

Center for Sustainable Business



Case Study: The Campaign to Reenergize ExxonMobil

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May 26, 2021, may have been a watershed moment in shareholder activism. At the annual shareholder meeting of ExxonMobil ('Exxon'), the largest American oil and gas company, an activist shareholder campaign led by a new hedge fund, Engine No. 1, succeeded in electing three of the four candidates it put forward for Exxon's Board of Directors over the opposition of Exxon's management (Appendix 1). The activists were seeking major changes in the company's strategic direction and capital investment priorities. What was remarkable about the campaign was the support it received from institutions that traditionally sided with management over activists, including the three largest index fund managers and a number of large publicemployee pension funds.

Ten years earlier, Exxon was America's second largest publicly held company measured by both revenue and market capitalization, but the intervening decade was a rough one for the company and its shareholders. From 2010 through December 1, 2020, Exxon's market value declined by half, its net debt expanded from \$8 billion to \$63 billion, and the credit ratings of its bonds had been downgraded twice (Appendices 2-4). And the bad news kept coming: in November 2020, the company announced write-offs of assets valued at \$20 billion (5.5% of total assets) as well as major spending cuts: 14,000 layoffs (15% of total staff), a \$10 billion annual reduction in capital spending over the next five years, and the elimination of bonuses for 2020. At the same time, multimillion-dollar stock awards for the CEO continued to grow (Appendix 5). While it might seem natural to assume that Exxon's management was hard at work devising a turnaround strategy, their plan was, in fact, to continue on the same course.

The 'Reenergize Exxon' Campaign

Six months earlier, on December 1, 2020, Engine No. 1's formation was announced as "an investment firm purpose-built to create long-term value by driving positive impact through active ownership." What that meant became clear within a week when, on December 7, Engine No. 1 announced its intention to nominate four new, independent Directors for election at Exxon's annual meeting in May 2021. The announcement came with a powerful endorsement: Christopher Ailman, Chief Investment Officer of the California State Teachers' Retirement System (CalSTRS), the second largest U.S. pension fund and owner of over \$300 million of Exxon stock, announced the fund's support for Engine No. 1's candidates saying, "We intend to use our vote as an active shareholder to support Engine No. 1's slate of Directors because a change at the top is necessary to reposition this Company to be successful for the long-term."iii

A simple chart near the beginning of Engine No. 1's investor presentation starkly made the financial case for change, highlighting Exxon's stock market underperformance over the

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Figure 1. Exxon's Stock Market Performance vs. Peers

| Total Returns Pre-COVID * | | | | Total Returns Prior to Engine No. 1 Public Engagement ** | | | | | |
|-----------------------------------|--------|--------|--------|--|-----------------------------------|--------|--------|--------|------|
| | 1 YR | 3 YR | 5 YR | 10 YR | | 1 YR | 3 YR | 5 YR | 10 |
| ExxonMobil | -18.9% | -15.9% | -17.5% | 27.8% | ExxonMobil | -34.4% | -41.2% | -33.0% | -14. |
| Chevron | -3.3% | 13.0% | 25.6% | 117.5% | Chevron | -15.7% | -11.9% | 28.9% | 62.4 |
| Shell | -10.4% | 14.3% | 12.9% | 104.7% | Shell | -35.4% | -31.1% | -3.1% | 18.3 |
| Total | -4.1% | 11.0% | 28.3% | 83.2% | Total | -13.9% | -5.8% | 15.9% | 74.0 |
| ВР | -8.1% | 24.7% | 43.9% | 34.6% | ВР | -36.7% | -31.7% | 8.0% | 14.2 |
| Peer avg. ex XOM | -6.4% | 15.8% | 27.7% | 85.0% | Peer avg. ex XOM | -25.4% | -20.1% | 12.4% | 42.2 |
| Underperformance vs. peer average | -12.5% | -31.7% | -45.2% | -57.2% | Underperformance vs. peer average | -9.0% | -21.1% | -45.5% | -57. |
| ExxonMobil Peer Rank | 5/5 | 5/5 | 5/5 | 5/5 | ExxonMobil Peer Rank | 3/5 | 5/5 | 5/5 | 5/ |
| S&P 500 | 24.3% | 52.8% | 78.7% | 275.4% | S&P 500 | 21.1% | 48.5% | 95.4% | 271. |

Source: Engine No. 1, "Reenergize Exxon // Investor Presentation," May 2021, https://reenergizexom.com/wpcontent/uploads/2021/05/Investor-Presentation-May-2021-v2.pdf, accessed 4 Sept 2021 *Pre-COVID returns are as of February 19, 2020. **Returns are as of December 4, 2020 close, the last trading day prior to Energy No. 1's public engagement with ExxonMobil.

Total Returns include dividends. Proxy Peers are Chevron, Shell, Total & BP (ExxonMobil 2021 proxy statement).

previous 10 years compared with its peer group of global integrated oil and gas companies (Figure 1). The 'Reenergize Exxon' campaign was not the first expression of shareholder unhappiness with Exxon's management. At the annual meeting a year earlier, several large shareholders, including CalSTRS and BlackRock, voted against management's nominees for the Board. Earlier still, BlackRock and Vanguard supported a 2017 shareholder resolution requiring Exxon to assess and disclose its climate-related risks – the first time that Vanguard had voted against management to require climate-risk disclosure. iv

Engine No. 1 outlined several reasons the activists saw a need for change on Exxon's Board:

- 1. Exxon was investing in hydrocarbon (oil and gas) reserves that would be profitable only at prices above \$87/barrel of oil. In comparison, peer companies' breakeven prices were \$47-\$60/barrel (Appendix 6). This implied that:
 - a. Exxon's peers had a huge gross profit advantage on every barrel;
 - b. As climate policies forced reductions in the use of hydrocarbons, Exxon's reserves would be among the first to become unprofitable; and
 - c. Quite possibly, Exxon's planned capital investment over the coming five years would add to its hydrocarbon reserves that could never be pumped out of the ground, as hydrocarbon demand shifted to clean energy alternatives.

- 2. While Exxon was aggressively developing new hydrocarbon deposits with questionable future markets, its peers were accelerating their investments in alternative energy technologies. These technologies were needed to meet the commitments made by 190 countries, including the U.S., to reduce greenhouse gas emissions in the 2015 Paris Climate Accord.
- 3. Exxon planned no more than a token investment in new energy technologies that might give the company strategic alternatives if the widely expected decline in hydrocarbon use occurred. The company's 2020 annual report put its planned investment in two alternative energy technologies – hydrogen fuel and carbon capture – at \$3 billion over five years, or just 2.4% of a total \$125 billion planned capital expenditures through 2025.vi
- 4. Exxon's poor returns on investment over the 10-year period (Appendix 7) led shareholders to expect more detailed and frequent communication about the reasons and remedies for this shortfall. Instead, management showed little inclination to consider new directions and, before 2021, provided no access for shareholders to meet with the independent Directors on its Board. By preventing communication with the independent Directors, Exxon's management was able to insulate itself from the questions many investors were raising. As one investment manager put it, "When you're worried that management might be the problem, you can't really talk to management about it."

Engine No. 1's presentation neatly depicted \$174 billion of shareholder value that had been destroyed over the prior 10 years, or about \$40 per share (Figure 2).

