

December 2021

Lessons Learned from BP: Deepwater Horizon and the Transition to Renewables

Daniel Valle

Tobin College of Business, St. John's University, New York City

Follow this and additional works at: <https://scholar.stjohns.edu/jga>



Part of the [Business Commons](#), [Engineering Commons](#), [Law Commons](#), [Medicine and Health Sciences Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Valle, Daniel (2021) "Lessons Learned from BP: Deepwater Horizon and the Transition to Renewables," *Journal of Global Awareness*: Vol. 2 : No. 2 , Article 7.

DOI: <https://doi.org/10.24073/jga/2/02/07>

Available at: <https://scholar.stjohns.edu/jga/vol2/iss2/7>

This Article is brought to you for free and open access by St. John's Scholar. It has been accepted for inclusion in *Journal of Global Awareness* by an authorized editor of St. John's Scholar. For more information, please contact fazzinol@stjohns.edu.

Abstract

This paper analyzes the gradual transition of British Petroleum (BP), one of the world's largest oil and gas companies, into a renewable energy company focused on sustainability and the reduction of carbon emissions. BP's leadership and ethical practices are compared before and after the 2010 Deepwater Horizon disaster. The purpose of the comparison and the broader analysis of the transition is to identify how effective leadership can be used to transform a company with a suspect social responsibility record into a leader among its peers. Lessons learned from the disaster, and the subsequent transition conclude the research.

Keywords: British Petroleum, BP, leadership, ethics, energy, renewables, corporate social responsibility, fossil fuels, oil, crisis management, stakeholder management, Deepwater Horizon

Introduction

British Petroleum is a multinational oil, gas, and alternative energy company headquartered in London, England. The company was founded as the Anglo-Persian Oil Company on April 14th, 1909, shortly after a large deposit of oil was located by British geologists in what is today southwest Iran, as reported in the “From Anglo-Persian Oil to BP Amoco” (1998) article. Notable acquisitions include BP’s purchase of Amoco in 1998 for \$48 billion (Moore, 1998) and the purchase of Standard Oil of Ohio in 1987 for \$7.8 billion (Cole, 1987). As reported by The London Economic (2021), the company also owns a 20% stake in Rosneft, Russia’s integrated oil and gas provider.

BP is vertically integrated in the oil and gas industry to a high degree; its exploration, production, refining, marketing and distribution, power generation, and trading functions are handled internally rather than through arms-length transactions (Stacey & Crooks, 2016). The alternative energy business unit, founded in 2005, focuses on solar, wind, and biofuel energy projects and is integrated to a far lesser extent than the oil and gas unit (Bouso & Twidale, 2017). BP’s revenues and revenue growth for the last three years and that of the other oil and gas supermajors are provided in Table 1. The decline in revenues in 2019 is

attributed to a decline in crude prices, and the sharp decline in 2020 is due to the global economic downturn associated with the COVID-19 pandemic.

| Company | 2018 | YoY Δ | 2019 | YoY Δ | 2020 | YoY Δ |
|-------------------|-------------|--------------|-------------|--------------|-------------|--------------|
| BP | 303.74 | 24.19% | 282.62 | -6.95% | 183.5 | -35.07% |
| Chevron | 166.34 | 17.37% | 146.52 | -11.92% | 94.69 | -35.37% |
| ConocoPhillips | 38.73 | 18.85% | 36.67 | -5.31% | 19.26 | -47.49% |
| Eni | 90.86 | 13.26% | 79.57 | -12.43% | 51.34 | -35.47% |
| ExxonMobil | 290.21 | 18.76% | 264.93 | -8.71% | 181.5 | -31.49% |
| Royal Dutch Shell | 396.56 | 27.15% | 352.1 | -11.21% | 183.19 | -47.97% |
| TotalEnergies | 184.106 | 23.48% | 176.25 | -4.27% | 119.7 | -32.08% |

Source: The data was retrieved from Macrotrends (2021). Copyright 2021 by Macrotrends. Several sites consulted; see References.

