

ASSESSMENT OF TOTALENERGIES' CLIMATE STRATEGY





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INTRODUCTION

n 2021, TotalEnergies ranked as the 12th crucial responsibility to ensure the company biggest oil and gas producer and 7th biggest oil and gas upstream developers worldwide.1 The company is the 12th biggest liquified natural gas (LNG) terminal developer.²

As one of the six oil and gas majors and largest greenhouse gas emitters worldwide, TotalEnergies is among the few companies in the world whose climate transition (or lack thereof) in the coming years will have a determining impact on our collective ability to limit global temperature rise to 1.5°C. In 2020, the company pledged to achieve carbon neutrality across its entire operations on an absolute basis by 2050 or sooner.3

TotalEnergies' investors and other financial stakeholders have both a key interest and a

swiftly aligns with a 1.5°C-compatible pathway. In addition to targeted restriction policies, shareholder engagement is an important tool to reach this objective.

Key findings:

- TotalEnergiesreinforceditsdecarbonization targets in its 2023 Sustainability & Climate report.4 However insufficient information is still given on TotalEnergies' Capital Expenditure (CAPEX) plan as renewable CAPEX are aggregated with gas plants, carbon capture and storage and hydrogen.
- · Taking into account TotalEnergies' oil and gas production from currently producing fields, plus its fields under development and

field evaluation, the company's production in 2030 will be 22% higher than the level required to align with the International Energy Agency's (IEA) 1.5°C-aligned Net Zero Emissions by 2050 scenario (NZE).

- In 2023, TotalEnergies disclosed its aim to maintain its oil production at 1,400 kboe/d and to increase its gas production to 1,400 kboe/d. If it meets this target, its production will be 26% to 52% higher than the level required to align with the NZE.
- · TotalEnergies has not committed to stop developing new oil and gas projects beyond those already in development. Around a third of its current expansion plans are in Arctic and ultradeep water activities.
- · For every dollar invested in its Integrated Gas, Renewable and Power (iGRP) division in 2022, TotalEnergies invested more than 3 dollars in oil and gas. However, considering the iGRP division also includes nonrenewable energy sources, for every dollar

invested in fossil fuels, less than 33 cents were invested in sustainable renewable energies.

- · For every dollar invested in its iGRP division in 2022, more than 4 dollars were distributed to shareholders through dividends and share buyback.
- TotalEnergies plans to allocate 33% of its short term net investments to the "low carbon" business line.
- TotalEnergies' targeted carbon intensity by 2030 is 20% higher than in the NZE, and 7% higher than the IEA's Announced Pledges Scenario (APS) which covers commitments towards a below-2°C pathway. If TotalEnergies meets its targets and reduces its energy supply in line with the IEA scenarios, by 2030 the company will have overshot its share of the 2023-30 carbon budget by 20% under the NZE, and by 7% under the below 2°C scenario.



1. TOTALENERGIES IN A NUTSHELL TODAY

otalEnergies accounts for 1.9% of global oil and gas production and 3% of short-term expansion plans.⁵

As of March 1st, 2023:6

- TotalEnergies had 11,748 million barrels of oil equivalent (mmboe) of resources under production, with 8,261 million barrels (mmbbl) of oil and 3,488 mmboe of fossil gas. This represents the equivalent of 12.8 years of production at 2022 levels.
- TotalEnergies had 6,140 mmboe of resources under development or field evaluation, including 2,768 mmbbl of oil and 3,372 mmboe of fossil gas. This represents 6.7 years of production at 2022 levels.
- TotalEnergies holds 9,491 mmboe of oil and fossil gas discoveries, including

3,771 mmbbl of oil and 7,721 mmboe of fossil gas. This represents 10.4 years of production at 2022 levels.

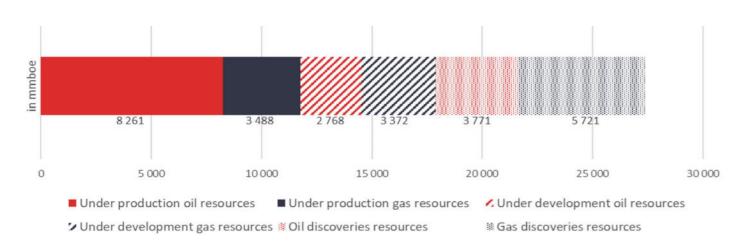
In 2022, TotalEnergies extracted 477 mmbbl of oil and 532 mmboe of fossil gas. Beyond exploration and production, TotalEnergies is also active in LNG, refining, petrochemical activities, retail, and power.

