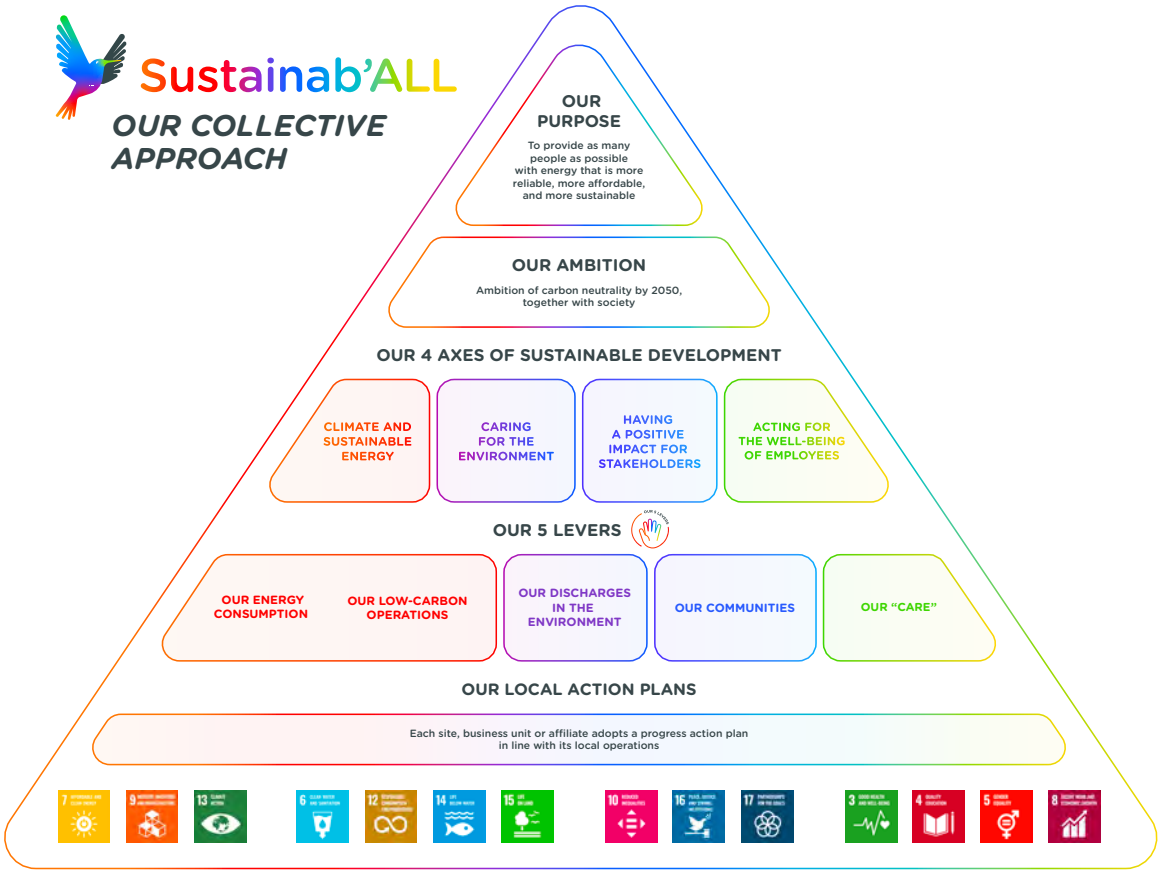
More Energy, Less Emissions

Sustainability & Climate 2025 Progress Report

Our Approach to Sustainable Development



Energy is at the heart of one of the great challenges of the 21st century: saving our planet from the threat of climate change while enabling the majority of mankind to escape from poverty. The climate challenge and energy transition are inseparable from other major world challenges such as poverty, hunger, environmental degradation, biodiversity loss, the preservation of water, ethics and corruption: these are the 17 U.N. Sustainable Development Goals. It is not enough to decarbonize energy. It is also necessary to meet in a responsible way the growing needs for affordable and sustainable energy of a rising global population. This is TotalEnergies' purpose: to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. And this is why the Company aims at placing Sustainability in all its dimensions at the heart of its strategy, its projects and its operations and at establishing the benchmark for endorsement of the Sustainable Development Goals.

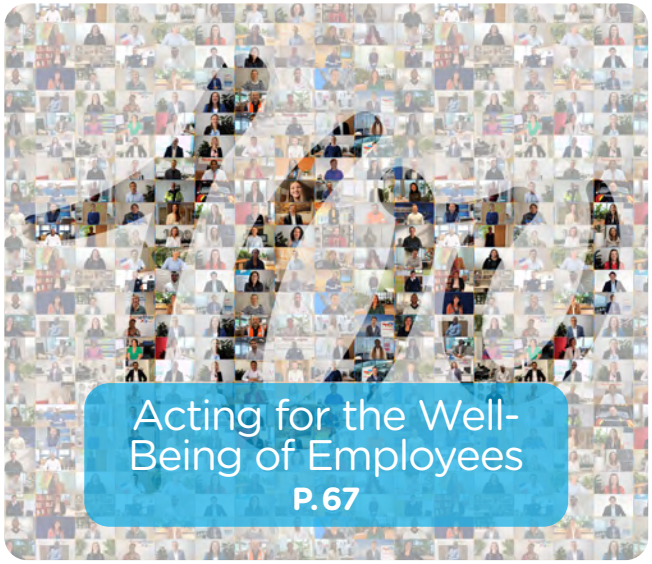
To do so, it relies on the action principles at the heart of its business model, Safety, Respect for Each Other, Zero tolerance towards corruption and fraud, Transparency in its engagement with society.
TotalEnergies' commitment to contribute to the Sustainable Development Goals is based on 4 axes:

- **Climate and Sustainable Energy;**
- **Caring for the Environment;**
- **Acting for the Well-being of Our Employees;**
- **Having a Positive Impact for Stakeholders.**

In 2024, to make these commitments a reality, the Company has identified 5 "Levers for a Sustainable Change"[1] to bring about collective change in our behaviors. They support our Sustainab'ALL approach, for which we have mobilized our 100,000 employees through the local progress plans defined at each of our sites. ■

1. See p. 72, "Our 5 Levers for a Sustainable Change".

Our 4 Axes of Sustainable Development



What's New?

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The **launch** of our internal program: **"Our 5 Levers for a Sustainable Change"** which aims at mobilizing all our employees to collectively make our corporate culture in terms of sustainable development evolve, over the long term, as we have been able to do in the area of safety.

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41 TWh of **electricity** produced in 2024. **Target** of **50 TWh** in **2025,** i.e. an objective to reach **10%** of hydrocarbon **production.**

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Our **2025 emissions reductions targets** have been **strengthened:**

- Methane: from -50% to -60% (vs 2020) with the deployment of continuous detection means of emissions at all our operated sites (Upstream assets operated);
- Scope 1+2 of our operated sites: from less than 38 Mt to less than 37 Mt CO_2e;
- Carbon intensity of energy products sold: from -15 % to -17%

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Taking into account the issue of **adaptation** to **climate change.**

Strengthening our extra-financial reporting: in 2025, in addition to this 4th edition of the S&C Progress report, our Universal Registration Document includes a sustainability report in application of the CSRD (Corporate Sustainability Reporting Directive[1]). They complement other voluntary reporting initiatives to which the Company subscribes, such as its GRI report and the Global Compact's Communication on Progress.

Our progress in the field: Focus

- Our multi-energy presence in Brazil;
- Our progress in reducing emissions the LNG chain, notably with the launch of an innovative low-carbon liquefaction plant in Oman;
- Our ability to supply *Clean Firm Power* in the United States;
- The deployment of our *Integrated Power* strategy in Germany;
- The development of Sustainable Aviation Fuel (SAF);
- Local action plans for sustainable development;
- Concrete examples of our waste treatment initiatives;
- The positive impact of our Tilenga-EACOP project for our stakeholders;
- The GranMorgu project in Suriname;
- Our local presence in France.

1. A presentation of the methodological differences relating to certain indicators in this report is given in the glossary.

Message from Patrick Pouyanné,
Chairman and CEO

> "The 1st challenge we face is to continue to produce the energy the world needs today while reducing our industrial emissions, and in particular moving towards zero methane emissions by 2030."

More Energy, Less Emissions

In 2025, we are staying the course of the transition strategy to which we are resolutely engaged since 2020! Through this Sustainability & Climate 2025 Progress Report, you can follow the continued commitment of our 100,000 employees to supply to as many people as possible a more affordable, more available and more sustainable energy. You will be able to appreciate how we are pragmatically allocating our human and financial capital to the development of our activities, taking into account the abatement costs of the various emission reduction technologies at our operated industrial sites on the one hand, and our customers' emissions on the other.

The **1st challenge** we face is to continue to **produce the energy the world needs today while reducing our industrial emissions, and in particular moving towards zero methane emissions by 2030.**

In 2024, we reached and even **exceeded our 2025 methane emissions reduction target** (a year ahead of schedule **-55% vs.** -50% **compared with 2020**). We are therefore stepping up our efforts to reach -60% by 2025 and -80% by 2030. This is a priority for us, but it must also become a priority for the entire oil and gas industry.

As an international company with technological strengths, we are working to bring the entire industry on board. This is the purpose of my commitment to the OGDC launched at COP28. As a pioneer in the continuous detection and quantification of our methane emissions through an equipment plan that will cover all our Upstream sites by 2025, we are convinced that the sharing of technologies and best practices is essential if the entire sector is to evolve.

To meet the demand for "more energy", we are investing in new oil and gas projects with low breakeven points and low greenhouse gas emissions. In Oman, the Marsa LNG project demonstrates that we can produce LNG while considerably reducing emissions: all-electric and powered by a solar farm, this plant will emit less than 3 kg CO_2e/boe compared with 35 kg CO_2e/boe for average LNG plants. The year 2024 was also marked by the launch of major projects in Suriname, Brazil and Angola, each with a lower emissions intensity than the portfolio average. We have thus entered a virtuous circle, with our Scope 1+2 intensity falling in 2024 to 17 kg CO_2/b, which becomes our new acceptable maximum intensity for all our new projects from 2025 onwards.

We are also reducing the emissions generated by our existing operations. We have a billion-dollar energy efficiency plan for the period 2023-2025 and in 2024 launched a new billion-dollar plan to cover our projects for 2026-2028. In 2024, more than 170 projects to reduce emissions by more than 2 Mt CO_2 were implemented and will be completed in 2025.

We are also making progress towards using low-carbon hydrogen in our refineries. In 2024, we entered into a number of partnerships, large-scale unprecedented in terms of volume which position us as a pioneering player in the low-carbon hydrogen market.

The **2nd challenge** is to **build the low-carbon energy system of tomorrow.** Decarbonizing electricity plays a key role in the energy transition. We have built a profitable integrated model, *Integrated Power*, which will become one of the Company's cash generation engines.

We have expanded our renewable electricity generation, storage, flexible generation and distribution capabilities. The deployment of our integrated model in the USA and in Germany are further proof of our massive development in this energy sector. In 2024, net electricity production reached 41 TWh, up 23% over the year, helping to reduce the average intensity of all the energy products sold by the Company to its customers (-16.5% compared with 2015, again ahead of our trajectory). We plan to produce more than 50 TWh of electricity by 2025, i.e. 10% of our production of hydrocarbon, on the way to reaching 20% by 2030.

On a global scale, the transport sector emits around 8 Gt CO_2e every year. To support the decarbonization of the road transport sector, we are producing low-carbon electricity and investing in the deployment of charging infrastructures, with the aim of developing a high-power charging network of 1,500 sites in Europe by 2030. To contribute to the decarbonization of the heavy transport market, whether land, air or sea, we are developing our production and distribution capacities for biofuels, Sustainable Aviation Fuel and LNG.

In addition to these two challenges, we need to ensure that our activities are part of a sustainable development approach, i.e. one that meets the needs of today's population while preserving the ability to meet the ones of future generations.

> "The 2nd challenge is to build the low-carbon energy system of tomorrow. Decarbonizing electricity plays a key role in the energy transition."

In concrete terms, this means paying attention to our impact on the environment (water use, impact on biodiversity, circularity, etc.) and to all our stakeholders affected by the energy transition: our employees, our customers, our suppliers and the communities in the countries where we operate, particularly the most vulnerable ones. The needs are very different from one country to another: let's not forget that nearly 2.3 billion people in the world still do not have access to *Clean Cooking*. By supplying LPG bottles to replace wood and charcoal, we are helping to make *Clean Cooking* possible, a way of cooking that emits less CO_2 and particles and is better for health and the planet. In 2024, we distributed 990 kt of bottled LPG in Africa and Asia, serving 15 million households and 60 million people. In 2024, we announced that our goal is to serve 100 million people by 2030 in Africa and India.

100 years of pioneering spirit to serve energy

To continue to drive this sustainable development approach through our collective corporate culture, in 2024 we launched "Our 5 Levers for a Sustainable Change", which promote 5 priority attitudes among all our employees: minimizing our energy consumption, promoting renewable energies and low-carbon technologies, minimizing our discharges into the environment, engaging in constructive dialogue with our stakeholders and paying attention to our colleagues. Our ambition is to make sustainability part of our culture, at the heart of our operational performance, just as safety has become today.

We can rely on the strong commitment of our employees, a pride of belonging demonstrated in 2024 on the occasion of the Company's 100th anniversary. We are resolutely committed to working with our customers and partners to meet the collective challenges of sustainable development, with the ambition of carbon neutrality by 2050, together with society. ■

Message from the Lead Independent Director

Jacques Aschenbroich
Lead Independant Director,
Chairman of the Governance
and Ethics Committee

> "The unanimous Board of Directors, is counting on the leadership of the Chairman and CEO, and his strategic vision to pursue TotalEnergies' transition with determination and consistency."

Since the Annual General Meeting of shareholders held in May 2023, I have held the position of Lead Independent Director, which was entrusted to me by the Board of Directors, and in this capacity, I chair the Governance and Ethics Committee.

In view of the renewal of the Chairman and CEO's directorship at the end of the 2024 Annual General Meeting, I chaired, without the Chairman and CEO being present, the work and deliberations of the Governance and Ethics Committee and the Board of Directors, which unanimously reaffirmed the relevance of a unified governance structure in order to pursue the Company's transition strategy.

The Board of Directors is unanimously counting on the leadership of the Chairman and CEO, Patrick Pouyanné, and his strategic vision to pursue TotalEnergies' transition with determination and consistency, based on two pillars: Oil & Gas on the one hand, and Power and Renewables on the other. This vision, which creates value in the medium and long term, and this strategic stability are an asset and a differentiating factor for TotalEnergies compared with its peers.

I also led the formal evaluation of the Board's operation, with the support of an external consultant, and chaired the annual meeting of non-executive or salaried directors (executive session). At this gathering, the non-executive directors confirmed – once again – their full support of the strategy implemented as decided by the Board: it makes TotalEnergies, the company most committed to the energy transition among the majors, by developing, in a determined and structured way, an *Integrated Power* business unit. As a result, TotalEnergies is one of the key players in renewable energies, and the *Integrated Power* business is achieving encouraging levels of profitability.

> "TotalEnergies the company most committed to the energy transition among the majors, by developing, in a determined and structured way, an *Integrated Power* business unit."

With regard to stakeholders, in my capacity as Lead Independent Director, before the 2024 Annual General Meeting, I maintained an active dialogue with shareholders representing almost a quarter of the Company's capital, in order to prepare the vote on the resolutions. I also managed the dialogue with the proxy advisors. These discussions continued after the Annual General Meeting, after analyzing the results and the lessons to be learned from them.

In this context, I explained the reasons that led the Board of Directors to reaffirm the relevance of a unified governance to pursue the Company's transition strategy, as well as the

> "The Company's ambition in terms of sustainable development and energy transition will be submitted once again for discussion at the Annual General Meeting."

Board's position on consultative shareholder resolutions, and reminded shareholders of the possibility to submit an item on the agenda (without voting) to trigger a debate on a particular subject at the Annual General Meeting. The composition of the Board of Directors, its operation and the role of the Lead Independant Director in the context of the combined role of Chairman and CEO were discussed at these meetings. These exchanges also provided an opportunity to talk about TotalEnergies' strategy and investments, particularly for the *Integrated Power* business and the Tilenga & EACOP projects (I had the opportunity to travel to Uganda in 2024 with other directors), and the Company's climate and sustainability strategy, described in this report.

The Company's ambition in terms of sustainable development and energy transition will be submitted once again for discussion at the Annual General Meeting.

In the context of major regulatory changes (CSRD) and controversies over the practice of Say on Climate via consultative resolutions, the Board of Directors commissioned a review of the practices of its peers, market developments and a consultation of shareholders and proxy advisors to gather their expectations regarding Say on Climate.

In 2024, the Board of Directors indeed refused to include a resolution on the agenda of the Annual General Meeting because it would have encroached on the Board's own powers under French law, and the merits of this position were confirmed by the President of the Nanterre Commercial Court.

On this occasion, the Board of Directors had invited shareholders who so wished, as it had done in 2023, to propose items for debate on the agenda of the Annual General Meeting or to submit written questions to the Board.

Following this review, the Board of Directors has decided to include on the agenda of the Annual General Meeting of May 23, 2025 a formal item for debate (without a resolution to be put to shareholders' vote) on the Sustainability & Climate 2025 Report, which reports on the progress made in implementing the Company's ambition in terms of sustainable development and energy transition to carbon neutrality, and its 2030 targets in this area.

The Board of Directors intends to make this practice of including an item on the agenda a permanent feature at future shareholders' meetings. In the event of a significant change in the strategy, a consultative vote by shareholders on the Sustainability & Climate strategy would be initiated by the Board of Directors. ■

Pioneers for Over a Hundred Years

OUR HISTORY

1924 to 1945 — The Beginnings

1924 Creation of the Compagnie Française des Pétroles (CFP).

1927 Initial discovery at the Kirkukfield in Iraq.

1929 Listing of CFP shares on the Paris Stock Exchange.

1933 Production start-up at the Gonfreville refinery in Normandy (France).

1939 Discovery of the Saint-Marcet gas field, the first hydrocarbon reserves found in France.

1941 Creation of Société Nationale des pétroles d'Aquitaine (SNPA).

1945 to 1970 — Towards an Integrated Model

1951 SNPA discovers the Lacq gas field in France.

1954 CFP launches the Total brand. Creating our own distribution network.

1956 Discovery of the Edjeleh, Hassi R'Mel (gas) and Hassi Messaoud (oil) fields in the Algerian Sahara.

1958 First offshore well on Umm Shaif (Abu Dhabi).

1961 Discovery of the first offshore fields in Gabon.

1964 Inauguration of the Feyzin Refinery.

1971 to 1997 — A New Era

1971 Production start-up at the Ekofisk field in the North Sea.

1974 The Group acquires Hutchinson-Mapa.

1976 Creation of Société Nationale Elf Aquitaine (SNEA).

1982 A new world record for CFP with the drilling of a deepwater well to a depth of 1,714 meters in the Mediterranean Sea.

1991 CFP becomes Total.

1996 Discovery in Angola of one of the biggest offshore oil fields in the world.

1998 to 2004 — United for Success - The Consolidation

2000 Total merges with Petrofina and Elf Aquitaine.

2001 Production start-up at the Girassol field on Block 17 in Angola starts production.

2003 TotalFinaElf changes its name to Total.

2005 - Today — From Total to TotalEnergies: Committed to the Energy Transition

Pioneers for 100 years

2011 Investment in the solar energy sector with the acquisition of 60% of the US company SunPower.

2016 Total acquires Saft Groupe.

2018 Total announces the completion of the acquisition of Direct Energie.

Total acquires Engie's LNG business and becomes the world's number two liquefied natural gas player.

Total acquires exploration and production company Mærsk Oil & Gas A/S.

2020 Total announces its ambition of carbon neutrality by 2050, together with society.

2021 Total becomes TotalEnergies.

2023 TotalEnergies becomes an operator again in Iraq thanks to a multi-energy project (oil, gas, electricity).

2024 The Company celebrates its centenary.

2024 Key Figures

OUR KEY FIGURES

Almost **9 million customers** gas and electricity in Europe

More than **6 million customers at over 13,000 service stations** every day in nearly 60 countries

More than **2.43 Mboe/d** produced in 2024 including **46% gas**

N°3 worldwide in Liquefied Natural Gas

41 TWh of electricity generated in 2024

26 GW of gross installed renewable electricity capacity

OUR 2030 OBJECTIVES

MORE ENERGY

+ 4%/year energy production over the 2024-2030 period

>100 TWh of electricity generation by 2030

1.5 Mt/year of ***Sustainable Aviation Fuel*** (SAF) by 2030

LESS EMISSIONS

- 40%[1] net reduction in our Scope 1+2 in 2030 vs. 2015. Already **-26%** in 2024, and **-36%** in O&G

- 25% Lifecycle carbon intensity of energy products sold (**-16.5%** in 2024 vs 2015)[2]

>100 million people supplied with Clean Cooking

OUR RESOURCES

>100,000 employees in over **120 countries**

18.3 B$ Adj. net income in 2024

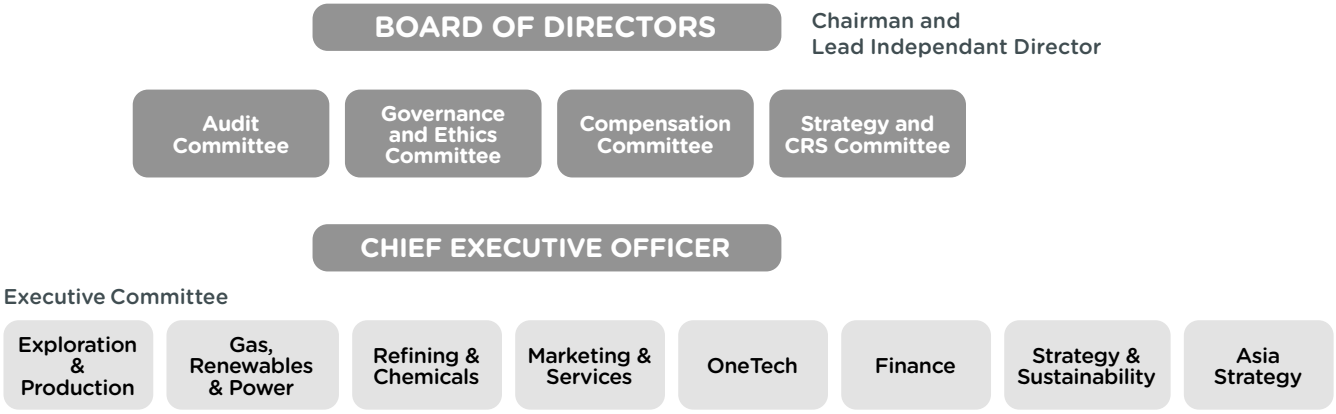
4.8 B$ **invested** in low-carbon energies in 2024

More than **3,500** **researchers** in our **18 R&D centers**

>1 B$ **invested in R&D** and digital development in 2024, **with 68% devoted to low-carbon and decarbonization solutions**

1. Net emissions, including nature-based carbon sinks from 2030. **2.** Lifecycle carbon intensity of energy products sold. See report's glossary for further details.

Governance



SPECIALIZED COMMITTEES FOR ADDRESSING OUR STRATEGIC PRIORITIES

10 meetings of the Board of Directors
97.9% attendance rate

5 meetings of the Governance & Ethics Committee
100% attendance rate

1 executive session chaired by the **Lead Independent Director**

3 meetings of the Compensation Committee
100% attendance rate

7 meetings of the Audit Committee
100% attendance rate

3 meetings of the Strategy & CSR Committee
88.9% attendance rate

To define its strategy and take into account the challenges posed by climate change and sustainability, TotalEnergies relies on a clearly defined organizational structure and governance. Climate and sustainability issues are addressed at the highest level of the organization, by both the Board of Directors and the Executive Committee.

Board of Directors

TotalEnergies' Board of Directors is dedicated to promoting long-term value creation by the Company. It defines the Company's strategic orientations and annually reviews opportunities and risks, such as financial, legal, operational, social and environmental risks, and the measures taken in response. It ensures that both the Company's strategy and the investment projects submitted for its consideration take account of climate and sustainability concerns. To aid the Board in carrying out its duties, a continuous training program on climate was approved for the Directors in 2021 and includes a variety of modules on the following topics: energy, climate change and environmental risks, financial risks and opportunities. Site visits make a very practical contribution to the training of Administrators, enabling them to deepen their knowledge of the Company's specific features, its sustainability challenges in particular, its businesses – including new ones – and its teams. They are often the occasion for thematic presentations.

In this context, site visits were organized in 2024, by groups of Administrators accompanied by a member of the Executive Committee, in Saudi Arabia (SATORP in Jubail, Amiral project, renewables), in Uganda (Exploration & Production, Marketing & Services), in Bordeaux and Nersac (Saft R&D center, ACC factory) and in Feluy in Belgium (R&D center, polymers) as well as in the Paris region (Hutchinson & Belib). Furthermore, the members of the Audit Committee went to Le Havre (Gonfreville refinery, FSRU).

Strategy & CSR Committee

The 2024 annual strategic seminar focused in particular on the examination of the *Integrated Power* business model, in particular the integration of gas – electricity and renewables – flexible assets. The Directors spoke with Michele della Vigna, Senior Analyst at Goldman Sachs, on the challenges of the energy transition.

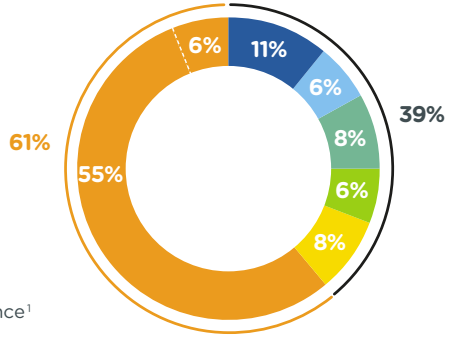
The Audit Committee

The Audit Committee, notably carried out the new tasks arising from the regulations on the reporting of sustainability information. In this context, the members of the Audit

VARIABLE COMPENSATION ALIGNED WITH THE COMPANY'S STRATEGIC OBJECTIVES

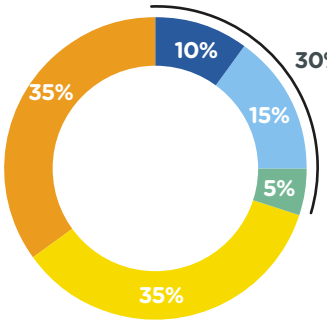
ANNUAL VARIABLE COMPENSATION

Chairman & CEO extra-financial criteria account for 39%; financial criteria for 61%, including 6% for *Integrated Power* cash flow



- Safety performance[1]
- GHG reduction[1]
- Supervision of the transition strategy[1]
- Profitability of renewables[1]
- CSR performance[1]
- Financial performance[1]
  (*Integrated Power* cash flow included for 6%)

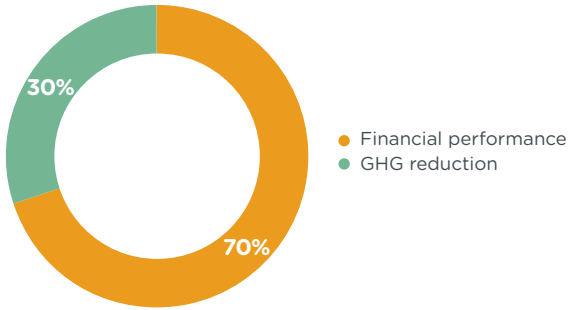
Senior Executives: extra-financial criteria account for 30%



- Safety
- GHG reduction and carbon intensity
- Diversity
- Individual performance[2]
- Financial performance

PERFORMANCE SHARE PLAN

From the Chairman and CEO to all beneficiary employees[3]: extra-financial criteria account for 30%



- Financial performance
- GHG reduction

1. Maximum percentage. **2.** According to the role.
3. More than 12,000 employees.

Committee all participated in external training dedicated to CSRD issues, training in which most of the Directors also participated. The Audit Committee thus monitored the process of drawing up the sustainability report that succeeds the extra-financial performance declaration. It also monitored the certification of sustainability information.

Compensation Committee

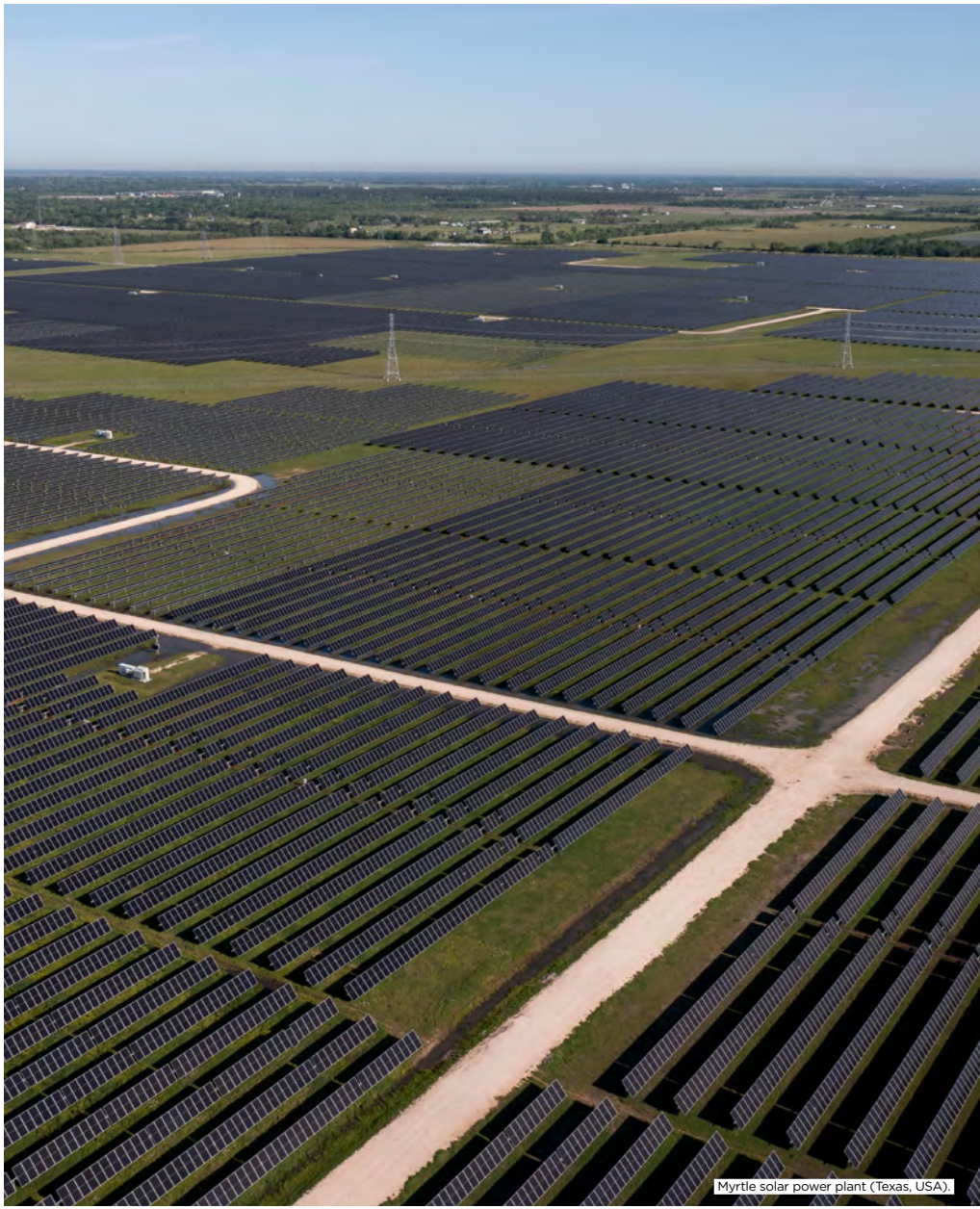
For many years the Compensation Committee has included sustainability issues including climate ones in the compensation structures of the Chairman & Chief Executive Officer, as well as in the criteria related to the performance share plans.

Executive Committee (Comex)

The Chairman & Chief Executive Officer of TotalEnergies, assisted by the Executive Committee, ensures that climate issues are taken into account and built into operational roadmaps. The Executive Committee is responsible for identifying and analyzing risks that could prevent TotalEnergies from reaching its objectives. The TotalEnergies Risk Management Committee (TRMC) assists the Executive Committee. The TRMC's primary duties are to ensure that the Company's risk mapping is updated on a regular basis and that its existing risk management processes, procedures and systems are effective. The Strategy & Sustainability Division coordinates the Company's activities through the entities in charge of strategy and markets analysis, sustainability and climate, and also safety, health and environment, legal affairs, relations with public authorities and internal audit. Its President also chairs the Risk Committee (CoRisk) which is in charge of the Company's investments. The Finance Division ensures an ongoing dialogue with investors, analysts and extra-financial rating agencies on climate challenges and on extra-financial issues more broadly. In all, around 450 meetings were held in France and worldwide in 2024. ■


Operators on the CLOV FPSO.

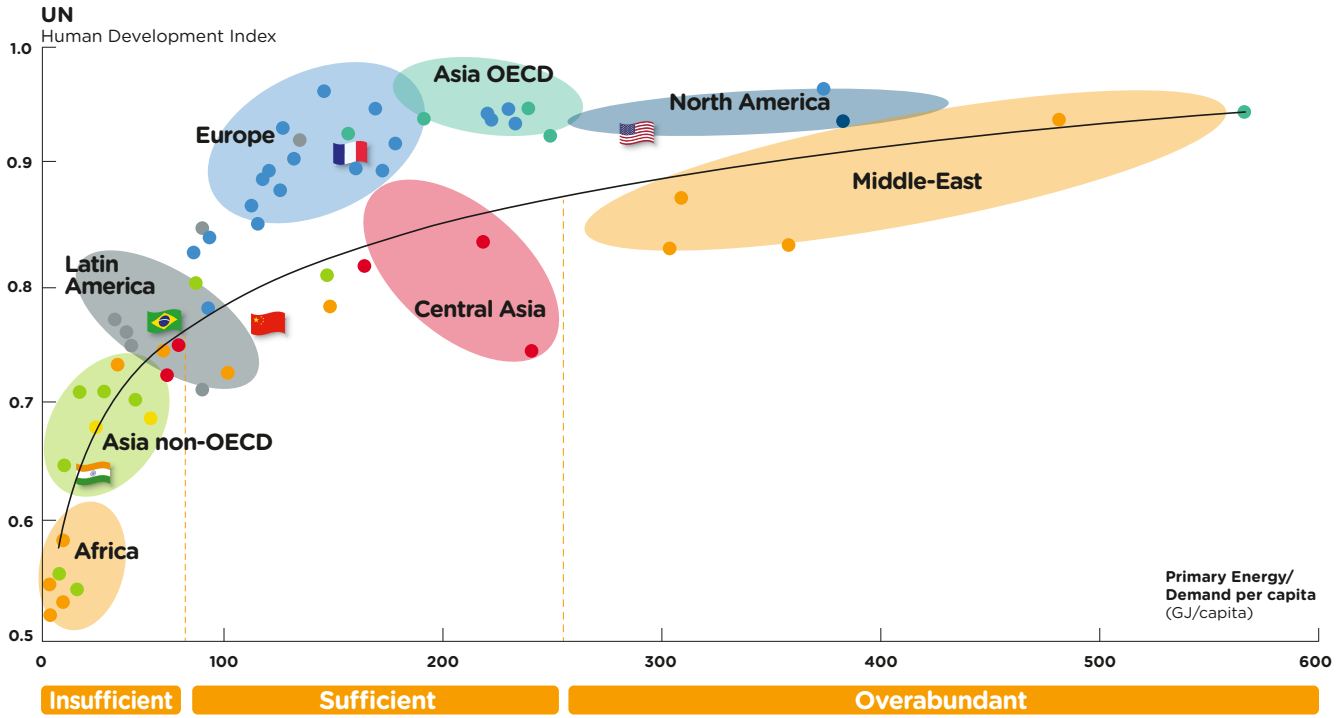
Our Transition Strategy


Myrtle solar power plant (Texas, USA).

Global Challenges: More Energy, Less Emissions

ENERGY ACCESS AND HUMAN DEVELOPMENT INDEX

The United Nations Human Development Index (HDI) measures well-being in terms of health, education and living standards (GDP). HDI increases dramatically with energy access for low levels (below ~70 GJ/cap). Above ~240 GJ/cap incremental energy does not significantly improve human development.



Today, approximately **4.5 bn** people have insufficient access to energy (less than 70 GJ/capita)

Since the Paris Agreement in 2015, states have made a joint commitment *"to strengthen the global response to the threat of climate change, in the context of sustainable development and the fight against poverty, including by containing the rise in global average temperature to well below 2°C above pre-industrial levels and continuing action to limit the rise in temperature to 1.5°C above pre-industrial levels."*

TotalEnergies supports the objectives of the Paris Agreement and is deploying a strategy to meet the needs of both development and energy transition: more energy and less emissions.

More energy to fuel human development

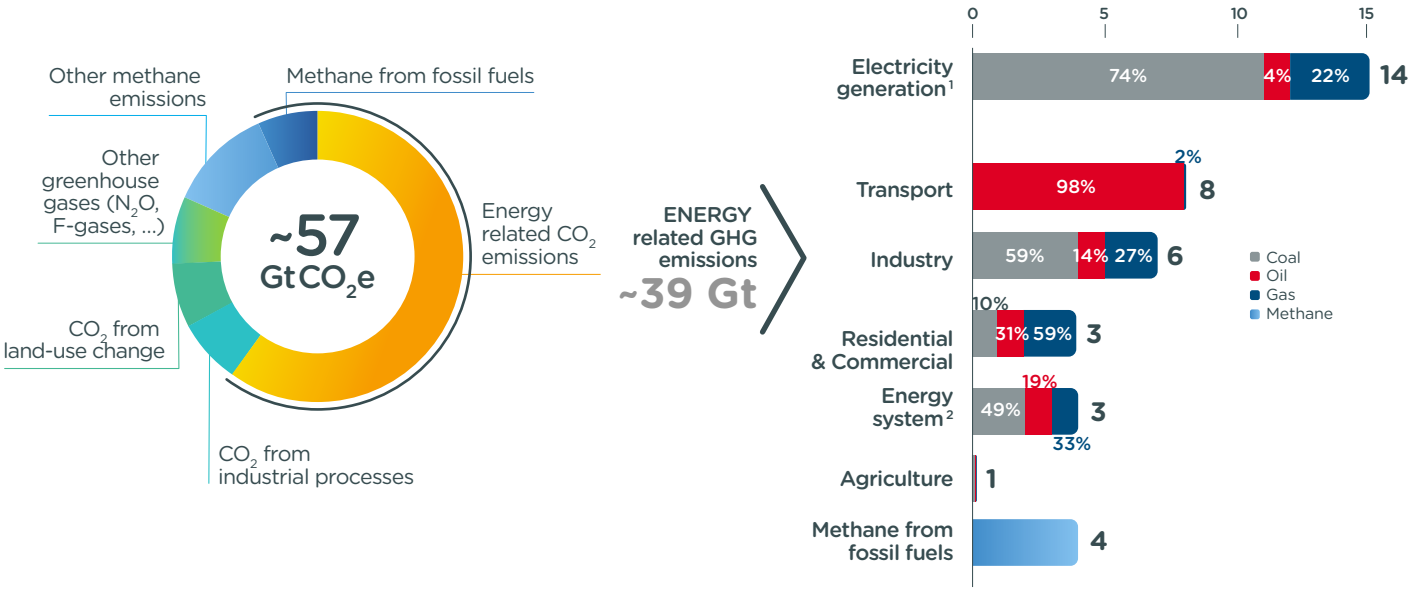
Access to energy is essential for human development. **The figure opposite,** adapted from the work of energy historian Vaclav Smil, shows that the human development index increases with the energy available per capita. The available energy must exceed the threshold of 70 GJ/capita to reach an index level deemed sufficient.

Today, around 4.5 billion people live below this threshold. Getting them there today would require a 3-fold increase in the energy available to them. By 2050, taking into account the demographic growth of these populations, the energy available will have to be multiplied by 4.

Recent history shows that such an increase is possible: between 2000 and 2022, China increased its available energy per capita by a factor of 3, from ~40 to ~120 GJ/capita, lifting

GLOBAL ANTHROPOGENIC GHG EMISSIONS IN 2023

Gt CO_2e



AVAILABLE TECHNOLOGIES TO REDUCE GHG EMISSIONS AND THEIR POTENTIAL IMPACT

- **Renewables combined with Flexible Gas** to displace coal from the electricity system: up to ~8 Gt CO_2
- **Electrification** to decarbonize road transport: up to ~6 Gt CO_2
- **Heat pumps** to replace fossil boilers: up to ~2 Gt CO_2
- **Elimination of venting & flaring and leak detection & repair** to cut emissions from fossil fuels production: up to ~4 Gt CO_2

~800 million people out of poverty. This historic economic and social development resulted from the massive exploitation of coal, an abundant and often cheap source of domestic energy.

The challenge of the energy transition is therefore twofold: (I) to decarbonize the "mature" energy systems of developed countries, and (II) to increase the energy available in the Global South and India by fuelling economic and social development with low-carbon electricity rather than coal.

Less emissions

In 2023, GHG emissions from the energy system accounted for 39 billion tonnes of the 57 billion tonnes of anthropogenic GHG emissions. Burning coal to produce electricity is the biggest contributor, at around 10 Gt CO_2, followed by using oil for transport, at around 8 Gt.

The global deployment of mature and competitive low-carbon technologies would make it possible to eliminate around 20 of these 39 Gt:

- **solar and wind** – and natural gas to ensure the long-term balancing of the system – to produce electricity;
- **electric vehicles** and heat pumps to use it, and
- **technologies to reduce** methane emissions in the energy system.

Reconciling economic and social development with the fight against climate change requires a pragmatic approach to deploy low-carbon technologies at a global scale, taking into account their cost (cost merit curve) and technological maturity. ■

1. Including heat combined with power. **2.** Includes energy sector own use, transport losses and energy transformation. **Sources:** IEA, Enerdata, TTE analysis. "Methane from fossil fuels", includes methane emissions from the production and transport of fossil fuels.

A Two-pillar Multi-energy Strategy

TotalEnergies stays the course of its balanced integrated multi-energy strategy…
TotalEnergies reaffirms the relevance of its balanced integrated multi-energy strategy considering the developments in the oil, gas and electricity markets. Anchored on two pillars, Oil & Gas, notably LNG, and electricity, the energy at the heart of the transition, the Company plans to increase its energy production (hydrocarbons and electricity) by +4% per year between 2024 and 2030 and is in a very favorable position to take advantage of energy prices evolution. Thanks to the refocusing of the Oil & Gas portfolio on assets and projects with low breakeven and low greenhouse gas emissions, and to the diversification into electricity, notably renewable, through an integrated strategy from production to customer, the Company is implementing its transition strategy while ensuring an attractive shareholder return policy.

… responsibly producing low cost, low emissions Oil & Gas…
While drastically lowering the emissions of greenhouse gas from its operations, TotalEnergies plans to grow its Oil & Gas production by around 3% per year over the next five years, predominantly from LNG, thanks to its rich low cost, low emission project portfolio which has been the subject of major investment decisions in 2024 to ensure its medium-term growth *(see p.29/Investments)*.

The Company will put more than ten projects into production by 2030 starting from 2025-2026, in oil in the United States, Brazil, Iraq and Uganda and in gas in Argentina, Nigeria, Malaysia, Qatar and Mexico.

In 2027 and 2028 the start-ups of LNG projects will follow in Qatar, the United States, and Oman. At the same time, the Company strengthens its leading position in Europe in regasification and its leading LNG exporter position in the United States.

The oil projects developed, like the liquefaction plant projects, are well positioned on their respective merit curves, enabling them to generate value for the Company, even in a low-price scenario.

The key indicator of our progress on this pillar is the reduction in Scope 1 + 2 emissions of our Oil & Gas assets because our first duty as a producer of hydrocarbons is to reduce the greenhouse gas emissions linked to their production.

… and developing a profitable and differentiated *Integrated Power* model which will become a future cash engine of the Company.
TotalEnergies is replicating its integrated Oil & Gas business model into the electricity value chain to achieve a profitability (ROACE) of ~12% for the *Integrated Power* segment, equivalent to Upstream Oil & Gas ROACE at 60 $/b, above the returns of the traditional Utilities model.

The Company is building a world class cost-competitive portfolio combining renewable (solar, onshore wind, offshore wind) and flexible assets (CCGT, storage) to deliver low-carbon electricity available 24/7. In particular, TotalEnergies is leveraging its scale effect in equipment purchases and digital to lower its operational costs in its renewable assets. TotalEnergies also uses the strength of its balance sheet to increase its market exposure from 10% in 2024 to 30% in 2030, allowing it to capture additional margins in a volatile market. Finally, the last lever is the recycling of capital through farm-downs of post-development assets in order to reinvest in new projects.

The Company aims to grow its annual power generation to more than 100 TWh (around 70% renewables / 30% flexible) by 2030, investing around 4 B$ per year; the generated cash flow of this segment was 2.6 B$ in 2024 and will be more than 4 B$ in 2028, the *Integrated Power* segment becoming net cash-flow positive at that time.

Additionally, we invest in a targeted manner in low-carbon molecules (biofuels, SAF and biogas, as well as hydrogen and its derivatives: e-fuels), as part of an “equity light” business model with partners.

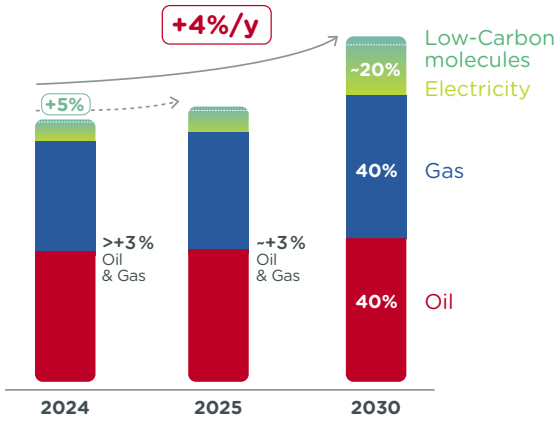
The key indicator of our progress to measure our transition towards low-carbon energy products is the lifecycle carbon intensity[1] of the products used by the Company’s customers. The reduction in carbon intensity[1] reflects the lower carbon content of the energy sold to our customers and the Company’s progress in implementing its transition strategy. This intensity decreased by 16.5% between 2015 and 2024. ■

1. Lifecycle carbon intensity of energy products sold. See report’s glossary for further details.

2030: Our Objectives for More Energy and Less Emissions

ENERGY PRODUCTION

Energy production
In PJ/d



+4%/year
of energy production between 2024 and 2030

Over the decade 2020-2030, TotalEnergies' energy transition strategy based on two pillars is reflected in the production targets shown on the left hand side.

We plan to **increase our energy production (oil, gas and electricity), overall by 4% per year between 2024 and 2030.**

In 2025, the electricity production will account for 10% of our hydrocarbon production. By 2030, our objective is to increase it to nearly 20%.

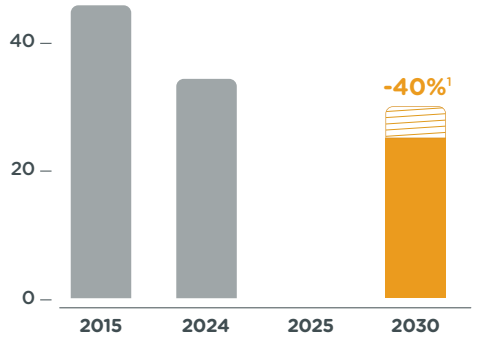
At the same time, the Company is pursuing its trajectory of reducing its emissions (Scope 1 + 2 CO_2 and methane) from its operated facilities with a view to reducing net emissions by 40% compared with 2015 *(see table p. 106)*.

The growth of our electricity sales allows us to target a 25% reduction in the lifecycle carbon intensity[2] of our sales by 2030 compared to 2015. ■

1. Net of nature-based carbon sinks. **2.** Lifecycle carbon intensity of energy products sold used by end-customers. See report's glossary for further details.