BP operates in more than 75 countries and owns roughly 20,300 retail service stations worldwide (BP, 2020a). Products sold at the service stations include gasoline, diesel fuel, lubricants, snacks, and beverages. To complement the goods offered, automotive services, including repairs, maintenance, and inspections, can be procured at many retail service stations. In addition to their retail service stations, according to the article “BP buys UK's largest car charging firm Chargemaster” (2018), BP has expanded their presence in the European electric vehicle charging station market by acquiring Chargemaster. Furthermore, according to the report “Aral accelerates ultra-fast charging expansion” (2021), their presence was also expanded through their Aral brand, which recently announced plans to install 500 fast-charging stations across its fleet of 120 fuel service stations in Germany. BP is a company in the midst of a significant transition. Though they are one of the world's largest oil and gas companies, BP has stated that their future relies on developing and implementing low carbon and renewable energy projects, particularly wind and solar generation supported by battery storage. BP plans to finance these renewable energy projects by selling certain oil and gas assets, cutting their quarterly dividends, reducing investment in new oil and gas projects, and through the elimination of oil and gas exploration efforts in countries where it does

not already maintain a presence (Parnell, 2020). This focus on renewable energy is a stark contrast to other major players in the oil and gas industry, particularly ExxonMobil, which continues to prioritize investments in traditional oil and gas projects in their efforts to maximize shareholder returns (Trefis Team, 2021).

Corporate Governance

BP's management structure consists of a board of directors, led by Chairman of the Board Helge Lund, and a hierarchical management team led by Chief Executive Officer Bernard Looney, who also serves on the board of directors. Lund became chairman on January 1st, 2019, and Looney succeeded Bob Dudley as CEO on February 5th, 2020. Shortly after the announcement of Looney as the new CEO, BP released a plan to achieve zero-net carbon emissions by 2050, by transitioning away from fossil fuels and into renewable energy (BP, 2020b). The pivot to renewables is a risky decision, but BP believes it is the right thing to do from an economic perspective, as reliance on fossil fuels is expected to decrease as vehicle electrification increases, and a sustainability and environmental perspective, as the company has experienced numerous disasters relating to their oil and gas infrastructure (Korosec, 2010).

Leadership Disconnect Prior to the 2010 Disaster

Before the Deepwater Horizon disaster, BP's code of conduct emphasized their commitment to ethics, a zero-accident culture, safety, and integrity. The occurrence of the disaster, and several disasters that preceded it, highlight the disconnect that existed between management's stated values and BP's actual business practices leading up to 2010. Chazan, Faucon, & Casselman (2010) reported that concerning BP's management team, Occupational Safety and Health Administration (OSHA) deputy secretary Jordan Barab commented that they "claim to be very much focused on safety, I think sincerely, but somehow their sincerity and their programs don't always get translated well into the refinery floor." The disconnect between messaging and practice described by Barab is common among large companies with a siloed, hierarchical organization structure like BP (Galonek, 2015).

Crisis Management

BP's crisis management has been tested in the aftermath of the Deepwater Horizon disaster. The failure of a blowout preventer, a key component of a drilling rig

designed to prevent an uncontrolled release of crude oil from a well, combined with a failure to follow proper maintenance and operational procedures, led to the deaths of 11 employees and the worst maritime oil spill in history (Tabibzadeh & Meshkati, 2014). The damage to ecosystems, wildlife, and the environment in and around the Gulf of Mexico is incalculable. The article “BP Oil Spill Caused \$17.2 Billion in Natural Resource Damage” (2017) reports that researchers have conservatively estimated that it exceeds \$17 billion. More than \$65 billion in costs have been incurred by BP due to the disaster (Bouso, 2018). The fact that the company was able to weather such an unprecedented disaster speaks to their ability to manage and work through crisis situations.

How BP’s Culture Contributed to the Deepwater Horizon Disaster

BP's ethical record is mixed. Their brand image prior to 2010 emphasized good corporate citizenship, green credentials, and care for the environment (Balmer, 2010). The company credited their operational and safety performance to their benchmarking efforts to identify best practices and their ability to measure key safety metrics, such as injuries, lost time accidents, spills, and adherence to training and human performance improvement programs. BP's management thought that they could root out any issues by measuring safety and operational performance.

