damage and productivity losses.

Behrens, Paul. The Impact of Climate Change on UK Cost of Living: a Report for Scientists Warning Europe, 2023, https://www.scientistswarningeurope.org.uk/cost-of-living.

4.8.2 Laurie Laybourn, Director of the Strategic Climate Risks Initiative. It's not just storms and heatwaves that we need to worry about, it's that those storms and

heatwaves smash up the food supply and lowered harvests increase food prices. They also increase the cost of fertiliser, which further increases prices. That then cascades into higher overall inflation, which itself then influences politics.

Source: Spencer, Ben. "We've failed to stop climate change — this is what we need to do next." The Times 6.3.25

https://www.thetimes.com/uk/environment/article/climate-change-adaptation-decarbonisation-times-earth-93jln78vd?

4.9 Drought

A new report has revealed how the 100 most populated cities globally are becoming increasingly exposed to flooding and drought. The <u>study</u>, led by WaterAid with academics from the University of Bristol and Cardiff University, shows widespread drying throughout European cities including the Spanish capital Madrid, which was ranked second among the 49 drying cities, and UK capital London, ranked 44th.

Source: University of Bristol, "Pioneering research ranks world's most populated cities for flood and drought risk." [press release] 12.03.25

https://www.bristol.ac.uk/cabot/news/2025/drought.html#:~:text=Hotspots%20of%20heightened%20risk%20comprised,and%20Addis%20Ababa%20in%20Ethiopia.

4.10 Health Impacts

4.1.1 The climate emergency is a health emergency. Climate change threatens the foundations of good health, with direct and immediate consequences for our patients, the public and the NHS. The situation is getting worse, with nine out of the 10 hottest years on record occurring in the last decade and more than 2,500 people killed by heatwaves across the UK in 2020. Without accelerated action there will be increases in the intensity of heatwaves, more frequent storms and flooding, and increased spread of infectious diseases such as tick-borne encephalitis and vibriosis.

Source: NHS England. "Health and climate change"

https://www.england.nhs.uk/greenernhs/national-ambition/national-commitments/

4.1.2 Climate change is a major threat to human health and wellbeing in the UK. Its far-reaching impacts can be seen in various ways, from direct effects like rising temperatures and increased flooding, to indirect consequences such as food and water scarcity, and reduced air quality. Vulnerable populations, including those with pre-existing conditions, the elderly, and underprivileged communities, are likely to be worst affected.

Source: UK Health Security Agency. "How does climate change threaten our health." 11.12.23 https://ukhsa.blog.gov.uk/2023/12/11/11-things-to-know-about-the-health-effects-of-climate-change-report/

4.1.3 Climate change is making more areas prone to flooding, including those previously not at risk. Heavier rainfall and rising sea levels contribute to this threat. Flooding endangers lives and can have long-lasting negative impacts on mental health, risk of infectious diseases, and access to healthcare services."

Source: UK Health Security Agency. "How does climate change threaten our health." 11.12.23

https://ukhsa.blog.gov.uk/2023/12/11/11-things-to-know-about-the-health-effects-of-climate-chan ge-report/

4.11 Economic Instability

4.1.1 Half (48%) of all UK businesses have reported being impacted by the effects of climate change, with 52% of those reporting that their ability to do business has been impacted by extreme weather events, according to new research by global risk management and insurance broker, Gallagher...The most common effect of climate change on British business are disruption from extreme weather events, including flooding, storms and heatwaves (52%), followed by climate change related increased operating costs (47%), supply chain issues (39%) and physical damage (35%). The research by Gallagher found that 15% of businesses have already moved premises due to climate change, while 16% have been forced to change their business model.

The sectors facing the greatest pressures from climate change include hospitality and tourism (57%), banking and finance (53%) and retailers / FMCG firms (50%), demonstrating a significant threat to the UK's service-based economy.

Source: Gallagher. "Half of UK businesses already impacted by climate change." Gallagher, 26.04.23

https://www.ajg.com/uk/news-and-insights/half-of-uk-businesses-already-impacted-by-climate-c hange/

4.1.2 Headline findings

- [a] Under current policies, the total cost of climate change damages to the UK are projected to increase from 1.1% of GDP at present to 3.3% by 2050 and at least 7.4% by 2100.
- [b] Strong global mitigation action could reduce the impacts of climate change damages to the UK from 7.4% to 2.4% of GDP by 2100.
- [c] The greatest risk to the UK under current policies is from catastrophic disruption to the global economic system.
- [d] Proactive investment in adaptation measures such as coastal protection has the potential to reduce the risk of climate-related damages.
- [e] There are strong economic reasons for the drive to net-zero: the benefits from mitigation exceed the costs at the global level in the second half of the century; there are significant co-benefits; and there is potential for boosting economic activity through investment." Source: Rising J, Dietz S, Dumas M, Khurana R, Kikstra J, Lenton T, Linsenmeier M, Smith C, Taylor C, Ward B (2022) What will climate change cost the UK? Risks, impacts and mitigation for the netzero transition. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science. p.1 https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/05/What-will-climate-change-c

ost-the-UK-risks-impacts-mitigation-1.pdf

[f] Climate change poses numerous threats to society, including risks to the food system, biodiversity, infrastructure and human health. Through various impact channels, the term we use to describe particular pathways through which it can affect human welfare, climate change

undermines and disrupts crucial sectors of the economy, incurring significant costs to business, investors and households.