In 2022, TotalEnergies produced 17 Mt of LNG and sold 48 Mt of LNG. The capacity of LNG terminals currently being developed by TotalEnergies represents 1.7% of total terminal capacity being developed. TotalEnergies is the first LNG exporter in the United States with 10 Mt exported in 2022 and first in LNG regasification in Europe with more than 20 Mt regasification capacity. TotalEnergies plans to increase its LNG production by 40% by 2030, compared to 2021 level, with expansion plans



TotalEnergies' oil and gas resources

(based on current ressources in million barrels of oil equivalent)



Source: Rystad Energy, accessed in March 2023

such as the ones in Qatar (North Field), in the United States (Cameron), in Mozambique (Area-1), in Papua New Guinea (Papua LNG)¹⁰ and in Nigeria (Nigeria LNG).¹¹

TotalEnergies is also present in marketing with a refinery throughput of 537 mmbbl, petrochemical production were 9,6Mt and petroleum product sales were 536 mmbbl in 2022.¹²

TotalEnergies integrated power portfolio is composed of renewable and gas power generation, power trading, and power and gas marketing. Gross renewable capacities¹³ are of 16.8 Gigawatt (GW), primarily solar energy, followed by onshore wind, offshore wind and

storage. TotalEnergies' gross gas capacities are of 4 GW. TotalEnergies produced 10.4 TWh (Terawatt-hour) from renewable sources in 2022 and 22.8TWh from combined cycle gas turbine (CCGT). Therefore, renewable energy represents 31% of its electricity generation mix.14 TotalEnergies plans to reach 35 GW of gross renewable capacity in 2025 and 100 GW in 2030. TotalEnergies aims to generate 130 TWh power in 2030, through renewable and gas. TotalEnergies' renewable energy is generated mostly in Europe, in the United States and in India, and the group is developing several projects in the United States (solar and wind), in India (solar), in the United Kingdom (offshore wind), in Brazil and in Kazakhstan (Onshore wind).15

2. TRANSPARENCY OF TOTALENERGIES' CLIMATE PLAN

The adoption and publication of sufficiently detailed targets and indicators are a prerequisite for assessing how a company's transition plan aligns with a 1.5°C trajectory.

TotalEnergies published a climate plan and indicators regarding its climate strategy "Getting to net zero" land has been strengthened with intermediate targets in the sustainability reports in 2021, 2022 and 2023. Before TotalEnergies' 2022 Annual General Meeting (AGM), some investors requested that TotalEnergies improve the transparency of its reporting.

As a result, in April 2022, TotalEnergies committed to publish in the Sustainability and Climate report information such as:

- The 2025 and 2030 absolute and relative greenhouse gas (GHG) reduction targets on scope 1, 2 and 3 covering all activities.
- The evolution of the energy mix and production volumes;
- The breakdown of its capex by sector and the split between growth and maintenance CAPEX;
- The contribution of captured GHG emissions in the reduction targets.

In its 2023 publication,¹⁸ TotalEnergies publishes new GHG reduction target as declared to its shareholders. However, TotalEnergies does not publish enough granularity on its CAPEX plan as the company does not disclose CAPEX specifically dedicated specifically to renewable. Then, information provided lacks the granularity needed to allow investors and other financial stakeholders to correctly assess its capacity to align with a 1.5°C pathway.

The table below summarizes the level of disclosure by TotalEnergies on a few key transition indicators. It does not provide a comprehensive assessment of the transparency and completeness of TotalEnergies' climate plan, but rather focuses on the basic indicators that should be at the foundations of any oil and gas major's plan.

