



TRENDS  
RENEWABLE ENERGY

# From Big Oil to Big Power? At the Heart of the Renewable Energy Boom, Oil Producers Are Dreaming of a Low-Carbon Future

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Cornered by pressure from their shareholders and civil society, some of the major oil producers are envisaging a future in low-carbon services, and producing renewable energy. However, their declarations of hope in the climatic situation are hardly convincing, and their emergence on the wind and solar energy markets is challenging the sector's pioneers.



DATA OVERVIEW

## Covid-19 is rearranging the energy market landscape

In 2020, the investments in renewables rose to \$303.5 billion, an increase of 1.7% compared to the previous year.<sup>1</sup> The sector continues to benefit from the low prices of solar photovoltaic energy, (**fig. 1**) which ended up being \$20 per Megawatt hour (MWh), the “cheapest energy in history” according to the International Energy Agency (IEA).<sup>2</sup> Attracting \$148.6 billion, or almost half of the world total, it is the only renewable energy to have experienced an increase in investments (+12%). At the same time, the capital expenditure in relation to offshore wind farms exceeded offshore oil and gas investments for the first time<sup>1</sup>. All of the other renewable energies, such as biomass, biofuels and small hydro recorded a drop in investments compared to 2019, continuing the decadal downward trend.

During the pandemic, public aid has been a great support for industries: 31 States directly allocated \$51.3 billion for renewable energies between January 2020 and April 2021. This allowed investments to bounce back in the latter half of the period, after an initial six months marked by the interruption of production chains. REN21 explains this sum is six times lower than the public funding allocated as a form of support for fossil fuels, drawing figures from the Energy Policy Tracker.<sup>1</sup> Contrary to several European countries, China has substantially reduced its public aid for solar and wind energy. Likewise, in India, Latin America and Sub-Saharan Africa, there has been a drop in investments in new renewable capacities.

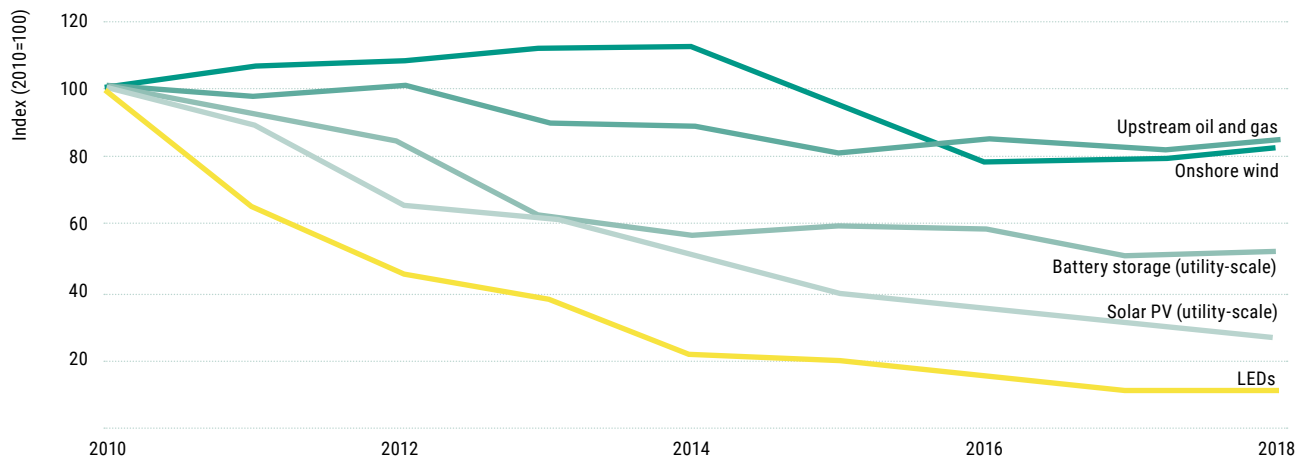
As for businesses, this year the gap has increased between the dynamics across the booming renewable sector and the oil and gas sector, which greatly suffered from the health crisis. According to Rystad's analyses, out of the 170 energy suppliers, those who drew the majority of their revenue from oil and gas were subject to financial losses averaging at 23% in 2020, whereas the businesses that focused on PV and wind power recorded gains of 17%.<sup>3</sup> In the United States, 107 exploration companies and parapetroleum services became bankrupt in 2020, compared to 63 in 2019.<sup>4</sup> In Europe and North America, oil and gas businesses depreciated their shares by a record sum of \$145 billion during the three first quarters of 2020.<sup>5</sup> The projections for capital global expenditure (capex) relating to renewable energy projects in 2021 (\$243 billion) got increasingly closer to the level of those anticipated for oil & gas (\$311 billion). To compensate for the depletion of the fields being exploited, the exploration and drilling of new deposits became increasingly costlier and energy-consuming. The success levels of conventional oil and gas drilling dropped from 60% in 2016 to 10.6% in 2020.<sup>6</sup> The ultimate sign of this shift was when Florida-based renewable energy producer NextEra's stock market value exceeded that of ExxonMobil at the point, which was once one of the most listed business in the world on the stock market.<sup>7</sup>

