

The Quiet Culprit: Pension Funds Bankrolling the Climate Crisis

A review of 14 public pension funds and their
\$82 billion invested in fossil fuels





ABOUT

Banks, insurance companies, and institutional investors such as pension funds, are the great enablers of climate change. By financing fossil fuel companies, they enable these companies to continue to produce and burn more fossil fuels, driving up global greenhouse gas emissions at the very time when we need to be doing the exact opposite – urgently and rapidly decreasing emissions.

Without financing, these companies would not be able to continue to pollute to the degree that they do, nor have the political influence that they continue to wield. From being direct investors in these companies to providing cash, loans, credit facilities and insurance, financial institutions such as banks, pension funds, insurance companies and asset managers enable fossil fuel companies to expand fossil fuel use.

With more than \$46 trillion in assets worldwide, pension funds are among the largest institutional investors in fossil fuels. Climate change poses serious risks to both pensioners and their investments. Pension fund divestment from fossil fuels not only supports sustainable growth and a transition towards a low-carbon economy and leads to an increase in the cost of capital to fossil fuel companies, it fulfills a prudent financial responsibility to protect the rights of pensioners by reducing the risk of exposure to an underperforming fossil fuel sector, particularly in the long term¹.

Recent research of fourteen public pension funds in the [Climate Safe Pensions Network](#) by Third Rail Economy and [Stand.earth](#) flagged \$81.6 billion in assets, or 5.9% of all fund assets, as likely “fossil fuel” holdings.

The [Climate Safe Pensions Network](#) is a distributed network of city, county, state and national pension divestment and shareholder advocacy campaigns which are active in over 20 jurisdictions across North America. The CSPN is coordinated and supported by [Stand.earth](#).

\$81.6

Billion invested in fossil fuels

¹ [Cost of Capital spikes for Fossil Fuel Producers](#), Bloomberg Green, November 9th 2021 by Tim Quinson

Pension funds are among the largest institutional investors in fossil fuels. Across Canada and the USA, they have hundreds of billions invested in the world's largest coal, oil and gas companies. Many of these companies are actively expanding fossil fuel infrastructure, from tar sands and gas pipelines, to fracking wells and offshore drilling – even digging new coal mines and building new coal-fired power plants. Coal, oil, and gas companies are underperforming the rest of the market, making investments in fossil fuels by public pension funds inherently risky. It is widely expected that the assets of many fossil fuel companies will eventually become stranded and stock values will plunge, jeopardizing the hard-earned retirement benefits of public employees

and putting an additional burden on tax-payers and city and state budgets. Nearly **30% of fossil fuel industry shares** are held by pension funds – with as much financial power as pension funds hold, they could be a force to reckon with in the battle to confront, slow and mitigate climate change.

Pension funds must take climate protection seriously for their own financial well-being and for the well-being of their members. The fastest way for pensions to address climate change is to divest from their fossil fuel holdings and invest in just and equitable climate solutions

LIST OF PENSION FUNDS RESEARCHED WITH THE TOTAL OF EACH PORTFOLIO

TOTAL AUM/ FUND SIZE

California Public Employees' Retirement System (CalPERS)	\$	393,914,413,756
California State Teachers' Retirement System (CalSTRS)	\$	291,296,508,416
Washington State Investment Board (WSIB)	\$	141,334,804,792
New York State Teachers' Retirement System (NYSTRS)	\$	98,743,177,812
Minnesota State Board of Investment (MSBI)	\$	94,685,041,843
New Jersey Pension Fund (NJ)	\$	82,678,597,349
Alaska Permanent Fund Corporation (APFC)	\$	82,525,554,828
Massachusetts Pension Reserves Investment Trust (PRIT)	\$	57,974,190,121
Colorado Public Employees' Retirement Association (CoPERA)	\$	49,483,907,139
Oregon Public Employees Retirement System (PERS)	\$	43,283,486,000
Alaska Retirement Management Board (ARMB)	\$	23,846,809,359
Chicago Teachers' Pension Fund (CTPF)	\$	12,732,674,410
Maine Public Employees Retirement System (MainePERS)	\$	20,027,920,622
San Mateo County Employees' Retirement Association (SamCERA)	\$	1,104,671,437

GRAND TOTAL

\$ 1,393,631,757,882

¹<https://whoownsbigoil.com/> "Who owns Big Oil? The Answer Might Surprise You"

WHAT ARE THESE PENSION FUNDS INVESTED IN?