Assessment of the transparency of TotalEnergies' climate plan

Does TotalEnergies publish detailed information about the following indicators up to 2030?	Yes - No Partially	Comment		
Absolute and relative GHG emissions reduction targets covering scope 1, 2 and 3	Yes			
Contribution to emissions reduction targets of carbon capture and storage (CCS) along the company's value chain	Yes			
Contribution to emissions reduction targets of offsets and offsetting approaches. ¹⁹	Yes			
CAPEX breakdown by activity, and by production maintenance and growth	Partially	 CAPEX is disclosed with a lack of granularity: Forecasted net investments range target are detailed in three categories: oil, LNG & gas, and "low carbon". As low carbon aggregates "integrated power" (renewable and gas power) and "new molecules" (such as hydrogen or CCUS), CAPEX specifically dedicated to renewable energy are not disclosed. Forecasted net investments in oil and gas are disclosed, without any breakdown between upstream, midstream and downstream activities. 		
2030 targeted energy mix and production volumes	Yes	 TotalEnergies discloses its 2030 total energy supply forecasts with oil and gas production targets, split between oil and gas, gross renewable capacity target and power production target. 		
Reference scenario used to define the climate targets ²⁰	Partially	 TotalEnergies uses several scenarios including the IEA NZE and Sustainable Development Scenario (SDS). TotalEnergies set scope 1 and 2 methane emission targets in accordance with the NZE 		

Source: 2022 FY Financial statements and 2021 20-F, 2022 and 2023 Investor presentations, Sustainability Climate 2023 Progress Report

3. QUALITY OF TOTALENERGIES' CLIMATE PLAN

a. Oil and gas trajectory

In May 2021, the IEA published its "Net Zero Emissions by 2050 scenario (NZE)" which provides a pathway to meet global energy needs while having a 50% chance of keeping global temperature increases below 1.5°C.²¹ It was used as the reference scenario in the World Energy Outlook (WEO) 2021 and was updated in the WEO 2022 published in October 2022.²² It projects a reduction of the oil and gas production by 2030 compared to 2021 levels of 21.3% and 18.6%, respectively, and the interruption of the development of new oil and gas production projects and LNG terminals.

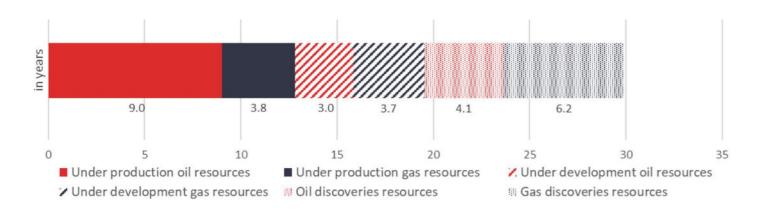
According to the Global Oil and Gas Exit List (GOGEL), TotalEnergies is the 7th top global oil and gas upstream developer. TotalEnergies is the 5th top global upstream

developer of oil and gas resources from fields under development that are not sanctioned under the NZE. TotalEnergies is tapping into unconventional oil and gas resources, mostly ultra deep offshore and Arctic resources. Unconventional resources all together account for 30.5% of oil and gas resources currently being developed by the major.²³ TotalEnergies announced exiting from tar sands in spring 2023 through a spin off. However, in early 2023, a few months before the spring 2023 spin off,24 TotalEnergies increased its participation in Fort Hills tar sands project, participating in the tar sands development right before exiting the sector.²⁵ Aside, among the main projects under development today, TotalEnergies is present in the East African Crude Oil Pipeline (EACOP) in Tanzania and Uganda, in the Barents sea in Northern Europe.²⁶

Despite the disrupted energy environment caused by the invasion of Ukraine, the need

TotalEnergies' oil and gas resources

(based on current ressources and 2022 level of production)



Source: Rystad Energy, accessed in March 2023



to halt oil and gas expansion as soon as possible remains a key feature of the NZE. The May 2021 NZE projected a halt to the development of new oil and gas fields for which a FID was not approved by January 1st, 2022. The updated WEO 2022 version of the NZE also highlights the need to end the development of new LNG terminals beyond those approved by January 1st, 2023, which is significant when considering TotalEnergies' LNG capacity additions in 2022.

The completion of some projects that can swiftly enter production and operate for a limited time only – mainly shale oil and gas projects – is not expressly forbidden in the WEO 2022 version of the NZE. However, the IEA notably stresses that the invasion of Ukraine cannot justify a "new wave of oil and gas infrastructure", and that any new oil and gas fields will make it "even more challenging" to meet carbon neutrality targets and "creates the clear risk that [the 1.5°C] target moves out of reach". Concretely, any such project will require even greater reduction efforts in other sectors and activities.

