

DEFUSING CARBON BOMBS

How climate due diligence can put an end to European companies' involvement in projects that trigger climate catastrophe



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INTRODUCTION

Rising investments in fossil fuels in times of climate emergency

The climate crisis is one of the most pressing issues humanity faces today. The world is already grappling with the devastating impacts of global warming, encompassing extreme weather events, rising sea levels, and the displacement of millions of people from their homes. The Paris Agreement, an international accord aimed at addressing the climate crisis, commits states to reduce emissions as well as reporting and monitoring their progress. Notably, the Paris Agreement and other international environmental and climate conventions currently do not extend to corporations and non-state entities, even though they are responsible for most of a country's emissions.

Among all sectors, the fossil fuel industry and supporting financial institutions bear a significant responsibility, with a mere **100 companies contributing to 71% of global GHG emissions** between 1998 and 2015.¹

¹ Just 100 companies responsible for 71% of global emissions, study says, The Guardian, 2017
<https://www.theguardian.com/sustainable-business/2017/jul/10/100-fossil-fuel-companies-investors-responsible-71-global-emissions-cdp-study-climate-change>

Fossil fuel investments exceeded **\$850 billion annually** in 2019/2020.

Instead of implementing emission reduction plans, fossil fuel corporations continue to expand their operations. Between 2019 and 2020, fossil fuel investments surpassed those designated for climate change adaptation and mitigation. Fossil fuel investments exceeded \$850 billion annually in 2019/2020.² In stark contrast, \$46 billion was allocated for global climate adaptation efforts, and \$571 billion for mitigation of which only \$334 billion went to energy systems.³ Based on the announced expenditure plans of large and medium-sized fossil fuel companies, the International Energy Agency (IEA) estimates that investments in hydrocarbon supply will rise compared to previous years, reaching \$950 billion in 2023.⁴

This trend extends to European financial institutions, which emerge as major financiers in the world's most environmentally damaging industry. Crédit Agricole (France), UBS (Switzerland), Legal & General (United Kingdom), Deutsche Bank (Germany), and the Norwegian GPFG top the list of investors. Collectively, they hold over €118 billion in fossil fuel bonds and shares based on data from January 2023.⁵

This has devastating impacts on our climate. Even the International Energy Agency (IEA), emphasises in its net-zero scenario that new investments in coal, fossil gas or oil extraction must cease to achieve the goal of limiting global warming to 1.5°C.⁶ Continued extraction from existing fossil fuel projects alone risks overshooting the 1.5°C target as was demonstrated by a peer-reviewed study from 2022.⁷ Using the latest IPCC figures, climate scientists warn that limiting global warming to approximately 1.5°C necessitates global greenhouse gas emissions to halve by 2030. To achieve this, fossil fuel production must fall by around 40% over this decade.⁸

Halting the expansion of oil and gas extraction is a climate imperative but in actual fact, fossil fuel extraction is not just continuing, it is even expanding.

2 Based on average investment numbers on upstream and downstream oil & gas, coal mining and related infrastructure and fossil fuel power generation in 2019/2020 in IEA's World Energy Investment 2021 report – cited in CPI (2021) Global Landscape of Climate Finance 2021 report <https://www.climatepolicyinitiative.org/wp-content/uploads/2021/10/Full-report-Global-Landscape-of-Climate-Finance-2021.pdf>

3 CPI (2021) Global Landscape of Climate Finance 2021 report <https://www.climatepolicyinitiative.org/wp-content/uploads/2021/10/Full-report-Global-Landscape-of-Climate-Finance-2021.pdf>

4 Overview and key findings, World Energy Investment 2023, IEA <https://www.iea.org/reports/world-energy-investment-2023/overview-and-key-findings>

5 Investing in Climate Chaos, Urgewald 2023 <https://investinginclimatechaos.org/media/pages/reports/4377839a28-1693208616/urgewald-pr-icc-august2023.pdf>

6 Net Zero by 2050 A Roadmap for the Global Energy Sector, IEA, 2021 (page 20, 39) https://iea.blob.core.windows.net/assets/deebef5d-0c34-4539-9d0c-10b13d840027/NetZeroBy2050-ARoadmapfortheGlobalEnergySector_CORR.pdf

7 Existing fossil fuel extraction would warm the world beyond 1.5 °C <https://iopscience.iop.org/article/10.1088/1748-9326/ac6228>. A recent update corrected the figures from 2022, which estimated that 40% of fossil fuels must remain in the ground to 60%, see <https://priceofoil.org/2023/08/16/skys-limit-data-update-shut-down-60-of-existing-fossil-fuel-extraction-to-keep-1-5c-in-reach/>

8 Climate Analytics. 2030 targets aligned to 1.5°C. Evidence from the latest global pathways, June 2023 https://climateanalytics.org/media/2030_targets_for_1-5_1.pdf The evidence is clear: the time for action is now. We can halve emissions by 2030, IPCC, 2022 <https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/>

The latest IPCC report asserts that surpassing the 1.5°C threshold would yield catastrophic impacts on many parts of the world. The current 1.1°C additional warming, beyond pre-industrial levels, has triggered changes in the atmosphere, hydrosphere, cryosphere and biosphere. These shifts have already caused substantial losses and damage to both nature and people as the effects ripple through biodiversity, water resources, sea levels, food security, poverty, extreme weather events, and livelihoods. Rising sea levels increasingly imperil coastal regions, while more frequent extreme weather events lead to food scarcity, loss of livelihood and culture, and involuntary migration and displacement of people worldwide. These adverse impacts will only escalate, exemplified by Europe's record-breaking 2022 summer, characterised by extreme heat, diminished river flows, and extensive wildfire damage.^{9,10}

This report delves into one of the most severe examples of fossil fuel extraction: the so-called carbon bomb projects. These large-scale fossil fuel projects possess the potential to release over one gigaton of carbon dioxide (GtCO₂) each upon combustion (these types of emissions are referred to as Scope 3 emissions). In a 2022 peer-reviewed research article, 425 oil, gas and coal carbon bomb projects globally were identified, potentially releasing a staggering 1,182.3 GtCO₂ emissions.¹¹ To contextualise, the IPCC reports that the remaining carbon budget for a 50% probability of limiting global warming to 1.5°C is estimated at approximately 500 GtCO₂. For a 2°C scenario, this figure stands at 1150 GtCO₂. Thus, extracting and burning these megaproject reserves would exhaust not only the 1.5°C but also the 2°C carbon budgets.¹²

This report aims to highlight the urgent need to halt these projects, and the fact that an overwhelming majority of them are located outside of Europe must not be an excuse for inaction. European corporations are financing and operating these carbon bomb projects, reaping profits in the process. A 2020 dataset reveals that 58% of the EU's energy was imported.¹³

The EU holds a pivotal role in defusing carbon bombs by enforcing robust, **legally binding obligations** on companies operating within its market.



These obligations should involve monitoring climate risks across their operations and global value chains and mitigating these risks through a process termed “climate due diligence.”¹⁴

The EU should oblige companies to put in place credible transition plans with concrete, absolute emissions reduction targets in line with the Paris Agreement. A key obligation of the transition plans should be to stop developing or supporting new fossil fuel projects and therefore carbon bombs. These requirements should be integrated into the Corporate Sustainability Due Diligence Directive (CSDDD) under negotiation to ensure European corporations and financial institutions contribute to the achievement of the Paris Agreement, rather than undermining its objective. This would make sure the EU's efforts to reduce its own emissions are not undercut by production of CO₂ from carbon bombs abroad.

