
A DECADE
OF PROGRESS
TOWARDS A JUST
CLIMATE FUTURE
INVEST
DIVEST
2021

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EXECUTIVE SUMMARY

Amidst a depressing era in the race against climate change–with killer fires and titanic storms, political stalemate and corporate greenwashing–the fossil fuel divestment movement is a source for tremendous optimism.

Ten years in, the divestment movement has grown to become a major global influence on energy policy. There are now **1,485** institutions publicly committed to at least some form of fossil fuel divestment, representing an enormous **$39.2 trillion of assets under management.** That's as if the two biggest economies in the world, the United States and China, combined, chose to divest from fossil fuels.

Since the movement's first summary report in 2014, the amount of total assets publicly committed to divestment has grown by over **75,000 percent**. The number of institutional commitments to divestment has grown by 720 percent in that time, including a 49 percent increase in just the three years since the movement's most recent report. The true amount of money being pulled out from fossil fuels is almost certainly larger since not all divestment commitments are made public.

The movement has now expanded far beyond its origins as a student-driven effort on college campuses. Divestment campaigners now target cities, states, foundations, banks, investment firms, and any player who participates in the global investment pool. Major new divestment commitments from iconic institutions have arrived in a rush over just a few months in late 2021, including **Harvard University, Dutch and Canadian pension fund giants PME and CDPQ, French public bank La Banque Postale, the U.S. city of Baltimore, and the Ford and MacArthur Foundations**.

The movement has gone global: originally less than a quarter of divestment campaigns were based outside of the U.S., now it is more than two thirds. Related financial campaigns have sprung up to target bankers, asset managers, and insurers, cutting the fossil fuel industry off from the financial services they depend on for expansion.

With this growth, divestment has proven successful at its core goal of helping to delegitimize fossil fuel companies as political players. While the remaining power of these companies should not be underestimated, it has clearly diminished. Public opinion of fossil fuel use has plummeted both globally and in the U.S. For the first time, a majority of the U.S. candidates for President refused to take fossil fuel money in an election. Divestment-inspired campaigns have stalled or halted fossil fuel projects from Nebraska to Uganda.

The movement has grown so large that it is now helping hold fossil fuel companies accountable for the true cost of their unregulated carbon pollution. Oil companies themselves have started to admit that the divestment movement is raising their costs and hampering their profits and access to capital. Credit ratings agencies take it into consideration in their analyses. The divestment movement has become a market factor.

It's not a blow the fossil fuel industry is well positioned to absorb. This year has seen a short-term surge in oil prices and stock market gains, but over the last nine years, fossil fuel stocks have routinely underperformed the market. Institutional investors are focused on these long term trends. Big Oil once dominated Wall Street, literally setting the market pace as a major component of both the Dow Jones Industrial Average and S&P 500 indices. But those days are over. ExxonMobil was kicked off the Dow in 2020. Oil and gas companies now make up only 2.7 percent of the stock market's value, down from 28 percent, even with recent gains.

One of the most important victories for the movement has been the financial elite's gradual acceptance of the movement's core financial arguments. Fossil fuels are a bad bet financially. It was once considered a fringe position to argue that the fossil fuel industry's value is dependent on "stranded assets"–fuel reserves still buried in the ground that will become worthless in a clean, renewable energy future. Now the concept is cited by BlackRock, the largest investment house in the world, as a reason to divest.

The movement can now also offer solid proof that divestment is a sound financial strategy. Early adopters of divestment strategies are reporting positive financial results. Surveys and analyses by Wall Street firms support it. Divestment now moves in a positive feedback loop. As more and more institutions announce their plans to divest, many cite the financial reality that climate change will make fossil fuels obsolete and a renewable energy future inevitable. And by doing so, they are both hastening that change and convincing others of its inevitability.

But more needs to be done. In the past few years it has become painfully clear that the pace of investment in renewable energy systems, as well as in sustainable climate solutions more broadly, is woefully insufficient. That is why this report is titled "Invest-Divest." The International Energy Agency, in their landmark roadmap to a net-zero future released earlier this year, said that achieving the world's climate goals requires investors to more than triple the amount of money flowing to renewable energy projects by 2030. A delayed transition will be expensive, and so a rapid increase in investment is critical for the health of the world economy. Such investment is also likely to be profitable for institutions.

How that money is invested will be just as important as where it is invested. There is increased recognition of the need for a just transition, one that avoids the mistakes of past economic shifts and centers economic, gender, and racial justice. Workers and communities who have depended on fossil fuels, Indigenous communities who have faced generations of injustice, women and children who are disproportionately impacted by the effects of climate change–none of them can be left behind. As with divestment, there is evidence that investing in a just transition makes economic sense, but it will take mission-driven institutions to lead the way for the larger investment community. This will be a time of serious upheaval for many people. When conceived broadly, a just transition carries with it great possibility for positive change.

After ten years, it is clear the tremendous impact that the movement has already had, and the huge potential it holds for growth. But it is time for the movement to go even bigger. The latest IPCC report confirms that there are less than nine years left to make transformative changes to the world's energy systems and economies before facing dangerous and irreversible damage to the climate.[1] Going forward, the divest-invest movement must keep up the pressure and make three demands of institutional investors across the world:

1. All institutional investors must make an immediate public commitment to fully divest from and stop all financing of coal, oil, and gas companies and assets. Institutions that have partially divested must now divest all of their assets from all fossil fuels. As linked to this commitment, all institutions must align their policy, regulatory positions, and political expenditures with this commitment.
2. All institutional investors must immediately move to invest a minimum of 5 percent of their assets in climate solutions, doubling to 10 percent by 2030, including investments in renewable energy systems, universal energy access, and a just transition for communities and workers. Further, investors must hold these companies accountable to respecting Indigenous and other human rights and environmental standards.
3. To achieve Net Zero emissions by 2050, all institutional investors should adopt Net Zero plans that both immediately cut investments in fossil fuels and ensure that all other assets in their portfolio develop transition plans that halve absolute emissions by 2030, consistent with science's demands to limit global warming to 1.5°C.

Institutional investors everywhere are beginning to come to terms with the danger that fossil fuels pose to their investment portfolios, their communities, and their constituencies. This realization is important but it is not enough. Institutions around the world must step up now and commit to joining the divest-invest movement before it is too late–for them, for the economy, and for the world.

THE IMPACT OF THE MOVEMENT

THE GROWTH OF THE DIVEST-INVEST MOVEMENT AND ITS IMPACT HAS EXCEEDED NEARLY ALL EXPECTATIONS.

The total amount of assets under management committed to some form of fossil fuel divestment has leaped from a mere $52 billion across 181 institutions in 2014, when the movement first tallied all total commitments,[2] to now more than $39.2 trillion across 1,485 institutions. This growth includes both new commitments and portfolio growth among previously committed institutions. (See Methodology section below.)

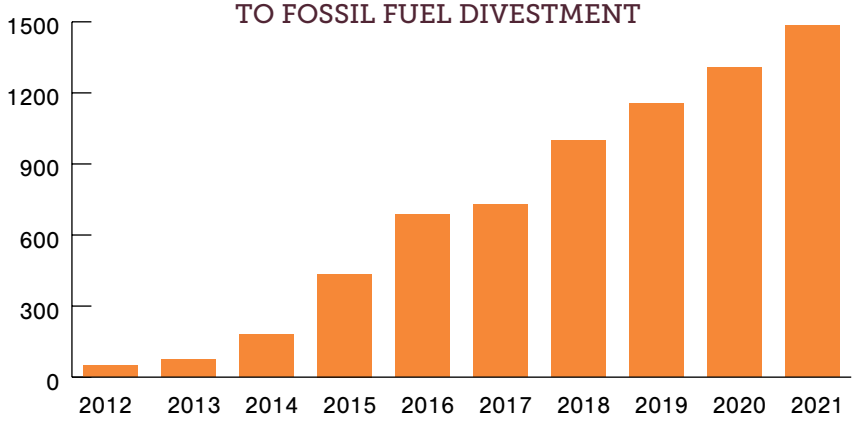
By comparison, the gross domestic products of the world's two largest economies, the United States and China, were only $20.9 trillion and $14.7 trillion, respectively, in 2020.[3]

The rate of growth has accelerated. While the first three years of the campaign netted 181 public commitments, the most recent three years have seen 485 new commitments.[4]

These numbers reflect only known, public commitments to divestment. More institutions, to say nothing of individual investors, are almost certainly divesting in numbers beyond this, as the fossil fuel sector's dominance of the stock market has shrunk considerably.

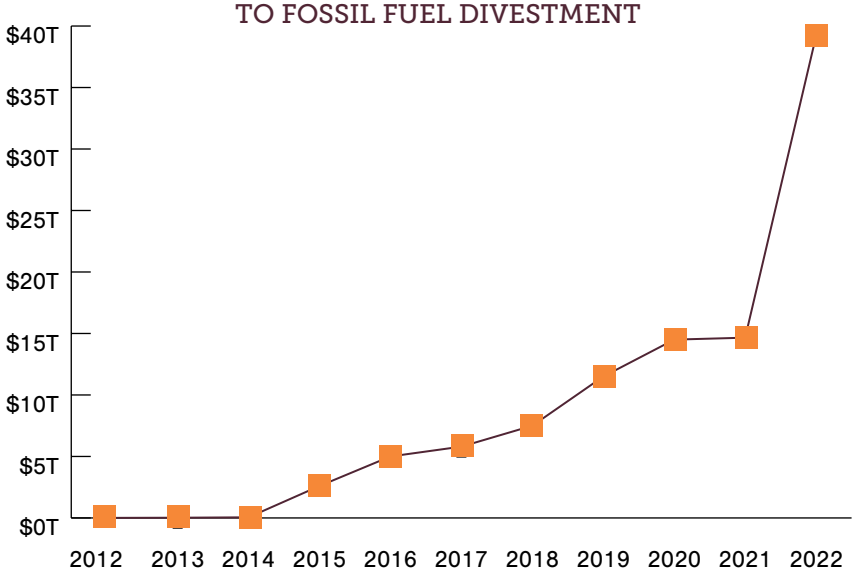
GROWTH IN DIVESTMENT COMMITMENTS

TOTAL PUBLIC INSTITUTIONAL COMMITMENTS TO FOSSIL FUEL DIVESTMENT



Source: Global Divestment Commitments Database

TOTAL ASSETS UNDER MANAGEMENT COMMITTED TO FOSSIL FUEL DIVESTMENT



* 2021 figures represent an update of some institutions' total assets under management. See Methodology section.

