

REBUILT

REENGINEERING BUSINESS UNDER CLIMATE CRISIS

Action Plan Implementation

COMPANY NAME AND WEBSITE:

TOTALENERGIES ([HTTPS://TOTALENERGIES.COM/](https://totalenergies.com/))

COMPANY DESCRIPTION:

MULTI-ENERGY COMPANY THAT PRODUCES AND MARKETS FUELS, NATURAL GAS AND ELECTRICITY

TOTALENERGIES IS A GLOBAL MULTI-ENERGY COMPANY THAT PRODUCES AND MARKETS ENERGIES: OIL AND BIOFUELS, NATURAL GAS AND GREEN GASES, RENEWABLES AND ELECTRICITY. THEIR EMPLOYEES ARE COMMITTED TO BETTER ENERGY THAT IS MORE AFFORDABLE, MORE RELIABLE, CLEANER AND ACCESSIBLE TO AS MANY PEOPLE AS POSSIBLE. ACTIVE IN MORE THAN 130 COUNTRIES, TOTALENERGIES' AMBITION IS TO BECOME THE RESPONSIBLE ENERGY MAJOR.

CREATED IN 1924 TO ENABLE FRANCE TO PLAY A KEY ROLE IN THE GREAT OIL AND GAS ADVENTURE. AS FOR THE COMPANY'S CULTURE, IT HAS BEEN FORGED ON THE GROUND, UNDERPINNED BY AN UNWAVERING COMMITMENT TO SAFETY AND PERFORMANCE. THROUGHOUT ITS LONG HISTORY, TOTALENERGIES WAS TO FREQUENTLY CROSS PATHS WITH TWO OTHER OIL COMPANIES, ONE FRENCH – ELF AQUITAINE – AND THE OTHER BELGIAN – PETROFINA.

IN 1999, THEY MERGED AND GAVE RISE TO THE FOURTH OIL MAJOR, A GROUP BUILT ON A WEALTH OF EXPERTISE AND EXPERIENCE. SOME 20 YEARS LATER, TOTAL BECAME TOTALENERGIES, DRIVEN BY A POWERFUL AMBITION: TO BE A WORLD-CLASS PLAYER IN THE ENERGY TRANSITION AND TO ACHIEVE,

TOGETHER WITH SOCIETY AS A WHOLE, CARBON NEUTRALITY IN ALL ITS GLOBAL ACTIVITIES BY 2050.

COMPANY'S CURRENT SITUATION (PROBLEMS):

TOTALENERGIES, AS A MAJOR PLAYER IN THE ENERGY TRANSITION, IS COMMITTED TO ADDRESSING CLIMATE CHANGE RELATED CHALLENGES AND ACHIEVING NET-ZERO EMISSIONS BY 2050, IN COLLABORATION WITH SOCIETY.

HOWEVER, LIKE ANY LARGE ENERGY COMPANY, THERE ARE ASPECTS OF THEIR OPERATIONS THAT MAY NOT ALIGN PERFECTLY WITH GREEN PRACTICES.

HERE ARE SOME POINTS TO CONSIDER:

BIOFUELS PRODUCTION: WHILE TOTALENERGIES HAS SET AMBITIOUS TARGETS FOR INCREASING THE SHARE OF CIRCULAR FEEDSTOCKS (SUCH AS USED OILS AND ANIMAL FATS) IN BIOFUEL PRODUCTION, THEY HAVE PREVIOUSLY SOURCED PALM OIL AND ITS DERIVATIVES. PALM OIL PRODUCTION CAN HAVE SIGNIFICANT ENVIRONMENTAL IMPACTS, INCLUDING DEFORESTATION AND HABITAT DESTRUCTION.

HISTORICAL PRACTICES: TOTALENERGIES HAS FACED CRITICISM FOR DOWNPLAYING CLIMATE RISKS IN THE PAST. ALTHOUGH THEY EMPHASIZE THEIR EFFORTS AND PROGRESS, SOME ARGUE THAT HISTORICAL PRACTICES SHOULD ALSO BE ACKNOWLEDGED. SUPPLY

CHAIN CHALLENGES: AS A GLOBAL COMPANY OPERATING IN CLOSE TO 130 COUNTRIES, TOTALENERGIES FACES SUPPLY CHAIN CHALLENGES. ENSURING SUSTAINABILITY AND MINIMIZING ENVIRONMENTAL IMPACT THROUGHOUT THE SUPPLY CHAIN CAN BE COMPLEX.

CARBON FOOTPRINT: DESPITE THEIR COMMITMENT TO LOWERING CARBON EMISSIONS, ENERGY PRODUCTION, PROCESSING, AND DELIVERY STILL CONTRIBUTE TO GREENHOUSE GAS EMISSIONS. ACHIEVING NET-ZERO EMISSIONS REQUIRES ONGOING EFFORTS TO REDUCE THIS FOOTPRINT.