9 Climate Change 2023, Synthesis Report, IPCC, 2023 (page 4-7)
https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf

10 European State of the Climate Summary 2022 (page 6)
https://climate.copernicus.eu/sites/default/files/custom-uploads/ESOTC2022/PR/ESOTCSummary2022_final.pdf

11 Kühne et al.: “Carbon Bombs” - Mapping key fossil fuel projects, 2022
<https://www.sciencedirect.com/science/article/pii/S0301421522001756>

12 Climate Change 2023, Synthesis Report, IPCC, 2023 (page 82)
https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf

13 Infographic - Where does the EU's energy come from? European Council, 2022
<https://www.consilium.europa.eu/en/infographics/where-does-the-eu-s-energy-come-from/>

14 Climate Due Diligence should cover the identification (Art. 6), prevention or mitigation (Art. 7), and resolution (Art. 8) of any adverse environmental impacts.

The Role of EU Companies in Carbon Bomb Projects

The CSDDD applies to companies operating within the EU market that exceed a specified threshold for size, based on employee count and annual turnover, with exact figures still being subject to debate. This legislation empowers the EU to exert influence not only over EU-based corporations but also over non-EU entities significantly engaged in the internal market. We term these entities “EU market companies” and the report aims to find out how many of them were involved in carbon bombs.

Leveraging publicly accessible data in collaboration with LINGO,¹⁵ we discovered that out of the 425 globally identified carbon bombs, **EU market companies are linked to at least 107** of them.¹⁶ Among these, 42 companies are identified by name, from which 19 are financiers.¹⁷

See more about the analysis in the methodology section. The cumulative potential emissions from these 107 carbon bomb projects, when their fossil fuels are extracted and burnt (Scope 3), amount to 333.9 gigatons of CO₂.¹⁸ To put this into perspective, it's nine times the total fossil fuels emissions recorded in 2021 (37.12 Gt) and even surpasses the combined emissions from fossil fuels between 2013 and 2021 - the top nine years in terms of CO₂ emissions in recorded history (324.3 Gt).¹⁹

Considering data limitations on business ties, these numbers are only the very tip of the iceberg. Actual carbon bomb numbers and corporate and financial sector involvement in fossil fuel extraction projects are likely to be much higher.

It is vital to recognise that fossil fuel companies' involvement in carbon bomb extraction does not necessarily imply full ownership of projects; often, companies hold a minority stake. Similarly, financial entities involved in carbon bomb projects may not directly finance extraction but provide indirect or hidden financial support to fossil fuel companies involved in carbon bomb development.²⁰ In both cases, they contribute to unlocking fossil fuel reserves, which, in alignment with the Paris Agreement, should stay in the ground.

Meanwhile, the European Union has set a target of reducing greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels.²¹ According to an EU Commission projection, this would allow the 27 member states to emit 19.94 GtCO₂e (gigatons of CO₂ equivalent) between 2021 and 2030 to achieve this reduction target.²² This figure appears minor compared to the 333.9 Gt of Scope 3 CO₂ emissions that EU market companies unlock.

To understand the responsibility of EU market corporations, we closely examined several highly involved companies in these projects, as shown in Figure 1.

15 Leave it in the Ground Initiative, LINGO, <https://www.leave-it-in-the-ground.org/>

16 List of Carbon Bomb Companies in the EU Market, Leave it in the Ground Initiative, 2023

<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-List-of-Carbon-Bomb-Companies42.xlsx>

17 EU market companies only involved in investments of Russian carbon bombs were excluded from this research. There is an excessive list of these companies published in August 2022. Given the political climate of the Russian invasion of Ukraine, there is a chance that these companies stepped back from their investments. See more: <https://www.leave-it-in-the-ground.org/resources/investors-in-russian-carbon-bombs/>

18 Summary of Scope 3 Emissions from EU Carbon Bomb Companies, Leave it in the Ground Initiative, 2023

<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Summary-of-Scope-3-Emissions.xlsx>

19 CO₂ emissions, Our World in Data, <https://ourworldindata.org/co2-emissions>

20 Europe's banks helped fossil fuel firms raise more than €1tn from global bond markets, September 26 2023

<https://www.theguardian.com/business/2023/sep/26/europes-banks-helped-fossil-fuel-firms-raise-more-than-1tn-from-global-bond-markets>

21 2030 Climate Target Plan, European Commission Official website

https://climate.ec.europa.eu/eu-action/european-green-deal/2030-climate-target-plan_en

22 EUR-Lex - 32020D2126, Annex II, EUR-Lex official website

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2020.426.01.0058.01.ENG

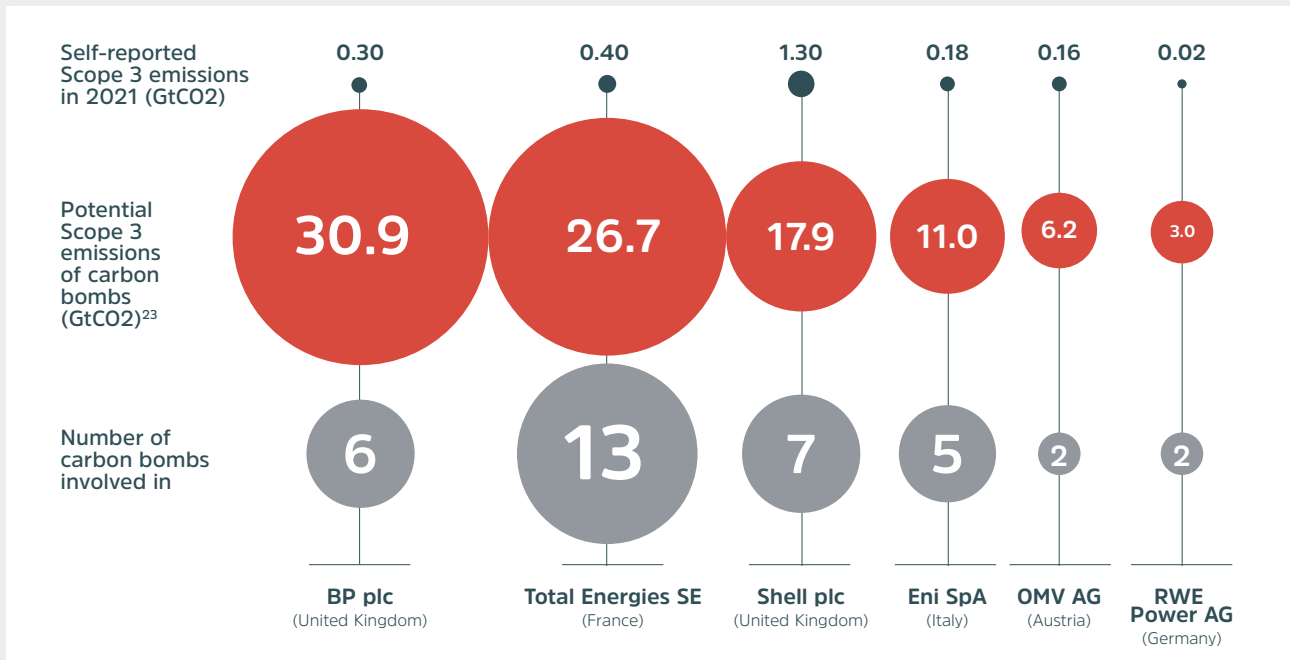


Figure 1. Selected energy companies in the European market and their involvement in carbon bomb projects (Source: [Company Factsheets](#))

Leading the list, BP plc (United Kingdom), a multinational oil and gas company operating in over 70 countries, contributes to a staggering potential Scope 3 emissions of 30.9 Gt CO₂ across its involvement in 6 carbon bomb projects. This surpasses the combined fossil fuel-related CO₂ emissions of Asia (21.69 GtCO₂), Africa (1.45 GtCO₂), Europe (5.31 GtCO₂), and South America (1.07 GtCO₂) in 2021.²⁴ Total Energies SE, headquartered in France, is involved in 13 carbon bombs, projecting a potential Scope 3 emissions of 26.7 GtCO₂. Shell plc, a global group of energy and petrochemical companies that recently moved its headquarters from the Netherlands to the United Kingdom,²⁵ is involved in the development of 7 carbon bombs that could potentially emit 17.9 GtCO₂ (Scope 3).²⁶

Meanwhile, the Italian Eni SpA's involvement in 5 carbon bomb projects amounts to a potential 11.0 GtCO₂ emissions, while OMV AG (Austria) and RWE Power AG (Germany) each participate in 2 projects, contributing to 6.2 GtCO₂ and 3.0 GtCO₂, respectively.