Source: Global Divestment Commitments Database

A DECADE OF HISTORY

The fossil fuel divest-invest movement started a decade ago, in 2011, when students at Swarthmore College in Pennsylvania launched a campaign calling on their university to divest from all fossil fuels. Students at another eight schools launched similar campaigns focused just on divestment from coal, the dirtiest fossil fuel. Soon, with the support of foundations such as the Wallace Global Fund, campaigns sprang up on campuses across the country. While Hampshire College[5] is acknowledged as the first institution to be divested from fossil fuels, the campaign's first real win was in the fall of 2012, when Unity College in Maine announced plans to divest after a strong student-driven campaign.[6]

The movement grew rapidly after Superstorm Sandy devastated the northeastern United States in 2012, causing tens of billions of dollars in damages. That's when environmentalist Bill McKibben, 350.org, and student organizers launched the "Do the Math" tour.[7] The non-profit organization Carbon Tracker Initiative also published its first two "Unburnable Carbon" reports in 2011 and 2013, introducing many to the concepts of a "carbon bubble" and "stranded assets."[8] These events inspired divest-invest campaigns in cities and campuses across North America, Australia, Asia and Europe.[9]

The faith community, an influential contributor to past divestment campaigns, also quickly became actively involved. The Church of Sweden, a leader in faith-based values driven investing, was the first religious group to divest, completing a process in 2014 that it began six years earlier.[10] The World Council of Churches, representing 600 million Protestants worldwide, followed soon after.[11]

In 2014, ahead of the UN climate change summit, the movement received an endorsement from Bishop Desmond Tutu just as it released its first report and announced public divestment commitments totaling $52 billion.[12]

Since then, the divest-invest movement has expanded substantially, becoming a central part of the broader climate movement and spawning critical offshoot campaigns. It seeded campaigns, often led by Indigenous communities, to defund fossil-fuel infrastructure projects such as the DefundDAPL campaign in the U.S. and the campaign to cut off insurance for the Trans Mountain Pipeline in Canada. It has also been the inspiration for other finance-focused climate campaigns directed at private equity, central banks, insurance companies, asset managers, and financial regulators. Perhaps most importantly, divest-invest campaigns have proven to be a successful recruitment and training ground for climate activists who have then gone on to lead climate organizations and drive climate action across the world.

The movement, from the very start, has focused on shifting the narrative around the fossil fuel companies themselves. The goal has been to brand these companies as moral outcasts, and to focus the public's attention on the web of finance supporting their operations and their aggressive manipulation of the political process to block climate action. From 2016 to 2019, the three years which followed the signing of the Paris Agreement, the five largest publicly-traded oil companies (ExxonMobil, Royal Dutch Shell, Chevron, BP and Total) spent over $1 billion on lobbying efforts to block climate action and advertising campaigns to mislead the public about their role in the climate crisis.[13]

But there are clear signs that public opinion and political power around climate are both shifting. While credit for this broader change is of course shared with the entire climate movement, divest-invest campaigns have played a critical role in shifting opinions specifically around these corporations and their money:

- In the 2020 U.S. Presidential election, for the first time, a majority of candidates pledged to refuse all campaign donations tied to fossil fuels.[14]
- Around the globe, major fossil fuel infrastructure projects are increasingly being stalled or canceled due to shifts in public opinion driven by protest movements, according to the credit rating agency Moody's.[15] [16] The Indigenous-led protest movements in North America alone are on track to prevent carbon emissions equal to a quarter of total U.S. and Canadian annual emissions combined.[17]
- Public support for fossil fuel use has plummeted. Globally, more people now support expansion of solar, wind and hydropower than support the expansion of any fossil fuel.[18] In Europe, an overwhelming 81 percent of people now favor greater government financial support for renewable energy, even if it means reducing subsidies for fossil fuels.[19] In 2019, for the first time, Gallup reported that a majority of Americans believed the country should put less emphasis on fossil fuels of all types. Support for more use of natural gas, which the fossil fuel industry had spent years falsely labeling a "clean" fuel, dropped from 65 percent in 2013 to only 46 percent in 2019. Support for oil dropped from 46 percent to 28 percent and coal dropped from 31 percent to 22 percent.[20]

A 2019 survey found that 57 percent of Americans, including majorities in historically oil-dependent states like Texas and Louisiana, believed that oil companies and other fossil fuel companies should pay for the damages caused by climate change.[21]

2011 – 2020
KEY MOMENTS IN THE DIVEST-INVEST MOVEMENT

2011

- Student climate activism on divestment on college campuses start showing up across America, largely in response the failure of the UN climate conference in 2009 to curb carbon emissions, and climate advocacy's failure to engage youth. Students at Swarthmore College push for the college to divest its endowment from the largest 16 fossil fuel companies, citing their solidarity with Appalachian communities who had been disproportionately negatively affected by coal. Student campaigns begin spreading.
- December 2011, Hampshire College becomes the first academic institution to divest from fossil fuels, just as it was the first to divest from Apartheid South Africa

2012

- Bill McKibben's article Global Warming's Terrifying New Math highlighted the Carbon Tracker Initiative's new calculations that 80% of fossil fuel reserves globally are unburnable if we want to avert climate crisis. It went viral and helped galvanize a movement around fossil fuel divestment, starting on US college campuses.
- 20 cities in 22 days, the Do The Math tour ignited a broader movement around fossil fuel divestment. Within a month of the tour over 100 campus campaigns had sprung up around the United States, with campaigns in cities too.

2013

- In April 2013, the first commitments from municipalities start rolling in: Seattle, WA, San Francisco, CA, Berkeley, CA, Richmond, CA, Boulder, CO, Bayfield, WI, Madison, WI, State College, PA, Eugene, OR, and Ithaca, NY.
- In June 2013, Obama embraces the divestment movement

2014

- Divest-Invest Philanthropy launched on January 30, 2014 when seventeen foundations, with combined assets of more than $2 billion, publicly announced their joint commitment to divest and invest and called upon the philanthropic sector to have a wider dialogue on the relationships between investments and climate change. Rockefeller Brothers Fund announced fossil fuel divestment in September 2014, notable at the time due to the Rockefeller wealth being built from fossil fuel expansion.
- Divestment gains the endorsement of public figures such as Archbishop Desmond Tutu who addressed the UN Global Climate Summit calling for global divestment in a historic video. At the UN Global Climate Summit, the movement makes the first joint divestment announcement, listing 52 billion dollars in assets divested.

2015

- In a watershed moment for the growing divestment movement, The Guardian outgoing editor-in-chief has decided to set the Guardian's editorial sights on keeping the majority of fossil fuels underground and achieving significant progress on climate change before stepping down.
- Norway's Parliament approves a decision to divest the country's sovereign wealth fund from companies with more than 30% of their income from coal extraction or coal power.

2016

- June marked the first-ever joint Catholic divestment announcement on the commemoration of the first anniversary of Pope Francis' encyclical Laudato Si, and a letter signed by multi-faith leaders calling for divestment.

  Seven Catholic institutions from all over the world announced that they are divesting from fossil fuels.

- Student divestment movement in the UK is wildly successful with 43 university divestment commitments in 2016.

2017

- Cape Town, South Africa announces divestment in June 2017 and becomes one of the first major cities in the Global South to commit to fossil fuel divestment.
- In May 2017, a Global Divestment Mobilization took place with people all over the world engaging in direct action and protest to demand fossil fuel divestment

2018

- In 2018, the divestment movement saw massive gains. It welcomed its 1,000th institutional commitment to divest from fossil fuels, bringing the global size of portfolios and endowments committed to divestment to more than $6.4 trillion. Ireland becomes the first country to divest from fossil fuels, and Divest-Invest pledges came from across 37 different countries, spanning every continent except Antarctica
- Major city pension funds also joined the divestment campaign – New York City committed to divest their $189 billion pension fund from fossil fuels and London announced plans to divest their multi-billion dollar pension funds from coal, oil, and gas.

2019

- The financial case to ditch fossil fuels kept getting bigger and bigger – IEEFA released a groundbreaking report showing that BlackRock, the world's largest fund manager, and its holdings in fossil fuels lost over $90 billion in value destruction and opportunity cost. Financiers begin to pull back from fossil fuels -the European Investment Bank became the first multilateral bank to commit to ending financing of oil, coal, and gas by end of 2021.
- In September 2019, the first major global conference on divestment was hosted in Cape Town, South Africa - "Financing the Future: The Global Climate Divest-Invest Summit" which served as a major platform for new institutional divest-invest announcements. It emphasized the equal importance of investing in a clean, equitable, and just future to ensure sustainable energy access for all. By the end of 2019, more than 11 trillion U.S. dollars had been committed to divesting from fossil fuels.

2020

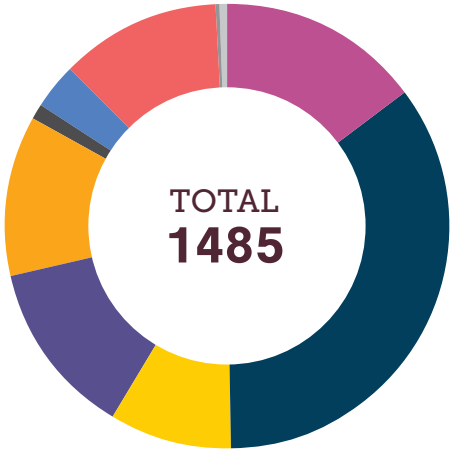
- New York State, the United States' third-largest pension, announced in December 2020 that they would be divesting their $226 billion retirement fund of the riskiest fossil fuel companies by the end of 2024.
- Faith leaders, foundational and instrumental partners to the divestment movement, launched the largest joint divestment announcement ever of over 1.5 billion USD in assets when over 47 faith institutions spanning across 21 different countries and 5 different continents announced their exit from fossil fuels.

A BROADER AND DEEPER MOVEMENT

While the overall growth of the movement is clear by the growing number of commitments, the depth and breadth of the movement has also expanded.

There are now institutions committed to fossil fuel divestment in 71 countries, up from the 37 recorded in the movement's most recent report from 2018.[22] In 2014, only 22 percent of divesting institutions were based outside of the U.S. But by 2021, that has climbed to 69 percent, signifying the globalization of the movement.[23] The diversity of institutions and their average size has also grown, and now includes more and more high-profile institutions. Large insurance companies, pension funds, and universities with massive endowments have driven the biggest increases in assets under management committed to divestment, while faith and philanthropic institutions have driven the largest increases in the number of commitments in recent years.

The philanthropic sector has stepped up its commitments significantly. The Divest-Invest Philanthropy coalition first launched in January 2014 with 17 foundations, holding combined assets of nearly $2 billion, publicly committing to both divest from all fossil fuels and invest at least 5 percent of their portfolio in climate solutions. As of October 2021, there are 192 foundations and family funds with assets over $125 billion committed to divestment in some form.



DIVESTMENT BY SECTORS

Fossil fuel divest-invest commitments by type of institution

Faith-based Organization	521
Educational Institution	220
Philanthropic Foundation	192
Government	166
Pension Fund	164
For Profit Corporation	132
NGO	51
Healthcare Institution	17
Other	5
Cultural Institution	4

Source: Global Divestment Commitments Database

GLOBAL REACH OF DIVEST-INVEST

ANGOLA
ARGENTINA
AUSTRALIA
AUSTRIA
BANGLADESH
BELGIUM
BERMUDA
BRAZIL
CAMEROON
CANADA
CHINA
COLOMBIA
CZECH REPUBLIC
DENMARK
ECUADOR
ESTONIA
FIJI
FINLAND
FRANCE
GERMANY
GREECE
INDIA
INDONESIA
IRELAND
ISRAEL
ITALY
JAPAN
LIBERIA
KENYA
LEBANON
LESOTHO
LIBERIA
LUXEMBOURG
MALAWI
MALAYSIA
MALTA
MEXICO
MYANMAR
NETHERLANDS
NEW ZEALAND
NIGERIA
NORTHERN IRELAND
NORWAY
PAKISTAN
PANAMA
PERU
PHILIPPINES
PORTUGAL
REPÚBLICA DOMINICANA
REPUBLIC OF THE MARSHALL ISLANDS
RWANDA
SENEGAL
SIERRA LEONE
SINGAPORE
SOMALIA
SENEGAL
SOUTH AFRICA
SOUTH KOREA
SPAIN
SRI LANKA
SWEDEN
SWITZERLAND
THAILAND
UGANDA
UK
UKRAINE
VATICAN CITY
ZAMBIA
USA

CASE STUDY

DIVESTMENT GAINS GROUND IN
SOUTH AFRICA

Most growth in energy demand is expected in the Global South in the coming years, making nations in that area critical to the climate fight. Divestment campaigners are finding new success across Africa, particularly in South Africa.