BP’s corporate culture in the months leading up to the disaster was characterized as having a relentless focus on cost-cutting (Verschoor, 2010). Lowering costs allowed BP to maintain its competitiveness with the other supermajors, most notably Shell, and management and the board of directors wanted to provide the shareholders with the greatest returns possible. To help keep costs low, BP instituted a variable pay program; employee compensation would be based, in part, on their ability to meet the financial, operational, and safety goals set by management.

What BP management failed to realize is that by tying the meeting of these goals to employee compensation, they created a conflict of interests for their employees (Jennings, 2010). When safety and operational goals are tied to compensation, it creates an incentive for individuals to underreport incidents that require attention. For example, an employee who witnesses an improper or unsafe operation could report the issue and risk losing part of their pay or even their job. If they look the other way and avoid reporting the issue, operations can continue, and they and their

colleagues will not face any discipline. The problem can be exacerbated by peer pressure to avoid reporting incidents, as well as pressure from supervisors and managers who, like employees, are paid based on their ability to meet goals. Each time an issue is ignored, it becomes easier to ignore future issues. The cycle continues until a disaster occurs, and management is left wondering how all of the operations and safety controls they had invested substantial resources in could have failed.

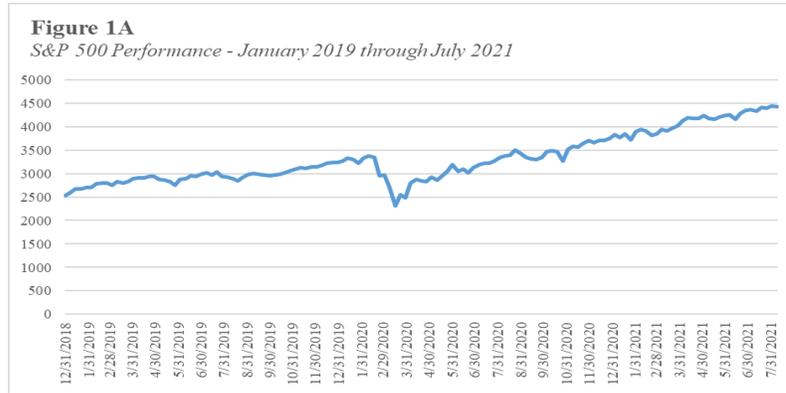
An example of how safety metrics can be misleading concerns BP's Texas City refinery. In 2005, an explosion at the refinery killed 15 workers. An investigation revealed numerous safety and operational issues that contributed to the explosion and subsequent loss of life. BP subsequently invested more than \$1 billion to upgrade the Texas City refinery to improve safety and operations. The company remarked that the investments helped drive down the OSHA recordable injury rate at the facility every year since 2005 (Chazan, Faucon, & Casselman, 2010). A six-month inspection by OSHA of the refinery conducted in 2009 resulted in an \$87 million fine to BP (Walter, 2009). Many of the hazards that contributed to the 2005 explosion had not been corrected. While management was celebrating the lower OSHA incident rate and other improved safety metrics, the lower rate was clearly not indicative of the actual safety situation in the refinery.

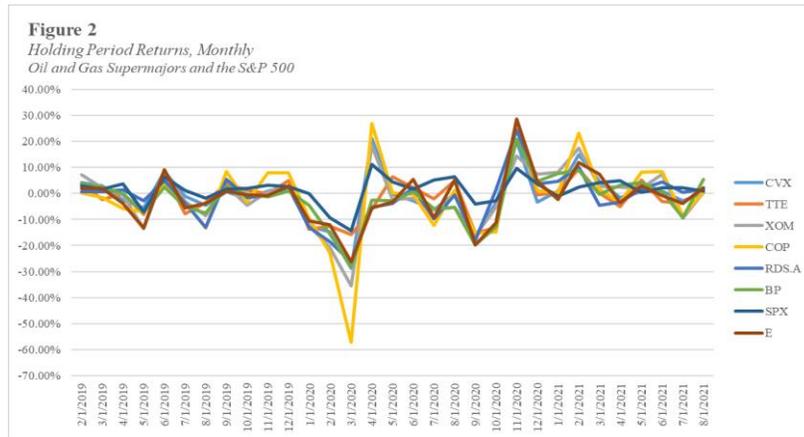
Pivot to Renewables

On August 4th, 2020, BP announced that it was transitioning its business away from fossil fuels toward renewable and low carbon energy (Hirs, 2020). Specific goals included the reduction of its carbon footprint by 40% within 10 years, and to become carbon neutral by 2050. The company also announced that it would not enter new countries for oil and gas development. The company believed that a reduction in oil and gas exploration and development activities, in conjunction with cutting their dividend by half and selling off certain oil and gas infrastructure, would allow them to conserve cash flow in order to finance a ten-fold increase in renewable and low carbon energy development (BP, 2020c).

