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CONSULTATION ON TOTALENERGIES' ALIGNMENT WITH THE OBJECTIVE OF LIMITING GLOBAL WARMING TO 1.5°C (PARIS AGREEMENT)

Notre affaire à tous et al. against TotalEnergies

8 February 2022

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This consultation was established at the request of the applicant communities and associations[2] in order to inform the judge on the following points:

- On the environmental and human risks of global warming above 1.5°C;
- The 2015 Paris Agreement's target of limiting global temperature to 1.5°C;
- The inadequacy of the international community's current commitments to limit warming to 1.5°C;
- The feasibility of "1.5°C no-exceedance trajectories" and their relevance for reducing climate risks and achieving the Paris Agreement;
- TotalEnergies' actions are important to meet the 1.5°C objective of the Paris Agreement;
- TotalEnergies' exploration for new hydrocarbon reserves and its forecasted production increases are not consistent with the scenarios for meeting the Paris Agreement targets;
- TotalEnergies' targets do not demonstrate alignment with the 1.5°C target, nor with the Paris Agreement.

Very important information: the author of this note wishes to draw the court's attention to the concomitant and independent publication of an opinion piece on TotalEnergies by ten other members of the IPCC: *TotalEnergies is very far from taking into account the conclusions of the IPCC: scientists denounce the instrumentalisation of their reports by the oil giant*, France Info, 8 February 2023 (authors: Yamina Saheb (OpenExp, SciencesPo Paris); Wolfgang Cramer (CNRS, Mediterranean Institute of Biodiversity and Ecology, Aix-en-Provence); Valérie Masson-Delmotte (CEA - IPSL, Université Paris Saclay Jean-Baptiste Sallée, CNRS, LOCEAN-IPSL, Paris Gonéri Le Cozannet, BRGM, Orléans); Christophe Cassou (CNRS, Cerfacs, Toulouse Sophie Szopa, CEA, LSCE-IPSL, Université Paris-Saclay); Sonia I. Seneviratne (ETH Zurich, Switzerland Gerhard Krinner, CNRS, IGE Grenoble); Céline Guivarch (Ecole des Ponts, CIRED); Julia Steinberger (University of Lausanne).

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[2] The editors and reviewers of this consultation have not been remunerated for the preparation of this note. The analyses presented in this note do not reflect the positions of their institutions.

1) On the environmental and human risks of global warming above 1.5°C

According to the Intergovernmental Panel on Climate Change (**IPCC**) Assessment Report No. 6[3] on the scientific basis of climate change in 2021: "There is *no doubt that human influence has warmed the atmosphere, oceans and land*.[4]

There is also a very high scientific consensus that global warming above 1.5°C is a threat to biodiversity and the functioning of human societies. According to the latest IPCC Impacts of Climate Change report of 2022**:** "*Global warming of up to 1.5°C in the near term will lead to an unavoidable increase in multiple climate hazards and present multiple risks to ecosystems and humans (very high confidence). The level of risk will depend on short-term trends in vulnerability, exposure, level of socio-economic development and adaptation (high confidence). Short-term actions that limit global warming to around 1.5°C would significantly reduce projected climate change-related losses and damages in human systems and ecosystems, compared to higher levels of warming, but cannot eliminate them all (very high confidence)*.[5]

The International Energy Agency (**IEA**) agrees: "*as the IPCC has pointed out, warming of close to 2°C would still have strong negative impacts on societies around the world (IPCC, 2022b)*.[6]

A temperature increase of 1.5°C - even temporarily - implies a multitude of risks, according to the IPCC: "[*i*]*f global warming transiently exceeds 1.5°C over the next few decades or later (overshoot), many human and natural systems will face additional severe risks, compared to staying below 1.5°C (high confidence). Depending on the magnitude and duration of the exceedance, some impacts will result in the release of additional greenhouse gases (medium confidence) and others will be irreversible, even if global warming is reduced (high confidence).*" [7]

One of the most serious risks associated with exceeding a 1.5°C temperature increase are so-called "*tipping points*", which can significantly worsen global warming: "*Trajectories that exceed 1.5°C are at greater risk of passing through 'tipping points', i.e. thresholds beyond which certain impacts can no longer be avoided, even if temperatures are subsequently returned to normal. The collapse of the Greenland and Antarctic ice sheets over a time scale of centuries and millennia is an example of a tipping point*." [8]

[3] The IPCC studies provide an overview of the most recent scientific knowledge on climate change. It is an intergovernmental body with 195 member states, whose mission is, on the one hand, to identify the elements of consensus in the scientific community and, on the other hand, to identify the limits of knowledge or interpretation of the results. Its studies are the result of the collaboration of thousands of experts from some 40 countries, are based on thousands of scientific references and are evaluated by public institutions from all over the world, which can make their observations.