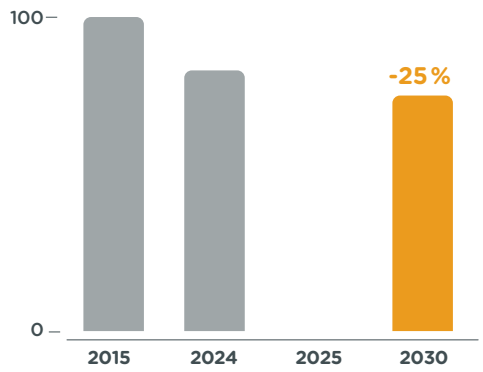
GHG EMISSIONS, SCOPE 1+2 FROM OPERATED FACILITIES

Mt CO_2e



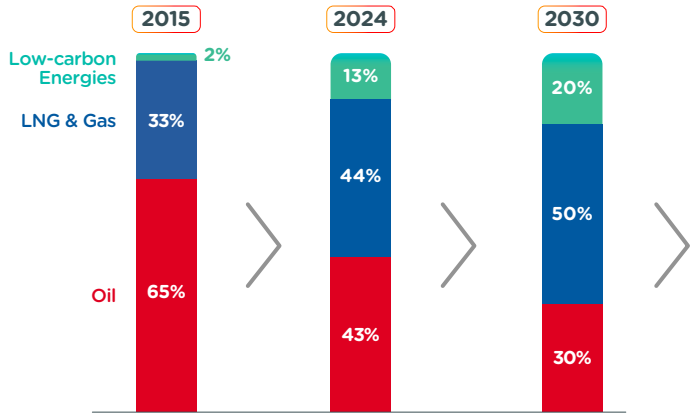
LIFECYCLE CARBON INTENSITY OF SALES[2]

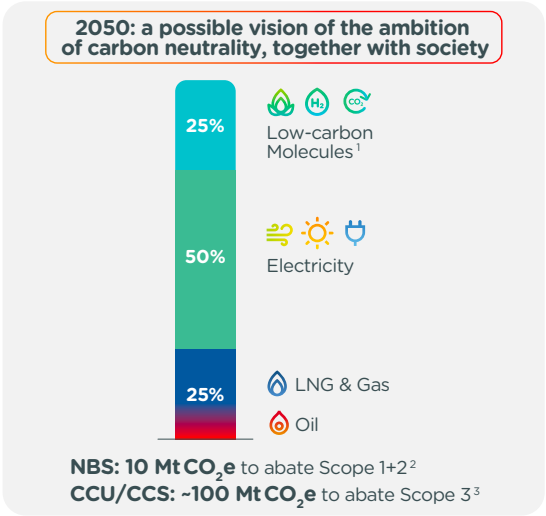
Scope 1+2+3, base 100 in 2015



Our Ambition of Carbon Neutrality by 2050, Together With Society

TotalEnergies' sales mix





The energy transition is underway and the growth in renewable electricity production across the world is paving the way for the decarbonization of energy. However, energy demand trajectories are still a long way from the scenarios compatible with the Paris Agreement.

The energy transition requires the participation of all stakeholders, from regulators to end customers and industrial players. TotalEnergies is deploying a strategy that supports this collective transition and will enable our Company to adapt to the different scenarios that may materialize depending on developments in low-carbon technologies (adoption rate, cost reduction), geopolitical relations, international trade and consumer behavior. In a scenario where low-carbon electrification continues to grow, both in power generation and uses, and which would enable an affordable low-carbon molecules on a large scale, TotalEnergies shares a possible vision of what its own activities could be as part of its ambition of carbon neutrality by 2050, together with society.

By 2050, TotalEnergies would produce:

- about 50% of its energy in the form of electricity, including the corresponding storage capacity, totaling around 500 TWh/year, on the premise that TotalEnergies would develop about 400 GW of gross renewable capacity;
- about 25% of its energy, equivalent to 50 Mt/year of low-carbon energy molecules in the form of biogas, hydrogen, or synthetic liquid fuels from the circular reaction: H2 + CO_2 → e-fuels;
- around 1 Mboe/day of Oil & Gas, primarily liquefied natural gas (about 0.7 Mboe/d, or 25-30 Mt/year) with very low-cost oil accounting for the rest. Most of that oil would be used in the petrochemicals industry to produce about 10 Mt/year of polymers, of which two thirds would come from the circular economy.

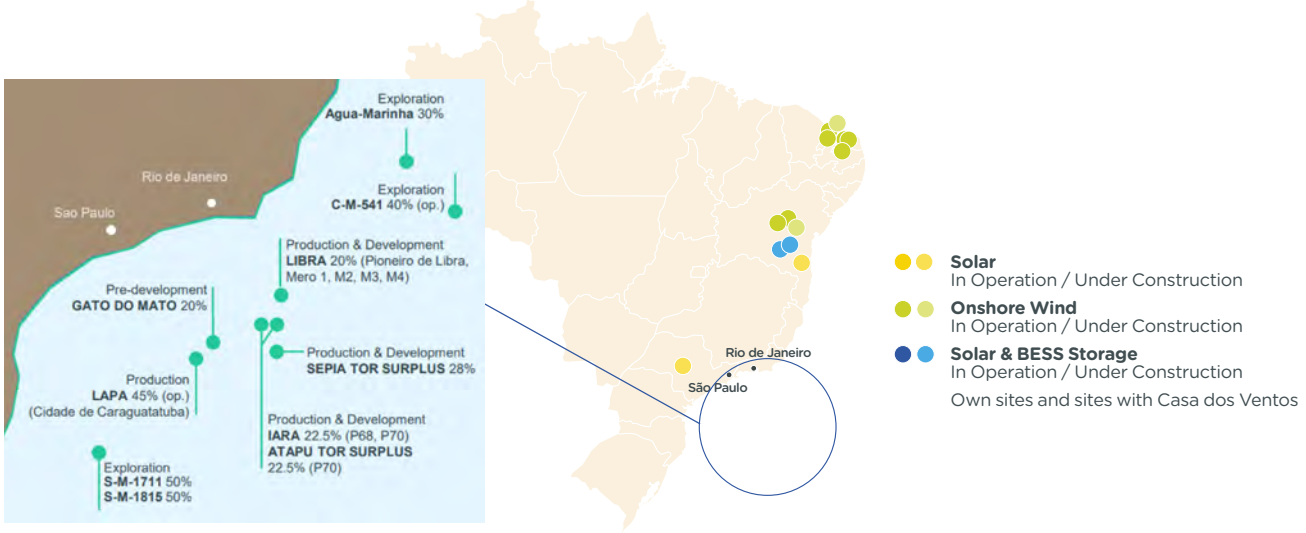
These hydrocarbons would represent:

- about 10 Mt CO_2e/year of Scope 1+2 residual emissions, including methane emissions aiming towards zero (below 0.1 Mt CO_2e/ year); those emissions would be fully offset by nature-based carbon sink projects.
- Scope 3[3] emissions totaling about 100 Mt CO_2e/year. As part of our ambition of carbon neutrality by 2050, together with society, TotalEnergies would contribute to "eliminate" the equivalent of 100 Mt/year of CO_2 generated by its customers by developing carbon utilization (CCU) and carbon capture and storage (CCS) solutions.

In 2050, our trading portfolio would be aligned with our productions and sales. ■

1. Biofuels, biogas, hydrogen and e-fuels/e-gas. **2.** From operated facilities. **3.** GHG Protocol – Category 11. See report's glossary for further details.

FOCUS Brazil, a Key Country in the Deployment of the Company's Multi-energy Strategy



In 2025, the company celebrates 50 years of presence in Brazil, a key country in the deployment of the Company's multi-energy strategy, with very strong potential for the development of oil and renewable. TotalEnergies is pursuing its development in the country through its strategic alliance with Petrobras and a joint venture with Casa dos Ventos, Brazil's leading developer of onshore wind projects.

Deep offshore in Brazil: an area that embodies the Company's strategy

TotalEnergies' portfolio in Brazil has steadily grown since 2015 and currently comprises 11 licenses, 4 of which are operated. Most of the installations are located in the ultra deep offshore and in the pre-salt deposits of the Campos and Santos basins.

In 2024, the Company's average production in the country reaches around 153,000 barrels of oil equivalent per day:

- Lapa (45% operator) in production since 2016, making TotalEnergies the first international operator to operate in the Brazilian pre-salt;
- Libra (19.3%) in production since 2017 and which development is continuing, with Mero 3 to come on stream in October 2024, and Mero 4 planned to start in 2025;
- Atapu (22.5%) and Sépia (28%). The Atapu and Sépia FPSOs are in production and final investment decisions for one additional FPSO on each field were taken in May 2024.

Additionally, as part of their strategic alliance renewed in 2023, TotalEnergies and Petrobras are innovating to reduce the GHG emissions associated with production. In January 2024, TotalEnergies and Petrobras announced the development of a pilot unit using a pioneering subsea technology to separate and reinject gas and CO_2 into the Mero 3 field. TotalEnergies also signed a cooperation agreement with Petrobras to deploy AUSEA in Brazil to detect and reduce methane emissions *(see p. 55)*.

Renewable energy

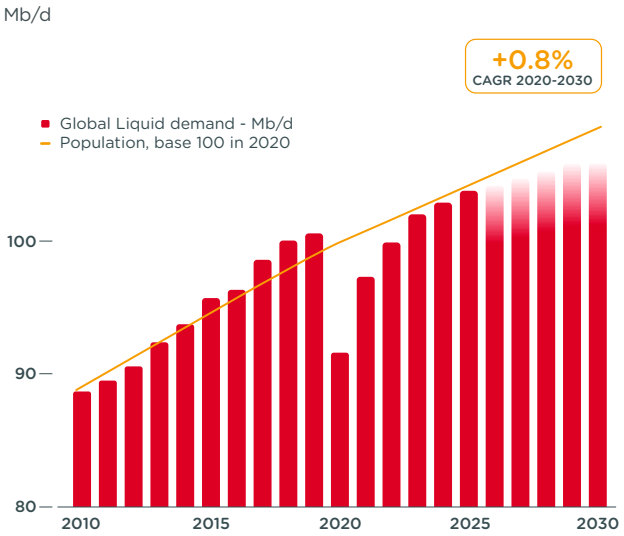
We have been active in the renewable energy sector in Brazil since 2017 with the launch of a first project under TotalEren, which has since been fully integrated into TotalEnergies. In October 2022, TotalEnergies acquired a 34% stake in a joint venture with Casa dos Ventos, one of Brazil's leading renewable energy companies. This partnership aims to jointly develop a renewable energy portfolio, including onshore wind, photovoltaic and battery storage, targeting a capacity of 12 GW by 2030, with more than 8 already identified.

By the end of 2024, 1.5 GW of assets are already in operation. In addition, 1.5 GW of onshore wind assets and 300 MW of photovoltaic production capacity with battery storage are under construction.

In 2025, Brazil will be the leading country in TotalEnergies' portfolio in terms of cash flow generation. ■

Producing Oil Differently: Focus on Low-cost and Low-emission Oil Assets

GLOBAL LIQUID DEMAND AND POPULATION[1]



1. **Sources :** 2015–2025 oil demand: IEA historical data, IEA Oil Market Report (September 2024). 2026–2030 oil demand: TotalEnergies projection. Population: United Nations World Population Prospects 2024. IEA Oil Market Report (September 2024).

In 2024, global demand for petroleum products reached 102.9 Mb/d, i.e. + 0.94 Mb/d (+ ~1%) compared to 2023, and should continue to grow over the decade according to the IEA (105.6 Mb/d by 2029). Beyond 2030 the trajectories of the different forecasters vary between moderate growth, plateau and start of decline. These demand forecasts remain dependent in particular on population and economic growth, market penetration pace of low-carbon technology innovations such as electric vehicles and changes in behavior.

In addition, it will evolve in a differentiated way according to the specific energy transition roadmaps of the various countries. Thus, demand for oil could start to decline between 2030 and 2040, but at a slower rate than the current natural decline rate of existing fields (around 5% per year).

TotalEnergies therefore believes that new oil projects are still needed to meet this demand and to keep prices at an acceptable level in order to create the conditions for a just transition that gives people time to adapt their energy use.

In 2024, TotalEnergies produced 1.4 Mb/d of oil, equivalent to its 2019 level, representing around 1.5% of world production. Our first responsibility as an oil producer is to produce differently, by reducing to the minimum our emissions.

To that end, we approve hydrocarbon projects on the basis of performance criteria, notably technical costs and carbon intensity (Scope 1+2) – *(see p. 46)*. We operate our fields in accordance with strict requirements concerning safety, emissions reduction and environmental impact. The cash flow generated by these Oil and Gas activities contributes to financing our investments in renewable energy. ■

HIGHLIGHTS

- **In Brazil,** we are pursuing our strategy of investing in low-cost, low-carbon assets, with the Mero field. A first floating production storage and offloading vessel (FPSO) started up in May 2022, followed by a second at the end of December 2023 and a third in October 2024. These will be followed by one in 2025. We are also present in the offshore Atapu and Sepia fields, corresponding to low-cost, low-emission reserves, where a decision on the production of two new FPSO was taken in 2024 *(see p. 19)*.

- **TotalEnergies** is focusing its exploration investments on oil prospects with low technical costs, low GHG emissions and short lead times. In 2024, we continued in particular to evaluate and appraise the discovery of Venus made in Namibia.

- The launch of the oil projects GranMorgu *(see p. 97)* in Suriname and Kaminho in Angola reinforces the growth objective of 3%/year in Upstream production and corresponding cash flow until 2030.

Liquefied Natural Gas: a Key Fuel for the Energy Transition

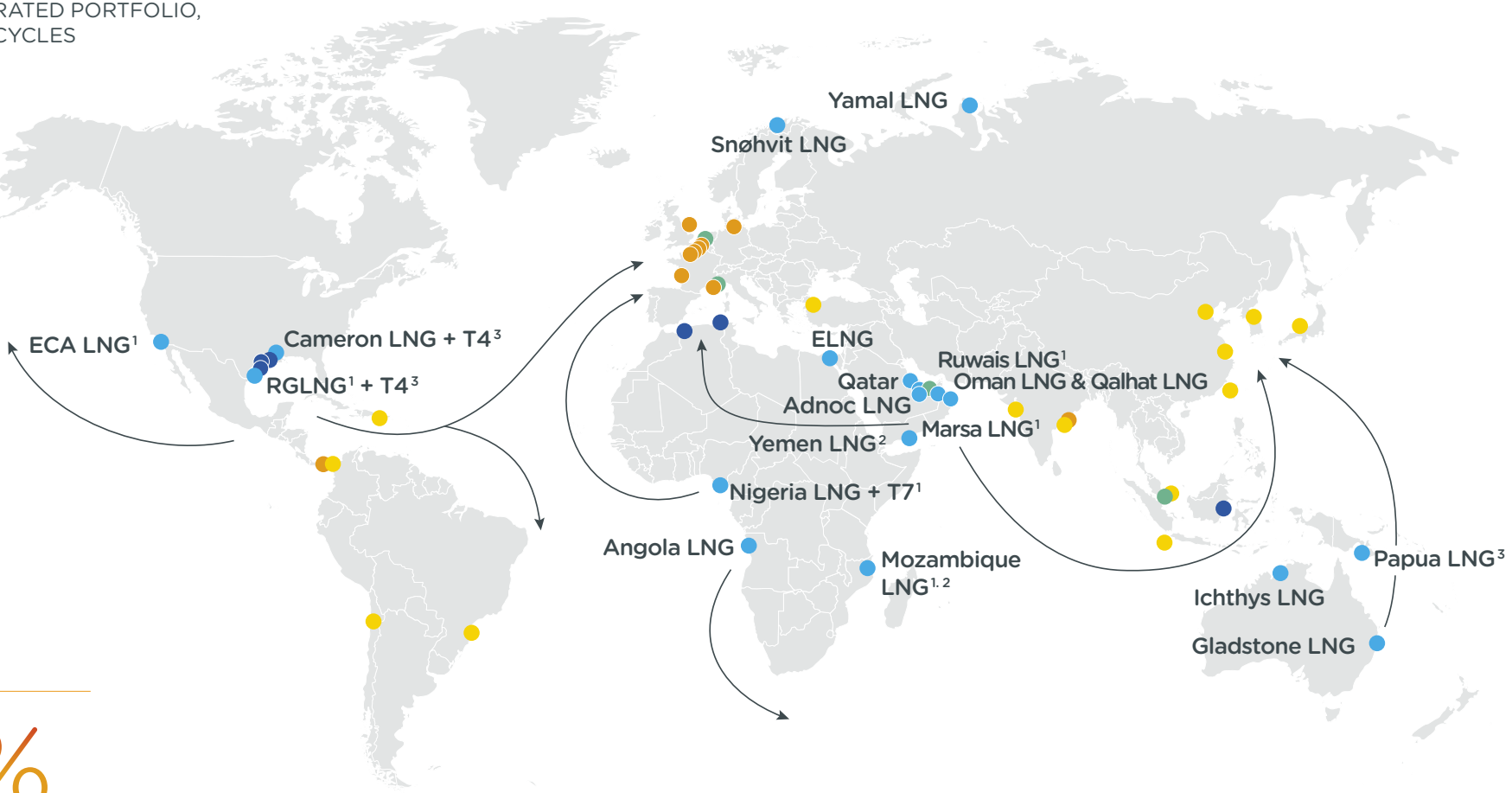
A DIVERSIFIED, INTEGRATED PORTFOLIO, RESILIENT THROUGH CYCLES

Production & Purchasing

- **Equity** production
  1. In construction
  2. Force majeure
  3. Subject to final investment decision (FID)
- Long-term **Supply**

Imports & Sales

- Long-term **Sales**
- **Regasification terminals** operational or planned
- **Maritime** bunkering hub



+50%

Growth share of production + removals 2023-2030 *(excluding Russia, excluding spot volumes)*

Upstream | LNG Plants equity and offtake | Trading | Shipping | Regas | Customers

In the gas markets, TotalEnergies focuses on Liquefied Natural Gas (LNG), which can be shipped everywhere in the world and thus contributes to **energy security,** as it has been the case in Europe since 2022 with the strong reduction of Russian pipeline gas deliveries.

The growth of renewable electricity, intermittent and seasonal by nature, will require an increase in flexible power generation resources. The dispatchable generation of gas-fired power plants helps secure electricity supply against weather variability affecting renewables, while also responding to fluctuations in demand.

In addition, natural gas plays an essential role in **reducing emissions from power generation as a replacement of coal,** which emits half as much greenhouse gas as coal-fired power plants for the same amount of electricity produced[1]. It is particularly the case in Asia where this one still accounts for a very large part of the electricity mix of many countries (e.g. 62% in China, 72% in India[2]).

With diversified positions, and in particular a **leading position of exporter in the United States** – over 10 Mt in 2024 – TotalEnergies is the **3rd world's largest LNG player,** with 40 Mt sold in 2024. The Company also signed numerous LNG sales contracts with major Asian customers last year, particularly in China.

In line with its balanced multi-energy strategy, TotalEnergies intends to consolidate its integrated position across the entire LNG value chain. **The LNG volumes** managed by the Company (excluding Russian volumes and spot volumes) are thus expected to **grow by 50% between 2023 and 2030.**

TotalEnergies intends to focus on improving the flexibility and resilience of its LNG portfolio by investing in low-cost liquefaction projects, which are best positioned on the merit curve, and to continue growing its Brent-indexed sales in Asia.

Reducing the carbon footprint of the LNG portfolio

TotalEnergies aims to gradually reduce GHG emissions of the LNG value chain, from gas production to end use.

In addition to its efforts to reduce methane emissions *(see p. 50)*, initiatives are being implemented throughout the whole chain. The electrification of liquefaction plant processes is helping to reduce LNG's carbon footprint today *(see focus on Marsa LNG project, p. 23)*, and tomorrow this reduction will be reinforced by CO_2 capture and storage projects.

We are also working to **reduce shipping emissions** by renewing our fleet of chartered LNG carriers with modern, high-performing vessels. (average age of the fleet under long-term charter: 6 years versus 11 years for the global fleet of LNG carriers[3]).

All LNG carriers chartered by TotalEnergies use LNG as fuel. Furthermore, TotalEnergies actively supports the industry's efforts to reduce "methane slip" (emission of unburned methane in engines) and joined the MAMII (Methane Abatement in Maritime Innovation Initiative) last February. ■

What is the Carbon Footprint of LNG Compared to Coal?

In 2016, TotalEnergies commissioned an independent study from the Canadian CIRAIG center[4], which indicates that the emissions from the gas chain, from extraction to electricity generation, are around 50% lower compared to the coal chain for the same destination. This study is supported by a large majority of other studies on the subject[5]. In October 2024 the American academic R. Howarth published a report estimating that American LNG has a higher carbon footprint than coal. This study uses assumptions for methane intensity and CO_2 emissions in the United States of 2.8%, 719 g CO_2/kg LNG (upstream+midstream segment) and 359 g CO_2/kg LNG (liquefaction segment) respectively, whereas the average values of published data[6] are 1.3%, 451 g CO_2/kg LNG[6] and 246 g CO_2/kg LNG[6] respectively. Furthermore, by limiting the comparison to primary energy, the author does not take into account the advantage of the better efficiency of gas power plants, typically between 45% and 60%, compared to coal power plants, which are generally between 35% and 45%. By correcting these biases, the emissions from the USA's gas chain, from extraction to electricity generation, would be approximately 40% lower than those from the coal chain. This is confirmed by the recent study published by WoodMackenzie (February 2025), which indicates that the LNG chain emits less than coal by between -60% (GWP[7] over 100 years) and -26% (GWP[7] over 20 years).

1. IEA; Life Cycle Upstream Emission Factors 2024. **2.** Source: Enerdata. **3.** Source: S&P. **4.** The International Reference Center for Life Cycle Analysis and Sustainable Transition (CIRAIG) - LCA of GHG associated with natural gas and coal in different geographical contexts – 2016. **5. Rystad Energy** - Clearing the smoke: How to get a better view of gas and coal emissions – Avril 2024; **NETL –** LCA GHG on exporting LNG from the US: 2019 UPDATE – 2019; **BRG -** Comparative GHG Footprint Analysis for European and Asian Supplies of USLNG, Pipeline Gas, and Coal – April 2024; **IEA –** Combination of Life cycle Upstream Emission Factors 2024 and IEA Emissions Factors - 2024 edition - 2024; **WoodMackenzie –** The bridge: Natural gas's crucial role as a transitional energy source - February 2025. **6.** Average value of published data as inventoried by Sphera. **7.** GWP: global warming potential.

FOCUS Marsa LNG in Oman, a Very Low-carbon LNG Plant, the First Marine LNG Bunkering Hub in The Middle East

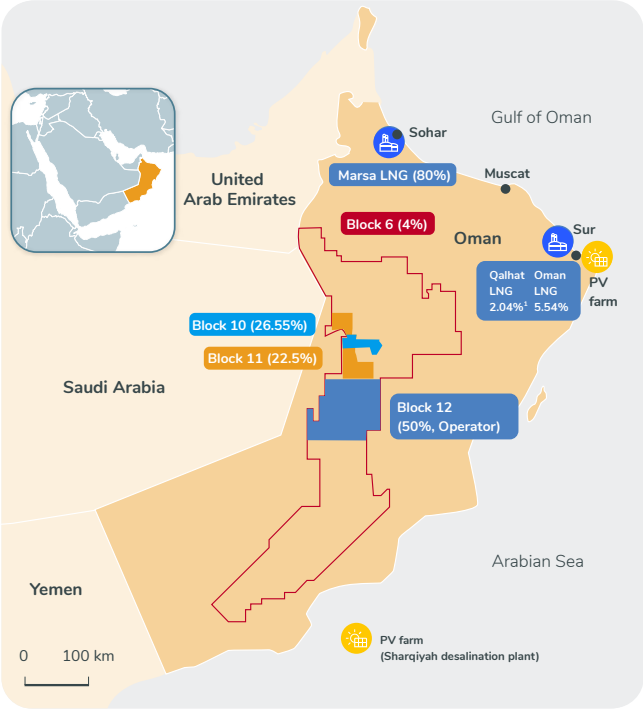
LOW-CARBON

"Our 5 Levers for a Sustainable Change"

Lever 2. Low-carbon operations

I promote the use of renewable energies and low-carbon technologies in my projects and my operations, taking into account a CO_2 cost of $100/t. I do the same with my customers and suppliers to enable them to reduce their emissions.

(see p. 72)



In April 2024, TotalEnergies launched the Marsa LNG project (TotalEnergies 80% – OQ 20%), a 1 Mtpa LNG liquefaction plant to be built in the port of Sohar in Oman. The LNG production, which is due to come on stream in the first quarter of 2028, is primarily intended to serve the marine fuel market (LNG bunkering) in the Gulf.

A low-carbon liquefaction plant model

Electrification of the plant's processes has been pushed to the limit, and a 300 megawatt-peak (MWp) photovoltaic solar farm will supply the equivalent of the plant's annual needs.

Marsa LNG will therefore be one of the lowest carbon intensity LNG plants in the world, with less than 3 kg CO_2e/boe. The average carbon intensity of LNG plants in the world is around 35 kg CO_2e/boe[2] – this represents a reduction in emissions of over 90%.

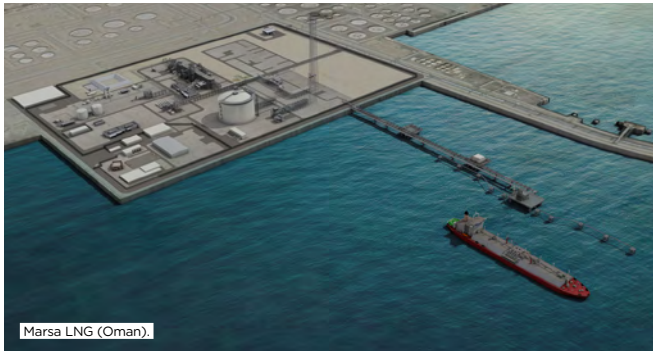
Marsa LNG, the first marine LNG bunkering hub in the Middle East

Used as a marine fuel to replace fuel oil, LNG reduces emissions of sulphur oxides and fine particles (99%), nitrogen oxides (up to 85%) and greenhouse gases (up to 23%). LNG ships are bunkered at large-scale service stations known as bunkering hubs.

The Marsa LNG site will bring together the LNG liquefaction plant and a jetty to accommodate bunkering vessels and LNG carriers for exporting the remaining LNG.

A charter contract for a new LNG bunkering vessel, which could be deployed on Marsa LNG, has been signed in 2024. This vessel will extend the Company's global presence in the major marine fuel supply hubs, where it currently charters three bunkering vessels: the *Gas Agility* in the port of Rotterdam in the Netherlands, the *Gas Vitality* in the port of Marseille-Fos in France and the *Brassavola* in the port of Singapore. ■

1. Via Oman LNG. **2.** Source IEA: The Oil and Gas Industry in Net Zero Transitions report from Nov 2023.


Marsa LNG (Oman).

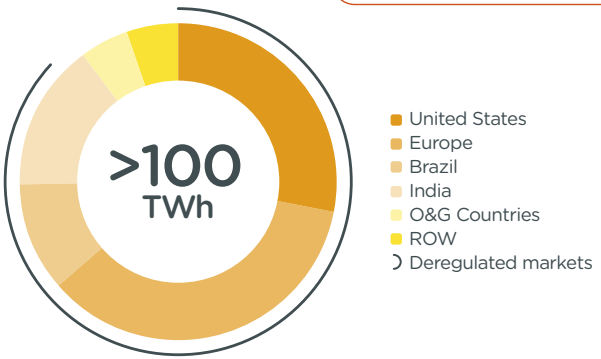
Our Major Development in Electricity: an Integrated Approach

POWER GENERATION BY 2030

By technology

>70% in deregulated markets where we can implement our integrated strategy

By geography



Electricity demand, which is vital to the success of the energy transition, is expected to grow sharply, as decarbonization is at the heart of the roadmaps of countries committed to carbon neutrality by 2050. In response, *Integrated Power*, the second pillar of the Company's strategy, is developing an integrated model encompassing the entire value chain, from power generation to sales and trading activities, with a profitability target of around 12% ROACE.

TotalEnergies' net electricity production target is to produce more than 100 TWh by 2030 (70% of production from renewable sources, 30% from flexible sources). As part of its transformation into an integrated multi-energy company, TotalEnergies is building a competitive portfolio of renewable (solar, onshore and offshore wind) and flexible (CCGT, storage) assets to provide its customers with less and less carbon-intensive electricity available 24/7.

The Company's levers to grow with a return on average capital employed of around 12% are selectivity in its choices of projects; integration across the entire electricity value chain; cost control using our project management and offshore development skills; mobilizing external financing at competitive rates and making partial divestments to accelerate cash flow generation and diversify our portfolio's exposure. ■

HIGHLIGHTS


Operator on a combined-cycle gas power plant site.

United Kingdom

TotalEnergies announced in June 2024 the acquisition of the "West Burton B" gas-fired power plant, one of the most modern in the United Kingdom, equipped with three combined-cycle gas turbines (CCGT) for a total capacity of 1.3 GW. The plant also includes a battery storage system of 49 MW added in 2018. In December 2024, TotalEnergies sold 50% of this power plant to EPH.

France

In January 2025, TotalEnergies and ST Microelectronics announced the signing of a contract to supply 1.5 TWh of renewable electricity over 15 years in France. The delivery of electricity is associated with structuring services which makes it possible to transform intermittent production into the supply of a continuous and constant volume of green energy. This is the first time that a contract of this type, lasting 15 years, has been signed in France.

United States

In 2024, TotalEnergies commissioned Danish Fields (720 MW) and Cottonwood (455 MW), two solar power plants with co-located battery storage in southeast Texas. These new projects are part of a portfolio of more than 8 GW of renewable assets in operation in the country.

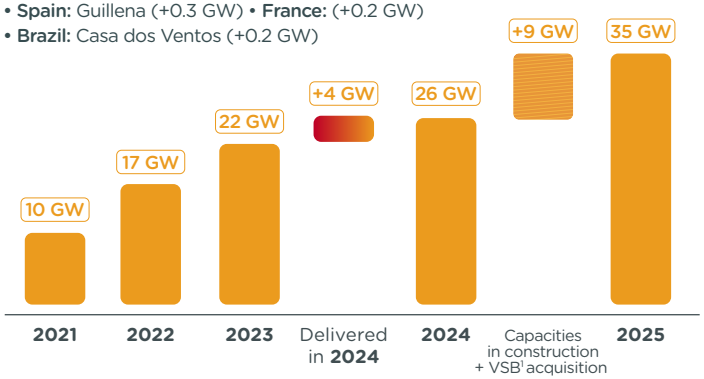
Our Renewable Electricity Capacity Build-up

GROSS INSTALLED CAPACITY OF RENEWABLE ELECTRICITY GENERATION (GW)

+4 GW IN 2024

Of gross capacity in 2024, including:

- **United States:** Danish, Cottonwood, Hill, Clearway (+1.5 GW)
- **India:** (+1.3 GW) • **Taiwan:** Yunlin (+0.3 GW)
- **Spain:** Guillena (+0.3 GW) • **France:** (+0.2 GW)
- **Brazil:** Casa dos Ventos (+0.2 GW)



We are executing our roadmap in renewable electricity. In 2024, TotalEnergies has reached a gross installed production capacity of 26 GW of renewable electricity and intends to continue developing these activities to reach 35 GW in 2025 and 100 GW in 2030, a level that should make the Company one of the world's top five producers of renewable electricity (wind and solar), Chinese producers set aside. ■

(1) See focus Germany p. 27.

In GW	Solar	Wind Onshore	Wind Offshore	Others	TOTAL
France	1.2	0.7	0	0.2	**2.1**
Rest of Europe	0.6	1.1	1.1	0.3	**3.1**
Africa	0.1	0	0	0	**0.1**
Middle East	1.2	0	0	0	**1.2**
North America	5.4	2.2	0	0.7	**8.2**
South America	0.4	1.3	0	0	**1.7**
India	6.7	0.6	0	0	**7.3**
Asia/Pacific	1.6	0	0.6	0	**2.2**
TOTAL	**17.2**	**6**	**1.7**	**1.1**	**26**

HIGHLIGHTS

Wind Power in Denmark

TotalEnergies has acquired majority stakes in the Jammerland Bugt (240 MW) and Lillebaelt South (165 MW) offshore wind projects located in Denmark. The start-up of these projects is planned by 2030.

Hydropower in Africa

TotalEnergies signed an agreement with Scatec to acquire interests in renewable hydroelectricity projects in Africa, notably in the Bujagali hydroelectric power station, currently in operation in Uganda, which covers more than 25% of the country's current maximum electricity demand. TotalEnergies also took minority stakes in two projects under development in Rwanda and Malawi.

Solar in Saudi Arabia

The consortium composed of TotalEnergies and the Saudi developer AEW has signed an electricity sales contract of 25 years with Saudi Power Procurement Company for the 300 MW Rabigh 2 solar power plant. This new project is an example of our multi-energy strategy to support oil and gas producing countries in their energy transition.

United States

See Focus on p. 26.

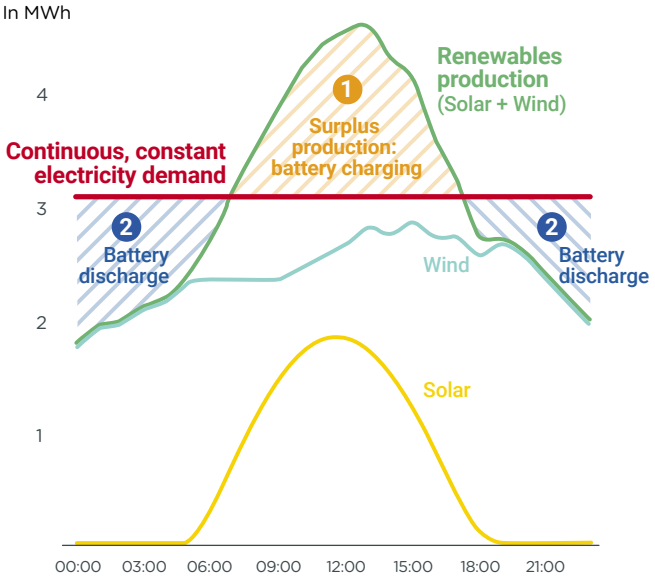
Germany

See Focus on p. 27.

FOCUS United States, Our *Clean Firm Power* Offer

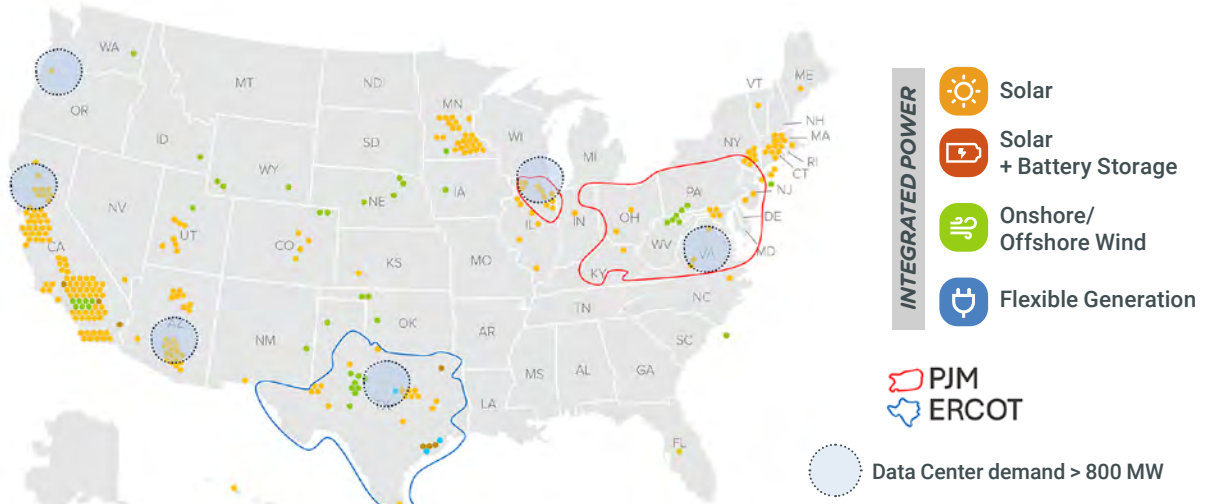
Clean Firm Power : meeting the growing energy needs of data centers in the United States with a differentiated offering.

DELIVERING PREMIUM *CLEAN FIRM POWER* THROUGH INTEGRATION OF RENEWABLE AND FLEXIBLE ASSETS



The storage capacity is designed so that load 1 absorbs the requirements of discharge 2

- An intermittent electron has no utility value: needs to be complemented with flexible generation to deliver 24/7 power.
- *Clean Firm Power* priced at a premium vs Pay-as-Produced PPAs.
- TotalEnergies positioned to capture these premiums thanks to its portfolio of flexible generation and battery storage.



In the United States, TotalEnergies is one of the top five players in renewable power generation. Present across the entire electricity value chain, the Company's USA portfolio represents 25 gigawatts (GW) of solar and wind farms, of which 7.5 GW gigawatts under construction or in operation, including battery storage capacity. To compensate for the intermittent nature of renewable energies, in addition to battery storage, the Company has also acquired 1.5 GW of combined-cycle gas turbine (CCGT) power plants in Texas.

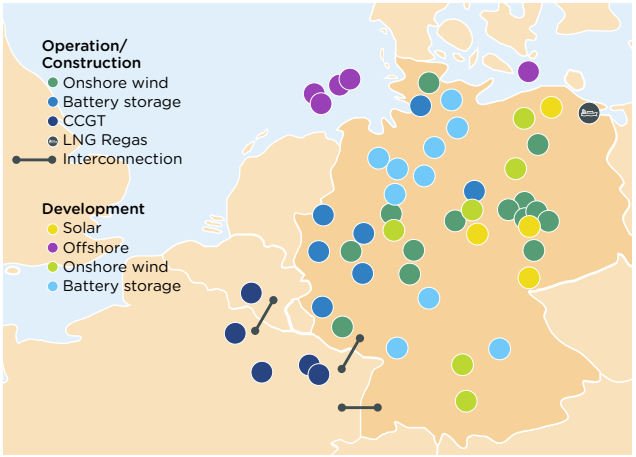
In Texas on the ERCOT market, as in Europe, we provide electricity bundled with services that enable intermittent renewable production to be transformed into a continuous and constant supply of energy predominantly from renewable sources. We combine wind power, solar power and batteries to develop tailor-made solutions, particularly suited for the needs of data centers, 40% of which are currently located in the USA. Our *Clean Firm Power* offer will help large technology companies to meet their growing electricity needs while meeting their decarbonization objectives.

We are ready to meet the energy needs of US technology giants in key electricity markets such as those of Texas (ERCOT) and the North East (PJM).

We have already signed electricity contracts with some of these companies over the last four years and are now stepping up our efforts on this market. ■

FOCUS Germany, Deploying Our *Integrated Power* Model

2024: A KEY YEAR IN THE CONSTRUCTION OF OUR *INTEGRATED POWER* MODEL IN GERMANY



The German electricity market, the largest in Europe, has fundamentals that make the implementation of an integrated model relevant in the electricity chain. The electrification of uses is expected to drive demand growth in a tense context due to the planned phase-out of nuclear and coal, offering opportunities for the development of renewables and flexible generation. Moreover, Germany is an energy importer and has limited interconnection capacities with its neighboring countries. Finally, its electricity market is highly volatile, which creates value generation through flexible assets and trading. TotalEnergies has therefore chosen to invest in this market.

TotalEnergies is expanding its renewable capacities, notably through the award of offshore concessions over the last two years for wind farm development (2+1 GW in 2023 and 1.5 GW in 2024). The Company has also acquired a 50% stake from RWE in two other offshore wind projects with RWE (2 GW each) , which will enable TotalEnergies to implement synergies on its German offshore wind hub, by optimizing its construction and operating costs of this 6.5 GW portfolio.

Additionally, in December 2024, TotalEnergies announced the acquisition of VSB, a leading renewable energy company in Europe, recognized for its expertise in onshore wind farm development, half of whose portfolio, partly already in operation/construction, is located in Germany.

To complement renewable generation, TotalEnergies can also rely on Kyon Energy, Germany's leading battery electricity storage developer, acquired in February 2024. In July 2024, the Company took the final investment decision (FID) for a 100 MW/200 MWh project in North Rhine-Westphalia, the first in Kyon Energy's 2 GW pipeline. TotalEnergies is also exploring investment opportunities in flexible generation.

Finally, TotalEnergies has strengthened its electricity marketing activities through the acquisition of Quadra Energy, completed in April 2024, one of Germany's leading renewable energy production aggregators. Demonstrating the synergies between its activities, Quadra Energy will also manage the marketing of Kyon's latest storage capacity.

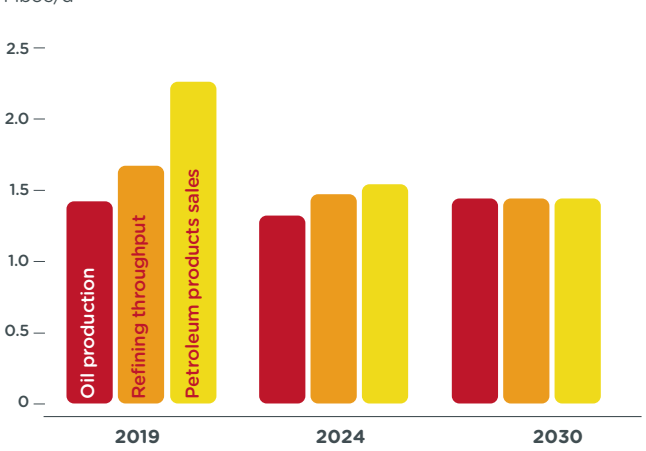
By actively expanding across the entire electricity value chain in Germany, TotalEnergies is implementing its *Integrated Power* model. ■

Upstream Gas Production LNG Imports	Flexible Generation	Renewables	Storage	Trading & Aggregation	Marketing
0.5 Bcf/d North Sea (ex. UK) gas production	Scouting for opportunities	VSB **0.2 GW** in operation or under construction[1]	KYON ENERGY **321 MW** under construction for TotalEnergies[1]	QUADRA energy **> 9 GW** under management, ~5000 wind and solar power plants	Long-term corporate PPAs **1.3 TWh** sold on fixed price PPA
2.6 Gm³/y Deutsche Ostee **FSRU**[2]		**7 GW** Pipeline of onshore wind, solar and battery storage[1]	**1.8 GW** BESS ready to build in 2025[1]	**15 TWh** renewable power production aggregated and resold on wholesale market	
		6.5 GW Offshore Wind			

1. In Germany. 2. Floating Storage and Regasification Unit.

Anticipating Changes in Demand by Adapting Our Sales of Petroleum Products

OIL PRODUCTION, REFINERY THROUGHPUT AND PETROLEUM PRODUCT SALES



TotalEnergies' downstream business has been a steady contributor to the Company's results, while transitioning and adapting its activities to focus on high value-added markets.

The Company is addressing the sustainability challenges of its downstream activities through 3 levers:

- lowering the breakeven point of of its refining-petrochemicals assets in a cyclical industry;
- reducing GHG emissions from its operations;
- offering customers low-carbon mobility solutions.

In Refining & Chemicals, TotalEnergies is continuing to develop its biofuels business. It is capitalizing on its existing assets by implementing SAF production by co-processing raw materials from waste and residues (used cooking oils and animal fats), excluding first generation 1G biomass (in competition with food consumption) in jet units in operation or by converting existing refineries into biorefineries (La Mède since 2019 and Grandpuits from 2026).

For the Marketing & Services, TotalEnergies is developing a three-fold strategy:

- **Network:** focusing on geographies where it has a competitive advantage, such as France, Africa and certain niche markets, in order to adapt to the evolving demand for petroleum products, particularly in Europe as part of the implementation of the "Fit for 55" program.
- **Lubricants:** differentiating ourselves through high value-added, high-margin products and developing more sustainable products to meet growing demand for circular products (RRBO)[1].
- **Electric mobility:** expand its positions in high-power charging in Europe and develop a low-equity business model (partnerships and leverage). ■

HIGHLIGHTS

Electromobility

- **In Europe, we are supporting the development of electric mobility, particularly in France, where we are the leading player in ultra-fast charging on motorways** ***(see p. 58 – Electromobility)*****.**

SAF

- **TotalEnergies has signed several agreements with its partners in Europe, the Middle East and Asia** ***(see Focus SAF on p. 60)*****.**

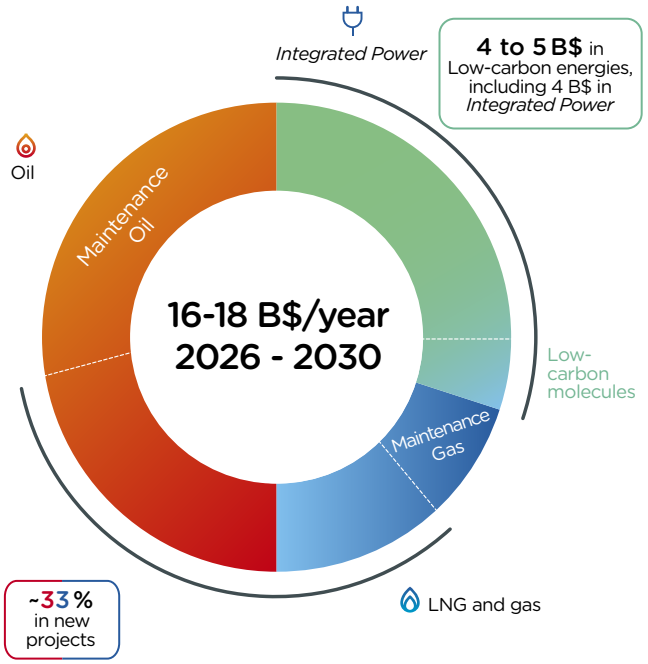
In July 2024

- **TotalEnergies acquired Tecoil, a Finnish company specialized in the production of RRBOs[1], and currently operates the most advanced used oil reprocessing process on the market.**

1. Re-Refined Base Oils.

Disciplined and Sustainable Investments to Support our Strategy

INVESTMENT STRATEGY



- 14-18 B$/y through cycles
- 2026-30: keeping 2 B$/y short-term downward CAPEX flexibility

We are maintaining an annual capital expenditure target of 16-18 B$ per year over the next 5 years. Since several years, TotalEnergies has consistently maintained a significant investment effort in low-carbon energies, mainly in low-carbon electricity.

In 2024, TotalEnergies has invested a total of 17.8 B$, including 4.8 B$ in low-carbon energies, mainly in electricity (4 B$). In 2025, we plan to maintain the same level of investment of 4 B$ in *Integrated Power*, for a total net investment amount of $17 to 17.5 B$.

Consistent with our commitment to build a multi-energy Company, we have begun publishing financial indicators for the *Integrated Power* segment from 2023.