The transition was driven primarily by a crash in oil prices that began in 2018, combined with forecasts of continued low prices into the foreseeable future (Horowitz, 2020). Government policies and programs relating to carbon credits and emissions mandates also played a role. Low oil prices had led BP to realize record

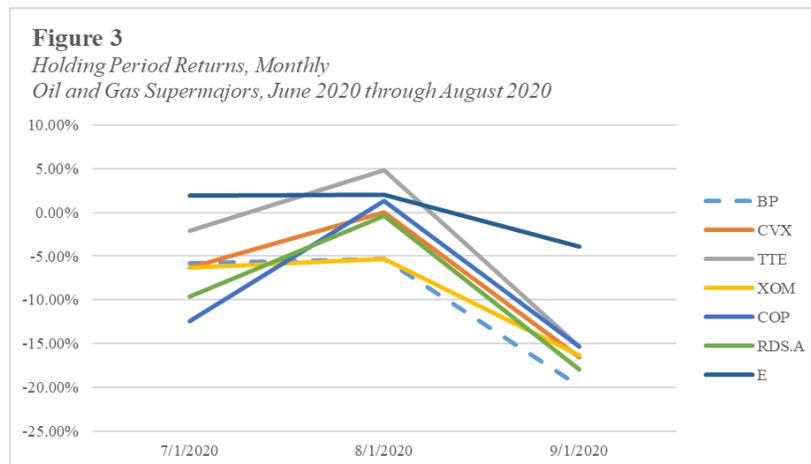
losses in the second quarter of 2020 (Bouso & Nasralla, 2020). The urgency of the transition increased as the damaging effects of the economic shutdowns associated with the COVID-19 pandemic took hold. Figures 1A and 1B show how BP underperformed the S&P 500 in the months leading up to and following the pandemic. Figure 2 shows how the oil and gas industry was hit particularly hard by the economic shutdown relative to the broader economy.





Source: The data for Figures 1A, 1B and 2 were retrieved from Yahoo! Finance (2021). Copyright 2021 by Yahoo! Finance. Several sites consulted; see References.

Reactions to the news of the planned transition were mixed. Environmental organizations were pleased, though skeptical, given BP's track record concerning environmental performance and their past failures in the low carbon energy sector (Smith, 2020). As shown in Figure 3, investor reaction to the news (and the record quarterly losses) was negative; BP's holding period returns for the month of August 2020 were worst among oil and gas supermajors.



Source: The data for Figure 3 was retrieved from Yahoo! Finance (2021). Copyright 2021 by Yahoo! Finance. Several sites consulted; see References.

Despite the initial negative response among investors, BP continued to argue that the transition was integral to its future success. Climate change is real, and BP's management felt that oil and gas companies would be subjected to ever-increasing pressures by governments to lower emissions and move away from fossil fuels. In addition, by transitioning to renewables, particularly offshore wind projects, BP would be in an excellent position to capitalize on hundreds of billions of dollars in new revenue potential (Jessen, 2021).

BP's messaging emphasized how the transition would benefit all stakeholders (Williams-Grut, 2020). Investors would benefit because as the first supermajor to fully embrace the low carbon and renewable future, BP would gain a significant first-mover advantage and a greater share of revenues compared to its rivals. It is estimated that 9% of the world's global greenhouse-gas emissions come from the oil and gas industry (Bates, Desroches, Rajah, Cosby, & Perrons, 2021). BP's reduction of carbon emissions by 40% within 10 years and becoming carbon neutral by 2050 represents meaningful progress in the battle against climate change.