IN SUMMARY, WHILE TOTALENERGIES IS ACTIVELY WORKING TOWARDS SUSTAINABILITY, IT'S ESSENTIAL TO RECOGNIZE THAT ACHIEVING COMPLETE "GREENNESS" IN THE ENERGY SECTOR IS A COMPLEX AND EVOLVING PROCESS. COMPANIES LIKE TOTALENERGIES CONTINUALLY ADAPT THEIR PRACTICES TO ALIGN WITH ENVIRONMENTAL GOALS WHILE BALANCING ECONOMIC AND OPERATIONAL REALITIES.

PROCESSES THAT HAVE BEEN DISCUSSED TO BE REENGINEERING:

IN 2020, TOTALENERGIES UNVEILED ITS TRANSFORMATION STRATEGY TO BECOME A MULTI-ENERGY COMPANY, AS WELL AS ITS AMBITION TO BECOME A MAJOR PLAYER IN THE



ENERGY TRANSITION, COMMITTED TO GETTING TO NET ZERO BY 2050, TOGETHER WITH SOCIETY. THIS AMBITION TOOK SHAPE IN 2021 THROUGH VERY SIGNIFICANT PROGRESS:

- **TOTALENERGIES ACCELERATED ITS DEVELOPMENT IN RENEWABLES AND ELECTRICITY WITH MORE THAN 10 GW OF GROSS INSTALLED CAPACITY FOR RENEWABLE ELECTRICITY GENERATION AND MORE THAN SIX MILLION ELECTRICITY CUSTOMERS AT THE END OF 2021. INVESTMENTS IN RENEWABLES AND ELECTRICITY ACCOUNTED FOR 25% OF TOTAL INVESTMENTS, EXCEEDING THE INITIAL TARGET OF 20% PLANNED ONE YEAR AGO.**
- **REGARDING GAS, THE ENERGY OF THE TRANSITION, TOTALENERGIES' LIQUEFIED NATURAL GAS (LNG) SALES INCREASED BY 10% TO REACH 42 MILLION TONS, 99% OF WHICH WENT TO COUNTRIES WITH A NET ZERO PLEDGE.**
- **TOTALENERGIES TOOK STRONG ACTION IN 2021 TO LOWER ITS SCOPE 1, 2 AND 3 GREENHOUSE GAS EMISSIONS: TOTALENERGIES REDUCED THE SHARE OF PETROLEUM PRODUCTS IN ITS SALES MIX TO 44% (FROM 65% IN 2015), LOWERING THE GREENHOUSE GAS EMISSIONS RELATED TO PETROLEUM PRODUCTS USED BY ITS CUSTOMERS (SCOPE 3) BY 19%.**
- **TOTALENERGIES ALSO ACHIEVED A VERY SIGNIFICANT 20% DECREASE IN EMISSIONS FROM ITS OPERATED FACILITIES (SCOPE 1+2) COMPARED TO 2015 AND A 14% REDUCTION IN THE CARBON FOOTPRINT OF THE PRODUCTS SOLD IN EUROPE (VS 2015).**

TODAY, ALL OF THESE RESULTS ALLOW THE COMPANY TO DELIVER ENERGY TO ITS CUSTOMERS WITH A MORE CARBON INTENSITY LIFECYCLE REDUCED BY MORE THAN 10% COMPARED TO 2015.

PROCESS THAT WILL BE REENGINEERED

TOTAL ENERGIES STATE THAT BY 2030, 15% OF THEIR SALES WOULD BE ELECTRICITY COMING "MOSTLY" FROM RENEWABLE ENERGIES, WHEREAS 80% WOULD STILL BE OIL AND GAS.

THROUGH THE ANNUAL REPORT, WE CAN FIND SOME NUMBERS: INVESTMENTS IN RENEWABLES (MOSTLY PHOTOVOLTAIC ELECTRICITY AND OFFSHORE WIND) HAVE REPRESENTED \$2 BILLION PER YEAR OVER THE PAST FIVE YEARS, AND WOULD RISE TO \$3 BILLION IN 2021. SOLAR ENERGY WOULD REPRESENT 75% OF THE 35 GW GROSS CAPACITY FOR RENEWABLE POWER THAT IS SCHEDULED AT THE 2025 HORIZON (COMPARED TO 10 GW IN 2021).

ACTIONS TO BE TAKEN FOR THE REENGINEERING OF THE PROCESS:

TOTALENERGIES USES DIFFERENT SOURCES OF RENEWABLE ENERGY.