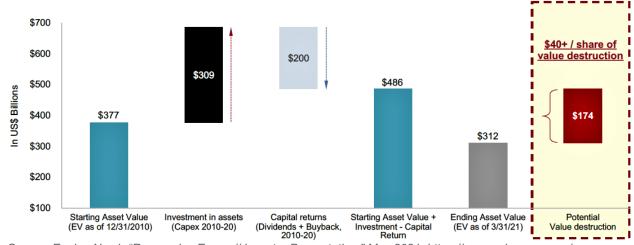


Figure 2. A Decade of Value Destruction at Exxon

Source: Engine No. 1, "Reenergize Exxon // Investor Presentation," May 2021, https://reenergizexom.com/wpcontent/uploads/2021/05/Investor-Presentation-May-2021-v2.pdf, accessed 4 Sept 2021

Charlie Penner, leader of the Reenergize Exxon campaign at Engine No. 1, succinctly described Engine No. 1's view of Exxon's short-sightedness: "Exxon is the fifth largest greenhouse gas emitter [Appendix 8] in a world where two-thirds of emissions come from countries that are trying to get on a path to net zero emissions. In other words, their main customers are xcommitted to dramatically reducing their use of Exxon's product. Even if you don't believe they'll succeed entirely, that's a business model that doesn't make sense. It's a major business risk that they have completely failed to consider."viii

Unlike earlier generations of corporate activists who sought Board seats for themselves and a quick stock market return, Engine No. 1 was hoping instead to seat four new independent Board members, instituting strategic changes that would take many years to implement and whose outcomes might be uncertain for decades. Its four main goals were:

- 1. Refresh the Board of Directors with four new candidates (out of 12 total Directors);
- 2. Impose greater long-term capital allocation discipline;
- 3. Implement a strategic plan for sustainable value creation in the context of the expected transition to clean energy; and
- 4. Overhaul management compensation to better align management's interests with shareholders'.

Who's In Charge Here?

A company's owners/shareholders elect its Board of Directors, who are tasked with overseeing the company's strategy and investments. The Board then hires executive management to carry out its strategy and deliver the financial returns that shareholders expect. Engine No. 1 was claiming that Exxon's Board had failed in its governance responsibilities by not imposing discipline on capital spending as returns deteriorated. Equally important, it had ignored the risks and opportunities presented by the industry transformation that most, including their peers, believed was necessary and inevitable.

Not one independent member of Exxon's Board of Directors in December 2020 had hydrocarbon industry experience, and none had successfully navigated a major industry disruption, such as the one the energy industry now faced. Engine No. 1 claimed that there was a direct connection between the Board's composition and its governance failures. As Penner saw it, that missing expertise left the Board susceptible to domination by executive management, and therefore unable to fulfill its fiduciary responsibility to challenge and validate management's strategy.

A company's Board of Directors has a fiduciary responsibility to represent shareholders' interests when it sets company strategy, and a majority of every publicly held company's Board of Directors must be independent – not executive employees of the company. An important role of independent Directors is to challenge the CEO and stress-test management's strategy and capital investment plan. In an industry facing disruption, like the energy industry, this requires independent Directors to have both industry expertise and experience managing through disruptive change. Engine No. 1 claimed that its candidates had that expertise (Appendix 9), and that the incumbent independent Directors did not (Appendix 10).

Although some large asset managers, like BlackRock and CalSTRS, had been voicing their unhappiness with Exxon's governance for several years, actually assembling a majority of shareholders to elect new Directors (and defeat incumbents) in 2021 was a major challenge for Penner. He had to secure the support of at least three major constituencies:

1. First, there were environmental activists whose concerns varied widely. For example, at the 2021 annual meeting, a shareholder resolution positioned as a "Report on Environmental Expenditures [Greenwashing Audit]" captured only 5.4% of votes cast, while another shareholder resolution for a "Report on [Climate Change] Scenario Analysis" almost passed with 49.4% of votes cast and a "Report on Climate Lobbying" received strong support with 64.2% of votes. When climate issues were positioned as governance issues, they received substantially higher shares of the vote.

In general, shareholder resolutions on environmental, sustainability, and governance (ESG) issues captured a growing share of the votes cast at public companies' annual meetings, rising from an average of about 10% in 2004 to 29% in 2019 (Figure 3). The votes for Exxon's 2021 shareholder resolutions demonstrate how broad the range of ESG issues can be, and it was not certain that Exxon's shareholders were giving as large a share of their votes to ESG resolutions as shareholders in other S&P 500 companies. However, even if Engine No. 1 could count on as much as 29% of the vote from the environmental "base," it needed a lot more to get its candidates elected. Penner had to capture the ESG base and, at the same time, appeal to shareholders with much broader concerns.

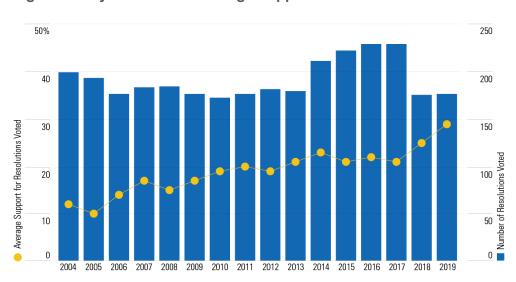


Figure 3. 15-year Trend in Average Support for ESG Resolutions

Source: Cook, Jackie, "ESG Proxy Resolutions Find More Support in 2019," Morningstar.com, 28 Feb 2020, https://www.morningstar.com/articles/967699/esg-proxy-resolutions-find-more-support-in-2019, accessed 19 Oct 2021

2. A second, and possibly the largest, bloc of shareholders whose support Penner needed were the largest mutual fund and exchange traded fund (ETF) managers. The largest three firms – BlackRock, State Street, and Vanguard – together controlled about 21% of Exxon's shares (and since only 72% of shares cast a vote at Exxon's 2021 annual meeting, the 'Big 3' fund companies controlled close to 30% of the votes cast that day).

Unfortunately, these firms had traditionally supported few ESG-related shareholder resolutions. In 2019, five of the largest fund families voted against more than 88% of ESG-related resolutions. In fact, from 2015 to 2019, BlackRock and Vanquard in particular supported less than 5% of ESG-related shareholder resolutions.* Given their historical lack of support for shareholder proposals on ESG issues, Penner had to build a compelling case that went beyond the issue of climate risk. By showing that (a) management was destroying the value of Exxon at an alarming rate; (b) despite this track record, management did not intend to change its strategy; and (c) management refused to communicate seriously with shareholders about its failures and its strategy for the future, Penner was able to base his appeal on the issue of poor governance.

Vanguard's published report on its vote reflected this perspective, saving, "we grounded our assessment on how any changes to the board's composition would affect its ability to oversee risk and strategy and ultimately lead to outcomes in the best interest of longterm shareholders. We also considered how potential changes would position Exxon to succeed through the energy transition."xi

Another component of this good-governance bloc were the two large governance analysis firms, Institutional Shareholder Services (ISS) and Glass Lewis. While not shareholders themselves, these firms provide detailed governance analyses to large numbers of institutional investors to inform their proxy voting activities. Each recommended that its subscribers vote for two (Glass Lewis) or three (ISS) of Engine No. 1's candidates.

3. A third constituency for Penner represented those who believed that a successful energy industry transition was essential to the future health and stability of the global economy. and thus to the performance of their investments. BlackRock was moving in this direction – its CEO, Larry Fink, made the case that "climate risk is investment risk."xii It was joined by several of the largest public-employee pension funds. A Managing Director of the California Public Employees Retirement System (CalPERS) was quoted saying, "As fiduciaries, we need to ensure that Boards are not just independent and diverse, but climate competent."xiii

Penner held more than one hundred meetings with institutional shareholders to gather support for the Reenergize Exxon campaign. Exxon countered with actions intended to undermine support for Engine No. 1's candidates. In February 2021, Exxon announced the immediate appointment of a new Director, and then two more in March. The new appointees did not satisfy Engine No. 1, but they did persuade a well-known hedge fund, the D.E. Shaw Group, to give management its support. Soon after, however, CalSTRS announced its continuing support for Reenergize Exxon, injecting renewed momentum into the campaign.