Furthermore, the research unveils the staggering contribution of European financial institutions.²⁷ BNP Paribas, a multinational bank headquartered in France, directly or indirectly provides fund for 59 carbon bombs with an estimated emissions potential of 216.9 GtCO₂. The German Deutsche Bank directly or indirectly finances 83 carbon bombs with an estimated potential emissions of 272.3 GtCO₂.

It is crucial to understand the magnitude of these emissions and the impact they have on our planet. Despite the EU's commitments under the Paris Agreement and the European Green Deal (EGD), EU market companies continue to rake in mega-profits through carbon bomb projects, undermining EU and international climate objectives. If we want to have even a ray of hope to keep global warming below 1.5°C, we must start by preventing EU market companies from destroying our planet. Any new fossil fuel extraction must cease immediately. It is therefore crucial that halting new fossil fuel projects is part of the climate due diligence obligations.

23 Some of the companies are involved in the same carbon bombs. Thus the emissions cannot be combined directly.

24 CO₂ emissions, Our World in Data, <https://ourworldindata.org/co2-emissions>

25 Despite the fact that Shell's headquarter is in the United Kingdom, due to its annual turnover in the EU market, it is covered by CSDDD's scope.

26 EU Companies Involved in Carbon Bombs - Company Factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>

27 EU Companies Involved in Carbon Bombs - Company factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>

EU Corporations Driving Environmental Disaster and Social Conflicts

Illustrating carbon bomb projects made possible by corporations in the EU, our research examines 5 projects that receive financing and partial ownership from EU market companies. See the details of these projects in [this document](#).

- 1 Athabasca Oil Sands Project (Canada):** Labelled as the “world’s most destructive oil operation” by National Geographic in 2019.²⁸ This project could potentially emit 1.36 GtCO₂ if fully extracted and burnt. Companies like Shell plc, Total Energies SE, BNP Paribas, Crédit Agricole, and Intesa Sanpaolo all finance or invest in this project, with 15 EU market financiers identified.²⁹
- 2 El Sharara Oil Field (Libya):** This project, with a potential Scope 3 emissions of 1.01 GtCO₂, began extraction in 1996. Since 2011 the operation has been interrupted multiple times due to environmental concerns and local conflict.^{30,31} Notably, 4 of the 5 project owners are EU market companies. See the complete list of owners and EU financiers [here](#).
- 3 Kashagan Carbon Bomb Project (Kazakhstan):** Owned by corporations like Eni SpA, Exxon Mobil Corporation, and Shell plc, this project in Kazakhstan’s North Caspian Sea could emit 5.09 GtCO₂ through its oil and gas condensate reserve. The distinct chemical composition of Kashagan crude, composed of significant levels of sulphur and other harmful pollutants like mercaptans, combined with challenging exploration conditions such as high oil pressure, an offshore location, and a harsh climate, poses dire consequences for the Caspian Sea ecosystem and communities.³²
- 4 Troll Oil and Gas Field (North Sea):** Located approximately 65 km from Norway’s shoreline, the Troll field, operated by Equinor ASA, faces potential new drilling despite the company’s seemingly ambitious climate goals.³³ Equinor ASA states that it is “likely that new wells will be drilled” and new infrastructure will be installed on the field.³⁴ Burning the extracted fossil fuel could lead to emissions of 1.77 GtCO₂.
- 5 Vaca Muerta Shale (Argentina):** Encompassing around 30,000 square kilometres - roughly the size of Belgium - this Argentine oil and gas field was named the quickest-growing shale play in 2021.³⁵ In addition to being a massive greenhouse gas emission emitter, it is known for documented public health violations and indigenous rights violations.³⁶ The main extraction method used in the project, fracking, has been banned or strictly regulated in many countries due to its destructive character and its devastating effects on human health and nature.³⁷ The potential emissions from burning the extracted fossil fuels are estimated to reach 5.18 GtCO₂. PB plc, Equinor ASA, Shell Plc, and Total Energies SE are among the many EU market companies that own parts of the project.

28 This is the world’s most destructive oil operation—and it’s growing, 2019
<https://www.nationalgeographic.com/environment/article/alberta-canadas-tar-sands-is-growing-but-indigenous-people-fight-back>

29 EU CSDDD - Carbon Bomb Factsheets, Leave it in the Ground Initiative, 2023
<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Carbon-Bomb-Factsheets.pdf>

30 Conflict in Libya since 2011 civil war has resulted in inconsistent crude oil production, 2022
<https://www.eia.gov/todayinenergy/detail.php?id=53419>

31 Libyan El Sharara oilfield in shutdown from pollution protest, Reuters, 2018
<https://www.reuters.com/article/libya-oil-elsharara-idINKBN1GG0UO>

32 ashagan oil field development Kazakhstan, Friends of the Earth Europe, 2007
https://www.foeeurope.org/sites/default/files/publications/foee_kashagan_oil_field_development_1207.pdf

33 Greenwashing Files: Equinor, 2021
<https://www.clientearth.org/projects/the-greenwashing-files/equinor/>

34 Highly profitable Troll phase 3 project on stream, Equinor official website, 2021
<https://www.equinor.com/news/archive/20210830-troll-phase-3>

35 Vaca Muerta is the World’s Quickest Growing Shale Play, 2021
<https://energy-analytics-institute.org/2021/09/29/vaca-muerta-is-the-worlds-quickest-growing-shale-play/>