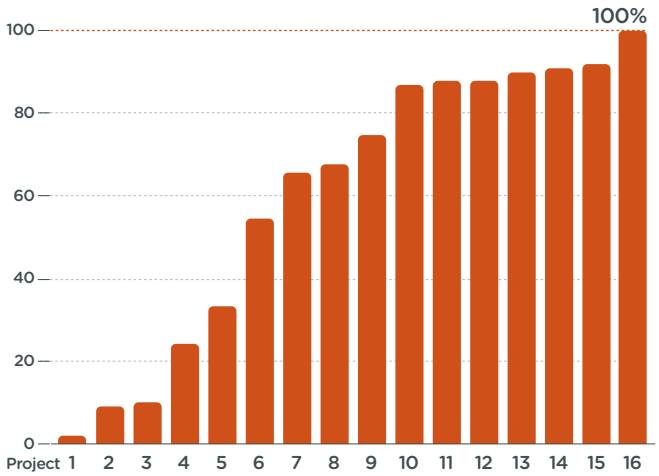
Continuing to invest with discipline

In a global economic context marked by a high level of uncertainty, it is essential to maintain our investment criteria to ensure the profitability and resilience of our portfolio. Each material investment project is assessed taking into consideration the aims of the Paris Agreement on the basis of the following criteria:

- project profitability is analyzed in a hydrocarbon price scenario compatible with the Paris Agreement objectives of limiting temperature rise to “well below 2°C” and with a carbon price of $100 per ton (or the prevailing price if higher in a given country);
- for new Oil & Gas projects (greenfield projects and acquisitions), the intensity of Scope 1+2 greenhouse gas emissions is compared, depending on their nature, to the intensity of the average greenhouse gas emissions of Upstream production assets or that of various Downstream units (LNG plants, refineries) of the Company;
- as of 2025, the threshold has been lowered to 17 kg CO_2e/boe, versus 18 kg CO_2e/boe previously – evidence of the effectiveness of our criteria. For additional investments in existing assets (brownfield projects), the investment will have to lower the Scope 1+2 emissions intensity of the asset in question. The goal is for each new investment to contribute to lowering the average intensity of the Company’s Scope 1+2 greenhouse gas emissions in its category;
- for projects involving other energy and technologies (biofuels, biogas…), GHG emissions reductions are assessed based on the amount by which they will reduce the carbon content of our sales. ■

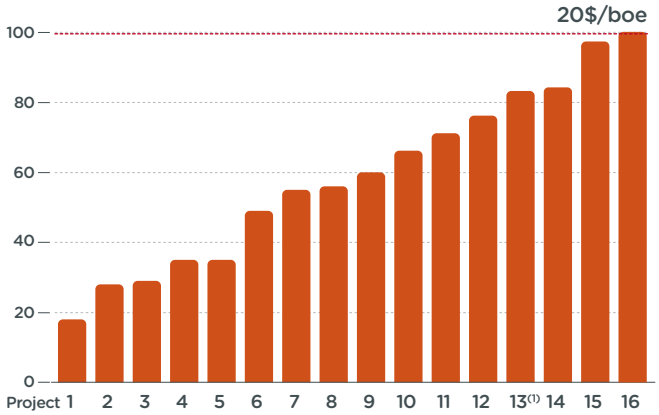
APPROVED OIL & GAS PROJECTS

GHG emission intensity
vs portfolio average (%)



Technical costs

- Technical costs include operating costs and investment costs.



1. Percentage of the reference break-event point (30 $/b).

HIGHLIGHTS

In 2024, after evaluation according to these criteria, 50 investments have been validated. The most significant by category are:

Hydrocarbons

Upstream Oil & Gas

Launch of several projects which support the 3%/year growth objective of Upstream production and corresponding cash flow: Kaminho in Angola, Sepia 2 and Atapu 2 in Brazil, GranMorgu in Suriname for oil projects. Acquisition of 100% of Sapura OMV, gas producer and operator in Malaysia.

Liquefied Natural Gas

- Launch of Marsa LNG in Oman *(see p. 22)*, acquisition of a stake in Ruwais LNG in the United Arab Emirates (electric trains) and Ubeta in Nigeria to supply Nigeria LNG.
- Strengthened integration in the LNG chain, particularly in the American and Asian markets: acquisition of the Upstream production assets of Lewis Energy Group in the United States (Eagle Ford in Texas), signing of LNG sales contracts in Singapore, India, South Korea, China and also in Turkey.

Disposals

- TotalEnergies completed the sale of the EP subsidiary in Brunei in 2024 and the sale of a 53.5% interest in the Nkossa and Nsoko permits in Congo in early 2025.
  In addition, it signed agreements to sell its interests in all of its West of Shetland assets in the United Kingdom and its 10% interest in the production licenses of the SPDC joint venture in Nigeria.
- Disposals of 50% stake in fuel networks activities in Pakistan and Brazil currently being finalized.
- Disposal of the minority stake in the South African Natref refinery.

Integrated Power

- In the United States, TotalEnergies is one of the top 5 renewable players with a portfolio of 25 GW in operation and development.
- In the United Kingdom, TotalEnergies acquired West Burton Energy which is one of the most modern gas power plant in England, with a capacity of 1.3 GW with a 49 MW battery storage system. TotalEnergies then sold to EPUKI, the British subsidiary of EPH, 50% in West Burton Energy.
- In Germany, we obtained a new 1.5 GW offshore wind concession and acquired a 50% share in two other offshore wind projects (2 GW each) from RWE.
- TotalEnergies acquired VSB in early 2025, recognized for its expertise in the development of onshore wind farms in Europe with more than 475 MW of renewable capacity in operation or under construction mainly in Germany and France, and a pipeline of 18 GW of wind power, solar and battery storage technologies.
- In line with our capital recycling strategy, this growth was accompanied by the sale of 50% of 2 GW of renewable and BESS assets in the United States.

Low-carbon Molecules

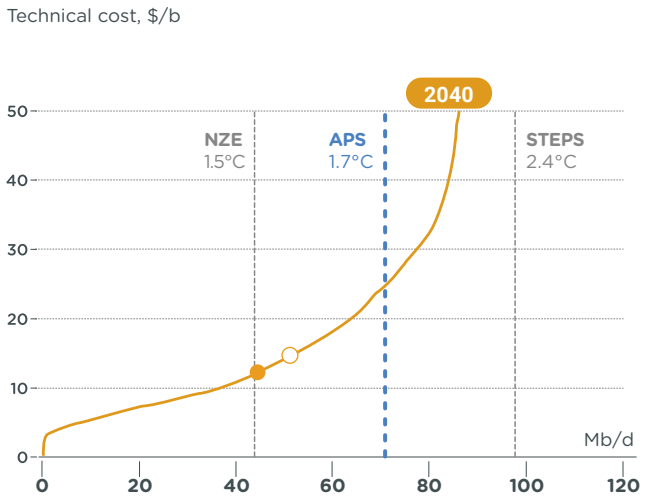
In 2024, the Company accelerated its commitment to develop production and marketing of sustainable aviation fuels (SAF) concluding strategic partnerships with Airbus for its supply of SAF for more than half of its needs in Europe and the establishment of a Research & Innovation program aimed at developing fuels certified as 100% sustainable, with Air France-KLM for the supply of 1.5 million tonnes of SAF over 10 years, with SINOPEC to jointly develop a production unit of SAF in China and with Saudi Aramco and Saudi Investment Recycling Company to develop a SAF production unit in the Kingdom of Saudi Arabia.

CCS

TotalEnergies has acquired a stake in the Bayou Bend asset in the United States and made the final investment decision for the NEP (North Endurance Partnership) project in the United Kingdom in which TotalEnergies holds a 10% stake and which will store up to 4 million tons of CO_2 per year from 2028.

A Resilient Portfolio

MERIT CURVE OF GLOBAL OIL PRODUCTION COST[1]



TotalEnergies has strengthened the resilience of its portfolio through very active portfolio management in recent years: the Upstream portfolio has seen a 50% portfolio change since 2015, ensuring an oil reserves replacement ratio above 100% over 2015-2024.

Our portfolio has a low breakeven point, in line with the Company's strategic objective of keeping it below $30/b (the Company's organic cash breakeven point before dividends is $25.4/b in 2024), which ensures the competitiveness of its resources. In particular, for its Upstream Oil & Gas assets in 2024, TotalEnergies has the lowest production cost per barrel of around $4.9/boe among its peers[2] and its GHG emissions intensity (Scope 1+2) is falling to 17 kg CO_2e/boe in 2024[3].

Furthermore, the average life of the Company's proved and probable Oil & Gas reserves is 18.5 years, and the discounted value of its Upstream Oil & Gas assets of more than 18.5 years represents less than 15% of their total value.

Risks of stranded assets

In June 2020, TotalEnergies determined that among its Upstream assets, only the Fort Hills and Surmont oil sands projects in Canada could be classified as stranded assets, meaning assets with reserves beyond 20 years and high production costs, whose overall reserves might therefore not be produced by 2050. TotalEnergies has sold these assets in 2023. This portfolio management approach allows TotalEnergies to mitigate the risk of stranded assets in the future if the risks of a structural decline in demand for Oil & Gas materialize faster than estimated as a result of stricter global environmental regulations and constraints and the resulting changes in consumer preferences.

As shown on the merit order curve of production costs for 2040 opposite, compared to the demand expected under various IEA scenarios, TotalEnergies' portfolio of Upstream Oil & Gas projects has an average technical cost that places it among the 50 Mb/d lowest-cost at these horizons, thanks in particular to long plateau oil assets with low production costs.

Sensitivity to CO_2, Oil & Gas prices

TotalEnergies assesses the robustness of its portfolio, including new material investments, based on relevant scenarios and sensitivity tests.

Each material investment, including in the exploration, acquisition or development of Oil & Gas resources, as well as in other energies and technologies, is reviewed taking into account a Brent price scenario at $50/b and Henry Hub at $3/MBtu, i.e. prices lower than those of the IEA APS scenario deemed to be compatible with the objectives of the Paris Agreement; every new investment enhances the resilience of the Compagny's portfolio.

Even though CO_2 pricing does not currently apply in all the countries where the Company operates, TotalEnergies includes as base case in its investment criteria a minimum

1. Source: Rystad, IEA WEO 2024 scenarios. **2.** Peers: BP, Chevron, ExxonMobil, Shell. **3.** Oil & Gas Upstream intensity is calculated excluding integrated LNG assets.


Tyra West platform off Denmark.

CO_2 price of $100/t (or the prevailing price in a given country, if higher) and beyond 2030, the CO_2 price is increased by 2%/year.

- Assuming a CO_2 price of $200/ton from 2024 and an annual increase of 2% beyond 2030, i.e. an increase of $100/ton compared to the base case scenario, TotalEnergies estimates a negative impact of around 15% on the discounted present value of all its assets (Upstream and Downstream).

- Compared with the reference scenario used to evaluate investments (Brent at $50/b), TotalEnergies evaluated the impact on the present value of its assets (Upstream and Downstream) of using the NZE price scenario published by the IEA[4] in 2024. Such a scenario would reduce the present value of all of the Company's assets (Upstream and Downstream) by around 10% compared to its reference scenario used to assess its investments.

Impairment of Upstream assets

In addition, to ensure robust accounting of its assets in the balance sheet, the Company calculates the impairment of its Upstream assets on the basis of an oil price trajectory that remains sustained at 70_{24}/b until 2030, then decreases linearly to reach 50_{24}/b in 2040, and then decreases from 2040 onwards to the price adopted in 2050 by the IEA's NZE scenario, i.e. 25.8_{24}/b. Gas prices retained in Europe and Asia decline and stabilise from 2027 until 2040 at respectively $8/MBtu and $9/MBtu at levels lower than current prices; the Henry Hub remaining at 3_{24}/MBtu over the period 2025-2040. They then all converge towards the prices in the IEA's NZE scenario in 2050. ■

HIGHLIGHTS

Unconventional Oil & Gas

Unconventional Oil & Gas are defined by the EIA (United States)[5] as hydrocarbons that are *"produced by means that do not meet the criteria for conventional production"* ie *"by a well drilled into a geologic formation in which the reservoir and fluid characteristics permit the oil and natural gas to readily flow to the wellbore."* According to UNFC[6], *"examples include CBM, low permeability deposits such as tight gas (including shale gas) and tight oil (including shale oil), gas hydrates and natural bitumen"*.

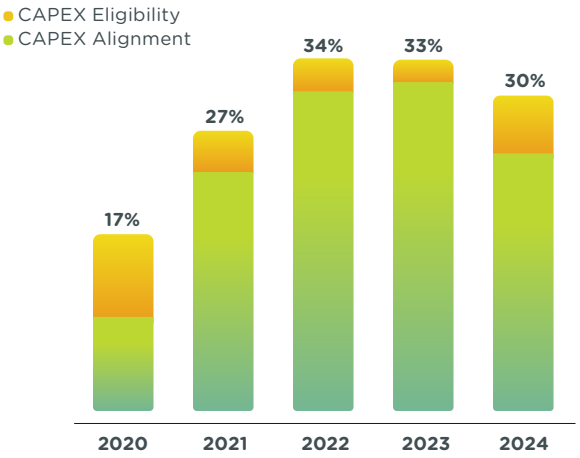
In 2024, these non-conventional hydrocarbons, essentially gas, accounted for 7% of our production and less than 5% of our consolidated turnover. In addition, TotalEnergies no longer produces oil from tar sands since the divestment of its Surmont and Fort Hills Canadian assets at the end of 2023. In line with its integration strategy in the LNG chain, TotalEnergies acquired stakes in 2024 in fields of the Eagle Ford Basin in the United States, including the Dorado field. The latter displays an emission intensity of around 10 kg CO_2e/boe.

4. World Energy Outlook 2024, Table 2.3 Fossil fuel prices by scenario *(p. 90)*. **5.** See definition by the Energy Information Administration, a federal agency within the U.S. Department of Energy. **6.** See United Nations Framework Classification for Resources to Petroleum, "Supplementary Specifications for the application of the United Nations Framework Classification for Resources to Petroleum" pages 8 and 22, points 9, 102, 103, 104.

2024 Taxonomy: a Company in Transition

CAPEX[1] ELIGIBILITY & ALIGNMENT

Proportional view[2]



1. CAPEX refers to the taxonomy standard. A reconciliation table is provided in the 2024 Universal Registration Document, Section 5.2.6. **2.** Proportional view, in accordance with EU Delegated Act 2021/2178.

In accordance with European Union regulations, TotalEnergies publishes the share of eligible and aligned activities based on revenue and CAPEX[1] indicators for the scope of the entities controlled by TotalEnergies, as well as a proportional view, proposed by the delegated regulation of July 6, 2021. This proportional view includes the contribution of jointly controlled companies and those over which TotalEnergies exercises significant influence, accounted for by using the equity method.

Controlled Scope – Proportional view

Given the size of the Company and its partnership-based development model across the integrated electricity value chain, the proportional view is more relevant than the controlled scope. Eligible or aligned CAPEX represents 30% and 25% respectively of the Company's investment in 2024 in the proportional view – confirming the momentum initiated since 2020.

Our main eligible activities at TotalEnergies

In electricity and renewables:

- activities related to renewable energy (wind, solar and hydropower), as well as battery manufacturing;
- activities related to new energy infrastructure for low-carbon mobility (charge points for electric vehicles, hydrogen refuelling stations);
- power generation from natural gas (portfolio of combined-cycle gas turbine power plants, CCGT).

In biofuels and chemicals:

- activities related to the manufacture of biofuels for transportation and certain petrochemical activities, including the production of biopolymers and mechanical or chemical recycling of plastics.

The Company's other key eligible activities are: biogas production through anaerobic digestion of organic waste and activities related to carbon sinks (carbon capture and storage of CO_2, nature-based carbon sinks projects). Detailed tables are presented in the Performance Indicators section *(see p. 113-114)*. ■

Our Climate-Related Risks

EXTRACT FROM TOTALENERGIES' RISK MAPPING

Following the recommendation of the Taskforce on Climate-related Financial Disclosures.

	Transition risks				Physical risks	
	Policy and legal risks	Technology risk	Market risk	Reputation risk	Acute risk	Chronic risk
Pace of the energy transition deployment, evolution of the demand	✓	✓	✓			
Financing of Oil & Gas reserves	✓		✓			
Operational risks related to the effects of climate change and extreme events	✓	✓			✓	✓
Risk of legal action	✓					
Reputation risk				✓		
Risks related to skills management and changes in jobs		✓	✓			

The risks posed by climate change are included among the risks analyzed by the TotalEnergies Risk Management Committee (TRMC). TotalEnergies ranks its risks by type and gravity. In 2022, the TRMC updated its risk mapping and submitted the results to the Board of Directors in early 2023.

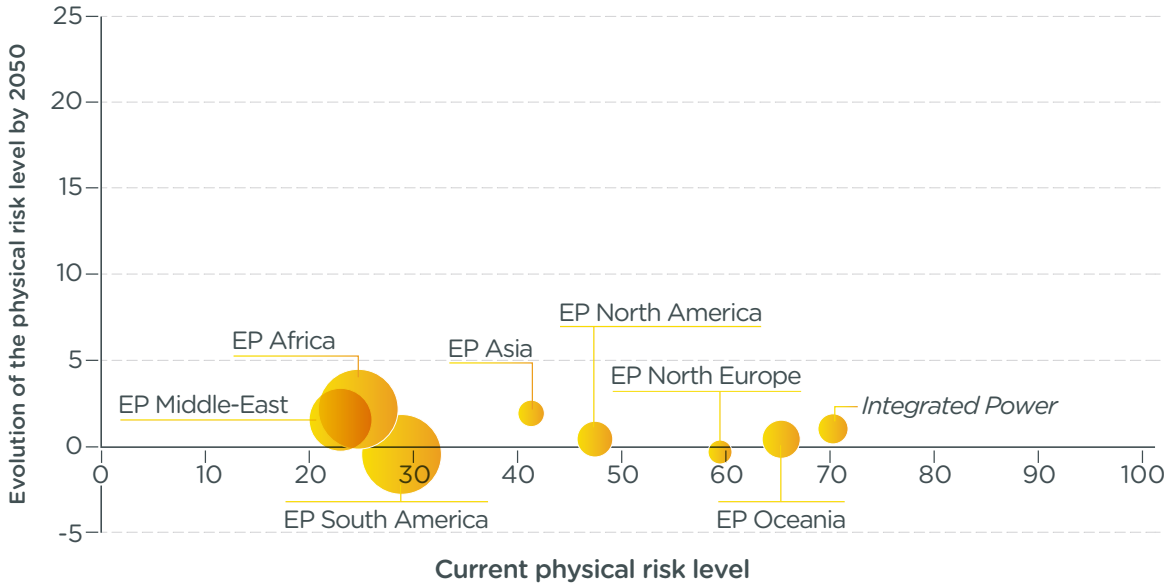
On the left hand side, TotalEnergies' risks are positioned in relation to identified generic risks, in accordance with the recommendation of the Taskforce on Climate-related Financial Disclosure (TCFD). The TRMC also verifies the use of appropriate risk management systems. Additional action plans can be defined when necessary.

Audits are conducted to ensure that existing risk reduction and control measures are effective. Personnel from multiple disciplines, segments and businesses may collaborate in carrying out these action plans and audits. The Audit Committee of the Board of Directors monitors the effectiveness of the internal control and risk management systems established by senior management, in light of identified risks and with a view to fulfilling TotalEnergies ' objectives. ■

Adapting to Physical Risks

OFFSHORE PORTFOLIO EXPOSURE TO CLIMATE-RELATED PHYSICAL RISKS (SCENARIO SSP5-8.5[2]) - BASED ON THE MOST PREVALENT PHYSICAL RISK

Results of the evaluation conducted in 2024 for our **offshore assets.** Bubble size is proportional to net book value.



In 2024, using a modeling tool provided by a third-party expert (Jupiter Intelligence), TotalEnergies carried out an assessment of the potential impacts of the effects of climate change on around 300[1] assets in its portfolio, including all operated industrial sites classified as Seveso (and their equivalents outside the European Union). The climate data used for this assessment are based on models from the IPCC's 6th Assessment Report of 2021. The climate scenario considered is a high emissions scenario: IPCC SSP5-8.5[2], as recommended by the European standard ESRS-E1, for which the global warming is estimated at 4.4°C by the end of the century. In addition, sensitivity tests were carried out for the SSP2-4.5[3] and SSP1-2.6[4] climate scenarios (for which global warming at the end of the century is 2.7°C and 1.8°C respectively). The climate hazards analyzed were selected for their relevance to the nature of the Company's portfolio and the state of available scientific knowledge. The main acute risks selected cover precipitation, flooding, drought, heat waves, cold, hail, strong winds, significant wave heights and wildfires. The main chronic risks included were temperature change, water stress and sea-level rise. Some climate hazards have not been included due to the nature and location of Company's assets (such as avalanches or glacial lakes outbursts), or to the unavailability of suitable climate risk assessment tools (as in the case of saline intrusion).

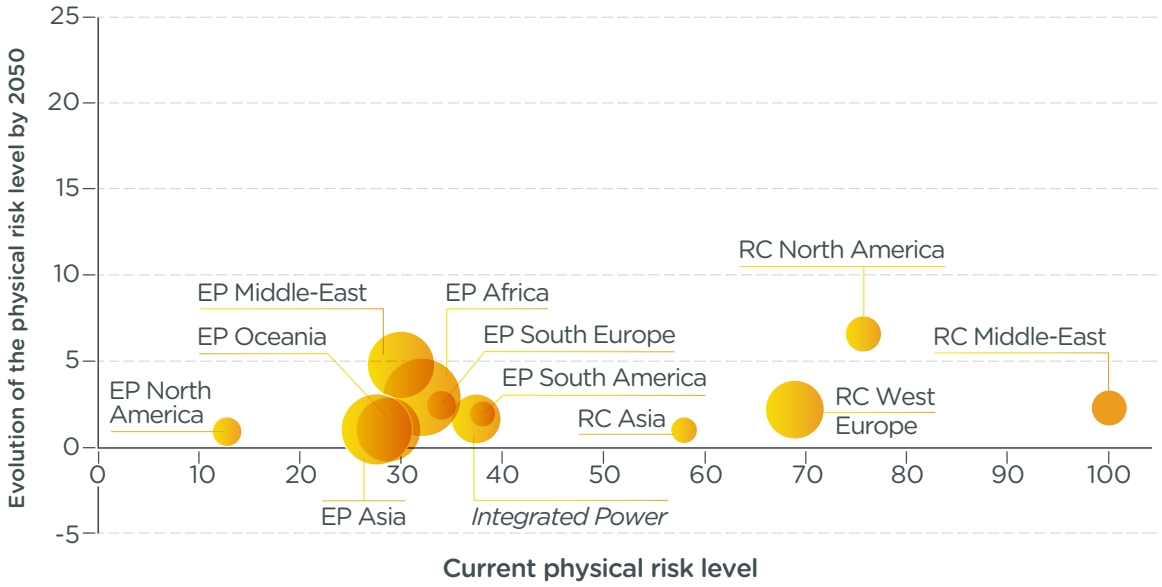
The results of the assessment carried out in 2024 for our onshore and offshore assets for the SSP5-8.5 scenario are presented in the graphs opposite and on the following page.

For the selected offshore sites, strong winds and wave heights are the two most severe hazards for this type of asset. As shown in the graph opposite, the majority of our offshore portfolio, which includes the Exploration & Production asset groups in Africa, South America and the Middle East, is subject to a relatively low physical risk in the current climate, and also a limited potential change between now and 2050. Offshore assets in the *Integrated Power* sector, comprising wind farms, are subject to a higher current physical risk due to their location (North Atlantic and South China Sea), but a low potential risk evolution.

1. Operated and non-operated. **2.** SSP5-8.5 is a pessimistic scenario that assumes, among other things, high GHG emissions linked to heavy dependence on fossil fuels. According IPCC, the "best estimate" in global surface temperature change associated with SSP5-8.5 is +4.4°C [3.3-5.7°C] over 2081-2100. **3.** SSP2-4.5 is an intermediate scenario that assumes, among other things, the continuation of current emissions until 2050, followed by a reduction. **4.** SSP1-2.6 is an optimistic scenario involving strong reductions in GHG emissions, net zero in 2080, compatible with the Paris agreement to limit global warming to below +2°C by 2100.

ONSHORE PORTFOLIO EXPOSURE TO CLIMATE-RELATED PHYSICAL RISKS (SCENARIO SSP5-8.5[2]) - BASED ON THE MOST PREVALENT PHYSICAL RISK

Results of the evaluation conducted in 2024 for our **onshore assets.** Bubble size is proportional to net book value.



The results of the study of physical risks at onshore sites are presented above. Today, our refineries and petrochemical plants are comparatively more at risk from climate change than assets in other sectors, due to their general dependence on water resources in water-stressed areas *(see p. 83)* and their greater vulnerability to flooding (as in the case of the Refining-Chemicals sites in North America, including the Port-Arthur site, for which mitigation measures have been put in place *(see Highlights on this page)*. For most of the assets studied, we have identified limited potential evolution of physical risks linked to climate change between now and 2050.

Following an assessment of the exposure of our operating sites to climatic hazards, we carry out additional studies where necessary to ensure that the consequences do not affect the integrity of installations or the safety of people. We also take climate risk into account in the design of our facilities. ■

HIGHLIGHTS

Port Arthur – Mitigating Flooding

The Port-Arthur site is subject to the risk of flooding following hurricanes, heavy rain and/or river flooding. Measures are in place to mitigate risks:

- **a perimeter dike protects the industrial zone and the town of Port Arthur from river flooding;**
- **a drainage system allows rainwater to be carried away from the area;**
- **sensitive installations (electrical distribution, control room, fire protection, etc.) have been raised or protected by inflatable flood control barriers;**
- **an emergency plan predefines the organization, means of communication and measures to be implemented, depending on the thresholds reached during the alert phase;**
- **a contract with a meteorological company allows us to supplement the information provided by the authorities and make it more reliable, by providing site-specific monitoring in real time.**

Aerial view with dike footprint.


Protection by inflatable flood control barriers.


Building elevation.


Dike gate.

Our Just Transition Plan

A woman in Kenya uses bottled LPG to cook, replacing charcoal.

Today, around

4.5 billion

people[1] have a level of access to energy below what is considered necessary to enable satisfactory human development

Energy is at the heart of one of the great challenges of the 21st century: saving our planet from the threat of climate change while enabling the majority of mankind to escape from poverty.

It is not enough to decarbonize energy. It is also necessary to meet the growing energy needs of a rising global population in a responsible way. That is the dual challenge for energy. Today, around 4.5 billion people[1] have a level of access to energy below what is considered necessary to enable satisfactory human development, particularly in terms of access to healthcare and education.

In 2050, there will be close to 10 billion people in the world. This demographic growth, and the improvement in living standards of the poorest populations, will require energy that is reliable, affordable, clean and accessible to as many people as possible.

As the effects of global warming become more visible, nations, both developed and emerging, are now faced with the essential task of a large-scale transformation, particularly of their energy systems.

Beyond the technological and financial challenges it poses, this transition process must be just if it is to succeed. It must provide the least developed countries with the clean, reliable and affordable energy they need for their growing populations aspiring to a higher standard of living. The most developed nations, in turn, will need to assist those who could be adversely affected by that transition, should for example their job disappear or the cost of this transition put them in energy poverty.

The Just Transition is at the heart of our purpose "To provide as many people as possible with energy that is more reliable, more affordable, and more sustainable". The Company is willing to accelerate the development of a decarbonized energy system, while maintaining the current energy system at a level sufficient to meet global demand and organize a just, orderly and equitable transition of energy systems.

We are mindful of the issues raised by our activities and our own transformation. We are particularly sensitive to the need to enhance our employees' skills, guarantee decent wages and maintain social dialogue, in the spirit of the International Labour Organization's guiding principles on just transition and the Paris Agreement. We also take actions towards our customers, our suppliers and more generally the communities and countries where we operate. ■

1. **Source :** *TotalEnergies Energy Outlook 2024.*

100,000 EMPLOYEES

Ensure employability, equal opportunity, social protection and attractive jobs

OUR DIALOGUE AND CONSULTATION MEANS

- Negotiation, discussion, consultation or information of staff representative bodies.
- Listening (annual surveys – TotalEnergies Pulse Survey).

OUR PROGRESS IN 2024

- 100% of employees receive direct remuneration at least equal to the country's living wage (global reporting in place since 2022).
- Roll out of the Care Together by TotalEnergies program, guaranteeing high social standards for our employees worldwide. 80% of employees benefit from a health check-up every two years. 98% of the Company's women benefit from a fully paid maternity leave of a minimum duration of 14 weeks.
- 5.5 training days per year per employee in 2024.
- Upskilling: "Visa for TotalEnergies, Digital Accelerator" training focused on generative AI, followed by 23,000 employees.
- Over 10,000 of our employees now work in low-carbon energies.
- Capital increase reserved for TotalEnergies employees in 2024: subscription of almost 500 M€; TotalEnergies is the number 1 European company in terms of capital held by its employees.
- Allocation of 100 free shares to almost 105,000 employees to celebrate the Company's 100th anniversary.
- 2024 TotalEnergies Survey of more than 90,000 employees in 122 countries: engagement rate of 83.7% and pride in working for TotalEnergies of 90% (increase over the past 2 years).

OUR 2025-2030 OBJECTIVES

- Start-up of the Grandpuits biorefinery, a major industrial redeployment project, without layoffs or forced mobility.
- Training employees in sustainable development on the occasion of the deployment of "Our 5 Levers for a Sustainable Change".
- Continuation of the deployment of Care Together by TotalEnergies program.
- Continuation of the upskilling programs: Visa for TotalEnergies Season 3 on digital and generative AI in 2025.
- Deployment of the 2,000 € "energy efficiency and transition" individual envelope agreement for our 35,000 employees in France, applicable from January 1, 2024 for a period of 5 years.

~120 HOST COUNTRIES

Participate in national energy transition projects by promoting responsible and transparent business conduct

OUR DIALOGUE AND CONSULTATION MEANS

- Cooperation and partnerships.
- Advocacy and lobbying based on the values and principles of our Code of Conduct.
- Participation in the Extractive Industry Transparency Initiative (EITI).

OUR PROGRESS IN 2024

- OGDC (Oil & Gas Decarbonization Charter): publication of the first baseline report under the leadership of the 3 CEO champions, including P. Pouyanné.
- Signing of a cooperation agreement with Oil India and ONGC to measure methane emissions (AUSEA).
- Publication of the third tax transparency report.
- Oman: launch of the Marsa LNG project, signing of agreements to develop 300 MW of renewable energy projects in the country.
- Stake acquisition in renewable hydropower projects in Africa (Bujagali hydropower plant in Uganda, project in Rwanda).
- Joint investment commitment by TotalEnergies, bp, Equinor and Shell of 500 M$ over the coming years to support access to energy, mainly in sub-Saharan Africa and South and Southeast Asia.
- France: milestone of 2 GW of installed capacity of renewable electricity production reached, additional 70 M€ in 2024 to process up to 100% of waste from the circular economy in La Mède and produce SAF (Sustainable Aviation Fuel) from 2025.

OUR 2025-2030 OBJECTIVES

- Continued deployment of our multi-energy strategy with our partner countries, notably the GGIP project in Iraq (start of construction of a first gas treatment unit in 2025).
- Continuation of AUSEA campaigns with national companies.
- Regular publication of our tax transparency reports.

COMMUNITIES

Contribute to their resilience and sustainable socio-economic development through a constant dialogue

OUR DIALOGUE AND CONSULTATION MEANS

- Public consultations and societal impact studies for projects, meetings with local stakeholders.
- Dialogue sessions with local/national/international NGOs.

OUR PROGRESS IN 2024

- EACOP & Tilenga: by the end of 2024, more than 20,000 direct jobs created, including around 13,300 for Ugandans and 6,700 for Tanzanians, 1.2 B$ spent locally; 1.5 million hours of training provided. In January 2024, signing of a new Free, Prior and Informed Consent (FPIC) agreement in Tanzania, with the Barabaig community.
- Over 1,600 socio-economic development initiatives supported worldwide.
- Creation of a foundation in Mozambique to support socio-economic development in the province of Cabo Delgado.
- Nearly 15,000 solidarity actions around the world in 2024 by more than 10,000 employees (*Action!* program).
- France: 29 meetings of the regional think tanks *"Territoires des énergies et au-delà"*, with 700 local players.
- Supporting youth in France: opening of 4 additional Production Schools in 2024; L'*Industreet* was hosting 289 young people at the end of 2024 and 173 graduated in 2024.

OUR 2025-2030 OBJECTIVES

- Local jobs Tilenga & EACOP: aim to create 78,000 direct and indirect jobs during the construction phase and 4,200 during the operations phase.
- Mozambique LNG: continuation of the Foundation's development actions (multi-year budget of 200 M$).
- Continue to support young people: network of 100 Production Schools in France in 2028 in 13 regions; train 400 young people per year at L'*Industreet*.

Millions OF CUSTOMERS

Support the transition towards low-carbon, affordable energy consumption

OUR DIALOGUE AND CONSULTATION MEANS

- B2B and B2C commercial relations.
- Every day more than 6 million customers visit our more than 13,000 service stations in nearly 60 countries.
- Management of our more than 300 key accounts and B2B technical and commercial partnerships.
- Customer satisfaction surveys.

OUR PROGRESS IN 2024

- 60 million people have access to LPG for *Clean Cooking* in Africa and Asia.
- Electromobility: nearly 78,000 charging points operated and supervized by the end of 2024, creation of the "Source" joint venture (TotalEnergies and SSE) to deploy and operate up to 3,000 rapid charging points in the United Kingdom and Ireland; more than 24,000 charging points in France, including more than 1,600 rapid and ultra-rapid. Launch of the Charge+ mobility card, providing access to a network of 100,000 public charging points spread across the country.
- France: capping of fuel prices at all service stations in France at €1.99/l; Operation "Bonus Conso" maintained for winter 2023-2024 on electricity and gas to encourage sobriety.

OUR 2025-2030 OBJECTIVES

- Provide access to *Clean Cooking* to 100 million people in Africa and India by 2030.
- 40 million people served by our electricity production in emerging countries by 2030.
- Electromobility: more than 1,500 sites equipped with high-power charging in Europe and more than 200,000 charging points operated and supervised worldwide by 2030.
- France: renewal in 2025 of the fuel prices cap at €1.99/l.

100,000 SUPPLIERS

Encourage the reduction of environmental impact and promote respect for human rights

OUR DIALOGUE AND CONSULTATION MEANS

- Awareness campaigns.
- Surveys and questionnaires.
- "Supplier Day".
- Monitoring and auditing platform.

OUR PROGRESS IN 2024

- 65% of buyers trained in responsible purchasing in 2024.
- Development of a guide, with a group of energy companies (EVOLEN), enabling SMEs to meet the requirements and challenges of sustainable development.
- Since 2023, more than 600 on-site audits and more than 390 documentary evaluations of priority suppliers carried out.

OUR 2025-2030 OBJECTIVES

- Train all our buyers in sustainable development and responsible purchasing.
- Raise awareness and mobilize our suppliers in terms of sustainable development.
- Support our suppliers within the framework of the Climate commitment program.
- Evaluate our 1,300 priority suppliers by the end of 2025.

Advocacy and Sector Initiatives in Support of the Energy Transition

A successful energy transition requires closer collaboration between all the players involved.

Support for government action and climate sectorial initiatives and disclosures

TotalEnergies supports the commitments made by governments to combat global warming as part of the Paris Agreement and publishes its positions on its corporate website[1].

This site also groups together our positions and commitments in favour of human rights, the fight against corruption and the environment. Our interest representation actions in France, Europe and the United States are listed by theme and by year, to promote complete transparency.

During COP29, Patrick Pouyanné participated as CEO Champion in a round table of the Oil and Gas Decarbonization Charter (OGDC). This industry initiative – launched at COP28 – brings together 55 national and international Oil & Gas companies representing almost 45% of the world's oil and gas production. The signatories' objectives are to eliminate routine flaring by 2030, aim for near-zero upstream methane emissions by 2030, and to be Net Zero on Scope 1+2 operated emissions by 2050. At the invitation of the United Nations Environment Programme (UNEP), Patrick Pouyanné also took part at the OGMP 2.0 CEO Forum and invited all Oil & Gas companies to join OGMP 2.0, which is a reference framework for methane reporting piloted by UNEP.
In Europe, TotalEnergies supports the "Fit-for-55" package and specifically some of its key components, such as the broader use of carbon pricing, the large-scale expansion of renewable energies, deployment of infrastructure and the development of fuels and renewables for the transportation industry. Our responses to the European Commission's public consultations on climate are public and may be viewed online[2].

Review of associations

TotalEnergies is an active participant in both national and international business and industry associations. Since 2019, we have been publishing our six principles on our responsible commitment to climate change within industry associations.

Our 6 key principles :

1. TotalEnergies recognizes the link established by science between human activities, in particular the use of fossil fuels, and climate change.
2. TotalEnergies recognizes the Paris Agreement as a major step forward in the fight against global warming and supports the initiatives of the implementing States to fulfill its aims.
3. TotalEnergies supports the implementation of carbon pricing mechanisms.
4. TotalEnergies supports policies, initiatives and technologies aimed at promoting the development of renewable energies and sustainable bioenergies (biofuels, biogas) as well as energies and technologies aimed at decarbonizing industrial processes and transportation.
5. TotalEnergies promotes the role of natural gas as a transition fuel, in particular as a replacement for coal. TotalEnergies supports policies aimed at measuring and reducing methane emissions aiming for zero methane emissions.
6. TotalEnergies supports the carbon offset mechanisms necessary to achieve carbon neutrality, through organized and certified markets ensuring the quality and sustainability of carbon credits. TotalEnergies promotes a policy of reducing greenhouse gas emissions.

Results of the review of industry associations published in 2024

Our Review of industry associations report was published in 2024 and can be found on our website[3].

Every two years, our entities record memberships in industry associations. 1107 industry associations and chambers of commerce have been covered for 2023 and for which the list is available on our Website[4].

In the review published in 2024, we have selected and evaluated 116 associations out of 1,107 representing more than 63% of the total amount of fees and memberships. We found that 2 associations are "partially aligned" with our six key principles on climate-related topics: Texas Oil and Gas Association (TXOGA) and International Air Transport Association (IATA).

1. https://totalenergies.com/sustainability/stakeholder-relationships-advocacy/advocacy-principles. **2.** https://totalenergies.com/sustainability/stakeholder-relationships-advocacy/advocacy-principles/our-advocacy-efforts. **3.** https://totalenergies.com/sites/g/files/nytnzq121/files/documents/2024-05/TotalEnergies_industry-associations-review-2023_2024-05-06_en_pdf.pdf **4.** https://totalenergies.com/sites/g/files/nytnzq121/files/documents/2024-05/totalenergies_review-2023-professional-associations-chambers-commerce_2024_en_pdf.pdf

COLLECTIVE INITIATIVES SUPPORTED BY TOTALENERGIES

Axes	Name of the collective initiative	Perimeter
ENERGY & CLIMATE	• 3x Renewables	Worldwide
	• Oil and Gas Decarbonization Charter	Worldwide
	• OGMP 2.0	Worldwide
	• Aiming For Zero Methane	Worldwide
	• TCFD	Worldwide
ACTING FOR THE WELL-BEING OF EMPLOYEES	• Global Deal	Worldwide
	• Women's Empowerment Principles – Equality Means Business (UNGP)	Worldwide
	• Closing the gender gap – a call to action (WEF)	Worldwide
	• ILO Global Business and Disability Network Charter	Worldwide
	• The Valuable 500	Worldwide
	• Manifesto for the inclusion of people with disabilities in economic life	France
	• Inclusion and Diversity Pledge (ERT)	Europe
	• LGBT Commitment charter + de L'Autre Cercle (signed again in 2023)	France
	• *Elles bougent*	France
CARING FOR THE ENVIRONMENT	• Act4Nature International	Worldwide
	• CEO Water Mandate	Worldwide
	• Circular economy commitment AFEP	Worldwide
	• UN Global Compact Ocean Stewardship Coalition	Worldwide
	• UNESCO - Ocean Decade (via Corporate Data Group)	Worldwide
HAVING A POSITIVE IMPACT FOR STAKEHOLDERS	• The Voluntary Principles on Security and Human Rights (VPSHR)	Worldwide
	• The United Nations Guiding Principles on Business and Human Rights as endorsed by the UN Human Rights Council in 2011	Worldwide
	• The United Nations Global Compact Principles	Worldwide
	• The B Team Responsible Tax Principles	Worldwide
	• Partnering Against Corruption Initiative (PACI)	Worldwide
	• Extractive Industries Transparency Initiative (EITI)	Worldwide
	• *Le Collectif des entreprises pour une économie plus inclusive*	France

With regard to TXOGA, since 2021 we have been paying close attention to the positions taken by this association, particularly concerning US methane regulations and their lack of support for the Paris Agreement. Nevertheless, we have noted their support for the EPA's (Environmental Protection Agency) efforts to measure methane emissions in the Permian Basin.

TotalEnergies is not a member of IATA, but is a strategic partner for technology projects (SAF). However, the inclusion of this association in our previous reviews of associations and the positions taken by this association against the carbon tax led us to keep it in our selection for the review of associations, in order to continue to monitor it closely.

In the review published in 2024, in the field of energy, the majority of the new associations to which our entities have joined relate to renewable energies and low-carbon technologies. We are already preparing the next review of associations with regard to our six principles and it will be published in 2026. ■

Our Extra-financial Evaluations

OUR EXTRA-FINANCIAL RATINGS

	TotalEnergies February 2025	Ranking vs our peers[1]
MSCI	AA	2nd
SUSTAINALYTICS	Medium risk	1rst (tie)
ISS ESG	B- I Prime	1rst (tie)
S&P Global	54	1rst

1. Peers: ExxonMobil, Shell, BP, Chevron, ENI, Equinor. 2. See report's glossary for further details.

Today, TotalEnergies is recognized by the main extra-financial rating agencies as a benchmark in its sector for its strategy and actions in favor of the energy transition, its consideration of environmental issues, social responsibility requirements, governance, and for its high level of transparency.

In 2024, TotalEnergies maintained its presence in a number of extra-financial indices such as the FTSE4Good index, the DJSI World and DJSI Europe indexes, the MSCI Europe ESG Leaders, the MSCI World ESG Screened and the MSCI Europe ESG Screened.

Paris Agreement

MSCI. In their enhanced Implied Temperature Rise (ITR) model seeking to align with the best practice guidance from the Glasgow Financial Alliance for Net Zero (GFANZ), MSCI have assessed TotalEnergies's ITR to be 1.9°C indicating that *"TotalEnergies SE is in line with the Paris agreement's minimal goal of limiting global mean temperature to below 2°C."*

ISS-ESG. TotalEnergies is one of the five O&G companies to have received a "global net zero alignment status: aligning". ISS considers the following components when evaluating Net Zero alignment status: "material GHG disclosure, 2050 net zero targets, intermediate target, decarbonization strategy".

Transition Pathway Initiative (TPI): see page 45.

Other evaluations

Climate Action 100+. TotalEnergies has made further progress in the Net Zero Company Benchmark in 2024, thanks to the actions implemented in the areas of interest representation and just transition. CA100+ also recognized TotalEnergies' leadership in the energy transition, placing the Company far ahead of the Net Zero Standard for Oil & Gas.

Carbon Tracker Absolute Impact 2024. TotalEnergies maintained its 2nd position in the ranking, which evaluates the emissions targets of the 27 main Oil & Gas companies.

Ecovadis. In the 2024 Sustainability Rating, TotalEnergies obtained a 83/100 score for its Hutchinson subsidiary, a 82/100 score for Saft subsidiary (both obtained Platinum status), and a 82/100 score for its Refining & Chemicals segment, placing them into the top 1% of rated companies.

Workforce Disclosure Initiative. TotalEnergies has made further progress with a score of 89% in 2024, above the industry average (76%) and the ranking average (62%) in the WDI transparency assessment of around 140 companies' human resources management.

Britain's Most Admired Companies. In 2024, TotalEnergies received the Britain's Most Admired Companies award in its category, based on non-financial criteria such as commitment to reducing environmental impact and diversity & inclusion. ■


Seagreen offshore wind farm, North Sea (Scotland).

Climate & Sustainable Energy


Grandpuits solar power plant and battery energy storage system.

Climate Impact of Our Strategy: Our 2024 Progress and 2025-2030 Objectives

		2015	2023	2024 Objectives	2024 Realizations	2025 Objectives	2030 Objectives
Scope 1+2 Emissions on Operated Activities (100%) Mt CO_2e	Oil & Gas Facilities	vs 2015	- 34%		- 36%		
		46	30.3		29.4		
	CCGT	0	4.3		4.9		
	Scope 1+2 Emissions	46	35	< 38.8	34	Enhanced Objective < 37 ~~< 38~~	25-30[1] > - 40%[1]
Methane Emissions on Operated Activities (100%) kt CH_4		vs **64 kt** in 2020	- 47%	- 50%	- 55%	Enhanced Objective - 60% ~~-50%~~	- 80%
			34		29		
Lifecycle Carbon Intensity of Energy Products Sold[2] **(Scope 1+2+3)** g CO_2e/MJ		73	- 13%	- 14%	- 16.5%	Enhanced Objective > - 17% ~~-15%~~	- 25%
Scope 3 (Category 11)[3] Mt CO_2e		410[4]	351		342	< 400	< 400

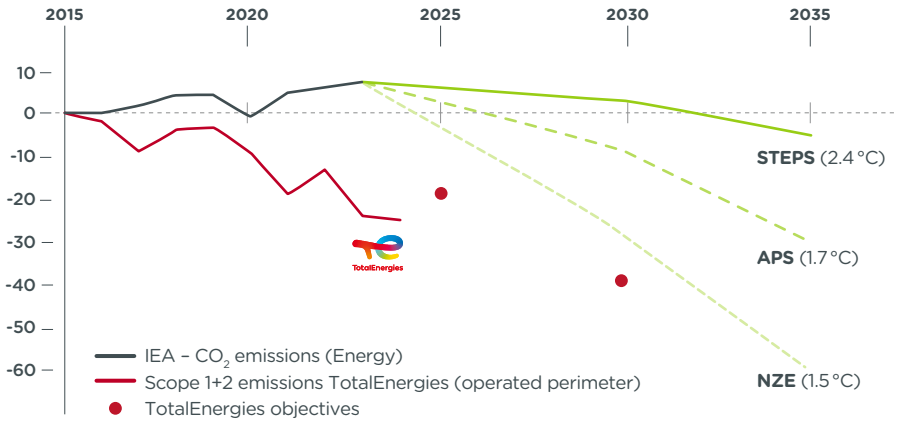
1. Net emissions, including nature-based carbon sinks from 2030. 2. Lifecycle carbon intensity of energy products sold. See Report's glossary for further details. **3.** Biofuels chain excluded from Scope 3 Cat. 11 and reported separately for 2023 and 2024, as per ESRS methodology. See Report's glossary for further details. **4.** In 2015, Scope 3 category 11 was published at 410 Mt CO_2e. The Company keeps this reference to assess the evolution of its Scope 3. If the Scope 3 category 11 for 2015 had been recalculated according to the IPIECA value chain methodology (published in 2016) on the gas value chain, as introduced in data disclosures from 2021, then the Scope 3 category 11 of 2015 would have been 465 Mt CO_2e, including 344 Mt CO_2e for the oil value chain and 121 Mt CO_2e for the gas value chain.

How TotalEnergies' 2030 Objectives Compare to the IEA Scenarios

SCOPE 1+2 EMISSIONS OPERATED DOMAIN

World CO_2 emissions – IEA scenarios (WEO 2024[1])

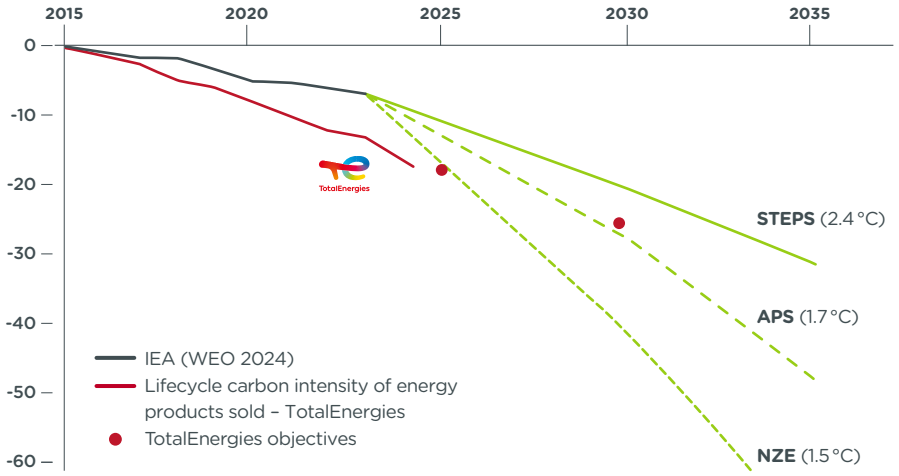
In % vs 2015



LIFECYCLE CARBON INTENSITY OF ENERGY PRODUCTS SOLD[2]

IEA scenarios (WEO 2024)

In % vs 2015



Reducing GHG emissions at our operated facilities (Scope 1+2) is key to our ambition to supply more energy while curbing GHG emissions.

