



Corporate sustainability applied to large corporations in the oil industry

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SUMMARY

Oil industry operations have a direct impact on the environment, including greenhouse gas emissions, liquid effluents and hazardous solid waste. The relationship between the oil industry and the environmental situation has given the sector a poor reputation for environmental stewardship. It is true that an environmental disaster caused by the oil industry is unpleasant and causes a great deal of impotence due to the characteristics of the fluid, causing damage not only to the environment, but also to the fauna and flora, as well as to society.

In recent years, these types of companies have begun to be concerned about environmental issues, seeking to minimise their impact on the environment and society through environmental management strategies. Nowadays, there are more and more companies that are committed to including in their policies, actions that favour corporate sustainability. Sustainable development is a concept that encompasses economics, social justice, business management, politics, law and environmental science and management. Sustainable development is not only the obligation of governments; business has an important role to play in this regard. This is why, in this paper, we will focus on the corporate sustainability policies of two large corporations in the oil industry, which they have implemented to combat the main problems they cause to the environment in the course of their business.

This paper aims to show how the selected companies have adopted measures over the years to reduce greenhouse gas emissions and water use in their activities, as well as increasing investment in renewable energy sources to diversify their activities.

Keywords: Corporate Social Responsibility, corporate sustainability, oil industry, environment, renewable energies

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1.- INTRODUCTION

Methane emissions from fossil fuels are 25-40% higher than previously estimated, according to the scientific journal *Nature* (2020), implying that oil and gas production is contributing much more to global warming than previously thought.

In recent years, the number of articles and studies related to the oil industry and the problems it causes for the environment and society has been increasing. Many articles have appeared that analyse the activity of the oil industry, such as environmental management in the oil industry in countries like Ecuador and Norway (Lofthus Sando, 2008), in which an analysis is made of the difference between the performance of oil activities in one country and the other. Another very interesting article is related to the activities of the oil industry and the legal framework in Venezuela (Zamora and Ramos, 2008), which deals with the environmental effects of oil and natural gas and criticises the lack of a legal environmental framework that regulates oil activities in the country and protects the environment and Venezuelan society.

The choice of this specific topic is determined by the social improvement that it can bring to the oil sector, i.e. that it can be seen how this type of companies have been working tirelessly for years to achieve ever lower pollution results through the implementation of corporate sustainability in their strategies and thus be better valued by society.

The oil industry is one of the sectors that has received the most criticism from governments and society in terms of care and collaboration for the preservation of the environment. The oil industry carries out numerous operations that have direct and indirect consequences on the environment. This is why, in recent years, companies have become increasingly aware of the dangers that these emissions can cause to the planet and to society in the future. Thus, these companies have been adopting corporate sustainability strategies, increasing investment and improving all types of activities that improve the phases of their production processes, involving companies and projects with more efficient and sustainable business models, and beginning to opt for zero-emission energy sources.

The aim of this paper is to analyse how companies in the oil industry, through the analysis of two case studies, have been implementing corporate sustainability practices and policies over the years in their strategies to involve the organisation's objectives with the fight for the environment and society.

The methodology to be followed in this study will consist of analysing the two selected companies (Repsol and CEPSA) and, based on their annual reports on their websites, we will analyse those variables that are closest to the objective of the study we are

seeking. In addition, we will try to make comparisons of those variables studied that are easily comparable between the companies, since, as these are annual reports, they do not follow the same patterns of analysis as one company to another, so that comparisons cannot be made in some cases.

With regard to the structure of the work, we will begin by analysing the evolution of the concept of Corporate Social Responsibility (CSR) from its birth in the 1950s to the present day, in which it will be possible to see how this concept has "mutated" over the years.

Subsequently, in section 3, we will deal with the problem that has arisen with CSR today, being a concept that is now obsolete for the new times, incapable of taking on the problems of the present day and the appearance of corporate sustainability replacing the former, capable of dealing with the issues of economic development, maintenance and the fight for the environment.

Section 4 will talk about the oil industry and its relationship with the environment and all the problems and damage it causes during the development of its activity. In addition, reference will also be made to the two main variables that will be analysed in the chosen oil industries through their reports: decarbonisation and increased investment in renewable energies and more efficient business models.

In section 5, an analysis of the chosen oil companies will be carried out through their annual reports, studying those variables that we consider most appropriate for the objective we are seeking.

And finally, section 6 will be a conclusion where I will give my opinion and talk about the present and the future of the oil industries.

2.- EVOLUTION AND CONCEPT OF CSR

The concept of Corporate Social Responsibility (CSR) is a concept that, as we will see below, is a term that is subject to many different definitions. It is a phenomenon that has changed and evolved over the years. For example, according to Stigson. B, president of the *World Business Council for Sustainable Development* (WBCSD), it is normal that:

"There is no unified definition of what CSR means, as it depends on the culture, religion or tradition of a particular society. There is no one-size-fits-all, so one must be designed for each case and need.

In order to study how CSR as we know it today came into being, we have to go back a few years. This concept emerged more than 50 years ago with the publication of "*Social*

Responsibilities of the Businessmen" (Bowen, 1953). In this book, the author first raised for the first time the obligation and initiative that businessmen should have to carry out actions and policies that contribute value to society altruistically without seeking any lucrative purpose in their actions. The author explores the relationship that should exist between business and society and how voluntary acceptance by business people can lead to a reduction in economic problems and a greater opportunity to achieve the organisation's goals.

Although Howard R. Bowen is considered the father of Corporate Social Responsibility, there are earlier works in which the concept of CSR already appeared, such as *"The Functions of the Executive"* (Bernard, 1938), or *"Measurement of the Social Performance of Business"* (Kreps, 1940). The first work, *"The Functions of the Executive"*, is notable for its analysis of how organisations actually operate, developing a cooperative approach and methods of executives within formal organisations. In the second work, *"Measurement of the Social Performance of Businesses"*, the first signs of the beginnings of social responsibility that companies are starting to assume are beginning to be seen.

In the 1960s, various organisations committed to consumers (*Consumers International*¹) and the environment (*World Wildlife Fund*²) were created, something that society began to value positively those companies that became involved in this type of initiative. In this decade, the concept of *stakeholder* emerged for the first time, developing a reflection on the importance of stakeholders in the economic growth of companies. All the theories on the importance of stakeholders were set out in an internal memorandum at the Stanford Research Institute in 1963. Also, with the publication of the book *"Corporate Social Responsibilities"* (Walton, 1967), many issues on the role of the company and the entrepreneur in society were addressed. In this book, different models of CSR are presented. Clarence C. Walton argued that the new concept of CSR should recognise the relationships between the corporation and society and that these relationships should be taken into account by top management, i.e. top management should take into account the objectives pursued by stakeholders.

In the 1970s, CSR was at its peak. Due to the various social revolutions at the end of the 1960s in the United States, which provoked a strong "anti-business" sentiment in society. This caused the concept of CSR to become the main topic of economic and business

¹ Consumer membership organisation that works together with its partners in the consumer area worldwide. <https://es.consumersinternational.org/>

² Non-governmental organisation for the conservation of the environment with more than 5 million members. <https://www.worldwildlife.org/>

discussions, giving rise to numerous articles and works during the decade to address the new developments in society. An article published in the New York Times, "*The Social Responsibility of Business Is to Increase Its Profits*" (Friedman, 1970), was highly criticised and controversial because it argued that the sole responsibility of business is to look after its interests and maximise its profits, since, according to Friedman, social benefits arose from companies paying taxes, complying with laws and contributing to employment. Another important contribution in this decade was through the work "*Business and Society*" (Steiner, 1971), in which very interesting details are provided, such as the ethical part that should emerge in corporations and that they should focus on the search for the right objectives for all parties in the long term.

During this decade, the concept known as *Social Corporate Performance* (CSP) appeared (Sethi 1975), which advocated that this concept aims to give more emphasis to the results achieved through the different CSR initiatives. This author was the precursor of the work "*A three-dimensional conceptual model of corporate performance*" (Carroll, 1979), which proposed a new CSR model composed of 3 pillars. These pillars, which are included in the aforementioned work, are as follows:

- I. **A basic definition of CSR. At the time**, definitions of CSR were mainly directed towards compliance with the law and profit-making. This author argued that in addition to these activities, a company should encompass ethical aspects such as the representation of moral behaviour and standards and discretionary expectations which are those practices and behaviours that the entrepreneur undertakes on a voluntary basis, known as corporate philanthropy.