The IPCC also highlights the risks associated with the development of any new fossil fuel projects.²⁷ This concurs with a large and growing body of scientific evidence showing

the need to immediately end fossil fuel development and a growing consensus on this in net-zero policy discussions.²⁸

Oil and gas production should decrease by 21.3% and 18.6%, respectively, during this decade according to the NZE.29 However, without developing any new oil and gas fields and by only extracting resources that are already under production, TotalEnergies has enough resources to produce the equivalent of 12.8 years of oil and gas production at its 2022 level. TotalEnergies' resources under development and field evaluation will provide the equivalent of another 6.7 years of production at its 2022 production level. Additionally, if the company exploits all its oil and gas discoveries, it will have enough resources to produce the equivalent of a further 10.4 years of production at its 2022 level.

In the IEA's NZE, the rate of oil and gas production declines due to the combination of the natural depletion of existing oil and gas fields and the absence of new fields to fill the gap. This decline happens even though the NZE relies on material levels of negative emissions, including through the deployment of technologies unproven at scale, and would be much faster without such a reliance. Other

prominent 1.5°C scenarios with no or low overshoot also show oil and gas production declining by 2030. These include the One Earth Climate Model (OECM),³⁰ the Network for Greening the Financial System's (NGFS) net zero climate scenarios,³¹ and the IPCC 1.5°C with no or low overshoot scenarios filtered to limit to reasonable volumes the reliance on negative emissions (CCS, NBS, etc.).³²

The following chart compares TotalEnergies' planned oil and gas production level in 2030 (TotalEnergies plans to maintain its oil production at 1,400 kbbl per day and increase its gas production to 1,400 kboepd in 2030 excluding Russia, without indicating if its 2030 production includes only the production of its upstream segment - hypothesis 1 in the following graph - or if it includes its hydrocarbon production for LNG hypothesis 2)33 with the level that would be considered aligned with the NZE scenario. That level aggregates production from its producing fields and its under-development fields that obtained FID before 2022.34 To reach its production target, TotalEnergies will have to increase its gas production beyond its current short-term expansion plans. That means TotalEnergies will have to develop part of its discoveries and/or to buy new fields.

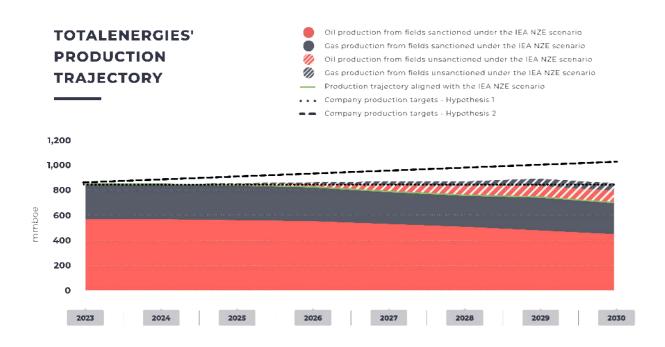
In 2030, with oil and gas from currently producing fields, plus fields under development and under evaluation, TotalEnergies' production level will be 22% higher than the NZE.

In 2030, with TotalEnergies' current oil and gas production target, its production will be 26% (hyp. 1) to 52% (hyp. 2) higher than the level required to align with the NZE.

TotalEnergies has not committed to stop developing new oil and gas projects beyond those already in development and could review its production targets, up or down. Consequently, the level of field-based production indicated in the chart could be conservative and lower than TotalEnergies' own forecasts. TotalEnergies owns 9,491 mmboe of discovered hydrocarbon resources that have not yet entered the field evaluation or development stage. From 2020 to 2022, TotalEnergies spent on average US\$1 billion per year on exploration, making it the 13th biggest investor in exploration over that period.³⁵

Regarding oil and gas midstream infrastructure, TotalEnergies is also developing 22.9 million tons per annum (Mtpa) of LNG terminal capacity.³⁶

TotalEnergies' oil and gas trajectories (in million barrels of oil equivalent to 2030)