Our objective of cutting net Scope 1+2 emissions from our operated activities by 40% is consistent with the reduction targets of the European Union's "Fit-for-55" program (37% decrease between 2015 and 2030) and the IEA's 2024 Net Zero Emissions (NZE) scenario (28% decrease between 2015 and 2030).

Our targets for lowering the lifecycle carbon intensity[2] of energy products sold (17% reduction by 2025 and 25% reduction by 2030) put the Company on a trajectory close to the Announced Pledges Scenario (APS) in the IEA's World Energy Outlook 2024, which assumes that the States parties to the Paris Agreement fulfill all their net zero objectives.

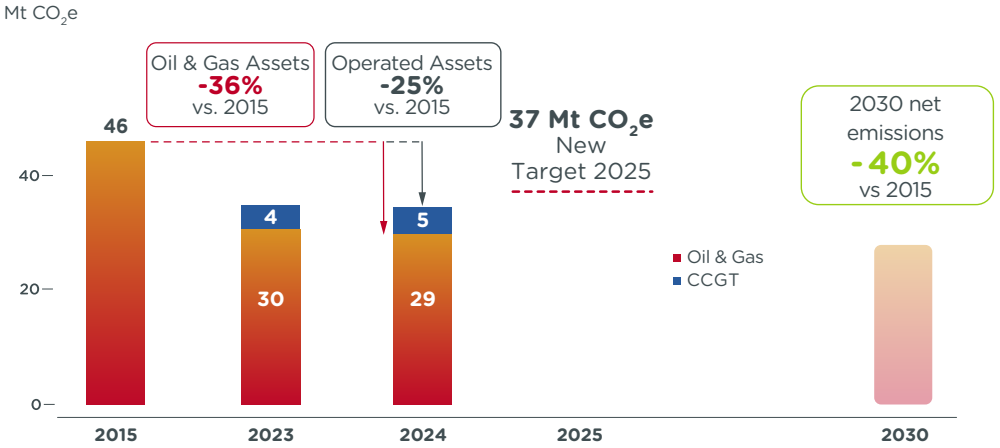
An independent third party (Wood Mackenzie)[3] has audited the calculations made and the associated trajectories for Scope 1+2 emissions and Carbon Intensity[2].

At the end of 2024, the NGO Transition Pathway Initiative (TPI) assessed the Company's lifecycle carbon intensity trajectory ("Carbon Performance"[4]) and considers it as aligned with a below 2°C scenario in 2050. ■

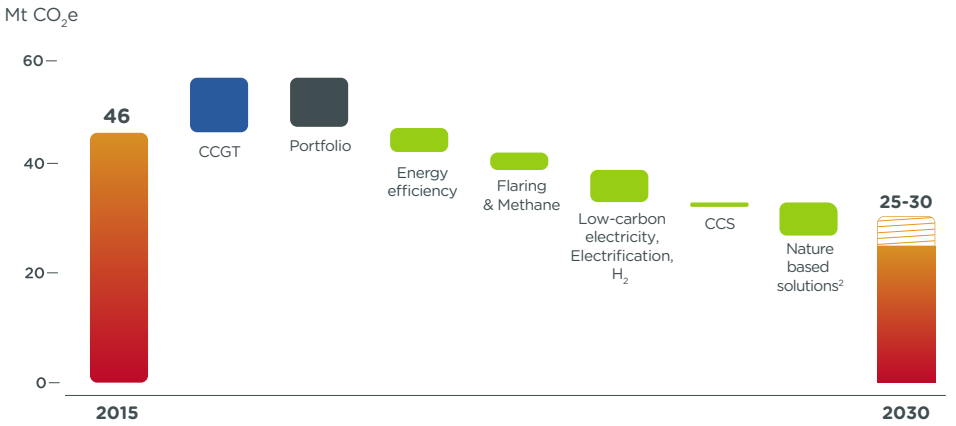
1. Based on the IEA's World Energy Outlook 2024, https://www.iea.org/reports/world-energy- outlook-2024, Licence CC by 4.0. Worlwide CO_2 emissions from energy combustion and industrial processes. For TotalEnergies, emissions exclude the Covid-19 effect in 2020 and 2021, and take into account nature-based carbon sinks projects from 2030. **2.** TotalEnergies' lifecycle carbon intensity and the change in carbon intensity of the world's energy, calculated as the ratio of the world's CO_2 emissions from fossil fuels (in Mt CO_2) to the total primary energy supply (in EJ) of the IEA's World Energy Outlook 2024. A replacement factor of 2.63 (38%) is used to obtain a fossil fuel equivalent for renewable power generation (wind, solar and hydroelectricity) modeled in those scenarios for purposes of comparison with TotalEnergies' lifecycle carbon intensity. **3.** Link to the assurance letter of Wood Mackenzie: https://totalenergies.com/sites/g/files/nytnzq121/files/documents/totalenergies_woodmac-totalenergies-letter_2025_en.pdf. **4.** https://www.transitionpathwayinitiative.org/companies/totalenergies

Reducing Our Scope 1+2 Emissions by 2030

SCOPE 1+2 EMISSIONS OF OPERATED FACILITIES



SCOPE 1+2 FROM OPERATED FACILITIES: LEVERS TO REACH OUR -40% TARGET IN 2030[1]



Our primary responsibility as a producer of fossil fuels is to reduce emissions on our facilities. In 2024, the Company launched the "Our 5 Levers for a Sustainable Change" initiative, which supports the commitment of all employees to improving energy efficiency and the use of low-carbon technologies in our operations.

Our progress in 2024

We are resolutely continuing to reduce emissions from our operated sites. Thus, emissions from our operated assets fell by more than 36% from 2015 levels. In 2024, with more than 200 GHG emissions reduction projects coming to fruition, we reduced our emissions by 1.3 million tons of CO_2e across our operated assets.

At the same time, emissions from flexible electricity generation increased as a result of the addition to the portfolio of CCGTs acquired in the United States and the United Kingdom, to support our strategy of rolling out an integrated low-carbon electricity offer. As a result, our overall operated emissions have decreased by 25% compared with 2015.

These ongoing reduction efforts have made it possible to reduce the Scope 1+2 intensity of our Upstream Oil & Gas operated assets, from 21 kg CO_2e/boe in 2015 to 17 kg CO_2e/ boe in 2024[3]. These results put us among the players with the lowest intensities in the industry.

1. Net of nature-based carbon sinks. **2.** NBS credits will be used from 2030. **3.** Operated Oil & Gas Upstream intensity is calculated excluding LNG plants. **4.** The calculation of net emissions includes nature-based carbon sinks projects as from 2030.

Our objectives

Given the progress we have made towards achieving our interim targets, TotalEnergies is stepping up its ambition to reduce GHG emissions from its operated assets and has set the target for 2025 at 37 Mt CO_2e/year, compared with 38 Mt CO_2e/year previously.

TotalEnergies reaffirms its target to reduce emissions from its operated assets, which aims to reduce its net Scope 1+2 emissions[4] by 40% by 2030 relative to 2015, after mobilizing around 5 million credits from nature-based carbon sinks projects. This offsetting will start only from 2030 for residual emissions on the basis of a consumption of approximately 10% per year of the stock of carbon credits *(see p. 64)*. ■

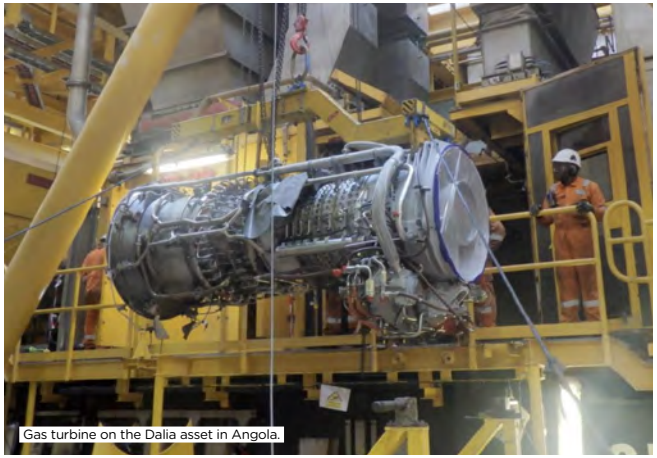
Improving the Energy Efficiency of Our Sites: Implementation of the 2023-2025 Action Plan

"Our 5 Levers for a Sustainable Change"

Lever 1. Energy Consumption

In my operations, I review all my energy consumptions and aim to minimize them. In my projects, I design installations to minimize energy consumptions.

(see p. 72)



Gas turbine on the Dalia asset in Angola.

Saving the energy used in our operations is beneficial in several ways: it contributes to the collective effort for energy efficiency, acts to reduce our GHG emissions and lowers our costs.

In September 2022, TotalEnergies launched a plan to accelerate energy efficiency improvements at its sites worldwide. Over the period 2023-2025, we are investing 1 B$ to reduce our energy consumption and cut GHG emissions by 2 Mt CO_2e.

This plan has enabled us to accelerate the actions undertaken for several years in the Company's operating sectors, with a total of more than 170 projects completed by 2024, including more than 80 initiatives for Exploration & Production, more than 80 for Refining & Chemicals and more than 10 for Marketing & Services and Gas, Renewables & Power.

At the end of 2024, these investments amounted to around 750 M$: they have reduced emissions by around 1.5 Mt CO_2e/year and generated energy savings of more than 100 M$/year.

Taking into account the efficiency projects reported by the teams at the industrial sites, a second energy efficiency improvement plan will be rolled out over the period 2026-2028, for a total of 1 B$.

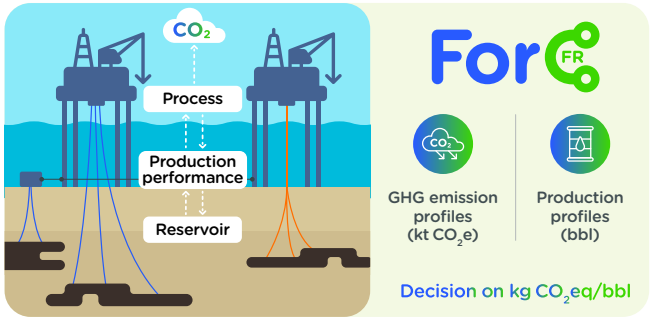
At Exploration & Production sites, some of the gas produced by oil reservoirs is used in gas turbines to generate the electrical power needed by equipment such as water injection pumps and treatment units.

TotalEnergies has launched a project to shut down certain underused gas turbines on its operated assets. Since 2021, 74% of E&P assets have been optimized in this way, enabling a total of nine gas turbines to be shut down. This initiative has resulted in GHG savings of around 130 kt CO_2e/year, while reducing maintenance costs and recovering additional gas.

In 2024, in Angola, two gas turbines were shut down on Block 17 (Dalia and Pazflor), reducing CO_2 emissions by 29 kt CO_2e/year and saving 13 Mm^3/year of fuel gas, while in the United Kingdom, the Elgin site reduced its CO_2e emissions by 15 kt CO_2e/year by switching from two turbines to one.

In the Refining & Chemicals segment, improving energy efficiency involves optimizing heat exchangers, furnaces and the steam network. For example, at our operated sites, the performance of furnaces has been improved by perfecting combustion conditions, which has led to a reduction in the associated GHG emissions.

FORECAST CARBON FOOTPRINT REDUCTION (ForCFR)




Gonfreville-l'Orcher refinery, Normandy (France).

Digital and monitoring

In Exploration & Production, the 'ForCFR' (Forecast Carbon Footprint Reduction) digital application has been designed to link GHG emission forecasts with oil and gas field production forecasts. Thanks to this integration, it is now possible to optimize future production while reducing the energy demand and therefore GHG emissions, particularly those linked to water and gas injection. For example, in Angola's deep offshore, ForCFR has made it possible to test different operating parameters and injection and well activation scenarios, with an estimated reduction in GHG emissions of 179 kt CO_2e/year. Some of the opportunities identified have already been implemented in the field.

At the Normandy, Donges and Feyzin refineries, digital applications are being deployed to optimize the steam and energy networks: the CarbOptim digital tool is being used to monitor energy consumption in real time so that it can be optimized.

Adapting the design of the facilities

At the Normandy refinery, the project to modernize the equipment in the reforming unit, including the furnace, an exchanger and a column, has resulted in a reduction of 75 kt CO_2e/year. In addition, the heat recovery project was commissioned at the end of 2024: this waste heat emitted by the refinery process will be used to supply the district heating network for the city of Le Havre, with an associated reduction of 18 kt CO_2e.

In the Gas, Renewables & Power segment's combined-cycle power plants (CCGT), the reduction in GHG emissions is reflected in improved efficiency and performance. In 2024, at the Pont-sur-Sambre CCGT, major modifications were made to the gas turbine during a major maintenance shutdown. The same project is planned for the St Avold 8 CCGT in 2025. Over a large part of the power station fleet, high-power electric motors have been replaced by the latest-generation motors with variable speed drives, which are more efficient. ■

HIGHLIGHTS

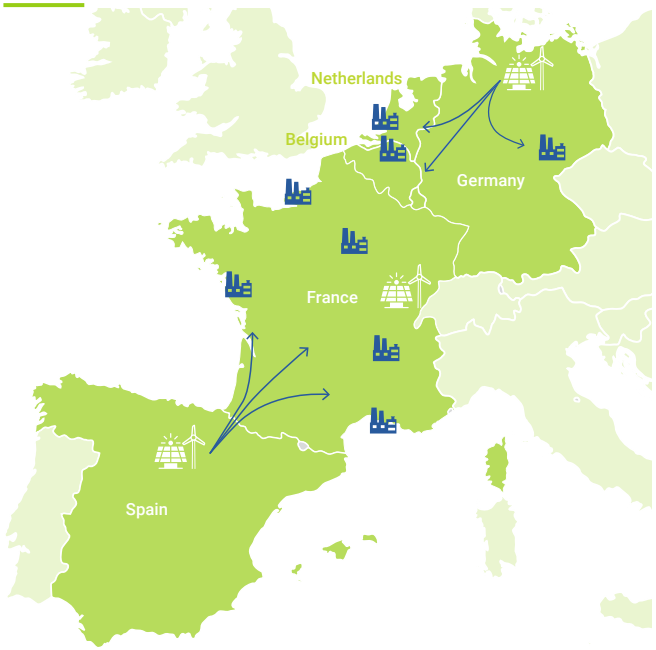

Drilling rigs and equipment in Uganda.

Reducing Diesel Consumption: the Innovative Approach of Hybrid Drilling Rigs

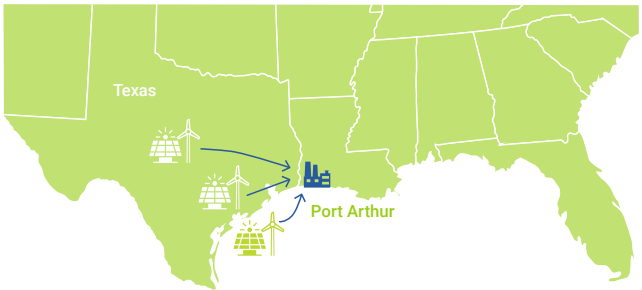
To limit diesel consumption, the drilling rigs at Exploration & Production in Uganda have been fitted with storage batteries. Based on the same principle as hybrid cars, the batteries store energy when demand is low and release it when demand peaks. This has reduced diesel consumption by 20%, equivalent to a reduction of 1 kt CO_2e/year per drilling site.

Decarbonizing Our Operated Sites Through Low-carbon Electricity Supply and Electrification

THE GO GREEN PROJECT IN EUROPE



THE GO GREEN PROJECT IN THE UNITED STATES



Low-carbon electricity supply

In Refining & Chemicals, our ambition is to provide our facilities in Europe and the United States with a 100% low-carbon electricity supply from 2025, which will be made possible through our Go Green initiative. In Europe, up to 2.5 TWh/year will be supplied to the Refining & Chemicals industrial assets (excluding cogeneration facilities). This electricity will come partly from the European renewable portfolio, of which 0.8 TWh/year is under construction or in operation and 4.2 TWh/year is under development, and partly from our aggregation trading portfolio.

In the United States, around 1.5 TWh/year will gradually be supplied to the Refining & Chemicals assets from the renewable portfolio in Texas. The Danish and Myrtle assets, which are already in service, will supply around 1 TWh/year, with the Hill project providing the remainder from 2025. This electricity will benefit the Port Arthur and Laporte facilities. This action to supply low-carbon electricity, illustrates our "Lever 2[1] for a Sustainable Change", which aims to use low-carbon technologies in our own operations, and will enable a reduction in emissions of more than 2 Mt CO_2e/year on the Refining & Chemicals business segment's Scope 2 compared with 2015.

Electrification of our facilities

Major projects to electrify our facilities have been completed or are under way at our operated assets. At the Antwerp petrochemicals site, the steam turbine driving an ethylene compressor was replaced by an electric motor at the end of 2023. At the Normandy platform, an obsolete gas furnace has been replaced by a 2 MW electric heater, reducing emissions by 4.8 kt CO_2e per year. At the Exploration & Production subsidiary in Argentina, power purchase agreements have been put in place to increase the proportion of renewable energy to 80%, enabling the Neuquèn asset to be connected to the local electricity grid and justifying the electrification of turbocompressors from 2025, thereby reducing the asset's fuel gas consumption by 90%. ■

HIGHLIGHTS

New Oil and Gas Projects Focusing on Electric Power

In April 2024, TotalEnergies launched the Marsa LNG project, a 1 Mt/y LNG[2] liquefaction plant in Oman. Marsa LNG will be one of the lowest carbon intensity LNG plants in the world, with less than 3 kg CO_2e/boe, thanks in particular to the electrification of the process and its supply by a 300 MWp photovoltaic solar farm, which will make it a major project illustrating the implementation of Lever 2[1] *(see p. 23)*.

In 2024, the final investment decision was taken for the GranMorgu project, a new oil exploration and production development in Suriname. This project incorporates the best technologies for reducing greenhouse gas emissions and has a carbon intensity of less than 16 kg CO_2e/boe thanks to various technologies and an all-electric FPSO[3] *(see p. 97)*.

1. Lever 2: "I promote the use of renewable energies and low-carbon technologies in my projects and my operations, taking into account a CO_2 cost of $100/t. I do the same with my customers and suppliers to enable them to reduce their emissions". **2.** Liquefied Natural Gas. **3.** Floating production storage and offloading unit.

Aiming for Zero Methane Emissions

TotalEnergies has long been committed to reducing its methane emissions by taking specific actions on each of the four sources: flaring, vents, stationary combustion and continuous real-time detection to identify any fugitive emissions.

Actions to reduce flaring

During flaring, gas combustion at the flare is incomplete, and around 2% of the gas sent to the flare is not burnt, the rest - 98% – being transformed into CO_2 after combustion. The actions to reduce flaring described below therefore directly reduce methane emissions.

Eliminating routine flaring is a priority for reducing methane and CO_2 emissions. TotalEnergies has been committed to eliminating routine flaring for new projects since 2000. A founding member of the World Bank's "Zero Routine Flaring by 2030" initiative since 2014, the Company is committed to ending this type of flaring by 2030 and to achieve this goal, has implemented several large-scale projects at its sites. TotalEnergies is also looking to reduce other forms of flaring, and is launching projects to retrofit installations with closed flares. Closed flare systems recover and treat waste gases, reducing methane and CO_2 emissions. In 2024, the first closed flare was installed at the Tempa Rossa facility already in operation in Italy.

Several projects for closed flares on existing facilities are under study, and three have already been approved, two in Angola and one in the UK, with start-ups scheduled between 2025 and 2026. They will enable an overall reduction of 160 kt CO_2e/year.

In addition to actions on each of these sources, all new projects include strict design criteria to avoid methane emissions: no natural gas for pneumatic equipment, no continuous cold venting and systematic installation of closed flares.

Actions on vents

Venting is the release of methane into the atmosphere without combustion. TotalEnergies has reduced its vents since 2020 by rerouting the gas going to the vents to the gas export system or to the flare. Some equipment – such as pneumatic actuators – also uses methane as an instrumentation gas, and the replacement of this equipment with innovative solutions using compressed air instead of methane has significantly reduced vents.

Continuous real-time detection

Leaks are monitored by annual detection and repair campaigns deployed at all our operated upstream sites. This regular monitoring is complemented by the deployment of AUSEA *(Airborn Ultralight Spectrometer for Environmental Application)* drone detection campaigns, as well as continuous, real-time detection resources that will be installed by the end of 2025 on all our operated upstream assets[1]. The number of sensors deployed will be around 13,000 for an investment of around 50 M$. As illustration, a FPSO could be equipped with around 500 sensors to provide complete, accurate coverage of the entire installation.

HIGHLIGHTS

Argentina

In 2024, the Argentinian subsidiary was particularly active in reducing methane emissions at its Rio Cullen site in Tierra del Fuego and its Neuquen site:

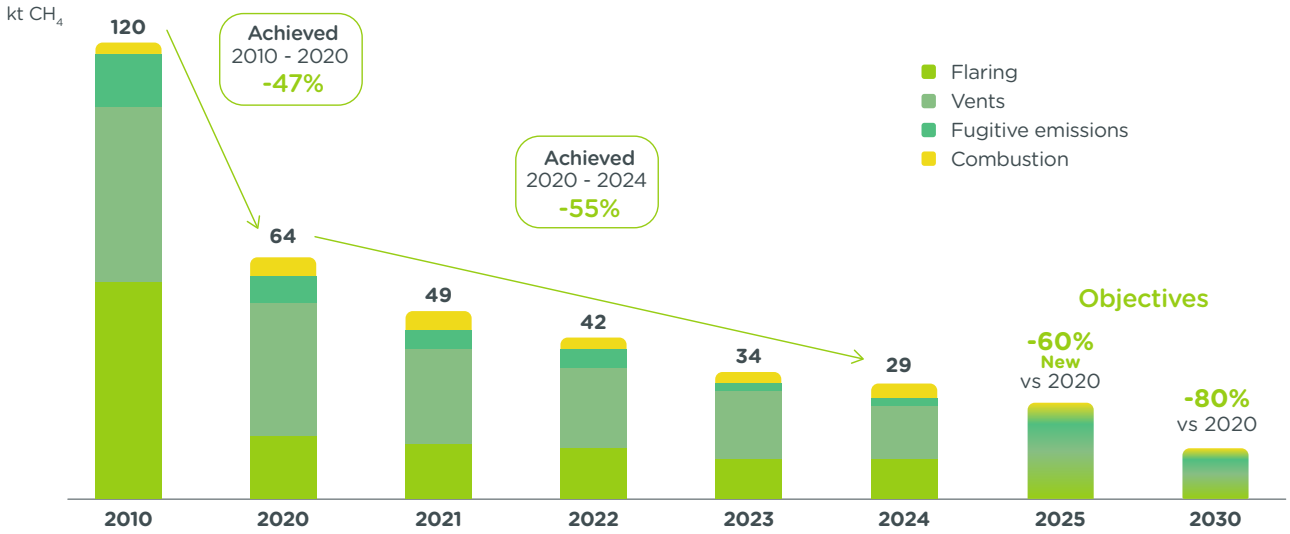
- **at Rio Cullen, a project to recover, compress and reinject blanketing gas from storage tanks into the process was implemented;**
- **at Neuquén, a new degassing stage has been installed in the process, enabling more condensate to be recovered, improving safety conditions on site and reducing emissions;**
- **at Neuquén, instrumentation gas was replaced by air thanks to an old pipeline reused to create an instrumentation air line and compressors powered by renewable energies.**

The combined effect of these projects is a reduction in methane vent emissions of 0.3 kt CH_4 in Tierra del Fuego and 0.85 kt CH_4 in Neuquen.

In Nigeria, the OML100 asset accounted for 57% of global routine E&P flaring in 2020. The end of routine flaring on the OML100 offshore block became effective in 2023. This was the last TotalEnergies asset in Nigeria with routine flaring by design (initial design, facilities commissioned in 1993). Significant modifications were made to the facilities to send the gas produced to the Bonny LNG plant for upgrading instead of being flared. The total reduction in greenhouse gas emissions is around 330 kt CO_2e/year, including 1.3 kt CH_4/year.

1. https://totalenergies.com/news/press-releases/cop29-totalenergies-deploys-continuous-real-time-methane-emissions-detection

METHANE EMISSIONS ON OPERATED FACILITIES



Our progress since 2010

Between 2010 and 2020, TotalEnergies reduced its operated methane emissions by almost half. Operating methane emissions decreased from 64 kt CH_4 in 2020 to 29 kt CH_4 in 2024, a 55% reduction. TotalEnergies is thus one year ahead of schedule in meeting its target of reducing its operated methane emissions by 50% between 2020 and 2025: TotalEnergies has set a new, reinforced target of -60% in 2025, compared with 2020. TotalEnergies is on the way to achieving its objective of reducing its operated methane emissions by 80% in 2030, compared with 2020. ■

HIGHLIGHTS

OGMP 2.0 Gold Standard Reporting and COP29

TotalEnergies has been assessed Gold Standard OGMP 2.0 in 2024 for the 4th consecutive year[2]. The OGMP 2.0 (Oil & Gas Methane Partnership) is the reference framework created in 2020 and piloted by the United Nations Environment Programme (UNEP) for methane reporting in the oil and gas sector. This framework encourages companies to continue improving the completeness and accuracy of their emissions reporting, for both operated and non-operated perimeters, in order to focus on reducing the most significant emissions. To date, nearly 150 companies are members across the value chain, including 65 upstream. TotalEnergies has been a founding member of OGMP 2.0 since 2020, is among the first companies to reach Gold Standard Reporting, the end point of the Gold Standard Pathway defined by the UNEP, and is one of the first three upstream companies to exceed the threshold of 40% of operated methane emissions in OGMP 2.0 level 5, the highest level of the reporting framework[3]. UNEP thus recognizes the excellence of TotalEnergies' methane reporting, which complies with increasing requirements for completeness and measurement at source and site level.

Patrick Pouyanné has also been invited by UNEP and the European Commission to speak at the CEO OGMP 2.0 forum at COP29 in Baku, to share his vision and the Company's leadership on methane with other industry players. TotalEnergies intends to play a positive role in the industry and regularly invites other companies in the sector to join OGMP2.0 and, beyond that, to collectively reduce methane emissions.

2. See the UNEP report "An Eye on Methane: Report 2024". 3. The OGMP 2.0 reporting framework defines 5 reporting levels. Levels 1 to 3 do not require measurements, but call for increasingly detailed methane inventories. Level 4 requires measurements at source level, and level 5 requires measurements at site level.

HIGHLIGHTS

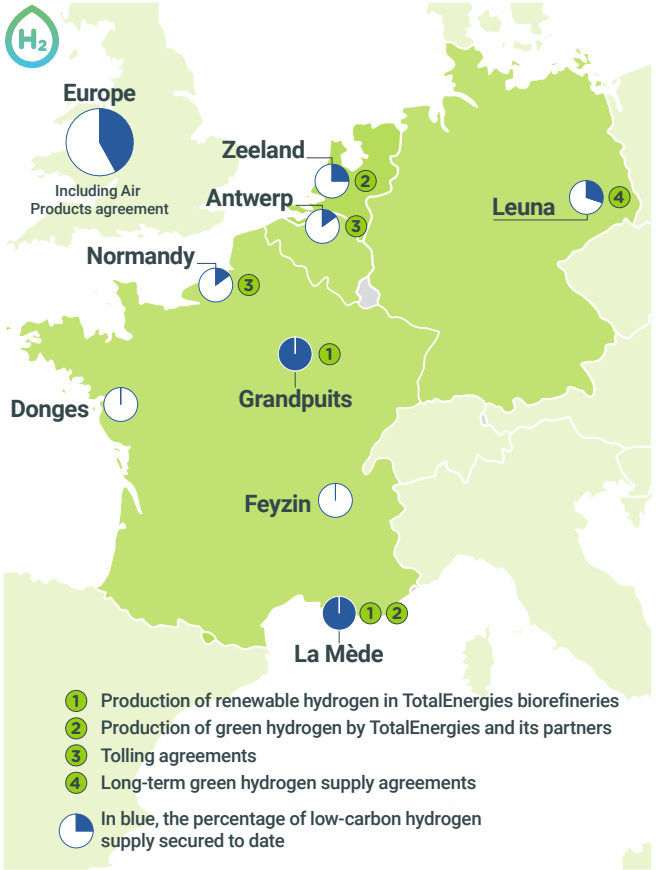
In Gabon, on the operated assets of the subsidiary TotalEnergies Exploration & Production, routine flaring was definitively eliminated in 2024, two years ahead of the initial schedule. To achieve this, the subsidiary adopted new operating methods and made modifications to its facilities.

Firstly, at the Anguille facility, the flare system has been redesigned to allow low-pressure gas, which was previously burnt, to be redirected to the compression facilities for recovery. At the beginning of 2024, the Ile Mandji asset saw its compression capacity increased, enabling the gas – previously routinely flared – to be sent for treatment and compression in order to be recovered. The elimination of routine flaring has reduced the subsidiary's GHG emissions by around 120 kt CO_2e/year, including more than 1 kt CH_4/year, while helping to increase production by +7% between 2023 and 2024.

Building Low-carbon Hydrogen Supply for Our Refineries in Europe by 2030

REFINING & CHEMICALS SITES IN EUROPE

Low-carbon hydrogen supply secured to date.



TotalEnergies is committed to reducing the carbon footprint associated with the production, transformation and supply of energy to its customers. One of the levers identified by the Company is the use of low-carbon hydrogen to decarbonize its European refineries, which would reduce their direct CO_2 emissions by up to three million tons a year by 2030.
In September 2023, TotalEnergies launched a call for tender to use up to 500 kt/year of hydrogen consumed in its European refineries from 2030.

Four types of projects are being launched to help develop a European low-carbon hydrogen market:

- biohydrogen production units using biomass gas produced in our biorefineries. This biohydrogen will be used in particular to produce sustainable aviation fuels (SAF);
- electrolyser projects powered by TotalEnergies renewable electrons, through:
  - either joint venture projects between TotalEnergies and a partner;
  - or tolling contracts for electrons supplied by TotalEnergies.
- long-term third-party purchases of green hydrogen from local electrolysers or via green hydrogen imports.

1. Producing renewable hydrogen in TotalEnergies' biorefineries

At La Mède, a new unit with a capacity of 25,000 tonnes per year is to be built and operated by Air Liquide. The overall investment of 150 M€ to adapt the platform for TotalEnergies and Air Liquide will reduce the biorefinery's greenhouse gas emissions by 130 kt CO_2e/year from 2028.

At Grandpuits, Air Liquide is building a unit to produce around 20,000 tonnes a year of renewable hydrogen, which will be equipped from the outset with Air Liquide's Cryocap™ CO_2 capture technology. This investment will make it possible to avoid emissions of 150 kt CO_2e/year compared with existing processes.

2. Green hydrogen production by TotalEnergies and its partners

To leverage its position as an integrated electricity player, in 2024 TotalEnergies acquired a 50% stake in the OranjeWind offshore wind farm in the Netherlands, with a total capacity of 795 MW, from the German developer RWE.

In the Netherlands, TotalEnergies and Air Liquide have set up a 50/50 joint venture to build and operate a 250 MW electrolyser at the Zeeland refinery. The project, that will be fuelled by OranjeWind, will produce up to 30,000 tonnes per year of green hydrogen, will be commissioned in 2029 and will reduce CO_2 emissions from the Zeeland site by up to 300 kt CO_2e/year. The project represents a total investment of around 600 M€.


Part of the solar farm on the TotalEnergies platform at La Mède.

Call for tender, in Septembre 2023, for the supply of

500 kt/year

of low-carbon hydrogen to European refineries

In France, TotalEnergies is continuing to develop, with its partner Engie, the Masshylia project to help reduce emissions of both La Mède biorefinery and of customers in the Fos-Berre industrial port area. The two partners are aiming to bring a first 20 MW unit of electrolyser on stream in 2029.

3. Tolling agreements

TotalEnergies has signed long-term tolling agreements with Air Liquide to supply renewable electricity to dedicated electrolysis capacity operated by partners, who in turn supply us with green hydrogen. The aim is to decarbonize the Normandy and Antwerp sites.

Air Liquide will dedicate 130 MW of a new electrolyser to produce 15,000 tonnes per year of green hydrogen for the TotalEnergies platform in Antwerp. TotalEnergies will supply renewable electrons produced by the OranjeWind project to Air Liquide for use in the production of green hydrogen. The project is scheduled to be operational by the end of 2027 and will reduce greenhouse gas emissions from the Antwerp site by up to 150 kt CO_2e/year.

In France, 100 MW of a new electrolyser will be dedicated by Air Liquide to the production of 15,000 tonnes per year of green, low-carbon hydrogen for the TotalEnergies platform at Gonfreville in Normandy. TotalEnergies will supply around 600 GWh/year of renewable, low-carbon electricity, and the project will reduce annual emissions from the Gonfreville site by up to 150 kt CO_2e/year.

4. Long-term green hydrogen supply contracts

In June 2024, TotalEnergies and Air Products announced an agreement for the annual supply of 70,000 tonnes of green hydrogen to the Refining & Chemicals sites in Europe for a period of 15 years from 2030. This green hydrogen will be produced from green ammonia imported by Air Products and will reduce CO_2 emissions by up to 700 kt CO_2e/year.

In Germany, TotalEnergies and VNG, a German natural gas distribution company, signed an agreement in June 2023 to supply green hydrogen to the TotalEnergies Leuna refinery (approximately 4,000 tonnes). The green hydrogen will be produced using renewable electricity from a 30 MW electrolyser built and operated by VNG and its partner Uniper. This agreement will contribute to the emissions reduction of the Leuna refinery by reducing GHG emissions by up to 80 kt CO_2e/year by 2030.

Also in Germany, TotalEnergies signed an agreement with RWE in March 2025 for the long-term supply of 30,000 tonnes per year of green hydrogen to its Leuna refinery. The green hydrogen will be produced by a 300 MW electrolyser built and operated by RWE in Lingen. Delivered via a 600 km pipeline to the Leuna refinery, which must be implemented by the German authorities, it will avoid the emission of around 300 kt CO_2e per year, from 2030 onwards. ■

Actively Working with Our Partners on Non-Operated Assets

OGDC VIDEO LINK

80%[1]

of our non-operated oil and gas production is operated by partners who are members of the OGDC or OGMP 2.0

Our emissions based on equity share from sites operated by our partners in 2024 represent 25 Mt CO_2e, of which 11 Mt CO_2e are included in Scope 1+2 of the ESRS perimeter and 14 Mt CO_2e are included in Scope 3 category 15. We are working to mobilize our partners to reduce emissions from the assets they operate.

At Exploration & Production, a dedicated team is tasked with sharing best practices with our partners at non-operated assets, such as deploying an emission reduction roadmap that includes an energy assessment, reduction of methane venting and routine flaring, and improving energy efficiency, particularly for gas turbines and compressors. We use the projects conducted at our operated sites to illustrate ways our partners can reduce their Scope 1+2 emissions and encourage uptake.

In addition to the existing collaboration with our partners on each of our non-operated assets, TotalEnergies has been a very active contributor to the Oil & Gas Decarbonization Charter (OGDC) initiative since its creation at the end of 2023.

80%[1] of TotalEnergies' non-operated production is operated by partners who are members of initiatives of which we are active members (OGDC and OGMP 2.0). The vast majority of our partners are therefore committed to reducing methane emissions and eliminating routine flaring by 2030.

TotalEnergies industry leader through the Oil & Gas Decarbonization Charter

OGDC THE OIL & GAS DECARBONIZATION CHARTER

At COP28, a major initiative between national and international companies was launched to reduce the industry's GHG emissions: the Oil & Gas Decarbonization Charter (OGDC). Through this initiative – which for the first time brings together international oil companies (IOCs) and national oil companies (NOCs) – the companies are committed to achieving net-zero operations by 2050, aiming for near-zero upstream methane emissions and eliminating routine flaring by 2030, as well as measuring and reporting progress towards these goals. Dr. Sultan Al Jaber, CEO of ADNOC and former President of COP28, is the driving force behind this initiative, which is being led by two other CEO Champions: Amin Nasser, CEO

Scope 1+2 GHG Emissions

Scope 1+2 GHG emissions for the ESRS perimeter correspond to 100% emissions from operated sites, plus equity emissions[2] from non-operated, financially consolidated assets excluding equity affiliates. Scope 1+2 equity emissions from non-operated, non-financially consolidated assets[2] are included in Scope 3 category 15.

1. Based on 2024 SEC production from all non-operated assets and membership as of end 2024. For the purpose of this calculation, ADNOC-led operating companies in the UAE are considered OGDC members, given ADNOC is championing OGDC; also when the operator is a joint venture that is not directly an OGDC or OGMP 2.0 member, it is treated as OGDC member if 100% of its partners are OGDC members, and as OGMP 2.0 member if 100% of its partners are OGMP 2.0 members.
2. Company's equity interest in the asset or its share of production for oil and gas production assets.


AUSEA drone in flight.

6

cooperation agreements to share AUSEA technology with our partners signed in 2023 and 2024

of Aramco, and Patrick Pouyanné, Chairman and CEO of TotalEnergies.

This initiative now brings together more than 55 companies representing almost 45% of the world's oil and gas production. On November 12, 2024, at the opening of COP29 in Baku, the OGDC published its first report[4] to baseline, prioritize and track progress on emissions reductions. Over the past 12 months, the OGDC has established a governance framework and launched a survey of its signatories' emission reduction ambitions and implementation plans, in order to establish a baseline against which future progress can be measured. The OGDC has also rolled out a program called Collaborate & Share, designed to share solutions, promote peer-to-peer collaboration and encourage the adoption of best practices to reduce emissions.

The three CEO Champions of the OGDC initiative said: *"The diversity of our signatories' profiles is both an opportunity and a challenge. Each company comes with its own experience, capabilities, stakeholders and national context. Signatories will have the opportunity to draw on the best practices and knowledge of their peers, with their diverse experiences from all over the world"*. They also publicly set out their 2025 priorities in a video[5], asking each signatory to focus their efforts on implementing concrete action plans, targeting methane and routine flaring as a priority. These plans must be accompanied by improved emissions reporting by each signatory: in addition to measuring progress, such an improvement will provide more precise information on the sources of emissions, making it easier to identify the actions to be launched as a matter of priority. This is what the OGMP 2.0 reporting framework enables for methane.

At COP29 in Baku, Patrick Pouyanné was invited to take part in an OGDC round table discussion to set out his vision and the Company's leadership in the fight against methane emissions and routine flaring.

Sharing best practices and AUSEA technology with our partners

At the end of 2024, as part of the OGDC's Collaborate & Share program, TotalEnergies shared with OGDC members the latest information on our AUSEA campaigns and continuous methane monitoring plan, and at the end of 2025 will share the lessons learned from deploying continuous, real-time detection equipment on all our operated Upstream assets.

In addition to the OGDC, TotalEnergies actively contributes to sharing its experience with its partners by making available its cutting-edge AUSEA technology for the detection and quantification of on-site methane emissions by drone. In November 2024 *(see press release)*, TotalEnergies signed its 6th cooperation agreement with a partner, Oil India in India, to share AUSEA, following the companies Sonangol in Angola, Socar in Azerbaijan, Petrobras in Brazil, NNPC in Nigeria and ONGC in India.

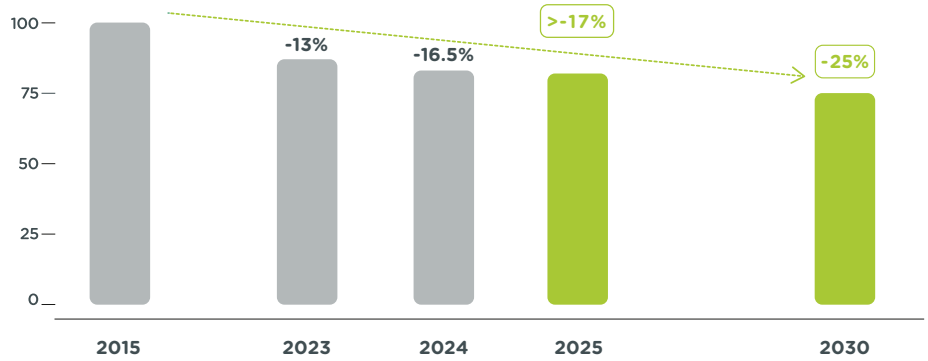
These cooperation agreements, which enable us to fly over installations where TotalEnergies is not a partner, complement the AUSEA campaigns on all our operated upstream sites, now regular in 2024, following the first flights in 2022, and those on non-operated assets (in Brazil, Angola and Nigeria in 2024). ■

4. https://totalenergies.com/news/press-releases/cop29-oil-gas-decarbonization-charter-publishes-its-first-report-baseline **5.** https://www.ogdc.org/#ceo-message

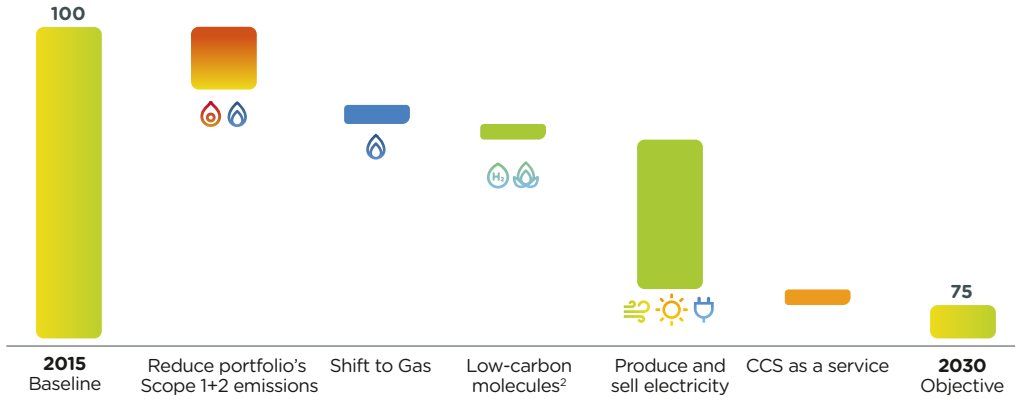
Being a Partner in Our Customers' Carbon Neutrality

LIFECYCLE CARBON INTENSITY[1] OF ENERGY PRODUCTS SOLD

Base 100 in 2015



LEVERS TO THE REDUCTION OF THE LIFECYCLE CARBON INTENSITY[1] OF ENERGY PRODUCTS SOLD (2015 - 2030)



1. Lifecycle carbon intensity of energy products sold. See report's glossary for further details. **2.** Biofuels, biogas, hydrogen and e-fuels/e-gas.

We are ambitious in our targets for direct emissions (Scope 1+2), which we control in facilities we are operating.

We are also ambitious in helping our customers reduce their emissions through our multi-energy strategy, which makes a wider range of energies available to our customers, including low-carbon energies. Indeed, by offering our clients an increasingly decarbonized portfolio, we contribute to the energy transition and help our clients reduce their emissions. We track progress through the life cycle carbon intensity of energy products sold[1] – the decarbonization index of our sales – for which we have reduction targets for 2025 and 2030.

We have been leading among our peers in terms of actually achieving decarbonization of the energy products sales mix since 2015. In 2024, we maintained our progress by notching a 16.5% reduction in the lifecycle carbon intensity[1] of our products compared to 2015.

Our 2025 target for lowering the lifecycle carbon intensity[1] of energy products sold has been strengthened: previously at 15%, it is now targeting 17%. By 2030, the Company's two-pillar balanced transition strategy aims to result in a sales mix of energy products with the view to final use whose lifecyle carbon intensity of energy products sold[1] would be reduced by 25%, which means:

- for an equivalent quantity of energy, the carbon content of energy products would be reduced by 25% ("less emissions for same energy");

Large companies across

35

industries in fulfilling their decarbonization roadmaps and offers low-carbon solutions

400

companies accompanied in their transition

850 potential projects worldwide

7 TWh/year

year of low-carbon energy sales committed by 2030

- for an equivalent quantity of emissions (Scope 1+2+3), the Company would supply 33% more energy to its customers ("more energy for same emissions").

Growth in electricity shall drive more than half the reduction in our lifecycle carbon intensity[1] between 2015 and 2030. Lower emissions from our facilities shall contribute to 25% of the intensity[1] reduction.

The other reduction factors of the lifecycle carbon intensity [1] shall be the reduction in sales of petroleum products coupled with an increase in gas production (particularly LNG) and sales of products derived from biomass.

Established in 2022, TotalEnergies OneB2B Solutions assists large companies across 35 industries in fulfilling their emissions reduction roadmaps and offers low-carbon solutions tailored to their needs from various segments of the Company, such as renewable electricity, BESS solutions, biogas, biofuels, truck charging solutions, and CCS.

In 2024, more than 400 large companies are accompanied in their transition through 850 potential projects worldwide. To date, about 7 TWh/year of low-carbon energy sales have been committed by TotalEnergies in 2030 to these industries. ■

3. PPA : Power Purchase Agreement.

HIGHLIGHTS

Pharmaceutical Industry: Unsubsidized Biomethane Guarantees of Origin Agreement Signed with a Leading Pharmaceutical Company

TotalEnergies will help its client achieve its 2030 greenhouse gas reduction targets and reach carbon neutrality in its operations over the next 3 years. This agreement totals 450 GWh over the next 3 years (2025-2027) and covers all its European needs.

Metallurgy Industry: Supporting Norsk Hydro in Reducing Emissions of its Sites

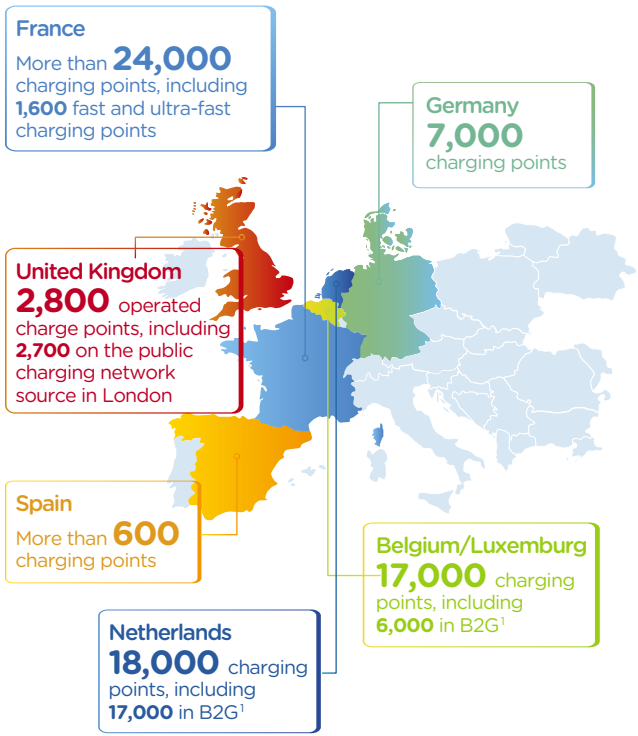
The metallurgy sector generates 11% of global CO_2 emissions. In 2024, Norsk Hydro, world leader in aluminum, has signed two contracts to install solar panels on the roofs of its Drunen (0.6 MWp) and Hoogezand (0.9 MWp) plants in the Netherlands, in order to reduce its emissions. These two solar farms will generate a total of 20 GWh over the 15-year term of the contracts.

Data Center Industry: Memorandum of Understanding Signed with Google

Google aims to use non-fossil fuel electricity 24/7 by 2030, while tracing the origin of the zero-carbon energy consumed by their sites. In January 2025, TotalEnergies signed a memorandum of understanding with Google Europe to help them achieve this goal in the Netherlands. TotalEnergies will bring together the PPAs[3] signed by Google, and develop battery projects to store energy from renewables and release it when needed. The integration of these batteries will make up for the intermittent nature of renewable energies. In the United States, we have already signed electricity contracts with several technology players to meet their energy needs ***(see Focus on p. 26)*****.**

Developing Electric Mobility

BREAKDOWN OF THE 70,000 CHARGE POINTS OPERATED BY TOTALENERGIES IN EUROPE AT THE END OF 2024



1. B2G : *Business to Government*, commercial relationship between a company and public or local authorities, or governments.

