The Global Fossil Fuel Divestment and Clean Energy Investment Movement

2018 Report

Executive Summary

Since its launch by students as a moral call to climate action in 2011, the fossil fuel divestment campaign has become a mainstream financial movement mobilizing trillions of dollars in support of the clean energy transition. Commitments to divest continue to grow rapidly: Today, nearly 1,000 institutional investors with $6.24 trillion in assets have committed to divest from fossil fuels, up from $52 billion four years ago—an increase of 11,900 percent.

The primary drivers of this recent growth are insurers, pension funds, and sovereign wealth funds. The insurance sector continues to divest more than any other sector, having committed to divest over $3 trillion in assets. Sovereign wealth funds and pension funds are also divesting: Ireland, which has an €8.9 billion ($10.4 billion) sovereign development fund, became the world's first country to commit to divest its wealth fund from fossil fuels. In 2018, New York City became the largest city in the world to date to commit to divest.

Mission-driven institutions also continue to divest in large numbers, with significant new commitments from the health, faith, philanthropic, and university sectors. On the health front, doctors have become increasingly concerned about the public health impacts of climate, motivating them to align their investments with their mission. Meanwhile, faith-based organizations are divesting in higher numbers, with an additional 138 institutions committing since 2016.

While divestment was once viewed as an alternative to shareholder engagement with the fossil fuel industry, it is now increasingly used as part of a joint strategy. Despite the efforts of shareholders to work with companies to adopt more sustainable business practices, there is little evidence that the largest oil and gas companies have changed their practices to be consistent with the Paris Agreement goal to keep temperature rise well-below 2°C. This convergence of engage and divest strategies, in which divestment is used as leverage for shareholder demands, is an important new development.

The growing success of this movement has accelerated in recent years because of the intersection of ethical, financial, and fiduciary imperatives to divest and invest:

- The **ethical case to divest** continues to be advanced by climate advocates and youth activists who first led the movement and who recognize the urgency of the climate crisis. Their grassroots resistance and mobilizations against fossil fuel projects and pipelines have spread globally and are increasing.

- New analyses show there is a strong **financial case** for fossil fuel divestment, and that investors can divest from any sector without jeopardizing their risk/return profiles. In addition, a proliferation of new fossil-free financial products is making it easier for institutions and individuals to divest.

- **Fiduciary duty** is driving large institutional investors to divest in order to manage climate and reputational risk, insulate their assets from growing financial stress in the oil and gas industry, and align with the goals of the UN Paris Climate Agreement. Regulators, including the G20 Financial Stability Board's Task Force on Climate-Related Financial Disclosures, are now explicit that climate change and the threat of stranded fossil fuel assets pose a significant risk to investor value, and that fiduciaries have a legal duty to manage that risk through divestment and other strategies. In addition, climate litigation is increasing the pressure on fiduciaries to divest, as fossil fuel companies—and fiduciaries themselves—face legal liability and damages in jurisdictions globally.

This growing support for divestment and the broader movement to keep fossil fuels in the ground is now having a negative material impact on the fossil fuel industry. Over the past year, divestment pressure and related "keep it in the ground" campaigns have inspired a number of high-profile decisions by major banks to stop financing new fossil fuel projects, including a commitment from the World Bank Group (WBG) to stop funding oil and gas development. In addition, several major insurers have decided to stop underwriting fossil fuel projects. While not divestment per se, these actions impact the industry by increasing the costs of capital and compliance. These actions also directly reduce fossil fuel emissions by slowing the expansion of the industry.

Along with divesting, investors are increasingly marrying divestment to commitments to invest in climate solutions, reallocating their funds to growth industries in renewable energy, clean tech, energy efficiency, and energy access. Global insurers, faith groups, foundations, and cities are leading this trend.

ABOUT ARABELLA ADVISORS:

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Taken together, the moral and financial cases for divestment have changed the context in which the fossil fuel industry operates and are advancing the transition to clean energy.

Methodology for Reporting Divestment

Arabella Advisors followed the methodology we deployed to aggregate and report data on the growth of the global fossil fuel divestment movement in 2014, 2015, and 2016. As for prior reports, we assembled a committee of diverse divestment movement leaders and other experts to advise on the methodology used to track and vet the commitments in this report. We list these leaders and experts in the Acknowledgments section on page 25.

We have included any public commitment to divest from top fossil fuel companies, with a few exceptions described below. The original standard for divestment commitments was a pledge to divest from the top 200 companies, as defined by the Carbon Tracker or Carbon Underground indexes. Over time, the range and size of institutions that are divesting have diversified, and we witnessed a proliferation of approaches beyond divesting from the top 200 companies. Some institutions have divested from all fossil fuel companies, committing themselves well beyond withdrawal from the top 200. Other institutions have opted for a sector-based approach: divesting from companies that derive a significant portion of their revenue from coal and/or tar sands companies. Still others have chosen to divest from specific fossil fuel companies based on a range of criteria, including companies' willingness to engage in meaningful efforts to curb emissions. We have included commitments that employed any of these approaches.

In a few instances, institutions have opted to freeze any future investments in fossil fuels but have stopped short of divesting existing holdings. While that is an important step toward divestment, we have not counted these commitments in our totals. Similarly, on occasion, members of an institution have passed a resolution in support of

A listing of divesting institutions, as well as more information on the asset sizes and divestment approaches employed by each institution, can be found at https://gofossilfree.org/divestment/commitments/.

divestment, but those who maintain fiduciary duty have declined to implement it. We have not included these resolutions in our analysis.

Asset sizes represent the total assets (or assets under management for financial institutions) of institutions that have committed to divest. As such, asset sizes do not represent the total sum divested from fossil fuel companies. Arabella obtained data on institutions' assets from various sources. For educational institutions, we tracked size of endowment, as publicly reported by the institutions. For health care institutions, pension funds, and for-profit asset managers, we tracked total assets, as cited in organizations' available financial statements (e.g., annual reports or tax forms) at the time of their commitments. For local governments, we tracked total net position, as cited in cities' most recent publicly available financial statements.

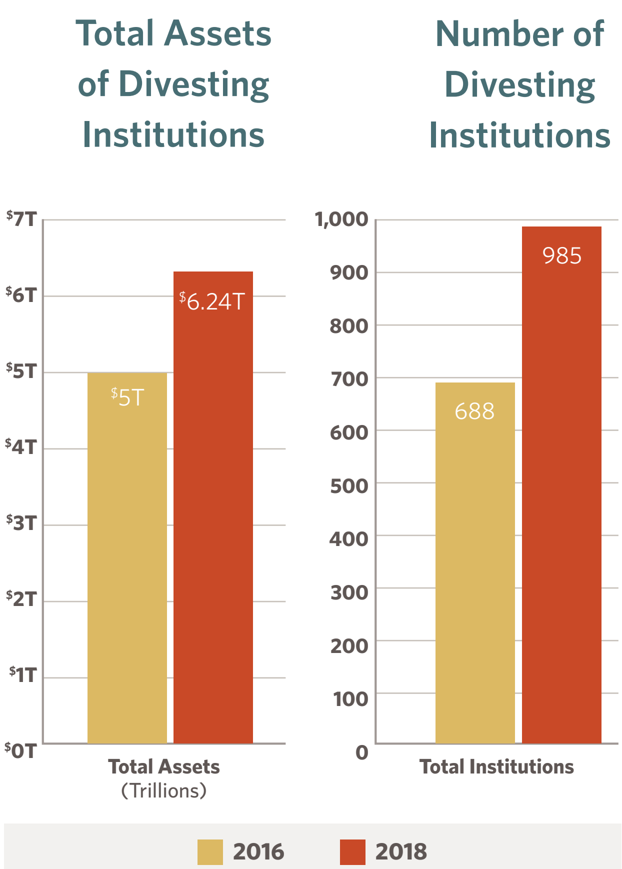
The Divestment Movement Continues to Grow Rapidly Across the Globe

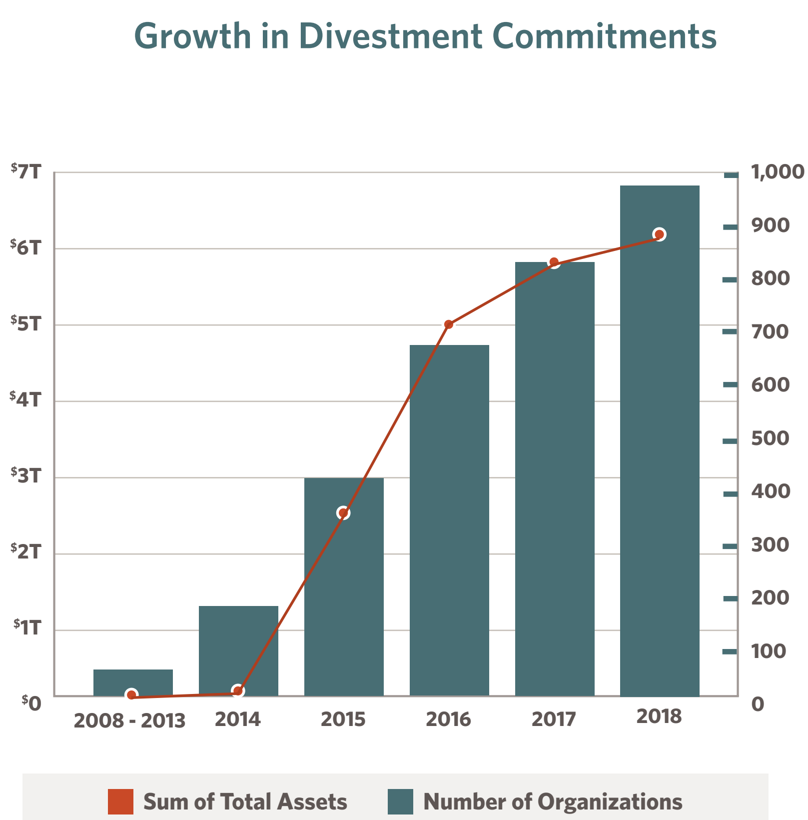
Investors with $6.24 trillion in assets have now committed to divest from fossil fuels. Commitments have continued to grow rapidly, particularly in the Global South. Pledges span 37 countries, and 66 percent of divesting institutions and individuals are based outside of the United States.