CoalExit

Holdings in companies appearing on the Global Coal Exit list (GCEL).

Fossil Fuel Production

Oil and gas producers and explorers, thermal coal related companies, some diversified companies with large hydrocarbon reserves (especially those appearing on the GCEL or Carbon Underground 200 lists). Vertically integrated oil/gas companies, meaning companies with oil/gas reserves as well as midstream or refining operations, will typically be flagged as Fossil Fuel Production companies.

Fossil Fuel Support

Oilfield services/equipment companies, refiners, pipeline and other midstream companies.

Fossil Fuel Utility

Fossil fuel power producers, electric and gas utilities. Utilities with an obvious focus on renewable energy production are not included in this category.

More Fossil Fuels

Holdings in companies with obvious fossil fuel interests and actions not fitting easily into groups 1-3. Holdings in fossil fuel energy private equity funds are assigned here.

PENSION FUND

TOTAL FOSSIL FUEL INVESTMENTS

Alaska Permanent Fund Corporation (APFC)_20210630	\$	4,998,406,400
Alaska Retirement Management Board (ARMB)_20210630	\$	1,317,804,996
California Public Employees' Retirement System (CalPERS)_20200630	\$	27,143,227,590
California State Teachers' Retirement System (CalSTRS)_20200630	\$	15,658,203,000
Chicago Teachers' Pension Fund (CTPF)_20210630	\$	602,007,802
Colorado Public Employees' Retirement Association (PERA)_20201231	\$	2,122,338,149
Maine Public Employees Retirement System (MainePERS)_20201231	\$	989,154,971

Massachusetts Pension Reserves Investment Trust (PRIT)_20200630t	\$	2,598,587,207
Minnesota State Board of Investment (MSBI)_20200630	\$	6,012,767,267
New Jersey Pension Funds (NJ)_20210331	\$	4,810,170,560
New York State Teachers' Retirement System (NYSTRS)_20210630	\$	6,563,005,119
Oregon Public Employees Retirement System (PERS)_20200630	\$	1,776,265,000
San Mateo County Employees' Retirement Association (SamCERA)_20200630	\$	46,177,998
Washington State Investment Board (WSIB)_20200630	\$	7,092,368,251

GRAND TOTAL

\$

81,730,484,311

Breakout of each funds investments in each category

California Public Employees' Retirement System (CalPERS)

Group 1 - Production	\$	5,557,648,501
Group 2 - Support	\$	5,108,383,628
Group 3 - Utility	\$	11,303,281,275
Group 4 - More Fossil Fuels	\$	5,173,914,186
Total Fossil Fuel Investments	\$	27,143,227,590

California State Teachers' Retirement System (CalSTRS)

Group 1 - Production	\$	3,426,633,000
Group 2 - Support	\$	1,678,753,000
Group 3 - Utility	\$	3,917,705,000
Group 4 - More Fossil Fuels	\$	6,635,112,000
Total Fossil Fuel Investments	\$	15,658,203,000

Washington State Investment Board (WSIB)

Group 1 - Production	\$	1,448,382,920
Group 2 - Support	\$	936,368,677
Group 3 - Utility	\$	2,781,793,893
Group 4 - More Fossil Fuels	\$	1,925,822,760
Total Fossil Fuel Investments	\$	7,092,368,251

**New York State Teachers'
Retirement System (NYSTRS)**

Group 1 - Production	\$	2,153,987,114
Group 2 - Support	\$	785,287,910
Group 3 - Utility	\$	2,368,544,853
Group 4 - More Fossil Fuels	\$	1,255,185,242
Total Fossil Fuel Investments	\$	6,563,005,119

**Minnesota State Board of
Investment (MSBI)**

Group 1 - Production	\$	1,691,711,625
Group 2 - Support	\$	928,847,969
Group 3 - Utility	\$	1,578,038,266
Group 4 - More Fossil Fuels	\$	1,814,169,407
Total Fossil Fuel Investments	\$	6,012,767,267