Lessons Learned

The lesson learned from the Deepwater Horizon disaster is that cost-cutting to satisfy one group of stakeholders (the shareholders, in the case of BP) cannot be allowed to trump safety, ethical, and operational concerns. By focusing too much on costs, management can unwittingly create a culture that shows little regard toward other concerns, including ethics and safety. History has shown that when ethics and safety are disregarded, all stakeholders are impacted in a negative way. In contrast, investing in social responsibility creates value for all stakeholders (Hockerts & Moir, 2004). Better stakeholder management and an understanding of the need to balance shareholder concerns against other stakeholders' concerns are necessary to prevent such disasters from occurring.

A second lesson learned from the lead up to the disaster is that while they provide value, safety metrics by themselves do not present a complete, accurate portrayal of the safety performance of the workforce. BP's management was convinced that safety performance had improved in the Texas City refinery following the 2005 explosion that left 15 workers dead. Subsequent safety assessments performed by OSHA showed that those serious issues remained, contrary to company safety metrics that showed a marked improvement. Safety metrics need to be

supplemented with periodic audits and site inspections to ensure that the reported numbers reflect the true practices of the organization.

BP's transition to renewables teaches us the importance of effective messaging. Initially, investors, environmental groups, and other stakeholders were skeptical. BP's messaging emphasized why the transition was needed and how it would benefit a broad range of stakeholders. Much of the credit belongs to CEO Bernard Looney and Chairman of the Board, Helge Lund. Looney's views on renewable energy contrast sharply with those of his predecessor Bob Dudley, who argued that a broad transition away from fossil fuels was unrealistic (Sedgwick & Turak, 2017). As Williams-Grut (2020) reported, Lund has shown strong support of Looney's vision for the company, stating that the transition is the right thing for BP, its shareholders, and society. A year into the transition, it is clear that the messaging has taken root, even amongst investors who had initially criticized the change in direction (Noffke, 2021).

Conclusion

To say the least, it is ironic that an oil and gas supermajor whose actions contributed to the worst maritime environmental disaster in history has become a leader in the global transition to renewable and low carbon energy. BP's actions leading up to the disaster and its aftermath provide many valuable lessons about how an over-emphasis on cost-cutting can harm the safety and operational performance. Additionally, an overreliance on metrics and analytics can paint a false picture of a company's actual performance. Site inspections, assessments, and audits, while expensive, can provide leaders with a more complete understanding of their organization. Lastly, BP's transition to renewables shows how effective leadership and coherent messaging can completely transform the perception of a company. In BP's case, they went from having the reputation of a social and environmental pariah into a company widely recognized for its leadership in the struggle against climate change.

References

- Aral accelerates ultra-fast charging expansion (2021). *Automotive World*. Retrieved September 18, 2021, from <https://www.automotiveworld.com/news-releases/aral-accelerates-ultra-fast-charging-expansion/>
- BP. (2020a). Annual Report. <https://www.bp.com/en/global/corporate/investors/results-and-reporting/annual-report.html>
- BP. (2020b). BP sets ambition for net-zero by 2050, fundamentally changing organization to deliver. <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bernard-looney-announces-new-ambition-for-bp.html>
- BP. (2020c). From International Oil Company to Integrated Energy Company: BP sets out strategy for decade of delivery towards net-zero ambition. <https://www.bp.com/en/global/corporate/news-and-insights/press-releases/from-international-oil-company-to-integrated-energy-company-bp-sets-out-strategy-for-decade-of-delivery-towards-net-zero-ambition.html>
- BP buys UK's largest car charging firm Chargemaster. (2018, June 28). BBC News. <https://www.bbc.com/news/business-44640647>
- BP Oil Spill Caused \$17.2 Billion in Natural Resource Damage: Virginia Tech Scientists. (2017). *Insurance Journal* <https://www.insurancejournal.com/news/national/2017/04/20/448459.htm>
- Balmer, J. M. (2010). The BP Deepwater Horizon debacle and corporate brand exuberance. *Journal of Brand Management*, 18(2), 97-104. <http://dx.doi.org/10.1057/bm.2010.33>
- Bates, M., Desroches, L., Rajah, A., Cosby, T., & Perrons, K. (2021). The Energy Sector's Other Challenge: How Digital Technologies Can Help the Oil and Gas Industry Work Toward a Zero-Carbon Future. *Journal of Petroleum Technology*. Retrieved September 16, 2021, from <https://jpt.spe.org/the-energy-sectors-other-challenge-how-digital-technologies-can-help-the-oil-and-gas-industry-work-toward-a-zero-carbon-future>