- II. **Reasons why CSR needs to exist.** The author elaborates on the fact that corporations should not only engage in the activities outlined in the previous section, but should also be involved in addressing social problems and topical areas. The author argues that these social problems can be very ambiguous and depend on the sector in which the corporation is located, the country, etc. This is why these issues change and can range from issues such as product safety or business ethics, to environmental concerns or occupational health and safety. Concerns about these issues are always changing and companies must be prepared to adapt to changing times and new concerns in society.

Table 1. Categories of social response

Ian Wilson	Reaction	Defense	Accommodation	Proaction	
Terry McAdam	Fight all the way	Do only what is required	Be Progressive	Lead the Industry	
Davis & Blomstrom	Withdrawal	Public Relations Approach	Legal Approach	Bargaining	Problem Solving
DO NOTHING	←—————→				DO MUCH

Source: Archie B. Carroll (1979) *A three-dimensional conceptual model of corporate social performance.*

III. Inbound philosophy. This last pillar addresses the strategy behind the business as a response to social issues. From this, the term "social responsiveness" emerged. ³which can range from the company's own disinterest to a proactive attitude. Four authors (Ian Wilson, Terry McAdam, Davis and Blomstrom) emerged in this field, who put forward their schemes regarding the response of companies to social issues (Table 1. Categories of social responsiveness).

In this table, we can see how these authors consider the degree of involvement that a company can have. In the case of Ian Wilson, he suggests 4 possible strategies, reaction, defence, accommodation and proaction. On the other hand, Terry McAdam describes the approach that characterises the range of responsiveness from "Fight all the way", "Do only what is required", "Be progressive" and "Lead the industry". Finally, Davis & Blomstrom describe an alternative relationship that responds to social pressures from "no retreat", to "problem solving", to "public relations approach", to "legal approach" and "denial".

³ Capacity of the company to become aware of social issues and how they respond to these issues.

In the 1980s, in the United States and due to dubious business scandals during Ronald Reagan's term of office, such as "Irangate"⁴ various procedures were developed with the aim of increasing the degree of social awareness of large corporations. From there, a list of the main problems to be addressed was drawn up, including: direct and indirect environmental pollution by corporations, employment discrimination of all kinds, consumer abuses from misleading advertising to price agreements between corporations, and minimal awareness of health, safety and quality of working life.

During these years, numerous journals began to appear on the subject of CSR, such as the *Business and Professional Ethics Journal*, published by the *Centre for Applied Ethics* at the University of Florida, or the *Journal of Business Ethics*⁵. It was at this time that this movement arrived in Europe, with the creation of institutions such as the *European Business Ethics Network*⁶ with the aim of raising awareness of the need for change.

The 1990s were critical years in terms of the development and consolidation of the concept. During these years, two different approaches emerged, centred on the degree of responsibility that companies should have, as well as on the question of whether or not the company should be socially responsible. This decade saw the emergence of the authors Robert Frederick and Clarence Walton, who argued that it was important to begin to understand that the ability to remain in the market did not depend solely on commercial matters, but that there was a differentiating element in which it was no longer how much I earned, but how I earned it that mattered. From this, two strands emerged:

- I. **North American trend:** characterised by a development of the subject from a business point of view, focusing exclusively on the success of the business.
- II. **European trend:** characterised by proposing a development of CSR led by governments and consumers, with the pursuit of corporate values.

Later, in 1997, *The Global Reporting Initiative*⁷ (GRI) began to present annual CSR reports. The success of this partnership was based on its multi-stakeholder approach

⁴ Scandal involving Ronald Regan's presidency and arms sales to Iran. Retrieved from: <https://www.lavanguardia.com/hemeroteca/19861125/54239250455/estalla-el-irangate.html>

⁵ Journal specialising in the field of industrial ethics.

⁶ Pan-European network that includes Russia, Turkey and other countries and supports initiatives at trans-European, national and regional level. Website: <https://eben-net.org/>

⁷ Independent institution that created the first global standard for CSR reporting guidelines. Website: <https://www.globalreporting.org/>

and the possibility it offered companies to identify and analyse their main economic, environmental and social indicators and to provide them with a solution.

In 1999, the Organisation for Economic Co-operation and Development (OECD) approved the "Guidelines for Multinational Enterprises". The main contribution of this document is to set concrete objectives for multinationals in order to begin to ensure that these corporations carry out their activities without coming into conflict with local public policies. The guidelines include elements such as sustainable development, collaboration with the community, employee training, and the extension of requirements to suppliers and contractors.

In the first decade of the 21st century, the idea was clear that organisations benefit economically from society and should therefore become leaders with a global vision, being the generators of social change. The social practices of companies acquired great importance to cover the shortcomings of the state and the imperfections of the free market. The entry into the new century has given CSR a new lease of life; the latest generation of entrepreneurs are now beginning to understand naturally and intrinsically the importance of caring for their social environments as part of the success of modern business. Much of the impetus given to CSR at the beginning of the century is due to the European Union (Echaiz, 2006), which was responsible for disseminating national strategies on CSR through various conferences such as: "Corporate social responsibility in the social policy agenda of the European Union", in November 2001 in Brussels, or "The role of public policies in promoting corporate social responsibility", in Venice in November 2003.

3.- FROM CSR TO CORPORATE SUSTAINABILITY

Today, CSR is more focused on social programmes that are not linked to business activity, which has led to a "halo effect"⁸ associated with corporate philanthropy, an effect that has hijacked the true nature of CSR. The media and public opinion link CSR only to philanthropy as a tool to improve its image. Therefore, there are doubts that this concept can be detached from this "halo effect", therefore, a way forward could be Corporate Sustainability. For the *Dow Jones Sustainability Index* (DJSI), Corporate Sustainability:

"It is a business approach that seeks to create long-term shareholder value by seizing opportunities and effectively managing the risks inherent in economic, environmental and social development".

⁸ The effect of exaggerated or unrealistic claims about the skills or abilities of a person or circumstance.

This definition should be the way forward for CSR. If we analyse this definition, several conclusions can be drawn. In terms of "**business focus**", corporate sustainability should be linked to *core business*⁹ activities. In terms of "**enables the creation of long-term shareholder value**", it has to do with long-term return on investment and not with short-term speculative moves. The phrase "**by seizing opportunities**", the public agenda (energy efficiency, education, inclusion and Implementing a new **effective risk** culture **inherent to economic, environmental and social development**", refers to the fact that managing risk allows reducing the risk premium of markets in situations of lack of confidence.

Therefore, working on the concept of corporate sustainability allows overcoming the limitations due to the "halo effect" of CSR. Therefore, corporate sustainability could be understood as an evolution of CSR with the aim of linking it more to *core business* and value.

This evolution, as described in the article *"From CSR to Corporate Sustainability: a necessary evolution for the creation of value"* (Andreu and Fernández, 2011), would bring positive points that were not possible before. (Andreu and Fernández, 2011), would bring positive points that were not possible before, among them:

- I. Participation in public-private partnerships with national and multinational institutions co-financing projects that promote inclusion and social cohesion.
- II. **Social innovation.** There are many institutions that have created a large network of partners that they help to raise funds to finance self-sustainable social projects.
- III. To turn sustainability reports into management tools, taking advantage of the recommendations offered by verifiers, transforming the sustainability report into a document showing the evolution of economic, social and environmental performance.
- IV. Implementing a new culture based on maximising ethical behaviour. This consists of implementing internal regulations (supply chain, human rights, conflicts of interest, etc.) that incorporate the principles of the code of ethics and exporting these regulations to the entire scope of operations of a global company.

⁹ The company's *raison d'être*, that for which it is created and in which it will generate the maximum added value.

- V. Establishment of agreements to seek formulas for the co-creation of joint businesses. For example, the launch of products or services aimed at people at risk of exclusion and to do so together with associations that work with these groups on a daily basis, benefiting all parties economically.