New Jersey Pension Funds (NJ)

Group 1 - Production	\$	1,437,617,030
Group 2 - Support	\$	592,246,989
Group 3 - Utility	\$	1,582,925,786
Group 4 - More Fossil Fuels	\$	1,197,380,754
Total Fossil Fuel Investments	\$	4,809,170,560

**Alaska Permanent Fund Corporation
(APFC)**

Group 1 - Production	\$	1,118,703,395
Group 2 - Support	\$	760,988,205
Group 3 - Utility	\$	682,243,365
Group 4 - More Fossil Fuels	\$	2,436,471,435
Total Fossil Fuel Investments	\$	4,998,406,480

**Massachusetts Pension Reserves
Investment Trust (PRIT)**

Group 1 - Production	\$	919,366,306
Group 2 - Support	\$	397,247,545
Group 3 - Utility	\$	893,325,244
Group 4 - More Fossil Fuels	\$	388,648,112
Total Fossil Fuel Investments	\$	2,598,581,207

**Colorado Public Employees'
Retirement Association (PERA)**

Group 1 - Production	\$	694,912,181
Group 2 - Support	\$	358,377,161
Group 3 - Utility	\$	825,818,660
Group 4 - More Fossil Fuels	\$	243,230,148
Total Fossil Fuel Investments	\$	2,122,338,149

**Oregon Public Employees
Retirement System (PERS)**

Group 1 - Production	\$	92,399,000
Group 2 - Support	\$	262,882,000
Group 3 - Utility	\$	173,087,000
Group 4 - More Fossil Fuels	\$	1,247,897,000
Total Fossil Fuel Investments	\$	1,776,265,000

**Alaska Retirement Management
Board (ARMB)**

Group 1 - Production	\$	437,047,466
Group 2 - Support	\$	209,476,720
Group 3 - Utility	\$	447,978,514
Group 4 - More Fossil Fuels	\$	223,302,296
Total Fossil Fuel Investments	\$	1,317,884,996

**Maine Public Employees Retirement
System (MainePERS)**

Group 1 - Production	\$	45,958,024
Group 2 - Support	\$	20,882,638
Group 3 - Utility	\$	73,499,160
Group 4 - More Fossil Fuels	\$	848,815,149
Total Fossil Fuel Investments	\$	989,154,971

**Chicago Teachers' Pension Fund
(CTPF)**

Group 1 - Production	\$	248,886,781
Group 2 - Support	\$	126,277,990
Group 3 - Utility	\$	167,901,271
Group 4 - More Fossil Fuels	\$	58,941,761
Total Fossil Fuel Investments	\$	602,007,802

**San Mateo County Employees'
Retirement Association (SamCERA)**

Group 1 - Production	\$	14,628,350
Group 2 - Support	\$	2,422,552
Group 3 - Utility	\$	27,341,830
Group 4 - More Fossil Fuels	\$	1,785,267
Total Fossil Fuel Investments	\$	46,177,998

Fund exposure to thermal coal related companies

Group 0

PENSION FUND

INVESTMENTS IN GROUP 0 - COALEXIT

California Public Employees' Retirement System (CalPERS)_20200630	\$	8,980,174,173
California State Teachers' Retirement System (CalSTRS)_20200630	\$	3,727,614,000
Washington State Investment Board (WSIB)_20200630	\$	2,914,457,703
New York State Teachers' Retirement System (NYSTRS)_20210630	\$	2,636,962,237
Minnesota State Board of Investment (MSBI)_20200630	\$	1,529,694,874
New Jersey Pension Funds (NJ)_20210331	\$	1,388,504,974
Alaska Permanent Fund Corporation (APFC)_20210630	\$	862,240,858
Massachusetts Pension Reserves Investment Trust (PRIT)_20200630	\$	881,359,823
Colorado Public Employees' Retirement Association (PERA)_20201231	\$	645,946,816
Oregon Public Employees Retirement System (PERS)_20200630	\$	115,560,000
Alaska Retirement Management Board (ARMB)_20210630	\$	465,904,324
Chicago Teachers' Pension Fund (CTPF)_20210630	\$	172,122,156
Maine Public Employees Retirement System (MainePERS)_20201231	\$	81,903,985
San Mateo County Employees' Retirement Association (SamCERA)_20200630	\$	15,729,544