Engine No. 1's coalition of different constituencies, and each major player's need to appear reasonable and balanced in explaining its position, led to a very close vote. Most of these institutions analyzed the activist candidates for the Board in their own way. With the exception of the pension funds, which supported Engine No. 1's complete slate, each chose to support two or three of them, but not always the same two or three (Table 1). This resulted in such a close vote that the election of Engine No. 1's third candidate, Alexander Karsner, was not announced until June 2, almost a week after the shareholder meeting.

Beyond the logical arguments about value destruction and fiduciary failings. Penner saw the emotional appeal of the climate-related campaign in its connection of universal personal concerns with investment returns: "This focus on climate change, the energy transition, and more broadly on ESG, isn't because people suddenly became selfless and enlightened. I think that the impacts of these issues used to be more abstract, and today they are more obvious. It's really hitting home for everybody. The big asset managers are paying attention to this because it affects them personally, it affects their investors, and it affects their portfolios."xiv

Table 1. Key Support for Activist Director Candidates

| Nominees | Nominated by | Votes Received | Supported by* | | | | | |
|--|--------------|-------------------|---------------|---|-----|-----|----|-----|
| | | | ISS GL | | BLK | VAN | SS | PFs |
| Candidates Elected to the Board of Directors | | | | | | | | |
| Kaisa Hietala | Engine No. 1 | 1,510,819,249 | Х | | Х | Х | Х | Х |
| Gregory J. Goff | Engine No. 1 | 1,425,523,196 | х х | | Х | Х | | Х |
| Alexander Karsner | Engine No. 1 | 1,218,032,919 | х х | | Х | | Х | Х |
| Steven A. Kandarian | Management | 1,173,176,391 | | | | | | |
| | | Candidates NO | T Electe | d | | | | |
| DouglasOberhelman | Management | 1,145,335,462 | | | | | | |
| Wan Zulkiflee | Management | 1,099,727,702 | | | | | | |
| Samuel J. Palmisano | Management | 1,098,045,723 | | | | | | |
| Anders Runevad | Engine No. 1 | 295,055,259 | | | | | | Х |

^{*} ISS = Institutional Shareholder Services; GL = Glass Lewis; BLK = BlackRock; VAN = Vanguard; SS = State Street Global Advisors; PFs = CalSTRS, CalPERS and NY State Common Retirement Fund. See Appendix 1 for complete vote tally. Source: data from ExxonMobil Corporation, Form 8-K/A, 21 June 2021, https://www.sec.gov/ix?doc=/Archives/edgar/data/0000034088/000003408821000037/xom-20210526.htm, accessed 2 Nov 2021

The Energy Industry Transition

By 2021, there was consensus in expert scientific circles that a radical reduction in hydrocarbon use was needed over the next 30 years if the world were to have a chance of avoiding the most catastrophic consequences of climate change. In 2015, 190 countries, including the U.S., had committed to make the changes mapped out by the Paris Climate Accord to keep global warming to 1.5 degrees Celsius – a level that would not avoid serious climate change, but would reduce the risk of the most catastrophic and irreversible consequences.

The International Energy Agency (IEA) estimated that to meet the Paris commitments and avoid catastrophic global warming, hydrocarbon use would have to decline to just 20% of current levels by 2050. Not only would renewable energy sources need to make up the difference, they would also have to provide the additional energy needed for global population growth of almost 2 billion people by 2050 and rising living standards in developing countries. The IEA described the needed transformation as "unparalleled in its speed and scope."xv

At the same time, it was recognized that our global society depended on abundant, affordable energy. The Paris Climate Accord highlighted a threefold challenge: (a) reduce hydrocarbon use drastically, (b) replace it with alternative technologies with net zero carbon emissions, and (c) invent and deploy a new energy distribution infrastructure tailored to the new energy technologies.

Following the IEA's roadmap would require leaving a substantial portion of the world's hydrocarbon resources in the ground. In 2015, it was estimated that "globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2 degrees C."xvi To meet the Paris Accord's 1.5 degree Celsius target would leave even more hydrocarbon reserves stranded. This posed several difficult problems for Exxon and its peers. First, recognizing unusable hydrocarbon reserves as stranded assets would reduce the companies' expected future cash flows, damaging their stock prices and market values. Second, and relatedly, investments in finding and developing new hydrocarbon deposits - assets with no future market - would have to be discontinued immediately. The Reenergize Exxon campaign made the case that Exxon's plans to dedicate 97% of capital expenditures to hydrocarbon investments were inconsistent with both the global carbon reduction goals and its investors' needs for a competitive return on their investment.

Penner saw the Reenergize Exxon campaign as the natural evolution of traditional activist campaigns: "This campaign was rooted in basic investor concerns, but we stretched the perspective out to include a longer time horizon than is typical for a normal activist campaign."xvii Aligning different time horizons is at the heart of the problem facing the energy industry. The climate impacts of changes made today aren't tangible today, they develop over long periods of time. Greenhouse gas concentrations that fuel climate change are cumulative. It isn't simply a matter of hitting specific targets in 2050, but also of meeting interim goals, such as those mapped out by the IEA (Figure 4), every year until then. Any current delays in meeting targets will require steeper reductions later.

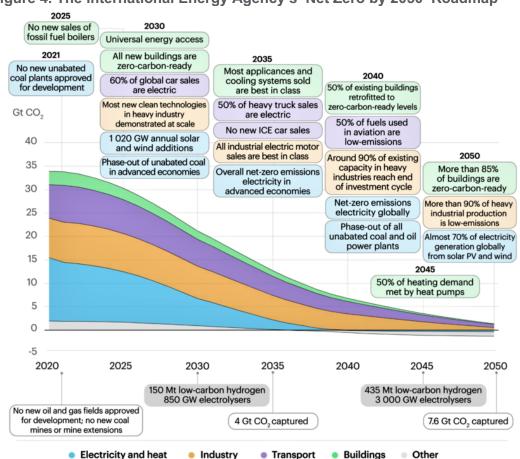


Figure 4. The International Energy Agency's 'Net Zero by 2050' Roadmap

Source: International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector," May 2021 https://www.iea.org/reports/net-zero-by-2050, accessed 31 Aug 2021

As investors evaluated the expected cash flows from Exxon's hydrocarbon deposits, the most fundamental driver of its stock price, they saw too many 'stranded assets' - hydrocarbon deposits like the \$20 billion written off in November. Very likely, these assets would have to remain in the ground and would therefore never generate a return on the billions spent to develop them. In this light, the company's plans to continue aggressively pursuing more hydrocarbon reserves looked increasingly risky.

In Engine No. 1's analysis, Exxon was a classic story of a company facing massive disruption to the business at which it excelled. Management was reluctant to give up doing what it had learned to do so well. However, to navigate the coming disruption, it would have to develop new capabilities. Historically, few companies succeeded in making major technology or business model transitions. Like them, instead of acknowledging and responding to change, Exxon preferred to continue doing what it was comfortable doing. As Penner explained it:

"In the oil and gas space, there are three main choices: First, there's the route that Exxon is currently pursuing – very heavy capital expenditures to grow the existing business with no risk management around the possibility that their predictions of continued oil and gas demand for decades to come won't come true. We think that's the worst possible direction.

"Second, there's an orderly return of capital to shareholders, in a measured fashion, via share repurchases and dividends. You let investors allocate it where they think they can get better long-term returns. That may sound counterintuitive, but if you're an investor and Exxon is planning to spend \$10 billion per year in growth capital developing new oil and gas assets, on which they've been delivering a 6% average return on capital employed, you'd rather have that capital returned to you so that you can reinvest in other sectors of the market that are doing a lot better. This is probably the path of least resistance and something like what Chevron is doing.