TotalEnergies develops a network of high-power electric charging stations along motorways, major roads and in urban hubs in Europe with a target of 1,500 sites equipped with high-power charging by 2030.

The Company is also developing its charging network in a number of large cities around the world, with a portfolio of over 30,000 charging points in Paris, Amsterdam, London, Brussels and Singapore.

It also supports road haulers in the electrification of their fleet with the installation of terminals dedicated to trucks along European corridors and charging services at the depot with the supply of green electricity.

Lastly, TotalEnergies offers French customers who own an electric car an adapted electricity rate and an intelligent, controllable charging station for economical home charging. This offer includes a number of services such as monitoring their charges via their mobile application, repair assistance and even a 24/7 mobility guarantee. Finally, as electricity customers, they also benefit from access to a large network of charging stations at an advantageous rate for their roaming charging.

From the production of renewable electricity to the operation of recharging services, the Company is present across the entire electric mobility value chain. ■

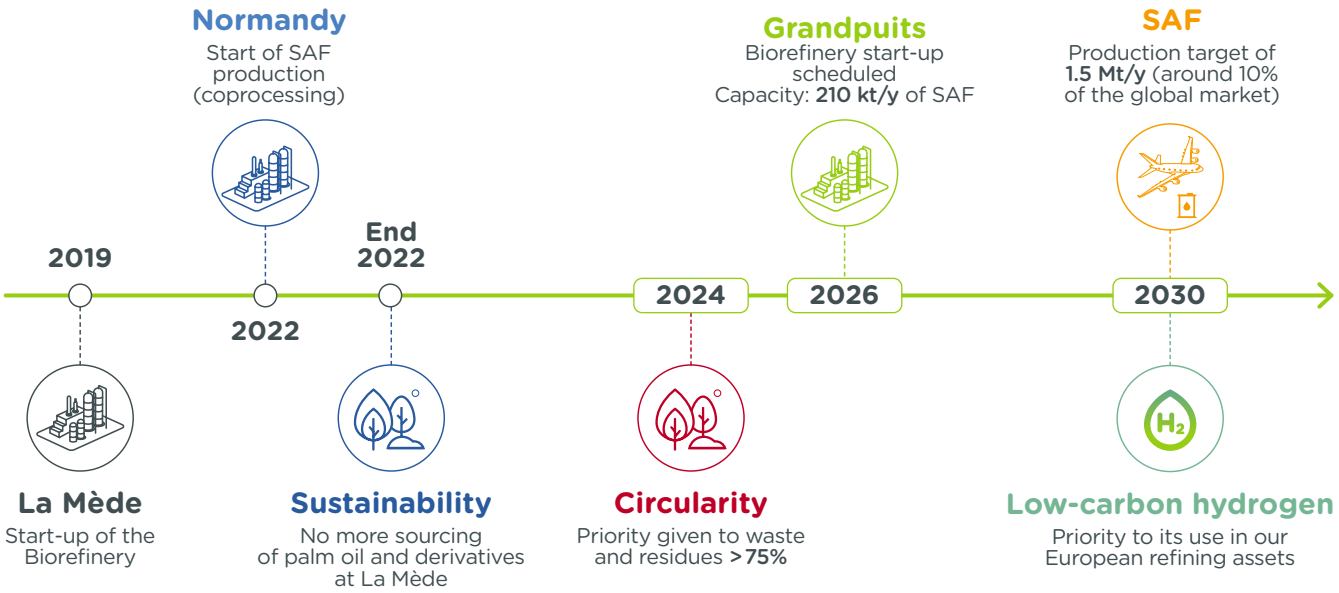
HIGHLIGHTS

In France, we are the leading player in ultra-fast charging on motorways and expressways where this year we reached 1,600 high-power charging stations installed on 240 sites.

In the United Kingdom and Ireland, TotalEnergies and SSE create a joint venture to launch a new major player in electric charging called "Source" with the ambition of deploying up to 3,000 fast charging points in both countries.

New Low-carbon Energy

TRANSFORMING OUR INDUSTRIAL SITES TO PRODUCE LOW-CARBON ENERGY



The energy transition also requires the development of low-carbon energy based on the conversion of biomass and waste, the use of renewable hydrogen, notably for refining or the production of synthetic molecules (e-fuels) combining hydrogen with CO_2 as a raw material. We are thus developing these new energies: biofuels, biogas, renewable hydrogen and synthetic fuels.

Biofuels

Today, biofuels emit over their life cycle more than 50% less CO_2 than their fossil fuel equivalents[1], making them a partial decarbonization pathway for liquid fuels. While demand is emerging quickly, which should lead towards a high-margin market, access to feedstocks (plants, residues, sugar, etc.) remains a barrier to growth.

Among these biofuels, TotalEnergies favors the production of Sustainable Aviation Fuel (SAF) to decarbonize the aviation industry. To avoid conflicts of land usage, TotalEnergies is developing solutions based on primarily food industry waste and residues (used oils, animal fats). As of 2024, the Company increases the share of circular feedstocks to more than 75% to produce biofuels.

Biogas

Biogas, produced from the decomposition of organic waste, is a renewable gas. Injected into gas networks in the form of biomethane, it contributes to the partial decarbonization of natural gas uses.

TotalEnergies' gross production capacity continued to increase in 2024, reaching 1.2 TWh/year eq. of biomethane. The Company now intends to pursue its development through growth, mainly in Europe and the United States. ■

1. According to the European Directive 2018/2001 named RED II.

HIGHLIGHTS

Biogas

TotalEnergies and Vanguard Renewables have entered into an agreement to create a 50/50 joint venture to initially develop, construct and operate ten biomethane projects with a combined annual capacity of 0.8 TWh. Among these, three first projects, with a capacity of nearly 75 GWh per year each, have already entered the construction phase in the states of Wisconsin and Virginia.

FOCUS Supplying Sustainable Aviation Fuel (SAF) to Airlines: TotalEnergies Targets 1.5 Mt in 2030

Today, there are different technological routes for making SAF from bio feedstocks. Our approach is to maximize CO_2 abatement based on the cost merit curve and the maturity of the different technologies.

TotalEnergies intends to become a major player in the production of SAF (Sustainable Aviation Fuel), with a target of 1.5 Mt/year in 2030.

This production is either operational or currently being developed on our existing platforms in Europe, the Middle East and Asia, notably Grandpuits, Normandie, La Mède, Anvers, Leuna and SATORP.

Grandpuits

The biorefinery is scheduled to come on stream in at the beginning of 2026. It will process 420 kt/year of feedstock, mainly waste and residues, to produce up to 210 kt/year of SAF. In 2022, TotalEnergies has joined forces with SARIA (European leader in the collection and valorization of organic materials into sustainable products) to guarantee the supply of lipid-based feedstock.

Normandy

TotalEnergies plans to increase SAF production from 60 kt/year in 2025 to 160 kt/year before 2030 by the coprocessing of HVO biodiesel produced on its La Mède platform.

La Mède

Since 2022, biodiesel produced at La Mède has already been used to produce SAF at the TotalEnergies plant in Oudalle, near Le Havre. In 2024, TotalEnergies continued to invest in the site, so as to be able to process up to 100% waste from the circular economy (used oils and animal fats) and will produce locally 14 kt/year of SAF by 2025.

SATORP

For the first time in the Middle East, SATORP has succeeded in co-processing used cooking oil to produce a fuel that meets all the quality criteria of the SAF ISCC+ certified specifications.

Partnerships

In China, TotalEnergies strengthens its partnership with Sinopec and aims for the development of SAF production of around 230 kt/year.

Beyond the SAF currently produced from used cooking oil, our mission is to prepare the next generation of aviation fuels, such as e-SAF.

Together with Masdar, the UAE Civil Aviation Authority, Airbus, Falcon Aviation Services and Axens, TotalEnergies has demonstrated the potential for converting methanol into SAF. Powered by renewable electricity, it could enable the production of e-SAF from CO_2 converted into methanol.


Employees refueling an aircraft.

Airbus Partnership
In February 2024, Airbus and TotalEnergies signed a strategic partnership regarding the supply of SAF to Airbus for more than half of its needs in Europe and a Research & Innovation program aimed at jointly developing 100% sustainable fuels.

Air France Partnership
In July 2024, Air France-KLM and TotalEnergies confirmed their agreement to supply a volume of SAF of up to 1.5 Mt over 10 years. ■

What are the Relevant Indicators for Reducing GHG Emissions Worldwide?


Fenix: low-emission offshore gas project in *Tierra del Fuego*.

We produce and sell liquified natural gas, which is a necessary transition fuel for building a reliable, low-carbon power system, complementing renewable energies that are intermittent by nature.

Moreover, gas helps to reduce emissions from power generation in many countries, since burning gas rather than coal to produce electricity emits half as much CO_2 for the same amount of energy produced.

In this respect, setting objectives to drastically reduce TotalEnergies' global indirect emissions (Scope 3)[1] in absolute value, without an evolution of the overall structure of energy demand, is in reality not relevant to reduce global GHG emissions.

Most of the emissions reported under Scope 3 by TotalEnergies correspond to the direct emissions (Scope 1) of the consumers of these products: the use of these products depends on their decisions and needs.

In this context, an absolute reduction target for Scope 3 for a company like TotalEnergies, without any change in energy systems and therefore without the reduction of the corresponding Scope 1 of energy users, would lead to a shift of this demand towards other suppliers, notably the national oil companies of producing countries which account for more than 70% of the world market (compared with around 1.5% for TotalEnergies).

This strategy would have no effect on lowering global greenhouse gas emissions, and therefore no positive impact on climate, and would be contrary to the interests of our Company and its shareholders.

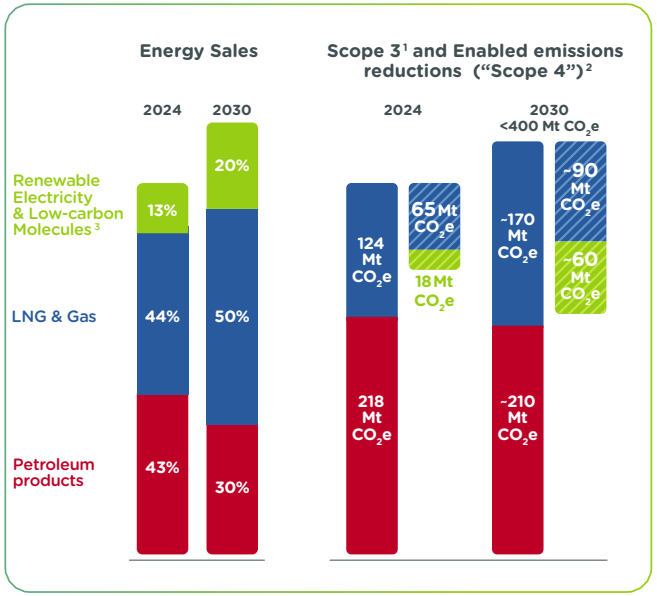
This strategy could be counter-productive for TotalEnergies' customers, as the Company has set as a goal to ensure their energy supply security while supporting them in their own emissions reduction journey.

Reminder: under Scope 3, since 2016 TotalEnergies has reported Category 11 emissions related to the end use by its customers of products sold i.e., linked to their combustion to obtain energy. Since 2023, TotalEnergies has published an estimate of indirect emissions related to the other Scope 3 categories, in accordance with the classification used by the GHG Protocol and Ipieca. We are also implementing action plans to reduce the emissions of the other categories. ■

1. GHG Protocol - Category 11. See report's glossary for further details.

Enabled Emissions Reductions ("Scope 4")

ESTIMATED SCOPE 3[1] AND ENABLED EMISSIONS REDUCTIONS[2]



Estimated enabled emissions reductions from LNG sales

Gas-fired power plants are a flexible mean of power generation and can be mobilized quickly; so they offer a secure backup for grids which are supplied by a growing share of intermittent renewable sources. CCGTs emit half as much GHG as coal or fuel oil-powered power plants[4], that still account for the majority of power generation capacity in some countries. Globally, coal covers 36% of production and 74% of greenhouse gas emissions associated with electricity, and gas covers 23% of production and 22% of emissions respectively[5]. LNG, which can be shipped by sea, can flexibly supply a large number of power plants. A large part of the gas we sell goes to the electricity sector.

Given the positive role of gas in the transition, TotalEnergies is aiming to increase its share in its sales mix by 2030, and has made the decision not to set a gas Scope 3[1] reduction target. When fuel-oil or coal-fired power generation is replaced by gas-fired power generation, GHG emissions fall, whereas TotalEnergies' gas Scope 3[1] increases. We have estimated the enabled emissions reductions ("Scope 4"[2]) to which our 2024 sales of LNG may have contributed. The calculation is based on generation mixes and emission factors, published by Enerdata and the IEA[6], for each country or region[7] and power generation mean. We estimate that our customers' use of LNG has enabled emissions reductions by about 65 Mt CO_2e in 2024 *(see p. 108)*.

Estimated emissions reductions from renewable electricity generation

A similar approach has been taken to estimate the enabled emissions reductions by our renewable electricity generation: the methodology compares the emissions of the country's alternative non-renewable mix to those from solar and wind generation. The applied emission factors (published by the IEA) cover the entire life cycle of power generation[8]. Non-renewable generation mixes are based on historical data published by Enerdata[9] for each country or continent[10]. We estimate that our renewable power generation has enabled emissions reductions by around 18 Mt CO_2e in 2024 *(see p. 108)*.

Estimates for 2030

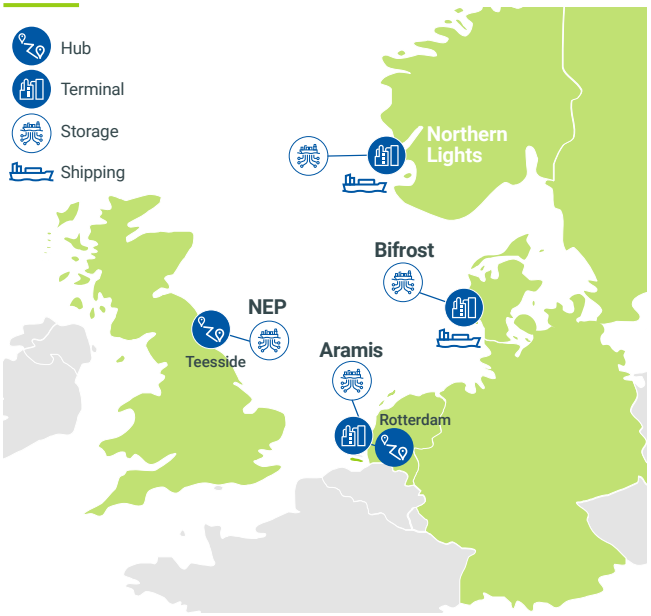
By 2030, the enabled emissions reductions[2] could amount to 150 Mt CO_2e (around 90 Mt CO_2e for LNG sales and around 60 Mt CO_2e for renewable production), compared with a Scope 3[1] maintained below 400 Mt CO_2e. These enabled emissions reductions that will result from our customers' decision to substitute carbon-based energy products (fossil fuels, in particular coal) with less carbon-intensive energies (natural gas and renewables) will contribute to a reduction in global GHG emissions. ■

1. Presented as full area in the graph. GHG Protocol - Category 11. See report's glossary for further details. **2.** Presented as hatched area in the graph. Methodology described in the report's glossary. **3.** Biofuels, biogas, hydrogen and e-fuels/e-gas. **4.** IEA 2024; Life Cycle Upstream Emission Factors 2024. **5.** The rest of the electricity production is provided by hydroelectricity (15%), solar and wind (12%), nuclear (9%) as well as by fuel oil and other renewables. Figures for the year 2022 detailed in the IEA's WEO 2024.

6. Production mix for the year 2023 provided by Enerdata (data published in January 2025) and emission factors for the year 2022 provided by IEA (data published in 2024). **7.** For this calculation, Germany, France, Belgium, Luxembourg and the Netherlands have been considered as a single electricity and gas system. For France, the emission factors published by RTE have been considered. **8.** Combustion-associated emission factors and upstream emission factors published in 2024 by the IEA for the year 2022. **9.** Enerdata data published in January 2025 for the year 2023. **10.** For this calculation, Europe has been considered as a single electrical network.

Developing Carbon Capture and Storage to Reduce Our Emissions and Those of Our Customers

CARBON STORAGE PROJECTS IN EUROPE



The IEA's NZE scenario[1] includes the use of CCS[2] for up to 6 Gt of CO_2 per year in 2050, in order to reduce emissions from residual oil and gas consumption, as well as from other industrial processes (cement, lime, steel…). This capacity is more than 100 times greater than the 50 Mt of CO_2 per year currently captured worldwide.

TotalEnergies' CCS strategy gives priority to reducing emissions from its activities, to reduce Scope 1+2 emissions from upstream Oil & Gas assets, as well as refining and LNG plants. For example, at Snøhvit liquefaction plant in Norway, where we are partners alongside Equinor, around 9 Mt of native CO_2 have been stored since 2008. Similarly, the separated native CO_2 in the new NFE and NFS LNG liquefaction trains, currently under development in Qatar, will be stored by QatarEnergy. Finally, for our Ichthys LNG asset in Australia, we are studying a native CO_2 storage solution for start-up beyond 2030. The study of CCS solutions for our assets therefore complements the already mentioned efforts to reduce emissions, including electrification, energy efficiency and flaring reduction.

The Company also invests in CO_2 storage projects close to its own assets, which can additionally serve as a CO_2 storage solution for large industrial emitters ("Storage as a Service") which can thereby reduce their Scope 1 and secure the future of their activities. We are investing around 100 M$ per year in this business, with models that enable us to benefit from leverage. This investment will be sustained in order to contribute to a gross storage capacity of 10 Mt CO_2[3] per year by 2030.

Europe is at the heart of this CCS strategy as TotalEnergies is an historical operator in the North Sea, with recognized operational and geological expertise in the area. The United Kingdom, Norway and the European Union have set objectives and regulations and have provided significant financial support to promote a cross-border deployment of CCS. We are currently developing four projects in the North Sea that will provide CO_2 storage solutions for our own assets and those of our customers.

The Company has entered the United States CCS market in 2024, with a 25% stake in the Bayou Bend project in Texas *(see below)*. Finally, TotalEnergies is studying the development of CO_2 storages in Malaysia, for local and regional markets, with its partners Petronas and Mitsui.
TotalEnergies is also studying the utilization of carbon in various forms (CCU)[4], such as in reaction with renewable hydrogen, to produce fuels or synthesis gas. In the United States, we are currently studying an industrial-scale production unit for "synthetic methane", produced from renewable hydrogen and biogenic CO_2, to be transported and marketed using existing natural gas infrastructures. ■

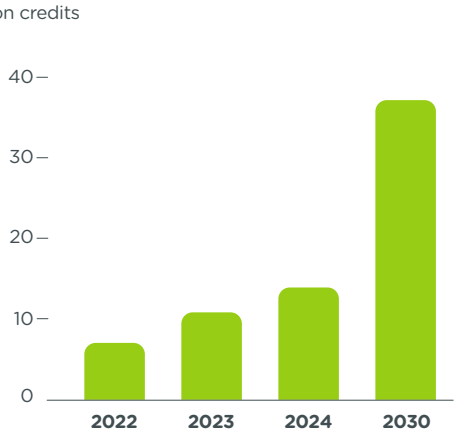
HIGHLIGHTS

In the United States, in March 2024, TotalEnergies acquired 100% of Talos Low-carbon Solutions, which held stakes of 25% in the Bayou Bend project in Texas, 65% in the Harvest Bend project in Louisiana and 50% in the Coastal Bend project in Texas. The last two participations were sold at the end of 2024, as the projects were far from the Company's existing assets in the region. In September 2024, the Company inaugurated phase 1 of the Northern Lights project in Norway, and in December 2024, alongside its partners, launched the Northern Endurance Partnership (NEP) project in the United Kingdom.

1. IEA 2024, World Energy Outlook 2024. **2.** Carbon Capture & Storage. **3.** A list of our CCS projects is provided in Performance *(see p. 113-114)*. **4.** Carbon Capture & Utilization.

Offsetting Residual Emissions with Nature-based Carbon Sinks

CUMULATED CREDITS GENERATED FROM 13 SANCTIONED PROJECTS BY THE END OF 2024



Natural areas preservation and restoration can be a lever for achieving net zero emissions worldwide by 2050.

Only in 2030 will TotalEnergies begin voluntary offsetting its residual emissions via NBS (Nature Based Solutions) carbon credits and will offset only Company's Scope 1+2 residual emissions. We are working to build a high-quality portfolio and are paying close attention to the integrity and permanence of the emissions reductions and sequestration achieved by the activities financed in this way. We are in favor of strengthening a global framework of trust to further reinforce robust and recognized voluntary crediting mechanisms.

We are investing in forestry, regenerative agriculture and wetlands protection projects. Our strategy aims to combine and balance the value of people's financial revenue from agriculture and forestry and the value of the benefits to soil, biodiversity, the water cycle and the production of carbon credits. When that approach is successful, the local standard of living improves and degradation of the land diminishes – as do emissions. This search for balance among different practices makes a just transition possible.

At 2024 year end, our stock of credits stood at 13.7 million carbon credits certified by the main international standards such as Verified Carbon Standard (VCS or Verra), ACR (American Carbon Registry) or ANREU. The annual budget allocated to these projects is 100 M$. The cumulative budget pledged to date for all concluded operations amounts to nearly 770 M$ over their cumulated lifespan, for an expected cumulative volume of verified credits of 37 million in 2030 and 53 million in 2050, taking into account methodological revisions for certification and technical updates. Between 2025 and 2030, TotalEnergies will continue to develop new projects in order to build up a stock of carbon credits of around 50 million by 2030.

In this context and based on a consumption rate of 10% of the stock per year from 2030, TotalEnergies would consume around 5 million credits per year from 2030 onwards. ■

HIGHLIGHTS

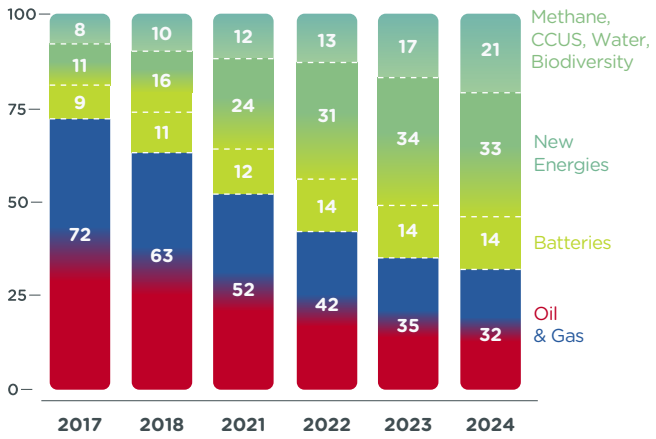
United States

In 2024 TotalEnergies has signed a 100 M$ (over 3 to 7 years) agreement with Anew Climate, a North American leader in climate solutions, and Aurora Sustainable Lands, a carbon-stewardship company and forest landowner in the U.S. to deploy their projects aimed at protecting productive forests from heavy timber harvesting, advancing conversion to sustainable management practices, and enhancing their ability to store more carbon from the atmosphere. The investment supports Improved Forest Management (IFM) practices across a portfolio of 20 carbon projects, covering 300,000 hectares in 10 states across the Unites States (Arkansas, Florida, Kentucky, Louisiana, Michigan, Minnesota, New York, Virginia, West Virginia, and Wisconsin). A new Climate and Aurora Sustainable Lands provide operational oversight to ensure the carbon projects meet the highest standards of additionality and durability.

Innovating to Accelerate the Energy Transition

R&D BUDGET ALLOCATION[1]

In %



1. Budget excluding Hutchinson.

Each year, TotalEnergies spends more than 1 B$ on R&D and innovation, and employs more than 3,500 people.

R&D at TotalEnergies

In 2024 , 68 % of our R&D budget was devoted to new energies (renewable electricity, low-carbon molecules), batteries and reducing our environmental footprint (methane, CCUS, reducing energy consumption, water, biodiversity, etc.). This shift in our research and innovation towards low-carbon energies is at the core of TotalEnergies' transition.

The creation of the OneTech branch, in September 2021, illustrates the dynamic undertaken by General Management to mobilize teams and meet TotalEnergies' new challenges as part of its transition strategy.

OneTech's mission is to provide all the technical and R&D expertise TotalEnergies needs to implement its strategy. One of the missions of the OneTech segment, is to provide low-carbon energy solutions, reduce CO_2 emissions and improve the energy efficiency of our projects right from the design stage and anticipate innovative technologies with our partners.

Reducing our emissions through digital technology

TotalEnergies' *Digital Factory* brings together 300 developers, data scientists and other digital experts, with the mission of developing digital solutions to optimize our industrial tools (environmental impact, availability, costs) and support the Company's development in low-carbon energies.

The "Smart Flare Tracker" solution saved 7,000 tonnes of CO_2 in 2023 and over 10,000 tonnes in 2024 at the Antwerp refinery. It has been deployed at all refineries and biorefineries operated by the Company in 2024. In addition, the "Carb optim" solution for Refining & Chemicals and the "MyCFR" solution for Exploration & Production are currently being deployed at several industrial sites around the world to track and detect abnormal CO_2 emissions from the most energy-intensive equipment in real time, and to propose corrective

HIGHLIGHTS

Partnership with AIRBUS for the Development of SAF

In February 2024, Airbus and TotalEnergies signed a strategic partnership to meet the challenges of reducing emissions of the aviation sector through sustainable aviation fuels. The partnership covers two main areas:
1. TotalEnergies will supply Airbus with sustainable aviation fuels for more than half of its European requirements.
2. A Research & Innovation program to develop 100% sustainable fuels, in line with the design of current and future aircraft. The impact of the composition of sustainable fuels on the reduction of CO_2 emissions and non-CO_2 effects, such as contrails, will also be studied. This partnership complements the one signed with Safran in 2021, covering the entire value chain, from raw materials through conversion processes to product specifications.

action. In 2024, "Carboptim" saved 10,000 tonnes of CO_2, and "MyCFR" identified 305,000 tonnes of avoidable CO_2 emissions for which corrective actions are underway. Beyond these solutions, the *Digital Factory,* with more than 8,000 models in production, relies heavily on artificial intelligence (machine learning, deep learning, generative AI...) to help reduce the Company's emissions and optimize the way it produces renewable energies.

Innovating with start-ups

To contribute to its development in the electricity sector, TotalEnergies continues to collaborate with startups selected through its *TotalEnergies On* acceleration program, based in Paris at Station F. Today, nearly 40 startups have been accelerated; three of them have been acquired by the Company (Nash, Predictive Layer, DS Flow), others have benefited from an equity investment, such as Time2Plug, and nearly 20 commercial contracts have been signed at the end of the 6-month acceleration period. ■

HIGHLIGHTS

Production of Biobased Products for Sustainable Fuel Production

The Centre for Sustainable Catalysis and Engineering (CSCE) at the University of Leuven and TotalEnergies have embarked on a partnership aimed at accelerating the industrialization of an innovative catalytic solution for producing biobased products. This collaboration aims to pool their skills to industrialize a thermocatalytic process for converting biomass residues into platform biomolecules for industry.
In 2024, we succeeded in validating the move to a higher scale by reproducing the quality of the products obtained in the laboratory on the scale of our pilot reactor. This step yielded several kilograms of products that were successfully transformed into Sustainable Aviation Fuel.

Culzean, a Floating Wind Farm Pilot in The North Sea

TotalEnergies has launched a floating wind farm pilot project to supply renewable electricity to an offshore oil and gas platform in the North Sea.
The 3 MW floating wind turbine will be located two kilometers west of the Culzean platform, 220 km off the Scottish coast. It should be operational by the end of 2025, and will cover around 20% of Culzean's electricity needs, helping to reduce its greenhouse gas emissions.
The wind turbine will be installed on a semi-submersible float with a lightweight, modular hull designed by Ocergy, enabling rapid assembly and thus optimizing costs.
This innovative pilot project aims to demonstrate the feasibility of hybridizing power generation on an offshore installation, by combining renewable electricity generated by a floating wind turbine with existing electricity production from gas turbines. It also aims to qualify a promising float concept for the future of floating offshore wind energy.

SWAP, a Platform to Decarbonize Water Recycling

The SWAP pilot plant is a modular platform that can accommodate and test different water treatment and recycling techniques, for different input water qualities, all powered by different renewable energy sources (solar, wind, solar thermal, hybridization). SWAP offers the ability to optimize the water/energy nexus, minimizing our water withdrawal and energy consumption, despite the intermittent nature of renewable energies. In this way, a platform that is totally self-sufficient in electricity and has no direct CO_2 emissions can be envisaged. In terms of water resource management, SWAP aims to make the most of all the water resources available on or near TotalEnergies sites, with the smallest possible carbon and environmental footprints. This pilot also aims to study and develop the synergies that can exist between energy production and water treatment, as well as dynamic optimization models for production systems using intermittent resources.

Processing of Methane Alerts Received in 2024 Via the IMEO Mars Program to Validate the Origin of Greenhouse Gas Emissions

The development of innovative algorithms in R&D has enabled us to process and validate the alerts received, in particular by refining the potential locations of leak sources of methane and the link with our sites. IMEO MARS is the name of the UN program that aggregates satellite data and sends alerts to emitters using data from public satellites (such as the European Space Agency's Sentinel 2). TotalEnergies works directly with this alert program.

Acting for the Well-Being of Employees


Employees donning personal protective equipment (PPE).


100 TotalEnergies Employees.

Ensuring People's Safety

OCCUPATIONAL SAFETY

Target

Zero fatal accident

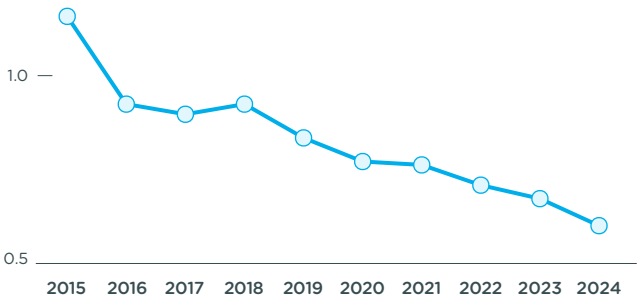
We deplore one accidental death in 2024

In 2024, TRIR continuously decreased and achieved

0.55

TOTALENERGIES TRIR

Total recordable injury rate per million hours worked.



The number of injuries per million hours worked (TRIR) for Company employees and contractors has improved regularly for many years. It stood at 0.63 in 2023 and reached 0.55 in 2024.

Safety is more than a priority at TotalEnergies; it is a core value on which we will not compromise for any reason. Everyone who works at our sites must be able to return home safe and sound at the end of their workday. The Company has set a goal of "zero fatalities" and is aiming for ongoing reductions in the number of accidents. Sadly, we recorded one accident-related fatality in 2024 among contractors staff. An analysis of the case led to a specific action plan.

Actions to prevent fatal accidents

Our actions plans to prevent fatal accidents are based on long-term work to continuously adapt and systematically implement our two global programs in the field: "The Golden Rules" and "Our Lives First". This indispensable fundamental work is supplemented by specific action plans resulting from investigations carried out when new events occur.

Worldwide roll-out of the"Our Lives First" program

The program is designed to implement three types of practical actions at all of our sites:

- **Life Saving Checks:** five activities have been identified as generating the highest risks which could be the cause of fatal accidents. Safety checklists have been drafted for these activities, to check that work is carried out correctly in the field, in compliance with the safety rules;
- **Joint Safety Tours:** front-line presence and safety dialogue have been enhanced to promote a shared safety culture. Joint safety Tours with TotalEnergies senior management and contractor partners are held in addition to daily visits from local management;
- **Safety Green Light:** the goal is to ensure, before starting work, that the risks involved are understood by the intervening teams, who may not start or stop work if the conditions are not met. To this end, the ritual of questions has been revised, and the objectives and expectations clarified. This new version of the Safety Green Light was deployed in 2024 and continues to be roll-out to all Company sites in 2025.

FOR ME, FOR YOU, FOR ALL
SAFETY
TotalEnergies

HIGHLIGHTS

Lessons Learned From the Accident-Related Fatality in 2024

Site Exploration & Production Obagi flow station OML58, Nigeria - July, 2nd 2024

Enyinnaya, a supervisor and rope access worker, lost his life during inspection work requiring rope access at height inside a storage tank. In the wake of this accident, safety measures have been stepped up, with the emphasis on using new technologies such as drones and robots to avoid rope access wherever possible. Additional measures have also been taken by the Company, in particular a strengthening of the validation process for rope access work, to ensure strict application of the prevention and control measures set out in the work authorization.

OUR LIVES FIRST

In 2024, Our Program «Our Lives First» gave rise to:

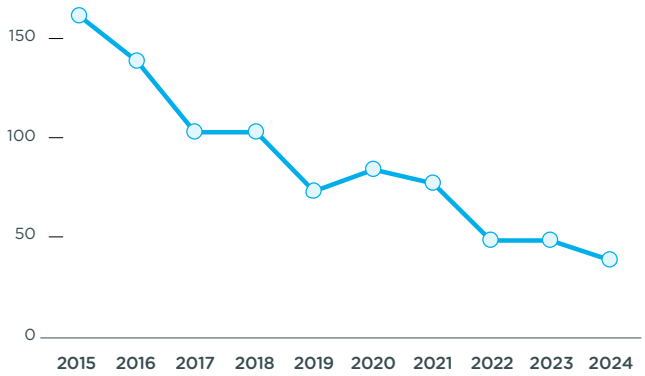
200,000
Life Saving Checks

10,000
Joint Safety Tours

100%
of sites deployed the Safety Green Light

TOTALENERGIES NUMBER OF TIER 1 AND TIER 2 INCIDENTS *(see p. 109)*

An indicator of the number of losses of primary containment as defined in the API and IGOP standards (excluding acts of sabotage and theft), Tier 1 incidents being those that may have the most serious consequences.



Furthermore, the "Risk Advisor" digital tool project, based on generative AI, aims to help field workers in analyzing risks for the development of work permits prior to an intervention. It has 3 functionalities:

- suggestions for completing the risk analysis linked to the work permit;
- a ChatBot providing quick answers to any questions, including the applicable rules;
- provision of the most suited return of experience to the work to be carried out, allowing the risks involved to be put into perspective;

After a development phase, this tool will be rolled out progressively in 2025 for the Company's operated entities.

Preventing major technological risks and accidental pollutions

TotalEnergies' facilities and activities are exposed to technological risks, and the prevention of major industrial accidents is an essential part of the Company's safety policy. All our facilities are subject to systematic studies to identify hazards and analyze the associated risks, with the aim of controlling risks in order to prevent a major accident, to protect people, the environment and assets. All risks are studied, and technical-, organizational- and human barriers are identified and implemented to guarantee risk control.

A multi-year plan has been elaborated to continue strengthening the control of major technological risks for the Company's operated entities.

This program has 3 main focuses:

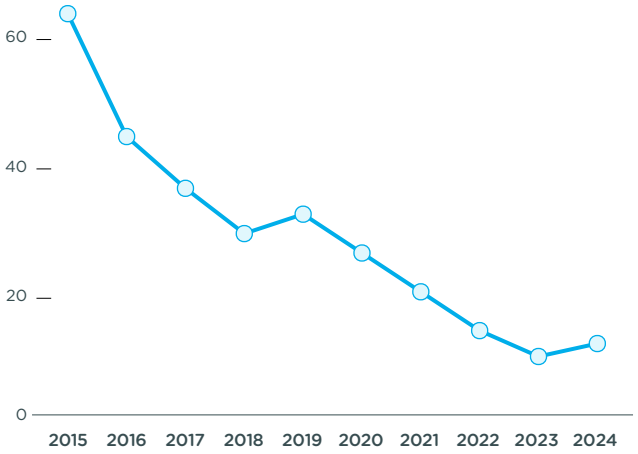
- reassess the effectiveness of critical barrier management for each major accident scenario.
- facilitate the management of major risks by visualizing critical barriers.
- improve understanding and management of prevention tools for operational staff.

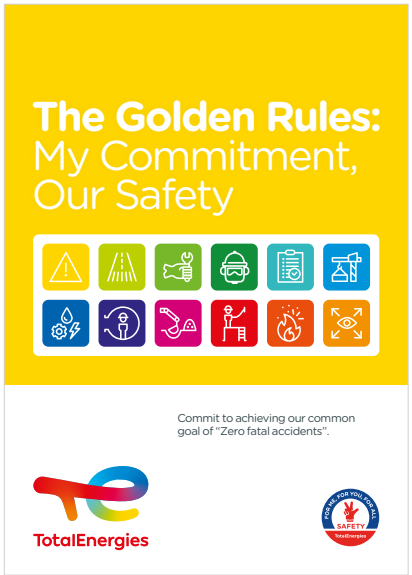
In addition, a specific training has been developed in 2024 for site operational managers. This immersive training in conditions closest to reality allows to understand fire and hydrocarbon explosion situations in a controlled environment and on secure ground.

Also, on April 22, 2024, during the World Day for Safety, the prevention of major accidents and experience feedback was the theme of discussions and presentations were made to employees of the Company and partner companies.

NUMBER OF SEVERE ROAD ACCIDENTS

Number of road accidents resulting in the vehicle rollover or an injury of the driver or the passenger.





We track Tier 1 and Tier 2 losses of primary containment, as defined by the industry standards. The prevention policy we have implemented, based on managing technical integrity and operational excellence, has resulted in a four-fold decrease since 2015. The Company did not experience any major industrial accidents in 2024.

Road transportation

The risk of road accidents is one of the main safety risks at the workplace for TotalEnergies. The Company has for many years had a policy based on rules, driver training, communication, technical vehicle specifications and an extensive carrier inspection program.

This policy has led to a steady decline in the number of accidents. The number of serious accidents has been divided by 6 since 2015. To prevent road accidents, several technological innovations have been tested, implemented as a priority in countries with high road risk and we have decided to extend them to all countries where the Company operates.

These technologies are:
- lane departure warning system;
- forward collision warning;
- advanced emergency breaking;
- fatigue and distraction detection. ■

HIGHLIGHTS

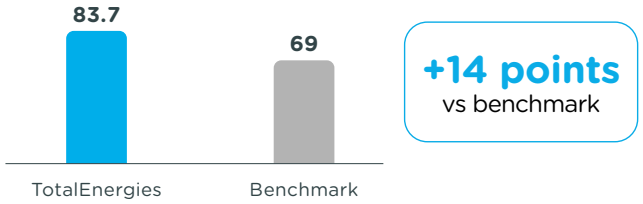
#SafeDriver

Since 2016, TotalEnergies has been carrying out #SafeDriver awareness campaigns aimed at all TotalEnergies employees and those of our partner companies who use light and heavy vehicles in the course of their duties. The aim is to challenge users, to remind them of the basic rules of driving and the importance of respecting them, and to encourage change in practices and behavior, accompanying it with a participative approach and exchanges in the field. In 2024, the campaign continued with a focus on vehicle control, fatigue and distracted driving, while remaining attentive to the reactions of other road users.

Our Employees Committed to Transition

2024 TOTALENERGIES ENGAGEMENT SCORE

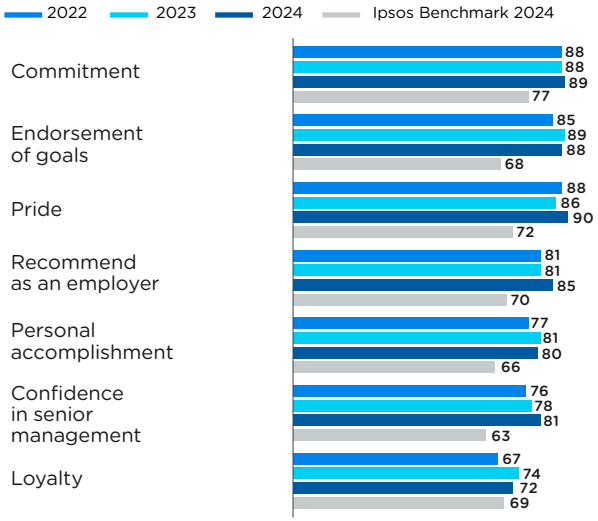
Ipsos Benchmark composed of companies larger than 10,000 employees throughout the world (in %).



+14 points
vs benchmark

2024 TOTALENERGIES ENGAGEMENT INDEX AND IPSOS BENCHMARK[1]

Ipsos Benchmark composed of companies larger than 10,000 employees throughout the world (% agree).



Our employees are at the heart of our performance, and their engagement is essential to the success of our transition. Our people ambition Better Together brings together a set of measures to make the Company a good place to work together, and to lead a just transition.

We believe that listening to our stakeholders is an essential part of a just transition. Social dialogue plays a key role in achieving this. Beyond, our employees around the world participate every two years in the TotalEnergies survey to share their perceptions of the Company across various themes (ambition, collective performance, management, talent development, and working conditions, etc.).

Following the Executive Committee's decision, a complementary and more concise survey, the TotalEnergies Pulse Survey, was launched in 2023. This survey now takes place alternately every other year to enable the measurement of employee engagement and well-being on an annual basis. In 2024, the engagement score for TotalEnergies was 83.7%[1], up 1 point from 2023.

Since 2022, the Company has been organizing campuses that bring together Comex members, senior executives, and employees to listen to their proposals on key topics. In 2024, nearly 300 employees representing technical professions were able to exchange views with the Comex. Participants particularly focused on the Company's technological ambition, following a process that invited all employees to identify the technological themes that could provide us with competitive advantages in the future. ■

HIGHLIGHTS

20ème Grand Prix FAS de l'Actionnariat Salarié 2024

2024 Employee Shareholding Grand Prix for TotalEnergies

To involve its employees in the Company's transition strategy, TotalEnergies places employee shareholding at the heart of its value sharing policy. It makes it possible to closely involve employees in its economic performance, to strengthen their sense of belonging and to align the interests of employees and shareholders.

In 2024, more than 63,600 employees and former employees subscribed to a capital increase amounting to 480.8 M€. To celebrate TotalEnergies' 100th anniversary, a total of 100 free shares were awarded[2] to nearly 105,000 employees in more than 100 countries. Since 2005, TotalEnergies has awarded performance shares to around 10,000 employees each year.

As of December 31, 2024, more than 70% of the Company employees are shareholders in TotalEnergies, and their stake in the Company's capital stood close to 8%, an increase of more than 50% over the last 10 years. As such, in 2024 they received around 559 M€ in dividends. TotalEnergies' proactive policy in terms of developing employee shareholding was rewarded with the 2024 Grand Prix from the French Federation of Employee Shareholders (FAS).

1. Results scope: Company without Hutchinson. **2.** Subject to a condition of 5 years' continuous presence in the Company.

Five Levers to Mobilize Our Employees

OUR 5 LEVERS FOR A SUSTAINABLE CHANGE

1 - Energy consumption

In my operations, I review all my energy consumptions and aim to minimize them. In my projects, I design installations to minimize energy consumptions.

2 - Low-carbon operations

I promote the use of renewable energies and low-carbon technologies in my projects and my operations, taking into account a CO_2 cost of $100/t. I do the same with my customers and suppliers to enable them to reduce their emissions.

3 - Discharges in the environment

In my operations, I review all discharges to air, water, oceans and soil, as well as waste, and aim to minimize them in the light of the best available technologies and practices. In my projects, I design installations to minimize pollution and waste.

4 - Our communities

I know the neighbors of my site and my stakeholders; I engage and maintain a constructive dialogue with them, including through the careful handling of complaints. I anticipate this dialogue right from the design stage of a new project.

5 - Care

I pay attention to my colleagues and report when one of them shows signs of not being well "mal-être".

TotalEnergies' ambition to place sustainable development at the heart of its strategy, its projects and its operations calls for the mobilization of all its employees.

To progress together and make our approach a reality, we deployed in 2024 "Our 5 Levers for a Sustainable Change". These 5 levers of action aim at collectively making our corporate culture evolve, over the long term, as we have been able to do over the past 20 years in the area of safety. Such an evolution implies a collective journey, which needs to be initiated by first focusing on certain priority behaviors.

Their deployment is supported by the appointment in 2024 of 189 Sustainability Officers within the HSSE (Health, Safety, Sustainability, Environment) teams of our operated affiliates. In charge of promoting the levers locally, of piloting progress plans and organizing information feedback, they constitute a network which meets at regular intervals, in particular to share good practices.
A training program on the 5 levers was launched in 2024, giving access to all Company employees to short digital modules dedicated to each of the levers, accessible on PC and mobile. Modules dedicated to levers 1 to 5 were published between the end of September 2024 and January 2025. They were followed by more than 1,500 employees over the last 3 months of the year. A longer training for managers is under development for 2025.

Finally, starting in January 2025, files supporting investment projects submitted to the Executive Committee will include a presentation on the way levers 1 to 4 have been taken into account in the projects.

"Our 5 Levers for a Sustainable Change" are therefore a key step in creating a dynamic for change by promoting 5 priority collective attitudes, in addition to the rituals of the Sustainab'ALL moment at the start of each afternoon meeting, launched in 2021, and of the Sustainab'ALL day launched in 2023. ■

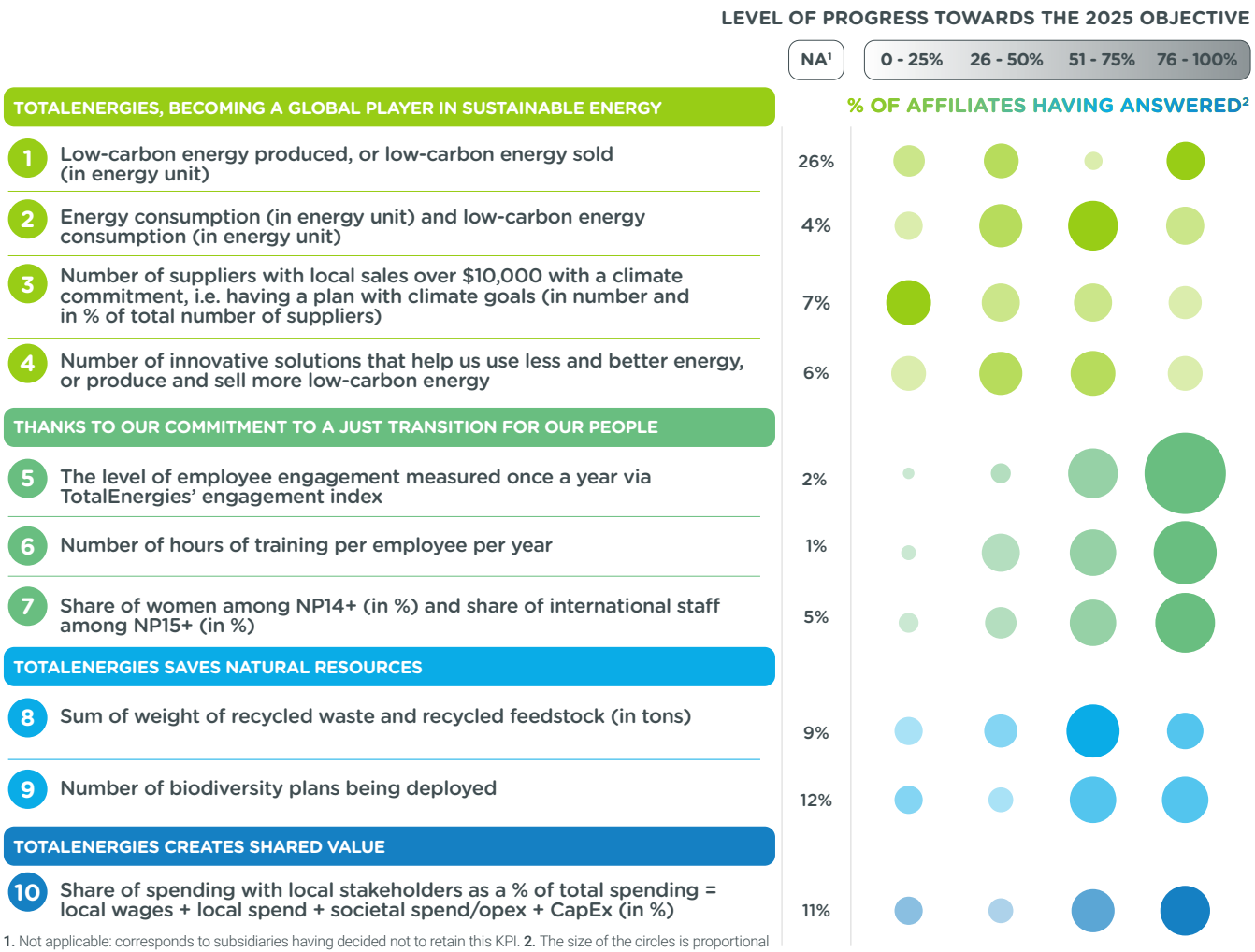
Sustainab'ALL

HIGHLIGHTS

Sustainab'ALL Day 2024: Mobilize Around "Our 5 Levers for a Sustainable Change"

TotalEnergies celebrated the Sustainab'ALL day on September 27, its global day dedicated to sustainable development. Initiated in 2023, this annual event aims to bring together all the Company's employees, all over the world, around the challenges associated with sustainable development and to highlight the concrete contributions of the Company's subsidiaries and entities. This second edition was dedicated to the launch of "Our 5 Levers for a Sustainable Change"; it mobilized 16,000 participants in local events and nearly 25,000 employees connected to the Live Event to follow Patrick Pouyanné's intervention from the Gonfreville refinery. The COMEX members all went to Company's sites on this occasion to discover concrete local initiatives related to each of the levers.

