Case #4.TotalEnergies Sets a New Course

The following information is from the Total Energies website. Go to the TotalEnergis website, or read the key features of its climate change commitments below.

https://www.totalenergies.com/commitment/climate-change/climate-our-vision

Total is Transforming and Becoming TotalEnergies

28/05/2021

At the May 2021 Shareholders' Meeting of Total Energy, shareholders approved a change the company's name from Total to **TotalEnergies.**

"Energy is life. We all need it and it's a source of progress. So today, to contribute to the sustainable development of the planet facing the climate challenge, we are moving forward, together, towards new energies. Energy is reinventing itself, and this energy journey is ours. Our ambition is to be a world-class player in the energy transition. That is why Total is transforming and becoming **TotalEnergies**," declared Patrick Pouyanné, Chairman and Chief Executive Officer of **TotalEnergies**.

This new name and new visual identity embody the course TotalEnergies has resolutely charted for itself: that of a broad energy company committed to producing and providing energies that are ever more affordable, reliable and clean.



About TotalEnergies

TotalEnergies is a broad energy company operating in 130 countries that produces and markets energies on a global scale: oil and biofuels, natural gas and green gases, renewables and electricity. The **TotalEnergies** website asserts it is committed to

-be a world-class player in the energy transition

-supplying energy that is ever more affordable, clean, reliable and accessible to as many people as possible

-putting sustainable development in all its dimensions at the heart of its projects and operations to contribute to the well-being of people."

-become the responsible energy company

As a major energy company, TotalEnergies wants to contribute to three core challenges: satisfying the energy needs of a growing population, limiting the impact of climate change and adapting to changing customer expectations.

Integrating climate into our strategy

TotalEnergies' focus on climate concerns is integral to our four areas of strategic focus: natural gas, electricity generated from renewables and gas, oil products and carbon neutrality.

Climate: Our vision

Energy plays a key role in mitigating climate change. **TotalEnergies** is working to reduce the greenhouse gas emissions associated with our operated activities, and is taking an active role in the industry and the international community to identify joint solutions.



Operating across the entire natural gas value chain

Today, natural gas, the lowest-carbon fossil fuel, must be our first choice to meet energy demand while combating global warming. That is why it is a key component of our strategy.

https://www.totalenergies.com/commitment/climate-change/growing-natural-gas



Developing a profitable electricity business

To meet the growing demand for power sustainably while reducing the emissions related to its generation, we are stepping up our business in electricity generated from renewables and gas, which is the fossil fuel with the lowest level of CO₂ emissions.



Petroleum products: Energy efficiency and biofuels

According to the International Atomic energy Agency (IEA), oil's share of the global energy mix could be reduced by 2040. TotalEnergies is investing in low-breakeven oil assets, reducing emissions from its facilities, encouraging more economical use of oil and producing sustainable biofuels.

https://www.totalenergies.com/commitment/climate-change/petroleum-products-energy-efficiencybiofuels



Developing activities that contribute to society's carbon neutrality

Carbon storage is a critical factor to achieve carbon neutrality. We are helping to preserve and restore natural carbon sinks; investing heavily in carbon capture, storage and utilization; and assisting our customers in their efforts to reduce their carbon footprint.

Developing activities that contribute to society's carbon neutrality

Carbon storage is a key factor to achieve carbon neutrality in the second half of the 21st century. We are developing businesses with a focus on preserving and restoring ecosystems that act as carbon sinks (i.e., that can absorb atmospheric carbon dioxide) and on carbon capture, utilization and storage (CCUS) technology. We're also helping customers improve their energy efficiency by offering products and services designed to reduce their carbon footprint.

Preserving and restoring ecosystems

Ecosystems, especially forests, store carbon naturally. Preserving them and restoring their role as carbon sinks is, in fact, crucial in the fight against greenhouse gas emissions. Our goal is to reach sustainable carbon storage capacity of 5 million tons per year by 2030.

To meet that challenge, in 2019 we created "*Total Nature Based Solutions*." That new unit, wielding a budget of \$100 million, is tasked with funding, developing and managing projects in carbon sequestration and greenhouse gas emissions reduction.

At the same time, the <u>TotalEnergies Foundation</u> has made forest preservation and restoration a key focus of its program. It is supporting **projects to preserve and restore** forests, mangroves and wetlands, which store carbon naturally, as well as **initiatives to rehabilitate degraded land**. It's also supporting **initiatives to raise awareness and teach** young people to preserve carbon sink ecosystems.

Using CCUS (Carbon Capture Utilization and Storage) to make industry less carbon intensive

Nearly 10% of our R&D budget is dedicated to carbon utilization and storage technologies.

CCUS technologies will be essential for numerous industries, particularly those that generate large volumes of carbon dioxide. We allocate 10% of our R&D budget and apply our expertise at every step in the CCUS process to make carbon reduction technologies more energy-efficient.

We are pioneers in this field, having begun developing CCUS technologies back in 1996 as a partner in the Sleipner project, a Norwegian carbon capture platform. We also developed **the pilot CO₂ capture and storage project in France's Lacq region**. Started in 2010, that pilot was a European first that enabled us to test a complete carbon capture, transportation and storage chain at one of our sites.

