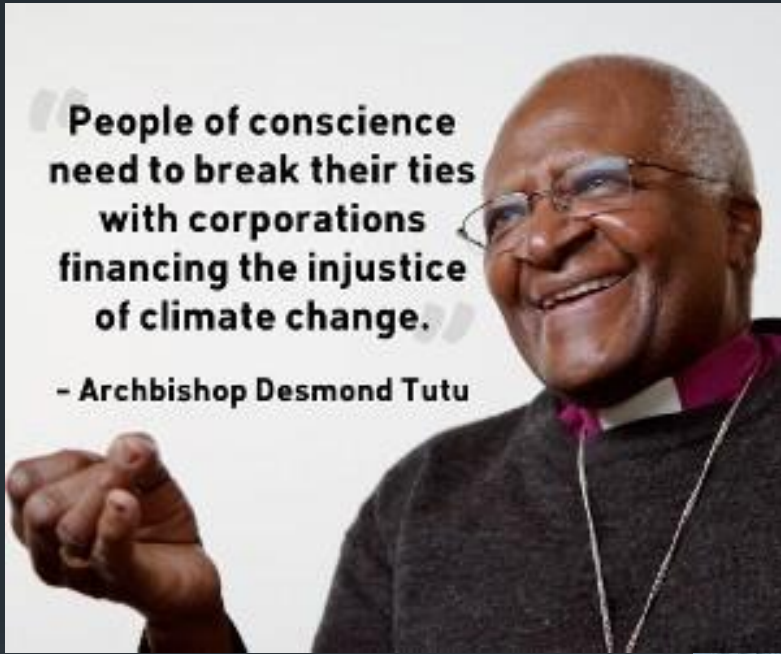


Fossil Fuel Divestment

“People of conscience need to break their ties with corporations financing the injustice of climate change.”

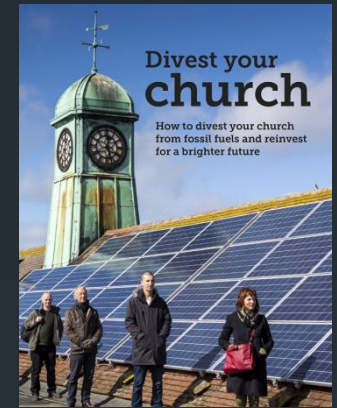
- Archbishop Desmond Tutu



Why the **United Church of Christ** divested from fossil fuels:

All of us hope this resolution will become a model for all faith communities who care about God's creation and recognize the urgent scientific mandate to keep at least 80 percent of the known oil, gas and coal reserves in the ground.

- Rev. Jim Antal



NEW YORK'S ICONIC RIVERSIDE CHURCH TO DIVEST \$140 MILLION ENDOWMENT!
MOMENTUM BUILDS TO #DIVESTNY

JOIN US: #DIVESTNY / DIVESTNY.ORG



Effects of Current World Wide Carbon Consumption and Chicago's Climate Future:

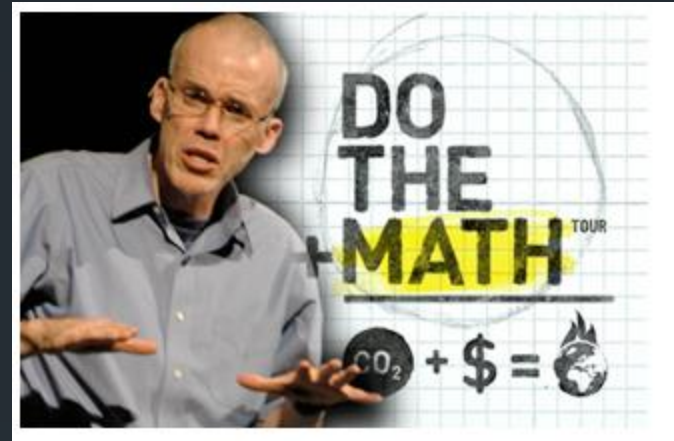
- Hotter summers, longer and more intense heat waves
- Heavier downpours and elevated possibilities for flooding and overwhelming the city's sewer systems.
- Lake Michigan and the Chicago River will see increased pollution risk from excessive run-off.
- By 2070, if nothing changes in carbon consumption levels, Chicago will experience 35% more precipitation in winter and spring.
- 20% less precipitation in summer and fall may lead to depletion of Lake Michigan's water levels, adversely impacting economic and tourist activities in Chicago and the Great Lakes region in general.