FOCUS Local Action Plans in Support of Sustainable Development



1. Not applicable: corresponds to subsidiaries having decided not to retain this KPI. **2.** The size of the circles is proportional to the number of responses in the interval considered. **3.** Results scope: Company without Hutchinson.

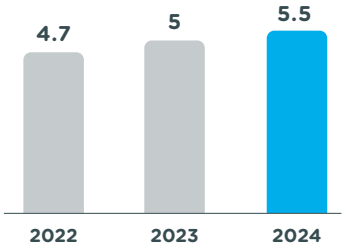
TotalEnergies' aim to be one of the major players in the energy transition will require the mobilization of our 100,000 employees.

More than 27,000 TotalEnergies employees took part in workshops during 2022, to develop ten objectives and indicators aligned with the United Nations Sustainable Development Goals (SDGs). In 2023, every TotalEnergies site, business unit and affiliate worldwide has adopted an action plan with targets to be met by 2025. Each plan is based on actions that are directly related to the entity's local operations in the field. The program has been rolled out in over 250 Company entities, representing 94% of employees[3]. A survey was carried out in January 2025, to which 55% of these entities responded. It showed that the vast majority put in place action plans (92%) and set targets (74%). Their assessment of progress at the end of 2024 towards 2025 objectives is shown in the table opposite; employee engagement (KPI 5), their training (KPI 6) and diversity targets (KPI 7) are the KPIs considered to be the most advanced. Entities took ownership of rituals: the Sustainab'ALL moment, for example, is practiced by 81% of them and 90% have celebrated the Sustainab'ALL day.

In 2024, TotalEnergies launched its "Our 5 Levers for a Sustainable Change" program *(see p. 72)*. These 5 levers are deployed as close as possible to our employees and our operations, thanks to the 189 Sustainability Officers of our operated subsidiaries. They ensure that the 5 levers are implemented in their subsidiaries, through action plans, training and the dissemination of best practices shared within the Company. ■

Develop and Support Talent in the Transition

AVERAGE NUMBER OF TRAINING DAYS PER YEAR AND PER EMPLOYEE



We are one of the

Top 10

companies preferred by young managers in the engineering and business sectors in France, according to the annual rankings established by the Universum agency

32

upskilling courses developed since 2022 in order to offer employees the accurate training to move into other technical disciplines

Developing everyone's skills is a major challenge for a just transition. Our goal is to empower all employees to take charge of their career development, notably through the internal mobility platform, or to freely decide which training courses they consider important for their development, up to three days per year, in addition to mandatory training. In 2024, 98% of our employees had taken at least one training course.

Visa for TotalEnergies, a global upskilling program

As part of its just transition plan, TotalEnergies has designed the "Visa for TotalEnergies" program as a global upskilling program, aimed at preparing all employees for the new challenges facing the Company and society in general, as well as supporting the development of their skills. This multi-year training program is deployed in several seasons, each one devoted to a key aspect of the Company's transition. The first two seasons enabled the training of more than 30,000 employees on climate challenges and the answers provided by our ambition, in 2023 in the fundamentals of electricity, the main lever for decarbonizing the energy mix.

In 2024, the program continued with an aim to accelerate the appropriation of generative Artificial Intelligence tools in the service of collective performance. This resulted in the gradual provision of Copilot licenses for Microsoft 365 and Microsoft Power Platform, supported by training on how to use these new tools currently being rolled out.

OneTech: decompartmentalizing skills

The OneTech branch, which brings together 3,400 engineers, technicians and researchers of TotalEnergies inside one entity is today a hub of technological excellence serving all the Company's multi-energy activities. The concentration of technical skills makes it possible to build multidisciplinary teams to carry out new industrial projects, regardless of the sector of activity. This generates a decompartmentalization of skills, creating value for the company and its employees. The result: greater flexibility to better develop our projects across the entire energy mix. ■

HIGHLIGHTS

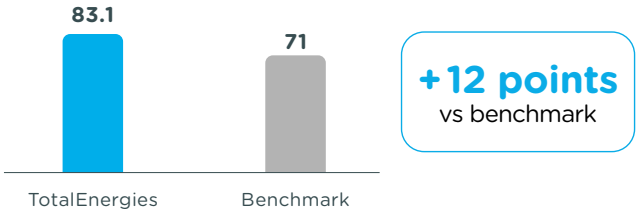
Social Dialogue Supporting the Transition

TotalEnergies encourages and maintains regular dialogue with employees and their representatives. In countries where employee representation is not mandatory under local legislation, the creation of a body to foster dialogue is proposed. In 2024, a total of 92% of Company employees had union representation or employee representatives.
In 2024, TotalEnergies negotiated an agreement with union organizations to support our employees in France in their ecological transition. This agreement provides an individual envelope of €2,000 gross to reimburse 80% of purchases or services related to their housing and mobility. As of now, 6,000 employees have benefited from this system.

Building a Good Place to Work

2024 TOTALENERGIES CARE SCORE

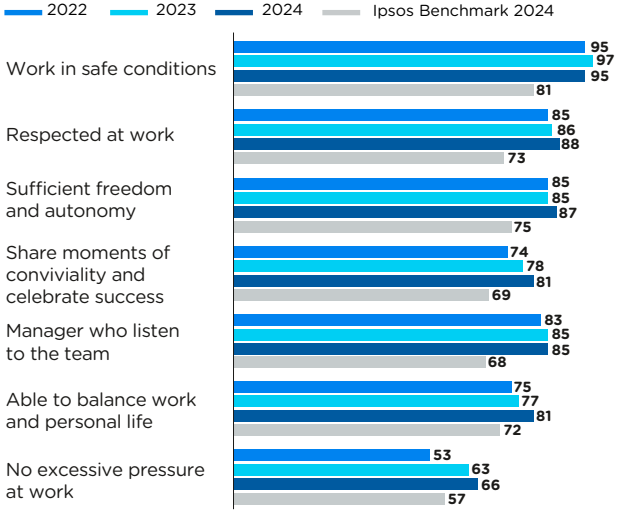
Ipsos Benchmark composed of companies larger than 10,000 employees throughout the world (in %).



+12 points
vs benchmark

2024 TOTALENERGIES CARE INDEX AND IPSOS BENCHMARK[1]

Ipsos Benchmark composed of companies larger than 10,000 employees throughout the world (% agree).



The Company's commitment to social responsibility is reflected in the roll out of the Care Together by TotalEnergies program. In addition to commitments specific to each affiliate, this program guarantees compliance with high social standards for all its employees worldwide, regardless of the legislation in force in any given country.

Remarkable for its scope, this program is based on concrete measures revolving around four essential pillars: social protection, health, the family sphere and working conditions. For example, every employee worldwide has access to medical monitoring, health insurance and a death benefit plan, and childcare leave. In terms of mental health, the Company has a worldwide policy of preventing psychosocial risks.

With the aim of developing a culture that fosters well-being on a daily basis, we help our employees to preserve their balance in a safe working environment, by reinforcing the attention that everyone pays to the well-being of their colleagues and encouraging local managers to create a working environment conducive to sustainable performance. We are thus providing our employees with a specific training offer within a framework that, since early 2023, has enabled every employee to take three days of training of his or her choice. Since 2023, the Company has been running "Green Fridays".

This innovation liberates the calendar from any collective meetings scheduled by management every other Friday and allows employees to organize their work.
In order to measure our progress and draw up action plans, in 2022 we defined, in collaboration with Ipsos, an annual measurement of our employees' level of well-being using a Care index based on 7 criteria. In 2024, our score is 83.1%, an increase of 1.5 points compared to 2023[1]. ■

1. Results scope: Company without Hutchinson.

HIGHLIGHTS

"Care": Paying Attention to Your Colleagues

TotalEnergies promotes this behavior in its "Our 5 Levers for a Sustainable Change" program, so that individual employees can play an active role in well-being. Launched in 2024, this program aims to create a dynamic for change by promoting certain collective attitudes identified as priorities for sustainable development. The "Care" lever encourages us to pay attention to our colleagues and to take action if any of them show signs of not being well. A training module dedicated to this lever was made available to all employees in early 2025.

Employee Mental Health: a Focus for TotalEnergies

In 2024, we ranked in the top 5 of the CCLA Corporate Mental Health Benchmark Global 100+. This benchmark evaluates the world's 119 largest listed companies with over 10,000 employees on the theme of mental health in the workplace. A ranking which recognizes the actions taken by the Company to make this a collective performance factor.

care together by TotalEnergies

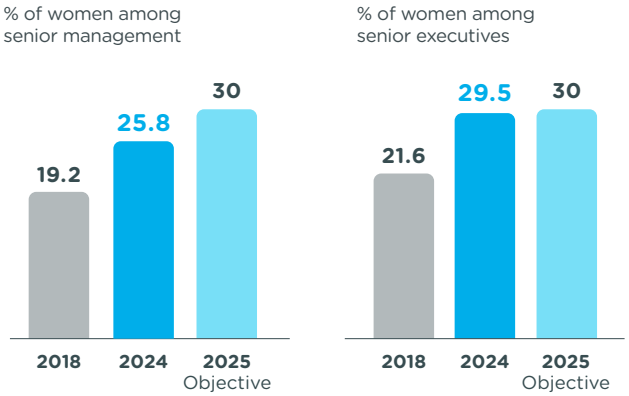
	OBJECTIVES	OUR WORLDWIDE ACTIONS
100% of employees receive direct remuneration at least equal to the living wage in the country or region in which they work	**Social Protection** Ensuring living wage and quality social protection for all our employees, regardless of their location	• Ensure all employees receive a direct wage that is at least equal to the living wage in the country or region in which they work. • Where appropriate, set up a health insurance plan or propose a corporate supplementary regime, in addition to the legal plans in force. • Set up a death benefit plan, whatever the cause, at least equivalent to two years' gross reference salary.
80% of employees received a medical follow-up every two years	**Health** Preserving the physical and mental health of all our employees worldwide	• Provide medical follow-up to our employees exposed to occupational risks that may have harmful effects on their physical and mental health. • Propose to our employees a health check at least every two years unless specific local regulations or contexts require otherwise. • Deploy a global policy for the prevention of psychosocial risks to protect employees' mental health.
98% of female employees benefit from 14-week maternity leave with 100% pay	**Family Sphere** Give employees the opportunity to take care of their families	*For pregnancy or adoption:* • Guarantee a minimum of 14 weeks of childcare leave for the first parent and two weeks for the second parent, with basic salary maintained at 100% (subject to more protective local measures). • Neutralize absences for childcare leave, by granting the first parent, when returning from childcare leave, an increase equal to the average of individual increases received over the last three years.
97% of the Company's entreprises run information campaigns or organize events to promote employee well-being	**Working Environment** Promote a flexible, modern and attractive work organization for our employees, while preserving collective efficiency in a safe working environment	• Generalize the use of flexible working hours with clear rules and trust our employees to take responsibility for the way they manage remote working as part of their day to day activities. • Conduct information campaigns and awareness-raising initiatives on employee well-being and work-life balance.

Without Hutchinson (2024 Worldwide HR Survey).

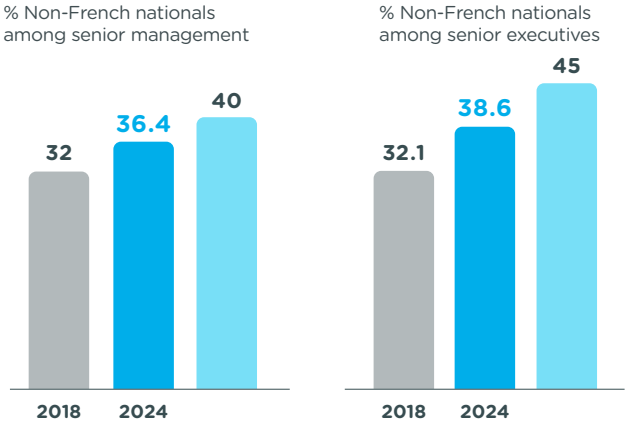
Talent Diversity, a Performance Lever

Diversity 2025 roadmap: Ongoing progress

EVOLUTION OF DIVERSITY



EVOLUTION OF INTERNATIONALIZATION



Diversity of talent and management is a decisive lever for progress for a company like TotalEnergies, in that it increases our competitiveness, our capacity for innovation and also our attractiveness. The Company ensures the diversity and internationalization of its teams and prevents any form of discrimination to build a respectful collective within which everyone can express their full potential.

Understanding and respecting our differences

In 2024, a complete awareness-raising kit was made available to managers so that they could organize a moment of exchange with their teams anywhere in the world. The aim: understand and respect differences to create collective conditions allowing everyone to express their talents, ideas and energy.

In 2024, awareness days were dedicated to *"Clichés, prejudice, sexist behaviour: it's everyone's business"*. To better identify these behaviours, five awareness-raising videos illustrating situations that we may encounter on a daily basis in the workplace were produced and shared with employees. Through this type of awareness-raising action, the Company aims to prevent all forms of discrimination, in line with its values: Respect for Each Other and Stand Together.

Acting for the disabled

Since 2018, we have joined the International Labour Organization (ILO) network, committing ourselves to promoting as a priority, 5 major principles of the Global Business and Disability Network Charter. To date, 41 Company subsidiaries have committed to creating a more inclusive working environment for employees with disabilities, while respecting the specific features of each country. ■

HIGHLIGHTS

Promoting Women's Ambitions

- **Within the Exploration & Production business segment, a program was launched in 2023 to accelerate the development of women in our talent pool. The A Effect, is a 100-day virtual inter-company development program. It focuses on three key behaviours: self-confidence, risk-taking, and influence. The program integrates four different types of learning: introspection, workshops and interviews with leaders, and work groups with participants from different companies. Since its launch, 127 female employees from head office and 27 affiliates have joined the program.**
- **Between 2010 and 2024, the percentage of women occupying the position of subsidiary General Manager increased from 10 to 25% within the Marketing & Services branch. This significant progress was achieved through the establishment of demonstrates the efforts made to establish career paths and training programs to develop the Company's female talent, whether they come from technical, sales, or support professions, with the goal of accessing or occupying positions of high operational responsibility.**


Myrtle solar power plant (Texas, USA).

Caring for the Environment


Pelican on an oil rig.

Caring for the Environment

Nature provides a large range of services, known as "ecosystem services", which are directly or indirectly necessary for all human activities on earth.

We are one of the many players who depend on these services. What's more, like all human activities, our operations have an impact on ecosystems.

In 2022, the world adopted a Global Biodiversity Framework, with quantified targets for States by 2030. We support this ambitious and concrete agreement. It also calls on companies to be transparent across their value chain. This agreement highlights the importance of nature in the broadest sense. It recalls the link between climate and biodiversity, climate change being listed by the IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) as the third leading cause of biodiversity loss.
Our ambition is to place environmental performance at the heart of our projects and operations. For us, it's a question of operational excellence. In concrete terms, this means developing our activities, including renewables, while protecting the environments in which we operate, in particular by limiting our discharges.

It means taking into account freshwater issues and therefore the preservation of water bodies in our upstream and downstream operations. It means being a player in circularity by developing recovery channels for the waste from our sites, and by making a concrete contribution to this "resource efficiency" particularly through our production of circular polymers. This means acting to protect biodiversity, by paying close attention to land use and making commitments of "net zero deforestation".

Finally, it means integrating these issues into our value chain: through our responsible purchasing roadmap. In 2024, we made progress in implementing our environmental objectives. ■

1. IPBES, SBTN, TNFD, CSRD, ENCORE, etc. **2.** World Business Council for Sustainable Development. **3.** PricewaterhouseCoopers. **4.** Ipieca: association for the advancement of environmental and social performance in the context of energy transition.

HIGHLIGHTS

Our Impacts, Risks and Opportunities Linked to Nature

With a view to apply the CSRD (Corporate Sustainability Reporting Directive), the Company carried out an internal mapping of its Nature-related Dependencies, Impacts, Risks and Opportunities (DIRO) linked to nature in conjunction with the Company's main business units, then with a third party, taking into account international benchmarks[1] and the concerns of stakeholders.

This analysis notably highlights the following points:
- **the dependence of its facilities on water resources (refineries, petrochemical sites, CCGT), on the availability of land (direct for solar farms and indirect for its agri-feedstock), and on weather conditions (renewable energy sites);**
- **the impacts linked to its greenhouse gas emissions, potential pollution, its physical footprint, for example for the establishment of wind farms;**
- **the risks associated with extreme climatic events, water stress and rising land prices;**
- **opportunities for reducing greenhouse gas emissions, CO_2 capture and sequestration, reduction of plastic pollution, improvement of biodiversity, reduction in the use of chemical fertilizers (biogas digestate).**

TotalEnergies is also a member of the Taskforce on Nature-related Financial Disclosures (TNFD) forum and took part in the pilot for the energy sector coordinated by the WBCSD[2] and PwC[3]. We shared the feedback from our pilot widely with TNFD members on the sidelines of COP 15 Biodiversity, with Ipieca[4] and at a meeting organized by EpE and the Institut de la Finance Durable in 2023.

FOCUS Concrete Illustrations of Our Waste Treatment Actions

(see p. 72)

"Our 5 Levers for a Sustainable Change"

Lever 3. Discharges in the environment

In my operations, I review all discharges to air, water, oceans and soil, as well as waste, and aim to minimize them in the light of the best available technologies and practices. In my projects, I design installations to minimize pollution and waste.

Reinjecting production effluent

EXPLORATION & PRODUCTION SUBSIDIARY IN ARGENTINA

In Argentina, our Exploration & Production subsidiary has set up at the Rio Cullen site a system for reinjecting, after treatment, the production water extracted during its operations. This project required the deployment of new injection pumps and a filtration system, at a cost of $2.5 m. The project will generate two environmental benefits: it will avoid discharging 365,000 m^3 of treated water into the environment per year, and it will reduce the amount of fresh water required to maintain pressure in the reservoir. Reinjection is scheduled to start in the first quarter of 2025. This is in line with the Company's objective of reducing the hydrocarbon content of onshore discharges *(see p. 81)*.

Processing drill cuttings and recycling drilling oil

EXPLORATION & PRODUCTION SUBSIDIARY IN ANGOLA

During drilling operations, oil muds are used to stabilize the well walls, evacuate cuttings and lubricate drilling. It is therefore present in the drill cuttings brought back to land to be treated as waste. TotalEnergies EP Angola subsidiary uses a thermal desorption process to clean this excavated material while recovering the base oil from the drilling mud. The operation makes it possible to manage the waste while reducing its impact on the environment, to recover around 650 tonnes of base oil per year, equivalent to the quantity used for 2 to 3 drillings, and to save around 1 M$ each year.

Reducing volatile organic compound emissions

DONGES REFINERY (FRANCE)

To limit emissions of Volatile Organic Compounds (VOCs) from one of its tanks, the Donges refinery has installed a floating cover made up of Hexa-Cover® modules. This system, which is very simple to install, enables emissions to be reduced very quickly while waiting until a floating roof is installed, which requires more complex operations. This rapid solution can be duplicated on many sites to reduce NMVOC emissions from old storage tanks not fitted with floating roofs.

Reeds in the Limours-Janvry station pond.

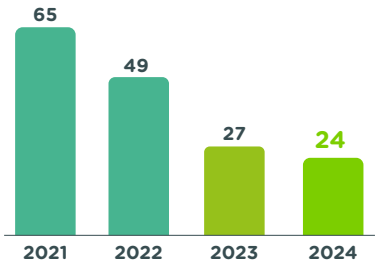
Treating waste water with a Nature-based Solution

LIMOURS-JANVRY SERVICE STATION (FRANCE)

The service station of Limours-Janvry treats its wastewater using a reed beds technology. This Nature-based Solution uses the purifying power of micro-organisms that develop on the roots of reeds. The wastewater percolates through the root system of the reed beds and is cleaned of pollutants before returning to the natural environment. This entirely natural technique requires no energy. ■

Environmental Protection

NUMBER OF ACCIDENTAL SPILLS



Number of accidental spills of liquid hydrocarbons in excess of one barrel into the environment, excluding acts of sabotage.

100%

Proportion of our sites that have identified a risk of accidental pollution that have an anti-pollution plan in place

OUR DISCHARGE REDUCTION TARGETS

-75%

in 2030 compared with 2015 sulphur dioxide emissions

<1 mg/l

in 2030, hydrocarbon content in water discharged from onshore sites

Reducing the environmental risks associated with liquid, gaseous and solid discharges into the environment is our top priority in controlling the environmental impact of our operations.

Preventing the risk of accidental pollution

We apply the highest standards to reduce the risks inherent to the nature of our activities:

- maritime and river transport of hydrocarbons; selection and vetting of chartered vessels in accordance with the best international standards (OCIMF[1] and EBIS[2]) and use of Marine Terminal Management and Self Assessment (MTMSA) in operated terminals;
- implementation of a Company-wide crisis management system to deal with a major accidental spill, backed up in the field by regular mandatory exercises to test the pollution control plans of Company-operated sites at risk of spills reaching surface water.

In 2024, we organised a crisis exercise bringing together the maritime transport teams based in Paris and Geneva, our Exploration & Production affiliate in Brazil, the Upstream branch and the anti-pollution expertise of headquarters. Based on a scenario involving multiple impacts on human, industrial and environmental levels, this exercise allowed us to test our ability to manage a complex incident and demonstrated effective coordination between the different entities involved.

Reducing our industrial discharges

Our activities generate emissions such as combustion fumes, atmospheric emissions from transformation processes and water discharges. The Company often goes beyond compliance with applicable regulations to limit the quantities discharged into the various environments:

- **Sulphur dioxide (SO_2)**

A target of 75% reduction in emissions between 2015 and 2030. In 2024, we reduced these emissions to 17 kt SO_2, a reduction of 71% compared to 2015.

- **Discharge of hydrocarbons into water**

In January 2022, the Company set itself a 2030 target for the quality of water discharged from our onshore sites. This new target devides by 15 the maximum hydrocarbon content of discharded water compared with the previous Company objective. To date, 82% of onshore sites comply with this strenghtened 1 mg/l target. Studies have been launched to improve discharges from sites that have not yet met the new target. At our offshore sites, the average hydrocarbon content of water discharges is 11.2 mg/l, well below our objective of keeping it below 30 mg/l. ■

1. Oil Companies International Marine Forum: industry association of the world's leading oil companie. **2.** European Barge Inspection Scheme.

Taking Action to Preserve Water Resources

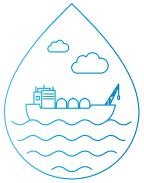
WATER USES IN TOTALENERGIES OPERATED SITES

APPROXIMATELY 1,300 MILLION M³ OF WATER WITHDRAWN IN 2024 INCLUDING:

10%

FRESH WATER

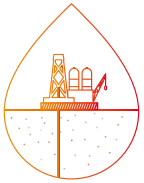
- Steam production necessary for industrial processes
- Cooling in cooling towers (refinery-petrochemical sites, gas power plants)
- To a lesser extent: processes, maintenance, sanitary uses



80%

SEA WATER

- Cooling in open loops
- Injection into reservoirs at offshore sites
- Production of green hydrogen (after desalination)
- Power supply of fire fighting systems



10%

PRODUCTION WATER

- Partly, reinjection into reservoirs

Wastewater undergoes appropriate treatment before being released into nature, so as to make it compliant with regulations and our standards.

In 2022, we joined the CEO Water Mandate, part of the United Nations Global Compact, joining a platform of over 400 companies committed to advancing water management. A brochure published in 2024 details the actions taken to reduce our footprint on water resources.

Reducing freshwater withdrawals in our direct operations

Freshwater represents 11% of the water used at our operated sites, and we have decided to focus our efforts on this unevenly distributed resource on the planet that we share with our neighbors.

Cameron LNG liquefaction terminal, next to Lake Charles in Louisiana (United States).

OUR OBJECTIVE OF REDUCING FRESHWATER WITHDRAWALS BY 2030 COMPARED TO 2021

La Mède biorafinery plans to save

300,000 m³

of water per year thanks to the installation of a variable flow pump, i.e. 13% of its annual withdrawal

Our target is to reduce our overall[1] freshwater withdrawals by 20% at sites located in water-stressed zones[2] in 2030 compared to 2021. In 2023, we have reassessed the priority sites on the basis of updated projections from the World Ressources institute's Aqueduct tool. Eleven priority sites[3] are now covered by this target. Located mainly in Western Europe, they represent, in 2024, 47% of the Company's total freshwater withdrawals, i.e. 51 Mm³.

Contributing to collective programs

We contribute to the French government's Water Plan (March 2023) with our sites at Donges *(Loire-Atlantique)*, La Mède and SOBEGI *(Pau region)*. After equipping itself with a variable flow pump on its main water intake, La Mède biorefinery is studying the optimization of the cooling of various equipment as well as the reduction of water losses from its osmosis units.

Promoting access to fresh water for local communities

Access to water is fundamental to local development. As part of our activities, we run several programs (Water, Water Sanitation And Hygiène (WASH)) to provide access to water for local communities in connection with our operations.

In Argentina, the E&P subsidiary supplies water, notably for breeding and agriculture as well as for human needs in the Neuquén and Tierra del Fuego regions. In Bolivia, the E&P subsidiary supported the creation of a water committee in the communities of Iviyeca and Carapari to improve water supply infrastructure and increase community knowledge of efficient and sustainable water use. ■


Monitoring the conversion of the TotalEnergies La Mède platform (France).

HIGHLIGHTS

Electricity

The Pont-sur-Sambre gas thermal power generation plant (CCGT) assessed in 2024 how to develop a decarbonated water storage to address shutdown events of the plant and a treatment to reuse the purge water from the cooling tower.

The CCGT of Castejon has equipped itself with flow meters to refine its water balance in 2024 and has validated the installation of a pilot to test advanced treatment technology for water to be recycled. The results of this pilot are expected in 2025.

1. 20% is the target integrated in the reduction for each of the site. This is an initial approach aligned with the definition of water stress. **2.** Water-stressed zone 2030: Water-stress zones as defined by WRI (zones in which withdrawals exceed 40% of available resources). **3.** Concerned sites are listed in the URD 2024, chapter 5.2.3.2.

Developing Circular Management of Our Products

CREATING VALUE FROM CIRCULAR RAW MATERIALS

Reduce • Recycle

- Double the quantity of circular raw materials entering our facilities by 2030.
- Achieve 75% waste and residues in our biofuel production by 2024.
- Achieve a gross production capacity of 10 TWh of biogas in 2030, mainly from waste.

PRODUCING RESPONSIBLY

Reduce • Reuse • Recycle

- 70% recovery of waste from our sites.

Reduce

- Evaluate our 1,300 priority suppliers concerning to their overall sustainable development performance by the end of 2025 (GHG emissions, biodiversity, water, waste/circularity).

OFFERING OUR CUSTOMERS A RANGE OF LOW-CARBON ENERGY AND CIRCULAR POLYMERS

Reduce • Rethink • Recycle

- Produce 1 Mt/year of circular polymers in 2030.

Making progress in the circularity of our products and waste is another way of reducing our environmental footprint. We do this through our production of biofuels, biogas and circular polymers. At our sites, promoting the circular management of resources starts with responsible management of our waste.

Valorizing waste from our sites

In early 2022, we have set ourselves the goal of valorizing over 70% of our waste. Our approach, based on the **"Reduce • Reuse • Recycle • Recover"** principle, has enabled us to recover 71% of waste from our operated sites in 2024 (vs. 61% in 2023). This clear improvement results from the action plans deployed at our sites and subsidiaries and the implementation of demanding waste management contracts and partnerships with international waste treatment companies, both in France and in our host countries in order to develop waste treatment industries in the countries where we operate. Lastly, we integrate the issue of resource saving into the value chain with our suppliers *(see p. 100)*.

Creating value from circular raw materials

Biogas is mainly produced from agricultural waste. Thus, in 2024, we have treated more than 1 Mt of agricultural waste in our biomethanizers. For the production of biofuels, we set ourselves the objective of increasing the share of circular raw materials (used oils, animal fats) to more than 75% from 2024 and achieved 77% this year.

HIGHLIGHTS

Saft and Battery Recycling

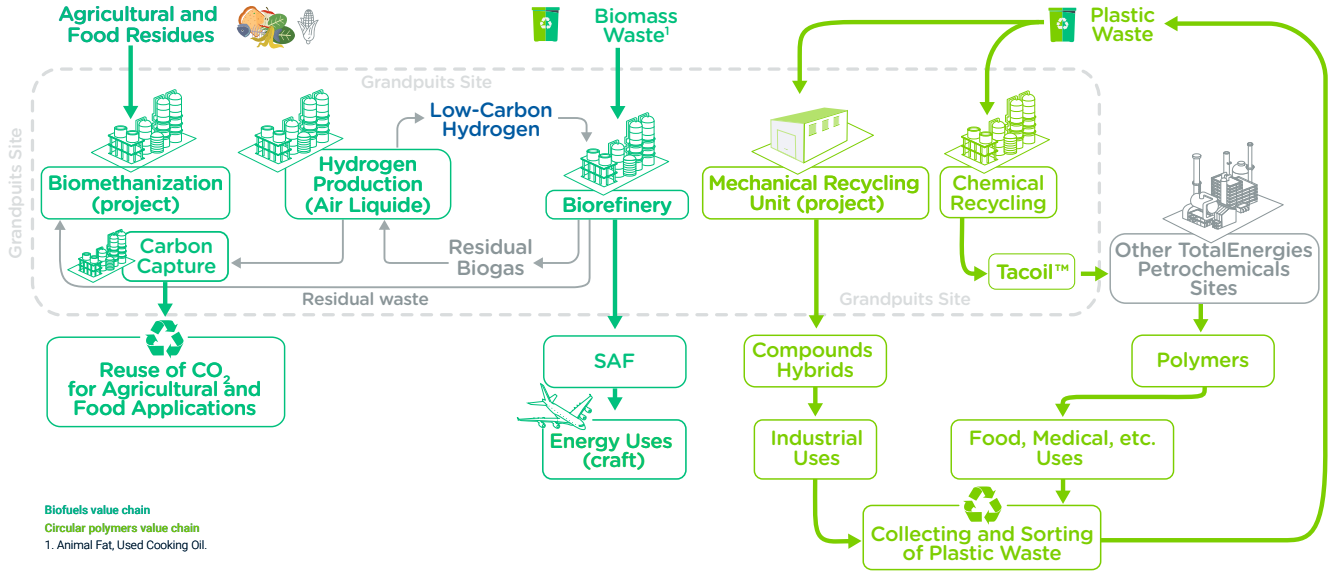
Saft batteries are designed to have a reduced environmental footprint. For nickel batteries, Saft has developed a recycling network that recovers at least 75% of the weight of recovered batteries, notably at its Oskarshamm recycling site (Sweden). Lithium-ion batteries are processed at end-of-life.
Saft is also leading an R&D project with Orano, Paprec, MTB Manufacturing and the CEA on the recycling of electric vehicle batteries. In 2024, pilots for module deactivation and hydrometallurgical treatment of black mass[1] were put into service.

Acquisition of Tecoil, Specialist in the Production of Regenerated Base Oils

In 2024, we acquired Tecoil, a Finnish plant with a capacity of 50 kt/year specializing in the production of ReRefined Based Oils (RRBO) from used lubricants collected in Northern Europe. These lubricants are pretreated to remove solids, water, light hydrocarbons and the heavy fraction (bitumens), treated with green hydrogen and distilled to produce RRBOs that can be integrated into the Company's lubricants.

1. Product resulting from the crushing of batteries.

GRANDPUITS PROJECTS, EXAMPLES OF CIRCULAR ECONOMY



HIGHLIGHTS

Startup of Our First Chemical Recycling Plant in France

In 2025, TotalEnergies and its partner Plastic Energy will start a new plastic waste recycling facility on the Grandpuits platform. This installation will transform 15,000 t/year of plastic waste by pyrolysis, which consists of heating the waste at high temperature in the absence of oxygen in order to obtain a pyrolysis oil called TACOIL (Thermal Anaerobic Conversion Oil). TACOIL is used in TotalEnergies units for the manufacture of polymers of identical quality to that of virgin polymers, compatible with food use, replacing material of fossil origin. An agreement was concluded with Paprec and Citeo (eco-organization responsible for collecting plastic packaging waste from French households) in order to supply the Grandpuits factory with plastic waste.

Circular polymers at the heart of our strategy

Increasing the circularity of our polymers is essential in the fight against plastic pollution. We offer our customers a range of low-carbon polymers named Re: clic.

RE:CLIC ORGANIZED AROUND 3 PRODUCT LINES

RE:use, polymers containing mechanically recycled plastic. Our subsidiary Synova is the leader on the French market, supplying high-performance recycled polymers to markets such as the automotive industry. In 2024, we started in Carling (France) a new line of 15 kt/year of hybrid compounds for automobiles, from domestic waste and used automobile parts, and decided to build a new unit in Grandpuits.

RE:build, polymers manufactured by chemical recycling, which converts non-mechanically recyclable waste into raw materials. Chemically recycled polymers can be used for food applications, for example.
We currently produce chemically recycled polymers at our Antwerp (Belgium) platform, from pyrolysis oil produced in Europe by Indaver and Plastic Energy. A new waste plastic recycling unit starts in Grandpuits (France) this year.

RE:newable, our range of biopolymers. TotalEnergies is developing new polymers based on vegetable oils and used edible oils processed at the La Mède biorefinery in France, and tomorrow at the Grandpuits biorefinery. The TotalEnergies Corbion joint venture produces PLA (polylactic acid), a biosourced, recyclable and biocompostable bioplastic, at its Rayong plant (Thailand) with a capacity of 75 kt/year.

We are also working with our stakeholders to reduce the global footprint of plastics:

- we develop "ecodesign" solutions to reduce the amount of material needed for packaging and enable the recycling of plastic waste at the end of its life cycle (monomaterials);
- we support regulatory initiatives aimed at banning certain single-use plastic applications;
- we are rolling out the Operation Clean Sweep® certification program;
- we are involved in coalitions such as the Alliance to End Plastic Waste, of which we are a founding member and which brings together players from the entire plastics value chain, to work on solutions to eliminate plastic waste in the environment. ■

Acting for Biodiversity


A sea turtle in a coral reef.

Biodiversity action is an engagement driver across all of our sites and underpins an ambition[1] and concrete objectives set across four action axes.

Our approach is to reconcile energy resources development with biodiversity protection to build a sustainable future. We apply the Mitigation Hierarchy: **Avoid** • **Reduce/Restore** • **Compensate** at all our operations and projects.

In practice, we implement environmental impact assessments inclusive of biodiversity for all our projects, including for renewable energies, which allows to identify areas of interest[1] and opportunities to limit impacts.

A continuous improvement voluntary approach

Our ambition is based on the Act4Nature International[2] voluntary commitments made since 2018. In 2022, we integrated a "zero net deforestation" target for each of our projects located in new locations. We use the United Nations[3] definition of “forest”, and we compensate on the basis of surface (hectares).

With our Sustainab’ALL program launched in 2023, our commitment to deploy actions to support biodiversity now applies to all our operated sites.

OUR COMMITMENTS

Axis 1. Respecting Our Voluntary Exclusion Zones

- **No oil or gas exploration or extraction in naturel World Heritage Sites Unesco zones.**
- **No oil exploration activities in the Arctic sea ice areas[4].**

Axis 2. Managing Biodiversity at Our New Projects

- **Implementation of a biodiversity action plan for each new project located in IUCN I to IV and Ramsar areas.**
- **Production of a positive impact on biodiversity, confirmed by a third-party, for all new project in priority zones (IUCN I to II and Ramsar).**

Axis 3. Managing Biodiversity at Our Existing Sites

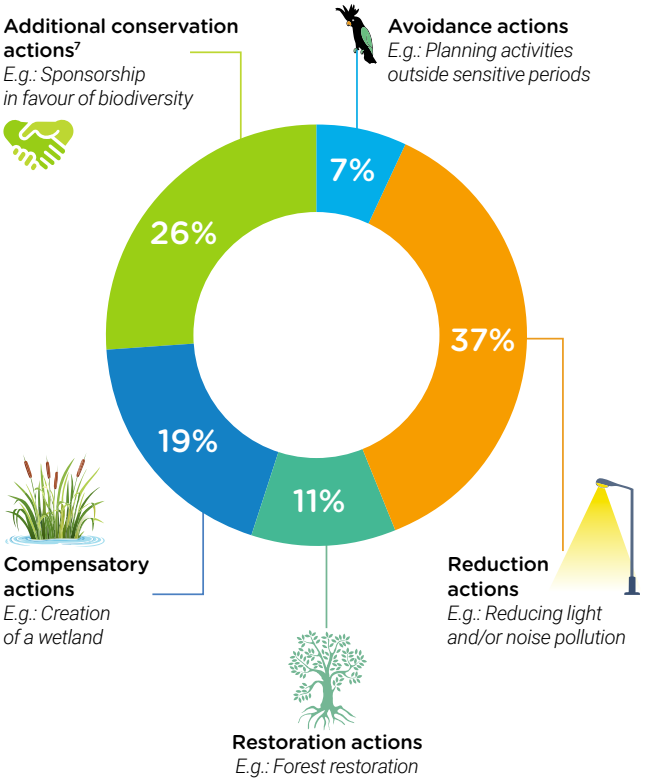
- **Implementation of a biodiversity action plan for each of our environmentally material sites[5].**
- **Assessment of the prospect of creating biodiversity rich areas (habitats for rare species, etc.) for sites that have ceased operations, as an option for their rehabilitation.**

Axis 4. Promoting Biodiversity

- **Promotion of biodiversity to youth, our employees, and sharing biodiversity data collected from our projects on the international GBIF[6] platform.**

1. See additional ambition details on our website. **2.** http://www.act4nature.com/entreprises-engagees-2018/. **3.** Forest: land larger than 0.5 ha with trees higher than 5 m and a canopy cover of more than 10%, or trees capable of reaching these thresholds in situ (source: Food and Agriculture Organization of the United Nations). **4.** The list of our licenses in the Arctic zone is available on the Company’s website. **5.** Site of the Exploration & Production production subsidiaries, refineries, petrochemical sites, gas-fired power plants operated by the Company. **6.** Global Biodiversity Information Facility.

PERCENTAGE SHARE OF MITIGATION ACTIONS **(AVOID • REDUCE/RESTORE • COMPENSATE)** FOR BIODIVERSITY



Our progress in 2024: 100% of our environmentally material sites have a Biodiversity Action Plan

Axis 3. With 7 additional biodiversity assessments carried out in 2024, all of our 77[8] industrial environmentally material sites now have a biodiversity action plan currently being deployed, in line with our 2025 objective. The most common actions of these biodiversity action plans include reducing light and noise pollution, restoring terrestrial habitats, controlling invasive species, creating fauna species refugia, or setting up partnerships with local NGOs.The percentage distributions of Mitigation Hierarchy actions of the biodiversity action plans are presented in the figure opposite and are monitored using response indicators. Sites' interactions with protected and sensitive areas are recorded annually and inform biodiversity action plans. Fourteen of our sites that have ceased operations initiated biodiversity restoration assessment or deployed actions.

Furthermore, in 2024:

Axis 1. We have respected our voluntary exclusion zones.

Axis 2. We are deploying five biodiversity action plans on our new projects and operated production sites located in the most sensitive protected areas, notably the Tilenga project in Uganda[9] which has a biodiversity net gain target supporting responsible management of wildlife[10]. For example, elephant movements in the Murchison Falls Park in Uganda are being monitored using GPS collars, in partnership with the Wildlife Conservation Society (WCS) NGO, to determine their movement patterns and areas of occurrence.

Zero Net Deforestation objective: in 2024, our new projects required the deforestation of 156 ha and 186 ha of forest were replanted during the year.

Axis 4. The TotalEnergies Foundation supported 16 projects including a project to raise awareness among middle school students about the preservation of the French Guadeloupe Island's mangroves with the National Forest Agency . 11 datasets from our projects in South Africa, Brazil and Namibia have been shared on GBIF. Since 2020, the shared data has been cited by 230 scientific publications, and TotalEnergies was invited to share its experience at the GBIF Symposium (Vairão, Portugal, 2024) in recognition of its status as the 3rd private contributor. The Action Program! raised awareness among 2,725 employees. ■

HIGHLIGHTS

Good Practices Sharing Cross-Sector Partnership

To leverage mining sector expertise regarding biodiversity net gain, the Tilenga project (Uganda) initiated an exchange program with Anglo American at the Venetia Limpopo Nature Reserve (South Africa), involving the Ugandan authorities and with the support of South African National Parks.

Use of Environmental DNA (eDNA) on Site

eDNA was used to inventory marine species in Denmark in partnership with the National Institute of Aquatic Resources (DTU[11] Aqua). This method makes it possible to study the genetic variability of species and precisely assess the health of ecosystems to guide restoration and conservation decisions.

7. Actions uncorrelated to the impact of activities. **8.** Excluding newly acquired sites which have 2 years to comply. **9.** See the "Focus Tilenga-EACOP p.96 for more information on the project and its actions in favor of biodiversity. **10.** Our other net gain projects are the EACOP projects in Uganda and Tanzania, Ratawi in Iraq, Mozambique LNG and Papua LNG. **11.** Technical University of Denmark.

Having a Positive Impact for Stakeholders

Local resident benefiting from livelihood restoration support (Uganda).

Having a Positive Impact for Stakeholders

(see p. 72)

"Our 5 Levers for a Sustainable Change"

Lever 4. Our Communities

I know the neighbors of my site and my stakeholders; I engage and maintain a constructive dialogue with them, including through the careful handling of complaints. I anticipate this dialogue right from the design stage of a new project.

Dayapar wind farm, Gujarat (India).

Energy is at the heart of the most daunting challenges of the 21st century, defined in the U.N.'s 2030 Agenda in the form of its 17 Sustainable Development Goals (SDGs) formulated in 2015.

Supplying energy indeed contributes to the development of our societies which have seen an increase in life expectancy of around 15 years over the last half a century[1], while the number of people living in extreme poverty has decreased significantly[2].

This spectacular progress nevertheless masks severe disparities. And it was largely achieved through the use of fossil energies, resulting in a very sharp increase in CO_2 emissions, which are the main cause of the climate change we can observe today.

In this situation, exacerbated by geopolitical upheavals such as the war in Ukraine and the energy crisis it has caused, pressure is growing on energy companies to meet a wide range of occasionally conflicting expectations. These demands are legitimate, reflecting people's aspiration to build a more responsible and more equitable world, while ensuring that the required transition is as fair as possible.

By aiming to provide more affordable, more available and more sustainable energy to as many people as possible, the Company's activities contribute to this and have a positive impact for its stakeholders.

This impact is based first of all on the values and principles of action that TotalEnergies applies in its operations, described in our Code of Conduct, which notably recalls our commitment to **respect internationally recognized human rights** *(see p. 90)*. It also involves promoting tax transparency and the **fight against corruption** *(see p. 92)*.

Having a positive impact for our stakeholders entails understanding their expectations, which requires constructive dialogue and reporting on our actions with transparency *(see p. 93)*. It also means **sharing the value** with our host communities *(see p. 95)*, by promoting local development and ensuring that they benefit from the economic outcomes of our projects, through employment and training for example, with particular attention paid to **youth** and their professional integration *(see p. 98)*.

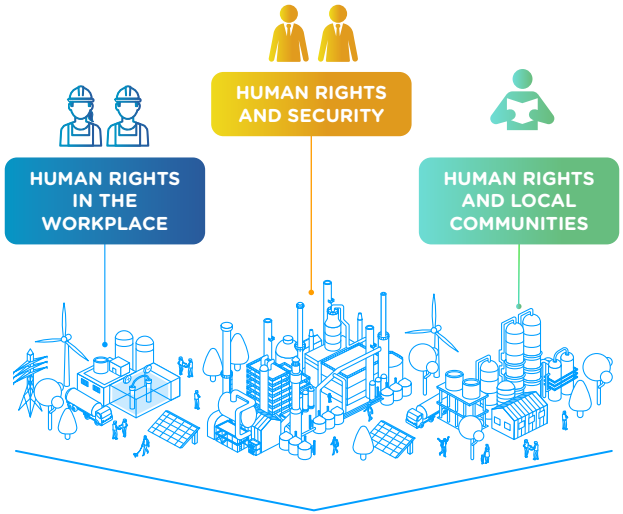
Beyond all the actions taken to reduce our greenhouse gas emissions and those of our customers presented in the previous chapters, TotalEnergies also contributes **to making energy accessible and affordable for all**, for example by developing ***Clean Cooking*** *(see p. 99)* while, in 2021, 675 million people in the world still did not have access to electricity and 2.3 billion to *Clean Cooking*[3].

The positive impact of the Company is finally manifested by the **sharing of the economic value** that it creates which benefits **its employees** *(see p. 71)*, **the States** *(see p. 92)*, **its shareholders** *(see p. 94)* and with its economic partners, including **its suppliers** *(see p. 100)*. ■

1. Between 1970 and 2020 – source: data.un.org **2.** Source: data.un.org **3.** Tracking SDG7: the energy progress report 2023 (International Energy Agency - International Renewable Energy Agency – UN Statistics Division - World Bank -World Health Organization joint report). https://trackingsdg7.esmap.org/

Upholding Human Rights

OUR SALIENT RISKS



OUR COMMITMENTS

Our Code of Conduct

Compliance with international standards and principles:

- Universal Declaration of Human Rights
- United Nations Guiding Principles on Business and Human Rights (UNGP)
- Fundamental Conventions of the ILO
- Voluntary Principles on Security and Human Rights (VPSHR)
- The OECD Guidelines for Multinational Enterprises

1. https://totalenergies.com/fr/medias/actualite/communiques-de-presse/totalenergies-rend-public-le-rapport-de-jc-rufin-sur-les 2. PGR.

Respect for Each Other is a core value at TotalEnergies, at the heart of our collective ethics and our Code of Conduct. The Code of Conduct applies to all our employees, as well as to our suppliers and contractors. *Respect for Each Other* means respect for human rights, which are non-negotiable in our operations around the world. It is a collective and individual requirement. Our salient risks of impacting human rights break down into three categories.

Human rights in the workplace

We take action against all forms of discrimination, forced labor and child labor; ensure just and favorable conditions of work and safety and require the same of our suppliers in their operations.

In the field, we emphasize training to explain, anticipate and prevent human rights risks. In 2024, nearly 5,000 employees participated in classroom training and since 2019, nearly 70,000 have received the online training on human rights in the workplace.