Alone or with partners, we have contributed to several projects that already constitute significant advances:

- The Northern Lights project, in which we have joined forces with Shell and Equinor with the aim of spurring development of new carbon capture solutions in Norway and elsewhere in Europe. This commercial-scale project focuses on transporting and storing carbon emissions produced by cement factories and aims to create 1.5 million tons of carbon storage capacity per year. It has the potential for future expansion to other industries, which would make it the world's first storage site to take delivery of carbon from industry sources in several countries.
- The Net Zero Teesside Project, of which we are a partner alongside the OGCI and other oil majors, including BP, Eni, Equinor, Occidental Petroleum and Shell. It's the first commercial-scale, fully integrated CCUS project in the United Kingdom. It was one of the earliest picks of OGCI Climate Investments, which funds technologies that significantly cut emissions. Launched in 2017, the organization is resourced at over \$1 billion for 10 years.

We also formed several major R&D partnerships in 2019 to encourage deployment of CCUS technology:

- In the United States, we joined the National Carbon Capture Center (NCCC), which works to develop carbon capture technology for reducing emissions from fossil fuel-based power plants.
- In France, we have launched a major CCUS project in Dunkirk that could accommodate up to 10 million tons of CO₂ annually by 2035.
- At our Leuna refinery in Germany, we're helping to devise techniques for producing methanol from CO₂ and hydrogen.

Energy efficiency for our customers

Over12 Millions of tons of carbon emissions have been avoided since the TotalEnergies EcoSolutions program launched in 2009

Around 85% of oil- and gas-related greenhouse gases are emitted during the end use of products and automotive and other fuels, compared to just 15% during their production. So helping our customers shrink their carbon footprint — and lower their energy bill while they're at it — is a key focus. We do that through:

- Energy performance consulting. We offer customers an end-to-end approach to energy efficiency via our affiliate <u>GreenFlex</u>, a French specialist that helps businesses transition to new energies and improve their environmental performance. Our teams create workable, sustainable solutions combining consulting, personal support, data intelligence and financing to achieve concrete, lasting outcomes.
- Our <u>TotalEnergies EcoSolutions</u> program. Created in 2009, this label alerts our customers to the energy and eco-efficiency of our products and services. At end-2019, 95 of our products and services had been awarded the TotalEnergies EcoSolutions label

for their ability to significantly outperform the market standard across their life cycle.

- The development of high-performance plastics. Our affiliate <u>Hutchinson</u>, which specializes in elastomer processing, produces parts that are used in the automotive and aviation industries. Those parts are lighter in weight, so they help reduce fuel consumption and, by extension, carbon emissions. It's one way that TotalEnergies is contributing to sustainable mobility.
- The use of recycled plastics and bioplastics. Our polypropylene and polyethylene grades contain at least 50% recycled materials and offer the same properties as virgin polymers. We have teamed up with Citeo, Saint-Gobain and Syndifrais to help create a polystyrene recycling channel. In addition, as part of our joint venture with Corbion, we started up a polylactic acid (PLA) plant in Thailand in late 2018 that offers annual production capacity of 75,000 tons. PLA is a recyclable, biodegradable biopolymer derived from sugar that can be used in various types of packaging.

Climate: our vision

Energy plays a key role in mitigating climate change. As a major energy player, TotalEnergies has been working for many years to reduce the greenhouse gas emissions associated with our activities. At the same time, we have proactively joined with the industry and the international community to identify joint solutions for capping the increase in global temperatures below 2°C. In particular, we advocate the adoption of carbon pricing.

Shaping tomorrow's energy

Energy consumption generates more than 80% of global carbon emissions. With the world's population expected to surpass 9 billion by 2040, we must make major strides in energy efficiency if we are to stabilize energy demand at levels close to the current rate of consumption. In addition, the global energy mix will need to change significantly in order to cut greenhouse gas emissions. Our ambition is to become the responsible energy major. We are committed to <u>furthering the Sustainable Development Goals (SDGs) defined by the United Nations</u>, especially in areas related to climate action and the development of energy that is more affordable, more reliable, cleaner and accessible to as many people as possible.

In the belief that climate goals can only be met by mobilizing businesses, governments and consumers as a team, we are also working to **create gateways for identifying solutions.** In particular, we are joining forces with other major players through organizations that aim to expand the courses of action available.

For example, we are a founding member of the **Oil and Gas Climate Initiative (OGCI)**, where we work with a dozen other oil and gas companies in backing the deployment of solutions for reducing greenhouse gas emissions. In 2017 we joined the **Breakthrough Energy Coalition**, a group of investors with the means to provide long-term support to new businesses at the

forefront of energy issues. We lend the organization our expertise in the energy industry and sustainable solutions.

TotalEnergies active role in industry associations

In order to help define technical standards or make our voice heard regarding government policies related to our business, we belong to national and international business and industry associations.