History of the Divestment Movement

- 2012 Divestment Campaign launched by 350.org
- Do the math tour
- Started on college campuses
- Moved into faith organizations, governments
- 2014 Symbolic – Rockefeller Foundation, World Council of Churches divest
- 2015 UN backs divestment
- 2017 NY/NYC divests



The Climate Math



- We can only burn **565** more gigatons of carbon dioxide and stay below **2°C** of warming - anything more risks catastrophe for life on earth. Fossil fuel corporations now have **2,795** gigatons of coal, oil, and gas in booked reserves, essentially five times the safe amount.

Divestment Commitments

- June 2016, New York and Pacific Northwest Annual Conferences Vote to Divest from Fossil Fuels; Northwest United Methodist Foundation Will Also Divest

OVERVIEW

Totals

\$6.01 TRILLION

APPROX. VALUE OF INSTITUTIONS
DIVESTING

[How is this number calculated?](#)

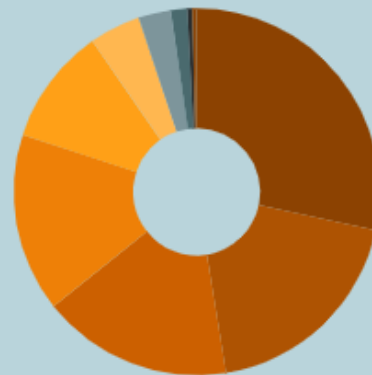
837

INSTITUTIONS DIVESTING

58,000+

INDIVIDUALS DIVESTING ABOUT \$5.2
BILLION

What kinds of institutions are divesting?



- Faith-based Organization — 28%
- Philanthropic Foundation — 19%
- Government — 17%
- Educational Institution — 16%
- Pension fund — 10%
- NGO — 5%
- For Profit Corporation — 3%
- Healthcare Institution — 1%
- Cultural Institution — 0%
- Other — 0%

Why Divestment?

- MORAL:
 - The burning of fossil fuels is significantly altering the climate and endangering civilization.
 - The poor are disproportionately affected.
- POLITICAL:
 - Divestment campaigns work to remove the social license to prioritize profit over people and planet.
- FINANCIAL:
 - Divestment defunds the exploration, mining, extraction and burning of fossil fuels.

Pressures Towards Divestment



**Financially
Prudent**

**1.
Carbon
Bubble is
Bursting**

**2.
Renewables
are
Competitive**

**3.
Decreased
Demand for
Fossil Fuels**

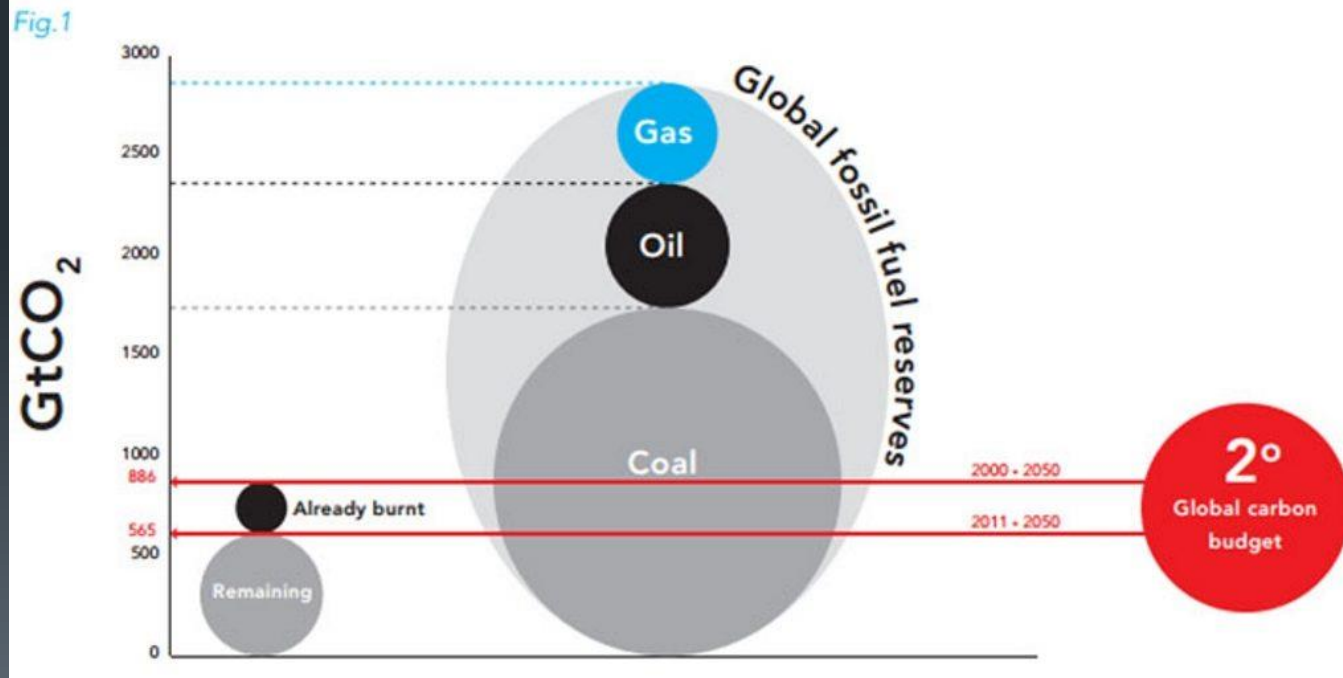
**4.
Regulatory
and Legal
Risks are
Escalating**