- **WIND POWER: THIS IS THE TRANSFORMATION OF WIND ENERGY INTO ELECTRICITY. IT IS SENT DIRECTLY TO THE DISTRIBUTION NETWORK, WITHOUT TRANSMISSION.**
- **HYDROELECTRIC POWER: ELECTRICITY GENERATED BY TURBINES INSTALLED ON WATERFALLS (DAMS, RIVERS).**



- **BIOMASS COGENERATION:** THE USE OF RENEWABLE RAW MATERIALS OF PLANT OR ANIMAL ORIGIN.
- **COGENERATION:** IN ADDITION TO THE ELECTRICITY PRODUCED, THE HEAT RELEASED IS ALSO RECOVERED AND USED.
- **WASTE RECYCLING:** RECOVERING THE ENERGY CONTAINED IN WASTE DURING COMBUSTION.

PHOTOVOLTAICS: THE TRANSFORMATION OF SOLAR RADIATION INTO ELECTRICAL ENERGY. THIS ELECTRICITY CAN EITHER BE USED DIRECTLY OR FED INTO THE GRID.

MONITORING

TOTALENERGIES SAID IT WOULD SPEND 1 BILLION EUROS (\$962.60 MILLION) OVER THE NEXT TWO YEARS TO HELP BUSINESSES BECOME MORE EFFICIENT IN THEIR USE OF ENERGY AT A TIME WHEN EUROPE FACES A SERIOUS ENERGY CRUNCH AMID THE WAR IN UKRAINE. "THIS WILL FREE AN IMPORTANT VOLUME AS WE ARE OURSELVES LARGE ENERGY USERS," TOTALENERGIES CHAIRMAN AND CEO PATRICK POUYANNE TOLD A GAS INDUSTRY CONFERENCE. (\$1 = 1.0389 EUROS)

TOTALENERGIES PRODUCTS REPORTS AND INDICATORS FOR ITS SUSTAINABLE DEVELOPMENT APPROACH.

RESULTS OF THE IMPLEMENTATION

TOTALENERGIES, A GLOBAL MULTI-ENERGY COMPANY, IS COMMITTED TO SUSTAINABLE DEVELOPMENT AND REDUCING ITS ENVIRONMENTAL IMPACT.

AS PART OF ITS STRATEGY, THE COMPANY AIMS TO ACHIEVE CARBON NEUTRALITY (NET ZERO EMISSIONS) BY 2050, IN ALIGNMENT WITH THE OBJECTIVES OF THE PARIS AGREEMENT.

SPECIFICALLY:

2030 TARGETS:

REDUCE GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1+2) FROM OPERATED FACILITIES: FROM 46 MT CO₂E IN 2015 TO LESS THAN 40 MT CO₂E BY 2025.

ACHIEVE A REDUCTION OF AT LEAST 40% COMPARED TO 2015 BY 2030 (BRINGING EMISSIONS TO BETWEEN 25 MT AND 30 MT CO₂E).

REDUCE METHANE EMISSIONS: BY 50% BETWEEN 2020 AND 2025. BY 80% BETWEEN 2020 AND 2030.

MAINTAIN METHANE EMISSIONS INTENSITY BELOW 0.1% OF COMMERCIAL GAS PRODUCED AT OPERATED GAS FACILITIES.

MINIMIZE ROUTINE FLARING: LESS THAN 0.1 MM³/D BY 2025, WITH THE GOAL OF ELIMINATING IT BY 2030.

REDUCE SCOPE 3 GHG EMISSIONS RELATED TO CUSTOMERS' USE OF ENERGY PRODUCTS: LESS THAN 400 MT CO₂E (LOWER THAN 2015 LEVELS) DESPITE ENERGY PRODUCTION GROWTH IN THE ONGOING DECADE.

SPECIFICALLY, REDUCE SCOPE 3 GHG EMISSIONS RELATED TO PETROLEUM PRODUCTS BY MORE THAN 30% COMPARED TO 2015. 2025

ACCELERATION: TOTAL ENERGIES IS ACCELERATING ITS EMISSIONS REDUCTION PLAN FOR 2025 BY 2 MT CO₂E ANNUALLY. THE NEW 2025 OBJECTIVE IS TO REDUCE SCOPE 1+2 EMISSIONS AT OPERATED FACILITIES TO LESS THAN 38 MT CO₂E.

CARBON-NEUTRAL AMBITION: THE COMPANY ENVISIONS BECOMING A CARBON-NEUTRAL ENERGY COMPANY BY 2050, IN COLLABORATION WITH SOCIETY. THIS TRANSFORMATION INVOLVES EVOLVING ENERGY OFFERINGS, REDUCING CARBON EMISSIONS, AND SECURING LONGTERM VALUE FOR SHAREHOLDERS.

IN SUMMARY, TOTAL ENERGIES IS ACTIVELY IMPLEMENTING MEASURES TO REDUCE EMISSIONS AND CONTRIBUTE TO A SUSTAINABLE ENERGY FUTURE. THE REBUILT PROJECT RECOMMENDATIONS ALIGN WITH THESE AMBITIOUS GOALS, DRIVING POSITIVE CHANGE WITHIN THE COMPANY.

FURTHER RECOMMENDATIONS