Divestment commitments have been driven primarily by global insurance companies, pension funds, and other large asset owners.

The insurance sector continues to be a divestment leader, having committed to divest over $3 trillion in assets. According to a report published by Unfriend Coal, a global coalition of environmental NGOs and social movements, 15 insurers have divested from coal companies and/or are no longer underwriting coal projects.[1] AXA, a French insurance company that was one of the first companies to reduce its

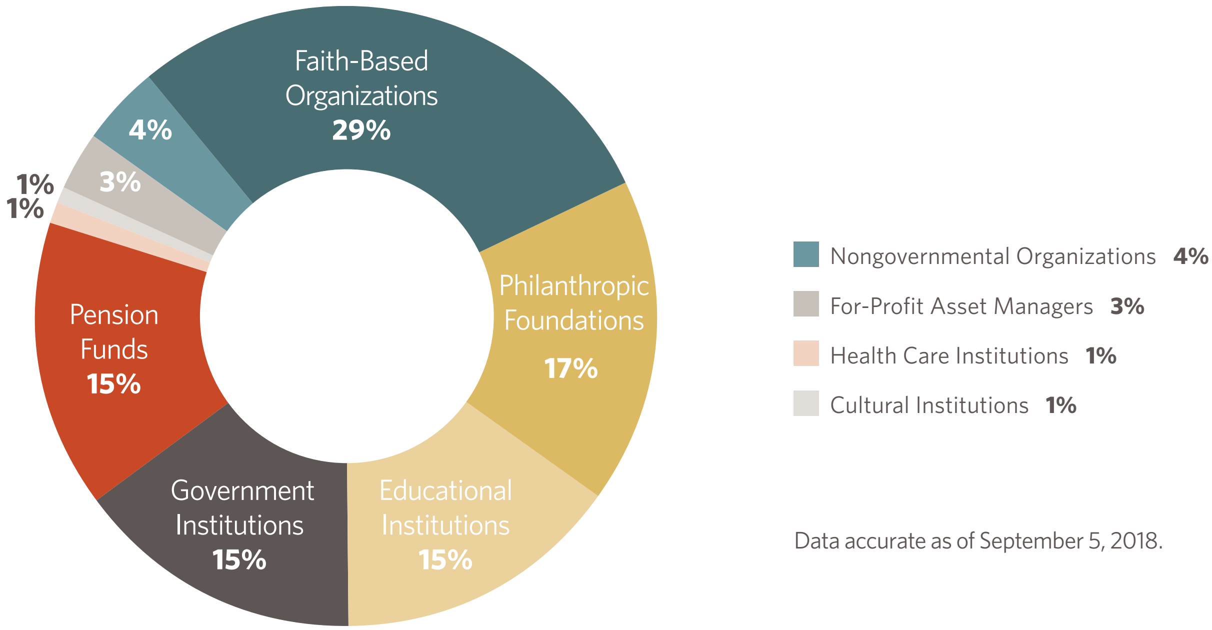
In 2018, institutional divestment pledges spanned 37 countries.





Data accurate as of September 5, 2018.

Types of Divesting Institutions



Data accurate as of September 5, 2018.

investments in coal, has additionally committed to divest from any company that derives more than 30 percent of its revenue from coal or oil sands and to stop insuring new coal construction projects.[2] Lloyd's of London, the world's oldest insurance provider, has also implemented a coal exclusion policy—restricting its investment in coal—for its central mutual fund.[3] Other major insurance companies that have divested or ceased to underwrite coal projects since 2016 include Zurich Insurance Group, Swiss Reinsurance Company, SCOR Se, Storebrand, and the California State Compensation Insurance Fund.[4]

Sovereign wealth funds are also taking steps to address exposure to carbon risk in their portfolios. Ireland, which has an €8.9 billion ($10.4 billion) sovereign development fund, became the world's first country to commit to divest its wealth fund from fossil fuels this year.[5] Alaska Permanent Fund, the United States' largest sovereign fund that relies on fossil fuel, has reduced its investment in fossil fuels from over $3 billion in 2011 to less than $1.7 billion in 2017.[6] Norway's sovereign wealth fund—the world's largest, with approximately $1 trillion in assets and roughly $35 billion invested in oil companies—divested from coal companies in 2015. It has recently indicated interest in divesting its holdings of international oil companies, as well.[7] This year, the fund appointed an expert group to assess its potential investments in energy stocks, the relationship between the value of energy stocks and the prices of oil and gas, and the effect of reducing its exposure to fossil fuel stocks.

In 2017, the European Parliament passed a resolution calling on all public and private investment institutions to divest from fossil fuels. In January 2018, Caisse de prévoyance de l'État de Genève, Geneva's CHF12.8 billion (€10.9 billion) pension fund, divested from coal-related companies.[8] Shortly thereafter, Handelskammer Hamburg (Chamber of Commerce) of Germany and the Pensioenfonds Van De Metalektro, the €46.4 billion ($55.4 billion) pension fund for metal workers in the Netherlands, also divested.[9] This year, Sweden's largest pension fund, AP7, which provides pensions to 3.5 million Swedes, divested from ExxonMobil, Gazprom, TransCanada, Westar Energy, Entergy, and Southern Company, citing the need to insulate its assets from growing financial stress in the oil and gas industry and to align with the UN Paris Agreement.[10] These announcements follow 2017 commitments from Kommunal Landspensjonskasse, the 589 billion Norwegian kroner ($70.8 billion) pension fund; Fonds de reserve pour les retraites, France's €37.2 billion ($43.4 billion) pension reserve fund; and BVK, the largest pension fund in Switzerland and founding member of the Swiss Association for Responsible Investments.

A new wave of large city and public pension commitments demonstrate how leaders at the state and local government levels are recognizing the importance of the movement. Sixty-one pension funds have committed to divestment since 2016, bringing the total number of self-managed funds committed to divestment to 144. For example, in January 2018, New York City Mayor Bill de Blasio announced a plan to divest New York's $189 billion pension funds from fossil fuel companies within five years. Currently, New York City's five pension funds carry about $5 billion in fossil fuel investments.[12] More recently, London's Mayor Sadiq Khan pledged to divest the London Pension Fund Authority of its remaining investments in fossil fuel industries by

Ireland

Ireland demonstrated global leadership in the divestment movement when its lower house of parliament voted for it to become the first country to formally divest from fossil fuels. Once the bill becomes law, the country will take steps to divest its €8.9 billion ($10.4 billion) national investment fund "as soon as practicable," which is expected to mean within five years. Prior to this decision, Ireland was ranked last in the Climate Change Performance Index published in 2017. The vote to fully divest from fossil fuels shows that Ireland is "ready to think and act beyond narrow short-term and vested interests," according to Thomas Pringle, the independent lawmaker driving the bill.[11]

2020.[13] While the commitment is still being finalized, if London does commit, it would become the largest city in the world to commit to divest to date. These announcements follow similar actions in Berlin; Paris; Copenhagen; Dunedin, New Zealand; and Sydney. Additionally, spurred by the strong coordinated effort of local activists, Denmark achieved an important milestone in its divestment campaign this year: with 19 municipalities divested from coal, oil, and gas, half of all Danish municipalities will have no investments in fossil fuels.[14]

Mission-driven institutions and activists that first led the movement continue to pledge in large numbers, advancing a strong moral call to action on climate.

Mission-driven institutions, including health organizations, faith groups, nonprofits, foundations, and educational institutions, continue to pledge in large numbers; they represent 60 percent of new divestment commitments made over the past two years.