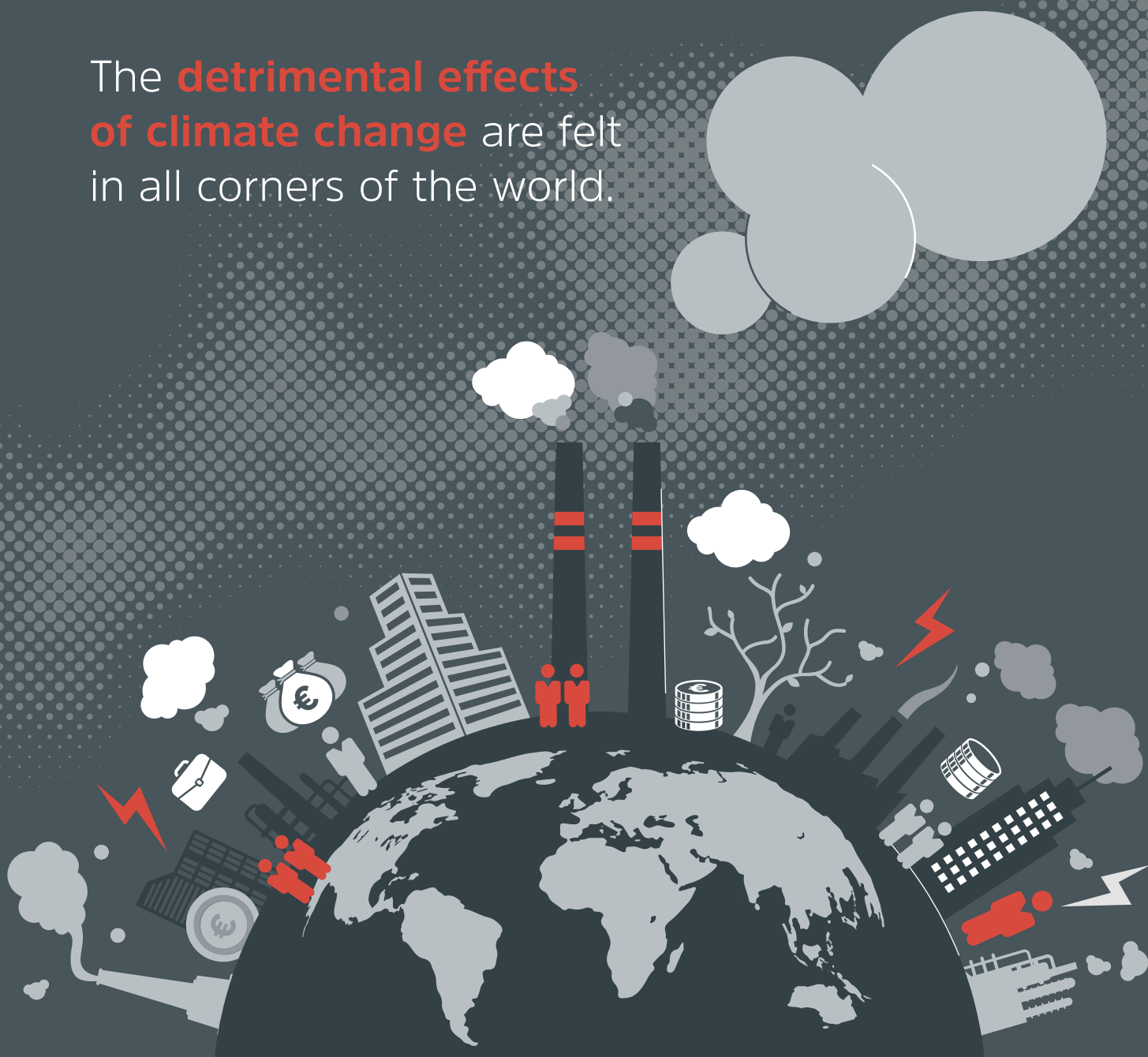
36 UN Spotlight on Impacts of Argentina’s Vaca Muerta Fracking Project on Indigenous Rights and Climate Change, 2017
<https://www.ciel.org/news/un-spotlight-impacts-argentinass-vaca-muerta-fracking-project-indigenous-rights-climate-change/>

37 Vaca Muerta Megaproject, A fracking carbon bomb in Patagonia, 2017
<https://www.boell.de/sites/default/files/megaproject.pdf>

As we grapple with the repercussions of climate change, exacerbated by emissions, its detrimental effects are felt in all corners of the world. A comprehensive study conducted in 2022 concluded that the ramifications of fossil fuel industries and their activities and products extend far beyond fuelling the climate crisis.³⁸ These industries also play a significant role in generating massive human and economic costs on a worldwide scale, thereby undermining all 17 of the UN's Sustainable Development Goals.

Extraction of carbon bombs epitomises extractivism that prioritises the economic growth of the Global North at the expense of countries in the Global South and local communities.³⁹ Indigenous communities often bear the brunt of these extractions, notably visible in cases such as Vaca Muerta Shale. Upholding indigenous rights is crucial to CSDDD legislations.⁴⁰

The **detrimental effects of climate change** are felt in all corners of the world.



38 Fossil Fuels Are "Weapons Of Mass Destruction" Preventing Economic Development, New Report Finds, Forbes, 2022
<https://www.forbes.com/sites/davidrvetter/2022/06/01/fossil-fuels-are-weapons-of-mass-destruction-preventing-economic-development-new-report-finds/>

39 "Extractivism" is destroying nature: to tackle it Cop15 must go beyond simple targets, The Guardian, 2022
<https://www.theguardian.com/environment/2022/dec/08/extractivism-is-destroying-nature-to-tackle-it-cop15-must-go-beyond-simple-targets>

40 Indigenous Mapuche pay high price for Argentina's fracking dream, The Guardian, 2019
<https://www.theguardian.com/environment/2019/oct/14/indigenous-mapuche-argentina-fracking-communities>

Enforcing Climate Responsibility through Due Diligence

The current moment presents a historic opportunity to defuse carbon bombs within EU supply chains through the implementation of a strong and effective climate due diligence (CDD) within the Corporate Sustainability Due Diligence Directive (CSDDD). CDD mandates companies across all sectors to continually identify and mitigate climate risks along their supply chains, prevent harm and report on their progress. This prompts companies to reevaluate involvement in carbon bombs and other mid or upstream fossil fuel projects, such as pipelines or refineries.

When a project involves fossil fuel extraction and combustion, CDD requires an assessment of predicted emissions throughout the extraction, transportation, and burning phases, in line with the EU's own commitment to reduce emissions by 55% in 2030. If projected emissions exceed what is considered to be in line with such established climate goals, the project may need to be altered or abandoned to reduce the impact. For financial institutions, effective CDD obligations would require them to terminate their investments or other financial support in the company.

CDD incentivises companies to adopt proactive sustainability approaches rather than simply continuing business as usual.

The CSDDD should oblige companies to formulate credible transition plans with specific goals for mitigating climate change with measurable short-term, mid-term, and long-term reduction targets in absolute terms. All scopes (1,2,3) of value chains must be included, which would make it impossible to justify investing in or financing new carbon bombs or expanding existing ones. A credible transition plan should include sector policies for carbon-intensive sectors, with exclusion measures on expansion of fossil fuel projects, and thus also end new carbon bombs.

Climate due diligence in the CSDDD should also allow stakeholders (such as investors, affected groups, and climate organisations) to challenge companies in court if they fail to make climate transition plans in line with the EU's own reduction targets or if they fail to implement plans that make them comply with these targets.

Existing corporate commitments are not sufficient. The Climate Action 100+ Net Zero Company Benchmark indicates that both Total Energies SE and Shell plc, two EU market companies heavily involved in carbon bomb projects, only partially meet the criteria for short- and medium-term GHG reduction targets. Their investments do not align with the Paris Agreement's 1.5°C goal.⁴¹

The Corporate Climate Responsibility Monitor 2023 concluded that most companies' climate pledges for 2030 fall well short of the necessary economy-wide emissions reductions required to stay below the 1.5°C limit.⁴²

The UN Office of the High Commissioner for Human Rights stresses the importance of climate-focused due diligence.^{43, 44, 45} They declare that states should ensure the private sector complies with climate change mitigation and adaptation goals with full respect for human rights. Financial sector actors including banks and investors also encourage climate-focused due diligence, recognising its importance in their investment processes. A private investor guide from PRI⁴⁶ highlights that investors consider it part of their trustees' duty to address climate-related risks during the investment process,⁴⁷ though this rarely happens in practice.

41 Climate Action 100+, Companies, official website
<https://www.climateaction100.org/whos-involved/companies/>

42 Corporate Climate Responsibility Monitor 2023, New Climate Institute, 2023
<https://newclimate.org/resources/publications/corporate-climate-responsibility-monitor-2023>

43 Human Rights, Climate Change and Business, UN OHCHR, 2023 (page 4, 7)
<https://www.ohchr.org/sites/default/files/Documents/Issues/ClimateChange/materials/KMBusiness.pdf>

44 Communication of UN experts about Aramco, 2023 <https://spcommreports.ohchr.org/TmSearch/RelCom?code=SAU%203/2023>

45 UN Working Group on Business and Human Rights publishes information note on climate change and the UNGPs, June 2023
<https://media.business-humanrights.org/media/documents/Information-Note-Climate-Change-and-UNGPs.pdf>

46 PRI, Principles for Responsible Investment, is an investor initiative in partnership with UNEP Finance Initiative and UN Global Compact.