TOTAL INVESTMENTS IN THERMAL COAL

\$ 24,418,175,467

TOP FOSSIL FUEL INVESTMENTS FOR EACH FUND

California Public Employees' Retirement System (CalPERS)



GROUP 1: PRODUCTION

Exxon	\$	660,868,815
Shell	\$	492,626,026
Chevron	\$	376,078,127
BHP	\$	316,200,059
Total	\$	295,453,789

GROUP 2: SUPPORT

Enterprise Products Partners	\$	383,337,433
Kinder Morgan	\$	334,730,749
Williams	\$	328,599,730
Energy Transfer	\$	290,951,142
Phillips 66	\$	215,179,143

California State Teachers' Retirement System (CalSTRS)



GROUP 1: PRODUCTION

Exxon	\$	379,241,000
Chevron	\$	352,198,000
Shell	\$	319,081,000
BHP	\$	253,218,000
BP	\$	181,189,000

GROUP 2: SUPPORT

Reliance Industries Limited	\$	119,503,000
Kinder Morgan	\$	109,632,000
Enbridge	\$	108,177,000
Phillips 66	\$	86,109,000
Valero	\$	78,578,000

Washington State Investment Board (WSIB)



GROUP 1: PRODUCTION

Glencore	\$	162,220,082
Petrobras	\$	149,288,974
Shell	\$	95,220,352
BHP	\$	80,203,979
Woodside Energy	\$	76,393,569

GROUP 2: SUPPORT

Reliance Industries Limited	\$	208,901,160
PGN	\$	96,109,264
KOGAS	\$	56,225,147
TGP	\$	53,982,073
Thai Oil	\$	31,694,139

New York State Teachers' Retirement System (NYSTRS)



GROUP 1: PRODUCTION

Exxon	\$	394,455,253
Chevron	\$	285,329,399
Shell	\$	134,867,279
Conoco Phillips	\$	110,163,532
Freeport - McMoRan	\$	81,440,481

GROUP 2: SUPPORT

Schlumberger	\$	91,415,068
Valero	\$	48,965,737
Halliburton	\$	45,544,836
Williams	\$	44,691,552
Marathon Petroleum	\$	44,216,685

Minnesota State Board of Investment (MSBI)



GROUP 1: PRODUCTION

Exxon	\$	295,890,190
Merite Energy	\$	255,034,837
Chevron	\$	164,387,679
BHP	\$	88,846,635
Shell	\$	86,375,141

GROUP 2: SUPPORT

Kinder Morgan	\$	53,969,422
Phillips 66	\$	48,365,318
Williams	\$	47,007,200
Marathon Petroleum	\$	34,599,431
Enbridge	\$	33,289,440

Alaska Permanent Fund Corporation (APFC)



GROUP 1: PRODUCTION

Chevron	\$	75,693,954
Exxon	\$	66,430,840
Shell	\$	60,866,922
Total	\$	57,094,590
Suncor	\$	45,683,756

GROUP 2: SUPPORT

Reliance Industries	\$	68,289,180
Energy Transfer Partners	\$	63,552,106
Phillips 66	\$	54,851,693
Varo Energy	\$	45,938,028
Valero	\$	33,980,520

New Jersey Pension Fund (NJ)



GROUP 1: PRODUCTION

BP	\$	185,298,595
Exxon	\$	167,813,093
Chevron	\$	151,541,161
Shell	\$	94,256,570
BHP	\$	92,582,973

GROUP 2: SUPPORT

Enbridge	\$	41,105,220
MPLX LP	\$	30,215,360
Enterprise Projects	\$	30,101,340
TC Energy	\$	27,941,538
Phillips 66	\$	26,943,226

Massachusetts Pension Reserves Investment Trust (PRIT)



GROUP 1: PRODUCTION

Exxon	\$	96,589,560
Chevron	\$	85,855,431
BP	\$	61,182,129
Shell	\$	58,248,420
Lukoil	\$	53,968,665