In the health care sector, doctors are increasingly concerned about the public health impacts of climate, spurring their desire to align their investments with their mission. Notably, in 2018, the American Medical Association (AMA), the Australian Medical Students' Association, and the Royal College of General Practitioners committed to divest from fossil fuels. The Royal College of General Practitioners, the UK's largest medical college with more than 52,000 members, committed to ending its investments in all fossil fuel companies.[15] The AMA passed a resolution that commits the organization to divest its $848.7 million in assets from companies that generate much of their income from fossil fuels. These organizations join the World Medical Association, the British Medical Association, the Canadian Medical Association, and the American Public Health Association in a commitment to divest. Across the health care sector, these commitments do more than simply move investments away from fossil fuel companies. In the case of the AMA, it also ends the organization's relationships with vendors that do not have environmental sustainability policies and commits the AMA to helping its 243,000 individual physician members and other professional health organizations to divest.[16]

> "Civilization requires energy, but energy must not destroy civilization."
>
> – POPE FRANCIS

In addition, faith-based organizations are divesting in higher numbers, with an additional 138 institutions committing since 2016. Influenced by Pope Francis and other church leaders, the Catholic climate movement has continued to expand dramatically over the past two years, with 103 Catholic commitments to date.

Catholic institutions are increasingly organizing coalitions to increase faith-based climate action. In October 2017, 40 Catholic institutions across five continents committed to divest in the largest joint announcement to date. In addition, the Irish Catholic Bishops Conference announced its divestment commitment on the eve of Pope Francis's visit to Ireland this past August. It also signed on to the global Catholic fossil-free pledge signifying its commitment to "the growing social movement, led by young people across the world, calling for the realignment of our financial policies to safeguard their future."[17] On September 10, 19 additional Catholic institutions representing 12 countries will collectively commit to divest. Recognizing "the huge impact of climate change on the poor," Chika Onyejiuwa, executive secretary of Africa Europe Faith and Justice Network, noted the group's commitment "to stay away completely from fossil fuel investments and to encourage others to divest."[18]

In addition to Catholic institutions, in May 2017, as the 10-day Global Divestment Mobilisation began, British Quakers announced an additional 19 divestments. The Methodist Church, which holds over $48 million in investments in BP and Shell, divested from coal and tar sand companies in 2015 and has maintained a policy of shareholder engagement with oil and gas companies. Then, in 2017, members of the church's annual conference voted to support a movement that requires the church to divest from companies that have not established strategies or investment plans that align with the goals of the Paris Agreement by 2020. Leaders of the movement within the Methodist Church believe that "...churches have an opportunity and responsibility to demonstrate moral leadership, to protect the poorest of the world and safeguard God's creation for the future."[19]

Caritas India

Caritas India, a humanitarian relief agency led by the Catholic Church in India, recently announced its commitment to divest from fossil fuels and is an example of the growing Catholic divestment movement. The organization provides development and social welfare support to marginalized and vulnerable communities and offers humanitarian assistance to communities impacted by climate-related disasters. The organization draws a link between the impacts of natural disasters it witnesses and a global dependency on fossil fuels. According to Father Paul Moonjely, the organization's executive director, "fossil fuel use is part of the power dynamics that marginalize our most vulnerable sisters and brothers." He noted that the organization decided to divest "to protect and conserve the environment for the betterment of humanity."[21] In addition to divesting from fossil fuels, Caritas India has committed to promote sustainable energy sources for vulnerable communities.[22]

Globally, the faith-based community continues to push for both financial and lifestyle commitments that will reduce the world's reliance on fossil fuels. At COP23, the 23rd Conference of the Parties to the United Nations Framework Convention on Climate Change, Protestant, Catholic, Evangelical, Jewish, Hindu, Muslim, Buddhist, interfaith, and Unitarian faith leaders announced an initiative to build a sustainable living movement. The COP23 Interfaith Climate Statement on Sustainable Lifestyles, entitled "Walk on Earth Gently," bade faith leaders to adopt sustainable behaviors that enable society to hold warming to 1.5°C, including dramatically reducing emissions from home energy use, adopting a plant-based diet and reducing food waste, and minimizing automobile and air travel.[20]

The desire to align their programmatic and giving strategies with their investment strategies has also led several high-profile foundations to commit to divestment since 2016. Currently, more than 170 philanthropic foundations have pledged to divest, accounting for nearly $20 billion in assets under management. These institutions include the Calouste Gulbenkian Foundation, the Kristina and William Catto Foundation, the Acacia Inversion of Tanzania, as well as additional anonymous family funders. The Australian Communities Foundation, Australia's oldest and largest community foundation, voted to divest its $74 million in assets completely from fossil fuels, following a vote of strong approval from its donors. The foundation, which is comprised of over 1,000 donors from 300 funds, expects to be entirely divested within the next year. The foundation will seek opportunities for positive investment in initiatives with social and environmental returns. It is also the newest signatory to Divest-Invest Philanthropy, a coalition of 175 foundations worldwide committed to divesting from fossil fuels and investing at least 5% of their endowments in climate solutions.

Other cultural institutions have chosen to end sponsorships by fossil fuel companies, which creates significant financial implications for them. While not divestment per se, these actions demonstrate a desire for moral alignment with the divest movement. To date, the Tate Galleries, Canadian Museum of History, American Museum of Natural

The Calouste Gulbenkian Foundation

Institutions that have significantly benefitted from the profits of fossil fuels are also choosing to divest. The Calouste Gulbenkian Foundation, built on one of the world's first oil fortunes, has sold its stake in Partex Oil and Gas and is reinvesting the generated €500 million into renewable energy projects. The foundation's decision to divest holds much symbolic value to the movement overall, as it demonstrates that even those who generated significant profits from the fossil fuel industry recognize the moral and financial importance of divestment. Martin Essayan, foundation trustee and great-grandson of the foundation's namesake, noted that the decision to sell Partex shares followed the board's desires to "avoid an excessive concentration of [its] investments in a single industry and in one company," adding that the issue of fossil fuels and sustainability also contributed to the decision.[23] The foundation follows a wave of other philanthropic commitments, including the historic decision by the Rockefeller Brothers Fund, heirs to the ExxonMobil dynasty, who committed to divest in 2014.

History, Van Gogh Museum in Amsterdam, Field Museum in Chicago, Edinburgh International Festival, Mauritshuis Museum in The Hague, and Phipps Conservatory and Botanical Gardens have all dropped fossil fuels sponsorships.

Universities are also increasingly divesting. The United Kingdom has emerged as the leader among university divestments, with 12 new commitments so far in 2018 and 68 in total. Irish and German universities have also begun to divest. In March 2018, the University of Münster became the first German university to do so, followed shortly thereafter by the University of Göttingen. Today, universities outside the United States represent 89 percent of educational institutions that have pledged to divest since 2016. While divestment commitments by US universities have plateaued at 38 institutions, students and faculty have continued vigorous campaigning. Earlier this year, Harvard board member Kat Taylor resigned in protest to that school's failure to divest.

Divestment is Increasingly Paired with Shareholder Engagement as Part of a Joint Strategy to Pressure the Industry

While divestment was once viewed as an alternative to shareholder engagement with the fossil fuel industry, it is now increasingly used as part of a joint strategy.

Despite the efforts of shareholders to work with companies to adopt more sustainable business practices, there is little evidence that the largest oil and gas companies have changed their practices to be consistent with the Paris Agreement goal to keep temperature rise well below 2°C. A new study from As You Sow, a nonprofit organization that promotes environmental and social corporate responsibility through shareholder advocacy, found that seven years of resolutions filed at 24 oil and gas companies have resulted in marginal change in corporate policies and actions. Shareholder engagement has not compelled companies to tender 2-degree transition plans, a prerequisite to meeting the goals of the Paris Agreement. Additionally, these companies have continued to invest in exploration for potentially stranded fossil fuel reserves, creating continued risk for fiduciaries of pension funds, university endowments, foundations, and mutual funds. As You Sow concludes the report with a call to investors to demand transition plans by 2020. If companies refuse, then shareholders must divest.[24]

The new convergence of engage and divest strategies, in which divestment is coupled with shareholder demands, is a significant new development. The Church of England recently committed that by 2023 it will divest its $16 billion fund from companies that are not on track to meet the goals of the Paris Agreement. Before divesting, the church and its investing bodies will use their voting rights and file shareholder resolutions that will drive companies to make decisions that align with the goals of the Paris Agreement. It believes that waiting to divest until 2023 will provide companies time to take meaningful steps toward cleaner energy solutions, and that its "active engagement and voting record provide greater leverage and influence than [it] could ever hope to achieve by acting alone or by forced divestment and simply selling [its] holdings."[27]

Danish pension fund PKA has also been deploying an engage and divest strategy. PKA is one of the largest pension service providers for labor-market pension funds in Denmark, with $41.3 billion in assets under management. After engaging extensively with oil and gas companies in its portfolio to foster compliance with the Paris Agreement, this year PKA announced its divestment from 35 additional oil and gas companies that it deemed were not making sufficient progress toward Paris goals. To date, the pension fund has eliminated 40 oil and gas companies and 70 coal companies from its portfolio, replacing them with investments in climate-focused projects. Fifteen companies remain under observation as PKA works to engage them in a more "climate-friendly" direction.[28]

"If companies that refuse to plan for transition have, by their own volition, declared themselves to be rogue global actors, shareholders that continue to support companies engaging in globally destructive action become complicit in both the risk and the outcome. We no longer have the luxury of time. Shareholder engagement should focus on one last, fit-for-purpose demand, seeking 2-degree assessments from companies in year one and 2-degree action plans by 2020. If Paris-compliant engagement fails, then investors must divest. It is the only way investors themselves can be Paris-compliant."[25]

– AS YOU SOW
"Paris-Compliant Shareholder Engagement Strategy Review"

In 2015, UK-based insurer Aviva, which has $572 billion in assets, began shareholder engagement with 40 companies that earned more than 30 percent of their revenue from coal-mining or power-generation activities. Aviva set expectations for the companies to incorporate responsible climate action into their governance, strategy, and operations, and to halt investment in new coal-generating capacity. Eight companies declined to engage with Aviva, and the insurer recently announced it has earmarked at least two of these companies for potential divestment.