**5.
Financial
Opportunities
from the
Transition**

Carbon Bubble is Bursting

- Poor returns in FF and increased returns in divesting
- Stranded assets

Comparison of the global 2°C carbon budget with fossil fuel reserves CO₂ emissions potential



The Performance Myth

A study conducted by Aperio Group in 2016 compared the performance of fossil fuel free portfolios to the performance of their underlying benchmarks from 1988 through 2013.

- In the case of U.S.-only stocks, the fossil fuel free portfolio outperformed its benchmark by a fraction of a percent (0.05%) over the 25-year period.
- Over rolling 10-year periods, the U.S.-only carbon-free portfolio outperformed its U.S. benchmark 68% of the time.
- For a portfolio of global stocks, the fossil fuel free portfolio outperformed its benchmark by 0.31% over the 25-year period.
- Over rolling 10-year periods, the global carbon-free portfolio outperformed its global benchmark 100% of the time.

Conclusion: *it is simply untrue that investors must sacrifice return in order to divest of fossil fuel investments.*

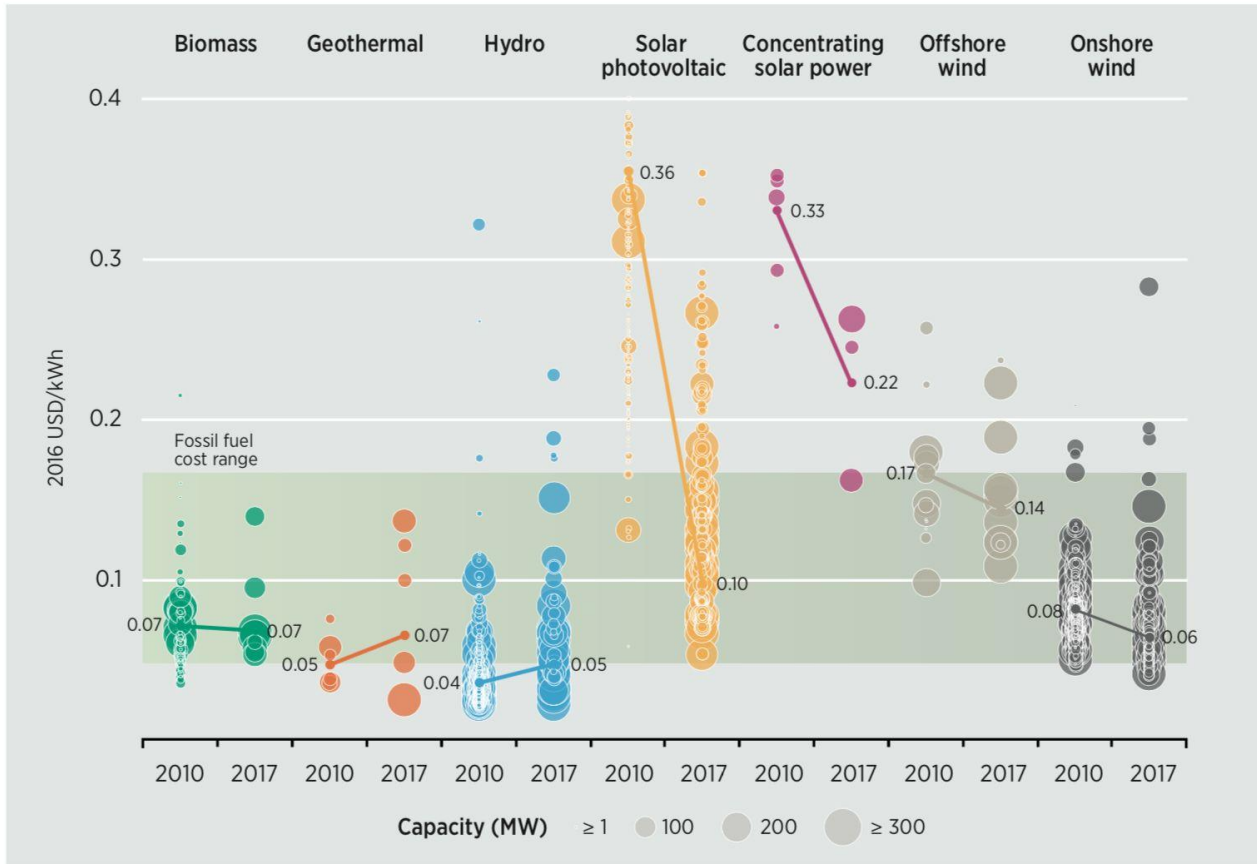
Source: Patrick Geddes, Lisa Goldberg, Robert Tymoczko, Michael Branch. "Building a Carbon Free Portfolio". Retrieved from <https://www.aperiogroup.com/resource/138/node/download>.