In this context, a few of the Oil Majors seem to want to get the energy transition train in motion. On the horizon: the uninviting prospect of reigning over a future empire of stranded assets. The International Energy Agency, which was set up overnight after the first oil shock to ensure the safety of energy supplies, advises putting an end to any investments in new fossil energy extraction projects and to reach carbon neutrality by 2050, to which over 100 countries are committed to this day.<sup>8</sup>

**FIGURE 1**

**EVOLUTION OF CAPITAL COSTS FOR SELECTED SECTORS AND ENERGY TECHNOLOGIES**

Source: [IEA, 2020](#)



**THE OBSERVATORY'S LENS**

**The Oil & Gas sector tries join the energy transition club**

**Climate change, an 'existential problem' for the oil & gas sector**

While in 2020 the sector experienced the most abrupt drop in demand in its history (-8.8%)<sup>a</sup>, forcing the OPEC+<sup>a</sup> to reach an agreement on a coordinated drop in production all throughout the year, 2021 started with uncertainty. Oil prices, briefly negotiated to below zero in April 2020, have once again reached profitable levels for most mining projects. It was up to around \$70/barrel in May 2021<sup>b</sup>. In principle, this constitutes a situation which is conducive to capital investment and relaunching production. The OPEC+ gradually relaxed the restrictions it had imposed on itself.

Nevertheless, there was no more optimism for several of the private companies, if the declarations of several of the leaders in the industry were to be believed. They estimated that the oil demand would not return to its pre-crisis levels. From Matt Gallagher, the CEO of the Texan shale oil producer Parsley Energy,<sup>10</sup> to Bernard Looney, who runs BP,<sup>11</sup> the analyses predicting a higher peak in demand were multiplied at the height of the crisis. This was until the annual figures of the extremely

popular *Energy Outlook*, which is edited by BP, corroborated the premonition – even in a business-as-usual (BAU) scenario, oil demand had never exceeded its record level from 2019<sup>12</sup> (100 million barrels, that is 192 exajoules a day)<sup>c</sup>. Russia, the third largest global producer whose exporting revenues of oil and gas represent a third of the State's budget, estimated it had already reached its peak offer in 2019.<sup>13</sup>

The economic situation questions the sector's ability to be able to endure a forced transition and reinvent new activities besides oil. In that respect, the Oil Majors must now face a contradicting double injunction. On the one hand, the shareholders are demanding their businesses to maintain the levels of high dividends, rather than keep investing in drilling and explorations, which are increasingly expensive and hard to access.<sup>d</sup> In 2020, the five biggest oil companies<sup>e</sup> spent more on dividends than what they had generated from cash flow, producing a deficit of \$29.4 billion.<sup>14</sup> Concurrently, the capital expenditures of those same companies were cut by \$22.8 billion (-25.7% between December 2019 and December 2020),<sup>15</sup> and layoff plans were put in place.