Legal & General Investment Management (LGIM), the UK's largest asset manager with just over $1 trillion in assets, recently launched a new fund—the Future World Fund—composed primarily of companies that contribute to a low-carbon future, excluding most oil and coal companies. In addition to addressing the risk associated with climate change, the fund incorporates LGIM's Climate Impact Pledge, which works directly with companies to achieve alignment with the Paris Agreement. LGIM has acted against eight companies that have demonstrated persistent inaction to address climate risk by removing them from the Future World Fund.[29]

Fund manager Sarasin and Partners has created its own policy that marries shareholder engagement with divestment. The company's Climate Active Endowment Fund is a multi-asset investment portfolio that "automatically divests [from] and never owns any company that derives five percent or more of its annual revenue from either the extraction of thermal coal or oil from tar sands." The fund will work with shareholders to establish strategies that will produce long-term returns and meet climate agreements, when possible. It will also divest from companies that do not adequately manage climate risk or where there is no commitment to build a profitable investment strategy aligned with the 2°C cap established in the Paris Agreement.[30]

Institutions Are Divesting Because of Ethical, Financial, and Fiduciary Imperatives

The moral case for divestment increases as climate impacts worsen.

Mission-driven institutions, climate advocates, and youth activists that first led the divestment movement have continued to respond to the urgency of the climate crisis by issuing a strong moral call for a global energy transition out of fossil fuels and into renewable solutions. In June 2018, following a meeting at the Vatican for oil and gas executives, Pope Francis delivered an unprecedented statement calling on industry leaders to help stop climate change. His warning against the "continued search for fossil fuel reserves"[31] validated the call for ethical investment by activists around the world, citing environmental degradation and the suffering of poor communities as a result of the current extractive economy.

The moral call for divestment has also driven momentum in new forms of fossil fuel resistance. The Australian-based Sunrise Project and the global Unfriend Coal campaign specifically focus on holding the insurance industry accountable for its role in climate change by advocating for insurance companies to stop underwriting and investing in coal projects.[32] Groups like the Rainforest Action Network, BankTrack, and Mazaska Talks advocate for banks to stop financing the expansion of the fossil fuel industry. Targeted, grassroots mobilizations against fossil fuel infrastructure have spread globally and are increasing, with active campaigns in Africa, Asia, Australia, Europe, and the United States. In the United States, new student campaigns like the Sunrise Movement and Zero Hour are demanding that politicians refuse to take money from the fossil fuel industry and instead commit to prioritizing the health of families, the climate, and democracy.[33] In addition, divestment and investment in an equitable clean energy transition are hallmarks of the Zero Hour platform.[34]

Pope Francis calls to "keep it in the ground"

Earlier this year, Pope Francis gathered leaders of the world's largest oil companies, including the chairman of ExxonMobil and the chief executive of BP, for a two-day conference to deliver a message about the urgency of their actions on climate change. Building on the pope's 2015 encyclical *Laudato si'*, which highlighted climate change as a global issue and called for meaningful action to protect the environment, the pope called on the leaders of the fossil fuel industry to become leaders of the global energy transition. In his call to develop new approaches and technologies that support the people and planet, he emphasized that the poor would "suffer most from the ravages of global warming," and that a transition to clean energy "is a duty that we owe toward millions of our brothers and sisters around the world, poorer countries, and generations yet to come."[35]

The financial case for divestment is strong, and the fossil fuel industry is weakening.

The fossil fuel industry is in decline, as the economy transitions to clean energy. New analyses show that there is a strong financial case for fossil fuel divestment now, and that investors can divest from any sector without jeopardizing their risk/return profiles. A proliferation of new fossil-free financial products is making it easier to divest.

A recent analysis by Jeremy Grantham, co-founder and chief investment strategist of Grantham, Mayo, Van Otterloo, one of the largest asset management firms in the world, tested how an investment portfolio would be affected by divesting from a group of companies that are listed in the Standard & Poor's 500. The analysis found that investors can divest from any sector without any impact on risk/return. Grantham argues that investors who are making long-term investments should avoid fossil fuels stocks, on the grounds that these companies face many challenges in sustaining their profitability. Conversely, he argues that companies that have chosen to transition to clean energy will continue growing at a faster rate than the rest of the economy, offering a better investment opportunity.[37]

Investors that don't divest are at risk of losing money.

New research is building the financial case for divestment, demonstrating that investors can confidently remove fossil fuels from their portfolios and may risk losing money if they do not divest. For example, research from the Corporate Knights, a media, research and financial information products company, assessed the implications of the New York State Common Retirement Fund failing to divest from the top 100 domestic and international equity holdings and calculated how much the fund would have earned over the past three years if it had divested from coal, oil, and gas companies.[38] Among its findings, Corporate Knights estimated that had the fund—the third-largest pension fund in the United States, with $184.5 billion held in trust for retirement benefits—divested from fossil fuels, it would have made

"In the past several years, oil industry financial statements have revealed significant signs of strain: profits have dropped, cash flow is down, balance sheets are deteriorating, and capital spending is falling. The stock market has recognized the sector's overall weakness, punishing oil and gas shares over the past five years even as the market as a whole has soared."[36]

– INSTITUTE FOR ENERGY ECONOMICS AND FINANCIAL ANALYSIS
"Financial Stress in the Oil and Gas Industry: Strategic Implications for Climate Activism"

each of the fund's 1.1 million members more than $4,500 richer and helped the state cover significant costs following Hurricane Sandy in 2012.

Large asset holders are increasingly divesting as a matter of fiduciary duty to protect the assets of their beneficiaries.

Early in the divestment movement, critics claimed that fiduciaries who divest from fossil fuels breach their duty. The mounting financial risks associated with climate change and the prospect that a significant proportion of existing fossil fuel reserves will be stranded have led regulators to be explicit that climate change poses a threat to investor value and that fund fiduciaries have a legal duty to manage this risk. Thus, the G20 Financial Stability Board, an international body that monitors and makes recommendations about the global financial system, formed the Task Force on Climate-Related Financial Disclosures (TCFD). In 2018, the task force released its recommendations for investors, lenders, and insurance underwriters for how to appropriately assess and price climate-related risks in their portfolios. The voluntary recommendations have been publicly endorsed by more than 275 companies with a combined market capitalization of over $6.6 trillion.

In addition, a 2016 analysis by the Center for International Environmental Law describes the long-term risks of climate-related investments to pension funds and their beneficiaries.[40] The analysis concluded that a failure to acknowledge and address the financial risks posed by climate change may result in a breach of fiduciary duties and financial losses. Similarly, ClientEarth, a nonprofit environmental law organization, recently published two reports: one on the financial risks posed to pension funds by climate change, and one on how the market is reacting to these risks. ClientEarth is now working to convince large UK pension funds to address these risks.[41]

"The financial case for fossil fuel divestment is strong. Over the past three and five years, global stock indexes without fossil fuel holdings have outperformed otherwise identical indexes that include fossil fuel companies. Fossil fuel companies once led the economy and world stock markets. They now lag."[39]

– INSTITUTE FOR ENERGY ECONOMICS AND FINANCIAL ANALYSIS
"The Financial Case for Fossil Fuel Divestment"

Fossil-free investment products and tools are making it easier for institutions and individuals to divest.

In the early years of activist demands for divestment, institutional boards and fiduciaries cited the paucity of fossil-free investment vehicles as a barrier to divestment. The market has responded, and today, a suite of fossil-free products across asset classes is available for institutional and individual investors alike.