"The third avenue, and probably the most difficult, is to try to become relevant in a transforming energy industry. I can't think of a tougher challenge that any industry has ever faced. Maybe the tobacco industry, but this is even more stark because it affects everyone, not just people who choose to use their product. Exxon's current business model is dependent on the idea that humanity is going to drive itself off a cliff. I can't think of a bigger challenge than that."xviii

Few investors make the kinds of decades-long commitments with uncertain returns that are required to transform the energy industry. Penner's challenge was to find ways to convince investors to match their investment timeframe to the company's climate impact. He was betting that truly long-term investors would be rewarded, not just with a less risky world and a more stable economy, but with better returns on their investments in Exxon and similar companies. The question was how to put a current price on both the long-term climate risks and the opportunities for economic growth associated with the new energy industry. BlackRock expressed its evolving perspective in a February 2021 publication:

"The popular notion that tackling climate change comes at a net cost to the global economy is wrong, we believe. Avoiding climate-related damages will help prevent economic deterioration and improve risk-asset returns, in our view. We see the 'green' transition to a carbon-neutral world rewarding companies, sectors

and countries that adjust and penalizing others. That is why our capital market assumptions (CMAs) - long-run estimates of risk and return - now reflect the impact of climate change."xix

The traditional method of pricing future risk involves discounting future cash flows at some appropriate rate, correlated with the perceived uncertainty or risk, to a net present value. The future cash flows from hydrocarbons, on which Exxon based its plans, looked increasingly questionable. At the same time, the growing global need for energy implied substantial growth in future cash flows for low-carbon energy technologies. The challenge was that hydrocarbon cash flows were heavily weighted to the short term and would decline over time. Low-carbon cash flows were negative in the short term, as substantial investment was needed, but would become dominant in the long term. Scenarios involving different rates of hydrocarbon decline and lowcarbon growth could be analyzed, but solving for the optimal rate of disinvestment in the former and investment in the latter involved too many unknowns. More importantly, the risks of investing too slowly in future energy technologies were potentially catastrophic.

The transition from hydrocarbons to net zero emissions technologies might well be messy. In the Fall of 2021, hydrocarbon supplies were expected to fall short of demand during the coming Northern Hemisphere winter, and Exxon's hydrocarbon-intensive strategy was rewarded as prices rose rapidly. Those in the Engine No. 1 camp, however, saw the current situation as a short-term bump in a road that must be travelled sooner or later – and the later the journey began, the rougher the ride would be.

Even assuming that Exxon's recent 6% return on capital invested was acceptable to investors. which Penner doubted, a 2050 dollar discounted at 6% was worth less than \$0.17 in 2021. Theoretically, a rational Exxon manager would be indifferent between spending \$17 billion today to develop a climate-friendly technology or spending \$100 billion in 2050 to clean up the damage caused by burning hydrocarbons. A realistic manager might even assume that an entity other than Exxon would inherit responsibility for cleaning up the mess decades down the road. But the real problem with this calculation was that by 2050, no amount of financial investment could repair the damaged climate and its impact on the global economy.

Passive Is the New Active

Index-based asset managers have traditionally been called 'passive' because they simply buy the holdings of an independently constructed index, such as the S&P 500. The difficulty of beating the index returns has been documented extensively, a realization that drove enormous growth in passive assets under management. Like the index-based funds at the Big 3, many large pension funds, such as CalSTRS, also invest the majority of their assets in passively managed, index-based portfolios.

The largest index fund managers have almost always supported management in opposition to shareholder proposals for change. One reason for this apparent bias toward management may simply be that taking an active role in boardroom disputes was seen as inappropriate for 'passive,' index-tracking investments. Another may be that the parent companies of many index funds also run businesses that administer 401(k) plans and pension funds for large companies. Investment stewardship teams, who are responsible for deciding how to vote their funds' proxies in shareholder meetings, are set up to be independent of revenue-generating functions and potential conflicts of interest, like 401(k) plan administration. Yet it is logical to wonder whether they might still be reluctant to vote against management of a company whose 401(k) business their parent company wants to secure.xx

This tension was raised a notch in June 2021, when the governor of Texas signed into law a bill prohibiting state agencies, including retirement funds, from investing with financial companies that boycott or divest holdings in energy (including hydrocarbon) companies. xxi Index funds cannot divest or boycott a company like Exxon, so the law was not a direct threat to them. However, it certainly provoked anxiety among investment managers who were communicating to energy companies in their portfolios via their proxy votes the need to plan for an energy industry transition. It wasn't a huge leap of imagination to think that the Texas legislature or other large investors might target this position as well.

There were signs that this bias to support current management was changing. Passive asset managers were expanding their commitment to playing an active role as fiduciaries representing their funds' investors. A survey of the 12 asset management firms with the largest index-tracking portfolios found that the collective size of their investment stewardship teams, which decide how to vote their funds' shares, grew by 85% between 2014 and 2017, from 61 to 113 total stewardship team members. xxii This trend continued as stewardship teams at major fund firms almost doubled again from 2017 to 2020. XXIII

The expansion in stewardship teams accompanied a limited but growing tendency to vote against management. For example, an analysis of BlackRock's voting record on environmentspecific issues in the 12 months ending June 30, 2021, compared with the prior 12 months, showed that it:xxiv

- Voted against 255 incumbent Directors, up from 55 a year earlier;
- Opposed management of 319 companies for climate-related reasons, vs. 53 the prior
- Supported about two-thirds of environmental resolutions, vs. about one-third the year before.

Just as Board members have a fiduciary responsibility to investors in their firms, managers at mutual funds, ETFs, and pension funds have a fiduciary duty to their investors. Their effectiveness in lowering risk in their portfolios bolsters the security of their investors' retirement income. Despite their hands-off approach to portfolio management, passive investment managers increasingly accept responsibility for actively evaluating and trying to influence strategy among the companies in their funds' portfolios via the proxy votes they control. The costs of doing so have yet to become a major factor for the industry.

¹ The fiduciary duty of index fund managers and pension fund managers to their investors is the same in many ways; for example, both are governed by the "prudent person" principles of investing including diversification and observing appropriate levels of risk. However, some differences are worth noting, including the fact that mutual funds are regulated by the Investment Company Act of 1940 and the SEC, whereas pension funds are regulated by ERISA and the Department of Labor (state government pension funds, like CalSTRS, are regulated at the state level). Also, mutual funds must disclose their proxy votes, but pension funds do not have the same obligation. Pension fund beneficiaries do not own the holdings of the fund; instead they own a right to receive certain retirement benefits from it. Consequently, beneficiaries do not pay taxes on the annual income and capital gains realized by the pension fund; taxable events only occur when they start receiving their benefits. Pension benefits due to beneficiaries do not fluctuate with the value of the pension fund's holdings, and beneficiaries cannot liquidate their investment at will. In contrast, index fund investors own proportional amounts of the holdings, dividends, gains and losses in their funds (and must pay taxes on them annually). Index fund investors can sell their funds whenever they choose, but are also exposed to market risk: the value of their stake in the fund fluctuates with the market value of the fund holdings.

A more basic question is whether the principles underlying passive investment strategies are a more efficient approach to stewardship than actively engaging with thousands of companies. Modern Portfolio Theory (MPT) hypothesizes that by diversifying their investments across a large number of unrelated companies, such as an index, portfolio managers can minimize the risk in their portfolios. Theoretically, the downside risk of Exxon's future underperformance is offset by the upside risk of other companies' outperformance. Diversification minimizes the company-specific risks within a portfolio.