Also adding pressure are the regulators, investors, and NGOs who, worried about the 'existential problem'<sup>f</sup> of climate change and how it could affect business, are pushing the industry to reduce its emissions and to become a major player in the energy transition. 26 May 2021 was the climax, when the activist hedge-fund Engine No. 1 achieved its goal, with the

a The OPEC+ refers to a group of 23 oil producing countries, including the 13 OPEC members. This cartel was founded in 1961 and the 10 producing non-member countries of the cartel include Russia, which is the third largest oil producer in the world.

b <https://oilprice.com/oil-price-charts/>

c Since then, the International Energy Agency has formulated projections which will see the oil demand exceed its pre-Covid level once more.

d 10 billion barrels were found in 'wildcats' (exploration drilling areas where production hasn't yet started) in 2020, and very few had a capacity that was greater than 250 million barrels. Out of them, 66% were located in deep to ultra-deep water, which made them harder and more expensive to exploit. Source: Rystad (05/03/2021). [Wildcat safari running dry: Onshore success rate dips to lowest on record, falls for fourth year in a row](#). Rystad

e Referred to as "super majors" by the IEEFA, this category includes Shell, Total, Chevron, BP and ExxonMobil.

f Engine No. 1 also formulated this in its shareholder appeal during ExxonMobil's general assembly in May 2021.



support of major financial players,<sup>9</sup> of electing three directors at ExxonMobil's administrative council,<sup>16</sup> whereas Shell was sentenced by a Dutch tribunal to reassess the ambition of its climate goals, following a complaint filed by seven NGOs supported by 17,000 signatures.<sup>17</sup> On that same day, 61% of Chevron's shareholders voted in favour of a resolution forcing the business to reduce its emissions.<sup>18</sup> The contradiction resides in the fact that as of today, only the yields from oil-sourcing activities would allow them to achieve the levels of financial profitability demanded from their shareholders.

However, earlier in April, the IEA, in its Net Zero By 2050 roadmap, recommended to put an end to investments in any new fossil fuel extraction projects.<sup>8</sup> As for the UNEP, it estimates that to reach the Paris Agreement's objectives, oil and gas production must be reduced by 4% and 3% a year respectively from now until 2030 (11% for coal, 6% in total for fossil fuels).<sup>19</sup> Overall, the oil & gas sector would be directly or indirectly at the root of 42% of the world's greenhouse gas emissions, according to McKinsey.<sup>20</sup>

### Fragile commitments to carbon neutrality

In December 2019, Repsol was the first of a long list of major European oil companies to commit to achieving carbon neutrality by 2050.<sup>21</sup> Total, BP, Shell and ENI adopted also this objective identified by the IPCC to limit global warming to 1.5°C.<sup>22</sup> This was soon supported by various plans of action which detailed, with varying levels of precision and ambition, how each one could go about it. However, there were a few rare exceptions, such as Occidental Petroleum,<sup>23</sup> their American sister company, which chose to go down the business-as-usual route – a strategy which is starting to prove risky in the eyes of their shareholders, as proven by the misfortunes of Chevron and ExxonMobil.

It is mainly the Oil Majors and independent companies who have undertaken such commitments. Equinor, 70% of whose capital is held by the Norwegian State, is the only INOC (**see Keys to Understanding**) to also be committed to it, in keeping with the strategic shift which took place from 2018 onwards to diversify its activities outside of oil. Malaysian enterprise Petronas,<sup>24</sup> and PetroChina<sup>25</sup> are the only national companies (NOC) to follow this movement. A few majorly symbolic moves added to these strategies, like when Total left the American Petroleum Institute (API), one of the biggest lobbies in the sector in early 2021.<sup>26</sup> Last year, BP had also left three American oil associations which were not respecting the Paris Agreement. Since then, the API has shown signs of supporting the idea of a coal tax in the United States,<sup>27</sup> a market tool which for them would be a lesser evil, compared to the normative standards Biden's cabinet could impose.<sup>h</sup>

The ambition and the impact of these new strategies has been greatly analysed. In May 2021, the Carbon Tracker Initiative, published its report *Absolute Impact* for the second consecutive year. In it, it proposes a ranking of the low-carbon strategies from the largest oil companies (**tab. 1**). These strategies may fall in line with the Paris Agreement if the following three criteria have been fulfilled:

- The fixed objectives cover Scopes 1, 2 and 3;
- The objectives are expressed in absolute terms, with intermediate deadlines;
- The objectives cover all of the products sold by the business on a worldwide scale.<sup>28</sup>

g CalSTRS, CalPERS and New York State Common, the three biggest American pension funds, as well as BlackRock, Vanguard and State Street, the three biggest asset managers in the world, all voted in favour of candidates proposed by Engine No. 1 to attend Exxon's administrative council.