Index providers like MSCI, FTSE, and S&P offer straightforward means to exclude sectors from portfolios and evaluate performance via "ex-fossil fuel" indexes. For example, FTSE Russell created an index that reduces exposure within the index to companies associated with fossil fuels while also increasing exposure within the index to companies engaged in the transition to a green economy. The FTSE Divest-Invest Developed 200 Index is comprised of the 200 largest companies in the FTSE Developed All-Cap Index, excluding oil and gas producers, oil equipment service and distribution providers, and coal and general mining companies. It replaces these excluded companies with green companies.[42]

Fossil-free passive funds, mutual funds, and exchange-traded funds (ETFs) are also scaling rapidly. Currently, there are over 150 low-carbon ETFs traded in the United States. The ETHO Climate Leadership US ETF, with net assets of $34 million, ranks companies according to their carbon efficiency and, in 2015, became the first broad-based, diversified, socially responsible, and fossil-free ETF that does not expose investors to the fossil fuel sector. Vanguard has also filed a preliminary registration statement with the Securities and Exchange Commission for two environmental, social, and corporate governance (ESG) ETFs. The new ETFs will complement Vanguard's existing FTSE Social Index Fund and are expected to begin trading in September 2018.[43]

The increasing frequency of climate lawsuits is deepening fiduciary duty risk for investors.

Rising climate change concerns and regulatory commitments have led to a proliferation of climate lawsuits, deepening fiduciary duty risk for investors. According to the TCFD's final recommendations, organizations with exposure to global litigation or legal risk may face fines and judgments that could have a real financial and reputational impact. As of May 2018, over 276 court cases were filed across 25 national courts and international adjudicatory bodies. These cases are in addition to the over 800 cases in the United States brought by corporations, governments, and individuals that are primarily concerned with emissions reductions. Recently, fossil fuel companies have been targeted by several municipalities in the United States for their role in knowingly concealing climate risk and are currently defending claims for climate damages in the billions of dollars.

In January 2018, New York City announced it was suing five major fossil fuel companies—ExxonMobil, Chevron, Shell, BP, and ConocoPhillips—becoming the eighth municipality (and the first outside of California) to attempt to hold fossil fuel companies directly responsible for climate change. While the New York City suit was dismissed on the grounds that climate change must be addressed by the executive branch and Congress, not by the courts, it has not dissuaded several other cities and counties, including King County, Washington and multiple counties in Colorado from pressing forward. The Colorado case—brought by Boulder County, San Miguel County, and the City of Boulder against ExxonMobil and Suncor Energy—demanded that the companies pay their share of the costs of climate change caused by their products and their actions. The case is an important reminder that climate change impacts are not limited to coastal communities.[45]

Similarly, in July 2018, the City of Baltimore filed a lawsuit against 26 oil and gas companies and entities, including BP, Chevron, and ExxonMobil. The lawsuit accuses oil and gas companies of knowing about a link between climate change and fossil fuel production for nearly 50 years, yet working to hide the dangers and protect their assets, rather than minimize the damage. Baltimore is vulnerable to any

Queens' College, Cambridge

Queens' College in Cambridge, which has an endowment of over £68 million ($87.6 million) and a £55 million ($70.9 million) global equity investment exposure, has allocated part of its funds to a self-managed portfolio using equity-sector ETFs in order to exclude carbon-intensive industries. The portfolio specifically excludes the energy and utilities sectors. The decision to allocate funds to this ETF portfolio follows strong advocacy from student groups pushing the university to divest its endowment from fossil fuels. According to Jonathan Spence, a senior bursar at the college, "[The strategy] is part of our continued drive to address divestment considerations in an intelligent way without compromising on investment returns or diversification considerations."[44]

rise in sea level because it has 60 miles (96 km) of coastline and one of the country's largest ports.[46]

ExxonMobil recently attempted to dismiss a lawsuit claiming that it misled investors about its impact on climate change. The bid, however, was denied in August 2018 by a Texas court. The claim, led by the Greater Pennsylvania Carpenters Pension Fund, alleges that a fall in ExxonMobil's share price resulted from the company's failure to properly account for the risks that climate change could have on its business. The court's decision to not dismiss the lawsuit indicates validity in the plaintiff's arguments and highlights the legal risks that now impact the fossil fuel industry.[47]

Beyond the United States, there have been at least 80 cases filed in Australia, 40 in the EU, and over 100 cases among cities in Colombia, India, Micronesia, New Zealand, Nigeria, Norway, Pakistan, the Philippines, South Africa, Switzerland, and Ukraine. Many of these cases are aimed at holding governments accountable for their legislative and policy commitments, but an increasing number of cases are working to hold the fossil fuel industry responsible for emissions that have caused adverse climate impacts. The City of Paris, for example, is exploring suing the fossil fuel industry for causing climate damages after severe flooding and summer heatwaves reduced agricultural protection, unleashed fires, and led to the death of citizens.

Local communities are beginning to use litigation to halt the construction and operation of coal power plants. In Turkey, advocates fought to close a power plant known to be a leading contributor to regional emissions. On the grounds that the region has already exceeded its pollution limit values, the court also ruled to stop all new fossil fuel projects.[48]

Individuals are also pursuing cases against the industry. In Peru, Saúl Lliuya, a farmer and mountain guide, is suing German energy firm RWE. As his city faces catastrophic flooding from a nearby melting glacier, Lliuya is seeking funds from RWE that would cover the cost of a flood defense system for the city.[49]

As researchers discover more evidence about what the 90 corporate entities responsible for two-thirds of emissions knew about climate change, and as attribution science—the effort to determine if past emissions of greenhouse gases are the cause of current extreme weather events—becomes more sophisticated, the number of climate cases is expected to rise, with plaintiffs more likely to prevail on their claims than in years past.

The Divestment Movement and Related Campaigns Are Having a Significant Impact on the Operations of the Fossil Fuel Industry

Divestment and aligned climate advocacy campaigns are adding increased pressure on the fossil fuel industry, restricting access to capital and insurance.

Since 2016, divestment and related advocacy have resulted in the first commitments by banks and insurance companies to pull financing and insurance coverage from the fossil fuel industry—changing the context in which fossil fuel companies operate. To date, 19 banks have stopped direct financing to new coal mines projects, and 16 banks have stopped direct financing to new coal plants projects globally. Of these, seven banks have restricted indirect finance to coal plant developers, 11 banks have restricted indirect financing to coal utilities, and four banks have ended or restricted the selling or buying of coal assets. Since 2017, Unfriend Coal has reported that four major insurance companies have committed to stop underwriting fossil fuel projects.[50]

Last year, the WBG became the first development bank to announce that, beginning in 2019, it would no longer finance upstream oil and gas development.[51] Since then, Lloyds Banking Group, one of Europe's

“To stop climate change, we need a historic redirection of capital away from fossil fuels and toward the economy of the future. Banks are crucial sources and gatekeepers for the capital flowing to this sector, and bank policies that restrict financing for fossil fuels are a major part of the energy transition.”[54]

– JASON OPEÑA DISTERHOFT
Climate and Energy Senior Campaigner, Rainforest Action Network

largest banks, announced it will no longer fund new projects for coal-fired power stations or thermal coal mines and will work with existing clients who generate revenue from coal "to actively support their transition to lower-carbon models in line with the Paris Agreement."[52] HSBC also announced a new policy that prohibits financing of new coal power plant projects, new greenfield tar sands projects, and offshore oil or gas projects in the Arctic.[53]

Fossil fuel companies are increasingly citing divestment as a risk to future investments in the industry

Fossil fuel companies are beginning to acknowledge the threat posed by divestment and broader climate advocacy to their operations. For the first time, Shell acknowledged in its annual report that rising climate change concerns and the success of the fossil fuel divestment movement could lead to project delays or cancellations, a decrease in demand for fossil fuels, and an inability for the industry to access capital. Chevron similarly acknowledged the negative impact of climate litigations and policy regulations on the company's financial operations and overall business model, stating that these actions may make the "extraction of the company's oil and gas resources economically infeasible."[55]

The reputational risk of enabling the fossil fuel industry may be best exemplified by the decision of Norway's largest company, Statoil, to change its name to not include "oil" as it sought to diversify its business and attract young talent concerned about fossil fuels' impact on climate change. Under its new name, Equinor, it will invest up to 20 percent of its annual capital expenditure in new energy solutions by 2030, mostly in offshore wind.[56] Also, this year Spanish energy company Repsol announced that it will no longer grow its oil and gas business in preparation for the global transition to cleaner energy, and publicly stated its desire to become known as an energy company rather than an oil producer.[57]

In reaction to the risk posed by divestment and related campaigns, the fossil fuel industry is pushing back by funding PR and disinformation campaigns to combat the movement.[58] These campaigns include front groups such as DivestmentFacts.com, Help Protect Our Pensions, and the Institute for Pension Fund Integrity, which challenge divestment on financial and fiduciary duty grounds.[59] Misinformation has been spread through reports by the Independent Petroleum Association of America, an oil and gas industry trade group, and has been cited in the *Wall Street Journal*. This year, the Oil & Money Conference, a gathering of senior executives, policymakers, financiers, strategists, and experts from the international oil and gas industry, hosted a panel entitled: "What more do [oil companies] need to do on the PR front to combat the growing fossil fuel divestment movement."[60]

As More Investors Divest, Investments in Climate Solutions Are Growing Rapidly

Institutional investors are increasingly going beyond divestment by committing to invest in climate solutions, reallocating their funds to growth industries in renewable energy, clean tech, energy efficiency, and energy access.

