



PRESS RELEASE

In view of the COP26, TotalEnergies contributes to the Energy Transition Dialogue by publishing the “Energy Landscape” and the “TotalEnergies Energy Outlook 2021”

Paris, September 27, 2021 – In view of the forthcoming COP26, multi-energy company TotalEnergies contributes to the Energy Transition discussion with two new documents aiming to provide a better understanding of the global energy system: the “Energy Landscape” and the “TotalEnergies Energy Outlook 2021” (available in English [here](#) and in French [here](#)).

Energy Landscape

The “Energy Landscape”, written in collaboration with Capgemini and energy expert Colette Lewiner, aims to provide an overview of the worldwide energy system as of 2021, to enlighten the ongoing energy transition. It provides facts-based information on energy supply and demand and on how to compare energies in an informed way. It also presents the technological progresses that have already been made and those still to come.

This document equally provides insights into the climate challenges and the progress needed to ensure a supply of energy that is affordable, reliable, and as carbon-free as possible to limit global warming, a challenge that concerns us all.

TotalEnergies Energy Outlook 2021

Published for a third consecutive year, the TotalEnergies Energy Outlook 2021 reexamines the two core scenarios – Momentum and Rupture – elaborated by TotalEnergies in order to achieve the energy transition by 2050, taking into consideration the current market and societal trends. It also integrates Net Zero pledges unveiled by several countries since the presentation of last year’s Energy Outlook.

- Similar to last year, TotalEnergies’ **Momentum** scenario is a forward-looking approach based on existing decarbonization strategies of net-zero pledged countries, as well as announced targets and NDCs (Nationally Determined Contributions) of other countries. Unlike last year, Momentum incorporates new net-zero-by-2050 pledges of major economies like the US, Japan and South Korea, as well as a more stringent policy framework for the EU and China’s net-zero-by-2060 ambitions. This scenario enables to temperatures’ rise to be limited at around 2,2 – 2,4° C compared to pre-industrial levels.
- TotalEnergies’ **Rupture** is a scenario built to reach the objectives of the Paris Agreement by 2050, with temperatures’ rise well-below 2°C vs pre-industrial levels. It involves large-scale cleantech advancements, higher penetration of new energy carriers and the engagement and actions from all countries to move towards net zero by the middle of the century.

“Energy transition is a global debate and there is consequently a necessity for society as a whole to participate,” declared **Patrick Pouyanné, Chairman and CEO of TotalEnergies**. “With these two documents, in line with our strategy to build a multi-energy company with an ambition to get to Net Zero by 2050 and our wish to put the sustainable development goals at the core of our strategy, TotalEnergies intends to share its understanding of the world of

energies, in order to contribute to the decisions that will have to be taken to tackle climate change.”

Helle Kristoffersen, President Strategy & Sustainability and member of the Executive Committee, presents these two documents today as an introduction to the Investors Days. This webcast will be streamed live and available for replay at the following address: <https://totalenergies.com/investors/results-investor-presentations/investor-presentations>

Below are some of the main assumptions and conclusions from the TotalEnergies Energy Outlook 2021:

- **Energy efficiency** is a key lever shared by all countries and one of a low-hanging fruit. The Momentum scenario takes into account an ambitious path in that matter, similar to the 2020 outlook.
- **Energy demand** grows in Momentum and Rupture, along with the growth of both world population and global economic development. In the meantime, emissions are down in both scenarios, particularly in Momentum, compared to the 2020 outlook with new energy carriers such as electricity in transportation and hydrogen allowing for deeper decarbonization of all sectors.
- The **ban on single-use plastics** from 2040 has been taken into account, in ‘Net Zero 2050 Countries’ in Momentum, and worldwide in Rupture.
- The **ban on sales of new internal combustion vehicles** from 2035 has also been applied to Net Zero 2050 Countries in Momentum. This hypothesis has for consequence a massive electrification of light vehicles and an increased penetration of hydrogen or of hydrogen-based fuels -such as e-fuels-, and of biofuels in other modes of transport.
- By extending the ban on sales of new internal combustion vehicles from 2035 to all countries around the world in the Rupture scenario, the TotalEnergies Outlook 2021 introduces a Rupture+ scenario, which allows to limit the temperature rise to 1,5°C.
- The **end-use demand** is met with **massive electrification**, yielding an increased demand for renewable-based electricity, solar and wind, which considerably increased compared to last year’s outlook.
- The assumption of **oil plateauing** before 2030 and declining thereafter has been integrated in Momentum and Rupture, while **natural gas** continues to play a role as a transition fuel, particularly when accompanied by carbon capture and methane emissions control solutions, throughout the projected timeframe covered by Momentum and Rupture.
- Finally, the incorporation of **new net zero pledges** in this year’s Momentum, and the ambitious application of equivalent pledges to all countries in Rupture, underscores the importance of a fair transition: one that addresses the challenge of ‘more energy, less emissions’ without penalizing growth and improved living standards in developing countries. The TotalEnergies Energy Outlook wants to address the need for energy to decarbonize , but also to remain globally accessible.

About TotalEnergies

TotalEnergies is a broad energy company that produces and markets energies on a global scale: oil and biofuels, natural gas and green gases, renewables and electricity. Our 105,000 employees are committed to energy that is ever more affordable, clean, reliable and accessible to as many people as possible. Active in more than 130 countries, TotalEnergies puts sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people.

TotalEnergies Contacts

Media Relations: +33 1 47 44 46 99 | presse@totalenergies.com | [@TotalEnergiesPR](https://www.instagram.com/TotalEnergiesPR)

Investor Relations: +44 (0)207 719 7962 | ir@totalenergies.com



[@TotalEnergies](https://twitter.com/TotalEnergies)



[TotalEnergies](https://www.linkedin.com/company/TotalEnergies)



[TotalEnergies](https://www.facebook.com/TotalEnergies)



[TotalEnergies](https://www.instagram.com/TotalEnergies)

Cautionary Note

This press release, from which no legal consequences may be drawn, is for information purposes only. The entities in which TotalEnergies SE directly or indirectly owns investments are separate legal entities. TotalEnergies SE has no liability for their acts or omissions. The terms “Company” or “TotalEnergies company” refer collectively to the company TotalEnergies SE and the companies it controls directly or indirectly. Such terms are used solely for the sake of convenience for purposes of the present communication. Likewise, the words “we”, “us” and “our” may also be used to refer to subsidiaries in general or to those who work for them. This document may contain forward-looking information and statements that are based on a number of economic data and assumptions made in a given economic, competitive and regulatory environment. They may prove to be inaccurate in the future and are subject to a number of risk factors. Neither TotalEnergies SE nor any of its subsidiaries assumes any obligation to update publicly any forward-looking information or statement, objectives or trends contained in this document whether as a result of new information, future events or otherwise.