Another facet of MPT acknowledges that while diversification eliminates risks within a portfolio, it can't eliminate systemic risks that are external to portfolios and the stock market. Penner notes that climate change poses a risk to the overall global economy, something not foreseen in the 1950s, when MPT was introduced. He believes that Exxon's traditional hydrocarbonintensive strategy threatens the entire economic system:

"Only about 3% of the S&P 500 is made up of energy companies. If you're an institutional investor with most of your assets in index funds, then you're mainly concerned about how the massive economic destruction that will result from climate change will affect the value of the other 97%, the non-energy portion of your portfolio."xxv

Each of the major passive asset managers saw its fiduciary duty a little differently. Vanguard and State Street sought to recruit qualified Board members and ensure that they communicated appropriately with shareholders. After that, they preferred to trust the Board to address longterm issues like climate change if they saw fit. Ben Colton, Global Co-Head of Asset Stewardship at State Street Global Advisors, put it this way: "State Street is not prescriptive on strategy. We are interested in competent and balanced Board oversight, consistent strategy, and disclosure."xxvi

Other asset managers were more insistent about the need to address climate change explicitly, which they saw as a global challenge that every Board had to address, especially hydrocarbon producers. In their view, climate was an existential threat to the economy, of which they owned a representative sample, and therefore an enormous risk to their investors' future well-being. BlackRock's CEO, Larry Fink, framed his firm's point of view as follows in his widely discussed January 2020 letter to CEOs:

"Research from a wide range of organizations ... is deepening our understanding of how climate risk will impact both our physical world and the global system that finances economic growth.... Investors are increasingly reckoning with these questions and recognizing that climate risk is investment risk. Indeed, climate change is almost invariably the top issue that clients around the world raise with BlackRock.... They are seeking to understand both the physical risks associated with climate change as well as the ways that climate policy will impact prices. costs, and demand across the entire economy.

"These questions are driving a profound reassessment of risk and asset values." And because capital markets pull future risk forward, we will see changes in capital allocation more quickly than we see changes to the climate itself. In the near future – and sooner than most anticipate – there will be a significant reallocation of capital."xxvii

Aeisha Mastagni, a portfolio manager at CalSTRS, connected the themes of climate risk and governance at Exxon:

"What was so concerning with Exxon was that they had only planned for one scenario, and in that scenario the demand for oil and gas was only going to increase for the foreseeable future. The idea of planning for just one scenario is a risky proposition for us as investors. We need companies in our portfolio that are planning for a variety of scenarios and timeframes. Company strategy should seek to understand a range of future scenarios and plan for them."xxviii

As Charlie Penner thought about his next moves at Engine No. 1, it was good to know that there was at least some receptivity to the idea that, as Fink put it, "climate risk is investment risk."

Aligning Investment Horizons with the Long-term Impacts of Climate Change

Asset managers that invest in broad indexes end up managing portfolios that look and perform like the overall economy. They are sometimes referred to as 'universal owners' because (a) their portfolios mirror the overall economy; (b) their investors are a cross-section of the population – almost 100 million Americans own index funds, many through 401(k) plans; and (c) because most are more or less explicitly intended to provide retirement income for their investors, they are interested in the performance of their investments over the course of many decades into the future.xxix

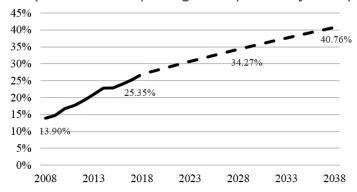
For example, a 30-year-old 401(k) investor today may retire in 35 years and expect to live another 20 years beyond that, giving them a 55-year investment time horizon. Their financial security is inextricably tied to the health of the economy and the stock market as far in the future as 2076. As younger employees open 401(k) and other long-term investment plans every year, index-based funds take on a perpetual, open-ended character. They are truly 'permanent capital,' a term often applied to certain private equity that invests open-endedly with no liquidity deadline.

Permanent capital is highly prized, because it frees management from short-term needs to return cash to investors. It enables a company to plan and invest for the long term. To the extent that stewardship teams at major passive funds explicitly think like permanent capital, it seems probable that they will vote against short-sighted managements more and more often. Public positions on broad issues, such as BlackRock's position on climate risk, xxx may also become more widely recognized and acted on by Boards of Directors.

Just after the Reenergize Exxon campaign, Engine No. 1 created its own index-based ETF. Michael O'Leary, the manager of its fund, noted that, "We will own Exxon as long as it exists as a large, publicly held company. We will be there after the CEO changes, and after the next CEO changes, and after the entire Board turns over."xxxi Stewardship teams that see climate-related risks as material to their investments' performance 20, 30, or more years in the future – and therefore to their investors' retirement income - may increasingly lobby for long-term priorities today, even if the returns are not realized for many years.

Index investing is an increasingly popular strategy. In 2008, passively managed funds at just the Big 3 owned a combined average of 13.9% of S&P 500 shares. That share grew to 25.35% in 2018 and the rate of growth showed no sign of moderating. This trend enabled the Big 3 to take an increasingly influential role in exercising 'active stewardship.' Some projected that the large index managers could ultimately control not just an influential 25%, but a dominant 40% or more of the votes at most large companies in the foreseeable future (Figure 5). xxxii Effectively, the

Figure 5, Combined Voting Stakes of BlackRock, Vanguard and State Street in S&P 500 Companies: Actual (through 2018) and Projected (through 2038)



Source: Bebchuk, Lucian, and Hirst, Scott, "The Specter of the Giant Three," 9 May 2019, Harvard Law School John M. Olin Center Discussion Paper No. 1004, European Corporate Governance Institute (ECGI) - Finance Working Paper No. 608/2019, Available at https://ssrn.com/abstract=3385501 or http://dx.doi.org/10.2139/ssrn.3385501

strategic direction of almost any large publicly held company might be strongly influenced by a few executives at the largest asset managers. XXXIII

Some worried that putting so much power in the hands of a few fund managers was not how shareholder capitalism was supposed to work. Others thought this development could be seen in a positive light – until then, no shareholders were powerful enough to challenge management at very large companies like Exxon. Now, at least, the large fund managers could play that role. Their proxy votes were public information, enabling investors, managements, and regulatory authorities to monitor how they exercised their influence.

In October 2021, as the implications of this concentration of power became clear to a broader constituency in the industry and government, BlackRock announced a plan to let its larger institutional investors exercise their own proxy votes. The company positioned this development as a step toward eventually empowering all of its institutional and individual investors to vote their own proxies.xxxiv An analyst at Morningstar noted that, "By letting more clients vote their own proxies, BlackRock is pre-empting any regulatory action that would come sooner or later. There is only so much power concentration that policymakers can tolerate."xxxv

What's Next?

Reflecting on the future at Exxon, Aeisha Mastagni at CalSTRS said, "Yes, we won, but the hard work begins now. We still have an obligation as shareholders to hold this company accountable. We need to change its trajectory. It was losing money, it was underperforming for shareholders, it wasn't communicating with its investors, it wasn't preparing itself for an energy transition. We have to begin addressing all of these issues now."xxxvi

Charlie Penner thought about the challenge of keeping the investment stewardship teams of the Big 3 index fund managers and the large pension funds focused on Exxon's progress. The new Board certainly needed some time to come together as an effective team, but time was not on their side. How would the Reenergize Exxon coalition continue to stress to the Board and management the urgency of making tangible progress in a new direction?

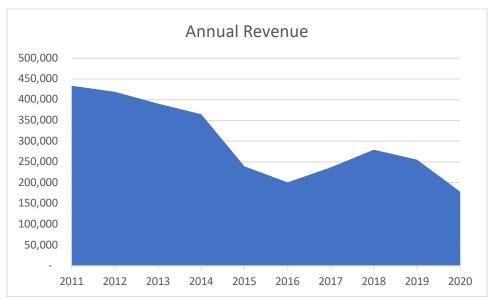
Appendix 1. Vote Tally for Board of Directors Candidates, ExxonMobil Annual Meeting, 5/26/2021

The final votes In Favor and Withheld for each nominee are set forth below. The twelve nominees with the most votes in favor were elected to the Board.