Since 2010, total global investment in clean energy has reached over $2.5 trillion. Reductions in capital and generating costs, increased scalability of products, and technology improvements are expanding the market for clean energy.[61] Renewable technologies are outcompeting new fossil fuel energy sources, and in 2017 the world installed more solar products than net additions of coal, gas, and nuclear plants combined.[62] Total annual new investment in clean energy, across all asset classes and sectors, reached $138.2 billion in the first six months of 2018. New investment in clean energy reached $76.7 billion in the second quarter of 2018 alone, an eight percent increase from the same time in 2017.[63] The prominent investor coalition Ceres recently stated that adding $1 trillion investment in clean energy each year through 2050 is increasingly feasible in this new market for renewables.[64]

C40 Divest/Invest Forum

The recently created C40 Divest/Invest Forum[65] supports and connects cities interested in divestment from fossil fuels and sustainable reinvestment. The forum will support cities through peer-to-peer learning and harness the guidance of pension funds and investment managers to inspire new commitments, connect cities working on divestment, and provide tools to cities interested in learning more. While the initiative is focused on C40 cities, a network of the world's megacities committed to addressing climate change, the forum encourages any city that has a strong interest in divesting to engage with the organization.

The $1 trillion Norwegian sovereign wealth fund follows a divest/invest mandate to foster alignment with the UN Sustainable Development Goals (SDGs). "[W]e relate to the SDGs in four main ways: by promoting long-term value creation in companies, by investing in developing markets, by investing in companies providing environmental solutions, and by divesting from unsustainable businesses."[66]

AXA, the world's second largest insurer, has committed to increasing its funding for green energy projects to more than €12 billion ($13.9 billion) by 2020, quadrupling its original target, which it has already reached. It is also raising its divestment fivefold, to reach €3 billion by completely divesting from the oil sands industry and associated pipelines.[67]

After committing to divestment in 2013, Storebrand, Norway's largest pension and insurance provider, developed a strong investment strategy for clean energy that evaluates companies based on their commitment to sustainability, as well as their risks and opportunities related to climate change. In 2016, Storebrand chose to invest in more sustainable companies while maintaining low risk for investors as it has become a prominent investor in green bonds, which allow lenders to target their investments toward projects related to renewable energy, energy efficiency, sustainable waste management, and other clean energy projects.[69]

The 175 foundations of Divest-Invest Philanthropy have committed to invest at least 5 percent of their portfolios toward climate solutions such as renewable energy, energy efficiency, and clean energy access for vulnerable communities.

Clean energy investment products and tools are making it easier for institutions and individuals to invest.

A variety of clean energy vehicles and sustainable investment products are expanding the opportunities for institutions to invest in a clean economy. Renewal Funds, a venture capital firm investing in companies in Canada and the United States, is developing its fourth fund, which will allocate investments to projects focused on food, water, and climate sustainability.[70] Alternative Investment Group, a private investment management company, also integrates ESG into its investment decisions and generates high returns for its shareholders.[71] In March 2018, Institutional Shareholder Services Inc. (ISS), which provides governance research and recommendations to large asset holders, acquired Oekom Research, a leading ESG research and ratings agency. The merger will allow clients of ISS to more easily incorporate leading ESG screens into their investment strategies.[72]

Green bonds are another expanding investment tool that allows institutions and individuals to invest in clean energy projects. Sales of green bonds by US companies have already topped last year and are on pace for a record, with $29.6 billion in sales in the first quarter of 2018.[73] Several fixed-income managers and other financial institutions such as Breckenridge and Barclays are integrating green bonds into their ESG and fossil-free investment product offerings.[75]

Mission-driven investors are making bold new commitments to invest in clean energy infrastructure and development in the communities most vulnerable to climate impacts.

One such initiative is the Shine Campaign, a global campaign working to drive new investments in renewables in order to end global energy poverty. Guided by UN Sustainable Development Goal Seven, the Shine Campaign has brought together leaders from faith, philanthropy, and development organizations to encourage investments in green infrastructure, provide financing for renewable energy projects in developing countries, and share new technologies with scalable solutions. The campaign supports community-based approaches that scale clean energy solutions to meet community needs and promote economic development. To date, the Shine Campaign has secured $100 million in commitments to its projects, with plans to at least double this total by 2020. As stated by Rev. Fletcher Harper, executive director of GreenFaith and partner to the Shine Campaign, "Shine grew out of a moral imperative to make certain that in the transition to a renewable energy future, those communities who lack access to reliable electricity are not left behind."[76]

Self-Help

A wave of new funds and community development financial institutions (CDFIs) are providing additional capital for clean energy projects. One example is Self-Help, a family of CDFIs in North Carolina, which has contributed over $68 million in direct loans to green businesses and nonprofits. Self-Help investments include providing capital for solar farms, the construction and rehabilitation of energy-efficient homes and buildings, healthy food systems, and recycling. Through its investments in renewable energy, Self-Help has created more than 2,250 construction jobs in the clean energy sector and has financed the building of 235 energy-efficient homes.[80] Self-Help also supports lending in vulnerable communities through green certificates of deposits, which provide lending to projects and businesses that reduce carbon emissions and help conserve natural resources.[81]

Foundations and other institutions are providing capital to companies, funds, and projects that deliver clean, distributed energy to communities. Many of the foundation members of Divest-Invest Philanthropy are investing in the communities most vulnerable to climate impacts. As one of the most prominent foundations to divest from fossil fuels and invest in climate solutions, the Rockefeller Brothers Fund has committed over $67.5 million to community-oriented climate solutions by supporting investments in projects and clean energy funds related to wind and solar, clean energy and infrastructure, water, agriculture, waste reduction, and more.[77] The Russell Family Foundation makes place-based investments with a focus on climate solutions that benefit local communities, including a sustainable local farming enterprise and the protection of Pacific Northwest timberland through ecosystem services.[78] Another member of Divest-Invest Philanthropy, the Chorus Foundation, is investing in organizations on the frontlines of the extractive economy to help them build political and economic power in the new clean energy economy, including private-debt financing to the Yansa Group for community-based wind farms in Mexico.[79]

Conclusion

In four years, assets committed to divestment have increased by 11,900 percent. Fossil fuel companies are listing divestment as a material risk factor in their annual reports and securities filings, and climate litigation around the world is deepening the risk for fiduciaries. Challenged by grassroots campaigns, banks and insurance companies are starting to pull their core business—financing and insurance—from a fossil fuel industry already beset by financial and regulatory challenges. Movement leaders are doubling down on divestment pressure, and institutional investors are responding.

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Endnotes

[1] Casey Harrell and Peter Bosshard, "Insuring Coal No More: An Insurance Scorecard on Coal and Climate Change," Unfriend Coal, published November 2017, accessed August 20, 2018, https://unfriendcoal.com/wp-content/uploads/2017/11/UnfriendCoal-Insurance-Scorecard.pdf.

[2] "AXA Accelerates its Commitment to Fight Climate Change," AXA Newsroom, published December 12, 2017, accessed August 1, 2018, https://group.axa.com/en/newsroom/press-releases/axa-accelerates-its-commitment-to-fight-climate-change.

[3] Julia Kollewe, "Lloyd's of London to Divest From Coal Over Climate Change," *The Guardian*, published January 21, 2018, accessed August 1, 2018, https://www.theguardian.com/business/2018/jan/21/lloyds-of-london-to-divest-from-coal-over-climate-change.

[4] Casey Harrell and Peter Bosshard, "Insuring Coal No More: An Insurance Scorecard on Coal and Climate Change," Unfriend Coal, published November 2017, accessed August 20, 2018, https://unfriendcoal.com/wp-content/uploads/2017/11/UnfriendCoal-Insurance-Scorecard.pdf.

[5] Somini Sengupta, "Ireland Moves to Divest From Fossil Fuels," *The New York Times*, published July 12, 2018, accessed July 15, 2018, https://www.nytimes.com/2018/07/12/climate/ireland-fossil-fuels-divestment.html.

[6] "350.org's Statement about Alaska Permanent Fund exiting fossil fuels," 350.org, published June 1, 2018, accessed August 2, 2018, https://350.org/press-release/alaska-permanent-fund-exiting-fossil-fuels/.

[7] Clifford Krauss, "Norway's Wealth Fund Considers Divesting From Oil Shares," *The New York Times*, published November 16, 2017, accessed August 1, 2018, https://www.nytimes.com/2017/11/16/business/energy-environment/norway-fund-oil.html.

[8] Susana Rust, "Geneva Pension Fund Steps Up Climate Change Efforts," IPE, published July 6, 2018, accessed July 21, 2018, https://www.ipe.com/news/esg/geneva-pension-fund-steps-up-climate-change-efforts/10025628.article?utm_term=&utm_source=IPE%20Daily%20News&utm_medium=Email&utm_content=Geneva%20pension%20fund%20steps%20up%20climate%20change%20efforts%C2%A0%20%C2%A0_https://www.ipe.com/news/esg/geneva-pension-fund-steps-up-climate-change-efforts/10025628.article&utm_campaign=6.7.18%20ipe%20daily%20news_IMF%20questions%20German%20state%20pension%20measures,%20CPEG%20steps%20up%20climate%20change%20efforts.