Source: Rising J, Dietz S, Dumas M, Khurana R, Kikstra J, Lenton T, Linsenmeier M, Smith C, Taylor C, Ward B (2022) What will climate change cost the UK? Risks, impacts and mitigation for the netzero transition. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science. p.1 https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2022/05/What-will-climate-change-c

4.12 Political Instability

ost-the-UK-risks-impacts-mitigation-1.pdf

"Climate effects are exacerbating long-term wealth inequality with poorer UK households more vulnerable to temperature shocks and air pollution and flooding, a study has found. Rising temperatures have been found to have statistically significant impacts on all measures of wealth inequality in the long term with this being particularly noticeable between the wealthiest 10% and the poorest 10%."

Source: Halpen, Danny. "Climate change exacerbating UK wealth inequality, study suggests." The Standard 1.6.23

https://www.standard.co.uk/news/environment/climate-office-of-national-statistics-south-africa-g ermany-b1085019.html

"Police have said climate activists' daily slow march protests through London have cost them millions of pounds and thousands of officer hours in the past six weeks. As MPs prepared on Monday to debate new police powers to curtail the Just Stop Oil demonstrations, the Metropolitan police said maintaining order around them had cost more than £4.5m and the equivalent of almost 13,770 officer shifts. Since the end of April, Just Stop Oil's supporters have been causing rush-hour tailbacks by staging daily go-slow protest marches in the capital, alongside disruptive protests at high-profile sporting and cultural events. They have said they will wage "an indefinite campaign of civil resistance" using the tactic until the government agrees to its demand of a moratorium on new oil and gas projects. "In deploying the new tactics of moving slowly in front of traffic along highways, Just Stop Oil's intent has been clear on disrupting road users," said the deputy assistant commissioner Ade Adelekan. "This has caused significant impact to the public and officers have been responding as swiftly as possible once aware of the incidents." Gayle, Damien "Met says Just Stop Oil protests have cost it more than £4.5m in six weeks" The Guardian 12.6.23

https://www.theguardian.com/uk-news/2023/jun/12/met-police-just-stop-oil-protests-cost-millions-pounds

Appendix

[A] Public Nuisance

The definition of Public Nuisance according to Police, Crime, Sentencing and Courts Act of 2022 6 Section 78

Intentionally or recklessly causing public nuisance

- (1) A person commits an offence if—
- (a) the person—
- (i) does an act, or
- (ii) omits to do an act that they are required to do by any enactment or rule of law,
 - (b) the person's act or omission—
- (i) creates a risk of, or causes, serious harm to the public or a section of the public, or
- (ii) obstructs the public or a section of the public in the exercise or enjoyment of a right that may be exercised or enjoyed by the public at large, and
- (c) the person intends that their act or omission will have a consequence mentioned in paragraph (b) or is reckless as to whether it will have such a consequence.
- (2) In subsection (1)(b)(i) "serious harm" means—
 - (a) death, personal injury or disease,
 - (b) loss of, or damage to, property, or
 - (c) serious distress, serious annoyance, serious inconvenience or serious loss of amenity.
- (3) It is a defence for a person charged with an offence under subsection (1) to prove that they had a reasonable excuse for the act or omission mentioned in paragraph (a) of that subsection.
- (4) A person guilty of an offence under subsection (1) is liable—
 - (a) on summary conviction, to imprisonment for a term not exceeding [F1 the general limit in a magistrates' court], to a fine or to both;
 - (b) on conviction on indictment, to imprisonment for a term not exceeding 10 years, to a fine or to both.
- (5) In relation to an offence committed before the coming into force of paragraph 24(2) of Schedule 22 to the Sentencing Act 2020 (increase in magistrates' court power to impose imprisonment) the reference in subsection (4)(a) to [**F2** the general limit in a magistrates' court] is to be read as a reference to 6 months.
- (6) The common law offence of public nuisance is abolished.
- (7) Subsections (1) to (6) do not apply in relation to—
 - (a) any act or omission which occurred before the coming into force of those subsections, or
 - (b) any act or omission which began before the coming into force of those subsections and continues after their coming into force.
- (8) This section does not affect—
 - (a) the liability of any person for an offence other than the common law offence of public nuisance,
 - (b) the civil liability of any person for the tort of public nuisance, or
 - (c) the ability to take any action under any enactment against a person for any act or omission within subsection (1).

(9) In this section "enactment" includes an enactment comprised in subordinate legislation within the meaning of the Interpretation Act 1978.