47 A Guide on Climate Change for Private Equity Investors, PRI, 2016 <https://www.unpri.org/download?ac=274>

Gaps and loopholes in the current CSDDD

The EU's planned Corporate Sustainability Due Diligence Directive (CSDDD) aims to hold companies operating in the EU market accountable for human rights and environmental abuses across global value chains. Even though CSDDD could be a powerful tool to ensure companies reduce emissions as soon as possible and align their trajectories to meet national reduction targets, climate change is not sufficiently addressed in the draft proposal published by the Commission in February 2022.

The Commission's proposal for the CSDDD generally takes a weak stance on environmental harm, confining it to a narrow set of international environmental conventions. This omission creates several gaps, most notably in the case of climate change, as the list of conventions did not include the Paris Agreement. This exclusion means that the vast majority of the due diligence obligations outlined in the directive would not be applicable to companies' impacts on the climate.

Climate change must be explicitly incorporated as a key environmental risk category within the CSDDD.

It stands as one of the most paramount environmental challenges, in which business activities play a pivotal role, as underscored by the prevalence of carbon bomb projects. The emission of harmful greenhouse gases from fossil fuels burnt in carbon bomb projects highlights the imperative for companies to conduct climate risk due diligence. This involves identifying risks within their own operations, subsidiaries and global value chains and taking necessary actions to prevent and mitigate adverse impacts.

The Commission's stance contains one article on climate transition plans. The creation and implementation of climate transition plans constitute an important aspect of climate due diligence.

However, this article's effectiveness is compromised by its limitations. It solely applies to very large companies and only if they identify climate as a "principal risk". Notably, there is an absence of a defined methodology for determining what constitutes a principal risk. Additionally, the article only requires companies to "adopt" a plan, with no inclusion of criteria to ensure plan quality, or an obligation to implement these plans.

The CSDDD must incorporate specific criteria to ensure the robust implementation and quality of corporate transition plans.

The issue with voluntary commitments by companies is that they provide little to no accountability when it comes to the credibility and quality of the plans. This leads to a paradoxical situation where most of the companies in this research possess transition plans, yet simultaneously participate in the development of new carbon bomb projects.

These criteria should include short-, medium- and long-term targets for 2030 and progressing in five-year intervals up to 2050.

These targets should be credible, including halting fossil fuel expansions, and would serve to prevent companies from adopting distant 2050 objectives while concurrently pursuing emission-intensive carbon bomb projects in the short- and medium-term. Without these targets, companies have minimal prospects of achieving the necessary early reductions for meeting 2050 goals, thus averting the climate-delaying approach that persists across various sectors.

The criteria encompass emissions reduction objectives for Scope 1, 2 and particularly Scope 3 emissions.

The majority of projected emissions from carbon bomb projects originate from the burning of the fuels extracted by the consumers, constituting Scope 3. In the case of oil, gas and coal companies, GHG emissions from the extraction process (Scope 1) and indirectly from energy generation (Scope 2) contribute minimally to total emissions. Some estimations propose that Scope 3 emissions constitute over 70% of the total emissions for fossil fuel companies.⁴⁸ For example, Shell's 2021 Scope 1 and 2 emissions were 0.07 GtCO₂e, whereas its Scope 3 emissions were 1.30 GtCO₂e.⁴⁹ Shell's climate commitments include a 50% reduction by 2030 for Scope 1 and 2, but only a commitment to be "net zero" by 2050 for Scope 3.⁵⁰

In recent years, many companies have pledged to reduce their Scope 3 emissions. However, these promises often lack short-term reduction plans, comprehensive coverage of emissions, and transparency.⁵¹ The absence of concrete obligations for Scope 3 emission reduction targets enables companies to push ahead with more extraction, including carbon bomb projects.

48 What is the difference between Scope 1, 2 and 3 emissions, and what are companies doing to cut all three? World Economic Forum, 2022 <https://www.weforum.org/agenda/2022/09/scope-emissions-climate-greenhouse-business/>

49 Shell plc Annual Report and Accounts, 2021 (page 9, 89) https://reports.shell.com/annual-report/2021/_assets/downloads/shell-annual-report-2021.pdf

50 EU Companies Involved in Carbon Bombs - Company Factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>

51 Fossil-fuel company net zero plans "largely meaningless" report says, Reuters, 2023 <https://www.reuters.com/sustainability/fossil-fuel-company-net-zero-plans-largely-meaningless-report-2023-06-11/>

The criteria must prevent over-reliance on offsetting by requiring “absolute” emissions reduction targets.

Frequently, companies integrate so-called “offsets” into their emission reduction calculations, purchasing “carbon credits” to serve as substitutes for genuine emissions reductions. These credits correspond to carbon credit projects, such as those focused on preserving or planting forests as natural carbon sinks.

This approach, however, proves highly unreliable. The quality of carbon credit projects has been consistently questioned, highlighted in reports like “Chasing Carbon Unicorns”⁵². These projects lack regulation, are challenging to monitor, and frequently involve significant loopholes, over-claiming, and double counting.⁵³ Moreover, carbon credits are insufficient to offset emissions resulting from carbon bombs. Some estimates even suggest that if corporations continue using offsets without real emissions reductions, the required offsets by 2050 could be up to 160 times greater than those in 2020.⁵⁴ The maximum potential annual contribution of all offsets or “natural climate solutions” is projected to be around 10 GtCO₂.

When companies formulate targets by deducting these offsets from their total emissions, this can provide a distorted view of their real emissions reductions. The UN’s High-Level Expert Group on Net Zero, therefore, supports “absolute” or total emissions reduction targets, emphasising that intensity targets and offsets cannot be a substitute for companies “immediately cutting their own emissions across their value chain”.⁵⁵ Strengthening climate obligations in the CSDDD would establish corporate accountability for genuine emissions reductions over short- to medium-term durations across all operations and global value chains. This should make it impossible for companies to delay real climate action and press ahead with dangerous carbon bombs.

A push for strong and effective climate due diligence obligations of financial institutions and bringing the financial sector in line with key climate targets, such as the Paris Agreement, is equally crucial as the due diligence obligations for non-financial corporations. Without harnessing the power and potential of the financial sector we won’t succeed in averting climate disaster.

52 Chasing Carbon Unicorns: The Deception Of Carbon Markets and “Net Zero”, 2021 (page 14)
<https://www.foei.org/wp-content/uploads/2021/04/Friends-of-the-earth-international-carbon-unicorns-english.pdf>

53 Legal Risks of Carbon Offsets Briefing, Client Earth, 2022
<https://www.clientearth.org/media/lcvhm5uw/carbon-offsets-legal-risk-briefing.pdf>

54 Chasing Carbon Unicorns: The Deception Of Carbon Markets and “Net Zero”, 2021 (page 14)
<https://www.foei.org/wp-content/uploads/2021/04/Friends-of-the-earth-international-carbon-unicorns-english.pdf>

55 Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions, 2022 (Page 7, 17)
https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf

Towards Climate Accountability

We have a historic opportunity now to take this crucial step forward and introduce climate due diligence into the CSDDD Directive, thereby defusing the world's most significant fossil fuel projects before their catastrophic consequences unfold. The urgency of addressing the climate crisis is more pressing than ever, emphasised by the latest IPCC report, which indicates that this is the final chance to avert severe global warming effects and that mega fossil fuel projects are incompatible with any realistically survivable scenario.

While EU governments have binding commitments to reduce their climate emissions, EU market companies are involved in or financing/investing in projects that would result in new emissions that are many times greater than what the EU can emit according to its own commitments. That would be a guarantee for not meeting them. It is, therefore, crucial to ensure that companies also have strong obligations to reduce their climate emissions.

Considering that voluntary commitments have proven to be insufficient and in view of the urgency of the climate crises, they need to be legally binding.