Source: Rystad Energy for oil and gas production and expansion, accessed in March 2023; TotalEnergies' reportings and investor presentations for the company production plans

b. Cash-flow allocation

The future energy mix of a company is determined by its current investment strategy. In the NZE, total energy investment needs to more than double by 2030, with a shift from high carbon energy to clean alternatives. Investment in clean energy, end-use and efficiency more than triple in the NZE, and nine dollars are spent on clean energy for each dollar spent on fossil fuels by 2030.³⁷

In its 2022 unaudited financial statement released in February 2023,³⁸ TotalEnergies provides information that show us how the cash flows generated from its operational activities were spent in 2022:

1. TotalEnergies' net investments in its "integrated Gas, Renewables and Power" division (iGRP) amounted to US\$4 billion.³⁹ That includes net investments in renewables and in combined cycle gas turbine and LNG. 53% of TotalEnergies' net investments in iGRP were inorganic

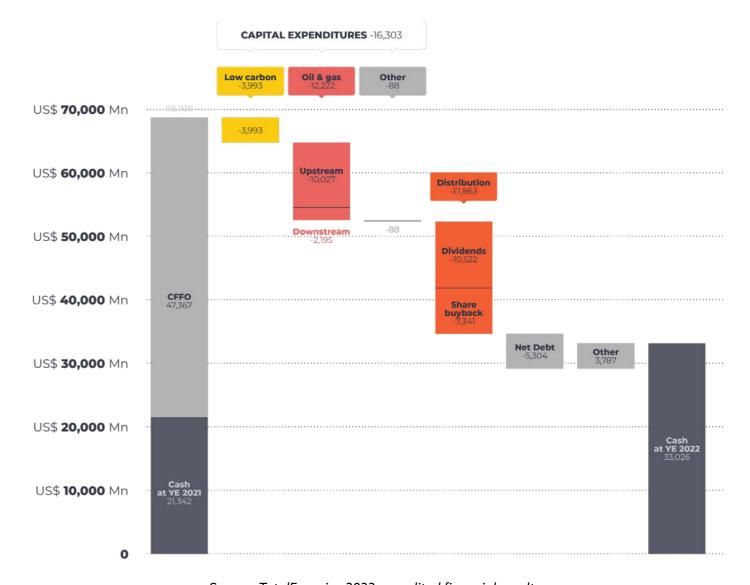
CAPEX, due to net acquisition, including the acquisition of 50% of Clearway Energy Group in the United States and of 34% of Casa Dos Ventos in Brazil. A minority of its net investments in iGRP (47%) were organic investments, that are necessary for the deployment of new renewable capacities.

2. TotalEnergies allocated US\$12.2 billion to oil and gas, including US\$10 billion to oil and gas exploration and production and US\$2.2 billion to oil and gas downstream activities.⁴⁰

In 2022, for every dollar invested in iGRP division, TotalEnergies invested more than three dollars in oil and gas. TotalEnergies' iGRP division also integrates non-renewable energy sources such as gas power, biogas, power trading and marketing. This means that for every dollar invested in fossil fuels, less than 33 cents were invested in sustainable renewable energies.

3. Total Energies provided its shareholders with US\$17.9 billion, through dividend

Breakdown of TotalEnergies' 2022 Cash-flows



Source: TotalEnergies 2022 unaudited financial results

payment (US\$10.5 billion) and share buybacks (US\$7.3 billion).⁴¹ In total, for every dollar invested in its iGRP, more than 4 dollars are distributed to shareholders through dividends and share buybacks.

In 2023, TotalEnergies forecasts short-term CAPEX of US\$16 billion to US\$18 billion per year, including more than one quarter in the integrated power division that include the renewables and CCGT.⁴² TotalEnergies aims to invest US\$5 billion in "low-carbon energies" that include integrated power as well as new molecules such as hydrogen. These targets represent a 25% increase of its "low-carbon energies" net investments.

Although this is a significant increase, it

amounts to less than one third of overall organic and inorganic CAPEX which in turn means that most of the company's investments will still be going to fossil fuels. US\$4.5 billion will be invested annually in new oil and gas projects, including LNG projects.