[4] IPCC, Assessment Report No. 6 of 2022 (**AR 6**), Working Group I (**WG I**), Summary for Policymakers (**SPM)**, § A.1 (automatic translation DeepL).

[5] IPCC, **AR 6**, Working Group II (WG **II**), SPM, § B.3 (automatic translation DeepL).

[6] IEA, *World Energy Outlook* (**WEO**) 2022, p. 64 (automatic translation DeepL).

[7] IPCC, AR 6, Working Group II (WG II), § B.6.

[8] IPCC, IPCC Special Report on the consequences of 1.5°C global warming (hereafter: **1.5°C Special Report**), Chapter 3, 2018, p. 283; see also Armstrong McKay et al, Exceeding 1.5°C global warming could trigger multiple climate tipping points, Science, Vol 377, Issue 6611, 9 Sep 2022 (https://www.science.org/doi/10.1126/science.abn7950).

The IPCC currently considers that "[t]he *likely range of total global surface temperature increase due to human activity [...*] *is 0.8°C to 1.3°C, with a best estimate of 1.07°C*" relative to pre-industrial levels.[9] According to the 2018 IPCC 1.5°C Special Report, "*[i]t is likely that global warming will reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate (high confidence).*"[10] **Immediate action is therefore absolutely necessary to limit warming to 1.5°C.**

2) The 2015 Paris Agreement aims to limit global temperature to 1.5°C

Article 2 (1) of the 2015 Paris Agreement aims to limit global temperature to 1.5°C, in any case "*well below 2°C*", while noting the reduced risks if warming were limited to 1.5°C: "*This Agreement, in contributing to the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and poverty alleviation, inter alia by: (a) Limiting the increase in global average temperature to well below 2°C above pre-industrial levels and continuing efforts to limit the increase in temperature to 1.5°C above pre-industrial levels, while recognizing that this would significantly reduce the risks and impacts of climate change*.

In 2021, the international community reiterated the importance of limiting warming to 1.5°C in the decision adopted following the Conference of the Parties No. 26 in Glasgow (COP 26 - Glasgow Pact): "*the impacts of climate change will be much lower with a temperature increase of 1.5°C compared to 2°C and decides to continue efforts to limit the temperature increase to 1.5°C*".[11]

3) The inadequacy of the international community's current commitments to limit warming to 1.5°C

The international community recognises in the 2021 Glasgow Compact "*that limiting global warming to 1.5°C requires rapid, deep and sustained reductions in global greenhouse gas emissions, including a 45% reduction in global carbon dioxide emissions by 2030 from 2010 levels to net zero by mid-century, as well as deep reductions in other greenhouse gases*"[12] . To achieve this, the United Nations Environment Programme's annual *Emissions Gap* Report 2019 states that global CO2 emissions need to fall by about 7.6% per year[13] .

According to the IEA director, the commitments adopted following COP 26 in Glasgow are still insufficient to meet the Paris Agreement target: "*Our updated analysis of these new targets - which are in addition to all those previously set - shows that if they are met in full and on time, they would be sufficient to limit the rise in global temperatures to 1.8°C by the end of the century. This is a historic moment: it is the first time that governments have proposed targets that are ambitious enough to keep global warming below 2°C. But while we welcome this progress, we must also sound a note of caution: 1.8°C is still above the Paris Agreement's goal of limiting global warming to well below 2°C and continuing efforts to limit it to 1.5°C. Scientists have clearly warned of the major climate risks of exceeding the 1.5°C limit. Our latest analysis - reflected in a pledged scenario updated to include all recent announcements - shows that even with these new commitments, we are still far from what is*

[9] GIEC, AR 6, WG I, § A.1.3.
[10] IPCC, Special Report 1.5°C, § A.1.
[11] *Glasgow Climate Pact* of 13 November 2021, § 21 (automatic translation DeepL).
[12] Glasgow Pact of 13 November 2021, § 22 (automatic translation DeepL).
[13] UNEP, Emissions Gap Report 2019, p. XX.

needed to keep the door open at 1.5°C. This would require rapid progress on emissions reductions by 2030."[14]

Among the causes of this lack of action by the international community, the IPCC and numerous studies accepted by scientific journals have shown that the fossil fuel industry, including TotalEnergies[15] , has historically contributed to delaying the global fight against climate change by unduly highlighting scientific uncertainties, pressuring decision-makers, and deflecting responsibility for the climate crisis onto individuals, despite its early and accurate knowledge of the climate dangers[16] .