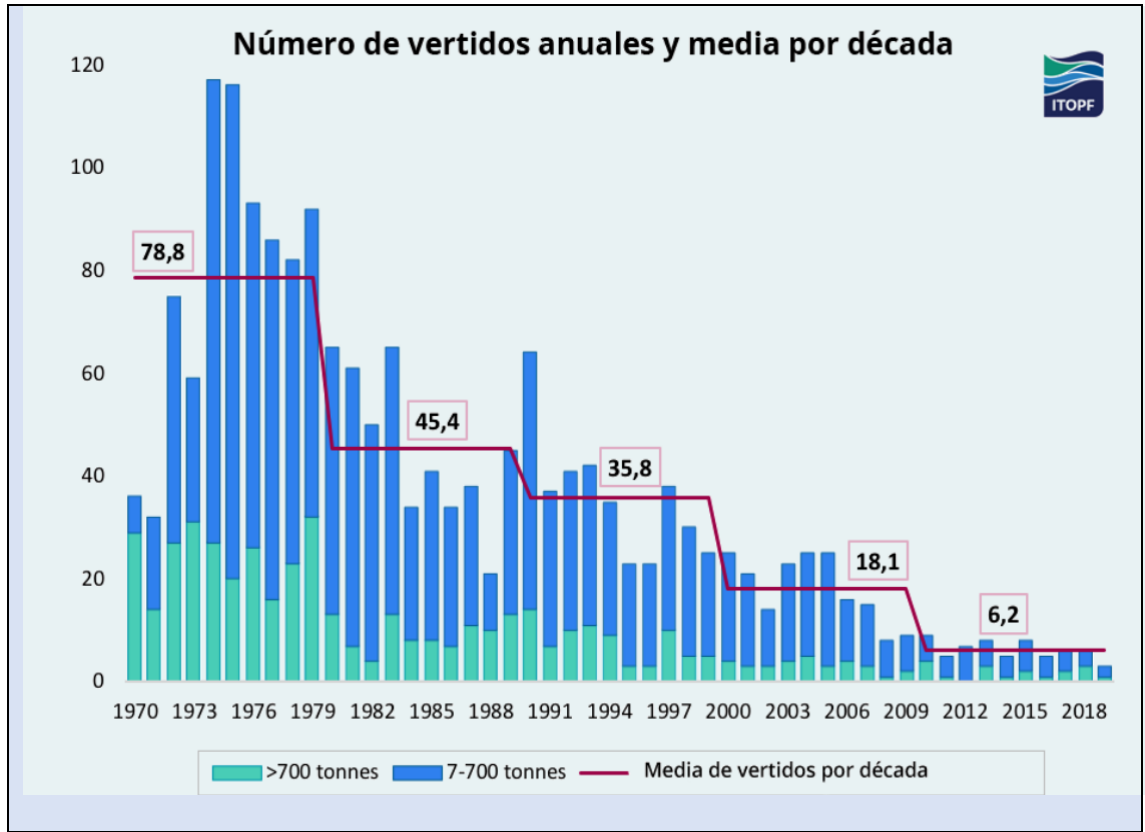
Therefore, corporate sustainability has more arguments than CSR to be linked to the *core business* of an organisation and to be truly dedicated to what CSR was known for.

4. OIL INDUSTRY AND THE ENVIRONMENT

Worldwide and over the years, there have been a large number of environmental damages¹⁰ caused by accidents in the oil industry. Oil extraction generates pollution, causing effects on people or the environment. It can cause **effects on the soil** due to the smoothing of the ground and displacement of heavy material. In addition, oil spills can lead to loss of soil fertility. It also causes **effects on water due** to the release of oil or other wastes leading to a decrease in oxygen content. **Effects on the air** are the most common because the oil extraction itself always comes with gas (formed by light hydrocarbons and may contain carbon monoxide, carbon dioxide and sulphuric acid). On the other hand, it also produces **effects on fauna and flora**. Almost half of the oil and other industrial products are dumped into the sea either because it is used as a reservoir for pollutants or because of negligence in dumping these substances into the sea (Figure 1. Evolution of oil spills). These substances completely damage the marine ecosystem, causing the death of living beings, worsening their quality of life, causing diseases, etc. Oil spills are a responsibility that these corporations must assume by complying with strict environmental preservation regulations.

¹⁰ Greenpeace document on the effects of oil on the environment:
<http://www.ceida.org/prestige/Documentacion/petro-efectos.pdf>

Graph 1. Evolution of oil spills



Source: ANAVE Asociación navieros españoles (2019).

This graph shows the drastic decrease in oil spills at sea over the years. The number of spills of 7t or more in the 1970s was 78.8 per year, and we can see how this figure has already been reduced quite a lot, but not enough in the 1980s. The total amount spilled per decade has been reduced by 95% since the 1970s. Later, in 2018, there was a spill of 113,000 tonnes produced by the vessel *Sanchi*¹¹. Although it is true that the average amount of oil spilled between 2010 and 2019 was 5,200 t/year. These data reflect the strong performance of governments and ITOPF¹² in promoting an effective response to oil spills.

4.1 Evolution towards sustainability

Today, oil companies are much more aware of the struggle for sustainability and the environment. The transformation of the fossil fuel-based energy system into a sustainable and decarbonised system is one of the biggest challenges for the oil sector. In this section, we will look at how the oil industry is trying to become more sustainable

¹¹ [https://es.wikipedia.org/wiki/Sanchi_\(tanker\)](https://es.wikipedia.org/wiki/Sanchi_(tanker))

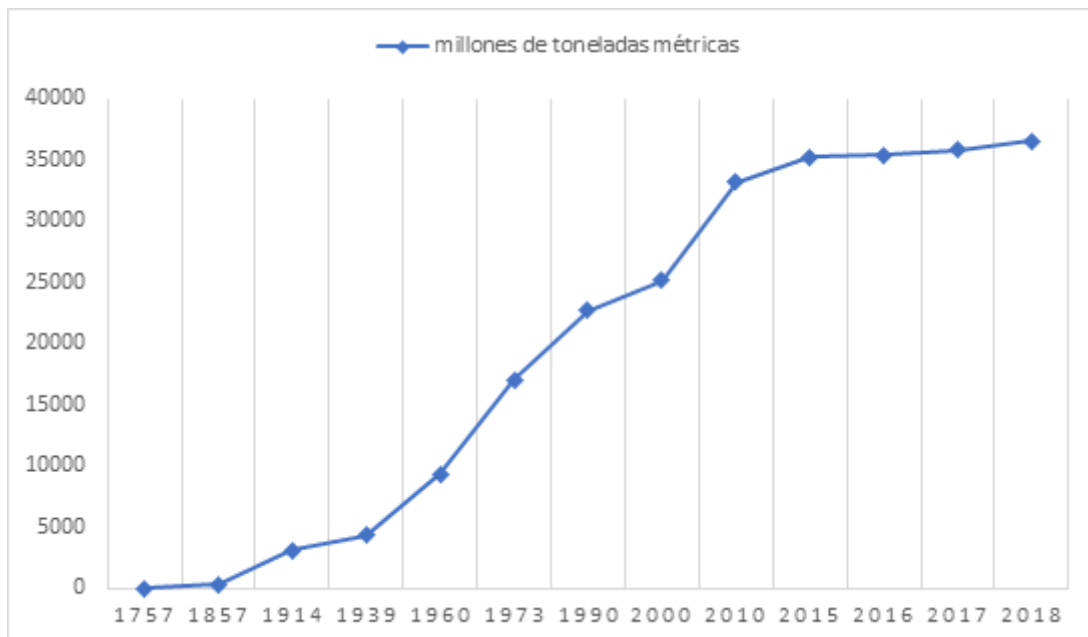
¹² Organisation of more than 8,000 shipowners and charterers. Website: <https://www.itopf.org/>

in the conduct of its business and we will also look at the transition of this industry, and how it has increased investment in renewable energy sources over the years with the aim, among other things, of diversifying its business.

While it is true that the oil industry has been reducing its pollution over the years, they are aware that they are still one of the most polluting sectors today. In 2020, the oil industry will generate approximately 31% of the planet's greenhouse gas emissions, according to a report by *Thomson Reuters*. This is why the sector itself is implementing new practices during the phases of its activity to try to reduce these emissions.