Due to its capital expenditure strategy, TotalEnergies aims to have a gross renewable capacity of 35 GW by 2025 and 100 GW by 2030, that represents a net renewable capacity of 23 GW and 67 GW respectively.⁴³ Its strategy relies on an acquisition strategy of assets and companies. Assuming the company meets its targets, **TotalEnergies' maximum renewable share of its energy supply mix would remain under 16% in 2030.**

c. Decarbonization targets and emissions trajectory

TotalEnergies pledged mitigation targets for 2025 and 2030 compared to its 2015 and 2020 levels, measured in absolute and intensity terms, and including scope 1, 2 and 3.

Using the IEA energy supply data from the NZE and the APS in the WEO 2022, Reclaim Finance has calculated TotalEnergies' GHG emissions overshoot.

We have assumed that TotalEnergies will follow the IEA scenario pathways for total global energy supply. In the NZE, total energy supply decreases by 9.1% between 2022 and 2030, while in the APS, it increases by 1.6% in the same period. Our analysis is likely to be conservative: while TotalEnergies does not give a projection for its 2030 energy supply, we know that TotalEnergies' oil and gas production target is significatively higher than in the NZE.

Inourhypothesis, weassumethat Total Energies reaches its targets with a decrease of its scope

1 and 2 absolute emissions by 15% by 2025 and its scope 1, 2 and 3 carbon intensity emissions by 2030 by 20%.

TotalEnergies relies on CCS and offsets for a significant proportion of its planned CO2 emission reductions by 2030: 5 Mtpa from purchasing offsets and 10 Mtpa from carbon capture.⁴⁴ This 15 Mtpa would represent 16.5% of TotalEnergies' absolute emission reductions. As highlighted by the IPCC, however, CCS in the energy sector still has limitations to overcome before it can be scaled up, which means it comes with

limited potential and prohibitive costs. Too high reliance on these types of mitigation approaches represents a material risk factor for the TotalEnergies' ability to reach its decarbonization targets.

By 2030, TotalEnergies' targeted carbon intensity would remain 20.2% and 7.5% higher than in the NZE and APS. If it meets its targets and reduces its energy supply in line with the IEA scenarios, TotalEnergies will have overshot its share of the 2023-2030 carbon budget by 20.0% under the NZE, and by 7.5% under the APS.⁴⁵

TotalEnergies' pledged mitigation targets

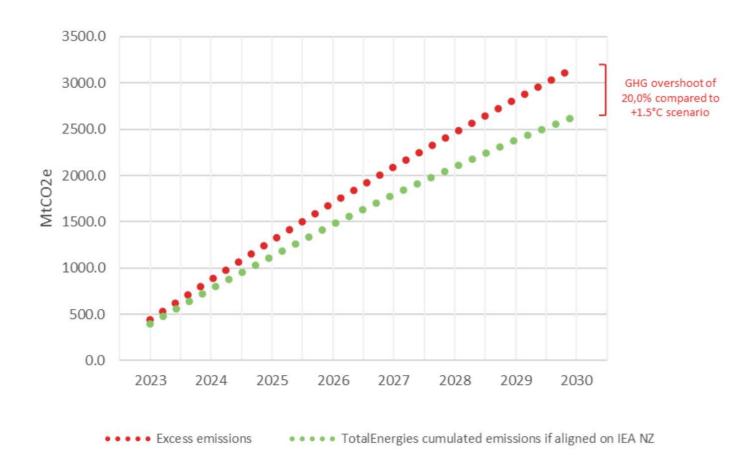
Base year	Target year	Reduction target	Net target	Geographical scope	Emission scope	Emission Type
2015	2025	-15%	Yes	World	1 & 2 & 3, carbon intensity of sold energy products	Intensity
2020	2025	-17%	No	World	1 & 2, operationnal control	Absolute
2015	2025	-2%	No	World	3, final use of sold energy	Absolute
2015	2030	-25%	Yes	World	1 & 2 & 3, carbon intensity of sold energy products	Intensity
2015	2030	-40%	Yes	World	1 & 2, operational control	Absolute
2015	2030	-2%	No	World	3, final use of sold energy	Absolute