h From the very first few days of his mandate, Joe Biden signed a moratorium suspending the concessions for federal land and water to be used for oil and gas exploration. Thirteen American states filed complaints in March, before a judge in Louisiana issued a favourable decision on their behalf in May, estimating that the federal administration does not have that power. Source: Puko, T., Ferek, K. S. (15/06/2021). [Federal Judge Stops Biden Administration From Blocking New Oil and Gas Leases](#). *Wall Street Journal*



**TABLEAU 1**

COMPARATIVE CLASSIFICATION OF CLIMATE STRATEGIES, PRESENTED BY OIL & GAS COMPANIES - Source: [Carbon Tracker Initiative, 2021](#)

RANK	COMPANY	METRIC	CHARACTERISTICS		COVERAGE		SCALE	
			END USE EMISSIONS	ABSOLUTE BASIS TO 2030 GOAL	FULL EQUITY SHARE BASIS (GLOBAL)	DOWN-STREAM PRODUCTS INCLUDED	2030 REDUCTIONS (ABSOLUTE)	2050 GOAL
1	ENI	Emissions of all products	Yes	Yes	Yes	Yes	25%	Net Zero
2	TOTAL	Emissions of products sold in Europe	Yes	Yes	Partial (Europe sales only)	Yes	30%	Net Zero
3	BP	Emissions from O&G production	Yes	Yes	Partial (excludes Rosneft)	-	30-40%	Net Zero
4	SHELL	Emissions intensity of all products	Yes	-	Yes	Yes	-	Net Zero
5	EQUINOR	Emissions intensity of all products	Yes	-	Yes	Yes	-	"Near zero"
6	REPSOL	O&G operational emissions intensity	Yes	-	Yes	-	-	Net Zero
7	OCCIDENTAL	O&G operational emissions intensity	Yes	-	Partial (Operated only)	Yes	-	Net Zero
8	CONOCO-PHILIPS	O&G operational emissions intensity	-	-	Partial (Operated only)	(n/a)	-	Net Zero
9	CHEVRON	O&G operational emissions intensity	-	-	Yes	-	-	-
10	EXXON-MOBIL	O&G operational emissions intensity	-	-	Partial (Operated only)	-	-	-

**KEYS TO UNDERSTANDING**

**OIL MAJORS**

The term "major" refers to the main private oil companies who used to be known as the "cartel of the Seven Sisters" after the major wave of mergers and acquisitions from the late 1990s-early 2000s. The IEA lists seven of them: ExxonMobil, Chevron, BP, Shell, Total, ConocoPhillips and ENI. We distinguish them from "independent" companies, of which there are more, and which are smaller (Repsol, Lukoil, Mitsubishi Corp, etc.). NOCs, or national oil companies, (such as Petrobras, Saudi Aramco, PDVSA and Sonatrach), focus their activities in the State's territory and they own most of the capital. They differ from international national oil companies (INOCs, such as Equinor, the Chinese CNOCC and CNPC, plus Gazprom), whose activities go beyond the borders of the State which owns most of their capital. This distinction is crucial for understanding the impact these companies have as they position themselves to make the best energy transition. In fact, the Oil Majors, of which only the Europeans have shown themselves to be open to volunteering up until now when it comes to diversifying their activities, represent only 12.3% of the world's reserves, 13.9% of production and 15.6% of the oil sector's investment (**fig. 2**). The overwhelming majority of reserves (67.5%) is owned by national companies (NOCs and INOCs). Dependant on oil profits to fuel their budget and social expenditures, the States which are running them do not seem willing to turn away from this financial godsend.<sup>30</sup>



A product of the collaboration between several NGOs defending the environment, petitioning for shareholders and financing, the *Big Oil Reality Check* report, edited by Oil Change International, analyses the climate strategies of BP, Chevron, Eni, Equinor, ExxonMobil, Repsol, Shell and Total. Ten criteria have been set, evaluating not only the ambition and transitional plans of companies, but also their ‘integrity’ (do they offer to put an end to lobbying over climate solutions, for example?).<sup>29</sup>