In 2020, the city of eThekwini/Durban followed Cape Town to become the second city in South Africa to commit to divest. Both signed the divestment declaration of the C40 coalition.[24] Durban's two pension funds control over $130 million in assets.[25] [26]

City leaders acknowledged that divesting from fossil fuels and investing in climate solutions would help support Durban's ambitious Energy Policy, which seeks to fully transition the city to 100 percent renewable energy by 2050.[27] They also cited divestment as a way to free up investment dollars to help small and medium businesses, social enterprises, and co-operatives to participate in the green economy.[28]

Mayor Mxolisi Kaunda of Durban, said: "City Leadership is committed to invest in a fossil-free sustainable economy and Durban is ready to demonstrate that just transition."[29]


HARVARD


HONG-KONG BASED AIA GROUP


LONDON


CATHOLIC CHURCH

GAME-CHANGING DIVESTMENT COMMITMENTS

Some of the world's most influential and iconic institutions have committed to divestment over the past 24 months. These announcements have grabbed headlines around the world, pushed forward the political conversation on climate, and further energized the movement:

HARVARD

Following nearly a decade of pressure from student activists, alumni, and faculty, Harvard, the world's wealthiest university, announced that it has nearly entirely divested its $42 billion endowment from fossil fuels and will bar any future investments in coal, oil, and gas.[30] It was quickly followed by a divestment announcement from fellow Ivy League university Dartmouth,[31] and follows progress in divestment campaigns at other prominent Ivy schools, including Brown, Columbia, and Cornell.[32] [33] [34]

LA BANQUE POSTALE

The French public bank La Banque Postale ($894 billion in assets)[35] announced in October 2021 that it would divest from all oil and gas companies by 2030.[36] Significantly, the bank also promised a broad denial of financial services to "conventional and non-conventional fossil-fuels producers, upstream and midstream activities ... companies involved in infrastructure development for the industry ... (and) businesses involved in lobbying for the oil and gas industry."[37]

FORD FOUNDATION

With $17 billion in assets, the Ford Foundation is one of the largest philanthropic funds in the world, built on a legacy that gives its announcement powerful significance.[38] The foundation said in October 2021 it "will not invest in any fossil-fuel-related industries" and will look for opportunities to invest in a "renewable sector that is strong, diverse, and varied enough to sustain a green-energy economy."[39]

CAISSE DE DÉPÔT ET PLACEMENT DU QUÉBEC

CDPQ is Canada's second-largest pension fund with assets over $307 billion.[40] It announced in September 2021 that it will divest from all oil investments, which the Toronto Star reported "will make it harder for Canadian oil and gas producers to raise money for new wells and oil sands projects,"[41] a major development given that Canada is home to the largest tar sands deposits.[42] The fund also said it would invest $10 billion in renewable energy[43] and has increased investments in sustainable infrastructure, such as Montreal's new light-rail system.[44]

PME

Dutch pension fund PME ($71 billion in assets) announced it had divested in September 2021,[45] becoming the first Dutch pension fund to do so. Fund managers noted that the process took only six weeks and did not impact their overall portfolio.[46]

NEW YORK STATE

One of the largest and most influential U.S. pension funds, the $265 billion New York State Common Retirement Fund, took important steps towards divestment in 2020 and 2021. In December 2020, New York State Comptroller Thomas DiNapoli announced that the fund would shed its riskiest investments in fossil fuels by 2024 and reach net zero emissions across its investment portfolio by 2040. In April 2021, it became the first state pension fund in North America to divest from oil sands companies.[47] The fund has committed to double investment in climate solutions to $20 billion.[48]

OXFORD AND CAMBRIDGE

For nearly a decade, alumni, faculty, and students have diligently and creatively pressured two of the world's oldest and most prestigious universities, Oxford and Cambridge, to divest from fossil fuels. Both buckled to pressure in 2020[49] with announcements covering their $4.1 billion and $4.8 billion endowments respectively.[50]

ROCKEFELLER FOUNDATION

The $5 billion fund, established by famed Standard Oil tycoon John D. Rockefeller, announced in December 2020 that it will fully divest from all fossil fuels and increase investments in a just transition to a renewable energy economy. It joins its sister foundations, the Rockefeller Brothers Fund, which became an early leader of the movement when it committed to divestment back in 2014, and the Rockefeller Family Fund, which committed in 2016.[51]

MAINE

In June 2021, the U.S. state of Maine became the first jurisdiction in North America to direct divestment of its treasury and state pension fund via legislation.[52] The law was passed after years of campaigning by grassroots and youth advocates with Sierra Club, Maine Youth for Climate Justice, and 350 Maine. It directs the $17 billion state pension and treasury to divest more than $1.3 billion from fossil fuels by 2026.[53] One of the cosponsors of the bill was state senator Chloe Maxmin, a co-founder of the successful Fossil Fuel Divest Harvard campaign.[54]

BALTIMORE

All three of the U.S. city's pension funds must begin divestment next year under a law signed by the mayor in October 2021. The Baltimore City Fire & Police Employees' Retirement System ($3.5 billion in assets), Baltimore City Employees' Retirement System ($2.2 billion) and Baltimore Elected Officials' Retirement System ($31 million) will shed all holdings in the top 100 holders of coal reserves and the top 100 holders of oil and gas reserves over the next five years.[55] The measure is significant given Baltimore's proximity to major oil and natural gas import/export operations.[56]

NEW YORK CITY

Following up on the city's 2018 commitment, the New York City Employees' Retirement System ($87.0 billion in assets), the New York City Teachers' Retirement System ($102.2 billion in assets), and the New York City Board of Education Retirement System ($8.8 billion in assets) voted in 2021 to divest, pulling $4 billion out of fossil fuels by 2022.[5758] The mayor also announced in 2021 a goal of moving the funds to reach net-zero emissions by 2040 and invest $50 billion in climate solutions by 2035.[59] The New York City comptroller, on behalf of the city's pension funds, also led a successful push to unseat former Exxon CEO Lee Raymond from the board of JP Morgan Chase.[60 61]

LONDON

London in 2021 reaffirmed and expanded on its commitment to reduce fossil fuel investment.[62] In parallel, the London Pensions Fund Authority (LPFA, $9.1 billion in assets)[63] has reduced fossil fuels to just 0.6 percent of its investments in listed equities as of March 2021. In September 2021, the LPFA announced a commitment to reach net-zero carbon emissions by 2050 and to soon set an interim target for 2030[64]

C40 DIVEST/INVEST FORUM

New York and London lead C40's Divest/Invest Forum, a peer network supporting a growing number of cities divesting from fossil fuels and investing in climate solutions. As of September 2021, cities representing more than 43 million residents and over $360 billion in pension assets have signed the "Divesting from Fossil Fuels Investing in a Sustainable Future Declaration," committing to push their pension funds to adopt a divest-invest strategy now. This includes: Auckland, Berlin, Bristol, Cape Town, Copenhagen, Durban (eThekwini), Los Angeles, Milan, New Orleans, Oslo, Paris, Pittsburgh, Seattle, and Vancouver, as well as forum co-chairs New York and London.[65]

UNIVERSITY OF CALIFORNIA SYSTEM

As one of the largest university systems in the world, serving more than 285,000 students, the University of California system has one of the nation's largest endowments, pension funds, and working capital pools. The system completed divestment in 2020, announcing it had sold off $1 billion worth of shares in fossil fuel companies across $125 billion worth of assets.[66] The university has committed to increase investments in climate solutions by at least $1 billion.

CATHOLIC CHURCH

An official Vatican statement in 2021 called on Catholic investors worldwide to divest from fossil fuel holdings.[67] Thanks to organizing by the Laudato Si' Movement (formerly Global Catholic Climate Movement), over 250 Catholic institutions globally have divested, including Bishops' Conferences, religious orders, Catholic colleges and universities, donor institutions, and others around the globe.[68]

MACARTHUR FOUNDATION

Known globally for its MacArthur Fellows program (often called the "MacArthur genius grants"), the foundation committed in September 2021 to unwind its $8 billion endowment from fossil fuels, making it one of the largest foundations in the U.S. to do so. It specifically acknowledged the voices calling for alignment between grants and investments as a driver in its decision..[69]

MAJOR INSURANCE COMPANIES

Several global insurance companies, which are among the world's largest investors, made major new or improved divestment commitments over the past two years, with large financial impacts. Germany-based Allianz updated its coal exclusion policy in May 2021.[70] Hong-Kong based AIA Group divested from coal in 2021,[71] the first major Asian insurer to do so.[72] MetLife became the first major US life insurer to divest in June 2020, excluding coal and tar sands from their portfolios.[73] Suncorp, based in Australia, adopted an oil and gas divestment policy in 2020 as well.[74] The total assets under management of these four firms is more than $2.13 trillion.

"WE DEMAND THAT...

participants from all companies, banks, institutions and governments immediately halt all investments in fossil fuel exploration and extraction, immediately end all fossil fuel subsidies and immediately and completely divest from fossil fuels. We don't want these things done by 2050, 2030 or even 2021, we want this done now –

AS IN RIGHT NOW."

–GRETA THUNBERG

CASE STUDY

ALL INSTITUTIONS. ALL ASSETS. ALL FOSSIL FUELS.

WHY PARTIAL DIVESTMENT IS NO LONGER ENOUGH.

When the divest-invest movement began a decade ago, it faced great resistance. Many institutional investors said complete divestment from fossil fuels was too complex or financially risky. Under pressure to divest, many institutional investors chose different paths and pursued commitments that did not reflect full divestment.

Some divested only part of their assets, such as direct investments, while leaving other portions of their assets untouched. Others focused on divestment from only certain fossil fuel sectors. Many institutions started their divestment efforts by focusing on coal, the most carbon-intensive fossil fuel. For instance, in 2015, the U.S. state of California voted to divest its pension fund from companies that derived at least half of their revenue from coal mining, as did the city of Providence, Rhode Island.[75] The multinational life insurance and asset management company Aegon committed to coal divestment in 2016.[76] Investment giant BlackRock said in 2020 it would divest from companies that "generate more than 25% of their revenues from thermal coal production."[77]

European banking leader HSBC said in 2018 it would stop direct "funding new coal power plants, oil sands and arctic drilling,"[78] naming a trio of politically toxic projects that many other institutions also targeted. After first opposing all divestment, the Gates Foundation began to reverse course by cutting all holdings in oil giants BP and ExxonMobil in 2016.[79] In 2016, the Hewlett Foundation made the decision to end "future investments in private partnerships primarily involved in oil and gas drilling."[80] While important progress, movvement leaders continued to call for full divestment of all assets.

Demands for investors to invest in climate solutions were always part of the movement and commitments to both divest and invest began to increase as the movement progressed. The Divest-Invest Philanthropy campaign launched in 2014 asked foundations to pledge to fully divest from fossil fuels and invest at least 5 percent of their portfolio in climate solutions. By 2019, almost 200 foundations had taken the pledge, and half of those surveyed were investing 10 percent, or more, in solutions.[81] For example, the Rockefeller Brothers Fund, an early signatory, made its first direct investment in a renewable energy company in July 2016.[82]

Due to continued movement pressure and a growing body of data on the financial weakness of fossil fuel investments, some of the institutions named above later made broader divestment commitments, while others continue to be critical of demands to move more quickly and more boldly. Both HSBC and BlackRock, for example, remain targets of active divestment campaigns in 2021.