The CSDDD can and must deliver on that.

As the ongoing repercussions of climate change, irreversible and devastating, are already unfolding before us, affecting the livelihood and lives of millions, the implementation of CDD offers a chance to defuse the most colossal fossil fuel projects globally.



Methodology

Our research is based on the list of carbon bombs identified by Kühne et al. in 2022.⁵⁶ That list used data from Rystad Energy⁵⁷ that was published in 2020.

The first step in our research was to match the carbon bomb projects to data in databases from Global Energy Monitor (GEM). We used the Global Oil and Gas Extraction Tracker⁵⁸ and the Global Coal Mine Tracker⁵⁹ which were published in January and July 2022, respectively. After this, we used the operator and the owner information of the GEM databases to build our initial list of companies involved in carbon bombs. This list was compared against the Global Oil & Gas Exit List⁶⁰ and the Global Coal Exit List.⁶¹ The companies with headquarters in any of the EU countries were automatically added to our list. The rest of the companies were reviewed based on their publicly shared information, and if they were doing business in the EU, they were also added. This is how we built part of the list of carbon bomb companies in the EU market.

The Financiers (banks) were added to the list by comparing the carbon bomb companies with the companies listed in the Banking on Climate Chaos: Fossil Fuel Finance Report 2022.⁶² With this, we were able to see which banks finance carbon bomb companies.

Due to financial constraints, we were unable to use the same dataset that was used in the Kühne et al. carbon bombs study. In our research, we only used publicly available data. While there is a growing number of easily accessible public datasets, they often have limitations compared to commercial ones, such as slow data updates. Our first challenge was to compare the list of carbon bombs that was based on a Rystad dataset to data from Global Energy Monitor.

The Banking on Climate Chaos: Fossil Fuel Finance Report 2022 focuses on the bank's investment flow, lending and underwriting bond and share issuances and excludes investments made by their asset management arms, bondholding, shareholding and credit exposure. This means that the bandholding, shareholding and credit exposure were not accounted for in our research.

In the research, we didn't account for different companies' shares when we attributed emissions value to a company or financial institution. If a company has a share in a carbon bomb, therefore enabling its extraction, it is responsible for the emissions of the specific carbon bomb. Any company enabling the extraction of a carbon bomb is responsible for its emissions. We used the same for financiers, if a financial institution supports a company responsible for carbon bomb extraction, we attribute all the potential emissions of the carbon bomb to the institutions, as it contributes to the development. The CO₂ emissions we describe as projected emissions per carbon bomb project, and for which we hold each companies involved responsible, are not projected scope 3 reporting figures for the companies.

Due to limitations of publicly available data, the number of companies, and thus the number of carbon bombs they are involved in, is a minimum number.

56 Kühne et al.: "Carbon Bombs" - Mapping key fossil fuel projects, 2022

<https://www.sciencedirect.com/science/article/pii/S0301421522001756>

57 Rystad Energy - Upstream Solution, <https://www.rystadenergy.com/services/upstream-solution>

58 Global Oil and Gas Extraction Tracker, Global Energy Monitor, 2022

<https://globalenergymonitor.org/projects/global-oil-gas-extraction-tracker/>

59 Global Coal Mine Tracker, Global Energy Monitor, 2022

<https://globalenergymonitor.org/projects/global-coal-mine-tracker/>

60 Global Oil & Gas Exit List (GOGEL) 2022 V1 <https://gogel.org/>

61 Global Coal Exit List (GCEL) 2022 <https://www.coalexit.org/>

62 Banking on Climate Chaos: Fossil Fuel Finance Report 2022 <https://www.bankingonclimatechaos.org/>

COUNTRY FACTSHEETS

EU Fossil Fuel Industry's reckless involvement in carbon intensive projects

UNITED KINGDOM

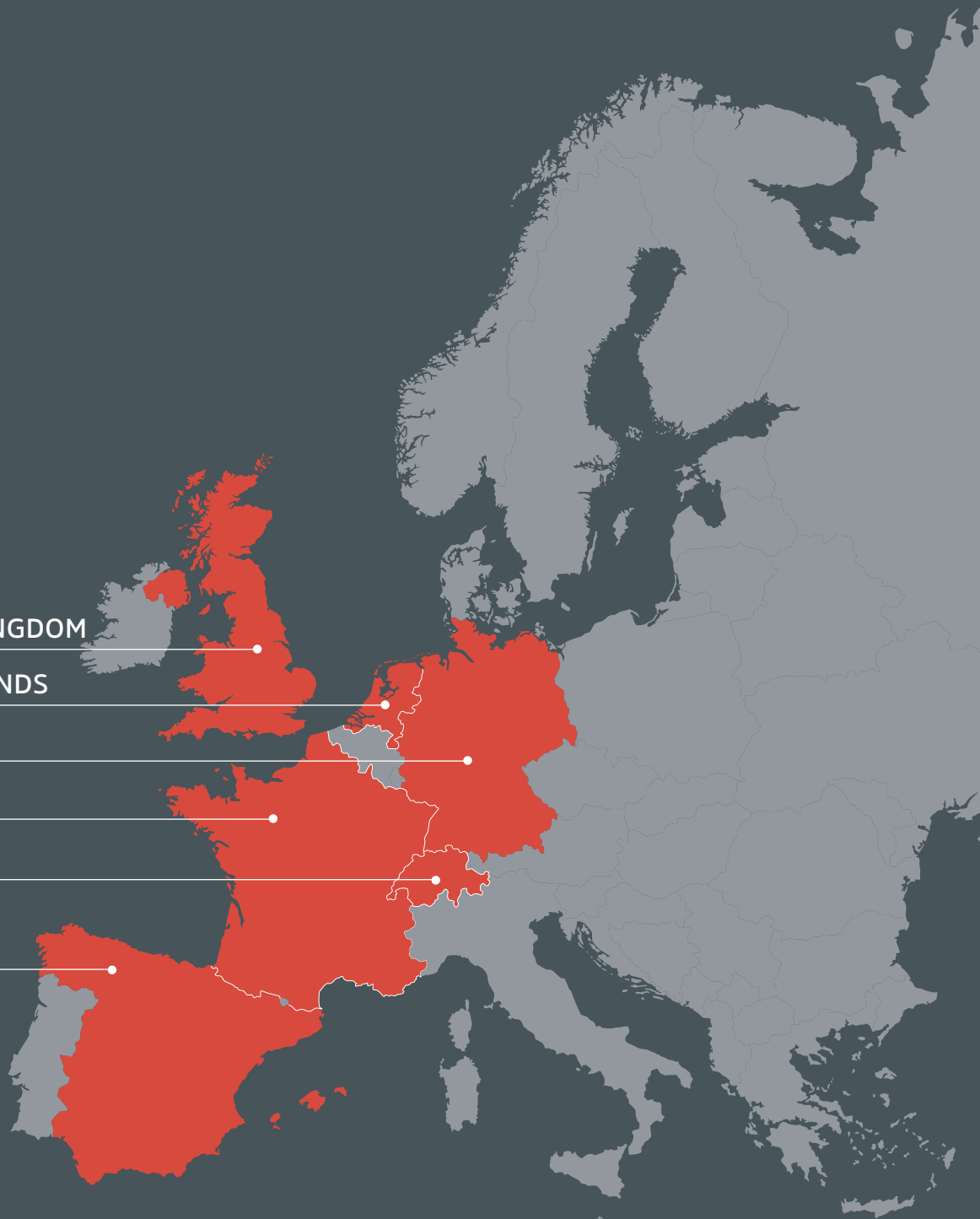
NETHERLANDS

GERMANY

FRANCE

AUSTRIA

SPAIN



FRANCE

Population: 64,531,448

CO2 emissions in 2021 (MtCO2): 305.96

CO2 emissions in 1990 (MtCO2): 393.42

55% reduction below 1990 levels (MtCO2): 177.04

Source

Total Energies SE (Total), a French energy company, is deeply contributing to global warming.