Source: TotalEnergies website and reports, as of end of 2022



2023-2030 TotalEnergies' GHG emissions compared to the NZE pathway

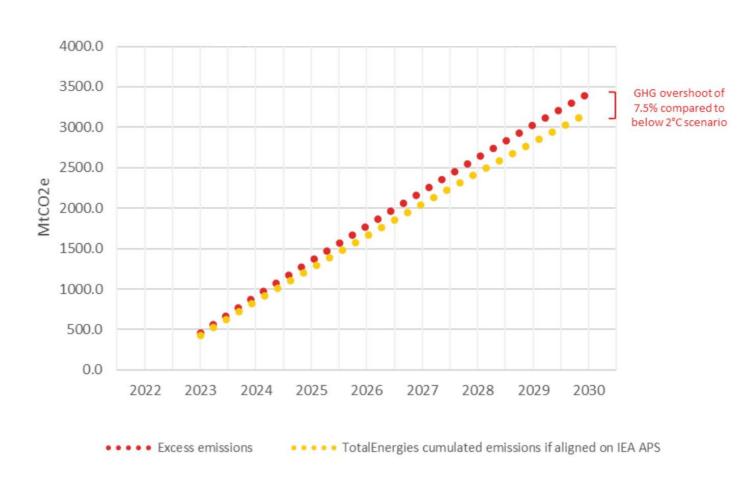
(in million tons of CO2e to 2030)



Calculations based on data from company's disclosed data and scenario data taken from IEA's NZE and APS scenarios. See the methodology section below for more details on these calculations.

2023-2030 TotalEnergies' GHG emissions compared to the below 2°C pathway

(in million tons of CO2e to 2030)



Calculations based on data from company's disclosed data and scenario data taken from IEA's NZE and APS scenarios. See the methodology section below for more details on these calculations.

References

- 1. Defined as fields under evaluation and under development using Rystad Ucube Energy data extracted in March 2023.
- 2. Using the Urgewald 2022 <u>Global Oil & Gas Exit List</u>. The list was constructed based on September 2022 Rystad data.
- 3. TotalEnergies, Total takes major new steps to achieve its ambition to get to Net Zero by 2050, 2020.
- 4. TotalEnergies, Sustainability Climate 2023 Progress Report, 2023.
- 5. Using the Urgewald 2022 Global Oil & Gas Exit List. The list was constructed based on September 2022 Rystad data.
- 6. Calculations made using Rystad Energy Ucube with data from March 2023.
- 7. Urgewald, Global Oil and Gas Exit List, 2022.
- 8. TotalEnergies, Investor presentation 2022 Strategy and Outlook, 2022.
- 9. TotalEnergies, Investor presentation transcript, 2023.
- 10. TotalEnergies, Présentation Un portefeuille GNL intégré de classe mondiale, 2022.
- 11. TotalEnergies, Investor Presentation "2022 Results and 2023 Objectives", 2023.
- 12. TotalEnergies, Résultats du quatrième trimestre et de l'année 2022, 2023.
- 13. TotalEnergies communicates on its gross renewable targets, with consider the total capacity of each renewable project, even if partially owned. In its 2021 annual report, the Group had a 5.1 GW net renewable capacity and a 10.3 GW gross renewable capacity, the Group had a 5.1 GW net renewable capacity and a 10.3 GW gross renewable capacity.
- 14. TotalEnergies, Investor presentation 2022 Strategy and Outlook, 2022.
- 15. TotalEnergies, Investor Presentation "2022 Results and 2023 Objectives", 2023.
- 16. TotalEnergies, Getting to Net Zero, 2020.
- 17. TotalEnergies, Sustainability Climate 2023 Progress Report, 2023.
- 18. TotalEnergies, Sustainability Climate 2023 Progress Report, 2023.
- 19. IPCC estimates between 500 and 3,600 million metric tons of CO₂ could be removed annually through planting new forests by 2050. See Greenpeace, Net expectations Assessing the role of carbon dioxide removal in companies' climate plans, 2021.
- 20. To meet this criterion, the company must disclose the publicly available 1.5°C pathway with no or low overshoot that it uses to set its targets. While all oil and gas companies somewhat rely on 1.5°C pathways to conduct analysis and inform their decision making, this does not mean that the targets set are coherent with these pathways.
- 21. IEA, Net Zero by 2050, 2021.
- 22. IEA, World Energy Outlook 2022, 2022.
- 23. Ultradeep water and Arctic drillings respectively represent 14.2% and 11.1% of TotalEnergies' oil and gas resources currently being developed or under field evaluation. Find out issues related to some unconventional oil and gas in the <u>Five of the riskiest oil and gas sectors</u>, 2021.
- 24. TotalEnergies, <u>TotalEnergies EP Canada acquires an additional interest in Fort Hills, ahead of its planned spinoff</u>, 2023.
- 25. TotalEnergies, <u>TotalEnergies EP Canada acquires an additional interest in Fort Hills, ahead of its planned spinoff</u>, 2023.
- 26. More details on the area detailed by Urgewald on the <u>Vaca Muerta</u>, **₹**HYPERLINK "https://gogel.org/tilenga-kingfisher-eacop" <u>EACOP</u> and <u>and Barents sea</u> webpages. <u>Barents sea</u> webpages.