4) The feasibility of "1.5°C without overshoot" trajectories and their relevance for reducing climate risks and achieving the Paris Agreement

Despite the significant efforts involved in the "1.5°C no-exceedance or minimal-exceedance trajectories"[17] , these remain physically, technically, socially and economically feasible. The IEA, which has developed the **NZE (*Net-Zero Emissions by 2050*)** scenario, which is also a 1.5°C no-exceedance pathway,[18] explains: "*There are still pathways to reach zero by 2050. The one we are focusing on is, according to our analysis, the most technically feasible, cost-effective and socially acceptable. Despite this, the pathway remains narrow and extremely difficult, requiring all stakeholders - governments, businesses, investors and citizens - to act this year and every year thereafter to ensure that the target is not out of reach*.[19]

In addition, the IEA states that its NZE scenario "*stabilises the rise in global average temperatures at 1.5°C and provides universal access to modern energy by 2030*." [20]

Finally, it is notable that "1.5°C no-exceedance" trajectories such as the IEA's NZE provide about a 50% chance of success in limiting warming to 1.5°C[21] and just over a 90% chance of success in limiting

[14] Dr F. Birol, "C.O.P. 26 climate pledges could help limit global warming to 1.8 °C, but implementing them will be the key", Commentary, 4 November 2021, (automatic translation DeepL).
[15] Christophe Bonneuil et al, Early warnings and emerging accountability: Total's responses to global warming, 1971-2021, Global Environmental Change Volume 71, November 2021.
[16] IPCC; AR 6, WG III, Chapter 5, p. 84: '*A number of corporate representatives have attempted to derail climate change mitigation through targeted lobbying and doubt-inducing media strategies (Oreskes and Conway 2011). A number of companies involved in the upstream and downstream supply chain of fossil fuel companies make up the majority of organisations opposed to climate action (Dunlap and McCright 2015; Cory et al. 2021; Brulle 2019). Corporate advertising and branding strategies also attempt to divert corporate responsibility to individuals, and/or to appropriate climate protection sentiments in their own branding; climate change mitigation is framed solely by product and consumption choice, avoiding the notion of a political sphere of collective action (Doyle 2011; Doyle et al. 2019)*." (automatic translation DeepL).
[17] According to the IPCC Special Report 1.5°C, p. 26 (Box RID.1): "*trajectories that project, based on current knowledge, at least a 50% probability of limiting global warming to no more than 1.5°C are 'no-exceedance' trajectories ; those that project a limitation of warming to no more than 1.6°C, followed by a return to 1.5°C warming by 2100 at the latest are "small overshoot" trajectories; while those that project warming above 1.6°C, but returning to 1.5°C by 2100 at the latest are "large overshoot" trajectories*. "
[18] IEA, Net Zero by 2050, Special Report, May 2021, p. 49: "*The NZE aims to ensure that CO2 emissions from energy and industrial processes up to 2030 are in line with the reductions projected in the 1.5°C no-exceedance or low-exceedance and limited-exceedance scenarios assessed by the IPCC in its special report on 1.5°C global warming.*" (automatic translation DeepL).
[19] *Ibid*, p. 3 (automatic translation DeepL).
[20] IEA, WEO 2022, p. 20 (automatic translation DeepL).
[21] *Ibid*, p. 35; see also IPCC, Special Report 1.5°C, SPM, p. 26.

warming to 2°C.[22] In other words, alignment with a "1.5°C no-exceedance" trajectory offers the best available chance of achieving the Paris Agreement target and reducing the risks of global warming.