Consumers, activists, investors and regulators are demanding changes in the sector. One of the concepts that has gained momentum in the oil sector is decarbonisation¹³. CO₂ is a greenhouse gas that is produced in large quantities by the oil industry during its activity due to the exploitation of fossil fuels. The evolution and consumption of CO₂ has not stopped increasing, even so, many companies in the sector have action plans to reach an emission-free future by 2040. The following graph shows the evolution of CO₂ emissions from industrial activity and fossil fuels (Graph 2. Historical global CO₂ emissions from industrial activity and fossil fuels).

Graph 2. Historical global CO₂ emissions from industrial activity and fossil fuels.



Source: *Statista*

Although it is true that this graph does not only analyse the oil sector, CO₂ emissions in this sector have not stopped rising over the years. Therefore, one of the aspects that we

¹³ According to IPCC (2018), decarbonisation is the process by which countries, individuals or other entities seek zero CO₂ emissions by eliminating fossil fuel consumption.

will discuss in the following section is how the companies in the study have taken measures to reduce CO₂ emissions in their oil and natural gas extraction activity in all its phases, from the extraction and refining phase to the distribution and storage phase.

Another important variable has to do with water harvesting, as water use is essential to the activity of any oil company. In the oil industry, water is used for hydraulic fracturing¹⁴ and is present in all phases of the process. During the drilling phase, water is used for the preparation of drilling fluids, to lubricate, clean and cool the well. Later, when the hydrocarbon is produced and separated, in the transformation phase, water is needed for the cooling process for the generation of liquefied natural gas.

In the oil industry, high amounts of water are needed for the activity of the industry. For example, in 2016, Ecopetrol showed an average production of 11.6 barrels of water per barrel of oil in Colombia (Suarez, Jaramillo, González, and Pacavita, 2016). This implies high investments by companies in water to carry out their activities, which makes it essential for companies to consider serious strategies for water reuse.

Companies are constantly looking for solutions and new practices in order to reduce water consumption or water abstraction, mainly through water reuse. In the following section we will see how the chosen companies are tackling this problem and fighting for the environment and sustainable development.

In terms of the damage that oil activity can cause on the ground,¹⁵ seismic surveys are usually carried out, with each seismic line typically 1 kilometre long (Rosania, 1993). For example, in Ecuador up to 1994, some 30,000 kilometres of seismic line forest had been opened in the middle of the tropical rainforest (Almeida, 2006).

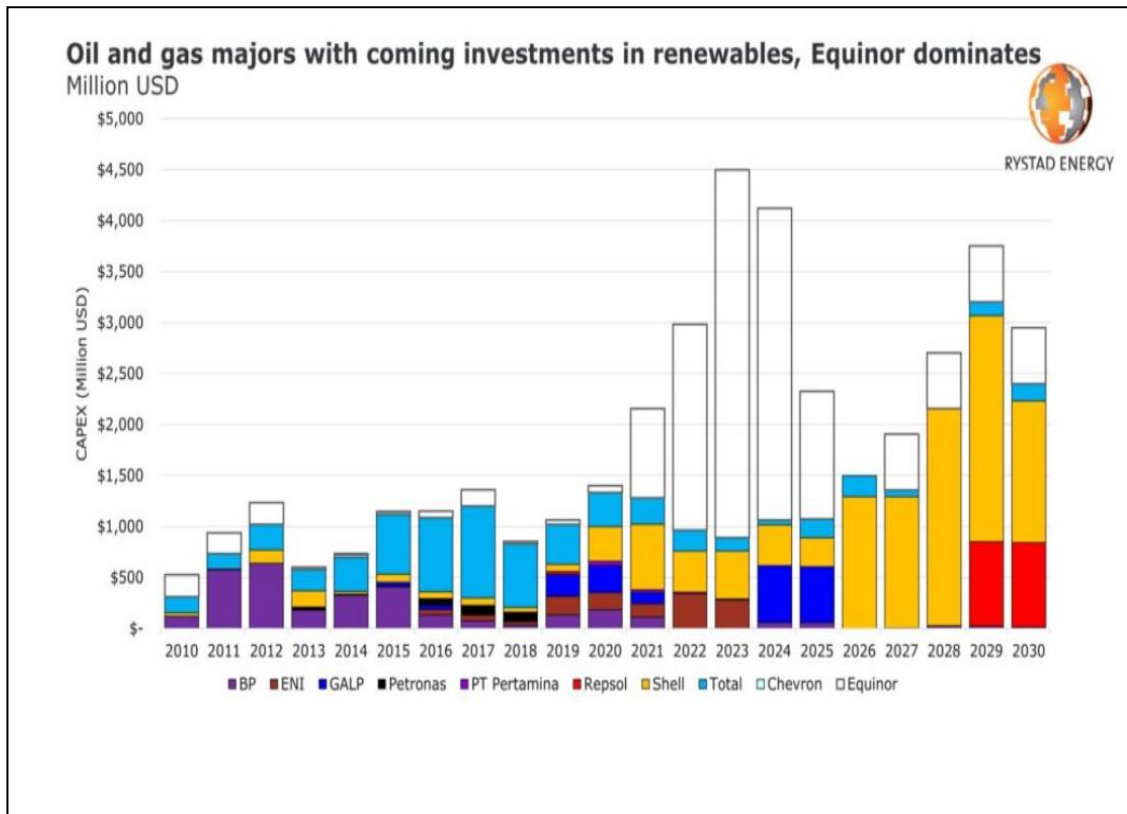
The other variable that will be analysed in the following section is the increase in investment by oil companies in renewable energies. At present and in recent years, the oil sector is much more concerned about preserving the environment, although this change is also due to the great pressure it has received from governments, organisations and society itself. In addition to this factor, the significant decrease in the costs of renewable energies and the increased knowledge and experience of oil companies in the use of renewable energies also play a role.

¹⁴ A well stimulation technique used to facilitate the extraction of oil and gas from underground.

¹⁵ Geophysical process that consists of creating artificial earth tremors, with the use of explosives that cause waves with which an ultrasound scan of the subsoil is made, where structure potentially containing stored hydrocarbons may appear.

An analysis carried out by *Rystad Energy*¹⁶, claims that investments in solar and wind energy by the major oil companies will reach 17.5 billion dollars in the next 5 years, of which 6.5 billion is expected to come from Equinor, the Norwegian energy giant. The following graph shows an estimate of past, present and future investments in renewable energies by the major oil companies (Graph 3. Investment in renewable energies by the major oil companies).

Graph 3. Investment in renewable energy by the largest oil companies.



Source: Rystad Energy

Thus, the transition of the oil companies is a reality. The diversification and expansion of their business portfolio is a fact and they are committed to the fight for the environment and sustainability through investment in these energy sources.

In addition, in 2020, the coronavirus precipitated the energy transition of the oil industries. The pandemic has caused fossil fuel prices to fall and this trend is expected to continue for another two to three years, with oil companies accelerating their transition to commercialised electricity and renewables, Moody's reports¹⁷. Diversification is a reality

¹⁶ Independent Norwegian energy consultancy and leading energy research and business intelligence company. Website: <https://www.rystadenergy.com/>

¹⁷ Rating agency that conducts international financial research and analysis of commercial and governmental entities. Website: <https://www.moody.com/>

for oil companies, and some experts say that, from 2030 onwards, oil will start to fall even though it is currently a very powerful industry, as *Peter Kelly-Detwiler*, director of NorthBridge Energy Partners, points out:

"One thing is clear: the pace of change is accelerating and the major players know they must have some chips on the board, otherwise they risk being left behind in the new trillion-dollar energy economy".

5. METHODOLOGY

The methodology in this work will consist of carrying out a study of the points analysed in the previous section in two companies that have been chosen for the study. These companies are Repsol and CEPSA. The reason for choosing these two companies is because they are very well-known companies, and the two largest and most important in Spain¹⁸, and they also have very rich annual sustainability reports with a lot of information for the issues we want to deal with. The documents we will work with are annual reports obtained from the websites of these companies from 2015 to 2019. Thus, the points that we are going to analyse for this study are as follows:

- I. To analyse the decarbonisation process that these companies have carried out during the process of their activity in order to try to reduce greenhouse gas emissions, as well as other projects in favour of the fight against the environment. Therefore, we will analyse the greenhouse gas emissions emitted directly and indirectly by these companies in their reports.
- II. To study the data on the collection and reuse of water by the companies during the process of their activity. Water is a very important element in the production process of this type of company and we will analyse whether Repsol and CEPSA have taken measures to reduce its consumption or increase its reuse.
- III. Analyse whether these companies have been increasing their annual investment in renewable energies or in other projects that seek to obtain more sustainable and efficient business models.