It is for that reason that movement leaders have made clear their demands for 2021, which reflect the urgency of the moment: that all institutions must divest all assets, including private equity funds, from all fossil fuels, and that they match that divestment with greater investment in climate solutions.

BROADER PRESSURE ON FOSSIL FUEL FINANCES

The intensity and growing breadth of the divest-invest movement has led to pressure on many institutions to reveal and ultimately end other types of financial ties to the fossil fuel industry.

Many large banks and financiers have committed to stop lending or giving other financial support to fossil fuel companies. As of 2021, at least 150 large banks, asset managers, and insurers, each of which has assets of at least $10 billion, have announced that they will cut ties from one or more fossil fuel industries.[83] Other banks have responded to direct demands by campaigners to cut funding of specific fossil fuel infrastructure projects. U.S. Bank moved to end funding for the Enbridge Line 3 pipeline[84] following global protests led by the Indigenous communities targeting the project's financing.[85] Similarly, major private banks such as Barclays, Credit Suisse, and ANZ released statements saying they will not provide funding[86] for the controversial East Africa Crude Oil Pipeline in Uganda, which is fiercely opposed by local community members and environmentalists.[87]

Major insurance companies have stopped offering policies to some fossil fuel projects, creating a barrier for financing. Coal projects are becoming "uninsurable" after an exodus of U.S. and European insurance companies from the business, according to a report from Insure our Future.[88] Suncorp committed in 2020 to cease underwriting of any new gas or oil infrastructure projects.[89] The Trans Mountain tar sands pipeline in Canada is struggling to find insurers, forcing costs higher.[90]

While many institutions remain resistant to true fossil fuel divestment, movement pressure has increased so dramatically that many have scrambled to show some progress on shifting capital away from the fossil fuel industry. This has led to a proliferation of so-called "Net Zero by 2050" commitments from financial institutions, non-fossil companies, and even fossil fuel companies themselves. Many of these announcements set far-reaching 2050 goals without sufficient short-term targets, realistic plans for implementation, or, most importantly, clear policies for excluding fossil fuels.[91] However, they are an important signal that pressure from the movement is effective and expanding.

- More than one in five of the world's 2,000 largest publicly traded companies have made some form of net-zero commitment, according to a 2021 study from researchers at Oxford University.[92]
- Facebook, Google, Apple, and Microsoft all announced new or stronger net-zero pledges in 2020.[93]
- Ford in 2020 became the first U.S. automaker to commit to carbon neutrality,[94] followed by an even more ambitious announcement by GM in 2021 to achieve carbon neutrality by 2040 and stop selling gas-powered cars and trucks altogether by 2035.[95]
- Vanguard, the largest issuer of mutual funds in the world, and BlackRock, the world's largest asset manager, were among 43 investment firms managing a combined total of more than $22.8 trillion in assets who pledged in 2021 to reach net-zero emissions by 2050 across all their holdings.[96] Both firms have been slow to reveal clear plans for implementation or fully divest from companies expanding fossil fuel infrastructure.[97]

ENGAGEMENT CANNOT REPLACE DIVESTMENT

Recent years have also proven that open-ended "shareholder engagement" strategies with fossil fuel companies are not an adequate substitute for divestment.

Fund managers resisting fossil fuel divestment have often cited shareholder engagement with fossil fuel companies as a more effective method for fighting climate change. They argue that by remaining shareholders of these fossil fuel companies, they keep a "seat at the table" to force fossil fuel companies to alter their behavior.

But the record makes clear that this strategy, when it does not include the threat of divestment and is not time-limited, is ineffective and too slow with regards to major fossil fuel companies.

Researchers at the University of Cambridge reviewed two decades worth of research on shareholder engagement and concluded that it was an ineffective strategy for forcing the level of change needed at the pace needed in fossil fuel companies:

> "Shareholder resolutions are indeed largely non-binding, and results in this quarter are poor regardless; most resolutions fail, and a majority of those that pass or are withdrawn fail to be implemented. Those that are implemented tend to fall into the category of disclosure only, leaving open the charge that there is indeed some greenwashing – and delaying – going on in the field. Evidence of positive results are lacking, and these results are incremental at best – if there is any real-world outcome at all (except, perhaps, improved spending on R&D and small increases in benzene internalisation). By any threshold one could devise as to the efficacy of a tactic for action on climate change and other social and environmental issues, it would be difficult to deem shareholder engagement a success."[98]

For instance, the researchers noted, Exxon has been one of the top targets for climate-related shareholder votes for years, but has not changed its behavior in any meaningful way.[99]

Even worse, as one recent Bloomberg report noted, investor pledges to support environmentally related shareholder resolutions cannot always be trusted:

> "A study from Dutch investment manager Robeco and the Erasmus School of Economics found that only 35% of (Principles for Responsible Investment) signatories backed U.S.-based environmental resolutions as recently as 2018. ... The majority of environmental and social recommendations fail to garner enough shareholder support to steer the corporate agenda 'towards sustainability focused decision making,' Robeco said in its 41-page report."[100]

Even when shareholders succeed after considerable effort, fossil fuel companies remain dug in.

For instance, several major oil companies have agreed to so-called "net-zero by 2050" commitments, with oil giants Shell and BP both making big pledges in 2020. These commitments have been touted as proof of success by advocates of an engagement strategy.[101] [102] But even by these advocates' own analyses, both BP and Shell's commitments fall short on critical measures associated with the scope of emissions covered. Most notably, Shell does not make meaningful short-to-medium term commitments that align with the Paris Agreement, nor has it committed to stop making capital expenditures in new oil and gas reserves.[103] [104] Shell plans to actually increase its natural gas operations by 25 percent through 2025.[105] Independent researchers with Oxford similarly concluded that neither company's plan actually accounts for all of their emissions or realistically matches a real path to limit climate change.[106]

In a May 2021 report, the research group Carbon Tracker said that nearly all oil companies with net zero commitments either exclude some part of their production or emissions, leave open the option of actually increasing emissions through a focus on "carbon intensity," or rely on unrealistic projections of unproven carbon capture technology.[107] The group's September 2021 report noted that, despite net zero commitments, no major oil company has actually stopped new drilling or other capital expenditures, which the IEA has identified as critical for reducing emissions to target levels.[108]

After years of effort, the most notable shareholder engagement strategy to gain traction with Big Oil happened at the May 2021 shareholder meeting of ExxonMobil. Insurgent shareholders organized to successfully vote in three new corporate board members against management recommendations.[109] But these directors remain in the minority and in the months since, ExxonMobil's management has refused to make any substantive changes in climate-related policy, limit spending on new infrastructure, or curb real emissions. The company's first public announcement after the shareholder insurgency was a boast about expanded greenfield drilling in Guyana.[110]

Engagement may be useful in changing the behavior of other industries, but it has proven ineffective as a tool for forcing fossil fuel companies to alter their fundamental business model. For movement and institutional leaders committed to fighting for climate justice and reducing the power of fossil fuel companies, divestment is a clear choice.

But investment managers who are focused on the bottom line have every reason to join the divest-invest movement as well.

DIVEST-INVEST IS THE **SMART FINANCIAL CHOICE**

With ten years of data and studies from some of the most respected financial entities in the world, the verdict is now clear — there is no rationale for investors to keep fossil fuels in their portfolio. Divestment both increases financial returns and reduces long-term financial risk. But recent years have also made clear that it is not enough just to divest from fossil fuels. It is both necessary and profitable for institutions to invest in the transition to clean, renewable, and sustainable infrastructure.

Smart decisions in long-term investing lie at the core of investment managers' "fiduciary duty," which is their legal responsibility to make wise financial decisions on behalf of shareholders or beneficiaries. Institutional investors resisting divestment have often cited fiduciary duty as their rationale. But the evidence is now clear that fiduciary duty should lead investment managers towards, not away, from fossil fuel divestment.

DIVESTMENT RAISES PROFITS AND LOWERS RISK

The divestment movement can now point to solid records from multiple institutions which have divested as proof of the financial benefits of the strategy.

Many previous analyses have used models to project that divestment would improve returns. But significantly, hard data has emerged in the last two years that has conclusively proven that divested portfolios are performing well.

The world's largest investment house, BlackRock, confirmed in a critical research report commissioned by New York City that divestment has been a winner for those who have tried it and would be a winner now based on historical data:

> "..no investors found significant negative performance from divestment but rather, have reported neutral to positive results."[111]

> "The broadest of all [divestment] options ... outperforms all other options and the benchmark portfolio on both a standalone cumulative and standalone annualized return basis."[112]

And, the report said, fossil fuel stocks have been losing value and are risky going forward:

> "The standalone performance analysis shows the universe of [fossil fuel investments] has consistently underperformed the broader market over the past five years."[113]

> "Fiduciary investors must consider the potential increase of transition risks for fossil fuel reserve linked securities within their portfolios."[114]

> "Due to the mounting risks of climate change, technological advances and regulatory actions are signaling toward a global energy transition. The potential transition to a low-carbon economy presents investment risks to fossil fuel reserve owners, raising the possibility that fossil fuel reserves — which may be unusable in a low carbon scenario — will face precipitous devaluation or become 'stranded assets.'"[115]

> "The IEA World Energy Outlook has consistently underestimated the rate at which renewable power has been adopted and overestimated the demand for fossil fuel energy. ... This is the paramount risk for companies and investors — the risk that the transition away from fossil fuels happens quicker and more abruptly than forecasted."[116]

The report notes further that the risk of stranded assets is actually made worse if governments delay action on climate change because the inevitable shift will be more sudden.[117]

BlackRock's findings are critical for three reasons. First, because they are based on actual returns to date. Studies critical of the divest-invest movement, nearly all funded by fossil fuel companies, have focused on projections and models. Second, because the firm has no ties to the movement but nevertheless agreed with the movement's core financial arguments. Third, because BlackRock was under contract with the City of New York and had a formal fiduciary duty. The research was used to support a specific investment decision upon which fiduciaries relied to cast their votes for divestment.

Other recent analyses agree. A 2019 survey by the Croatan Institute asked 60 philanthropic foundations who had divested about their experience and found that 94 percent had "experienced positive to neutral performance since committing to Divest Invest." The remaining 6 percent said either that positive results were expected soon or that divestment was not the clear cause of their difficulties.[118]

Individually divested institutions that have made returns public provide further proof. The Rockefeller Brothers Fund, five years into divestment, reported in 2020 that its analysis showed the decision had improved returns.[119] Wallace Global Fund, a private foundation that was nearly fully divested from fossil fuels by 2012, completely divested by 2014, and now has over 15 percent of its portfolio invested in climate solutions, has outperformed their financial benchmarks for more than a decade, performing in the top decile of market returns as compared to a larger group of 178 foundations.[120]

Recent data from Morningstar, one of the most influential investment research firms on Wall Street, provides a critical window into how divestment could not just improve returns, but also reduce portfolio risk. A review of Morningstar's 2021 data revealed that investment options which rate well for environmental, social, and corporate governance considerations (ESG) carried less risk than options that were low on Morningstar's ESG scale, with a standard deviation of 14.1 percent vs. 15.2 percent over 10 years. At the same time, these funds earned higher returns (12.1 percent vs 10.9 percent.)[121] While it is important to note that ESG-rated funds are not synonymous with divested funds, this nonetheless provides an important rebuttal of the oft-cited argument that divestment may increase portfolio risk.