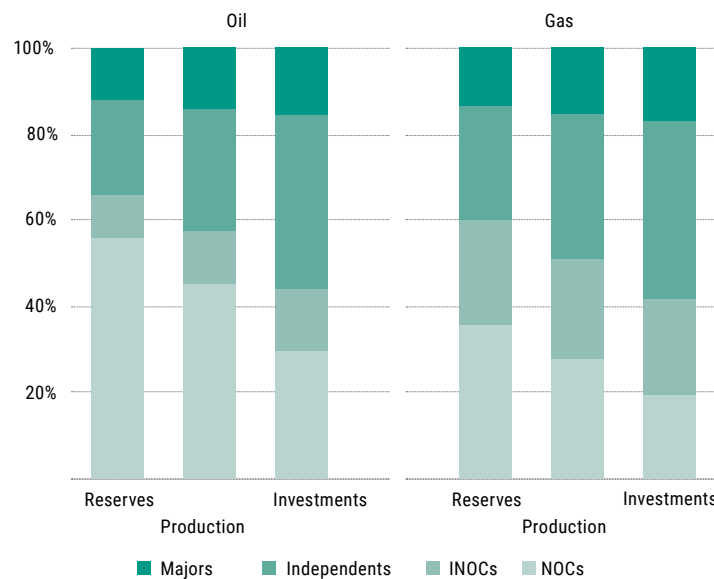
Seven companies in total have a fixed emission objective with Scope 3 for all of their projects, but in the cases of Shell, Equinor, Repsol and Oxy, the emission objectives are only expressed in terms of carbon intensity (CO<sub>2</sub>/joule). In these conditions, a minor increase in their low-carbon energy portfolios would be enough for these companies to reach their objectives, without having to reduce all of their production, and therefore combusting oil. The same goes for the major American players, who haven’t yet consented to reducing the carbon intensity of their operational activities (scopes 1 & 2). However, it is the accumulation of GHGs in the atmosphere which leads to global warming: the climate objective requires not only the development of low-carbon energies, but also the elimination of fossil fuels. Currently, only BP (-40% in 2030, based on 2019 figures) and Shell (-55% in 2030) predict a drop in their oil production, but none of the companies plan to cut it completely. In all of the other cases, production is set to increase between now and 2030.<sup>29</sup>

In all of the observed rankings, the Italian company Eni stands out by being the only company to have defined complete objectives for reducing emissions with intermediate deadlines across all of its products, covering even Scope 3. This point is essential, insofar as 81% of emissions from oil producing majors come from Scope 3.<sup>1</sup> Total and BP have also formulated intermediate objectives to reduce emissions before 2050.

There are several studies which highlight that these strategies also have the disadvantage of greatly relying on technologies which have not yet been developed on a large scale, so their efficiency is often the subject of debate, as is the capture, use and storage of CO<sub>2</sub> (CCUS). In comparison, several studies predict an increase in the production capacities for generating renewable energies.

**FIGURE 2**

THE SHARE OF RESERVES, PRODUCTION AND INVESTMENTS IN THE OIL AND GAS SECTORS PER COMPANY TYPE IN 2018 - Source: IEA, 2020



Note: NOCs = national oil companies ; INOCs = international national oil companies

i When discussing the emissions of a company, Scope 3 refers to emissions given off before the product’s value chain, so during its distribution, storage, use or at the end of its life. For oil, this mainly relates to the emissions produced during combustion. Source: GHG Protocol, *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*.