Once the variables have been analysed, comparisons of the data between the two companies will be made in order to draw conclusions about their situation and whether

¹⁸ Ranking 10 Spanish oil companies: <https://www.eaeprogramas.es/blog/negocio/empresa/las-diez-empresas-mas-importantes-de-espana>

they are actually carrying out practices and procedures for the environment and society by implementing corporate sustainability plans in their strategies.

6. RESULTS

The aim of this section will be to analyse the two oil companies chosen (Repsol and CEPSA), and to see how over the years they have taken measures to address the variables analysed, trying to improve their results over the years by applying corporate sustainability practices in their activities.

6.1. Basic characteristics of the selected enterprises

Repsol is a Spanish multinational energy and petrochemical company headquartered in Madrid and founded in 1987. It produces, distributes and markets oil derivatives, petrochemical products, liquefied gas, natural gas sales in more than 90 countries and since 2018 also markets gas and electricity in the Spanish retail market. The company is currently present in 35 countries and has a total of 25,000 employees. Its services serve more than 10 million people, with 4,849 service stations and more than 1,700 electric recharging points. In terms of the values and culture by which the company is governed, its **vision** is:

"We want to be a global company that seeks the well-being of people and anticipates the construction of a better future through the development of intelligent energies. At Repsol, with effort, talent and enthusiasm, we move forward to offer the best energy solutions to society and the planet.

This vision is to be realised through the application of the company's core values. The company's **values** are as follows:

- I. **Integrity.** Caring for the well-being of the company and the society in which it operates.
- II. **Responsibility.** To achieve the objectives proposed by the company, taking into account the environmental impact and society.
- III. **Flexibility.** Active listening to society's problems and constantly trying to find solutions.

IV. Transparency. All activities and projects carried out by the company are reported by the company so that their veracity and clarity can be appreciated.

V. Innovation. The basis of the company's competitiveness lies in its ability to generate ideas and implement them in a continuous learning environment.

The company's **mission is** as follows:

"We care about the well-being of people and the economic growth of society. We want to build smart and sustainable energy solutions while respecting the environment".

On the other hand, Compañía Española de Petróleos S.A.U., known as CEPSA, is a Madrid-based company owned by Mubadala Investment Company. The company was founded in 1929 and was the first private Spanish oil company. The company operates in a total of 20 countries and employs more than 11,000 people. In terms of the values and culture by which the company is governed, its **vision** is:

"To be an energy company of choice, by reinforcing our integrated model, with solid international growth and maintaining the leadership of our services and products".

Its **mission** is to:

"To provide the energy that each reality needs, bringing our energy solutions to the service of the people".

On the other hand, the company's values are the **safety** of all people inside and outside the workplace, **continuous improvement** based on talent, technique and knowledge, **sustainability** of its activity and protecting the environment and society where the company operates, **leadership** based on honesty, integrity and respect, and finally, **solidarity and altruism** within the work environment to achieve its objectives.

6.2. Corporate sustainability practices of companies

In this section, all those variables chosen that fit the objective we are looking for will be subjected to analysis. The variables we will submit next are direct and indirect greenhouse gas emissions, water use by companies and investments in renewable energy.

6.2.1. Greenhouse gas emissions

The first point to be studied in this analysis is the decarbonisation process that companies have undertaken to try to reduce greenhouse gas emissions during the process of their activity.

To begin with, one of the variables we are going to analyse is direct greenhouse gas emissions, i.e. emissions that come directly from the company's own properties and activities (Table 2. Direct greenhouse gas emissions 2015-2019 in Repsol). Because we are analysing from 2015 to 2019, the annual reports have varied from year to year and although the total amount of direct gases emitted in all of them (CO₂, CH₄ and N₂O) is shown, from 2017 onwards these amounts are separated according to activity (upstream, refining, chemical and others).

Table 2. Direct greenhouse gas emissions 2015-2019 in Repsol.

	2015	2016	2017	2018	2019
Total direct emissions (Million tonnes)	21,04	24,9	22,9	21,9	24,7

Source: Repsol Sustainability Annual Reports (2015-2019).

Of all these annual emissions, 84.79% were CO₂ in 2015, 79.11% in 2016, 80% in 2017, 80.9% in 2018 and 81.34% in 2019. It can be seen how direct emissions rose by more than 3 million tonnes from 2015 to 2016, but were also down to 21.9 million tonnes in 2018. Finally, the rise to 24.7 million tonnes in 2019 is due to the addition of the electricity and gas business, due to the increase in production compared to previous years.

On the other hand, the company also produces indirect emissions, which are those that are also a consequence of the company's operations, but take place in sources owned by another organisation. The following graph shows the indirect greenhouse gas emissions (Table 3. Indirect greenhouse gas emissions 2015-2018 in Repsol (Millions of tonnes)).

Table 3. Indirect greenhouse gas emissions 2015-2018 in Repsol (Millions of tonnes).

	2015	2016	2017	2018
Indirect CO ₂ emissions associated with hydrogen purchases	0,77	0,63	0,67	
Indirect CO ₂ emissions associated with the purchase of goods and services (excluding hydrogen)	7,94	6,94	7,84	8.24 (including hydrogen)
Transport and distribution of products	1,04	0,61	0,52	0,51
CO ₂ emissions from the marketing of products		146		148

Source: Repsol Annual Sustainability Reports 2015-2018.

The table shows the company's indirect emissions from 2015 to 2018. The figure for indirect CO₂ emissions associated with hydrogen purchases in 2018 was accumulated in the variable in the bottom row. In 2019, other variables were taken into account when analysing indirect emissions, so they cannot be compared between these years.

Starting in 2018, Repsol began to develop and invest in technologies for decarbonisation and approved a new Technology and *Corporate Venturing* strategy focused on reducing energy intensity and reducing CO₂ emissions, among other things. In addition, it invested in projects with *start-ups* to introduce new business models that are more sustainable during production processes.

In 2019, with the commitment to achieve the goal of zero emissions by 2050, the decarbonisation process began. Thus, developments have been carried out in the field of mobility, with projects for the production of advanced biofuels with a low carbon footprint, through the use of waste. In Spain, two decarbonisation projects were initiated in 2020:

- I. The first project, in which they will initially invest 60 million euros, will consist of the construction of a plant for the production of synthetic fuels with zero net emissions from green hydrogen, generated with renewable energy. The plant is expected to be completed in approximately 4 years near the port of Bilbao.

- II. The second project, also in the port of Bilbao, which will involve an investment of 20 million euros, will consist of a plant to generate gas from urban waste. This second project responds to the company's strategy to promote the circular economy, applying it in many phases of the production process through technology and innovation.

In addition to these projects, the company has a decarbonisation plan to reduce CO₂ emissions and achieve the goal of zero emissions by 2050, divided into several phases. The phases are as follows:

- **Phase 1 (2020-2025).** The company intends to implement cost-effective projects and initiatives based on energy efficiency, methane emission reduction in flaring activity and renewable electricity for Scope 2 emissions¹⁹
- **Phase 2 (2025-2030).** The company intends to implement a multitude of projects and technologies under development such as: additional *Waste-to-Energy*²⁰ processes, high/medium concentration carbon capture and storage projects, first renewable hydrogen projects and carbon capture and use projects.
- **Long term.** Emergence of technologies with uncertain costs such as carbon capture and storage (depending on access to storage projects), carbon capture and use technologies (eco-fuels), large-scale renewable hydrogen and further electrification (Power-To-Heat²¹).

Since 2019, the company has launched more than 200 projects to achieve decarbonisation in its activities and achieve the goal of zero greenhouse gas emissions by 2050. Repsol believes that, for the transition process to reduce carbon emissions, it is important to adopt innovative technologies and new business models. For example, in the area of reducing energy intensity and CO₂ emissions, the company developed a project through a *joint venture* with Enagás to design a plant to generate hydrogen using solar

¹⁹ Indirect greenhouse gas emissions.