- 27. IPCC, Climate Change 2022: Mitigation of Climate Change, 2022.
- 28. For example, the UN 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, November 2022; Race to Zero Expert Peer Review Group, Interpretation Guide. Version 2.0, June 2022, para 5b; Net-Zero Asset Owner Alliance (NZAOA), Position on the Oil and Gas Sector, March 2023.
- 29. IEA, Net Zero by 2050 Data Explorer, 2021
- 30. OECM, Limit global warming to 1.5°C, 2022
- 31. NGFS, Climate scenarios
- 32. The International Institute for Sustainable Development (IISD) filtered the various 1.5°C scenarios provided by the IPCC to ensure they do not rely on volumes of negative emission that are not coherent with the IPCC's own realistic potentials. These "limited negative emissions" pathways are analyzed in the report <u>Lighting the</u> Path.
- 33. TotalEnergies, Universal Registration Document 2022, 2023.
- 34. To model the IEA's NZE production trajectory and replicate it by company, we did not integrate merger and acquisition operations as these could increase the production rate because of field acquisitions with a FID obtained before 2022.
- 35. Urgewald, Global Oil and Gas Exit List, November 2022.
- 36. Urgewald, Global Oil and Gas Exit List, November 2022.
- 37. The IEA 9 for 1 ratio includes renewable energy, efficiency and end-use but also biomass and other activities (like CCS) that could lead to some environmental harm and/or raise sustainability questions. Relying on a different scope of clean energy investment, BloombergNEF estimates that \$4 must be spent on clean energy for every dollar spent on fossil fuels by 2030, based on energy supply only.
- 38. TotalEnergies, Résultats du quatrième trimestre et de l'année 2022, 2023.
- 39. TotalEnergies' net investments in iGRP amounted to US\$3.993 billion.
- 40. TotalEnergies allocated US\$12.222 billion to oil and gas, including US\$10.027 billion to oil and gas exploration and production, and US\$2.195 billion to oil and gas downstream activities.
- 41. TotalEnergies provided its shareholders with US\$17.863 billion, through dividend payment (US\$10.522 billion) and share buybacks (US\$7.341 billion).
- 42. Integrated LNG will be reported separately from integrated power from 1st quarter 2023.
- 43. Calculation based on the net to gross capacity ratio of TotalEnergies' 2022 renewable power generation. Net installed, in construction and in development renewable capacities were of 45.5 GW and gross installed, in construction and in development renewable capacities were of 69 GW. More information in TotalEnergies' 2022 Universal Registration Document 2022.
- 44. It is now internationally recognized that offsets cannot replace emission reduction. The SBTi notably forbids the use of offsets, reserving them for a residual share of emissions (up to 10%) once all emission reductions options have been pursued.
- 45. IPCC, Climate Change 2022, Mitigation of Climate Change, Summary for Policymakers, page 40, 2022.

Useful links

Methodology - Glossary

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Reclaim Finance is an NGO affiliated with Friends of the Earth France. It was founded in 2020 and is 100% dedicated to issues linking finance with social and climate justice. In the context of the climate emergency and biodiversity losses, one of Reclaim Finance's priorities is to accelerate the decarbonization of financial flows. Reclaim Finance exposes the climate impacts of financial players, denounces the most harmful practices and puts its expertise at the service of public authorities and financial stakeholders who desire to bend existing practices to ecological imperatives.

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