In 2019, we examined the public stance taken by those associations on climate issues to verify that their positions were aligned with our own (and, where appropriate, chose not to renew our membership in those whose positions were opposed to ours). That review was conducted on the basis of six criteria:

- 1. **The scientific position:** TotalEnergies believes the link between human activity and climate change is an established fact.
- 2. **The Paris Agreement:** TotalEnergies recognizes that the Paris Agreement is a major advance in the fight against climate change and supports the initiatives of the implementing States to fulfill its aims.
- 3. **Carbon pricing:** TotalEnergies believes that it is necessary to implement carbon pricing to encourage energy efficiency, support low-carbon technology and develop carbon sinks, all critical to achieve carbon neutrality.
- 4. **The role of natural gas:** TotalEnergies considers that natural gas is a key component in the energy transition, specifically as an alternative to coal. The Group supports policies to reduce methane emissions from natural gas production and consumption and, in particular, campaigns to reduce the use of flaring (such as the World Bank's Zero Routine Flaring by 2030 Initiative).
- 5. **The development of renewable energies:** TotalEnergies supports policies, initiatives and technologies to promote growth in renewable energies. The Group also supports the development of sustainable biofuels.
- 6. **The development of Carbon Capture, Utilization and Storage (CCUS):** TotalEnergies supports the development of CCUS, which is critical to achieve carbon neutrality by the second half of the century, the aim of the Paris Agreement.A strong commitment to carbon pricing

We advocate implementing **carbon pricing** to combat emissions. We believe that this helps fight climate change by creating incentives to move the energy mix in the right direction. Putting a price on carbon is **the most efficient financial signal** to change the rules of the game and hasten the switch to power generation.

We already use a carbon price to financially assess our own capital expenditure, to make sure our projects and long-term strategy are viable given climate challenges.

We are calling for the rapid adoption of pricing mechanisms that are tailored to specific circumstances, such as geographical region or economic sector, and can be gradually linked. More broadly, we have been involved since 2015 in various international initiatives, including:

• **Paying for Carbon.** In 2015, we and five other leading oil and gas companies called on the international community to implement carbon pricing mechanisms.

- **The Carbon Pricing Leadership Coalition.** We contribute to this World Bank initiative in order to expand the reach of our messages.
- **The Climate Leadership Council.** We joined the council and its carbon dividend project as a founding member.

Total Energies and Scope 1,2 & 3 (visit the TotalEnergies website for details)

https://totalenergies.com/sustainability/climate-and-sustainability-energy

To reach its ambition of carbon neutrality by 2050, together with society, TotalEnergies is taking action to reduce emissions from its operated industrial facilities (Scope 1 & 2) by over 40% by 2030.

TotalEnergies has set itself the target that by 2030 its global Scope 3 emissions, linked to the use by its customers of the energy products used, will be below 2015 levels, while over the same period the Company plans to produce and sell 30% more energy products, in particular from growth in sales of electricity and liquified natural gas.

Case Questions

Module 4 argues that there is an ongoing movement from "corporate social responsibility" to "sustainability" and now to "creating shared value."

- 1. Create a supporting argument for each of the following assertions Pay attention to the <u>underlined phrase</u>.:
- a. (1) that the TotalEnergies are still at the "corporate social responsibility" stage but has moved no further .
- b. (1) that the TotalEnergies have moved to the "sustainability" stage, including incorporating "triple bottom line" thinking, and <u>has moved no further, i.e., is not</u> yet at the "creating shared value" stage.
- c. (2) that the TotalEnergies have now <u>reached the "creating shared value" stage</u> in its development (meaning it is creating "shared value" for all of its potential stakeholders.)
- NOTE: You will need to refer to the definitions for each of these stages in the module to make your judgments. The easiest way to approach these case questions is to develop your criteria for each stage and then read through the case seeking supporting evidence that the company is at that stage.) Where appropriate, refer to TotalEnergies' performance in terms of the Scope scale in Appendix A.
- (maximum length: 50 words for each)

Appendix A. Scope 1 2 & 3 Emissions

Greenhouse gas emissions are categorised into three groups or 'Scopes' by the most widely-used international accounting tool, the **Greenhouse Gas (GHG) Protocol**. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain.

Scope 1	Scope 2	Scope 3
Fuel combustion Company vehicles Fugitive emissions	Purchased electricity, heat and steam	Purchased goods and services
		Business travel
		Employee commuting
		Waste disposal
		Customer use of sold products
		Transportation and distribution (up- and
		downstream)
		Investments
		Leased assets and franchises

Why should an organisation measure its Scope 3 emissions?

There are a number of benefits associated with measuring Scope 3 emissions. For many companies, the majority of their greenhouse gas (GHG) emissions and cost reduction opportunities lie outside their own operations. By measuring Scope 3 emissions, organisations can:

- Assess where the emission hotspots are in their supply chain;
- Identify resource and energy risks in their supply chain;
- Identify which suppliers are leaders and which are laggards in terms of their sustainability performance;
- Identify energy efficiency and cost reduction opportunities in their supply chain;
- Engage suppliers and assist them to implement sustainability initiatives
- Improve the energy efficiency of their products
- Positively engage with employees to reduce emissions from business travel and employee commuting.