The company is involved in at least

13

carbon bomb projects^{1,2}

By being involved in these projects, Total helps unlock reserves that could potentially emit **26.7 gigatons** of CO2 (GtCO2) if extracted and burnt.

This amount is approximately **88 times** the CO2 emissions of France in 2021, which stood at 0.31 GtCO2.³

One of these carbon bombs is the oil and gas field **Troll**, situated in the North Sea, approximately 65 km from the Norwegian coastline. This gas field is one of the biggest gas suppliers to the EU and has plans to continue supplying gas for decades to come.⁶

Even without factoring in Total Energies' future involvement in additional carbon-emitting projects, the company's self-reported **annual emissions in 2021 alone reached 0.44 gigatons of CO2 equivalent (GtCO2e)**,⁴ surpassing France's annual CO2 emissions in the same year (0.31 Gt).⁵

Like all EU countries, France has committed to reducing its own emissions. However, it is concerning to see that while the country plans to continuously reduce its emissions (to an annual 0.18 GtCO2 by 2030), **Total is involved in projects that unlock 26.7 GtCO2, approximately 150 times the 2030 emissions target of the country.**

These high emission figures are deeply concerning.

Moreover, in the context of the collective efforts of the EU27, which all member states are expected to contribute to, **Total's emissions amount to 15 times what the entire EU27 would be permitted to emit in 2030 (1.7 GtCO2)** to meet the 55% reduction targets.

The following France-based financial institutions support companies with ownership in carbon bomb projects (number of projects in parenthesis): BNP Paribas (59), PBCE/Natixis (36), Crédit Agricole (59) and Société Générale (62).⁷

- 1 The involvement in carbon bomb project does not mean full ownership, Total Energies SE has ownership in extraction projects related to 13 carbon bombs.
- 2 Due to the limitations of the public datasets and slow data updates, there can be inconsistencies between our carbon bomb list and Total's current involvement. In some carbon bombs, Total Energies is not involved anymore based on a discussion with Global Energy Monitor and still needs to be updated in the dataset. These are namely: Shtokman (Russia, until 2019), Athabasca Oil Sands Project (Canada, until 2023), and South Pars (Iran, until 2018). The project Al Khaleej Gas project (Qatar) was wrongly identified as a TotalEnergies project. In contrast, some carbon bomb projects were left out from our findings, such as MZ LNG Joint Development (Mozambique) with a 1.3 Gt potential CO2 emissions.
- 3 Summary of Scope 3 Emissions from EU Carbon Bomb Companies, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Summary-of-Scope-3-Emissions.xlsx>
- 4 TotalEnergies to take legal action after Greenpeace says it under-reports emissions, Reuters, 2022 <https://www.reuters.com/business/energy/cop-totalenergies-plays-down-its-carbon-emissions-greenpeace-warns-2022-11-02/>
- 5 EU Companies Involved in Carbon Bombs - Company Factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>
- 6 EU CSDDD - Carbon Bomb Factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Carbon-Bomb-Factsheets.pdf>
- 7 List of Carbon Bomb Companies in the EU Market, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-List-of-Carbon-Bomb-Companies42.xlsx>



AUSTRIA

The massive climate destruction caused by **OMV AG (OMV)** and its involvement in carbon bombs warrants attention and urgent action.

The company is involved in

2

carbon bombs projects

Even more alarming is OMV's active participation in the extraction of two oil and gas carbon bombs projects, namely **El Sharara in Libya and Urengoykoye in Russia**.^{9,10}

The estimated Scope 3 emissions of these two projects are 6.2 GtCO₂ which is a whopping 97 times the 2021 annual emissions of Austria (0.065 GtCO₂).¹¹

Population: 8,922,086

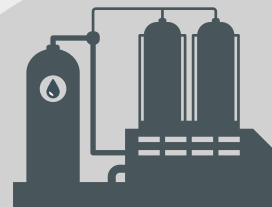
CO₂ emissions in 2021 (MtCO₂): 64.63

CO₂ emissions in 1990 (MtCO₂): 62.15

55% reduction below 1990 levels (MtCO₂): 27.97

Source

OMV AG, an Austrian integrated oil and gas company, reported **0.17 GtCO₂e emissions** in 2021.



To put this into perspective, this is more than **2.5 times** Austria's CO₂ emissions for the same year, which amounted to 0.064 GtCO₂.⁸

However, the concerns do not solely revolve around the climate impacts of these carbon bomb projects. The El Sharara oil field in Libya, since its establishment, has faced significant controversy, and its operation has been periodically interrupted due to environmental concerns and local conflicts.^{12,13}

These high emission figures are deeply concerning.

Austria has committed to reducing its annual emissions to 27,970 million tons (Mt) of CO₂ emissions (0.028 GtCO₂) by 2030 as part of the 55% reduction target. However, OMV's reported emissions in 2021 alone were 0.17 GtCO₂e. While Austria strives to decrease its emissions, OMV's global emissions only in a single year (2021) overshoot the country's 2030 yearly target or even its 2021 annual emissions (0.065 GtCO₂).

8 Summary of Scope 3 Emissions from EU Carbon Bomb Companies, Leave it in the Ground Initiative, 2023

<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Summary-of-Scope-3-Emissions.xlsx>

9 The involvement in carbon bomb project does not mean full ownership, OMV AG has ownership in extraction projects related to 2 carbon bombs.

10 EU CSDDD - Carbon Bomb Factsheets, Leave it in the Ground Initiative, 2023

<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Carbon-Bomb-Factsheets.pdf>

11 EU Companies Involved in Carbon Bombs - Company Factsheets, Leave it in the Ground Initiative, 2023

<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>

12 Conflict in Libya since 2011 civil war has resulted in inconsistent crude oil production, 2022 <https://www.eia.gov/todayinenergy/detail.php?id=53419>

13 Libyan El Sharara oilfield in shutdown from pollution protest, Reuters, 2018 [Libyan El Sharara oilfield in shutdown from pollution protest | Reuters](https://www.reuters.com/business/energy/libyan-el-sharara-oilfield-in-shutdown-from-pollution-protest-2018-07-11/)

GERMANY

The involvement of **RWE Power AG**, call for immediate attention and decisive action.

The company is actively participating in

2

carbon bomb projects

Currently, RWE Power AG is actively participating in two carbon bomb projects with the **potential Scope 3 emissions of a staggering 3 GtCO₂**, which is 4.5 times the 2021 emissions of Germany and more than 6 times those in 2030.¹⁶

RWE Power AG, a prominent European utility company specialising in gas and coal power generation and headquartered in Germany, self-reported a concerning **0.11 GtCO₂e emissions** in 2021.¹⁴



To put this into perspective, it accounts for **one-sixth of Germany's annual 2021 emissions** (0.67 GtCO₂), and it is three times the annual emissions of Ireland in the same year.¹⁵

Population: 83,408,560

CO₂ emissions in 2021 (MtCO₂): 674.75

CO₂ emissions in 1990 (MtCO₂): 1051.98

55% reduction below 1990 levels (MtCO₂): 473.39

Source

While Germany plans to reduce its emissions, the involvement of German companies in carbon bomb projects can undermine this effort.

Beyond RWE Power AG, an additional 5 German companies directly or indirectly support carbon bomb development.

These are the following (number of projects in parenthesis): BASF SE (2), Commerzbank (30), Deutsche Bank (83), DZ Bank (14) and Wintershall Dea AG (2).¹⁷

¹⁴ EU Companies Involved in Carbon Bombs - Company Factsheets, Leave it in the Ground Initiative, 2023
<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>

¹⁵ Summary of Scope 3 Emissions from EU Carbon Bomb Companies, Leave it in the Ground Initiative, 2023
<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Summary-of-Scope-3-Emissions.xlsx>

¹⁶ For the comparisons we used two decimals.