5) TotalEnergies' actions are important to meet the Paris Agreement's 1.5°C target

Meeting the Paris Agreement target requires a reduction in emissions from all sectors of the economy. It is **therefore necessary for everyone to do their part.**

The actions of major oil and gas companies such as TotalEnergies are decisive in this respect. Fossil fuels, which are responsible for more than 70% of global emissions[23] , must be reduced rapidly. Indeed, according to the UNEP, "[t]here *is a need to move from phasing out fossil fuels to electrifying transport, halting deforestation and retrofitting buildings (Intergovernmental Panel on Climate Change [IPCC] 2021)* [... and] *not to invest in new fossil fuel infrastructure*". [24]

The IPCC explains that "[*c*]*ompanies and business organisations play a key role in mitigating global warming, through their own commitments to a zero carbon footprint [...*]. *Business models and strategies are both a barrier and an accelerator to decarbonisation.*"[25] **More specifically, the IEA details the crucial role of the oil and gas sector in the necessary decarbonisation of the economy**: "The *resources and skills of the oil and gas industry are well matched to some of the new technologies needed to tackle emissions in the sectors where reductions are likely to be most difficult, and to produce some of the low-emission liquids and gases for which demand is growing rapidly in the NZE [...*]. *Some oil and gas companies may choose to become 'energy companies' focused on low-emission technologies and fuels, including renewable electricity, electricity distribution, electric vehicle charging and batteries*."[26]

TotalEnergies agrees with some of the IPCC and IEA findings above, as the company has a "*net zero 2050 ambition*" and believes it can build on its previous oil and gas expertise to develop decarbonised activities: "The *Company's engineering teams were originally developed around exploration, production and refining/chemicals. The Company wants new activities, such as wind, solar, hydrogen, biogas and carbon capture, to have the same level of technical and technological support and to benefit from the experience of the Company in structuring their activities from an industrial point of view*.[27]

TotalEnergies' decisions are all the more important in view of the significant amount of emissions with which it is associated: the company markets a quantity of fossil fuels that is responsible for approximately 0.8% to 1% of global emissions each year, i.e. the equivalent of France's annual territorial emissions[28] . **TotalEnergies therefore has a significant capacity for action and its actions are decisive in meeting the objective of the Paris Agreement**.

[22] IPCC, Special Report 1.5°C, Chapter 2, Supplementary Material, p. 18 (Table 2.SM.12).
[23] UNEP, Emissions Gap Report 2022, p. 5.
[24] *Ibid*, p. 38 (automatic translation DeepL); see also: Gütschow, J.; Pflüger, M. (2022): The PRIMAP-hist national historical emissions time series v2.4 (1750-2021).
[25] IPCC, AR 6, WG III, Chapter 5, p. 84 (automatic translation DeepL).
[26] IEA, Net Zero by 2050, Special Report, May 2021, p. 160 (automatic translation DeepL).
[27] TotalEnergies, Universal Registration Document 2021, p. 33.
[28] TotalEnergies ' direct and indirect emissions amount to 437 Mt CO2e in 2021 according to the company's 2021 Universal Registration Document (pp. 302-303), while French emissions in 2021 are expected to amount to 418 Mt CO2e according to CITEPA data.

6) TotalEnergies' exploration for new hydrocarbon reserves and its production growth forecasts are not consistent with the scenarios for achieving the Paris Agreement objectives

Antonio Guterres, the UN Secretary General said on 18 January 2023: "[t]*oday, fossil fuel producers and those who support them continue to fight to increase production, knowing full well that their economic model is incompatible with human survival*".[29]

This remark by the UN Secretary General is supported by the scientific consensus on the risk of exceeding global temperatures by 1.5°C or even 2°C if new hydrocarbon projects are added to existing ones. Indeed, according to the IPCC: "*Cumulative future CO2 emissions projected over the lifetime of existing and currently planned fossil fuel infrastructure, without additional abatement, exceed the total cumulative net CO2 emissions in trajectories that limit warming to 1.5°C (>50%) with no or limited overshoot. They are approximately equal to the total cumulative net CO2 emissions in the trajectories that limit warming to 2°C (>67%). (high confidence)*".[30]

The International Energy Agency (IEA) corroborates the above IPCC findings by stating in 2021 that "*beyond the projects already committed in 2021, there are no new oil and gas fields to be approved in our* trajectory"[31] . In 2022, the IEA confirmed this result by stating, "*No one should imagine that the invasion of Russia can justify a wave of new oil and gas infrastructure in a world that wants to achieve zero net emissions by 2050*."[32]