[9] Sophie Baker, "Dutch metal workers pension funds divests from coal companies," Pensions & Investments, published May 22, 2018, accessed August 1, 2018, http://www.pionline.com/article/20180522/ONLINE/180529969/dutch-metal-workers-pension-funds-divests-from-coal-companies.

[10] Gwladys Fouche, "Swedish pension fund sells out of six firms it says break Paris climate deal," Reuters, published June 15, 2017, accessed July 25, 2018, https://www.reuters.com/article/us-climatechange-investment-sweden/swedish-pension-fund-sells-out-of-six-firms-it-says-breach-paris-climate-deal-idUSKBN1962CC.

[11] Damien Carrington, "Ireland Becomes World's First Country to Divest," *The Guardian*, published July 12, 2018, accessed August 1, 2018, https://www.theguardian.com/environment/2018/jul/12/ireland-becomes-worlds-first-country-to-divest-from-fossil-fuels.

[12] Oliver Milman, "New York City Plans to Divest $5bn from Fossil Fuels and Sue Oil Companies," *The Guardian*, published January 10, 2018, accessed August 1, 2018, https://www.theguardian.com/us-news/2018/jan/10/new-york-city-plans-to-divest-5bn-from-fossil-fuels-and-sue-oil-companies.

[13] "Mayor calls for boroughs to ditch fossil fuel investment," published March 26, 2018, accessed September 5, 2018, https://www.london.gov.uk/press-releases/mayoral/mayor-calls-for-boroughs-to-divest-pension-funds.

[14] "Aalborg becomes 19th Danish Municipality to Divest," Fossil Free, published August 9, 2018, accessed August 11, 2018, https://gofossilfree.org/aalborg-becomes-19th-danish-municipality-to-divest/.

[15] "RCGP to Stop Investing in Fossil Fuel Companies," Royal College of General Practitioners, published July 27, 2018, accessed August 1, 2018, http://www.rcgp.org.uk/about-us/news/2018/july/rcgp-to-stop-investing-in-fossil-fuel-companies.aspx.

[16] "AMA Passes Resolution on Divesting from Fossil Fuels," Physicians for Social Responsibility, published June 13, 2018, accessed August 1, 2018, https://www.psr.org/blog/2018/06/13/ama-passes-resolution-on-divesting-from-fossil-fuels/.

[17] "Statement by Bishop William Crean announcing the decision of the Bishops' Conference to divest from fossil fuels," press release, published August 24, 2018, accessed August 24, 2018, https://www.catholicbishops.ie/2018/08/24/statement-by-bishop-william-crean-announcing-the-decision-of-the-bishops-conference-to-divest-from-fossil-fuels/.

[18] Chika Onyejiuwa (Executive Secretary, Africa Europe Faith and Justice Network) in conversation with Daniela Finamore, August 2018.

[19] "Methodist Church takes a step closer to divestment," Bright Now Towards Fossil Free Churches, published June 29, 2017, accessed August 24, 2018, http://brightnow.org.uk/news/methodist-church-takes-step-closer-divestment/.

[20] "'Walk on Earth Gently' A Multi-Faith Invitation to Sustainable Lifestyles," COP23 Interfaith Climate Statement, published November 2017, accessed August 20, 2018, http://www.interfaithclimatestatement.org/.

[21] Fr. Paul Moonjely (Executive Director, Caritas India,) in discussion with Daniela Finamore, September 2018.

[22] Caritas India, last updated 2018, accessed August 24, 2018, http://caritasindia.org/#.

[23] "The slow dismantling the house of oil – The Gulbenkian Foundation divests," Platform London, published March 18, 2018, accessed August 14, 2018, https://platformlondon.org/2018/03/18/the-slow-dismantling-the-house-of-oil-the-gulbenkian-foundation-divests/.

[24] "Paris Compliant Shareholder Engagement: Strategy Review Can a Climate Change Solution for Oil & Gas Companies be Reached through Shareholder Engagement and at What Cost?" As You Sow, published September 10, 2018, reviewed pre-release September 5, 2018.

[25] Ibid.

[26] Barry Critchley, "Church of England adds

another 'brick in the wall' of oil divestment," *Financial Post*, published July 13, 2018, accessed July 23, 2018, https://business.financialpost.com/news/fp-street/church-of-england-adds-another-brick-in-the-wall-of-oil-disinvestment.

[27] "National Investing Bodies' approach to climate change affirmed by General Synod," The Church of England, published July 8, 2018, accessed July 23, 2018, https://www.churchofengland.org/more/media-centre/news/national-investing-bodies-approach-climate-change-affirmed-general-synod.

[28] Paulina Pielichata, "Denmark's PKA Divests from 35 Oil and Gas Companies," Pensions & Investments, published April 12, 2018, accessed August 1, 2018, http://www.pionline.com/article/20180412/ONLINE/180419948/denmarks-pka-divests-from-35-oil-and-gas-companies.

[29] "The Future World Fund," Legal and General Investment Management, published 2018, accessed August 20, 2018, http://update.lgim.com/futureworldfund.

[30] "The Sarasin & Partners Climate Active Endowment Fund," Sarasin & Partners, published February 2018, accessed August 24, 2018, https://www.sarasinclimateactive.com/docs/default-source/climate-active-launch-2017/climate-active-strategy-brochure.pdf?sfvrsn=10.

[31] Elizabeth Povoledo, "Pope Tells Oil Executives to Act on Climate: 'There Is No Time to Lose,'" *The New York Times*, published June 9, 2018, accessed August 24, 2018, https://www.nytimes.com/2018/06/09/world/europe/pope-oil-executives-climate-change.html.

[32] "Shifting Global Finance," The Sunrise Project, accessed August 2, 2018, https://sunriseproject.org.au/project/shifting-global-finance/.

[33] "Our Strategy," The Sunrise Movement, published 2017, accessed August 1, 2018, https://www.sunrisemovement.org/our-strategy/.

[34] "This Is Zero Hour," The Zero Hour Movement, last updated 2018, accessed July 30, 2018, http://thisiszerohour.org/.

[35] Elizabeth Povoledo, "Pope Tells Oil Executives to Act on Climate: 'There Is No Time to Lose,'" *The New York Times*, published June 9, 2018, accessed August 24, 2018, https://www.nytimes.com/2018/06/09/world/europe/pope-oil-executives-climate-change.html.

[36] Tom Sanzillo and Clark Williams-Derry, "Financial Stress in the Oil and Gas Industry: Strategic Implications for Climate Activism," Institute for Energy Economics and Financial Analysis, published May 2018, accessed August 1, 2018, http://ieefa.org/wp-content/uploads/2018/06/Financial-Stress-in-the-Oil-and-Gas-Industry.pdf.

[37] Jeremy Grantham, "The mythical peril of divesting from fossil fuels," The London School of Economics and Political Science and Grantham Research Institute on Climate Change and the Environment, published June 13, 2018, accessed August 2, 2018, http://www.lse.ac.uk/GranthamInstitute/news/the-mythical-peril-of-divesting-from-fossil-fuels/.

[38] Corporate Knights, "New York State Common Retirement Fund Pays High Price for Holding Fossil Fuel Price," Corporate Knights, accessed September 4, 2018, http://www.corporateknights.com/channels/climate-and-carbon/new-york-state-common-retirement-fund-pay-high-price-holding-fossil-fuel-stocks-15251358/.

[39] Tom Sanzillo, Kathy Hipple, Clark Willams-Derry, "The Financial Case for Fossil Fuel Divestment," Institute for Energy Economics and Financial Analysis, published July 2018, accessed July 30, 2018, http://ieefa.org/wp-content/uploads/2018/07/Divestment-from-Fossil-Fuels_The-Financial-Case_July-2018.pdf.

[40] Steven Feit, "Trillion Dollar Transformation: Fiduciary Duty, Divestment, and Fossil Fuels in an Era of Climate Risk," Center for International Environmental Law, published December 2016, accessed August 16, 2018, http://www.ciel.org/wp-content/uploads/2016/12/Trillion-Dollar-Transformation-CIEL.pdf.

[41] "Top UK pension funds put on notice over climate risk," ClientEarth, published August 13, 2018, accessed August 20, 2018, https://www.clientearth.org/top-uk-pension-funds-put-on-notice-over-climate-risk/.

[42] "Innovative new index supports investors seeking to Divest Fossil Fuels and Invest in the Green Economy," FTSE Russell, published April 28, 2016, accessed July 20, 2018, https://www.ftserussell.com/files/press-releases/innovative-new-index-supports-investors-seeking-divest-fossil-fuels-and-invest.

[43] "Vanguard ETFs," The Vanguard Group, published 2018, accessed August 26, 2018, https://investor.vanguard.com/etf/list#/etf/asset-class/month-end-returns.