¹⁷ List of Carbon Bomb Companies in the EU Market, Leave it in the Ground Initiative, 2023
<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-List-of-Carbon-Bomb-Companies42.xlsx>



SPAIN

Population: 47,486,932

CO2 emissions in 2021 (MtCO2): 233.65

CO2 emissions in 1990 (MtCO2): 231.33

55% reduction below 1990 levels (MtCO2: 104.1)

Source

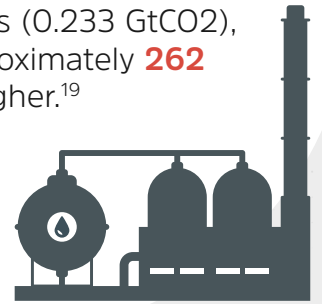
The deep involvement of **Spain-based companies** in carbon-intensive projects on a global scale raises significant concerns.

Spain-based companies are involved in a total of

86

carbon bomb projects

While this figure represents the cumulative Scope 3 emissions over the lifetime of these projects, when compared to Spain's 2021 annual emissions (0.233 GtCO₂), it is approximately **262 times** higher.¹⁹



BBVA, a multinational financial institution and one of the largest banks in Spain, is financing companies involved in **28 carbon bombs** around the globe.¹⁸

The total potential emissions from these carbon bombs add up to **61.0 GtCO₂**.

Santander, a Spanish multinational commercial bank, is financing companies involved in the development of **50 carbon bombs** around the globe. The total potential Scope 3 emissions from these projects amount to 199.2 GtCO₂.²⁰ This is about **865 times** Spain's 2021 emissions.

Repsol SA, a Spanish multinational energy company engaged in oil and gas exploration, production, refining, and marketing is investing in **3 carbon bombs** around the globe, including El Sharara.²¹ The total potential Scope 3 emissions from these amount to 7.5 GtCO₂. This is about **32 times** Spain's 2021 emissions.

Caixa Bank, another Spanish multinational financial services company, is financing **4 carbon bombs** globally. The total potential Scope 3 emissions from these projects amount to 9.1 GtCO₂.

Tecpetrol International SA, primarily engaged in oil and gas exploration, production, and distribution, is involved in **1 carbon bomb** project, namely the Vaca Muerta Shale. The total emissions from the carbon bomb are estimated to reach 5.2 GtCO₂ if extracted and burnt. Notably, this particular carbon bomb, which covers an area almost the size of Belgium, carries additional risks. The project was the fastest-growing shale play in 2021 and has been linked to documented violations of public health and indigenous rights. The main extraction method used in the project, fracking, has been banned or strictly regulated in many countries due to its environmentally damaging effects, including land pollution, groundwater contamination, and seismic disturbances.²²

Along with all the EU countries, Spain has committed to reducing its own emissions.

However, the involvement of Spain-based companies in global carbon bomb development strongly undermines Spain's efforts to stop climate change.

18 List of Carbon Bomb Companies in the EU Market, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-List-of-Carbon-Bomb-Companies42.xlsx>

19 Summary of Scope 3 Emissions from EU Carbon Bomb Companies, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Summary-of-Scope-3-Emissions.xlsx>

20 See previous footnote.

21 EU CSDDD - Carbon Bomb Factsheets, Leave it in the Ground Initiative, 2023

<https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Carbon-Bomb-Factsheets.pdf>

22 See previous footnote.



THE CASE OF SHELL

THE NETHERLANDS

Population: 17,501,696

CO2 emissions in 2021 (MtCO2): 141.05

CO2 emissions in 1990 (MtCO2): 161.81

55% reduction below 1990 levels (MtCO2): 72.81

Source

Shell reported an alarming 1.37 GtCO₂e emissions in 2021.

To contextualise this figure, this surpasses the Netherlands' 2021 annual emissions by almost **10 times** (0.14 GtCO₂).²⁵

And it is about **half of the total CO2 emissions of the EU** in the same year (2.79 GtCO₂).²⁶



Shell plc is one of the owners of multiple carbon bomb projects across various countries including Argentina, Australia, Brazil, Canada, Kazakhstan, and Norway.²⁷ The overall estimated Scope 3 emissions of these projects reach 17.9 GtCO₂.

The detrimental consequences arising from Shell plc's involvement in carbon bombs and its investments in such ventures demand immediate attention and decisive action. Shell plc is a prominent global oil and gas company that has moved its headquarters from the Netherlands to the UK in 2022. In 2021, Shell plc was still headquartered in the Netherlands. Even after the move, the company maintained significant ties to the Netherlands.²³ Shell plc is one of the largest EU market companies with numerous activities and offices in EU member states.²⁴ Furthermore, despite the company's relocation of its headquarters to the UK, it falls within the scope of CSDDD due to its annual turnover in the EU market.

Sadly, the impacts are not limited to the climate. Carbon bombs carry significant environmental, social and harmful community impacts as well.

While the Netherlands' plans to reduce its emissions (targeting 0.073 GtCO₂ for 2030), only in 2021 Shell emitted 19 times that amount (1,37 GtCO₂) and it is involved in carbon bomb projects that emit 245 times that amount.

One of the carbon bombs Shell has invested in lies in the **Kashagan field**²⁸ composed of significant levels of sulphur and other harmful pollutants like mercaptans, combined with challenging exploration conditions such as high oil pressure, an offshore location, and a harsh climate, poses dire consequences for the Caspian Sea ecosystem and communities. As a result, numerous individuals in the region have already been displaced from their homes.²⁹

We identified 3 more companies in the Netherlands involved in carbon bomb development. Among these, one is an integrated oil and gas company, Pluspetrol Resources Corporation, while the others, ING Group and Rabobank assume roles as financiers. The ING Group financially supports companies developing carbon bombs, thus indirectly supporting 39 projects with the potential overall Scope 3 emissions of 112.6 GtCO₂.³¹

Another carbon bomb, the Athabasca oil sands project in Canada, was called the **"world's most destructive oil operation"** in 2019.³⁰

23 Shell ends Dutch era with move to London, 2021 <https://newseu.ctn.com/news/2021-12-11/Shell-ends-Dutch-era-with-move-to-London-15TavoXL7KE/index.html>

24 Shell Energy in Europe <https://www.shell.com/business-customers/trading-and-supply/trading/shell-energy-europe.html>

25 Summary of Scope 3 Emissions from EU Carbon Bomb Companies, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Summary-of-Scope-3-Emissions.xlsx>

26 CO2 emissions, Our World in Data, <https://ourworldindata.org/co2-emissions>

27 EU Companies Involved in Carbon Bombs - Company Factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Company-Factsheets.xlsx>

28 EU CSDDD - Carbon Bomb Factsheets, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-Carbon-Bomb-Factsheets.pdf>

29 Kashagan oil field development Kazakhstan, Friends of the Earth Europe, 2007 https://www.foeeurope.org/sites/default/files/publications/foee_kashagan_oil_field_development_1207.pdf

30 This is the world's most destructive oil operation—and it's growing, 2019 <https://www.nationalgeographic.com/environment/article/alberta-canadas-tar-sands-is-growing-but-indigenous-people-fight-back>

31 List of Carbon Bomb Companies in the EU Market, Leave it in the Ground Initiative, 2023 <https://www.leave-it-in-the-ground.org/wp-content/uploads/2023/08/EU-CSDDD-List-of-Carbon-Bomb-Companies42.xlsx>



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astm
ACTION SOLIDARITE TIERS MONDE



eco-union

 European Coalition
for Corporate Justice