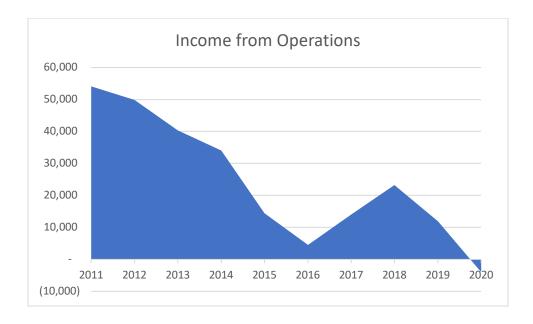
| Nominees | Nominated by Votes For | | Votes Withheld | | | | |
|--|------------------------|---------------|----------------|--|--|--|--|
| Candidates Elected to the Board of Directors | | | | | | | |
| Michael J. Angelakis | Management | 2,796,428,863 | 46,636,107 | | | | |
| Jeffrey W. Ubben | Management | 2,788,738,768 | 54,326,219 | | | | |
| Ursula M. Burns | Management | 2,753,092,463 | 61,220,881 | | | | |
| Susan K. Avery | Management | 2,748,172,284 | 94,892,487 | | | | |
| Joseph L. Hooley | Management | 2,747,469,168 | 95,596,019 | | | | |
| Angela F. Braly | Management | 2,709,049,323 | 134,015,448 | | | | |
| Darren W. Woods | Management | 2,686,402,783 | 156,662,205 | | | | |
| Kenneth C. Frazier | Management | 2,685,351,293 | 157,713,694 | | | | |
| Kaisa Hietala | Engine No. 1 | 1,510,819,249 | 154,384,137 | | | | |
| Gregory J. Goff | Engine No. 1 | 1,425,523,196 | 239,680,189 | | | | |
| Alexander A. Karsner | Engine No. 1 | 1,218,032,919 | 447,170,467 | | | | |
| Steven A. Kandarian | Management | 1,173,176,391 | 33,438,686 | | | | |
| Candidates NOT Elected | | | | | | | |
| Douglas R. Oberhelman | Management | 1,145,335,462 | 32,527,746 | | | | |
| Wan Zulkiflee | Management | 1,099,727,702 | 78,135,506 | | | | |
| Samuel J. Palmisano | Management | 1,098,045,723 | 79,817,485 | | | | |
| Anders Runevad | Engine No. 1 | 295,055,259 | 1,370,148,126 | | | | |

Source: data from ExxonMobil Corporation, Form 8-K/A, 21 June 2021, https://www.sec.gov/ix?doc=/Archives/edgar/data/0000034088/000003408821000037/xom-20210526.htm, accessed 2 Nov 2021

Appendix 2. Exxon Annual Revenue and Income from Operations, 2011-2020 (\$ millions)



Source: data from SeekingAlpha.com,https://seekingalpha.com/symbol/XOM/income-statement, accessed 2 Nov 2021



Source: data from SeekingAlpha.com,https://seekingalpha.com/symbol/XOM/income-statement, accessed 2 Nov 2021

Appendix 3. Exxon Market Capitalization, 2011 through 12/01/2020 (\$ billions)



Source: data from https://www.macrotrends.net/stocks/charts/XOM/exxon/market-cap, accessed 2 Nov 2021

Appendix 4. Reenergize Exxon's Summary of a Rough 10 Years

This decline occurred while oil and gas are still the dominant forms of global energy

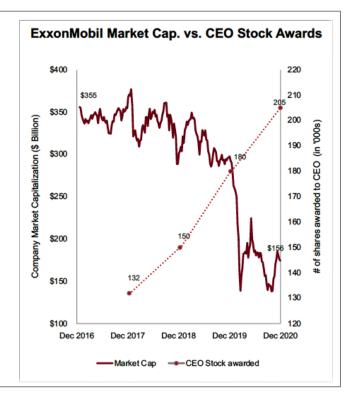
| E x onMobil | 2010 | 2015 | 2020* | |
|--------------------------|--|---|--|--|
| Market Capitalization | Largest company in the World at ~\$370 bn market cap; #1 in the Dow Jones | ~\$370 billion market capitalization; #3 company in the Dow Jones | Removed from DJIA. ~\$250 billion market cap pre-COVID / ~\$176 billon pre-Engine No. 1 engagement. | |
| S&P Credit Rating | AAA | AAA | Downgraded three times (twice pre-COVID) by S&P and put on negative outlook | |
| Balance Sheet | Net Debt: \$7 bn Net Debt / CFO: 0.15 x | Net Debt: \$39 bn Net Debt / CFO: 1.8x | Net Debt: \$63bn Net Debt / CFO: 4.0x | |
| Dividend Capability | Consistent dividend growth. Total of \$163bn returned over 2005-2010 including share buybacks. Free Cash generated covered dividend by over 2 times | 37 straight years of dividend increases | Free Cash flow fell short of dividend by over \$20bn from 2017-2020, forcing the Company to borrow to pay the dividend | |

Source: Engine No. 1, "Reenergize Exxon // Investor Presentation," May 2021, https://reenergizexom.com/wp-

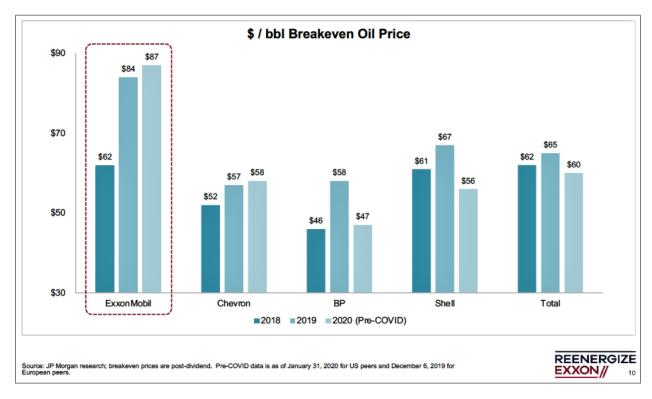
content/uploads/2021/05/Investor-Presentation-May-2021-v2.pdf, accessed 4 Sept 2021

Appendix 5. Market Value vs. CEO Stock Compensation

- From 2017-19, ExxonMobil's total return was -(12)% and share repurchases were effectively halted in 2017, yet CEO compensation rose 35% during this period
- While 2020 CEO compensation was down 33%, ~72% of this reduction was due to the temporary COVIDrelated decline in the stock price, and the number of shares awarded increased 14%
- Stock awards, the largest discretionary compensation component (~60%), have grown every year from 2017-2020.
- In total from 2017 through 2020, CEO pay has totaled over \$75 million



Appendix 6. Breakeven Oil Price: Exxon vs. Peers

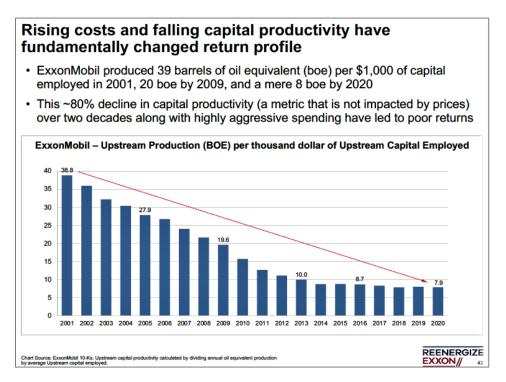


Appendix 7(a). Declining Return on Invested Capital, 2011-2020



Source: data from SeekingAlpha.com,https://seekingalpha.com/symbol/XOM/income-statement, accessed 2 Nov 2021