Yet TotalEnergies continues to explore for multiple new hydrocarbon reserves[33] and aims to increase its oil production to around 2025 and gas production to at least 2030[34] . **TotalEnergies' ongoing exploration and production activities do not fit into a coherent collective effort to meet the objectives of the Paris Agreement.**

The "United Nations High-Level Panel on Net Zero Emissions Commitments by Non-State Entities" (hereafter "**UN Net Zero Panel**"), whose work was "*based on existing science and best voluntary efforts to create a universal definition of net zero*"[35] confirmed that "*companies* [must] *end (i) exploration for new oil and gas fields, (ii) expansion of oil and gas reserves, and (iii) production of oil and gas.* " [36]

7) TotalEnergies' targets do not demonstrate alignment with the 1.5°C objective, nor with the Paris Agreement

TotalEnergies has a "*net zero 2050 ambition, together with society, in line with the objectives of the Paris Agreement*",[37] by sharing "*the vision of the 2050 end point described by the IEA for carbon*

[29] Secretary-General's remarks at the World Economic Forum, Davos, Switzerland, 18 January 2023.
[30] IPCC, AR 6, WG III, SPM, § B.7 (automatic translation DeepL).
[31] IEA, Net Zero by 2050, Special Report, May 2021, p. 21 (automatic translation DeepL).
[32] IEA, WEO 2022, p. 79 - 81 (automatic translation DeepL).
[33] TotalEnergies, Universal Registration Document 2021, p. 78 - 89.
[34] *Ibid*, p. 166: '*TotalEnergies is targeting a peak in oil production within the decade, followed by a reduction to around 1.4 Mboe/d in 2030. For gas, the target growth between 2015 and 2030 is around 50% (from 1.3 Mboe/d to 2 Mboe/d)*.
[35] Report of the United Nations' High-Level Expert Group on the Net Zero Emissions Commitments of Non-State Entities, Integrity Matters: Net Zero Commitments by Businesses, Financial Institutions, Cities and Regions, 8 November 2022, p. 12 (automatic translation DeepL).
[36] *Ibid*, p. 24 (automatic translation DeepL).
[37] TotalEnergies, Universal Registration Document 2021, p. 19.

neutrality"[38] . However, TotalEnergies is opposed to the transition needed to reach this IEA objective: "*we do not believe that our companies can follow the trajectory proposed by this scenario in the short term*"[39] . It should be noted that carbon neutrality in 2050 is not the end point or objective of the NZE but only a step towards the objective of limiting warming to 1.5°C. However, achieving the global warming limitation target of a trajectory (e.g. 1.5°C) can only be guaranteed by respecting the emission levels over the entire duration of a trajectory compatible with 1.5°C.

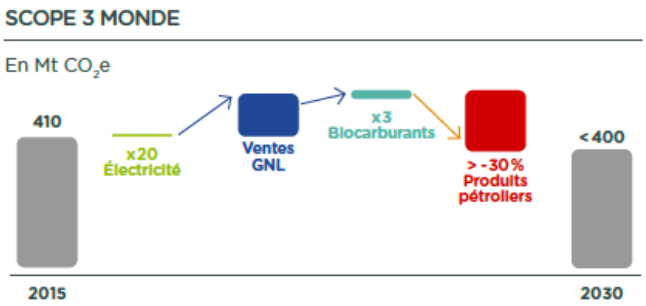
The UN Expert Group Report on Net Zero Commitments explains the measures that companies need to implement to achieve this 1.5°C target: "*All greenhouse gas emission reduction commitments should include specific targets to end the use and/or support of fossil fuels, consistent with the IPCC and IEA zero greenhouse gas emission models that limit warming to 1.5°C with no or limited overshoot, with a reduction in global emissions of at least 50 per cent by 2030, reaching zero by 2050.* "[40]

The analysis below of the information published by TotalEnergies shows how the company is not aligned with the 1.5°C "no overrun" scenarios, in particular the IEA's NZE scenario. If all oil and gas players were to stick to the same targets as TotalEnergies, the sector would not be aligned with the 1.5°C scenario.