- Bouso, R. (2018, January 16). BP Deepwater Horizon costs balloon to \$65 billion. Reuters. <https://www.reuters.com/article/uk-bp-deepwaterhorizon/bp-deepwater-horizon-costs-balloon-to-65-billion-idUKKBN1F50O6?edition-redirect=uk>
- Bouso, R., & Nasralla, S. (2020, August 4). BP halves dividend after record loss, speeds up reinvention. Yahoo Finance. <https://finance.yahoo.com/news/bp-cuts-dividend-record-loss-062428348.html>
- Bouso, R., & Twidale, S. (2017, December 15). BP returns to solar with investment in Lightsource. Reuters. <https://www.reuters.com/article/uk-lightsource-bp-stake/bp-returns-to-solar-with-investment-in-lightsource-idUKKBN1E90GW?edition-redirect=uk>
- Chazan, G., Faucon, B., & Casselman, B. (2010, June 29.) As CEO Hayward Remade BP, Safety, Cost Drives Clashed. *The Wall Street Journal*. <https://www.wsj.com/articles/SB10001424052748703964104575335154126721876>
- Cole, R. J. (1987, April 29). B.P. in \$7.82 billion deal for Standard. *The New York Times*, p. 1. Retrieved from The New York Times: <https://www.nytimes.com/1987/04/29/business/bp-in-7.82-billion-deal-for-standard.html>
- From Anglo-Persian Oil to BP Amoco. (1998, August 11). BBC News. <http://news.bbc.co.uk/2/hi/business/149259.stm>
- Galonek, B. (2015, June 1). Safety suffers in corporate silos. *Industrial Safety and Hygiene News*. <https://www.ishn.com/articles/101558-safety-suffers-in-corporate-silos>
- Hirs, E. (2020, August 5). *BP's Strategic Shift to Renewables*. Retrieved from Forbes: <https://www.forbes.com/sites/edhirs/2020/08/05/bps-strategic-shift-to-renewables/>
- Hockerts, K., & Moir, L. (2004). Communicating Corporate Responsibility to Investors: The Changing Role of the Investor Relations Function. *Journal of Business Ethics*, 52(1), 8598. <https://doi.org/10.1023/B:BUSI.0000033109.35980.16>

- Horowitz, J. (2020, June 8). *BP to cut 10,000 jobs because of oil price crash*. Retrieved from CNN Business: <https://edition.cnn.com/2020/06/08/business/bp-job-cuts/index.html>
- Jennings, M. M. (2010). What BP Teaches us about Ethics, Risk, and Business Management. *Corporate Finance Review*, 15(2), 38-42. Retrieved from ProQuest ABI/Inform: <https://www.proquest.com/docview/801297205>
- Jessen, C. (2021, March 4). *BP Is Aggressive On Renewables With Good Reason*. Retrieved from Seeking Alpha: <https://seekingalpha.com/article/4411318-bp-aggressive-renewables-good-reason>
- Korosec, K. (2010, May 7). *BP's History of Oil Spills and Accidents: Same Strategy, Different Day*. Retrieved from CBS News: <https://www.cbsnews.com/news/bps-history-of-oil-spills-and-accidents-same-strategy-different-day/>
- Macrotrends. (2021). Revenues and revenue growth for oil and gas supermajors, 2018 through 2020 [Table]. <https://www.macrotrends.net/stocks/charts/bp/bp/revenue>
<https://www.macrotrends.net/stocks/charts/COP/conocophillips/revenue>
<https://www.macrotrends.net/stocks/charts/CVX/chevron/revenue>
<https://www.macrotrends.net/stocks/charts/E/eni-spa/revenue>
<https://www.macrotrends.net/stocks/charts/XOM/exxon/revenue>
<https://www.macrotrends.net/stocks/charts/RDS.B/royal-dutch-shell/revenue>
<https://www.macrotrends.net/stocks/charts/TTE/totalenergies-se/revenue>
- Moore, J. F. (1998, August 11). *BP to acquire Amoco*. Retrieved from CNN Money: <https://money.cnn.com/1998/08/11/deals/bp/>