Meanwhile, major pension funds that have resisted demands to divest lost money because of their exposure to fossil fuel investments.[122]

- California's state teachers' retirement fund, CalSTRS, ($238 billion in assets) would have gained $5.5 billion if divested from fossil fuels.
- California's public employees' retirement fund, CalPERS, ($380 billion in assets) would have gained $11.9 billion if divested.
- Colorado's state pension fund, PERA, ($45 billion in assets) would have gained $1.77 billion if divested.

Going forward, institutional investors have another incentive to divest–limiting their legal exposure. The movement has begun a pivot to litigation, as students and other constituencies seek to prove that ongoing financial support of fossil fuels is at odds with laws that govern the fiduciary duty of universities and other non-profit institutions. It is likely that the threat of such a court judgement or investigation by the State Attorney General influenced Harvard University's groundbreaking decision in September to 2021 to reverse its years of resistance to divestment.

PROMINENT ECONOMISTS AND FINANCIAL ANALYSTS ON THE DECLINE OF FOSSIL FUELS AND THE WISDOM OF DIVEST-INVEST

JIM CRAMER

> "I'm done with fossil fuels. They're done. ... We are starting to see divestment all over the world. ... Big pension funds are saying, 'Listen, we're not going to own them anymore.' ... The world's changed. ... We're in the death knell phase."[123]

JOSEPH STIGLITZ

> "I've been a supporter of divestment ... The prudent simply economic perspective is that the market is short sighted ... (and is) not taking into account the fact that we will be moving, whether it's in 10 years or five years or 20 years to a green economy. And there will be a carbon price and there will be lots of stranded assets and the value of those carbon assets are going to go down. So to me, prudential behavior. it says don't be in those assets that are going to go down. It's foolish."[124]

JEREMY GRANTHAM

> "We looked at the real cost of divestment, and there is none. ... The data is clear."[125]

THOMAS PICKETTY

> "This is a rare and decisive moment in history. Science, ethics, and economics are intersecting to form a clear market signal ... responsible investors should divest from fossil fuels."[126]

CHRISTINE LAGARDE

> "But if (the transition to clean, renewable energy) is delayed, the reduction in emissions may have to be sharper, resulting in a disorderly, disjointed and more disruptive transition for the economy. Certain economic activities may quickly be rendered obsolete, leading to a re-pricing of assets and the risk that some will become stranded. ... The financial sector will be pivotal in mobilising the necessary financial resources for the transition and in helping our economies to cope through adaptation and mitigation. It is vital that it provides finance of sufficient quantity and quality for the task."[127]

CASE STUDY

LEGAL PRESSURE ON HARVARD TO DIVEST

In March 2021, the decade-long campaign to pressure Harvard University to divest got a boost when the Climate Defense Project (CDP) filed a formal complaint with the office of the Massachusetts Attorney General.

The complaint,[128] signed by elected officials, community groups, and prominent alumni and faculty, requested the attorney general investigate whether Harvard's investments in fossil fuels violated the university's legal fiduciary duty.

The complaint relied on the Massachusetts Uniform Prudent Management of Charitable Funds Act (UPMIFA) and Massachusetts common law. It detailed Harvard's violation of its duty to invest with prudence, the duty of loyalty, the duty of care, the duty to act in good faith, and the requirement that non-profits invest in a way that is consistent with the charitable purposes of the institution.

Harvard announced its plans to divest on Sept. 10, 2021, before the attorney general's office could formally respond to the complaint. However, between the date of filing and Harvard's announcement, Harvard divestment campaigners and CDP attorneys met with senior staff from the attorney general's office on two occasions.

When Harvard's administrators explained their decision, their statement was strikingly similar to the language of CDP's complaint: "Given the need to decarbonize the economy and our responsibility as fiduciaries to make long-term investment decisions that support our teaching and research mission, we do not believe such investments are prudent."[129]

Notably, this legal argument could be applied to many other universities and non-profit investors, as UPMIFA is the law in every state except Pennsylvania. CDP has filed complaints on behalf of campaigners at four schools: Harvard, Cornell, Boston College, and the University of Wisconsin-Madison. Thus far, Cornell and Harvard have divested after the complaints were filed.

FOSSIL FUEL INDUSTRY IN DECLINE

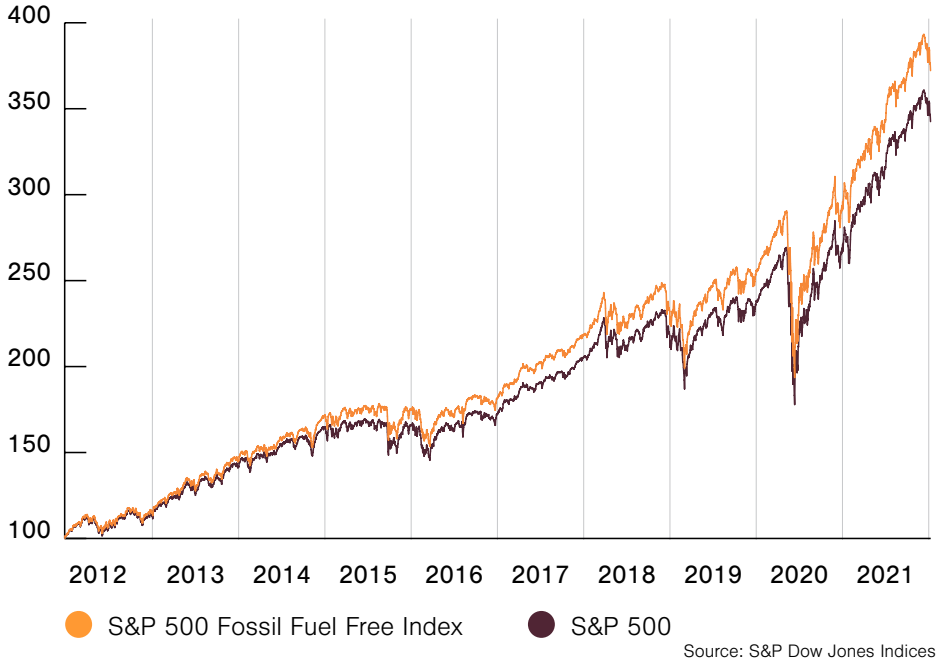
Driving these analyses is the unmistakable decline in the long-term performance of the coal, oil, and gas industries, which has occurred over decades and accelerated over the last decade.

Investors continue to buy oil and gas stocks, but with poor results.

- In 1980 seven of the top ten S&P 500 companies were from the oil and gas sector.[130] Today, there are none among the top ten.[131]
- In 1980 the oil and gas sector accounted for 28 percent of the stock market's value, according to the S&P 500. Today, despite recent oil and share price increases, it accounts for only 2.7 percent.[132]
- In 2020, Exxon left the Dow Jones Industrial Average after 92 years of continuous presence, to be replaced by Salesforce, a tech company.[133]

FOSSIL-FREE FUNDS VS. MARKET INDEX

The S&P 500 market benchmark index vs. the S&P Fossil Free index



Source: S&P Dow Jones Indices

Over the last decade the industry's decline has become more pronounced as competition within the oil and gas space has accelerated. At the same time, the sector faces competition from clean, renewable energy sources, which have seen advances in technology that make them more profitable and efficient than fossil sources,[134] as well as environmentally safe and sustainable.

- For the last decade, the MSCI ACWI global index–one of the world's most important benchmarks for stock performance–has produced steady and stronger returns when calculated without fossil fuels than with them.[135]
- In 2019, 72 percent of newly added electricity capacity was in renewable energy.[136] In 2020, it was 100 percent.[137]
- New equity shares sold by fossil fuel companies have lost $123 billion of their $640 billion in value since 2012, significantly underperforming the market.[138]

The long-term outlook for the oil and gas industry is grim, even as the exit from the COVID-19 pandemic may provide a short-term boost in prices. The International Energy Agency has concluded that in order for the world to reach its climate goals, no new oil and gas production should go forward.[139] Both sectors continued their decline in early 2021 despite receiving $8.2 billion in U.S. taxpayer support as part of the U.S. government's COVID relief plans.[140] Closing out the third quarter of 2021, even with a 40 percent short-term surge in the price of oil,[141] energy stocks still made up less than 3 percent of the stock market. That's far behind the market-leading information technology sector, which represents over 27 percent of the stock market's value, according to the S&P 500.[142]

Meanwhile, the coal industry is facing a sharp decline in both production and employment base. China, which has been the world's top funder of coal energy projects, announced in September 2021 that it would end financing for coal projects overseas.[143] From just 2019 to 2021, the U.S. coal industry lost 24,000 jobs, a 30 percent decline.[144] Coal employment in the U.S. is now at its lowest level since the American Civil War. From 2008 to 2020 coal production fell in the U.S. from 1.17 billion to 535 million tons per year.[145] [146]

Independent credit rating agencies have begun to take note of the fossil fuel industry's long-term failing prospects. Moody's 2021 analysis concludes that the coal industry's limited access to capital, loss of regulatory support, public opposition, health and safety risks, pollution contributions, and loss of employment base leaves it vulnerable to increasing pressure on investors to divest.[147] Moody's has also issued a warning that due to market uncertainties and popular opposition, financing of oil and gas infrastructure faces a bumpy credit future.[148] Major oil-producing nations are similarly predicting a decline in oil revenue. Norway, a country that derives 25 percent of its national revenues from oil and gas, now projects budget deficits through 2050 due to failing oil revenues.[149]

Houston Chronicle

Over 100 oil and gas companies went bankrupt in 2020

C40 Cities

Mayors of 12 Major Cities Commit to Divest From Fossil Fuel Companies, Invest in Green and Just Recovery from COVID-19 Crisis

The New York Times

Fracking Firms Fail, Rewarding Executives and Raising Climate Fears

Carbon Tracker Initiative

A Tale of Two Share Issues: How fossil fuel equity offerings are losing investors billions

npr

Exxon Mobil Exits: The Dow Drops Its Oldest Member

The New York Times

Nations Must Drop Fossil Fuels, Fast, World Energy Body Warns

CBS NEWS

Exxon Mobil dropped from the Dow after nearly a century

University of Oxford

Oxford announces historic commitment to fossil fuel divestment

CNBC

An industry 'operating on borrowed time': Energy experts on the increasing risks ahead for Big Oil

Rockefeller Brothers Fund

Philanthropy for an Interdependent World

Five Years Out of Oil, the RBF Isn't Looking Back

npr

Harvard University Will Stop Investing In Fossil Fuels After Years Of Public Pressure

350.org

New Study Shows Oil, Coal and Gas Investments Drove Over $19 Billion in Losses for Major Pension Funds

DIVEST-INVEST, MOVEMENT IMPACT ON THE FOSSIL FUEL INDUSTRY

At the outset of the movement a decade ago, advocates for fossil fuel divestment set out to build an ethical case against fossil fuel companies and brand them as rogue actors, so that a political shift could occur. Movement leaders did not generally believe that the movement could grow large enough to influence the overall financial picture of the industry. But there is evidence that the movement has now grown so large and pervasive that it is having a real impact on the cost of business for fossil fuel companies.

As a permanent component of the economic landscape, the divestment movement has now reached into the financial decision-making calculus of institutional investors across the world. Corporations, industry organizations, and credit rating agencies now all consider the efforts of the movement of sufficient authority and prominence to remain aware of it and to consider changes to business practices.

Formal regulatory disclosures by major fossil fuel companies make this clear. Corporate managers take the movement's influence so seriously that they felt it necessary to inform investors about the risk it represents to company profits.