Firstly, in order to be in line with a 1.5°C scenario, it is not sufficient to have general targets in absolute terms only for scopes 1 and 2[41] as these emissions only cover a minimal part of the emissions resulting from TotalEnergies' activities (37 Mt CO2eq in 2021 according to the figures reported by the company[42]). The group's scope 3 emissions[43] , linked in particular to the use of its products (especially the combustion of hydrocarbons), are much higher (400 Mt CO2e in 2021[44] , i.e. 92% of the company's scope 1+2+3 emissions) and are not subject to reduction targets in absolute terms. The UN Expert Group Report on Net Zero Commitments confirms this analysis: "[t]he *targets should include emission reductions from the entire value chain and activities of a non-state actor, including: - Scope 1, 2 and 3 emissions for companies.*"[45]

Secondly, the announced 30% decrease in sales of its oil products in 2030 compared to 2015 results in a decrease in scope 3 emissions which is offset by an increase in natural gas sales, as the TotalEnergies graph below demonstrates[46] . The IEA indicates that the share of gas should decrease by 3.6% annually between 2021 and 2030, which corresponds to a 30% decrease between 2021 and 2030[47] . However, if scope 3 emissions as a whole (oil + gas) are not reduced in line with the NZE or other 1.5°C scenarios, then TotalEnergies will not contribute sufficiently to the 1.5°C target.

[38] TotalEnergies, Sustainability & Climate 2022 Progress Report March 2022, French version, p. 5.
[39] *Ibid*.
[40] Report of the UN Expert Group on Net Zero Commitments, *op. cit.* (note 35), p. 12 (automatic translation DeepL).
[41] Scope 1 constitutes the direct emissions linked to the operated perimeter, while Scope 2 concerns the indirect emissions linked to the energy consumption of the operated sites (see GHG Protocol, Scope 1 & 2 GHG Inventory Guidance Use to prepare a GHG inventory and quantify emissions, November 2019, p.12).
[42] TotalEnergies, Universal Registration Document 2021, p. 301.
[43] Scope 3 constitutes the indirect emissions of companies resulting from their activities, such as those linked to the use of the goods and services produced (see category 11 of Scope 3, see GHG Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard, p. 56).
[44] TotalEnergies, Universal Registration Document 2021, p. 302.
[45] Report of the UN Expert Group on Net Zero Commitments, *op. cit.* (note 35), p. 17 (automatic translation DeepL).
[46] TotalEnergies, Sustainability & Climate 2022 Progress Report March 2022, French version, p. 39.
[47] IEA, WEO 2022, p. 445.



The above graph of TotalEnergies' scope 3 emissions (Sustainability & Climate 2022 Progress Report March 2022, French version, p. 39) shows that the decrease in emissions due to the decrease in sales of petroleum products is offset by the increase in sales of natural gas (LNG) in particular.

Thirdly, TotalEnergies' projected peak production in 2025 for oil and 2030 for gas[48] is not aligned with an IPCC "no exceedance" 1.5°C scenario and the IEA's NZE scenario, which foresees an immediate end to oil and gas field expansion and a decline in fossil fuel use of around -2.7% for oil and -3.6% for gas.[49] TotalEnergies expects to increase gas production by 50% between 2015 and 2030 (and thus 60% above 2010)[50] , which is well above, in terms of alignment, the allowable natural gas production levels in the 1.5°C no-exceedance scenarios put forward in the IPCC 1.5°C Special Report (Summary for Policymakers).

Fourth, TotalEnergies plans to "*offset residual emissions*" by developing "*over 5 Mt CO2e of natural carbon sink capacity by 2030, investing $100 million per year*"[51] . The development of natural carbon sinks does not obviate the need to reduce emissions in the hydrocarbon sector. In any case, this commitment would only have a marginal effect on the group's emissions: 5 Mt CO2e is equivalent to 1.14% of the company's scope 1+2+3 emissions in 2021.

In conclusion, Total's strategy does not demonstrate alignment with the IPCC and IEA 1.5°C trajectories. Based on the existing literature, TotalEnergies is moving away from achieving the objectives of the Paris Agreement. Aligning short-term measures with the long-term objective and taking into account all emissions from fossil fuel extraction activities would help to meet the sectoral objectives of the transition scenarios.

Dr. Yann Robiou du Pont

[48] TotalEnergies, Universal Registration Document 2021, p. 166: "*TotalEnergies is targeting a peak in oil production within the decade, followed by a reduction to around 1.4 Mboe/d by 2030. For gas, the target growth between 2015 and 2030 is around 50% (from 1.3 Mboe/d to 2 Mboe/d)*.
[49] IEA, WEO 2022, p. 79 - 81 and p. 445.
[50] TotalEnergies, Universal Registration Document 2021, p. 166.
[51] *Ibid*, p. 19.