We are also engaged in conducting external audits of our affiliates using the consulting firm GoodCorporation. In 2024, 7 assessments were conducted (United States, Angola, Nigeria, Equatorial Guinea, Philippines, Brazil and Serbia). An evaluation program targeting 1,300 priority suppliers by the end of 2025 was launched in 2023. To this date, 990 evaluations of suppliers have been carried out. Of the 600 suppliers audited on site in 65 countries, 261 have implemented a corrective action plan.

HIGHLIGHTS

An Active Role in Trade Associations

In 2024, the Company joined *Entreprise et Droits de l'Homme* (EDH), a French non-profit association that promotes respect for human rights by businesses, in order to exchange views on current issues with other French companies with an international reach.

In the field of security, in 2024 TotalEnergies became an observer member of the International Code of Conduct Association (ICOCA), a multi-stakeholder initiative aimed at strengthening respect for human rights and humanitarian law by private security service providers.

Third Edition of our Human Rights Briefing Paper

We promote transparency in our approach and actions in terms of respecting human rights, in our own activities and our contractors' activities. In this regard, we have published in January 2024 the third edition of our Human Rights Briefing Paper, covering the period 2018 to 2023. It includes the Company's approach to human rights, describing how we implement international standards and conventions in this respect. We also highlight our governance to address human rights matters, as well as our due diligence process across our operations.

Concrete examples illustrating our approach are provided, such as the Grandpuits refinery conversion project in France, which is part of a just transition approach.

More than

300

people trained in VPSHR by TotalEnergies' Security division in 2024

Nearly

210

reports logged through the address ethics@totalenergies.com

GRIEVANCES MANAGEMENT IN OUR AFFILIATES

1,414

grievances logged in 2024

Resolution rate

87%

Human rights and local communities

In our projects, we conduct specific due diligence as soon as studies begin, to identify the potential negative impacts of our activities on local communities, as well as appropriate remediation plans, in accordance with the United Nations Guiding Principles on Business and Human Rights (UNGP). We pay particular attention to salient risks concerning access to land, the right to health and to an adequate standard of living. We are setting up mechanisms to manage grievances in our affiliates.

Human rights and security

The intervention of government forces or private security companies may be necessary to protect the Company's personnel and facilities. To prevent the risk of disproportionate use of force, TotalEnergies implement the VPSHR. We make sure that the personnel assigned to this mission have been vetted and received adequate training. In 2024, over 300 people have been trained by TotalEnergies' Security division on the VPSHR. We perform analyses each year to assess human rights risks linked to our security activities at our sites and publish annually a VPSHR report[1].

Listening to whistleblowers

The Chairman of the Company's Ethics Committee reports directly to the Chairman and CEO and oversees a network of more than 100 Ethics Officers. The Ethics Committee maintains a system for reporting situations or behavior that violate the Code of Conduct, including a grievance reporting mechanism (via the address ethics@totalenergies.com) accessible to all employees internally and to external stakeholders. In 2024, nearly 210 reports were logged over 60% of which concerned issues related to human resources. ■

HIGHLIGHTS

Use of External Experts

When the context of a project is complex, we seek the advice of independent third parties. The independent mission to assess the humanitarian situation in the province of Cabo Delgado in Mozambique, entrusted in 2022 to Jean-Christophe Rufin[1], highlighted the execution quality and the positive impact of the actions undertaken by Mozambique LNG. In 2024, Jean-Christophe Rufin led a follow-up mission which concluded that the recommendations were being implemented.

Following recent allegations of human rights abuses by the Mozambican armed forces in 2021 during the period when Mozambique LNG no longer had staff on the Afungi site, Mozambique LNG conducted a review of the elements in its possession at the time of the facts which did not allow to identify any corroborating information, although Mozambique LNG had several functioning information and grievance reporting channels at its disposal. In October 2024, Mozambique LNG invited the Mozambican authorities to conduct an investigation on these allegations. The opening of an investigation has been confirmed by the Attorney General's Office of Mozambique[2] early March 2025. In addition, TotalEnergies has requested the intervention of the Mozambican Commission on Human rights (CNDH). The CNDH confirmed on 25 March 2025 that it will carry out its own assessment of all relevant information to ensure that the facts are duly ascertained and that the rights of the parties involved are fully respected. It has stated that it will follow the investigation launched by the Mozambican judicial authorities to ensure that it is conducted in a transparent, fair and impartial manner.

In January 2024, Lionel Zinsou, recognized for his expertise in African economic development, was entrusted with a mission to assess the land acquisition program carried out in Uganda and Tanzania as part of the Tilenga and EACOP projects. Lionel Zinsou informed the Company that he would only be able to issue the report in 2025 owing to health issues in 2024 that prevented him from finalizing it.

1. TotalEnergies VPSHR report 2023.

Promoting Fiscal Transparency and Fighting Corruption

ZERO TOLERANCE TOWARDS CORRUPTION

In 2024, more than

15,000

employees have taken the online anti-corruption training course

HIGHLIGHTS

Anti-Corruption: Our Actions in 2024

- In 2024, more than 15,000 employees have taken the online training course. Webinars designed to train the populations most exposed to the risk of corruption continued to be rolled out. They involve about 20,000 employees.
- 22 entities were evaluated in 2024.
- About 220 incidents relating to fraud (excluding attempted fraud), corruption or influence peddling were recorded and resulted, when they concerned an employee, in around 140 disciplinary actions including dismissal in line with the zero-tolerance principle enshrined in the Code of Conduct.
- Each of the Company's business segments reviewed its risk mapping in 2024. A summary was presented to the Executive Committee in April and October 2024.

We work with governments to promote fiscal transparency and fight corruption, helping to create the right environment for socio-economic development.

Sharing value with governments

TotalEnergies pays its share of taxes, making a contribution to the economic development of its host countries. In 2024, the amount of income tax and production taxes paid by the Company across all operations, came to just over 22 B$ and the average tax rate was 40.2%. Payments made by the Company's extracting entities to governments or territories in which we operate amounted to 25.6 B$ in 2024 (mainly taxes, duties and production rights). At the other end of the value chain, product retail, the Company collects excise taxes for government from consumers of energy products. In 2024, we collected 18.9 B$ in excise taxes on petroleum products.

Promoting fiscal transparency

TotalEnergies is a member of the Extractive Industries Transparency Initiative (EITI) since its creation in 2003. As early as 2014, the Company made its tax policy public, which is approved by the Board of Directors and regularly updated. We also publicly endorse the Responsible Tax Principles developed by the B Team.

The Company published in 2024 a fiscal transparency report for fiscal year 2023[1], as every year since fiscal year 2019, in line with GRI recommendations. This report describes the Company's tax policy and provides detailed information on TotalEnergies' global tax contribution, as well as on taxes due, country by country, in the EU, in so-called uncooperative or tax-preferred states and in all countries with extractive activity (thus covering more than 70 countries and more than 90% of the tax burden).

Fighting corruption

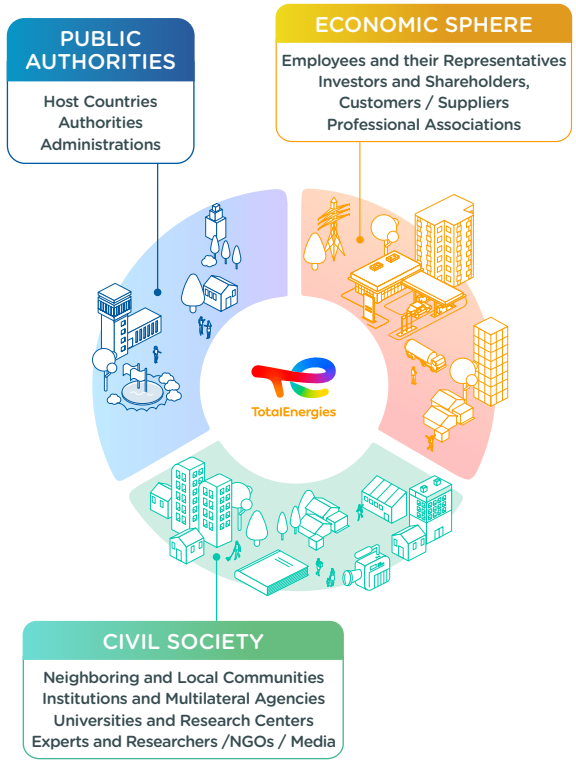
TotalEnergies is exposed to corruption risks owing to its presence in certain countries that have a high perceived level of corruption according to the index drawn up by Transparency International. We apply a principle of zero tolerance for corruption among our employees and suppliers. We promote the Code of Conduct as a mean of communicating our values both internally and externally.

In 2024, our annual "Business Ethics Day" event was dedicated to it on the theme "Code of conduct: back to basics". Our employees are encouraged to put the principles of the Code of Conduct into practice on a daily basis, and to be ambassadors of them to all those who work with and for us. To take action in all areas of its value chain, TotalEnergies has made preventing and fighting the risk of conflicts of interest and corruption part of its Responsible Purchasing Program. The tool which was launched at the end of 2023 to facilitate systematic checks during the supplier evaluation process continued to be deployed within the Company. ■

1. https://totalenergies.com/media/news/press-releases/totalenergies-publishes-its-first-tax-transparency-report

Engaging with Our Stakeholders

MAPPING OF OUR MAIN STAKEHOLDERS



Our activities directly or indirectly concern a very large number of stakeholders. With growing expectations of businesses, legitimate questions are raised about our strategy, how we implement it and the impact it has. We organize discussion channels in order to dialogue with all stakeholders and pay particular attention to any controversies raised.

The main controversies that we faced in 2024 related to:

- the pace and the reality of our transition strategy:
- our climate impact, and particularly that of new oil and gas production projects;
- the role of Nature-Based Solutions projects;
- LNG's role in ensuring security of supply, the viability of investments in LNG and the emissions associated with its production and transport;
- human rights and the impact of our activities or that of our partners on local communities, particularly those concerned in Uganda and Tanzania by the Tilenga-EACOP projects, in Mozambique by the Mozambique LNG project;
- our activities in relation with Russia;
- the impact of our operations on the environment and health;
- the Company's rate of taxation, its profits and dividends paid.

On the ground, all over the world, we work hand in hand with civil society including local NGOs, the business world and public authorities. These relationships enable us to identify priority needs, and contribute to taking a responsible approach in our operations.

TotalEnergies is also a member of a number of coalitions and think-tanks committed to advancing corporate sustainability, such as the WBSCD, the Global Compact, CSR Europe, le *Collectif des entreprises pour une économie plus inclusive* (the Collective of companies for a more inclusive economy), ORSE and EpE[1]. ■

HIGHLIGHTS

Papua New Guinea – Independent Panel

The advisory panel of experts set up in 2022 in Papua New Guinea met 8 times since its launch, including two in 2024. Sessions include site and community tours. 42 recommendations on the conduct of the project with regard to local communities and biodiversity were formulated and published, 30 of which were followed by concrete actions, either completed or in progress[2].

France – Exchanges with Local Players

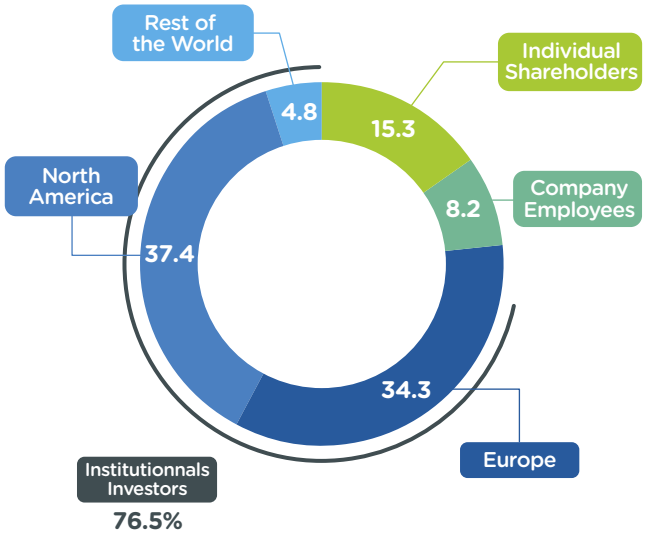
The *"Territoires des énergies et au-delà"* regional think tanks, convened 29 times in 2024 by the *Direction France* of the Company, brought together 700 local stakeholders, members of the business world, civil society, public authorities and elected representatives since their creation in March 2022. Their aim is to discuss the challenges of energy transition and economic development. The *Direction France* has also taken part in regional COP meetings, whose objective is to develop a regional version of the trajectory set by France.

1. TotalEnergies has been a member of the World Business Council for Sustainable Development since 2014, the United Nations Global Compact since 2002, the Corporate Sustainability and Responsibility network since 2016, the Collective since 2002 and of EpE *(Entreprises pour l'Environnement)* since 1992. **2.** They are all made public on the site papualng.com

Dialogue with Investors

SHAREHOLDER STRUCTURE

In % excluding treasury shares



+83,000

French individual shareholders in 2024, i.e. +15% in one year

We deeply value the dialogue with all our shareholders, with whom the members of the Executive Committee, the Lead Independent Director and the Investor Relations team regularly engage about the Company's strategy and sustainability policy.

Investors: ongoing demanding and fruitful dialogue

In addition to engagement on financial matters, the Company has developed a shareholder engagement program on extra-financial themes. This program allows for regular interactions with shareholders, throughout the year, on Company strategy, climate policy and sustainability issues as well as governance practices.

In 2024, nearly 1,200 meetings were held with investors, of which around 450 were dedicated to extra-financial issues. Ahead of the Annual General Meeting, the Lead Independent Director maintained a particularly active dialogue with shareholders totaling nearly a quarter of TotalEnergies' capital. In this context, the Lead Independent Director explained the reasons which led the Board of Directors to reaffirm the relevance of a unified governance in order to pursue the Company's transition strategy. These meetings also made it possible to discuss TotalEnergies' strategy and investments, particularly for the *Integrated Power* activity and the Tilenga & EACOP projects, and the strategy of the Company in terms of climate and sustainability.
In addition, a site visit took place in Uganda in April 2024, to allow institutional shareholders to discover the Tilenga and EACOP projects and interact with various stakeholders. Dialogue is also particularly active with individual shareholders, who are informed of Company news via dedicated publications, participate to visits organized with the *Cercle des Actionnaires* and with whom we interact via the shareholders' advisory committee.

The expectations expressed by our shareholders as well as by investor coalitions such as CA100+ during these numerous interactions are evaluated as often as necessary by General Management and the Board of Directors, and more specifically before and after the Annual General Meeting.

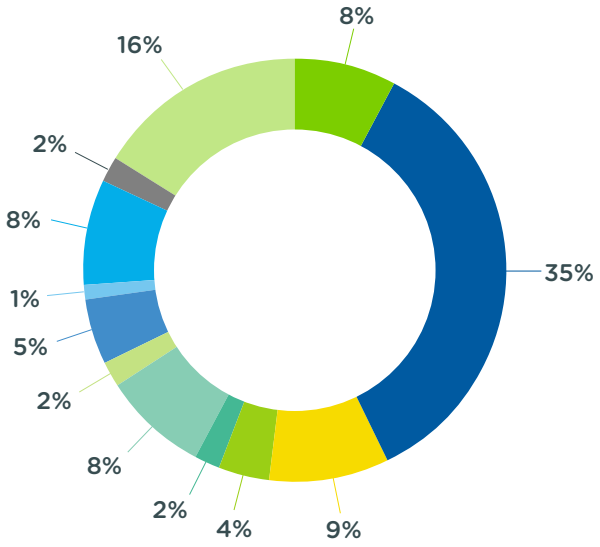
An attractive shareholder return policy

TotalEnergies has not reduced its dividend since 1982. The Company's financial strength enables it to successfully implement its transition strategy and offer shareholders an attractive return policy.

Over the past 10 years, the average annual gross dividend yield has been 5.8%. In 2024, in addition to the 7% increase in quarterly interim dividends, a 8 B$ share buyback program has been implemented. Payout to shareholders represented therefore 50% of cash flow in 2024, in line with the objective of maintaining the latter above 40%. ■

Share Value with Our Host Communities

SOCIO-ECONOMIC DEVELOPMENT INITIATIVES BY TOPIC



1. Voluntary Convention for Economic and Social Development. **2.** https://mozambiquelngfoundation.org/en/

Our operations involve close interaction with local communities in our host countries. Our vision of shared prosperity is based on three principles: dialogue and engagement with all our host communities, which are based on Lever 4 of "Our 5 Levers for a Sustainable Change" program *(see p. 72)*; assessing and reducing the impact of our operations, and contributing to local social and economic development that meets the needs of the communities.

Contributing to local development

Long-term operations in a territory means developing profitable, sustainable projects. TotalEnergies is committed to prioritizing local jobs and subcontracting locally wherever possible, in accordance with operational constraints. For example, TotalEnergies is supporting the conversion project of the Grandpuits refinery into a "zero crude" platform announced in September 2020 and representing a planned investment of more than 500 M€. The CVDES[1] signed between the public authorities and TotalEnergies, with a budget of nearly 5 M€ dedicated to the employment basin of Grandpuits and Gargenville, was closed in 2024 with 5 supported third-party projects.

In addition to jobs and using local suppliers for projects, we support education and getting young people into employment, protecting cultural heritage, access to water, health and road safety, which all contribute to reduce inequality. In 2024, more than 1,600 initiatives were supported in these areas.

Building ties with host communities

Our employees have the opportunity to get involved in causes close to where they work. The *Action!* program enables all employees to donate up to 3 workdays a year to local causes. These are opportunities to play a part in achieving the Company's aim of driving positive change locally. In 2024, more than 10,000 employees took part in nearly 15,000 citizenship initiatives worldwide as part of this program. ■

HIGHLIGHTS

The Mozambique LNG Project

The Mozambique LNG Project has been under Force Majeure since 2021. In 2024, a foundation[2] dedicated to implementing a voluntary socio-economic development program in the Cabo Delgado region was established.
It has a multi-year budget of 200 M$. Programs dedicated to agriculture, fishing, small businesses and mobility were supported in 2024. For example, 1,885 households received agricultural training and seed kits and over 100,000 tree seedlings were distributed to restore local ecosystems.

Support for SMEs in France

Our actions in favor of the local economic fabric are illustrated in France by our help to create and support jobs through interest-free, unsecured loans to French SMEs.
In 2024, 141 SMEs benefited from loans worth 5 M€, helping to create or support nearly 3,600 jobs.

FOCUS Uganda and Tanzania: Tilenga and EACOP Projects


Village in the Murchinson Falls Park (Uganda).

Uganda's Lake Albert region is rich in oil resources. Uganda has awarded TotalEnergies a development contract for the Tilenga project. The oil produced will be transported to the port of Tanga in Tanzania via a pipeline over 1,400 km long, built and operated by EACOP[1].

Respecting the rights of stakeholders

Like any infrastructure construction project anywhere in the world, the Tilenga and EACOP projects require land acquisition. This process, conducted by TotalEnergies and EACOP on behalf of the Ugandan and Tanzanian governments, is carried out in compliance with the IFC's demanding performance standards[2]. By the end of 2024, more than 99% of the people affected had received their compensation and 93% of the livelihood restoration programs had been implemented. 100% of relocation houses have been built. TotalEnergies EP Uganda reported on these activities in a social report[3] for the Tilenga project perimeter in 2024.

In addition to the audit and grievance mechanisms already existing to ensure that the rights of our suppliers' employees are respected, a "workers' voice survey" pilot project has been in place since 2023 at the EACOP and Tilenga projects. The aim is to consult them directly about their working conditions. The results of these surveys are shared with suppliers, who then implement appropriate action plans.

Taking care of the environment

In line with its biodiversity ambition, TotalEnergies is implementing actions to restore and enhance the environment with the aim of achieving a net gain for biodiversity in the Murchinson Falls Park as part of the Tilenga project. The footprint of the facilities was limited to 0.03% of the park's surface area, and the visual and noise footprint was reduced. Over a hundred anti-poaching patrols were conducted in partnership with the Uganda Wildlife Authority (UWA), and carnivore surveys and movement studies of 15 elephants were carried out in partnership with the Wildlife Conservation Society (WCS). TotalEnergies EP Uganda reported on its actions in a biodiversity report[4] in 2024.

Contributing to socio-economic development

These two projects will have a significant impact on the Ugandan and Tanzanian economies. By the end of 2024, the construction phase had created more than 20,000 direct jobs and 1.2 B$ had been spent locally. Some 1.5 million hours of training have been provided, with 40% of technical skills applicable to other industries. Numerous socio-economic development initiatives have been carried out by the Tilenga project in the areas of road safety, access to health, drinking water, education, promotion of cultural heritage and diversity, and inclusion of young people. For example, since 2013, 327 students from communities near the site have benefited from scholarships, including 153 women; 200 people have been trained with the help of the Uganda Petroleum Institute and more than 900 Ugandans have received vocational training. ■

HIGHLIGHTS

EACOP - Publication of Principles of Action on Rights Defenders

In June 2024, EACOP published its policy statement on human rights defenders, with input from external experts to ensure consistency with international human rights laws and standards. EACOP's practices towards demonstrators and rights defenders are aligned with those of TotalEnergies EP Uganda, which intervened on several occasions in 2024 with the authorities to call for respect for the rights of those concerned and to reiterate its commitment to open dialogue with all stakeholders.

1. TotalEnergies (62%), UNOC and TPDC (15%), CNOOC (8%). **2.** International Finance Corporation. **3.** https://totalenergies.ug/peoples-well-being. **4.** https://totalenergies.ug/projects/tilenga/tilenga-biodiversity-program

FOCUS Suriname: the GranMorgu Project

Local content spending estimated to be more than

1 B$ over the duration of the project

More than

6,000 direct, indirect and induced jobs

Suriname has entrusted TotalEnergies with the development of the Sapakara and Krabdagu discoveries, located 150 kilometers off the coast in water depths ranging from 100 to 1,100 meters, in Block 58, which it operates[1]. The final investment decision (FID) for the GranMorgu project was announced in October 2024, just one year after the end of the appraisal phase.

The project, with a capacity of 220,000 bbl/d, leverages multiple technologies to minimize greenhouse gas emissions, in particular an all-electric FPSO[2] configuration with zero routine flaring, an optimized power usage with a waste heat recovery unit, and a methane detection and monitoring system. Total investment is estimated at around 10.5 B$, with production scheduled to start in 2028.

As with all our projects, the design phases have been conducted with a view to taking into account the impacts that will result from its implementation. An environmental baseline, a specific biodiversity study and a stakeholder mapping were carried out in 2021, followed by an environmental and social impact assessment launched in 2023, applying the IFC's demanding performance standards[3] and including a focus on human rights, then an industrial baseline in 2024.

Dialogue with stakeholders

As soon as Block 58 was awarded, information and consultation meetings were held with stakeholders in Paramaribo and all the coastal districts, including the indigenous communities of Galibi and Kalebaskreek. Quarterly meetings have been held since June 2023 as part of a dialogue plan dedicated to the development project. A grievance mechanism has been in place since 2023. The FID announcement was followed by a day of meetings and workshops to exchange views with civil society and professional organizations on the stages of the project and to gather their views.

Maximizing local content

A significant part of the investment will be made locally, contributing to local employment and the economic development of Suriname. Paramaribo will serve as the primary hub for administrative, support and logistics activities. Local companies will be involved in logistics, well services, as well as operations. Overall, local content is estimated to be more than 1 B$ over the duration of the project, and more than 6,000 jobs (direct, indirect and induced) are expected to be created in Suriname.

Acting for people and their environment

Alongside the FID announcement, TotalEnergies and its partner APA signed a memorandum of understanding with the Health Ministry to support the rehabilitation of Paramaribo's two main mother and child hospitals at a cost of around 13 M$. A voluntary biodiversity action plan supporting the country's biodiversity strategy has been in place since January 2024 for a 2-year pilot period, targeting marine, terrestrial and coastal (mangrove) ecosystems. Actions in favor of education, road safety and health are gradually being implemented as part of a voluntary societal investment plan. ■

1. TotalEnergies 50%, APA Corporation 50% at the date of the FID. **2.** Floating production, storage and offloading unit. **3.** International Finance Corporation.

Making a Commitment to Young People

VIA ROAD SAFETY EDUCATION PROGRAM

At the end of 2024,

920,000

youth trained, since the start of the program

3.6 **Road traffic injuries**
By 2030, halve the number of global deaths and injuries from road traffic accidents

The Sustainable Development Goals (SDGs), particularly those related to employment and education, are at the heart of youth development. TotalEnergies takes action to give them the means to take charge of their own futures, focusing on the most vulnerable.

Helping young people to find work

TotalEnergies takes an active approach as an employer: in 2024, we renewed our commitment to welcoming in France 2,000 work-study students per year into our teams, including 10% work-study students from priority neighborhoods *(Quartiers Prioritaires de la Ville* (QPV) or *Zones de Revitalisation Rurales (ZRR))* by 2025. At the end of 2024, more than 2,400 work-study students were present (over 7% of our workforce in France), including 11% from priority neighborhoods.

The Company also takes action through its corporate foundation, which in 2020 created L'Industreet in Stains, Seine-Saint-Denis. L'*Industreet* is a campus providing free professional training for young people in industrial sectors struggling to recruit. At the end of 2024, it was hosting 289 18- to-30-year-olds for training and 173 obtained their qualification in 2024. The Foundation also contributed to the opening of a further 4 Production Schools in 2024, bringing the total to 71, as part of a 60 M€ partnership over 10 years.

Internationally, since 2004, no fewer than 1,500 scholarships have been awarded to young people selected by our subsidiaries, mainly in Africa, to enable them to pursue their studies in France.

Making the roads safer

We are committed to road safety for our operations and our customers, to make the roads safer for all users, in particular the youngest users, for whom this is the leading cause of death. By sharing our expertise in schools, for example, we are contributing to support reaching SDG 3.6. This is the aim of our VIA Road Safety Education Program[1]. In 2024, the program trained nearly 300,000 school-children in 22 countries, including over 200,000 in Africa and more than 54,000 in India. The program rollout is supported by employees of the Company's affiliates. ■

HIGHLIGHTS

"Helmet4Life" Initiative

In 2024, TotalEnergies continued the "Helmet4Life" initiative. Launched in May 2023 and supported by its local subsidiaries, it aims to provide 100,000 motorcycle helmets meeting the strictest safety standards to two-wheeler riders in 40 countries in Africa, South America and Asia. In 2024, 63,000 helmets had been distributed in 44 countries.

Our Corporate Foundation

Created in 1992, the TotalEnergies Corporate Foundation supports young people, especially the most vulnerable[2]. To this end, it is mobilizing alongside its partners[3] in four priority areas: inclusion and education; road safety; climate, coastal areas and oceans; cultural dialogue and heritage. In 2024, the Foundation support to its partners reached 64 M€, including 5 M€ for emergency aid to Mayotte.

1. https://fondation.totalenergies.com/en/news/totalenergies-corporate-foundation-welcomed-group-ambassadors-safe-mobility-paris **2.** https://fondation.totalenergies.com/en **3.** https://fondation.totalenergies.com/en/news/community-totalenergies-foundation-partners-working-together-young-people

Accessible and Affordable Energy for All

UNIVERSAL ACCESS TO CLEAN ENERGY

2.3 billion

people worldwide do not have access to clean energy, notably for cooking

In 2024,

60 M

beneficiaries of our bottled LPG sales in Africa and Asia

By 2030, give access to *Clean Cooking* to

100 M

people in Africa and India

Universal access to clean energy is one of the main aims of the United Nations Sustainable Development Goals. TotalEnergies' mission is to deliver energy that is more available, more affordable, more sustainable and accessible to the greatest number of people.

The energy transition relies in part on using more electricity, to which we have devoted nearly 4 G$ of our investments in 2024. We estimate that around a third of our development will be in emerging countries, as described in our SDG7 Energy Compact[1] which will enable around 40 million people to benefit from decent or more reliable access to energy for the first time by 2030.

Access to clean energy for cooking, is another essential prerequisite for economic and social development in emerging countries. Today, 2.3 billion people in the world do not have access to it[2].

By substituting Liquefied Petroleum Gas (a fossil fuel) in the form of bottled gas for wood and charcoal, "*Clean Cooking*" has a positive effect on people's health, the environment and the economy[3]. LPG is indeed more efficient for cooking, emits less CO_2 and particles harmful to health than charcoal. It also reduces some of the negative impacts of traditional biomass use, notably on women (time saved facilitating access to education and employment) and on the environment (deforestation). ■

HIGHLIGHTS

Clean Cooking: an Enhanced Ambition

In May 2024, we announced our ambition to give access to *Clean Cooking* to 100 million people in Africa and India by 2030. To achieve this, the Company will invest more than 400 M$ in the development of LPG for cooking.
In 2024, TotalEnergies distributed 990 kt of bottled LPG in Africa[4] and Asia[5], serving 15 million households and around 60 million people.

In order to facilitate access to *Clean Cooking*, "Pay as you cook" payment solutions have been launched in Kenya and Rwanda. They allow the customer to pay only as the LPG bottle is used instead of having to advance the entire value of the volume of the bottle. At the end of 2024, 100,000 people are benefiting from it.

COP29: TotalEnergies, bp, Equinor and Shell Join Forces to Help Increase Access to Energy

In 2024, on the occasion of COP29, we announced that we would join forces with bp, Equinor and Shell to support energy access in sub-Saharan Africa and South and Southeast Asia. With 500 M$ in capital, this joint investment seeks to support high-impact projects aiming to help millions of people in underserved communities gain access to electricity and improved cooking conditions. Investments will be directed to create both social impact and financial returns.

1. https://www.un.org/en/energycompacts/page/registry#TotalEnergiesSE. **2.** www.iea.org: "Vision for *Clean Cooking* access for all", July 2023. **3.** www.cleancooking.org. **4.** In the following countries and territories: Tanzania, Rwanda, Namibia, Senegal, Ivory Coast, Cameroon, South Africa, Kenya, Uganda, Togo, Morocco, Tunisia, Gabon, Mauritius, Burkina Faso, Mayotte and La Reunion. **5.** In India and Vietnam.

Working Alongside Our Suppliers

SUPPLIERS AUDITS

Since 2023,

990

assessments via documentary audits or on-site audits

600

on-site audits

Corrective action plans implemented following on-site audits by

261

suppliers

TotalEnergies works with over 100,000 suppliers of goods and services worldwide, for a total spend of around 31 B$ in 2024. We can play a major role in encouraging our suppliers to improve their sustainability.

Axis 1 • Training our buyers

By the end of 2024, 65% of TotalEnergies' procurement function had been trained in sustainable procurement. Additional awareness- raising actions are regularly carried out through thematic webinars.

Axis 2 • Raising awareness of suppliers

The Company regularly raises awareness among its suppliers regarding sustainable development, through supplier days such as in China in March 2024, and also through dedicated training sessions, such as the one organized this year in Angola.

Axis 3 • Integration of our sustainability requirements into our purchasing process

On the basis of its Fundamental Principles of Purchasing[1], updated in 2022, TotalEnergies ensures the integration of societal and environmental criteria at key stages of the purchasing process. Since 2024, synthesis tools enable buyers to look up suppliers' maturity with regard to the various aspects of sustainability. This maturity is assessed by means of documentary audits or on-site audits, as well as on the basis of their climate commitments.

Axis 4 • Evaluating our suppliers

In 2023, the Company has set itself the target of assessing its 1,300 priority suppliers on all aspects of sustainable development by the end of 2025. By the end of 2024, 76% of them, which means 990, have been assessed through documentary and on-site audits (37% by the end of 2023).

Axis 5 • Support of suppliers

The Company ensures that its suppliers are committed to continuous progress. In 2024, it strengthened its supplier climate commitment program and brought together 300 suppliers for an awareness-raising webinar. In this context, it also conducted training in collaboration with the Carbon Disclosure Project (CDP) supply chain program, allowing them to gain maturity and adopt an objective to reduce their emissions. ■

HIGHLIGHTS

Suppliers Day 2024

Every two years, the Company organizes a Suppliers Day with its strategic suppliers. In November 2024, the 4th edition of this event brought together 300 participants and notably enabled the Chairman and CEO and two members of the Executive Committee to reiterate the fundamentals of the Company's approach to sustainable development. The event also saw Vinci Energies receive a Sustainability Award for an initiative to recover and recondition spare parts from discarded valves.

1. https://totalenergies.com/sites/g/files/nytnzq121/files/documents/2022-05/Brochure_Fundamental_Principles_of_Purchasing.pdf

FOCUS TotalEnergies in France: Local Anchoring

MORE THAN 8 B€ INVESTED IN FRANCE SINCE 2020, ALMOST HALF OF WHICH IN THE ENERGY TRANSITION[1]

ENERGY TRANSITION

Nearly **1 B€** invested in low-carbon energy[2]

Nearly **25,000** **electric recharging stations operated**

More than **2 GW** of **renewable electricity generation capacity** in France

Progressive **transformation** and **reduction of the emissions of our refineries**

-40% of **CO_2 emissions** on our French refining and petrochemical sites between 2015 and 2023

Major Player in HVO[3] and Biogas production

EMPLOYMENT & ECONOMY

35,000 **employees in France**

2,300 **recruitment** on permanent contract

2,400 **recruitment on** fixed-term contracts apprenticeships and professionalization

141 **SMEs sustained** by PTZ[6], representing 3,500 jobs

650,000 **individual shareholders** (up by 15%)

OUR CUSTOMERS

1.99 €/l **price cap fuel for all and** and 1.94 €/l for our electricity and gas customers

300 **gas-station attendant** and creation of the profession of borniste[4] recruited to serve customers in service stations

Decarbonizing our products: biojet for aeronautics, biogas and renewable electricity for industry

Reopening of **25** **rural stations**

SOLIDARITY

100 M€[(5)] contribution to **Notre-Dame restauration** project

5 M€ **million euros** in donation for Mayotte

100,000 **young people** supported by **the Fondation**

22,000 **youngsters** discover **rugby** with the *"Tournoi National des quartiers et des campagnes"*

1. More details in the press release https://totalenergies.com/system/files/documents/totalenergies_TotalEnergies-en-France-ancrage-territorial-historique_2025_fr.pdf **2.** Low-carbon energies electricity, renewable energies, biofuels, biogas, plastics recyclingelectromobility renewable, low-carbon hydrogen. **3.** Hydrotreated Vegetable Oil. **4.** Employees helping customers to recharge their electric vehicles at recharging stations. **5.** Donation of 100 M€ in 2019 to the Fondation du Patrimoine. **6.** Interest-free loan.

Performance Indicators

Data management analyst, establishing a report with key performance indicators and connected metrics.

Key Performance Indicators

Following the adoption of the CSRD (Corporate Sustainability Reporting Directive) by the European Commission, TotalEnergies has published its consolidated sustainability information for the 2024 financial year in its Universal Registration Document, in accordance with the ESRS (European Sustainability Reporting Standards). This introduces, for certain indicators, a calculation based on the "ESRS perimeter," which differs from the historical calculation perimeter.

The extra-financial performance indicators presented below are derived from TotalEnergies' Sustainability Report, which has been subject to a limited assurance report by the auditors Ernst & Young Audit and PricewaterhouseCoopers Audit. Additionally, TotalEnergies has requested its auditors to issue a reasonable assurance report on a selection of Climate indicators marked with an asterisk below.

Climate

- Direct GHG emissions (operated* and ESRS perimeters) (scope 1).
- Indirect GHG emissions from energy use (operated* and ESRS perimeters) (scope 2).
- GHG emissions (scopes 1 & 2) from operated oil & gas facilities*.
- Other indirect GHG emissions related to the use by customers of energy products (Scope 3 category 11).
- Estimates of enabled emissions reductions by TotalEnergies' LNG sales and renewable electricity production.
- Flared gas (Upstream oil & gas activities, operated scope).
- Routine flaring.
- Lifecycle carbon intensity of energy products used by the customers.
- Intensity of GHG emissions (Scopes 1 & 2) of operated Upstream oil & gas activities.
- Methane emissions from Company operated activities*.
- Intensity of methane emissions from operated oil& gas facilities (Upstream).

Health Safety

- Health and safety management system coverage rate.
- Millions of hours worked.
- Number of occupational fatalities.
- Number of occupational fatalities per hundred millions hours worked.
- TRIR (number of recorded injuries per million hours worked.)
- LTIR (number of lost time injuries per million hours worked).
- LTIS (number of days lost due to accidents at work per million hours worked).
- Number of severe road accidents.
- Loss of primary containment Tier 1 and Tier 2.
- Number of occupational illnesses recorded in the year (in accordance with local regulations).
- Percentage of employees with specific occupational risks benefiting from regular medical monitoring.

Social

- Total number of employees.
- Percentage of women among permanent contract recruitment, among management recruitment, among total employees, among managers, among senior executives.
- Percentage of employees of non-French nationality among permanent contract recruitment, among management recruitment, among total employees, among managers, among senior executives.
- Percentage of employees that received a direct salary that exceeds the living wage in the country or region in which they work.
- Average number of training days/year per employee, per segment, per geographical areas and per type of training.
- Percentage of companies offering the option of regular remote working.
- Percentage of employees choosing remote working when given the option.
- Percentage of companies with labor union representation and/or employee representation.
- Percentage of employees covered by a collective bargaining agreement.
- Number of active agreements signed with employee representatives worldwide and in France.

Human Rights

- Percentage of subsidiaries in the One MAESTRO rollout scope with an operational activity which have a grievance mechanism in place.

Environment

- SO_2 emissions.
- NO_x emissions.
- NMVOC emissions.
- Total particulate matters.
- Hydrocarbon content of offshore water discharges.
- Hydrocarbon content of onshore water discharges.
- Percentage of sites that meet the target for the quality of offshore discharges.
- Percentage of sites that meet the target for the quality of onshore discharges.
- Fresh water withdrawals excluding cooling water.
- Fresh water withdrawal in water stress area.
- Fresh water consumption.
- Accidental liquid hydrocarbon spills of a volume of more than one barrel that affected the environment, excluding sabotage (number and total volume of spills, total volume recovered).
- Quantity of non-hazardous and hazardous waste
- Quantity of non-hazardous and hazardous waste valorized.
- Percentage of waste processed per treatment process (valorization, landfill, other).
- Number of environmentally material sites and ISO 14001 certified.

Energy Transition

	Unit	2015	2020	2021	2022	2023	2024
Energy mix of productions							
Oil	%	44	44	44	45	52	50
Gas	%	56	54	53	50	42	43
Electricity	%	< 1	2	3	5	6	7
Low-carbon molecules[1]	%	0	< 1	< 1	< 1	< 1	< 1
Energy mix of sales							
Oil[2]	%	65	47*	44*	41	43	43
Gas[3]	%	33	45*	48*	50	47	44
Electricity	%	1	5*	6*	7	8	11
Low-carbon molecules[1]	%	1	2*	2*	2	2	2
Petroleum products							
Sales of petroleum products	Mb/day	2.4	1.8	1.8	1.7	1.6	1.5
Gas							
Overall LNG sales	Mt	13	38	42	48	44	40
Electricity							
Gross renewable electricity capacity[4]	GW	0	7	10	17	22	26
Net production[5]	TWh	2	14	21	33	33	41
Clients BtB and BtC	Millions	< 2	8	9	9	9	9
EV charging points	Thousands	0	22	26	42	60	78
Low-carbon molecules							
Production of biofuels	Mt	-	0.3	0.5	0.2	0.3	0.3
Production of biogas	TWh	-	-	< 1	1	1	1
Net investments	**B$**	**20**	**13**	**13**	**16**	**17**	**18**
Oil	B$	13	6	7	10	6	9
LNG & Gas	B$	7	5	2	2	5	4
Low-carbon energies	B$	0	2	4	4	6	5
Integrated Power	B$	0	2	3	4	5	4
Low-carbon molecules	B$	0	< 1	< 1	< 1	1	1
Energy consumption - operated 100%							
Net primary energy consumption	TWh	153	147	148	166	157	156
Renewable energy consumption	TWh	-	-	-	1	2	4
Energy management system							
Operated sites with an auditable energy management system (annual consumption > 50 ktoe)[6]	Nb	-	26	27	27	34	35
Operated sites with annual consumption > 50 ktoe[7]	Nb	-	42	46	46	43	42

***** Valuation of these indicators excluding Covid-19 effect. **1.** Biofuels, biomass, biogas and H_2. **2.** Sales of Petroleum products (from Marketing & Services and bulk refining sales). **3.** Marketable gas production of Exploration & Production and LNG sales. **4.** Gross installed renewable electricity generation capacity. **5.** Company share perimeter. **6.** Including ISO 50001 standard that accompanies the implementation in companies of an energy management system that allows better use of energy. **7.** Excluding combined-cycle natural gas power plants that are power generation facilities whose gas consumption is optimized for maximum efficiency. These installations benefit from efficient energy management and do not require the implementation of a specific energy management system.

Taxonomy

		ELIGIBLE ACTIVITIES						ALIGNED ACTIVITIES					
	Unit	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Controlled perimeter		**Turnover**			**CapEx**			**Turnover**			**CapEx**		
Electricity and renewables	%	3.0	2.1	2.1	13.7	23.5	16.8	1.1	1.1	1.3	13.3	22.9	13.7
Incl. electricity generation from natural gas	%	*1.8*	*0.9*	*0.7*	*0.3*	*0.3*	*3.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Biofuels and chemicals	%	4.4	4.2	4.7	3.1	3.8	3.1	0.1	0.2	0.2	0.6	2.3	1.4
Other eligible activities	%	0.1	0.2	0.4	0.6	0.8	1.0	0.1	0.1	0.4	0.6	0.5	0.4
TOTAL	%	**7.5**	**6.5**	**7.2**	**17.4**	**28.1**	**20.9**	**1.3**	**1.4**	**1.9**	**14.5**	**25.7**	**15.5**

Proportional view		**Turnover**			**CapEx**			**Turnover**			**CapEx**		
Electricity and renewables	%	3.2	3.1	2.9	29.8	29.5	24.5	1.4	2.0	1.9	29.5	29.0	21.6
Incl. electricity generation from natural gas	%	*1.6*	*0.8*	*0.8*	*0.2*	*0.2*	*2.8*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Biofuels and chemicals	%	5.5	5.3	5.9	3.5	3.5	4.8	0.1	0.3	0.4	0.6	2.1	2.4
Other eligible activities	%	0.2	0.2	0.4	0.7	0.9	1.1	0.2	0.2	0.4	0.7	0.6	0.8
TOTAL	%	**8.9**	**8.6**	**9.2**	**34.0**	**33.9**	**30.4**	**1.7**	**2.5**	**2.7**	**30.8**	**31.7**	**24.8**

Eligible activities – Aligned activities

An eligible activity[1] is an activity that falls into one of the following categories on the list established by the European Commission: low-carbon, transitional[2] or enabling[3].

An aligned activity is an eligible activity that also meets a sustainability criterion; in other words, it contributes to one of the environmental objectives[4], without adversely affecting the other environmental objectives and meets minimum standards.

1. Described in Delegated Regulations (EU) 2021/2139 of June 4, 2021, (EU) 2021/2178 of July 6, 2021 and (EU) 2023/2486 of June 27, 2023. **2.** Activities for which there is currently no economically or technologically viable low-carbon alternative. **3.** Activities that enable other activities to contribute to the achievement of one of six environmental objectives. **4.** The Taxonomy regulation includes two climate objectives: (1) mitigation of climate change, and (2) adaptation to climate change; and four other environmental objectives relating to the sustainable use and protection of water and marine resources; the transition to a circular economy; pollution prevention and control; and the protection and restoration of biodiversity and ecosystems.

Climate

	Unit	OPERATED PERIMETER - 100% 2015	2020	2021	2022	2023	2024	EQUITY INTEREST PERIMETER 2015	2020	2021	2022	2023	2024	ESRS PERIMETER 2023	2024
GHG Emissions - Scope 1+2															
Scope 1- Direct emissions	**Mt CO_2e**	**42**	**38***	**34***	**37**	**32**	**33**	**50**	**52**	**49**	**51**	**45**	**43**	**44**	**43**
Breakdown by segment															
Upstream oil & gas activities	Mt CO_2e	19	16	14	14	12	12	22	24	23	22	19	18	20	18
Integrated LNG, excluding upstream gas operations	Mt CO_2e	-	< 1	< 1	< 1	< 1	< 1	-	1	1	1	1	1	1	1
Integrated Power	Mt CO_2e	-	3	5	9	6	7	-	4	5	9	6	6	6	7
Refining & Chemicals	Mt CO_2e	22	17	15*	15	14	14	27	22	19	20	18	18	17	17
Marketing & Services	Mt CO_2e	< 1	< 1	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Breakdown by geography															
Europe: EU 27 + Norway + UK + Switzerland	Mt CO_2e	22	22*	20*	23	19	18	22	20	18	21	18	16	22	20
Eurasia (inclu. Russia) / Oceania	Mt CO_2e	5	1	1	< 1	< 1	< 1	13	17	17	15	12	12	3	4
Africa	Mt CO_2e	12	10	9	9	8	7	9	7	7	7	7	7	11	10
Americas	Mt CO_2e	4	4	5	5	5	7	5	7	7	8	7	8	8	9
Breakdown by type of gas															
CO_2	Mt CO_2e	39	34	32	36	31	32	-	-	47	50	43	42	42	41
CH_4	Mt CO_2e	2	2	1	1	1	1	-	-	1	1	1	1	1	1
N_2O	Mt CO_2e	< 1	< 1	< 1	< 1	< 1	< 1	-	-	< 1	< 1	< 1	< 1	< 1	< 1
Scope 2 Market-based – Indirect emissions from energy use	**Mt CO_2e**	**4**	**3***	**2***	**2**	**2**	**1**	**-**	**-**	**5**	**5**	**4**	**3**	**3**	**2**
of which Europe: EU 27+ Norway + UK + Switzerland	Mt CO_2e	2	2*	1*	1	1	1	-	-	2	2	2	1	1	1
Scope 1+2	**Mt CO_2e**	**46**	**41***	**37***	**40**	**35**	**34**	**-**	**-**	**54**	**56**	**49**	**46**	**47**	**45**
	vs 2015		-9%*	-20%*	-13%	-24%	-25%								
of which oil & gas facilities	Mt CO_2e	46	39*	33*	33	30	29	-	-	49	48	44	41	43	40
of which CCGT	Mt CO_2e	-	3*	4	7	4	5	-	-	5	8	5	5	4	5
GHG Emissions – Methane															
Methane emissions[1]	**kt CH_4**	**94**	**64**	**49**	**42**	**34**	**29**	**-**	**-**	**51**	**47**	**40**	**33**		
	vs 2020			-23%	-34%	-47%	-55%								
Breakdown by segment															
Upstream oil & gas activities	kt CH_4	92	62	48	41	33	27	-	-	48	43	36	31		
Integrated LNG, excluding upstream gas operations	kt CH_4	0	< 1	< 1	0	< 1	< 1	-	-	2	3	2	1		
Integrated Power	kt CH_4	0	< 1	< 1	1	< 1	< 1			< 1	1	< 1	< 1		
Refining & Chemicals	kt CH_4	1	1	1	1	1	1	-	-	1	1	1	1		
Marketing & Services	kt CH_4	0	0	0	0	0	0	-	-	0	0	0	0		
Breakdown by geography															
Europe: EU 27 + Norway + UK + Switzerland	kt CH_4	9	12	7	7	6	5	-	-	5	5	4	4		
Eurasia (inclu. Russia) / Oceania	kt CH_4	33	3	1	1	1	3	-	-	16	15	11	9		
Africa	kt CH_4	49	31	23	23	18	16	-	-	18	17	19	16		
Americas	kt CH_4	3	18	18	12	9	5	-	-	12	10	7	4		
Flaring															
Flared gas[2] (Upstream oil & gas activities operated scope)	Mm^3/j	7.2	4.2	3.6	3.3	2.5	2.5								
of which routine flaring	Mm^3/j	2.3[3]	0.6	0.7	0.5	0.3	0.5								

*The GHG emissions within the **ESRS perimeter** correspond to 100% of the emissions from operated sites, plus the equity share of emissions from non-operated and financially consolidated assets excluding equity affiliates.*

* Excluding Covid-19 effect for 2020 and 2021 emissions data. **1.** Excluding biogenic methane. **2.** This indicator includes safety flaring, routine flaring and non-routine flaring. **3.** Volumes estimated upon historical data.