Appendix 7(b). Declining Productivity of Growth Capital Investment



Appendix 8. Largest Greenhouse Gas Emitters, Cumulative 1988-2015

| Producer | Cumulative 1988-2015 Scope 1+3 GHG, MtCO2e | Cumulative 1988-2015 Scope 1+3 of global industrial GHG, % |
|--------------------------------------|---|--|
| China (Coal) | 128,933 | 14.3% |
| Saudi Arabian Oil Company (Aramco) | 40,561 | 4.5% |
| Gazprom OAO | 35,221 | 3.9% |
| National Iranian Oil Co | 20,505 | 2.3% |
| ExxonMobil Corp | 17,785 | 2.0% |
| Coal India | 16,842 | 1.9% |
| Petroleos Mexicanos (Pemex) | 16,804 | 1.9% |
| Russia (Coal) | 16,740 | 1.9% |
| Royal Dutch Shell PLC | 15,017 | 1.7% |
| China National Petroleum Corp (CNPC) | 14,042 | 1.6% |
| BP PLC | 13,791 | 1.5% |
| Chevron Corp | 11,823 | 1.3% |
| Petroleos de Venezuela SA (PDVSA) | 11,079 | 1.2% |
| Abu Dhabi National Oil Co | 10,769 | 1.2% |
| Poland Coal | 10,480 | 1.2% |
| Peabody Energy Corp | 10,364 | 1.2% |
| Sonatrach SPA | 8,997 | 1.0% |
| Kuwait Petroleum Corp | 8,961 | 1.0% |

Source: data from Griffin, Paul, "The Carbon Majors Database: CDP Carbon Majors Report 2017," Climate Accountability Institute, July 2017, https://climateaccountability.org/pdf/CarbonMajorsRpt2017%20Jul17.pdf, accessed 26 Sep 2021

Appendix 9(a). Reenergize Exxon's Candidates



Gregory Goff

- Served as President and Chief Executive Officer (2010-2018) of Andeavor (formerly Tesoro), a leading petroleum refining and marketing company
- · During his tenure, Andeavor generated total returns of over 1,200%, versus the U.S. Energy sector's total return of 55%
- ~30-year career with ConocoPhillips, where he held various leadership positions in Exploration and Production, and Downstream, and served as Senior Vice President of Commercial businesses from 2008 to 2010
- · Serves on the Board of Enbridge Inc. and Avient

Relevant Experience

- Conventional Oil and Gas Industry
- Named by Harvard Business Review one of the "Best-Performing CEOs in the World" in 2018

Fills Unmet Board Need

 ~40 years of successful experience in all aspects of oil and gas

"Goff ... encapsulates exactly the worldview that we espouse, of the now-famous Chevron rallying cry 'Higher returns, lower emissions."

Paul Sankey, Sankey Research, April 1, 2021

"[A]mong the best and most strategic thinking managers in the industry."

Barclays Research, 2016

ote Source: Paul Sankey (Apr. 1, 2021). Morning Sankey 4/1/2021. Sankey Re setting Takeaways. Barclays Research.





Kaisa Hietala

- · Trained geophysicist and environmental scientist
- · Began oil and gas career in E&P and crude trading at Neste, then led strategic review that resulted in creation of the Renewable Products segment. Served as EVP for 5 years ending in 2019, during which annual segment revenues grew by 1.6x and operating profits grew by 4x to over \$1 billion
- · During this time, Renewable Products became over 2/3 of profits, and Neste's stock returned ~550%. Today the Renewables division is over 90% of profits and Neste is the world's largest producer of renewable diesel
- Serves on the board of Smurfit Kappa **Group and Tracegrow**

Relevant Experience

- Conventional and renewable energy
- · Led oil and gas company transformation which was named by Harvard Business Review as one of the "Top 20 Business Transformations of the Last Decade" in 2019 (alongside Netflix, Amazon, and Microsoft)

Fills Unmet Board Need

· Experience in energy industry transformation

"Kaisa Hietala built and ran the renewable business at Finnish refiner Neste, which has helped push that firm's share price up 10-fold over a decade."

Reuters Breakingviews, March 22, 2021

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Text Source: Bloomberg, Quote Source: Robert Cyran (Mar. 22, 2021). More Than This. Reuters Breakingview

Appendix 9(b). Reenergize Exxon's Candidates



Alexander Karsner

- Began career developing energy infrastructure. As a private equity investor, venture partner and advisor, portfolios have included some of the most successful clean tech startups of the past decade
- Part of the executive leadership team at X (formerly Google X), shaping strategy in new energy industry technologies
- From 2005 to 2008, served as US Assistant Secretary of Energy, responsible for large federal R&D programs and National Laboratories. Help enact or implement major legislation which remains foundational to federal energy policy and regulation today
- · Serves on the board of Applied Materials

Relevant Experience

- Conventional, alternative, and new energy technology
- **Appointed Assistant Energy Secretary** by President Bush and put on the **National Petroleum Council by President Obama**

Fills Unmet Board Needs

- Experience in conventional and cutting-edge energy technologies
- Regulatory experience

"My (recommendation for) energy secretary, Andy Karsner (a green Republican who led renewable energy for George W. Bush)." Tom Friedman, New York Times (April 7, 2020)

> REENERGIZE EXXON//



Anders Runevad

- · Served as Chief Executive Officer (2013-2019) of Vestas, which has more installed wind power worldwide than any other manufacturer
- · During his tenure, stock returned a total of 480%, significantly outperforming the global energy and industrials sectors
- Credited with turning around Vestas, including relieving debt burden, returning to profitability, and restoring dividend
- · CEO signatory to the Paris Pledge for Action signed in 2015 in connection with the signing of the Paris Agreement
- · Serves on 3 boards: Vestas, Schneider Electric SE, and Peab AB (as of March 2021 no longer of the board of Nilfisk Holding)

Text Source: Bloomberg. Quote Source: Businessperson of the Year (December 1, 2016). Fortune.

Relevant Experience

- Renewable energy
- · Named in Fortune's "Businessperson of the Year" list in 2016 and named one of the "Best-Performing CEOs in the World" by Harvard Business Review (2016, 2017, and 2019)

Fills Unmet Board Need

Successful experience in evolving and highly competitive energy landscape

"[S]ought to introduce discipline (read: cost cuts) into what some have viewed as an altruistic mission, looking to help wind power technology mature so that it no longer requires subsidies to attract customers. Under Runevad, Vestas .. passed \$10 billion in revenues ... with profits now at a healthy \$907 million. By contrast, Vestas lost \$1.3 billion in the last full year before Runevad took over." - Fortune, 2016

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Appendix 10. Pre-campaign Independent Directors

Reenergize Exxon's view of independent Directors' track records shows that the stock return for investors in the companies each of them led underperformed its sector and the market overall during their tenure.

| Current Independent Director Nominee Track Record as CEOs | | | | | | | |
|---|-------------------|------------|---------|-----------------------|-------------------|-------------------|--|
| Director | Company | CEO Tenure | | Stock Total Return | Sector Return* | Market Return* | |
| Frazier | Merck | 12/2011 | Present | 192% | 316% | 301% | |
| Burns | Xerox Holdings | 7/2009 | 12/2016 | 55% | 190% | 181% | |
| Palmisano | IBM | 3/2002 | 12/2011 | 103% | 36% | 35% | |
| Oberhelman | Caterpillar | 7/2010 | 12/2016 | 85% | 163% | 150% | |
| Braly | Anthem | 6/2007 | 8/2012 | -28% | 18% | 3% | |
| Hooley | State Street | 3/2010 | 12/2018 | 63% | 134% | 170% | |
| Kandarian | MetLife | 5/2011 | 4/2019 | 40% | 146% | 155% | |