Jim Blachman, CFA, Gerard Cronin, CFA, Daniel Kern, CFA. "Fossil Fuel Divestment: Risks and Opportunities". Retrieved from www.advisiorpartners.com



Renewables are Competitive

Figure ES.1 Global levelised cost of electricity from utility-scale renewable power generation technologies, 2010-2017



Source: IRENA Renewable Cost Database.

Note: The diameter of the circle represents the size of the project, with its centre the value for the cost of each project on the Y axis. The thick lines are the global weighted average LCOE value for plants commissioned in each year. Real weighted average cost of capital is 7.5% for OECD countries and China and 10% for the rest of the world. The band represents the fossil fuel-fired power generation cost range.

Renewables are Competitive



- According to Morgan Stanley, wind and solar will be cheaper to install, operate and maintain than natural gas by 2020.
- Battery Storage Technology will grow from \$300 Million to over \$4 Billion by 2019-20 replacing gas peaker plants, stabilizing electric grid and making wind and solar more dependable.
- Electric Vehicles(EV's) and Autonomous Vehicles(AV's) are poised to increase market share globally due to battery tech.

Decreased Demand for Fossil Fuels

- Oil hits peak demand between 2020-23 with estimated 2 million barrels/day removed from market and potentially 25-30 million/day by 2030, causing slump in prices
- As oil prices slump and eventually crash, costly oil fields will be driven from production, leading to diminished oil company valuations, especially corporations heavily invested in expensive Tar Sands and Shale extraction.
- Bloomberg Energy Finance concludes:
 - “One thing is certain: Whenever the oil crash comes, it will be only the beginning. Every year that follows will bring more electric cars to the road, and less demand for oil. Someone will be left holding the barrel.”
- Coal has lost 90% of market capitalization and will not recover due to market forces favoring renewable tech.
- Costliness of coal versus wind and solar will drive coal from the marketplace; most existing coal plants are 30-60 years old and Citibank analyst Ed Morse states,
 - “No Board of Directors of a utility is gonna sanction a new thermal coal power plant that’s gonna last fifty years.”

Regulatory and Legal Risk Escalating

- Signals from organizations
 - **Paris Agreement** - a major driver towards decarbonization, there is now a global agreement that will drive markets financially.
 - **United Nations** – continued investment in fossil fuel would deliver "an unsustainable future", Secretary-General of the United Nations Antonio Guterres
 - **World Bank** - no longer finance upstream oil and gas projects after 2019, apart from certain gas projects in the poorest countries in exceptional circumstances
 - **US Climate Alliance** - a bipartisan coalition of governors committed to reducing greenhouse gas emissions consistent with the goals of the Paris Agreement.
- Impending regulations
 - Off Fossil Fuels Act
 - States still committed to meet or exceed the Clean Power Plan (AR, CA, CO, MA, MN, NV, NY, OR, RI, WA)
- Lawsuits
 - NYC + 8 other cities and counties are suing 5 big oil companies, Paris (which committed to divest 5 years ago) is also considering suing.
 - Attorneys General in MA and NY opened an investigation into Exxon Mobil defrauding shareholders.