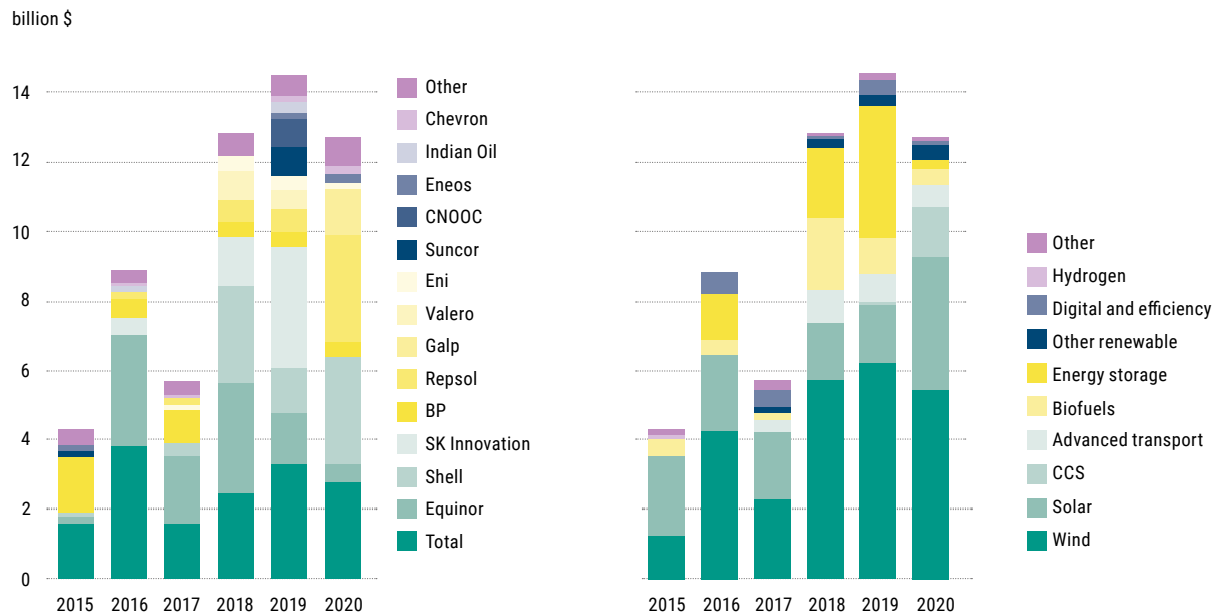
**TABLE 2**
**CLIMATE AND ENERGY TRANSITION STRATEGIES OF THE THE SEVEN LARGEST OIL COMPANIES**
*Sources: public documents from companies*

COMPANY	BP	SHELL	ENI	TOTAL	EQUINOR	EXXONMOBIL	CHEVRON
DOCUMENT	BP SUSTAINABILITY REPORT 2020	POWERING PROGRESS	ENI'S EVOLUTION. LONG-TERM STRATEGIC PLAN TO 2050	VERS LA NEUTRALITÉ CARBONE	EQUINOR'S CLIMATE ROADMAP	UPDATED 2021 ENERGY AND CARBON SUMMARY	CLIMATE CHANGE RESILIENCE. ADVANCING A LOWER-CARBON FUTURE
DATE	Mar-21	Feb-21	Feb-21	Sep-20	Nov-21	Apr-21	Mar-21
<b>NET ZERO TARGETS</b>	2050 (Scope 1, 2, 3)	2050 (Scope 1, 2, 3)	2030 (upstream)	2050 (Scope 1, 2, 3)	2050 ("Near zero absolute GHG emissions" in Norway)	No	No
<b>ABSOLUTE EMISSION REDUCTION TARGET</b>	-30-35% in 2030 (Scope 1 & 2, base 2019)	No	-80% in 2050 (Scope 3)	-30% in 2030 (Scope 3, in Europe) Absolute reduction in the world	-70% in 2040 (Norway)	-30% in 2025 (Scope 1)	No
<b>ABSOLUTE REDUCTION INTERIM TARGET</b>	-20% in 2025 (Scope 1 & 2, base 2019)	No	-25% in 2030 (base 2018) -65% in 2040	-13% in 2025 (base 2015)	-40% in 2030 (Norway)	No	No
<b>CARBON INTENSITY REDUCTION TARGET</b>	-50% in 2050 (base 2019)	-100% in 2050 (base 2016)	Net carbon intensity (Scope 1, 2, 3, base 2018)	-60% in 2050	-50% in 2050 (Scope 1, 2, 3)	-15-20% (upstream, base 2016)	-35% in 2028
<b>RENEWABLE ENERGY DEVELOPMENT TARGET</b>	50 GW capacity (2030)	560 TWh power sales (2030)	60 GW capacity (2050)	100 GW capacity (2030), 15% of sales	12-16 GW of installed capacity (2035)	No	No
<b>RENEWABLE ENERGY DEVELOPMENT INTERIM TARGET</b>	25 GW (2025)		4 GW (2024), 5 GW (2025), 15 GW (2030), > 25 GW (2035)	35 GW (2025)	4-6 GW (2026)	No	No
<b>CURRENT SITUATION</b>	3.3 GW (2020)	255 TWh power sales (2020) 1 GW operating capacity	200 MW (2019)	7 GW 5% of sales (2020)	500 MW (2019)	n.d.	n. d.
<b>OIL PRODUCTION REDUCTION TARGET</b>	-40% in 2030 (base 2019)	-55% in 2030 (-1-2%/year by 2030)	Plateau in 2025	No	No	No	No
<b>CCUS TARGET</b>	Yes, n.d.	+25 Mtpa capacity in 2035	7 Mtpa capacity in 2030 50 Mtpa capacity in 2050	Yes, via the OGCI, n. d.	No	No	No
<b>OFFSET TARGET</b>	Not before 2030	120 Mtpa in 2030	40 Mtpa in 2050	5 MtCO <sub>2</sub> /year by 2030	No	No	No