Climate

Indirect GHG emissions - Scope 3 - Category 11	Unit	2015	2020	2021	2022	2023	2024
Scope 3 - Category 11[1]	**Mt CO_2e**	**410**	**400***	**400***	**389***	**351**	**342**
of which Europe: EU 27 + Norway + UK + Switzerland	Mt CO_2e	256	215*	220*	191*	212	160
Breakdown by product							
Petroleum products	Mt CO_2e	350	320*	285*	254*	227	218
	vs 2015		-9%*	-19%*	-27%*	-35%	-38%
Gas	Mt CO_2e	60	80*	115*	130	124	124
Biofuels	Mt CO_2e	-	-	-	4	-	-

Estimates of enabled emissions reductions[2]							
by TotalEnergies' LNG sales	Mt CO_2e	-	-	-	~70	~70	~65
by TotalEnergies' renewable power generation	Mt CO_2e	-	-	-	-	-	~18

Intensity indicators							
Lifecycle carbon intensity of energy products sold (73 g CO_2 e/MJ in 2015)	Base 100 in 2015	100	92*	90*	88	87	83.5
Intensity of GHG emissions (Scope 1+2) of operated Upstream oil & gas activities[3]	kg CO_2e/boe	21	18	17	17	17	17
Intensity of methane emissions from operated oil & gas facilities (Upstream)	%	0.23	0.15	0.13	0.11	0.11	0.10

***** Excluding Covid-19 effect for emissions data from first half 2020 through first half 2022. **1.** Scope 3 category 11 GHG protocol: Oil products including bulk sales refining sales; natural gas excluding minority stakes in public companies. In accordance with ESRS standards, emissions resulting from biomass combustion are excluded from Scope 3 - Category 11 and reported separately in 2023 and 2024. In 2015, Scope 3 category 11 was published at 410 Mt CO_2e. The Company keeps this reference to assess the evolution of its Scope 3. If the Scope 3 category 11 for 2015 had been recalculated according to the IPIECA value chain methodology (published in 2016) on the gas value chain, as introduced in data disclosures from 2021, then the Scope 3 category 11 of 2015 would have been 465 Mt CO_2e, including 344 Mt CO_2e for the oil value chain and 121 Mt CO_2e for the gas value chain. **2.** Potential emissions reductions that may have been contributed by TotalEnergies'LNG sales and renewable power generation. **3.** This indicator doesn't include integrated LNG assets in its perimeter. **4.** Oil products including bulk refining sales; natural gas excluding minority stakes in public companies. **5.** Cradle-to-gate emissions from purchases of goods and services, excluding those reported in other categories. Calculated with the sum of purchases (excluding energy products resold) multiplied by specific external monetary ratios, as well as emissions corresponding to purchases of crude oil and oil products (net of the productions from the Company), medium and long-term LNG supply contracts and upstream biofuel emissions (in accordance with ESRS standards) calculated on the basis of emissions from the equivalent fossil fuel to which a standard abatement rate is applied. **6.** Cradle-to-gate emissions from purchases of capital goods such as drilling, subsea equipment, valves, static equipment's purchase categories. Calculated with the sum of the purchases multiplied by specific monetary ratios. **7.** Cradle-to-gate emissions related to B2B/B2C electricity sales (excluding trading) net of TotalEnergies' electricity production in Europe. **8.** Upstream emissions related to the transport of energy products, including measured emissions from shipping excluding time charters over 12 months reported in Scope 1+2 (in accordance with ESRS standards) and estimated emissions related to land transport purchase categories, calculated with the sum of purchases multiplied by specific external monetary ratios. **9.** Cradle-to-gate emissions from purchase categories linked to waste treatment and remediation. Calculated with the sum of purchases multiplied by specific external monetary ratios. **10.** Emissions related to employee business travel as reported by contractors. **11.** Emissions related to the commuting of the Company's employees. The estimate uses the average emission factor reported by INSEE per employee. **12.** Direct emissions related to long-term contracted assets, which mainly correspond to sea charters for the transport of energy products, already included in category 4. **13.** Emissions related to the downstream transport of B2B marketing sales in M&S and petroleum products bulk sales of Refining. **14.** Emissions related to the transformation of the main non-energy intermediate products sold (sulphur, polymers, bitumen), based on most representative or conservative external physical emission factors. **15.** Emissions related to the end of life of the main non-energy products sold (lubricants, polymers, bitumen, batteries). **16.** Not applicable, the Company did not identify emissions linked to third party leasing. **17.** Emissions associated with service stations operated by third parties, calculated with TotalEnergies' Scope 1+2 emission intensity. **18.** Scope 1+2 emissions from non-operated and non-consolidated activities (in accordance with ESRS standards), consolidated based on the Company's equity interest in the assets, or its share of production for oil and gas production assets. This category mainly concerns Scope 1+2 emissions from equity-accounted companies in liquefaction, refining and petrochemicals activities.

2024

Detailed value chain Scope 3 - Category 11[1]	Production	Midstream	Sales
	Oil 1.3 Mb/d (175 Mt CO_2e)	**Refining 1.5 Mb/d** (186 Mt CO_2e)	**Petroleum products 1.5 Mb/d** (218 Mt CO_2e)
	Natural Gas + condensates 1.1 Mboe/d (124 Mt CO_2e)	**Liquefaction 0.4 Mboe/d** (43 Mt CO_2e)	**LNG + B2B/B2C gas sales 1.1 Mboe/d** (114 Mt CO_2e)
		Third party long-term LNG purchases 0.4 Mboe/d (38 Mt CO_2e)	

The emissions associated with the various points on the value chains are not meant to be aggregated, given the integrated nature of our operations.

Indirect GHG emissions - Scope 3		Unit	2023	2024
Significant category of Scope 3				
Cat. 11	**Use of sold products**[4]	Mt CO_2e	**351**	**342**
Other categories of Scope 3				
Cat. 1	**Purchased goods and services**[5]	Mt CO_2e	**33**	**28**
Cat. 2	**Capital goods**[6]	Mt CO_2e	**3**	**4**
Cat. 3	**Fuel-and-energy-related activities (not included in Scope 1+2)**[7]	Mt CO_2e	**4**	**4**
Cat. 4	**Upstream transportation**[8]	Mt CO_2e	**6**	**6**
Cat. 5	**Waste generated in operations**[9]	Mt CO_2e	**< 1**	**< 1**
Cat. 6	**Business travel**[10]	Mt CO_2e	**<1**	**< 1**
Cat. 7	**Employee commuting**[11]	Mt CO_2e	**< 1**	**< 1**
Cat. 8	**Upstream leased assets**[12]	Mt CO_2e	**0**	**0**
Cat. 9	**Downstream transportation**[13]	Mt CO_2e	**1**	**1**
Cat. 10	**Processing of sold products**[14]	Mt CO_2e	**5**	**5**
Cat. 12	**End of life treatment of sold products**[15]	Mt CO_2e	**10**	**11**
Cat. 13	**Downstream leased assets**[16]	Mt CO_2e	**n/a**	**n/a**
Cat. 14	**Franchises**[17]	Mt CO_2e	**< 1**	**< 1**
Cat. 15	**Investments**[18]	Mt CO_2e	**13**	**14**

TotalEnergies has carried out an estimate of the 15 Scope 3 categories for the years 2023 and 2024 and has retained category 11 as significant, based in particular on the magnitude of its estimated GHG emissions, in line with its practice since 2017 and in continuity of the declaration of extra-financial performance.
In line with our commitment to transparency, TotalEnergies is publishing an estimate of indirect emissions in other Scope 3 categories according to the GHG Protocol and Ipieca classification. The values of these estimates may change from year to year as estimation methodologies progress.

Estimation of Enabled Emissions Reductions by the Sales of LNG by TotalEnergies – 2024

COUNTRY OF DESTINATION	2024 LNG Sales (Mt)	LNG displacing	Emission factor Gas-to-power (kt CO_2e/TWh)	Emission factor Oil-to-power (kt CO_2e/TWh)	Emission factor Coal-to-power (kt CO_2e/TWh)	Part of Gas used for Power Generation	Estimation of Enabled Emission Reduction (Mt CO_2e)	Efficiency[2] (t CO_2e reduction/ t GNL)
China	4.4	coal	335	-	929	-	**16.2**	3.7
Greece	0.8	oil/coal	386	805	1,086	66%	**1.9**	2.3
Japan	2.7	oil/coal	382	767	905	66%	**5.7**	2.1
South Korea	5.2	oil/coal	352	965	943	58%	**11.0**	2.1
Taiwan	1.6	oil/coal	441	812	844	78%	**3.2**	2.0
United Kingdom	0.8	oil/coal	374	612	1,481	34%	**1.6**	1.9
Italy	0.7	oil/coal	354	812	1,008	37%	**0.9**	1.4
Bangladesh	0.5	oil/coal	475	866	916	55%	**0.7**	1.4
Dominican Republic	1.7	oil	449	658	-	-	**2.3**	1.3
Brazil	1.0	oil/coal	525	628	1,451	26%	**1.1**	1.1
Turkey	1.7	oil/coal	341	807	989	26%	**1.8**	1.0
Malaysia	0.9	oil/coal	437	834	1,015	28%	**0.9**	1.0
North West Europe[1]	10.3	oil/coal	343	567	915	25%	**8.7**	0.8
Indonesia	0.5	oil/coal	518	1,164	1,047	21%	**0.4**	0.7
India	1.2	oil/coal	498	1,227	988	19%	**0.7**	0.6
Others	5.7		-	-	-	-	**8.8**	-
Total	**40**						**65**	**1.6**

1. Belgium, France, Germany, Luxemburg, Netherlands. **2.** Enabled Emission Reduction (t CO_2e) / LNG Sales (t).

Estimation of Enabled Emissions Reductions by the Renewable Power Generation by TotalEnergies – 2024

COUNTRY OF GENERATION	Solar generation (TWh)	Wind onshore generation (TWh)	Wind offshore generation (TWh)	Hydro generation (TWh)	Total net generation (TWh)	TTE assets average emission factor (g CO_2e/kWh)	Non-renewable emission factor (g CO_2e/kWh)	Estimation of Enabled Emission Reduction (Mt CO_2e)
Africa	0.1	0.0	0.0	0.0	0.1	33	1,011	**0.1**
Argentina	0.1	1.0	0.0	0.0	1.1	13	535	**0.6**
Brazil	0.2	2.5	0.0	0.0	2.7	14	613	**1.6**
Chile	0.3	0.0	0.0	0.0	0.3	33	796	**0.2**
United States	3.6	2.0	0.0	0.0	5.6	25	525	**2.8**
Kazakhstan	0.2	0.0	0.0	0.0	0.2	33	929	**0.2**
Uzbekistan	0.3	0.0	0.0	0.0	0.3	33	531	**0.1**
Australia	0.2	0.0	0.0	0.0	0.2	33	968	**0.2**
China	0.3	0.0	0.0	0.0	0.3	33	1,025	**0.3**
India	6.7	1.2	0.0	0.0	7.9	30	1,073	**8.2**
Taiwan	0.0	0.0	0.3	0.0	0.3	12	776	**0.3**
Rest of Asia Pacific	0.4	0.0	0.0	0.0	0.4	33	961	**0.4**
Europe	1.0	2.8	1.6	0.3	5.8	15	507	**2.9**
United Arab Emirates	0.1	0.0	0.0	0.0	0.1	33	426	**0.0**
Egypt	0.3	0.0	0.0	0.0	0.3	33	554	**0.1**
Israel	0.0	0.0	0.0	0.0	0.0	33	632	**0.0**
Qatar	0.4	0.0	0.0	0.0	0.4	33	500	**0.2**
Rest of Middle East	0.2	0.0	0.0	0.0	0.2	33	602	**0.1**
Total	**14.2**	**9.5**	**2.0**	**0.3**	**26**			**18**

Health and Safety

Occupational Safety	Unit	2020	2021	2022	2023	2024
Health and safety management system coverage rate[1]	%	-	-	91	91	91
of which coverage of operating activities[2]	%	-	-	100	100	100
Millions of hours worked - All personnel	Mh	389	389	392	400	400
Company Employees	Mh	211	215	217	212	216
Contractors' Personnel	Mh	178	174	175	188	184
Number of occupational fatalities[3] - All personnel	Nb	1	1	3	2	1
Company Employees	Nb	0	1	0	0	0
Contractors' Personnel	Nb	1	0	3	2	1
Number of occupational fatalities[3] per hundred millions hours worked - All personnel	Nb/ 100 Mh	0.26	0.26	0.77	0.50	0.25
Company Employees	Nb/ 100 Mh	0.00	0.46	0.00	0.00	0.00
Contractors' Personnel	Nb/ 100 Mh	0.56	0.00	1.71	1.06	0.54
Number of occupational injuries - All personnel	Nb	289	285	263	252	219
Company Employees	Nb	134	127	130	108	95
Contractors' Personnel	Nb	155	158	133	144	124
Number of lost days due to accidents at work - All personnel	Nb	6,764	5,980	5,724	4,800	6,002
Company Employees	Nb	3,429	2,703	3,116	2,508	2,621
Contractors' Personnel	Nb	3,335	3,277	2,608	2,292	3,381
Number of severe road accidents[4]	Nb	27	21	15	11	13
Light vehicles and public transportation	Nb	0	1	3	4	4
Heavy goods vehicles (truck)	Nb	27	20	12	7	9

Health indicators (WHRS scope - Worldwide Human Resources Survey)						
Percentage of employees with specific occupational risks benefiting from regular medical monitoring	%	97	97	99	100	99
Number of occupational illnesses recorded in the year (in accordance with local regulations)	Nb	136	158	129	107	170

Occupational Safety	Unit	2020	2021	2022	2023	2024
TRIR[5]: number of recorded injuries per million hours worked - All personnel	Nb/Mh	0.74	0.73	0.67	0.63	0.55
Company Employees	Nb/Mh	0.63	0.59	0.60	0.51	0.44
Contractors' Personnel	Nb/Mh	0.87	0.91	0.76	0.77	0.67
LTIR: number of lost time injuries per million hours worked - All personnel	Nb/Mh	0.48	0.48	0.45	0.40	0.35
Company Employees	Nb/Mh	0.50	0.47	0.51	0.42	0.33
Contractors' Personnel	Nb/Mh	0.46	0.48	0.39	0.38	0.39
LTIS: number of days lost due to accidents at work[6] per million hours worked - All personnel	Nb/Mh	17	15	15	12	15
Company Employees	Nb/Mh	16	13	14	12	12
Contractors' Personnel	Nb/Mh	19	19	15	12	18

Safety prevention of major industrial accidents						
Losses of primary containment (Tier 1 and Tier 2)[7]	Nb	84	77	48	48	39
Losses of primary containment (Tier 1)	Nb	30	29	11	19	14
Losses of primary containment (Tier 2)	Nb	54	48	37	29	25

1. Percentage of personnel covered by a health and safety management system based on legal requirements and/or recognized standards or guidelines (calculation based on hours worked). New 2024 indicator calculated retroactively. **2.** Excluding headquarters activities, services activities and trading activities. **3.** Excluding occupational illnesses, for which the link with a possible fatality is a matter of medical confidentiality. Target zero fatalities. **4.** Overturned vehicle or other accident resulting in the injury of a crew member or a passenger (recordable accident). **5.** Target TRIR less than or equal to 0.62 in 2024 and 0.60 in 2025. **6.** Excluding occupational illnesses, as the cause of absenteeism is a matter of medical confidentiality. **7.** Excluding acts of sabotage and theft. Target losses of primary containment Tier 1 and 2 less than or equal to 45 in 2024 and 40 in 2025.

Employees

Employees	Unit	2020	2021	2022	2023	2024
Company's workforce Breakdown by region	Nb	**105,476**	**101,309**	**101,279**	**102,579**	**102,887**
Europe	%	**62.8**	**63.2**	**63.3**	**63.2**	**62.1**
of which France	%	34.0	34.7	34.5	34.6	34.9
Africa	%	**9.6**	**9.8**	**10.4**	**10.2**	**10.8**
North America	%	**6.8**	**7.5**	**6.0**	**6.0**	**5.9**
Latin America	%	**11.3**	**11.6**	**13.1**	**13.4**	**13.8**
Asia-Pacific	%	**6.7**	**7.2**	**6.5**	**6.4**	**6.6**
Middle East	%	**2.8**	**0.7**	**0.7**	**0.8**	**0.9**

Male / Female						
% of women						
Among all employees	%	**34.8**	**35.8**	**36.3**	**36.9**	**36.8**
Among senior management[1]	%	**21.1**	**22.6**	**23.8**	**25.1**	**25.8**
Among senior executives	%	**25.7**	**26.5**	**27.5**	**28.3**	**29.5**

Internationalization						
% of employees of non-French nationality						
Among senior management[2]	%	**32.1**	**34.0**	**34.2**	**36.3**	**36.4**
Among senior executives	%	**36.3**	**36.6**	**37.4**	**37.7**	**38.6**

Living wage[3]						
Employees receiving direct remuneration that is at least equal to the living wage in the country or region in which they work	%	-	**98**	**100**	**100**	**100**

Training	Unit	2020	2021	2022	2023	2024
Employees having attended at least one training course during the year	%	**84.6**	**93.0**	**97.3**	**97.7**	**97.9**
Average number of training days/year per employees[4]	jours	**2.4**[5]	**4.2**	**4.7**	**5.0**	**5.5**

Social dialogue						
Companies that have implemented flextime	%	**77.2**	**80.6**	**81.8**	**82.5**	**85.0**
Companies offering the option of occasional remote working	%	**87.4**	**84.3**	**83.3**	**82.5**	**85.0**
Employees covered by a collective bargaining agreement	%	**71.9**	**72.6**	**73.6**	**73.0**	**73.6**
Employees with labor union representation and/or employee representation	%	**91.7**	**90.8**	**91.8**	**91.5**	**92.3**
Number of active agreements signed with employee representatives worldwide	Nb	**281**	**347**	**330**	**404**	**346**

1. Restated 2020 to 2021 data. The percentage of women was 19.9% in 2021 and 18.2% in 2020 based on the previous calculation method, which did not include JL14 and senior executives. **2.** Restated 2020 to 2021 data. The percentage of employees of non-French nationality was 33.8% in 2021 and 31.8% in 2020 based on the previous calculation method, which did not include senior executives. **3.** A living wage is defined as income that, in exchange for standard work hours, allows employees to ensure a decent life for their families, cover their essential costs and cope with unforeseen events. This criterion applies to the so called *"périmètre de gestion"* i.e., all subsidiaries controlled at more than 50%. **4.** This number is calculated using the number of hours of training where 7.6 hours equal one day. **5.** On-the-job training information only available from 2021.

Environment

	Unit	OPERATED PERIMETER - 100% 2020	2021	2022	2023	2024
Environmental footprint						
Atmospheric chronic emissions (excluding GHG)[1]						
SO_2 emissions	kt	34	16	13	12	16
No_x emissions	kt	64	59	60	60	57
NMVOC emissions	kt	69	58	48	43	35
Total particulate matters	kt	-	3.8	3.9	4.1	3.4
Discharged water quality						
Offshore continuous water discharges hydrocarbon content	mg/l	12.8	13.7	12.9	11.6	11.2
% of sites that meet the target for offshore discharges quality (30 mg/l)[2]	%	100	92	93	92	93
Onshore continuous water discharges hydrocarbon content	mg/l	1.9	2.6	1.8	1.9	2.0
Sites that meet the 2030 target for onshore discharges quality: 1 mg/l	%	-	80	73	86	82
Water-related indicators						
Fresh water withdrawals excluding open loop cooling water	Mm^3	105	101	107	102	106
Fresh water withdrawal in water stress area[3]	Mm^3	52	54	55	50	51
Fresh water consumption[4]	Mm^3	-	-	58	55	56
Forest-related indicators						
Cumulative deforested area since 2022	ha	-	-	0	81	237
Cumulative compensated area since 2022	ha	-	-	0	59	245
Forest balance[5]	ha	-	-	0	-22	+8

	Unit	OPERATED PERIMETER - 100% 2020	2021	2022	2023	2024
Environmental management system						
ISO 14001 certified sites	Nb	266	279	284	281	297
Environmentally material sites and ISO 14001 certified	Nb	79	79	80	79	82
Environmentally material sites and ISO 14001 certified	%	97	100	100	100	100

	Unit	OPERATED PERIMETER - 100% 2020	2021	2022	2023	2024
Risks of accidental pollution						
Accidental liquid hydrocarbon spills						
Number of spills	Nb	50	65	49	27	24
Total volume of spills	10^3m^3	1.0	2.0	0.1	1.7	0.6
Total volume recovered	10^3m^3	-	1.7	0.1	0.0	0.0
Biodiversity[6]						
Respecting our commitment to voluntary exclusion zones						
No oil or gas exploration/extraction activity in Unesco areas		Respected	Respected	Respected	Respected	Respected
No oil field exploration activity in the arctic sea ice zone		Respected	Respected	Respected	Respected	Respected
New projects						
Biodiversity plans deployed or in preparation for our sites located in area of interest for biodiversity[7]	Nb	6	8	7	8	5
Existing sites						
Biodiversity diagnostics carried out on environmentally material sites	Nb cumulated	-	5	43	70	77
Waste management						
Company's waste balance and waste treatment processes[8]						
Total volume of processed waste	kt	501	500	498	521	573
Non-hazardous waste	kt	303	335	322	319	357
Hazardous waste	kt	198	165	176	202	216
Reuse[9]	%	59	61	61	61	71
Circular economy[10]						
Quantity of circular feedstock	Mt vs 2021	-	3.4	3.4 -	3.8 +10%	4.6 +33%
Sales from circular products	B$ vs 2021	-	4.2	5.4 +30%	4.5 +8%	4.0 -4%

1. In 2024, application of the thresholds of the E-PRTR regulation. **2.** Alwyn and Gryphon sites (United Kingdom) excluded in 2020, as its produced water discharges only occur during the maintenance periods of the water reinjection system and are subject to a specific regulatory declaration. **3.** From 2023, the freshwater withdrawal values in water stress areas are evaluated from the Projected Basic Water Stress 2030 V4.0 from August 2023 for material sites of company and the watershed of Carling - St Avold sites in France is excluded from these calculations since the withdrawal of groundwater is administratively imposed there for environmental reasons. **4.** Data from 2022 to 2023 has been recalculated to take into account the GRI definition. **5.** Zero net deforestation target from 2022 for each of new projects, on new sites. **6.** See section 5.2.4.5 of 2024 URD for detailed reporting on action plans implemented on our four Biodiversity axes.

7. IUCN zone (International Union for Conservation of Nature) I to IV and Ramsar areas for IFC standard projects. From 2024, only new projects are considered; sites that have been in production for more than 2 years are no longer included. **8.** Excluding drilling cuttings, excluding digestate from Biogas units, excluding sites that have ceased operations and are in the process of being remediated. **9.** Reuse includes recycling, material recovery and energy recovery. **10.** Equity interest perimeter.

Positive Impact for Stakeholders

	Unit	2020	2021	2022	2023	2024
Human rights						
Subsidiaries[1] with an integrated grievance mechanism	%	99	100	100	100	100
Number of complaints received in the reference year	Nb	-	-	-	638	1,414
Percentage of solved complaints[2]	%	-	-	-	80	87
Priority supplier audits[3]	Nb	79	83	200	300	300
Ethics and Human Rights audits	Nb	2	2	5	4	7
Fighting corruption						
Online anti-corruption training course attended[4]	Nb	9,701	13,215	38,624	17,195	15,247
Integrity[5] incidents recorded	Nb	326	350	207	200	223
Value sharing						
Net investments	G$	13	13	16	17	18
Dividends	G$	8	8	10	8	8
Buybacks[6]	G$	1	2	7	9	8
Salaries and social charges	G$	9	9	9	9	9
Taxes[7]	G$	6	16	33	25	22

1. Subsidiaries in the One MAESTRO roll-out scope with an operational activity. **2.** Number of complaints received / number of complaints solved in the reference year. **3.** On the respect of the Fundamental Principles of Purchasing including human rights. **4.** Training open to all employees and mandatory for target populations. New module launched in 2022. **5.** Incidents covering fraud (excluding attempts since 2022), corruption or influence peddling. **6.** In 2024, includes buybacks covering employee share allocation plans. **7.** Current tax expenses and taxes on production.

	Unit	2020	2021	2022	2023	2024
Initiatives of general interest						
Number of actions for *Action!* Program[1]	**Nb**	**4,119**	**8,146**	**11,028**	**13,975**	**14,603**
Europe	Nb	2,952	6,115	7,410	9,191	9,855
Africa	Nb	709	1,208	1,664	2,072	2,146
Asia	Nb	191	415	923	1,480	1,298
Latin America	Nb	159	253	609	786	1,009
North America	Nb	2	131	231	407	268
Oceania	Nb	106	24	191	39	27
TotalEnergies Corporate Foundation						
Expenditures of TotalEnergies Corporate Foundation	M€	46	73	65	54	64

1. Worldwide community volunteering program for employees who can devote up to three workdays a year to local community projects.

The Carbon Capture and Storage Projects

Integrating Capture and Storage into Our Assets

Assets	Project type	CO_2 origin	Country	Project operator	Upstream or downstream	CO_2 capture solution	CO_2 storage solution[1]	GHG reduction potential (100%)[2]
In operation								
Snøhvit	Capture and storage	Native CO_2[3]	Norway	Equinor	Upstream	Separation of native CO_2 from natural gas	Re-injection into the Snøhvit saline aquifer	0.7 MTPA
Under development								
North Field East (NFE)	Capture	Native CO_2[3]	Qatar	QatarEnergy LNG	Upstream	Separation of native CO_2 from natural gas	Transfer of CO_2 to QatarEnergy for storage in a saline aquifer	2.1 MTPA
North Field South (NFS)	Capture	Native CO_2[3]	Qatar	QatarEnergy LNG	Upstream	Separation of native CO_2 from natural gas	Transfer of CO_2 to QatarEnergy for storage in a saline aquifer	1.1 MTPA
Under study								
LNG North 2[4]	Capture	Native CO_2[3]	Qatar	QatarEnergy LNG	Upstream	Separation of native CO_2 from natural gas	Transfer of CO_2 to QatarEnergy for storage in a saline aquifer	0.6 MTPA
Ichthys Associated CCS project, named Bonaparte CCS	Capture and storage	Native CO_2[3]	Australia	Inpex	Upstream	Separation of native CO_2 from natural gas	Re-injection into a saline aquifer	4 MTPA
Refinery RC [Antwerp or Port-Arthur]	Capture	Anthropogenic CO_2[6]	Belgium - ARCaDe project[5] or United States	TotalEnergies	Downstream	Treatment and purification of CO_2-concentrated combustion stream to reach transport and storage specifications	To be confirmed[7]	0.7 MTPA

1. Captured CO_2 is intended for permanent storage in a saline aquifer or depleted reservoir. **2.** The GHG reduction potential is the volume of CO_2 injected into storage, excluding Scope 1+2 emissions generated by the CCS project. **3.** CO_2 naturally present in the reservoir before any hydrocarbon production or CO_2 injection. **4.** Ex-QatarGas 2. **5.** Antwerp Refinery Carbon capture **6.** Anthropogenic CO_2 is a by-product of human activity, typically combustion, the production of chemicals, steel or cement, and the gas separation process. **7.** Transport and storage solutions are currently being selected.

The Carbon Capture and Storage Projects

Offering Carbon Transport & Storage Services

Project	Project maturity	Operator	Clients	CO_2 transport: national or cross-border[1]	Terminal /CO_2 collection point	CO_2 storage countries	Type of CO_2 storage	CO_2 storage capacity (100%)	Start-up year
Ready for operation									
Northern Lights	Phase 1: Ready for operation *Phase 2: Studies completed, investment decision planned for 2025*	Northern Lights Joint Venture	Norcem, Celsio, Yara, Ørsted	Both national and cross-border	Øygarden terminal, Norway	Norway	Saline aquifer	Phase 1: 1.5 Mt CO_2/year *Phase 2: above 5 Mt CO_2/year*	2025
Under development									
Northern Endurance Partnership (NEP)	Phase 1: Investment decision taken in 2024 *Extension: Under study*	BP	Emitters from industrial region of Teesside	National	Teesside, United Kingdom	United Kingdom	Saline aquifer	Phase 1: 4 Mt CO_2/year *Extension: beyond 20 Mt CO_2/year*	2028
Under study									
Aramis	Phase 1: FEED[2] in progress *Extension: Under study*	TotalEnergies (Storage)	Emitters mainly from the Netherlands and Belgium	Both national and cross-border	Port of Rotterdam, Netherlands	Netherlands	Depleted gas field	Phase 1: 2.5 Mt CO_2/year *Extension: beyond 5 Mt CO_2/year*	2029
Bayou Bend	Pre-FEED in progress	Chevron	Industrial emitters in the Houston / Beaumont-Port Arthur area	National	Under study	United States	Saline aquifer	Above 10 Mt CO_2/year	2028-2029
Southern Cluster	Pre-FEED in progress	Petronas	Emitters from industrial zones in Asia, particularly Japan	Both national and cross-border	Under study	Malaysia	Depleted gas field and/or saline aquifer	Approx. 5 Mt CO_2/year	2029
Bifrost	Apraisal in progress	TotalEnergies	Emitters mainly from Denmark, Germany and the Baltic States	Both national and cross-border	Esbjerg, Denmark	Denmark	Depleted gas field and/or saline aquifer	Above 5 Mt CO_2/year	2030

1. National by pipeline, cross-border by ship or pipeline **2.** Front-End Engineering & Design.

Glossary

Units of measurement

b	barrel
B	billion
boe/d	barrel of oil equivalent per day
CO_2e	CO_2 equivalent
e	equivalent
G	giga
J	joule
k	thousand
M	million
MMBtu	million British Thermal Unit
Mm^3	million cubic meters
Mtpa	million tons per year (of LNG)
PJ	petajoule (10^15 joules)
t	metric ton
toe	ton of oil equivalent
TWh	terawatt-hour
W	watt

Acronyms

AI	Artificial Intelligence
BESS	Battery Energy Storage Systems
CCGT	Combined Cycle Gas Turbine
CCS	Carbon Capture & Storage
CCUS	Carbon Capture, Utilization and Storage
CNG	Compressed Natural Gas
EACOP	East African Crude Oil Pipeline
EPA	Environmental Protection Agency
ESS	Energy Storage Systems
FEED	Front-End Engineering Design
FID	Final Investment Decision
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
GRP	Gas, Renewables & Power
IEA	International Energy Agency
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
IPIECA	International Petroleum Industry Environmental Conservation Association
IRENA	International Renewable Energy Agency
ISSB	International Sustainability Standard Board
IUCN	International Union for conversation of Nature
LNG	Liquefied Natural Gas
NBS	Nature Based Solution
NFE	North Field East (Qatar)
NFS	North Field South (Qatar)
NGV fuel	Natural Gas Vehicle Fuel
OGCI	Oil & Gas Climate Initiative
ROACE	Return on Average Capital Employed
RTE	Transmission system operator (France)
SAF	Sustainable Aviation Fuel
SEC	Securities and Exchange Commission (US)
TNFD	Taskforce on Nature-related Financial Disclosures
UNEP-WCMC	United Nation Environment Program – World Conservation Monitoring Centre
WBCSD	World Business Council for Sustainable Development
WEF	World Energy Forum
WEO	World Energy Outlook
WRI	World Resource Institute
$	Abbreviation for the United States dollar

Definitions

Biogas

A renewable gas produced from the fermentation of organic waste. Biogas can be purified to obtain biomethane, which has the same properties as natural gas and can therefore be injected into the gas distribution network or used as an alternative fuel for mobility (bio-NGV or bio-LNG).

Biomethane

An upgraded biogas with the same characteristics as natural gas. Biomethane can be injected into the gas distribution network.

Contractor/service provider personnel

Any employee of a contractor or service provider working at a site that is part of the safety reporting Scope or assigned by a transport company under a long-term contract.

Decarbonization

Actions aimed at reducing the carbon intensity of activities or products and/or the greenhouse gas emissions of activities.

Enabled emissions reductions ("Scope 4")

The enabled emission reductions correspond to the difference between the emissions associated with a reference electrical production (alternative source) and the emissions associated with the solution provided by the Company, either from electrical production using gas supplied by TotalEnergies (by regasifying LNG) or from the electrical production of renewable power plants owned by the Company (solar and wind).

For LNG sales, the Company has identified, for each recipient

Glossary

country or region, the probable source of competing flexible electrical generation (alternative source). When the end use by customers is established and the alternative source identified, the difference between the emissions of the alternative fuel (fuel oil or coal) and gas has been calculated using the emission factors related to the electricity generation of each country or region for each of these sources, as published by the IEA (except for France, where the emission factors published by RTE France were used). For countries where the final use of LNG sales is not identified, this method is applied to LNG sales weighted by the percentage of gas used for electricity production in the local gas consumption.

For renewable electricity production, the methodology compares the emissions of the alternative non-renewable mix (alternative source, in accordance with the IRENA methodology) to those from solar or wind production. The emission factors used (published by the IEA) cover the entire life cycle of electricity production. The non-renewable production mixes are based on IEA data by country or continent.

Environmentally material sites

Production sites of the Exploration & Production segment subsidiaries, sites producing more than 250 kt/y in the Refining & Chemicals and Marketing & Services segments, and gas-fired power plants in the *Integrated Power* segment, operated by the Company.

Equity interest perimeter

The equity interest perimeter, which is distinct from the operated perimeter, includes all the assets in which the consolidated subsidiaries (including equity-accounted companies) have a financial interest or rights to production. This scope also includes subsidiaries that are not financially consolidated but are material from a sustainability point of view. Under the equity interest perimeter, the indicators are consolidated based on the Company's equity interest in the assets or its share of production for oil and gas production assets.

Greenhouse gases (GHG)

The six greenhouse gases named in the Kyoto Protocol: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6), with their respective 100-year time horizon GWP (Global Warming Potential) as described in the 2021 IPCC report[1]. HFCs, PFCs and SF_6 are virtually absent from the Company's emissions or are considered non-material, and are therefore no longer counted as of 2018.

Hydrocarbon spills

Accidental spills of liquid hydrocarbons that have an environmental impact and exceed one barrel in volume, excluding acts of sabotage and theft.

Lifecycle carbon intensity of energy products sold

This indicator measures the average GHG emissions of a unit of energy used by the Company's customers across its lifecycle (i.e., Scope 1+2+3), from production to end use by customers. This indicator is calculated as a division which takes into account:

For the numerator:

- emissions related to the production and conversion of energy products used by the customers of the Company;
- emissions related to the end use of energy products sold to TotalEnergies customers. For each product, stoichiometric emission factors[1] are applied to these sales to obtain an emission volume. For the biofuel value chain, lifecycle emissions (production, processing and end use) are calculated on the basis of the emissions of the equivalent fossil fuel to which a standard abatement rate is applied. Non-energy use products (bitumen, lubricants, plastics, etc.) are not taken into account;
- negative emissions stored through the use of Carbon Capture and Storage and nature-based carbon sinks projects (these volumes are nil up to 2024).

For the denominator:

- the quantity of energy sold, this being the sum of:
  - the energy quantities associated with the highest points in the oil and gas value chains, as determined in the Scope 3 calculation;
  - energy quantities associated with sales of biofuels (Marketing & Services sales and bulk refining sales), biogas and hydrogen;

1. For data published from 2024. For historical data up to 2023, the Company based its calculation on the IPCC 4th Assessment Report (2007) and has not restated the published figures given a very low impact (less than 1% of the Company's Scope 1 emissions).

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– quantities of electricity sold, based on sales by marketing entities in Europe, sales linked to aggregation activities (corresponding to medium/long-term purchases), production outside Europe and sales of EV charging station entities outside Europe. Electricity is placed on an equal footing with fossil fuels, taking into account average capacity factors and average efficiency ratios.

The carbon intensity indicator therefore corresponds to the average emissions associated with each unit of energy used by customers. To track changes in the indicator, it is expressed in base 100 compared to 2015.

Lost Time Injury Rate (LTIR)

Frequency rate of lost-time injuries.

Lost Time Injury Severity (LTIS)

Number of lost-time days due to accidents at work per million hours worked.

Low-carbon hydrogen

Hydrogen produced from non renewable resources but with greenhouse gas emissions below a maximum threshold. For example, the hydrogen produced from natural gas via the steam reforming process associated with a capture and storage (CCS) process. In Europe, the maximum threshold of greenhouse gas emission for low-carbon hydrogen is the same as that for renewable hydrogen, i.e. 3.38 kg CO_2e/kg H_2 according to the European Directive 2018/2001 named RED II. In common language, low-carbon hydrogen is often considered to include renewable hydrogen.

Operated Oil & Gas facilities

Facilities operated by the Company as part of its Upstream oil and gas activities as well as in its Refining & Chemicals and Marketing & Services segments. Facilities for power generation from renewable sources or natural gas, such as combined-cycle natural gas power plants are therefore excluded from this perimeter.

Operated perimeter

Activities, sites and industrial assets of which TotalEnergies SE or one of its subsidiaries has operational control, i.e. has the responsibility of the conduct of operations on behalf of all its partners.

Scope 1 GHG emissions

Direct emissions related to the Company's activities. Direct emissions of biogenic CO_2 are excluded from Scope 1 and reported separately.

Scope 2 GHG emissions

Indirect emissions attributable to brought-in energy (electricity, heat, steam), net of any energy sales, excluding purchased industrial gases (H_2). Unless otherwise indicated, TotalEnergies reports Scope 2 GHG emissions using the market-based method defined in the GHG Protocol.

Scope 3 GHG emissions: other indirect emissions

If not stated otherwise, TotalEnergies reports Scope 3 GHG emissions, category 11, which correspond to indirect GHG emissions related to the direct use-phase emissions of sold products over their expected lifetime (i.e., the Scope 1 and Scope 2 emissions of end users that occur from the combustion of fuels) in accordance with the definition of the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard Supplement. The Company follows the Oil & Gas industry reporting guidelines published by IPIECA, which comply with the GHG Protocol methodologies. In order to avoid double counting, this methodology accounts for the largest volume in the oil and gas value chains, i.e. the higher of the two production volumes or sales for end use. For TotalEnergies, in 2024, the calculation of Scope 3 GHG emissions for the oil value chain considers products sales (higher than production) and for the gas value chain, the marketable gas and condensates production (higher than gas sales, either as LNG or as direct sales to B2B/B2C customers). A stoichiometric emission factor (oxidation of molecules to carbon dioxide) is applied to these sales or production to obtain an emission volume. In accordance with the Technical Guidance for Calculating Scope 3 Emissions Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard which defines end users as both consumers and business customers that use final products, and with IPIECA's Estimating petroleum industry value chain (Scope 3) greenhouse gas emissions guidelines, under which reporting of emissions from fuel purchased for resale to non-end users (e.g. traded) is optional, TotalEnergies does not report emissions associated with trading activities.

Glossary

In accordance with ESRS, biogenic CO_2 emissions from the combustion or biodegradation of biomass (from sales of biofuels and biogas) are excluded from Scope 3 and disclosed separately. The biofuels value chain which was previously reported in Scope 3 category 11 is not included anymore and the 2023 and 2024 data have been consequently restated.

Serious road accident

Overturned vehicle or other accident resulting in the injury of a crew member or a passenger (recordable accident) involving a TotalEnergies vehicle or vehicle on long-term contract with TotalEnergies (> 6 months).

Socle Social Commun or 'Common Social Basis'

The 'Socle Social Commun' or 'Common Social Basis' (whereby all employees have the same rights) brings together the following in France: TotalEnergies SE, Elf Exploration & Production, TotalEnergies Marketing & Services, TotalEnergies Marketing France, TotalEnergies Additives and Fuels Solutions, TotalEnergies Lubrifiants, TotalEnergies Fluids, TotalEnergies Raffinage Chimie, TotalEnergies Petrochemicals France, TotalEnergies Raffinage France, TotalEnergies Global Information Technology Services, TotalEnergies Global Financial Services, TotalEnergies Global Procurement, TotalEnergies Global Human Resources Services, TotalEnergies Learning Solutions, TotalEnergies Facilities Management Services, TotalEnergies Consulting and TotalEnergies OneTech.

Tier 1 and Tier 2

Indicator of the number of loss of primary containment events with more or less significant consequences (fires, explosions, injuries, etc.), as defined by API 754 (for downstream) and IOGP 456 (for upstream) standards. Excluding acts of sabotage and theft.

Total Recordable Injury Rate (TRIR)

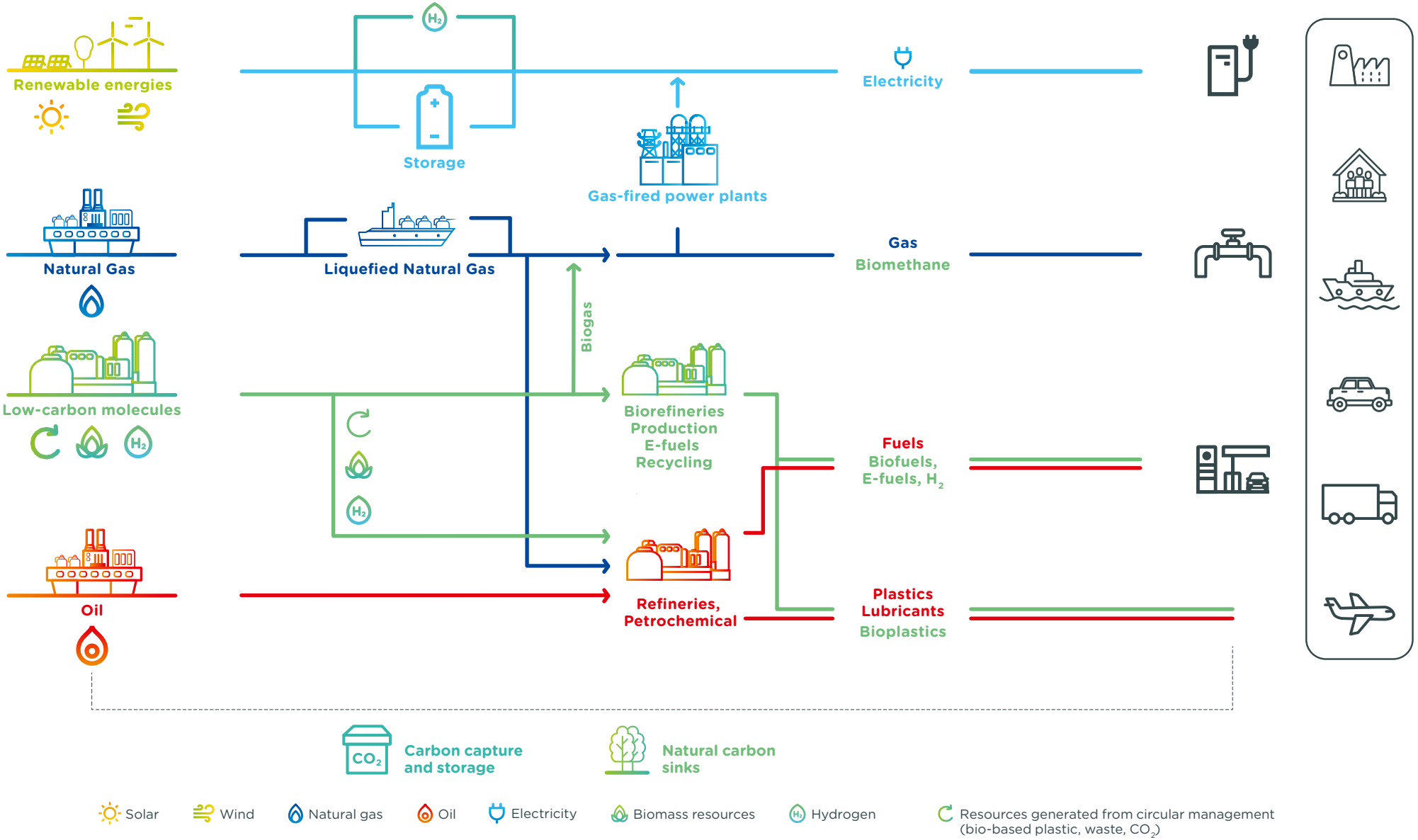
Frequency rate of recordable injuries.

Upstream oil and gas operations

Upstream oil and gas exploration and production operations of the Exploration & Production and Integrated LNG segments. Facilities for power generation from renewable sources or natural gas, such as combined-cycle natural gas power plants are therefore excluded from this perimeter.

Worldwide Human Resources Survey (WHRS)

An annual study that includes 284 workforce indicators linked to the Company's Human Resources policies, such as mobility, talent development, training, working conditions, social dialogue, deployment of the Code of Conduct, human rights and health. The survey covers 140 companies in 51 countries, representing 90.9% of the Company's consolidated workforce (93,516 employees). The data published in this document are taken from the most recent survey, carried out in December 2024 and January 2025.


PRODUCE
TRANSFORM AND TRANSPORT
DISTRIBUTE
Renewable energies
Natural Gas
Low-carbon molecules
Oil
Storage
Liquefied Natural Gas
Gas-fired power plants
Biogas
Biorefineries
Production
E-fuels
Recycling
Refineries,
Petrochemical
Electricity
Gas
Biomethane
Fuels
Biofuels,
E-fuels, H2
Plastics
Lubricants
Bioplastics
Carbon capture and storage
Natural carbon sinks
Solar
Wind
Natural gas
Oil
Electricity
Biomass resources
Hydrogen
Resources generated from circular management (bio-based plastic, waste, CO2)

Cautionary Note

The terms "TotalEnergies," "TotalEnergies company" or "Company" in this document are used to designate TotalEnergies SE and the consolidated entities that are directly or indirectly controlled by TotalEnergies SE. Likewise, the words "we," "us" and "our" may also be used to refer to these entities or to their employees. The entities in which TotalEnergies SE directly or indirectly owns a shareholding are separate legal entities. This document makes reference to greenhouse gas emissions. The Company has control over emissions from the facilities it operates (Scope 1) and their indirect emissions from purchased energy (Scope 2). By contrast, it does not have control over emissions from the end use of its products by its customers (Scope 3), and trends in those emissions depend largely on external factors, such as government policies and customer choices (for additional information on the definition of Scope 1, 2 and 3, refer to the Universal Registration Document). The use in this document of expressions such as "carbon intensity of the products sold by the Company," "carbon footprint of the Company" or similar expressions, insofar as they include Scope 3 emissions, does not mean that the latter are TotalEnergies emissions.

This document may contain forward-looking statements. Specifically, this document may contain statements regarding the perspectives, objectives, areas for improvement and goals of TotalEnergies, including with respect to climate change and the ambition of carbon neutrality by 2050, together with society. An ambition expresses an outcome desired by TotalEnergies, it being specified that the means to be deployed do not depend solely on TotalEnergies. These forward-looking statements may prove to be inaccurate in the future and are subject to a number of risk factors. Neither TotalEnergies SE nor any of its affiliates assumes any obligation with respect to investors or any other stakeholder to update or revise any forward-looking information or statement, objectives or trends contained in this document whether as a result of new information, future events or otherwise. Further information on risk factors that could have a significant adverse effect on the financial performance or operations of TotalEnergies is provided in the most recent version of the Universal Registration Document, which is filed by TotalEnergies SE with the French Autorité des Marchés Financiers and on Form 20-F filed with the United States Securities and Exchange Commission ("SEC").

About TotalEnergies

TotalEnergies is a global integrated energy company that produces and markets energies: oil and biofuels, natural gas, biogas and low-carbon hydrogen, renewables and electricity. Our more than 100,000 employees are committed to provide as many people as possible with energy that is more reliable, more affordable and more sustainable. Active in about 120 countries, TotalEnergies places sustainability at the heart of its strategy, its projects and its operations.

Iconography

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