Shell, for instance, informed investors in their 2020 disclosures that efforts to divest fossil fuel holdings may harm the price of securities and cause difficulties for oil and gas partnerships:

> "Additionally, some groups are pressuring certain investors to divest their investments in fossil fuel companies. If this were to continue, it could have a material adverse effect on the price of our securities and our ability to access capital markets. Additionally, some groups are pressuring commercial and investment banks from financing fossil fuel companies. Furthermore, according to press reports, some financial institutions also appear to be considering limiting their exposure to certain fossil fuel projects. Accordingly, our ability to use financing for future projects may be adversely impacted. This could also adversely impact our potential partners' ability to finance their portion of costs, either through equity or debt."[150]

Similarly, ExxonMobil told investors it sees a risk in the work of those seeking to change corporate behavior on the climate issue:

> "Political and other actors and their agents also increasingly seek to advance climate change objectives indirectly, such as by seeking to reduce the availability of or increase the cost for, financing and investment in the oil and gas sector and taking actions intended to promote changes in business strategy for oil and gas companies."[151]

The financial world has also noted how the divest-invest movement, and the related "Keep it In the Ground" and "Stop the Money Pipeline" movements, have been successful at halting progress on major new fossil fuel infrastructure projects. The infamous and long-protested Keystone XL Pipeline was finally defeated in 2021.[152] A report prepared by the United States Chamber of Commerce cited fifteen other examples of recent instances where citizen activism resulted in the termination of proposed coal ports, oil and gas pipelines, and other energy infrastructure.[153] Moody's 2020 report on the natural gas sector acknowledged that the change in climate politics is hurting the industry, and noted the effectiveness of the movement's stand against new infrastructure:

> "Development of oil and gas transmission infrastructure, in particular, continues to face legal challenges from environmental groups, which are succeeding in delaying pipeline development ... Environmentalists and Indigenous communities have opposed both oil and gas pipelines as well as broader development projects, such as the Frontier oil sands project in Alberta, Canada. Moreover, even existing pipeline facilities have come under fire, such as the Dakota Access Pipeline and an Enbridge Inc. compressor station that will increase pipeline capacity in Massachusetts."[154]

A study released in 2021 from the University of Edinburgh Business School concluded that the "effect of the fossil fuel divestment movement is highly significant" in reducing the ability of fossil fuel companies to raise new capital.[155]

Finally, evidence of the movement's impact can be seen in the fierce efforts by the oil, gas, and coal industry to discredit it. The industry has supported numerous studies and articles to challenge divestment advocates. These reports usually feature consultant models to argue that fossil fuel divestment would cause financial harm to institutional investors.[156] [157] [158] [159] [160] [161] As noted above, this claim has now been conclusively disproved by real data.

THE RISE OF RENEWABLES

While the fossil fuel industry begins its inevitable collapse, the renewable energy sector is rising with unstoppable momentum:

- Renewables were the only source of electricity generation to grow in 2020, which saw overall energy demands decrease because of the pandemic. The International Energy Agency raised its forecasts for wind and solar capacity growth by 25 percent in a single year.[162]
- It is now cheaper in the U.S. to build new renewable energy generation than to operate existing coal-fired power plants or natural gas lines.[163]
- New investments in renewable energy rose in the U.S. to a record high of $55.5 billion in 2019, an increase of 28 from the previous year.[164]

Use of renewables is growing particularly fast in emerging markets, where 88 percent of the growth in energy demand is expected over the next two decades.[165] A 2021 report from Carbon Tracker said that most developing nations have or will "leapfrog" the use of fossil fuels for electricity generation, going straight to cheaper renewables as they expand electricity access. In developed markets like the United States and Europe, fossil-fuel-based electricity generation has been dropping since 2007. "That means peak global fossil fuel usage for electricity generation was probably 2018," the report concludes.[166]

A new research paper from Oxford University analysed the trends in renewable energy costs to reach a stunning conclusion (emphasis added):

> "Rapidly decarbonising the global energy system is critical for addressing climate change, but concerns about costs have been a barrier to implementation. Most energy-economy models have historically underestimated deployment rates for renewable energy technologies and overestimated their costs. The problems with these models have stimulated calls for better approaches and recent efforts have made progress in this direction. ... We use these methods to estimate future energy system costs and find that, compared to continuing with a fossil-fuel-based system, **a rapid green energy transition will likely result in overall net savings of many trillions of dollars**–even without accounting for climate damages or co-benefits of climate policy.
>
> "The prices of fossil fuels such as coal, oil and gas are volatile, but after adjusting for inflation, prices now are very similar to what they were 140 years ago, and there is no obvious long range trend. In contrast, for several decades **the costs of solar photovoltaics (PV), wind, and batteries have dropped (roughly) exponentially at a rate near 10% per year**. The cost of solar PV has decreased by more than three orders of magnitude since its first commercial use in 1958.
>
> "The combination of exponentially decreasing costs and rapid exponentially increasing deployment is **different to anything observed in any other energy technologies in the past**, and positions renewables to challenge the dominance of fossil fuels within a decade."[167]

In other words, the common narrative about the transition to a renewable energy economy–that it will be expensive, difficult, and only possible in the future–is deeply false. That story has been built on incorrect assumptions about the reliability of renewable energy technology and how fast its costs can drop.[168] The renewable energy future is inevitable and it is arriving faster than expected.

INVESTING IN A RAPID, JUST TRANSITION

As the scale and speed of climate change becomes frighteningly more clear, the scale and speed of the economy's transition must increase to match it. Divestment alone is insufficient. The world's available capital must be redirected towards the transition to clean, renewable energy, clean industrial and transportation systems, and climate-resilient infrastructure and communities.

The current pace of investment does not meet the challenge. Driving these transitions forward more quickly will help to reduce the human suffering that will take place if the world warms 1.5°C or greater. That alone should be enough to satisfy investors' fiduciary duty on the need for greater investment. But to be clear, a faster transition is also critical for the health of the economy. It will both reduce the devastatingly destructive effects of climate change–which is costing billions of dollars annually already–and provide a path forward for robust economic growth. And it can make investors money.

How these investments are made will be just as important as when they are made. The transition to a renewable energy economy represents a huge shift in society and, as with all such upheavals, contains within it both the potential for compounding injustice and the opportunity for positive transformational change. All investors should consider the benefits of focusing their resources on a "just transition," one which avoids the mistakes of past economic shifts and centers economic, gender, and racial justice. As they have with the divestment side of the equation, mission-driven investors have a critical role to play in leading the rest of the investment community forward.

WHY INVESTMENT IN A JUST TRANSITION NEEDS TO SCALE QUICKLY

Scientific consensus has emerged on the need for a rapid transition to renewable energy. Although it is not the only hurdle, insufficient investment remains a barrier to this goal.

The "Net Zero by 2050" roadmap from the IEA released in 2021 found that "immediate and massive" deployment of all available clean and efficient energy technologies is needed in order to limit global temperature rise to 1.5°C. "To reach net zero emissions by 2050, annual clean energy investment worldwide will need to more than triple by 2030 to around $4 trillion," the report says.[169]

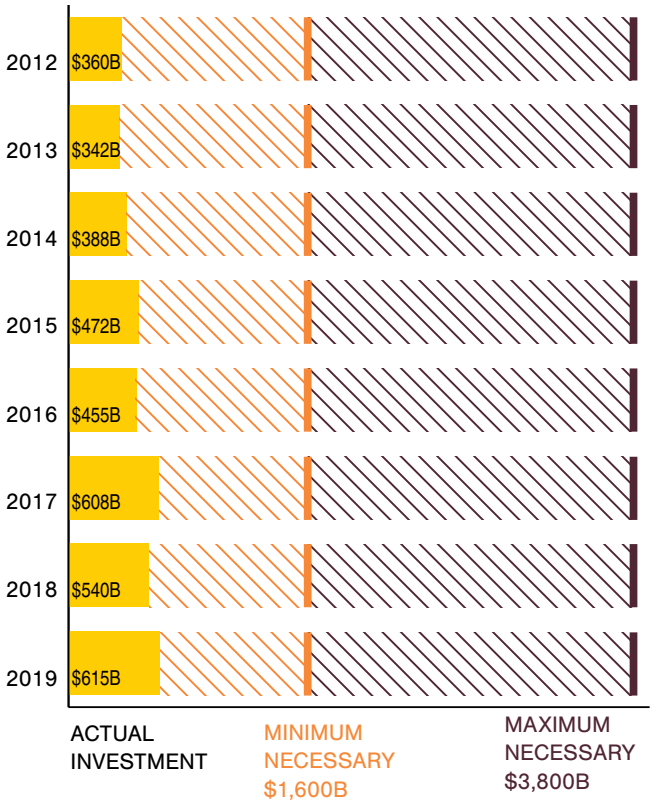
The International Monetary Fund said in October 2021 that the financial world needs to do more to support the transition and that investment vehicles for doing so are still too few:

> "The transition to net-zero greenhouse gas emissions requires unprecedented change by companies and governments, as well as additional investment of as much as $20 trillion over the next two decades. ... The world's $50 trillion investment fund industry, especially funds with a sustainability focus, can play an important role financing the transition to a greener economy and helping to avoid some of the most perilous effects of climate change...

> "However, even though sustainability is becoming mainstream in investment strategies, sustainable investment funds still represent only a small fraction of the investment fund universe. At the end of 2020, funds with a sustainability label totaled about $3.6 trillion, representing only 7 percent of the overall investment fund sector. Funds with a specific climate focus accounted for a meager $130 billion of that total."[170]

ACTUAL VS NEEDED INVESTMENT IN GREEN ECONOMY

Comparison of annual investment in transition to a green economy vs minimum and maximum estimates for needed investment to hold global warming to 1.5°C



Source: "Updated View on the Global Landscape of Climate Finance 2019," Climate Policy Initiative, December 18, 2020, https://www.climatepolicyinitiative.org/publication/updated-view-on-the-global-landscape-of-climate-finance-2019/

Investors must also recognize that the slower the transition to a renewable energy economy, the greater will be the economic burden of responding to climate devastation.

Since 1980, the U.S. National Oceanic and Atmospheric Administration has tracked extreme weather events in the U.S. that cost at least $1 billion in damages and costs. In total there have been 298 events that met that threshold, costing the country over $1.975 trillion.[171] But both the frequency and total cost of such events is rising alarmingly:

> 2020 set the new annual record of 22 events - shattering the previous annual record of 16 events that occurred in 2011 and 2017. 2020 was the sixth consecutive year (2015-2020) in which 10 or more billion-dollar weather and climate disaster events have impacted the United States. Over the last 41 years (1980-2020), the years with 10 or more separate billion-dollar disaster events include 1998, 2008, 2011-2013, and 2015-2020.[172]

As of the end of September, 2021 is on pace to exceed 2020's record on total costs.[173]

Globally, the collective cost of responding to climate-driven disasters–especially in communities that lack basic, essential services and economic opportunity–far outweighs the cost of investing in community preparedness and economic resilience today. A 2019 report from the Global Commission on Adaptation, headed by former UN Secretary-General Ban Ki-moon, philanthropist Bill Gates, and IMF Chair Kristalina Georgieva, said investment in climate adaptations such as early warning systems and clean, resilient infrastructure will be critical for avoiding massive human suffering. But such investments would also bring clear economic benefits (emphasis in source):

> "The Commission found that the overall rate of return on investments in improved resilience is very high, with benefit-cost ratios ranging from 2:1 to 10:1, and in some cases even higher. Specifically, our research finds that **investing $1.8 trillion globally in five areas from 2020 to 2030 could generate $7.1 trillion in total net benefits. ... The case for ambitious adaptation is clear, but it's not happening at nearly the pace and scale required.** This is because climate impacts and risks are not yet adequately factored into decisions by those who make choices about the future."[174]