²⁰ Process by which waste is used to generate energy, avoiding additional CO₂ emissions.

²¹ Conversion of electrical energy to heat via conventional heating resistors, electrode boilers and heat pumps.

energy as the main source. Starting in 2019, the company began to greatly increase its investment in start-ups, reaching 85 million euros in 2019. In the same year, 68 R&D projects and more than 15 investments in *start-ups* were carried out.

On the other hand, the company's digitalisation process is also important for the decarbonisation process. In exploration and production activities, the company has implemented remote operations control centres that allow it to increase efficiency in these activities, increasing safety and being more efficient in the amount of energy needed to carry out these activities and thus reduce greenhouse gas emissions. In the refining and petrochemical areas, digital autonomous plant products have been designed that increase the safety of operations and help to automatically geolocate incidents, thus improving safety and minimising the impact on the environment.

On the other hand, CEPSA, before analysing the decarbonisation process that the company has been following over the years to reduce its greenhouse gas emissions, below is a table of the company's direct emissions from 2015 to 2019 (Table 4. Direct greenhouse gas emissions 2015-2019 in CEPSA).

Table 4. Direct greenhouse gas emissions 2015-2019 in CEPSA.

	2015	2016	2017	2018	2019
Total direct emissions (million tonnes)	6,3	6,25	5,94	5,92	5,96

Source: *Cepsa Sustainability Reports (2015-2019)*

In this table, it can be seen how direct greenhouse gas emissions have been reduced over the years, although it is true that there has been a small increase from 2018 to 2019. CEPSA has already included in 2019 a strategy to follow to reduce emissions through efficiency and transformation (energy transition). All its production centres in Spain, whether refining, petrochemicals, electricity or gas, have an energy management system certified under the international ISO 50001 standard, with the aim of reducing energy consumption and, therefore, greenhouse gas emissions.

On the other hand, with regard to indirect greenhouse gas emissions, the following table shows the company's²² GHG emissions between 2015 and 2019. (Table 5. Indirect greenhouse gas emissions 2015-2019 in CEPSA).

Table 5. Indirect greenhouse gas emissions 2015-2019 in CEPSA.

	2015	2016	2017	2018	2019
Thousands of tonnes of CO₂ equivalent	57.155	58.467	77.443	80.519	71.354

Source: CEPSA Sustainability Reports (2015-2019)

This table shows at a glance a noticeable increase in emissions, especially from 2016 to 2017, due to the addition of more indirect emissions variables that previously existed but were not added. A slight increase in emissions can also be seen from 2017 to 2018 due to the variables "items and services purchased" and "Use of products sold" (For more information, see page 100 of CEPSA's 2019 Annual and Corporate Responsibility Report). Also, a drastic decrease is seen from 2018 to 2019 due to a substantial reduction of 9 thousand tonnes of CO₂ equivalent in the variable "Use of products sold".

CEPSA's strategies to achieve decarbonisation during its activities are based on a circular economy project for consumption and production based on the use of by-products and energy. During the production phase, the company makes efficient use of natural resources and energy to minimise the impact of its activity on the environment. The company is also working on the incorporation of secondary raw materials (recycled) in the production processes. An example of this is the Cepsa petrochemical plant in Palos de la Frontera (Huelva), where a project was launched in 2020 to reduce greenhouse gases, especially CO₂ and NO₂, by using only gaseous fuels during the production process.

When it comes to the digitisation process, which is also a process that can reduce greenhouse gas emissions by increasing efficiency, the company is pushing different models to drive its projects, be it robotisation, AI in the work environment or the evolution of the way work is done. But focusing on the digitisation process that achieves reductions in greenhouse gas emissions, the company has selected Amazon Web Services (AWS) as its cloud computing provider. The company uses this service's technology to automate

²² The main greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).

processes and improve the agility and efficiency of its global operations. In addition, this technology has sensors that connect devices to each other so that they can act locally and efficiently on all the data they observe. Thus, at Cepsa's petrochemicals facility in Huelva, inefficiencies can be quickly identified to reduce energy expenditure and usage while increasing refined product production. For example, the AWS system provides Cepsa engineers at this petrochemical plant with recommendations on how to balance feedstock use, energy use and production, resulting in an increase in phenol production and reducing carbon dioxide emissions by 1,500 tonnes per year.

Both companies are aware of the necessary change that needs to be made in the oil industry at all stages of its production process to reduce greenhouse gas emissions.





In the data collected on direct greenhouse gas emissions (Tables 2 and 4), Repsol did increase its direct greenhouse gas emissions from 2015 to 2019 from 21.04 million tonnes to 24.7 million tonnes. In contrast, CEPSA did reduce its direct greenhouse gas emissions from 2015 to 2019 from 6.3 million tonnes to 5.9 million tonnes. Repsol is constantly working to find more efficient solutions and activities in its production process to achieve the decarbonisation that is so necessary to achieve its goal of zero net emissions by 2050. Regardless of the fact that direct emissions have risen from 2015 to 2019, the company is implementing multiple strategies for emission-free sustainable development, and this rise in emissions may be due to the company's increased activity.

On the other hand, in the indirect greenhouse gas emissions generated (Tables 3 and 5), the information found in Repsol's annual reports provides much more detailed and richer information than in the reports obtained from CEPSA. Repsol, as it contains a richer table of data, there are data that over the years reduce their emissions (transport and distribution of products) and others increase their emissions (CO₂ emissions derived from the commercialisation of products) but, if we add up all these variables, their indirect greenhouse gas emissions decrease, unlike CEPSA, which increased its emissions. Because indirect emissions arise from secondary activities outside the company's area of influence, both Repsol and Cepsa cannot apply all those policies and strategies to remedy 100% of these emissions.

Therefore, in the section on greenhouse gas emissions generated by the company directly and indirectly, both companies have been acquiring a sense of responsibility towards the environment and society, and although Repsol has increased direct emissions and reduced indirect emissions during the period 2015-2019 and CEPSA has reduced direct emissions and increased indirect emissions (Table 6. Summary of Repsol

and CEPSA emissions), from 2019, both companies aim to reduce emissions of this type annually, and in the case of Repsol, to achieve the goal of zero emissions by 2050.

Table 6. Summary of Repsol and CEPSA emissions.

	Change in direct greenhouse gas emissions 2015 to 2019	Change in indirect greenhouse gas emissions from 2015 to 2019
REPSOL		
CEPSA		

Source: Own elaboration

6.2.2. Water use and water reuse

Another very important and essential aspect for sustainable development is water management. In the *oil and gas sector*, water is very important for energy production and Repsol is constantly working to minimise water consumption, reusing it in its facilities. As can be seen in the following table (Table 7. Amount of water reused during Repsol operations).

Table 7. Quantity of water reused during operations at Repsol.

	2015	2016	2017	2018	2019	2020
Quantity of water reused (Kilotonnes)	8.964	10.292	14.995	17.368	15.679	14.182
Freshwater withdrawn (kilotonnes)	56.025	52.022	53.497	51.320	57.643	54.447
Percentage of water reused relative to water withdrawn	16%	20%	28%	34%	27%	26%

Source: Repsol Sustainability Annual Reports (2015-2020).

The table above shows how the amount of water reused has clearly increased over the years. The percentage of water reused has increased by 75% from 2015 to 2019. On the other hand, the reduction in water captured in 2020 is due to a drop in production activity as a result of Covid-19. The company is aware that water is an increasingly scarce commodity, but at the same time essential for carrying out its activity. The company has a strategic plan for water management for the year 2025. The lines of action are as follows:

- **External water reuse.** The company is committed to finding and using alternative sources of water from third parties. For example, in the Tarragona industrial complex, regenerated water from the municipal wastewater treatment plant is used, thus reducing the amount of water captured.
- **Efficiency in the use of water.** This section encompasses all activities and projects to reduce water consumption by improving efficiency in all activities carried out by the company. One example is the combined cycle plant in Escatrón (Spain), where the consumption of chemicals in the cooling towers is being optimised, allowing a reduction in water for this process.
- **Internal water reuse.** At the company's industrial facilities, treatments are being carried out for the reuse of wastewater.