- Noffke, S. (2021, August 6). *Shell and BP: why we are hopeful for a sensible transition to renewables*. Retrieved from Investment Week:
<https://www.investmentweek.co.uk/opinion/4035466/shell-bp-hopeful-sensible-transition-renewables>
- Parnell, J. (2020, August 4). *BP Aims to Build 50GW of Renewables by 2030, Cut Fossil Fuel Output by 40%*. Retrieved from Greentech Media:
<https://www.greentechmedia.com/articles/read/bp-to-invest-5b-a-year-on-low-carbon-and-cut-fossil-fuel-output-by-40-percent-by-2030>
- Sedgwick, S., & Turak, N. (2017, November 14). *BP CEO Dudley: 'Politicians need to get more educated or be more honest'*. Retrieved from CNBC:
<https://www.cnbc.com/2017/11/14/bp-ceo-dudley-politicians-need-to-get-more-educated-or-be-more-honest.html>
- Smith, B. (2020, August 11). *BP: The Energy Transition and Renewables*. Retrieved from GreenBarrel: <http://greenbarrel.com/2020/08/11/bp-the-energy-transition-and-renewables/>
- Stacey, K., & Crooks, E. (2016, June 12). *Financial Times*. Retrieved from Oil majors find virtue in integration: <https://www.ft.com/content/8ff8ec62-2dcc-11e6-a18d-a96ab29e3c95>
- Tabibzadeh, M., & Meshkati, N. (2014). Learning from the BP Deepwater Horizon accident: risk analysis of human and organizational factors in negative pressure test. *Environment Systems & Decisions*, 34(2), 194-207.
<http://dx.doi.org/10.1007/s10669-014-9497-2>
- The London Economic. (2021, February 8). *Why BP's green future depends on Rosneft*. Retrieved from The London Economic:
<https://www.thelondoneconomic.com/business-economics/business/why-bps-green-future-depends-on-rosneft-219698/>
- Trefis Team. (2021, June 4). *Banking on Renewables? Pick BP Stock Over Exxon*. Retrieved from Forbes:
<https://www.forbes.com/sites/greatspeculations/2021/06/04/banking-on-renewables-pick-bp-stock-over-exxon/>

- Verschoor, C. (2010). BP Still Hasn't Learned Ethical Lessons. *Strategic Finance*, 92(2), 13-15. Retrieved October 23, 2021 from The Free Library
<https://www.thefreelibrary.com/BP+still+hasn%27t+learned+ethical+lessons.-a0236484919October>
- Walter, L. (2009, October 30). *OSHA Proposes Record \$87 Million in Fines Against BP*. Retrieved from EHS Today:
<https://www.ehstoday.com/standards/osha/article/21911384/osha-proposes-record-87-million-in-fines-against-bp>
- Williams-Grut, O. (2020, February 12). *New BP CEO pledges to make oil giant carbon neutral by 2050*. Retrieved from Yahoo Finance:
<https://finance.yahoo.com/news/bp-carbon-neutral-2050-bernard-looney-114838285.html>
- Yahoo! Finance. (2021) S&P 500 Performance and Oil & Gas Supermajors Stock Performance – January 2019 through July 2021 [Figures 1A, 1B, 2 and 3].
GSPC:<https://finance.yahoo.com/quote/%5EGSPC/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>
- BP:<https://finance.yahoo.com/quote/BP/history?period1=1546300800&period2=1627776000&interval=1d&filter=history&frequency=1d&includeAdjustedClose=true>
- COP:<https://finance.yahoo.com/quote/cop/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>
- CVX:<https://finance.yahoo.com/quote/cvx/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>
- E:<https://finance.yahoo.com/quote/e/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>

RDS-A:<https://finance.yahoo.com/quote/rds-a/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>

TTE:<https://finance.yahoo.com/quote/tte/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>

XOM:<https://finance.yahoo.com/quote/xom/history?period1=1546300800&period2=1627776000&interval=1wk&filter=history&frequency=1wk&includeAdjustedClose=true>