**FIGURE 3**

**INVESTMENTS IN 'CLEAN ENERGIES' FROM OIL AND GAS COMPANIES, 2015-2020.**

Source : [BloombergNEF](#), 2021



**Low-carbon services, an increasingly used strategy of oil companies**

Over the course of the year, several Oil Majors have expressed their desire to no longer be considered as oil companies: “The sole fact that [...] you refer to us as an oil company is symptomatic of the problems we have to face”, declared Ben van Beurden, the CEO of Shell, in an interview with Bloomberg in June 2020.<sup>31</sup> One year on, Total was renamed TotalEnergies.<sup>32</sup>

According to BloombergNEF, investments in “clean energies”<sup>j</sup> from the 34 biggest global oil companies have decreased by 12% between 2019 and 2020. Nevertheless, these investments are now focused on 6% of the sector’s total capex, which is a record (fig. 3).<sup>33</sup>

Mergers and acquisitions (M&A) and capital-risk investments designed to increase the participation of oil companies in pre-existing renewable installation projects, are preferential leverage tools, via which Oil Majors intend to carry out their transition. In this respect, Total has spent almost six billion dollars on acquisitions between 2016 and 2020, notably thanks to purchasing electricity supplier Direct Energie, the battery manufacturer Saft and the Spanish subsidiary of the energy company EDP. In early 2021, this French giant also bought a 20% share of the Indian solar energy producing company Adani Green Energy, and it has multiplied this kind of operation ever since.<sup>34</sup> Nevertheless, as Wood Mackenzie’s cabinet highlights, these M&As in “clean energies” are still just a drop in the ocean compared to the expenditure in oil & gas activities over the same period. That was only 16% in the case of Total (fig. 4),<sup>35</sup> which was the highest level amongst the major oil

producers. 5% of its energy sales are now electricity (which was 1% in 2015), against 55% of oil products (66% in 2015) and 40% of gas (33% in 2015).<sup>36</sup>

Direct investments in new renewable production capacities, known as ‘organic investments’, are rarer. However, the introduction of oil companies and their unparalleled major investments relating to calls for tenders for offshore wind farms, could raise the prices of concessions to the detriment of traditional electricity companies. The recent excise duty in February 2021 was proof of that, with two sites amounting to a total capacity of 3 GW for BP and the German electricity company EnBW off the coast of the United Kingdom, for a record price of a billion pounds; almost fifteen times more than the previous call for tenders<sup>37</sup>. Two oil companies, BP and Equinor, also took over the market with a 2.49 GW offshore wind farm capacity near New York, after the English company contributed over a billion dollars to the concession<sup>38</sup>. Offshore wind farms are an obvious choice for oil companies who already have the expertise in prospecting, constructing and carrying out operations out at sea.

Although a majority of the investments are in solar and wind energy, the diversification strategies of the European majors is not limited to a single energy producing sector. With carbon neutrality becoming the guide for global climate action, European companies are even searching to become what could be called “low-carbon service businesses”, rather than renewable energy producers.

<sup>j</sup> BloombergNEF is greatly accepting of “clean energies”, including notably solar, wind power, CCUS, biofuels, energy storage, digital, hydrogen, new means of transport and other forms of renewable energy.