But for Repsol, it is not enough just to adopt measures in its own sphere and in the development of its activity; it considers that water management requires a collaborative approach with stakeholders. The company intends to establish channels of dialogue with society to raise awareness and convey the concerns of local residents about safety, health and the environment, including water. In addition, the company intends to work hand in hand with associations such as IPIECA²³, CONCAWE²⁴ or FEIQUE²⁵, with the aim of remedying and seeking solutions to the treatment of water in the sector.

²³ International Petroleum Industry Environmental Conservation Association. Website: <https://www.ipieca.org/>

²⁴ Association of oil companies to carry out research on relevant environmental issues. Website: <https://www.concawe.eu/about-us/#:~:text=Concawe%20was%20established%20in%201963,relevant%20to%20the%20oil%20industry.&text=The%20scope%20of%20Concawe's%20activities,environmental%2C%20health%20and%20safety%20issues.>

²⁵ Spanish Chemical Industry Federation. Website: <https://www.feique.org/>

CEPSA is also aware of the importance of water for its activities and, in 2015, it recognised the need to reduce its consumption during the performance of its activities. Thus, since that year, the company has been promoting technical improvements in its activities to reduce indiscriminate water consumption and also began to initiate projects to raise awareness about saving water, reusing it, and using seawater to reduce freshwater consumption. The following graph shows the company's water intake for the years 2015-2019 (Table 8. CEPSA water intake 2015-2019).

Table 8. CEPSA water catchment years 2015-2019.

	2015	2016	2017	2018	2019
Volume of water abstracted (thousands of m ³)	36.910	34.233	41.535	47.585	46.666
Water reused (thousands of m ³)		0,08	15,25	1.930	1.660
Percentage of water reused relative to water withdrawn		0,00023%	0,037%	4,05%	3,56%
Recycled water (thousands of m ³)		263,43	286,63	200,42	172,44

Source: CEPSA Sustainability Reports 2015-2019.

The graph shows how the volume of water abstracted has increased over the years, but also the amount of water reused has increased over the years. On the other hand, the amount of recycled water has decreased slightly over the years. In order to further increase the amount of water reused and recycled, the company is constantly working on improving technologies at its facilities. A clear example is the La Rábida refinery (Huelva), where part of the water leaving the treatment plant is incorporated as plant water, and the rejection flow from the reverse osmosis treatment is used to feed the cooling towers. On the other hand, in the exploration and production areas, new methods are being implemented for the reuse and recycling of water through the reuse of water in the desalination process of crude oil, its recycling after passing through the treatment plant in the fire-fighting system pumps, or the use of recycled water for the preparation of chemical reagents and for the irrigation of the circulation routes.

On the other hand, in the area of water reuse and recycling, both companies are aware that, as water is an essential asset for the development of their production process, it is necessary to implement practices that improve the efficiency of its use, maintaining or

improving the company's productivity and at the same time reducing water withdrawal for production activities. In this aspect, Repsol has worked much harder than CEPSA to achieve an improvement in reducing water collection and increasing water reuse. In terms of water abstraction (Tables 7 and 8), Repsol has managed to reduce the level of water abstracted from 2015 to 2019, although there has been a slight decrease. CEPSA, on the other hand, has substantially increased the level of water abstracted from 2015 to 2019. Therefore, from this aspect we can clearly see that Repsol has been much more involved and concerned than CEPSA in taking measures to reduce the amount of water captured to carry out its activity. The issue of water is an important aspect not only for the activity of this type of company, but it is also an aspect that is highly valued by society in those companies that take measures and adopt new business models to protect this precious resource. That is why both Repsol and Cepsa have been carrying out projects for the reuse and recycling of water.

In the area of reuse, Repsol remains well ahead of CEPSA in terms of reuse and recycling of water used. From 2015 to 2020, Repsol's average percentage of water reused was 25.17% of the total water captured, i.e. 1 out of every 4 litres used to carry out its activity is reused water, well above the average percentage of water reused by CEPSA (1.91%). In this variable, the difference between the two companies is quite substantial and notorious. Repsol, as we have seen in the previous section, has become much more involved in the issue of water reuse, applying numerous practices to achieve the results shown in the data analysed above, with a much more defined strategy than in the case of CEPSA. CEPSA hardly reuses any of the water it collects and this is something it needs to work on in the future if it wants to follow a sustainable development strategy that is appropriate for the new times that lie ahead. Although CEPSA is promoting the circular economy from 2019 onwards, implementing, among other things, measures for the reuse and recycling of water, such as maximising the reuse of water in crude oil desalination processes, as well as other recycling methods for the preparation of chemical reagents and for the irrigation of roadways. In addition, the company is also working on practices for water purification for subsequent recycling and water treatment to adapt its quality to the receiving environment. The main projects for 2019 include the filtration treatment plant at the San Roque refinery, which reduces the content of suspended solids in the effluent with the aim of reducing them.

6.2.3. Investment in renewable energies

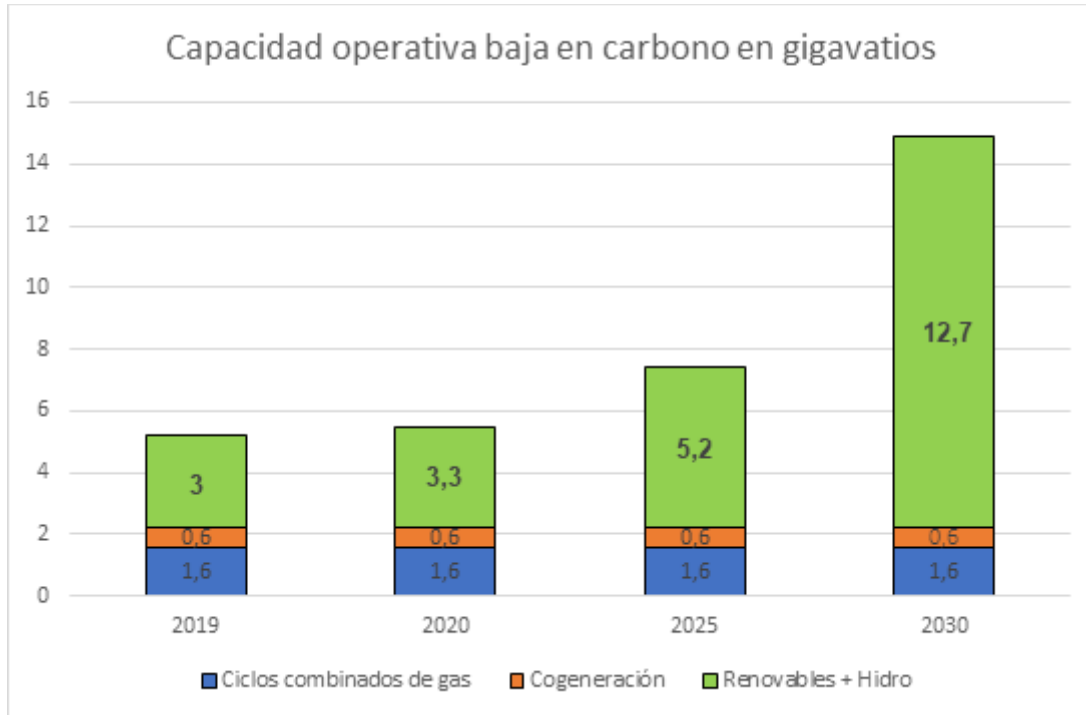
In this section, we will analyse the investment in renewable energy by companies over the years. Over the years, investment in renewable energy has increased over the years, which has also led to an increase in electricity generation. The evolution of investment in renewable energy has grown exponentially, from just 23 million euros in 2015 to 9,821.8 million euros in 2019. The company entered the world of renewables with force in 2018 following the acquisition of Viesgo²⁶ for €733 million, and since then it has not stopped. Repsol's turnaround in investment in renewable energy to reach the goal of zero emissions by 2050 is very clear and, as can be seen, from 2020 it will invest 4,000 million in renewables until 2025, something that makes the strategy to be followed by the company very clear.