Achieving such adaptation will require, among other things, a "revolution in finance" to increase the flow of money to adaptation projects, the report found.[175]

Along with avoiding calamity, there are strong economic benefits to a broad-based increase in investment in a rapid, just transition. Worldwide, renewable energy already employs 11.5 million people.[176] Two of the five fastest-growing occupations in the U.S. over the next ten years will be renewable energy jobs–wind turbine technician and solar panel installer–according to U.S. government data. No fossil fuel jobs are on the list of the top 20.[177] A rapid increase in renewable energy development can grow these jobs significantly, and the world economy with it. One study by the International Renewable Energy Agency (IRENA) revealed that doubling the percentage of renewables in the world energy supply and increasing energy access by 2030 would increase global GDP by up to 1.1 percent, or $1.3 trillion.[178] A 2020 Roosevelt Institute Report explained why investment in renewables is better for the economy than investment in fossil fuels:

> "Compared to fossil fuels, clean energy is highly labor-intensive. In fact, investments in clean energy generate nearly three times more jobs than comparable investments in fossil fuels (Garrett-Peltier 2017). This is largely because 'investments in clean energy—including the direct spending on specific projects plus the indirect spending on purchasing supplies—devote significantly more of their overall budgets on hiring people and relatively less on acquiring machines, supplies, land (either on- or offshore), and energy itself' when compared to fossil fuels (Pollin et al. 2014). Renewables also create many more jobs in the short term, which leads to more private spending, an expansion of demand, and an increase in short-run GDP multipliers."[179]

A 2018 report by researchers from the London School of Economics and Harvard University makes a cohesive case for why investors should build a strategy around not only rapid transition, but just transition. The researchers argue that investors need to understand that a poorly managed transition would trigger rising economic inequality, which represents a systemic risk to their portfolio. Similarly, they need to account for the benefits to the economy, and their financial returns, from investments that improve overall societal and environmental conditions.[180]

> "As the pace of decarbonisation accelerates and the physical impacts of climate change intensify, the just transition approach will increasingly provide investors with a strategic way to anticipate, evaluate and respond to the social and economic implications for their beneficiaries, their portfolios and the financial system as a whole.[181]

A fully just transition would also close the gap on universal energy access, particularly in the Global South. Nearly 800 million people lack basic access to reliable electricity today. The problem was badly exacerbated by the COVID-19 pandemic in 2020, which made electricity financially inaccessible for an additional 30 million people, mostly in Africa.[182]

Decentralized, renewable energy projects are the cleanest, quickest, and most affordable way to close the energy access gap in Africa.[183] Mission-driven investors have already found these projects successful in increasing energy access, reducing emissions, and generating local jobs.[184] Overall, about $35 billion of investment is needed every year from now to 2030 to achieve universal electrification with net zero emissions, according to the IEA.[185] Building renewable energy systems could create 25 million jobs in Asia and Africa[186] and improve healthcare. These outcomes and others tied to energy access can broadly stimulate macroeconomic growth.[187]

Increasingly, investors are organizing to push their peers to embrace a just transition. As of 2020, a coalition of 161 investors representing $10.2 trillion in assets were signed onto the "Statement of Investor Commitment to Support a Just Transition on Climate Change:"

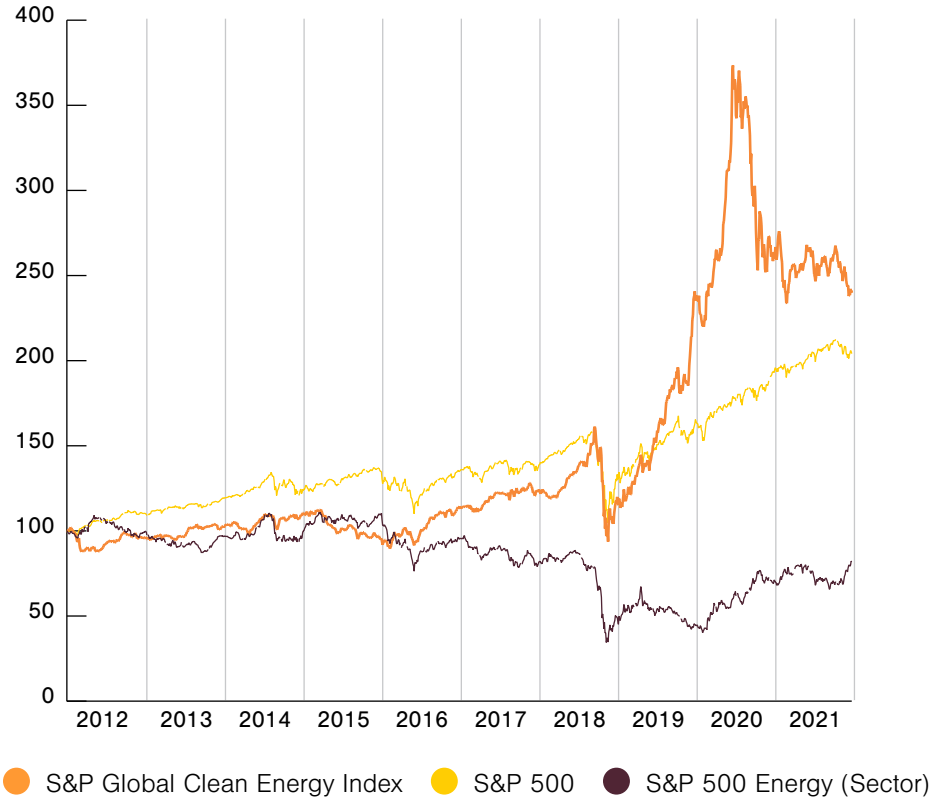
> "As investors with a requirement to act in the best interest of our beneficiaries and in line with our fiduciary duties, we believe that strategies to tackle climate change need to incorporate the full environmental, social and governance (ESG) dimensions of responsible investment. There is an increasing recognition that the social dimension of the transition to a resilient and low-carbon economy has been given insufficient attention, notably in terms of the implications in the workplace and wider community. Achieving a just transition, in line with the 2015 Paris Agreement on Climate Change, will help to accelerate climate action in ways that deliver the Sustainable Development Goals."[188]

Finally, while a robust investment strategy for a just transition can take many forms, it's clear based on long-term past performance and the current outlook that it could be profitable for any investor who pursues it.

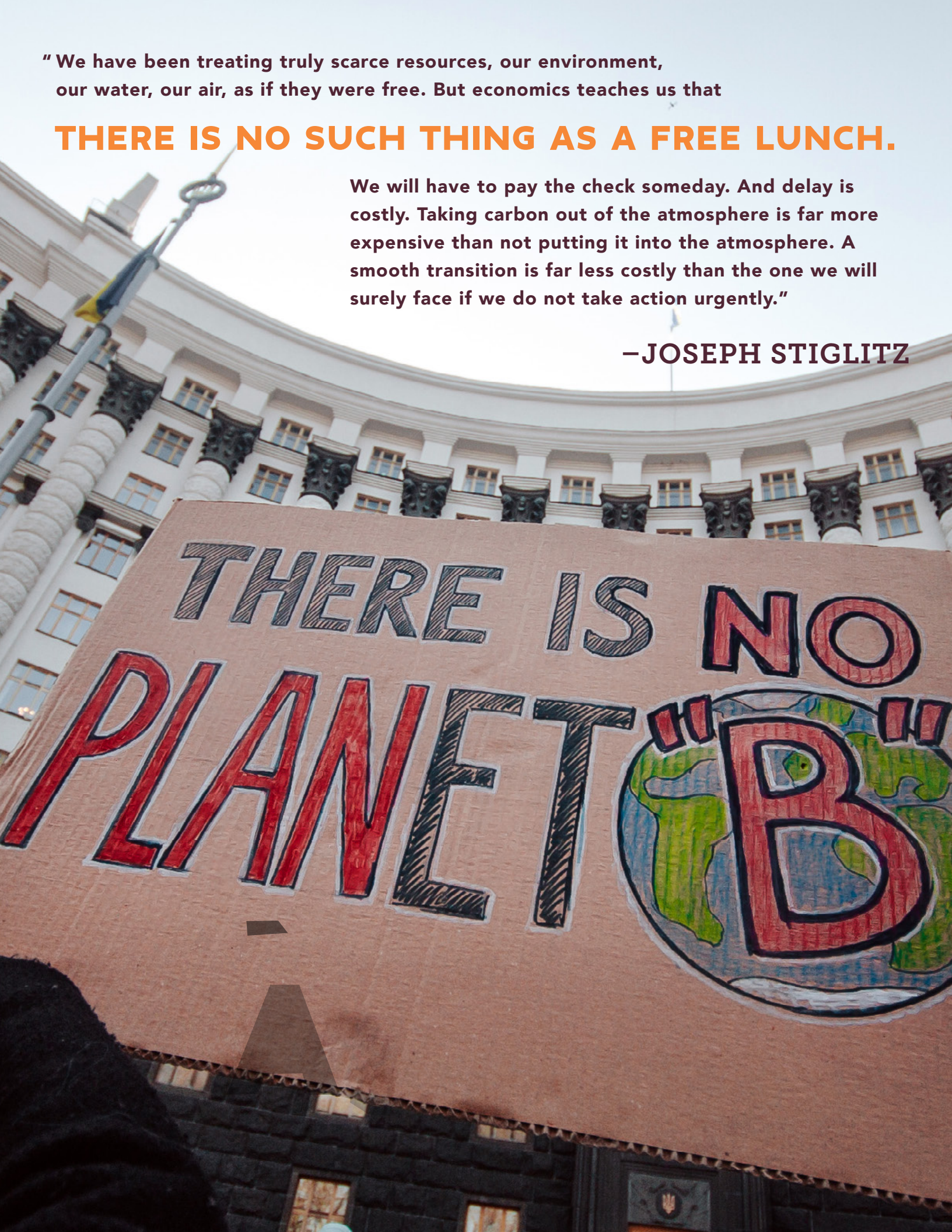
For example, compare the 5-year annualized total returns of the S&P's Global Clean Energy Index, which tracks the performance of "global clean energy-related business," to both the S&P 500 market benchmark and the S&P's energy sector index, which tracks major U.S. companies in all sectors of the fossil fuel supply chain. The clean energy index, with annualized returns of about 22 percent, beat the market's 17 percent. Meanwhile, the fossil fuel index lost money, with annualized returns of -1.6 percent.[189] [190] [191] [192]

RENEWABLES VS FOSSILS IN THE MARKET

Comparison of stock market gains for the clean energy sector, fossil fuel sector, and the overall stock market, per S&P indices.



Source: S&P Dow Jones Indices



"We have been treating truly scarce resources, our environment, our water, our air, as if they were free. But economics teaches us that

THERE IS NO SUCH THING AS A FREE LUNCH.

We will have to pay the check someday. And delay is costly. Taking carbon out of the atmosphere is far more expensive than not putting it into the atmosphere. A smooth transition is far less costly than the one we will surely face if we do not take action urgently."

—JOSEPH STIGLITZ

CASE STUDY

NAVAJO POWER

Navajo Power is “a native majority owned clean energy developer” working to build renewable energy generation in the Navajo Nation and other tribal lands.

The company received $4.5 million in seed funding in 2020 for projects that include solar panel assembly operations on Navajo land and the deployment of off-grid energy systems for thousands of Navajo families who still lack access to electricity.

The company is focused on ensuring that the benefits of the renewable energy resolution reach the many tribal communities that have depended on fossil fuels not just for energy, but for employment.