Investment Rationale for Divestment

Investment managers and stewards of capital have a fiduciary responsibility to prudently manage investment risk. Climate change poses four categories of risk to the value of investment assets.

- **Impact risk** is the risk of loss due to destructive physical effects of climate change. Rising sea levels, increased storm severity, and extreme weather events pose substantial risk to critical infrastructure such as oil rigs and pipelines.
- **Stranded asset risk** is the risk that future regulatory and societal shifts will make large carbon reserves economically unviable, resulting in billions of dollars of assets that will never be developed.
- **Transition risk** is the risk that certain businesses or industries will be adversely impacted by the global transition to a low-carbon economy. Tax policy changes that increase the price of carbon, along with technological advancements in clean energy and energy efficiency should erode the demand for fossil fuels, permanently impairing reserves.
- **Litigation risk** refers to the possibility that companies will be sued as a result of their contributions to climate change and associated impacts.

Financial Opportunities from the Transition

- The opportunities from the sustainable energy transition, with more favorable policies and more mature technologies, are significant. As more investors publicly commit to DivestInvest, the policy and financial environment become even more favorable in a virtuous cycle of supply and demand.
- The finance sector is responding to investor demand, creating new fossil fuel free products to make the process of divesting and investing easier and cheaper. In 2015, global [investment](#) in renewables was double that of fossil fuels.

Moral Imperative as Christians

- Creation care
 - We are not on the earth, we are of the earth
 - All nature has intrinsic value
 - We are decimating the earth
- Helping the most vulnerable
 - Fossil fuel extraction contributes to the exploitation of local peoples
 - Climate change disasters adversely affect the poor
 - Developed countries cause the majority of the carbon pollution
- Individual action is not enough
 - We need leadership on a larger scale
- From the Pope's Encyclical
 - "...how inseparable the bond is between concern for nature, justice for the poor, commitment to society, and interior peace."
 - "...we have to realize that a true ecological approach always becomes a social approach; it must integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor."
 - "Never have we so hurt and mistreated our common home as we have in the last two hundred years. Yet we are called to be instruments of God our Father, so that our planet might be what he desired when he created it and correspond with his plan for peace, beauty and fullness. The problem is that we still lack the culture needed to confront this crisis. We lack leadership capable of striking out on new paths and meeting the needs of the present with concern for all and without prejudice towards coming generations."

References

- <http://www.pnwumc.org/news/new-york-and-pacific-northwest-annual-conferences-vote-to-divest-from-fossil-fuels-northwest-united-methodist-foundation-will-also-divest/>
- <https://gofossilfree.org/paris-considers-suing-the-fossil-fuel-industry/>
- <https://phys.org/news/2017-11-fossil-fuel-investment-unsustainable-future.html>
- <https://www.reuters.com/article/us-climatechange-summit-worldbank/world-bank-says-will-cease-financing-upstream-oil-and-gas-after-2019-idUSKBN1E61LE>
- <https://www.offossilfuels.org/off-act/>
- <https://fwaction.us/2EuQnID>
- <http://www.georgetownclimate.org/articles/state-reactions-to-trump-repealing-the-clean-power-plan.html>
- <https://www.usclimatealliance.org/>
- <https://www.divestinvest.org/why-divestinvest/finance/>
- <https://www.greentechmedia.com/articles/read/irena-renewable-energy-competitive-fossil-fuels-2020#gs.nh8ZPRk>
- <https://oilprice.com/Finance/the-Markets/Clean-Energy-Stocks-Outperform-Oil-And-Gas.html>
- <https://www.morganstanley.com/ideas/solar-wind-renewable-energy-utilities>
- <https://www.morganstanley.com/ideas/renewable-energy-storage-solar-electric-grid>
- https://static1.squarespace.com/static/585c3439be65942f022bbf9b/t/591a2e4be6f2e1c13df930c5/1494888038959/RethinkX+Report_051517.pdf
- http://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/collaborative-publications/Expect-the-Unexpected_CTI_Imperial.pdf Executive Summary
- http://www.imperial.ac.uk/media/imperial-college/grantham-institute/public/publications/collaborative-publications/Expect-the-Unexpected_CTI_Imperial.pdf Executive Summary
- <https://www.bloomberg.com/features/2016-ev-oil-crisis/>
- <https://www.eia.gov/todayinenergy/detail.php?id=1830>
- <https://www.bloomberg.com/news/articles/2017-02-22/exxon-takes-historic-cut-to-oil-reserves-amid-crude-market-rout> See Embedded Video