Repsol is currently the oil company investing the most in the energy transition process and renewable energies, according to analyses by firms such as Goldman Sachs, Wood Mackenzie and Redburn. By 2020, the company is earmarking around 50% of its total investment in renewable energies, and in terms of energy generation figures through renewable energy, to achieve 7,500 megawatts (MW) in the next 5 years. By 2020, the company has reinvented itself by integrating

renewable energies in refining operations, as well as engaging in the circular economy as an activity to achieve the efficient use of resources. On the other hand, the company has a strategic plan for the years 2021-2025. In terms of dealing with the covid-19 pandemic, the company launched competitiveness programmes to maximise resilience through working capital optimisation and contract efficiency programmes (renegotiation initiatives, standardisation and implementation of new digital tools) to deal with the crisis caused by the pandemic. During these strategic plan years, the company intends to accelerate the transition and increase investment in decarbonisation activities, investing around 5.5 billion euros. On the other hand, the company's strategy for low-carbon energy generation projects and new business models, the company has made a forecast up to 2030 which can be seen in the following graph (Graph 4. Low-carbon operating capacity (in gigawatts)).

²⁶ Spanish company engaged in the generation and distribution of electricity.

Graph 4. Low-carbon operating capacity (in gigawatts).



Source: Repsol Strategic Plan 2012-2025.

In the graph, it can be seen how the company is going to focus exclusively on renewable + hydro generation in terms of low-carbon energy generation in the coming years. This plan is divided into 3 phases:

- **Phase 1 (2019).** Organic growth (develop early stage and ready-to-build assets) and capacity building and renewable project portfolio.
- **Phase 2 (2020-2025).** Construction and commissioning of projects with more than 500 megawatts per year and creation of international platforms.
- **Phase 3 (2026-2030).** Accelerate organic development to over 1 gigawatt per year and optimise the portfolio by taking advantage of opportunities.

Thus, Repsol's corporate sustainability policy aims to satisfy the growing demand for energy and products, thus contributing to sustainable development. The practices, activities and projects carried out by the company are aimed at creating value in the short and long term, seeking to maximise positive impacts and neutralising negative impacts on society and the environment. The Global Sustainability Plan (GSP) published by the company in 2020 contains the most important objectives to be followed by the company

in the field of sustainability, setting 39 medium-term objectives that revolve around the 6 axes established by the company (decent work and economic growth, climate action, responsible production and consumption, industry, innovation and infrastructure, clean water and sanitation, and affordable and non-polluting energy), among the most important of which is the goal of zero net emissions by 2050. In addition, in 2020, Repsol published the first SDG 2019 report²⁷, making clear its commitment to the United Nations 2030 Agenda and its 17 sustainable development goals.

With the SDG report, the company wants to take a step forward in its commitment to sustainable development. In the report, which follows the six-pronged strategy, it sets out the challenge of achieving zero net carbon emissions by 2050. The company has invested around €2.5 billion in low-emission businesses in the period 2018-2020, in addition to reducing the carbon intensity indicator by 2.8% since 2016. In addition, the company will invest more than USD 1 billion over the next ten years in innovative technologies that will contribute to reducing greenhouse gas emissions.

Thus, over the years, Repsol has made a significant turnaround in a relatively short period of time. It has been one of the companies that has been most involved and concerned about starting to implement practices to reduce greenhouse gas emissions and invest in projects such as new, more efficient methods to reduce emissions or to reduce or reuse water more efficiently during the industrial process. During this section it has been possible to see how the company over the years has been taking measures to improve its practices and improve efficiency in its activities to reduce greenhouse gas emissions, and also efficient practices for the reuse and recycling of water.

The company is aware of the importance of caring for the environment and society today and therefore the importance of having a corporate sustainability strategy with clear objectives that are in line with the values, culture and ethics that the company wants to project to the outside world. The new times and climate change are forcing everyone to change their outlook for the coming years, including companies, society and governments. That is why the company has not lagged behind and as has been seen and can be seen in the annual reports published year after year, its commitment to society and the environment is total, achieving and merging its business strategy with sustainable development.

²⁷ SDG Report: https://www.repsol.com/imagenes/global/es/repsol_informe_ods_tcm13-175437.pdf

On the other hand, CEPSA has also increased its investment in renewable energies over the years. Although, until before 2018, the company had been reluctant to invest in renewable energies, making rather scarce investments economically speaking. For example, investment in renewable energies in 2015 was only 11.4 million euros, which showed how little the company was involved in the environment and sustainability at that time. But from 2019, the company took a step forward after reaching an agreement with its Arab partner Masdar and investing around 500 million euros in developing photovoltaic and wind projects in Spain and Portugal and generating between 500 and 600 megawatts (MW) until 2024. Since 2020, the company is carrying out multiple projects to create wind power plants in places such as Jerez and Cadiz. The company is aware that society needs the company to get involved in the fight for sustainable development and that is why it intends to continue increasing its investments in wind energy in the future.

Therefore, Cepsa, like Repsol, is a company that over the years has been working to incorporate new, more efficient practices into its activities to reduce the consumption of greenhouse gas emissions. Although it is true that the company has taken a turn and has become involved in sustainable development and care for society and the environment, the truth is that, compared to Repsol, its results analysed in this section leave something to be desired compared to the other company, something that will be analysed in more detail in the next section.

In terms of investment in renewable energies, both companies have increased their investments in renewable energies exponentially over the years. In 2015, both companies barely invested in green energy, at that time investment in this type of energy was not yet a priority for these companies, although it is true that they were already beginning to worry about trying to reduce greenhouse gas emissions in their production process. From 2015, the two companies, but especially Repsol, began to involve and try to carry out large investment projects in renewable energies in their short, medium and long term strategies, finally realising that investment in this type of energy is not only beneficial for the environment and sustainable development, but also to achieve a diversification of the company's activities that can increase revenue in the future by not depending on a single source of income such as gas or oil.

To conclude this section, on the one hand, Repsol has developed projects and strategies to try to improve the results of the variables analysed in the previous section, although it is true that it increased direct greenhouse gas emissions from 2015 to 2019, it has

proposed a short, medium and long-term strategy to reach the goal of zero net emissions by 2050. The most notable difference between the two companies is in the area of water reuse, as we have seen, where Repsol reuses a large amount of the water it collects, in contrast to CEPSA, which hardly reuses the water it collects. Therefore, both companies are involved in sustainable development, but it is true that Repsol is implementing much more efficient policies and practices and is much more focused than CEPSA on achieving this objective as soon as possible.

7. CONCLUSION

Corporate sustainability should be a very ingrained concept in today's companies, which are aware that the world needs a global change mainly in the economic, environmental and social fields. In the paper, by focusing on the oil industry we focus on analysing the environmental environment because it is a very interesting aspect to analyse in this type of industry taking into account the objective of the study.

The aim of this analysis was to check the evolution of certain environmental variables that could, on the one hand, reflect the evolution and approach of these companies in the fight for the environment through sustainable development policies and, at the same time, be easily comparable between the companies in order to draw better conclusions, and to do this we chose those variables found in both Repsol's and CEPSA's annual reports that were closest to what we were looking for. The analysis of these two companies has led to the conclusion that both companies have evolved over the years to a greater or lesser extent towards a more sustainable perspective in their activities, strategy and future projects in investments or collaborations with various sustainable associations or *start-ups*, etc. From the results analysed in the previous section, a very clear conclusion can be drawn, and that is that these types of corporations have changed from the way they were 20 years ago to the way they are now, their prism and way of seeing things has changed radically, becoming much more involved in environmental and social issues, applying practices and projects in favour of the environment and society in their strategies. Oil companies are aware of the necessary change in their activities, so their investments in this type of projects are increasing over the years, as well as diversifying their activities into other types of more renewable energy sources. Furthermore, with the three variables analysed in the previous section, we can see very clear indications of the destiny of these companies in the future.

Thus, corporate sustainability must be an essential element in the strategy of companies seeking stable growth with the creation of sustainable development models and models of value creation for the environmental, social and economic environment in which companies find themselves. What we can conclude from this work is that companies must take into account that society and companies have to work together for sustainable development, i.e. sustainable development is the responsibility of everyone, including companies, and that, as we have seen, they can increase their competitiveness through sustainable development strategies in their future plans. In the future, companies will be forced to face the transformation of their traditional way of generating wealth if they do not want to become obsolete, focusing on the task of creating value for all stakeholders from an economic, environmental and social perspective. Therefore, corporate

sustainability will soon become, if it is not already, an indispensable part of companies' strategies.

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