“Coal was the backbone of the Navajo Economy for many years,” said Jerry Williams, the Chapter President of the LeChee community on Navajo. “I myself worked at Navajo Generating Station for 40 years, along with 460 other Navajo workers at the plant and another 400 at Peabody Coal mine. As we move forward and transition to renewable energy, we can’t forget about the communities and workers who provided energy for the West and the world. ... That’s what got me excited about Navajo Power.”

Brett Isaac, founder and CEO of Navajo Power, noted that the Navajo Nation has what could be the highest unemployment rate in the country at 65%. “We need to put people back to work in creating the clean energy future. ... Clean energy can be our bridge.”[193]

MISSION-DRIVEN INVESTORS MUST LEAD ON A JUST TRANSITION

As they have for the past decade, mission-driven investors have a special role to play. Schools, churches, cities, and foundations were early adopters of the divestment strategy because they had a broader interpretation of their investment responsibilities and understood that continued financial support of the fossil fuel industry was deeply harmful to the constituencies they serve. Now these institutions must recognize that they have an equally crucial responsibility to demonstrate the power and possibility of investment in a just transition.

It is well understood that the climate crisis will disproportionately hit low-to-middle income countries and communities the hardest. Marginalized communities in these areas, such as women and children, who often lack basic human rights and access to essential services, are particularly vulnerable. The UN climate panel's 2018 report said that even if the world meets the goals set out in the Paris agreement, these communities will suffer:

> Warming of 1.5°C is not considered 'safe' for most nations, communities, ecosystems and sectors and poses significant risks to natural and human systems as compared to the current warming of 1°C ... The impacts of 1.5°C of warming would disproportionately affect disadvantaged and vulnerable populations through food insecurity, higher food prices, income losses, lost livelihood opportunities, adverse health impacts and population displacements.[194]

Institutions with a mission or values that prioritize care for these communities should therefore prioritize investments in a transition that will allow them to build resilience, long-term economic wealth, and political power.

Similarly, a poorly managed transition could be devastating for the workers and communities who have relied on the fossil fuel economy. Historically, economic transitions driven by market forces and powerful corporate entities have left workers and communities behind. Such economic shocks can be very damaging to individuals and communities in both tangible and intangible ways, as major industrial employers like mines, plants, and factories are often part of a region's culture and identity. Economic impacts can be made worse by structural racism, gendered discrimination, and persistent wealth inequality. Much of the political resistance to the transition away from fossil fuels is grounded in these harsh realities. Mission-driven investors who want to remediate, rather than exacerbate, inequalities should ensure that projects they are supporting guarantee strong union jobs with worker protections, sufficient wages, and benefits.[195]

A fully just transition remains a fluid concept, and mission-driven institutions should consider the full breadth of possibilities as they design their investment strategy. A 2021 report from the Labor Network for Sustainability described it this way:

> "Just transition ideals can be seen along a spectrum. On one end is a relatively narrow concept that addresses and mitigates the job and revenue losses from ending use of fossil fuels. From there, the idea expands to incorporate specific attention to workers and communities who were excluded from the benefits of a fossil-fuel economy in the first place, all the way to understanding just transition as a holistic transformation of existing institutions and structures, fundamentally reconfiguring the relationship between human beings, industry, land and resources.
>
> "A just transition that includes all workers recognizes the exploitative nature of existing working conditions and the ties between underlying systemic racism and the precarity of work. Underlying racism and worker exploitation must be addressed for a just transition. ... In other words, for there to be a just transition, underlying social injustices must be addressed to avoid replicating the same systems of resource and human exploitation.
>
> "Moving beyond expanding just transition to include all workers, some argue that just transition must address all exploitation, including exploitation of land and natural resources. In this ideal of just transition, there is a clear relationship between exploitation of land and the climate crisis. Addressing the climate crisis will require not just ending the use of fossil fuels, but a fundamental change in our relationship with land and natural resources.
>
> As such, just transition goes beyond an energy transition: it is a rethinking of land and resource use."[196]

For example, the need for investments in the transition does not just include things like electricity generation and the built environment, but also includes investments in services such as health care, community and ecosystem adaptation, and child and elder care. A 2021 report from the Feminist Green New Deal Coalition observed that investments in the care economy both provide the foundation for a transition to new economic models and are a source of future employment for transitioning workers:

> "Without universal access to high-quality and affordable care, there will remain disproportionate barriers to women, and especially women of color, to entering the clean energy workforce, which today is predominantly male. ... To truly accomplish a just transition, we must recognize careers in care as important options for the transitioning workforce, dismantle harmful gender norms and break down stigmas of who does paid (and unpaid) care work, and make certain that care jobs are high-quality jobs."[197]

Finally, the transition to a renewable energy economy must include a focus on closing the electricity access gap. Along with the macroeconomic effects described earlier, expanding access to clean, renewable energy has clear benefits for human rights and wellbeing in the Global South, which is why it was identified as a priority by the UN in both the Paris Agreement[198] and the Sustainable Development Goals.[199] It would benefit households by saving time, providing access to information and earning opportunities, and enabling human development within the household.[200] Expanding access to electricity particularly benefits women, who on average spend more time on household chores and child care. For example, women's employment in rural South Africa increased by 9 to 9.5 percent within 5 years of electrification, while male employment rose by only 3.5 percent.[201]

Just transition projects are already underway across the globe, in places as diverse as Colorado[202] and South Africa.[203] As with the overall shift to clean, renewable energy, a just transition is increasingly being centered in domestic and international energy and climate policy discussions. The question remains whether investors will get ahead of the curve.

Photo by Ashden

CASE STUDY

FRONTIER MARKETS IN INDIA

Many rural areas of India still struggle with access to energy. Frontier Markets, an e-commerce startup that employs women in rural India,[204] had sold over 650,000 renewable energy products by February 2019, primarily through its program.

Sahelis are trained in use of the company's technology platform and are then able to reach women in some of India's poorest and most remote areas. About 2,000 women have trained for the program, and the network has proven successful in selling solar lamps and other systems that can provide clean, reliable sources of light.

According to Ashden, a nonprofit focused on recognizing climate innovations: "Solar systems make cooking and studying easier, providing brighter, less smoky light than kerosene lamps. Robust, long-range [flashlights] are particularly popular with women, for moving around outside after dark and checking livestock. Solar [flashlights] are brighter and more reliable ... For many women [working as Sahelis], this is their first significant income, and very useful for buying clothes and household equipment, contributing to children's education, and saving for weddings."[205]

Frontier Markets secured additional funding in 2021 and plans to grow to 1 million rural women entrepreneurs and 100 million customers by 2025.[206]

CONCLUSION

Divestment remains a critical strategy for the climate movement. It must be combined with an accelerated push for investment in a just transition to a clean, renewable energy future if the world is to avoid a future of worsening human injustice and irreversible ecological damage. Financial arguments against divest-invest no longer hold water.

Institutional investors and other financial actors must agree to these three principles if they want to be on the right side of history and humanity:

1. All institutional investors must make an immediate public commitment to fully divest from and stop all financing of coal, oil, and gas companies and assets. Institutions that have partially divested must now divest all of their assets from all fossil fuels. As linked to this commitment, all institutions must align their policy, regulatory positions, and political expenditures with this commitment.
2. All institutional investors must immediately move to invest a minimum of 5 percent of their assets in climate solutions, doubling to 10 percent by 2030, including investments in renewable energy systems, universal energy access, and a just transition for communities and workers. Further, investors must hold these companies accountable to respecting Indigenous and other human rights and environmental standards.
3. To achieve Net Zero emissions by 2050, all institutional investors should adopt Net Zero plans that both immediately cut investments in fossil fuels and ensure that all other assets in their portfolio develop transition plans that halve absolute emissions by 2030, consistent with science's demands to limit global warming to 1.5°C.

Societies, economies, and the climate are all changing. The financial world will have to change with them.

METHODOLOGY

The tally of divestment commitments and assets under management is taken from the Global Divestment Commitments Database, currently managed by Stand.earth in partnership with 350.org. This is the most comprehensive database of public divestment pledges. The true amount of money being pulled out from fossil fuels is almost certainly larger since not all divestment commitments are made public.

For this report, an update of the assets under management (AUM) of the institutions listed in the database was conducted, using the best available public information disclosed by those institutions or reported on by third parties. In past reports, and in the database itself, the assets were calculated based on their value at the time of the commitment. As the age of the movement has grown, this has meant that the total financial impact of the movement has been underestimated–the vast majority of institutions have seen their assets grow, in some cases, quite significantly, since the time of their commitment. To better reflect the true current value of the movement, this report updates these assets under management and will do so going forward in future reports.

Note that asset sizes represent the total assets under management of institutions that have committed to divest and do not represent the amount divested from fossil fuel companies. For this and all prior reports, AUM is used as the metric because the precise amounts of an investor's portfolio devoted to fossil fuels is often not known, and the total AUM represents the total pool of potential capital being taken "off the table" for the fossil fuel industry. Fossil fuel divestment commitments vary in the reach and impact on investments. Many fossil fuel divestment commitments are partial in nature, in that the institution has chosen to divest solely from thermal coal or tar sands or only the largest fossil fuel companies by size of reserve. Others have committed to divesting only certain asset classes. As the movement has evolved, this spectrum of divestment commitments has widened. In recent years, divestment commitments have tended to be more comprehensive and restrictive, capturing a wider group of fossil fuel companies, with less of a focus solely on coal. Of late, there is increasing focus on private equity investments and their heavy exposure to fossil fuel companies, often ones that are more risky than publicly traded firms. This reflects the evolving financial literacy of decision makers as they increasingly recognize the risk of the entire fossil fuel industrial chain, beyond just coal.

Data on institutions' assets was obtained from various sources. In many cases, when an institution publicly commits to divest, it discloses the value of its assets. In cases where this information is not made available in an announcement, and for the purposes of updating assets under management, this report relies on several public sources including reported size of endowment, annual and financial reports, and information posted on institution's websites. In each case, both the AUM and written confirmation of the institution's commitment to divest were verified by independent researchers before being confirmed as final.

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CORE PARTNER ORGANIZATIONS

ENDORSING ORGANIZATIONS

RAN, GreenFaith, People & Planet, Mid-Ohio Valley Climate Action, Green Education and Legal Fund, People of Albany United for Safe Energy, The United People Project , 350Vermont, Shift: Action for Pension Wealth & Planet Health, Texas Campaign for the Environment, Climate Hawks Vote, WESPAC Foundation, Inc., Texas Campaign for the Environment, Divest Ed, Youth Emergency Auxiliary Services Sierra Leone(YEAS-SL), 350PDX, Volusia Climate Action, New Mexico Climate Justice, FreshWater Accountability Project , 350NYC, Green America, 350 Colorado, DivestNY, 350GDL, 350 Bay Area, 350 West Sound Climate Action, Divest NJ, Extinction Rebellion San Francisco Bay Area, 350 Charlotte, Fossil Free California, AtEnergyStocks.com, Jai Jagat US, Fossil Fuel Divest Harvard, 350 Butte County, Elders Climate Action, 350 New Orleans, Divest NY, 350MoCo, Future Coalition, 350 Triangle, Extinction Rebellion San Francisco Bay Area, 350 Hawaii, Divest Oregon, 350Vermont, Earth Guardians, Maine Youth for Climate Justice, 350 Maine, NM Climate Justice , CCAG, 350 Conejo / San Fernando Valley, 350 Butte County, UNM LEAF (Leaders for Environmental Action and Foresight), Women's Earth and Climate Action Network (WECAN), Extinction Rebellion San Francisco Bay Area, Platform London

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