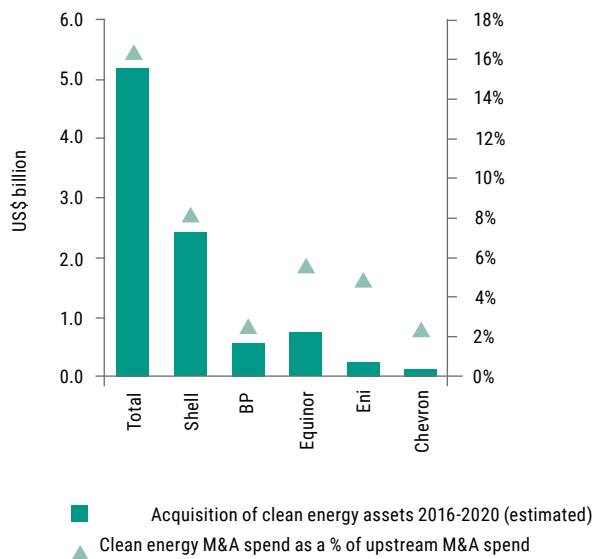
Shell's strategy is the perfect example of this. In its presentation to investors in early 2021, the company founded its strategy for growth, transition and investment around the concept of "clean-power-as-a-service": serving customers to help them reach their own carbon neutrality objectives by offering a wide range of low-carbon services, from hydrogen for recharging electric cars, to CCUS, with the aim of creating "integrated energy systems".<sup>39</sup> To achieve its objective of 500,000 charging stations in Europe between now and 2025, the Dutch firm notably bought NewMotion in 2017, which owned the largest network of charging stations on the continent in the Netherlands.<sup>40</sup>

The development of batteries and electricity storage technologies have also received major investments. In late 2020, Total joined forces with the car group PSA/Opel to create the Automotive Cells Company (ACC), a joint-venture aiming to become a global main player in producing batteries by 2023. Two "GigaFactories" will be opened in Douvrin in France and in Kaiserslautern in Germany. The project benefits from the public support of 1.3 billion euros from France and Germany, as well as European support via the research aid scheme IPCEI (Important Project of Common European Interest). This mechanism granted 3.2 billion euros in late 2019 to assist the European Batteries Alliance (known as the "Airbus of batteries") launched by the Commission in 2017.<sup>41</sup>

**FIGURE 4**

**THE M&As AND INVESTMENTS IN CAPITAL-RISK FROM THE OIL MAJORS IN 'CLEAN ENERGIES', BETWEEN 2016 AND 2020**

Source: [Wood Mackenzie, 2020](#) - With regards to 'clean energies', Wood Mackenzie includes photovoltaic solar energy, onshore and offshore wind energy, CCUS, hydrogen and electric infrastructures.



Previously largely developed by ExxonMobil, CCUS now attracts its European counterparts (see **Industry Sector**). As a result, Total, Shell and Equinor invested 650 million euros in the [Northern Lights](#) project in Norway last year, to enable CO2 emitted by cement manufacturers into the soil to be stored at 2,600 meters under the seabed.<sup>42</sup> In Great Britain, the [Net](#)

[Zero Teeside](#) project was financed by the Oil & Gas Climate Investment consortium (OGCI, behind 30% of the world's oil) which includes BP, ENI, Equinor, Shell and Total. Although CCUS is still not all that developed, it must theoretically reduce the impact of carbon-emitting energies and even extend the lifespan of certain oil fields which are being depleted. It is also expected that the CCUS will support the development of hydrogen when produced from a gas. CCUS was the third largest low-carbon expenditure item of the oil & gas sector in 2020 (fig. 3).

**KEY TAKEAWAYS**

**In the context of depletion of existing wells and increasing exploration and exportation costs of new fields, which are increasingly difficult to access, oil companies are now restricted to processing things faster to keep with the times. The dependence on oil represents a medium-term risk for the industry, which is looking to benefit from favourable trends in the energy transition, so that companies can carry out the transition along own economic models. However, the accelerated break-through of some of the major oil companies in renewable markets since 2018 has not resulted in the abandoning oil for the benefit of renewable electricity. It is precisely the cashflow created from oil producing activities which allows the Oil Majors to expand upon their activities, not only relating to renewable energy production, but across all of the low-carbon services in development. These strategies are more likely to lead to a desire to increase and preserve the interests of the shareholders with a genuine support for combatting climate change, as is proven by the weakness of their fixed objectives in their climate plans.**

**The main vehicle for this transition is the mergers and acquisitions carried out by the Oil Majors to buy low-carbon shares, which shape the renewable market, which is increasingly concentrated in the hands of very few of the dominant players. This is similar to the inflation in concessions prices for offshore wind farms, caused by the entry of oil companies in the bidding.**





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RETURN TO PREVIOUS PAGE

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