[44] Simon Smith, "Queens' Collee, Cambridge launches ETF portfolio as part of carbon divestment strategy," ETF Strategy, published July 24, 2018, accessed August 27, 2018, https://www.etfstrategy.com/queens-college-cambridge-launches-etf-portfolio-as-part-of-carbon-divestment-strategy-in-partnership-with-ssga-and-elstonetf-83932/.

[45] "New York City Takes Bold Steps to Protect New Yorkers from Climate Impacts and Risks//NYC to Sue Five Major Fossil Fuel Companies and Divest from Fossil Fuels," Center for International Environmental Law, published January 10, 2018, accessed July 20, 2018, https://www.ciel.org/news/new-york-city-takes-bolds-steps-protect-new-yorkers-climate-impacts-risks-nyc-sue-five-major-fossil-fuel-companies-divest-fossil-fuels/.

[46] Makini Brice, "Baltimore lawsuit blames oil and gas companies for climate change," Reuters, published July 20, 2018, accessed July 23, 2018, https://www.reuters.com/article/us-baltimore-climatechange-lawsuit/baltimore-lawsuit-blames-oil-and-gas-companies-for-climate-change-idUSKBN1KA2M6.

[47] "U.S. judge rules securities suit against Exxon, executives can procede," Reuters, published August 15, 2018, accessed August 24, 2018, https://www.reuters.com/article/us-exxon-mobil-lawsuit/u-s-judge-rules-securities-suit-against-exxon-executives-can-proceed-idUSKBN1L01WB.

[48] "Historic Victory for Local Communities in Turkey: Court cancels EIA approval of operational Coal Power Plant," 350.org, published February 17, 2017, accessed August 15, 2018, https://350.org/press-release/historic-victory-for-local-communities-in-turkey-court-cancels-eia-approval-of-operational-coal-power-plant/.

[49] "Lliuya v. RWE," The London School of Economics and Political Science and Grantham Research Institute on Climate Change and the Environment," published November 30, 2017, accessed August 20, 2018, http://www.lse.ac.uk/GranthamInstitute/litigation/lliuya-v-rwe/.

[50] Casey Harrell and Peter Bosshard, "Insuring Coal No More: An Insurance Scorecard on Coal and Climate Change," Unfriend Coal, published November 2017, accessed August 20, 2018, https://unfriendcoal.

com/wp-content/uploads/2017/11/UnfriendCoal-Insurance-Scorecard.pdf.

51 "World Bank Group Announcements at One Planet Summit," The World Bank, published December 12, 2017, accessed August 27, 2018, http://www.worldbank.org/en/news/press-release/2017/12/12/world-bank-group-announcements-at-one-planet-summit.

52 Joshua S. Hill, "Lloyds Banking Group Moves to Cease Financing New Coal-Fired Power," Clean Technica, published August 3, 2018, accessed August 13, 2018, https://cleantechnica.com/2018/08/03/lloyds-banking-group-moves-to-cease-financing-new-coal-fired-power/.

53 "HSBC to stop financing most new coal plants, oil sands, arctic drilling," Reuters, published April 20, 2018, accessed August 13, 2018, https://www.reuters.com/article/us-hsbc-strategy-fossil-fuels/hsbc-to-stop-financing-most-new-coal-plants-oil-sands-arctic-drilling-idUSKBN1HR1NR.

54 Jason Opeña Disterhoft (Climate and Energy Senior Campaigner, Rainforest Action Network), in discussion with Clara Vondrich, September 2018.

55 Ian Johnston, "Chevron warns it could face climate change lawsuits with future oil drilling potentially 'economically infeasible,' Independent, published March 3, 2017, accessed August 17, 2018, https://www.independent.co.uk/environment/chevron-oil-warn-climate-change-lawsuits-drilling-greenhouse-emissions-economically-infeasible-a7609411.html.

56 "Statoil to change name to Equinor," Equinor, published March 15, 2018, accessed August 20, 2018, https://www.equinor.com/en/news/15mar2018-statoil.html.

57 Rodrigo Orihuela, "Repsol to End Pursuit of Oil Growth," *Bloomberg*, published May 16, 2018, accessed August 20, 2018, https://www.bloomberg.com/news/articles/2018-05-15/repsol-said-to-end-pursuit-of-oil-growth-amid-energy-transition.

58 Andy Rowell, "PR Company Tries to Hide Links to New Pro-Fossil Fuel Investment Group," *Oil Change International*, published May 11, 2018, accessed August 5, 2018, http://priceofoil.org/2018/05/11/pr-company-tries-to-hide-links-to-new-pro-fossil-fuel-investment-group/.

59 Ben Elgin and Zachary Mider, "Fossil Fuels' Fishy New Friends," *Bloomberg Businessweek*, published November 16, 2017, accessed August 5, 2018, https://www.bloomberg.com/news/articles/2017-11-16/fossil-fuels-fishy-new-friends.

60 "Oil & Money 2018," *The New York Times and Energy Intelligence*, published August 2018, accessed August 25, 2018, https://www.oilandmoney.com/oilandmoney2018/124833.

61 Felicia Jackson, "Renewables Investment Nudges Out Fossil Fuels and Nuclear," *Forbes*, published May 15, 2018, accessed August 10, 2018, https://www.forbes.com/sites/feliciajackson/2018/05/15/renewables-investment-nudges-out-fossil-fuel-and-nuclear/#44c049f83752.

62 "Global Trends In Renewable Energy Investment 2018," UN Environment's Economy Division, *Bloomberg New Energy Finance*, Frankfurt School-UNEP Collaborating Centre for Climate & Sustainable Energy Finance, published 2018, accessed August 10, 2018, http://fs-unep-centre.org/sites/default/files/publications/gtr2018v2.pdf.

63 "Solar Energy Investment Set to Fall in 2018, on Cutback in China and Lower Equipment Costs," *Bloomberg New Energy Finance*, published July 9, 2018, accessed August 10, 2018, https://about.bnef.com/blog/solar-energy-investment-set-fall-2018-cutback-china-lower-equipment-costs/.

64 "'Clean Trillion' Investment Goal in Sight and Achievable, New Ceres Report Says," Ceres, published May 10, 2018, accessed August 12, 2018, https://www.ceres.org/news-center/press-releases/clean-trillion-investment-goal-sight-and-achievable-new-ceres-report.

65 C40 Media, published September 2018, accessed September 4, 2018, https://www.c40.org/media.

66 "The Sustainable Development Goals and the Government Pension Fund Global, accessed on September 5, 2018, https://www.nbim.no/contentassets/092e192d14d34d8eaf6110b75a27977c/nbim_amp_1_18_the-sdgs-and-the-gpfg.pdf.

67 "AXA launches new climate change actions," AXA Group, last modified December 12, 2017, accessed July 20, 2018, https://group.axa.com/en/newsroom/news/axa-launches-new-climate-change-actions.

68 "Our Climate Strategy," Storebrand, accessed August 20, 2018, https://www.storebrand.no/en/sustainability/climate-strategy.

69 Ibid.

70 Renewal Funds, accessed August 25, 2018, http://www.renewalfunds.com/about-us/.

71 "Why Sustainable/ESG Investing?" Alternative Investment Group, accessed August 24, 2018, http://www.altinv.com/Sustainability_Investing.aspx.

72 "Deal Furthers ISS' Responsible Investment Business Expansion," ISS, published March 15, 2018, accessed August 25, 2018, https://www.issgovernance.com/oekom-research-ag-join-institutional-shareholder-services/.

73 "Boom in green bonds attracts green rating agencies," *Financial Times*, published August 2018, accessed August 25, 2018, https://www.ft.com/content/c27b1276-47a3-11e8-8ae9-4b5ddcca99b3.

74 Yvette Klevan, "Green Bonds' Growing Role in ESG Investing," *Lazard Insights*, published March 28, 2018, accessed August 27, 2018, https://www.lazardassetmanagement.com/docs/-m0-/63453/GreenBondsGrowingRoleInESGInvesting_LazardInsights_201803_en.pdf.

75 "Tax Efficient Sustainable Strategy," Breckenridge Capital Advisors, accessed August 27, 2018, https://www.breckinridge.com/investments/strategies/sustainable/tax-efficient-sustainable-strategy/.

76 "Shine Campaign launches to end energy poverty by 2030," Altenergymag.com, published May 22, 2018, accessed July 30, 2018, https://www.altenergymag.com/news/2018/05/22/shine-campaign-launches-to-end-energy-poverty-by-2030/28581/.

77 Ophir Bruck, Christi Electris, and Joshua Humphreys, "Climate-Resilient Investment for Resilient Communities," The Croatan Institute, published December 2016, accessed August 15, 2018, https://www.croataninstitute.org/documents/Climate-Related_Investment_for_Resilient_Communities_2016.pdf.

78 Ibid.

79 Ibid.

80 "Our Environmental Work," Self-Help Credit Union, accessed August 24, 2018, https://www.self-help.org/what-we-do/we-lend/for-the-environment.

81 Ophir Bruck, Christi Electris, and Joshua Humphreys.