Endnotes

- Business Wire, "Engine No. 1 Launches to Bring Active Ownership and Impact-Driven Strategy to Investing." 1 Dec 2020, https://www.businesswire.com/news/home/20201201005703/en/, accessed 6 Oct 2021
- iii Business Wire, "Engine No. 1 to Nominate Four Highly Qualified, Independent Director Candidates to Exxon Board," 7 Dec 2020, https://www.businesswire.com/news/home/20201207005415/en/. accessed 6 Oct 2021
- iv Bioy, Hortense, Garcia-Zarate, Jose, and Bryan, Alex, "Passive Fund Providers and Investment Stewardship," Harvard Law School Forum on Corporate Governance, 21 Dec 2017, https://corpgov.law.harvard.edu/2017/12/21/passive-fund-providers-and-investment-stewardship/, accessed 27 Sept 2021
- ^v Engine No. 1, "Reenergize Exxon // Investor Presentation," May 2021. https://reenergizexom.com/wpcontent/uploads/2021/05/Investor-Presentation-May-2021-v2.pdf, accessed 4 Sept 2021
- vi Exxon Mobil Corporation, "2020 Annual Report," https://corporate.exxonmobil.com/investors/annualreport, accessed 5 Oct 2021
- vii Investment manager (anonymous), Interview by author, 5 Nov 2021
- viii Penner, Charlie (Engine No. 1), Interview by author, 2 Aug 2021
- ix Cook, Jackie, "ESG Proxy Resolutions Find More Support in 2019," Morningstar.com, 28 Feb 2020, https://www.morningstar.com/articles/967699/esq-proxy-resolutions-find-more-support-in-2019, accessed 19 Oct 2021
- * Cook, Jackie, "ESG Proxy Resolutions Find More Support in 2019," Morningstar.com, 28 Feb 2020. https://www.morningstar.com/articles/967699/esq-proxy-resolutions-find-more-support-in-2019, accessed 19 Oct 2021
- xi Vanguard Investment Stewardship Insights, "Voting insights: A proxy contest and shareholder proposals related to material risk oversight at ExxonMobil," Vanguard.com, undated, https://about.vanguard.com/investment-stewardship/perspectives-andcommentary/Exxon 1663547 052021.pdf?rid=74, accessed 10 Nov 2021
- xii Fink, Larry, "A Fundamental Reshaping of Finance," BlackRock.com, 14 Jan 2020, https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter, accessed 24 Aug 2021
- xiii Climate Action 100+,"In Stunning Vote, Shareholders Elect Two New Directors Put Forth by Shareholders at ExxonMobil, Seeking Climate Expertise and Action," ClimateAction100.org, 26 May 2021, 'https://www.climateaction100.org/news/in-stunning-vote-shareholders-elect-two-new-directorsput-forth-by-shareholders-at-exxonmobil-seeking-climate-expertise-and-action/," accessed 10 Nov 2021
- xiv Penner, Charlie (Engine No. 1), Interview by author, 2 Aug 2021
- xv International Energy Agency, "Net Zero by 2050: A Roadmap for the Global Energy Sector," May 2021, https://www.iea.org/reports/net-zero-by-2050, accessed 31 Aug 2021
- xvi McGlade, Christophe, and Elkins, Paul, "The geographical distribution of fossil fuels unused when limiting global warming to 2 °C," Nature, 7 Jan 2015, https://www.nature.com/articles/nature14016, accessed 12 Oct 2021

ⁱ The Energy Mix, "Exxon Writes Off \$20 Billion, Imperial \$1.2 Billion as Gas Properties Become Stranded Assets," 2 Dec 2020, https://www.theenergymix.com/2020/12/02/exxon-writes-off-20-billion-imperial-1-2-billion-as-gas-properties-become-stranded-assets/, accessed 24 Sept 2021

- xvii Penner, Charlie (Engine No. 1), Interview by author, 2 Aug 2021
- xviii Penner, Charlie (Engine No. 1), Interview by author, 2 Aug 2021
- xix Hildebrand, Philipp, Boivin, Jean, Tan, Jessica, "Launching Climate-aware Asset Class Return Expectations," BlackRock.com, Feb 2021, https://www.blackrock.com/us/individual/literature/whitepaper/climate-aware-investing.pdf, accessed 3 Nov 2021
- xx Morley, John D., "Too Big to Be Activist," 18 Dec 2019, Yale Law & Economics Research Paper No. 596, Available at https://ssrn.com/abstract=3225555, accessed 23 Sept 2021
- xxi Adams-Heard, Rachel, "Texas Targets Wall Street in Fight Over ESG Investing," BloombergLaw.com, 14 June 2021, https://news.bloomberglaw.com/private-equity/texas-targets-wall-street-in-fight-overesg-investing-1, accessed 2 Nov 2021
- xxii Bioy, Hortense, Garcia-Zarate, Jose, and Bryan, Alex, "Passive Fund Providers and Investment Stewardship," Harvard Law School Forum on Corporate Governance, 21 Dec 2017, https://corpgov.law.harvard.edu/2017/12/21/passive-fund-providers-and-investment-stewardship/, accessed 27 Sept 2021
- xxiii Mooney, Attracta, "Jobs Bonanza in Stewardship Teams: The Number of People Hired has Doubled since 2017 as Investors' Interest in ESG Strategies Blooms," Financial Times, 9 Mar 2020, http://proxy.library.nyu.edu/login?qurl=https%3A%2F%2Fwww.proquest.com%2Fnewspapers%2Fjobs -bonanza-stewardship-teams%2Fdocview%2F2387519996%2Fse-2%3Faccountid%3D12768, accessed 19 Oct 2021
- xxiv Kishan, Saijel, "BlackRock Voted Against 255 Directors for Climate Issues," Bloomberg.com, 20 July 2021, https://www.bloomberg.com/news/articles/2021-07-20/blackrock-voted-against-255-directorsfor-climate-related-issues, accessed 21 July 2021
- xxv Penner, Charlie (Engine No. 1), Interview by author, 2 Aug 2021
- xxvi Colton, Ben (State Street Global Advisors), Interview by author, 24 Aug 2021
- xxvii Fink, Larry, "A Fundamental Reshaping of Finance," BlackRock.com, 14 Jan 2020, https://www.blackrock.com/corporate/investor-relations/2020-larry-fink-ceo-letter, accessed 24 Aug 2021
- xxviii Mastagni, Aeisha (CalSTRS), Interview by author, 10 Aug 2021
- xxix Quigley, Ellen, Universal Ownership in the Anthropocene (May 13, 2019). Available at SSRN: https://ssrn.com/abstract=3457205 or http://dx.doi.org/10.2139/ssrn.3457205
- xxx Hildebrand, Philipp, Boivin, Jean, Tan, Jessica, "Launching Climate-aware Asset Class Return Expectations." BlackRock.com, Feb 2021. https://www.blackrock.com/us/individual/literature/whitepaper/climate-aware-investing.pdf, accessed 3 Nov 2021
- xxxi O'Leary, Michael (Engine No. 1), Interview by author, 23 Sept 2021
- xxxii Morley, John D., "Too Big to Be Activist," 18 Dec 2019, Yale Law & Economics Research Paper No. 596, Available at https://ssrn.com/abstract=3225555, accessed 23 Sept 2021
- xxxiii Bebchuk, Lucian, and Hirst, Scott, "The Specter of the Giant Three," 9 May 2019, Harvard Law School John M. Olin Center Discussion Paper No. 1004, European Corporate Governance Institute (ECGI) -Finance Working Paper No. 608/2019, Available at SSRN: https://ssrn.com/abstract=3385501, accessed 6 Sept 2021
- xxxiv "Working to Expand Proxy Voting Choice for Our Clients," BlackRock.com, undated (Oct 2021), https://www.blackrock.com/corporate/about-us/investment-stewardship/proxy-voting-choice, accessed 5 Nov 2021

xxxv Norton, Leslie, "BlackRock's Move to Open Up Proxy Voting to Clients Removes a Giant Rubber Stamp," Morningstar.com, 8 Oct 2021, https://www.morningstar.com/articles/1061357/blackrocksmove-to-open-up-proxy-voting-to-clients-removes-a-giant-rubber-stamp, accessed 20 Oct 2021

xxxvi Mastagni, Aeisha (CalSTRS), Interview by author, 10 Aug 2021