GROUP 2: SUPPORT

Reliance Industries	\$	32,273,685
Enbridge	\$	19,755,106
Phillips 66	\$	18,776,856
Schlumberger	\$	17,964,828
ONEOK	\$	17,193,943

Colorado Public Employees' Retirement Association (CoPERA)



GROUP 1: PRODUCTION

Chevron	\$	129,908,378
Shell	\$	85,864,770
BP	\$	60,580,094
EOG Resources	\$	50,984,183
BHP	\$	38,227,697

GROUP 2: SUPPORT

Phillips 66	\$	89,217,751
Neste Oil	\$	25,346,771
Energy Transfer Partners	\$	24,571,161
Holly Frontier Corp	\$	24,117,591
Enbridge	\$	16,344,071

Oregon Public Employees Retirement System (PERS)



GROUP 1: PRODUCTION

Exxon	\$	16,797,000
Range Resources	\$	15,203,000
Chevron	\$	15,001,000
Antero Resources	\$	\$,595,000
Conoco Phillips	\$	6,034,000

GROUP 2: SUPPORT

Marathon Petroleum	\$	18,033,000
Baker Hughes	\$	11,978,000
Ugi Corporation	\$	3,744,000
HollyFrontier	\$	3,580,000
Phillips 66	\$	2,835,000

Alaska Retirement Management Board (ARMB)

GROUP 1: PRODUCTION

Exxon	\$	58,598,496
Chevron	\$	47,197,304
Conoco Phillips	\$	29,339,610
Shell	\$	28,784,893
Pioneer	\$	20,999,691

GROUP 2: SUPPORT

Phillips 66	\$	29,920,407
Kinder Morgan	\$	23,954,908
Valero	\$	12,433,539
ONEOK	\$	10,538,090
Schlumberger	\$	10,538,090

Maine Public Employees Retirement System (MainePERS)



GROUP 1: PRODUCTION

Exxon	\$	14,372,589
Chevron	\$	13,400,526
Conoco Phillips	\$	3,551,591
Freeport-McRoRan	\$	3,112,642
EOG Resources	\$	2,396,452

GROUP 2: SUPPORT

Phillips 66	\$	2,521,686
Schlumberger	\$	2,519,248
Marathon Petroleum	\$	2,199,276
Kinder Morgan	\$	2,197,397
Williams	\$	2,013,561

Chicago Teachers' Pension Fund (CTPF)



GROUP 1: PRODUCTION

Petrobras	\$	29,464,441
Exxon	\$	22,538,877
Chevron	\$	22,479,227
Equinor	\$	19,638,286
Anglo American	\$	15,158,225

GROUP 2: SUPPORT

Neste Oil	\$	16,367,091
Kinder Morgan	\$	12,858,547
Core lab	\$	10,863,895
Reliance Industries	\$	10,736,483
Enterprise Products	\$	8,182,434

San Mateo County Employees' Retirement Association (SamCERA)



GROUP 1: PRODUCTION

Shell	\$	5,179,491
BP	\$	4,068,773
ENI	\$	3,553,306
Equinor	\$	544,506
Diamond Back Energy	\$	442,393

GROUP 2: SUPPORT

Woodgroup	\$	669,181
Williams	\$	644,319
Schlumberger	\$	386,331
Marathon Petroleum	\$	161,581
Energy Transfer Partners	\$	160,012

COAL INVESTMENTS

Peabody Energy

Alaska Permanent Fund Corporation	\$	717,356
Alaska Permanent Fund Corporation	\$	457,500
Colorado Public Employees' Retirement Association	\$	673,234
Massachusetts Pension Reserves New Jersey	\$	290,511
Pension Funds	\$	289,778
Washington State Investment Board	\$	138,512
Washington State Investment Board	\$	6,924
Minnesota State Board of Investment	\$	68,250
Chicago Teachers' Pension Fund	\$	25,146
TOTAL	\$	2,667,211



CONSOL Energy

New York State Teachers' Retirement System	\$	1,116,438
Alaska Retirement Management Board	\$	387,297
California Public Employees' Retirement System	\$	303,475
Washington State Investment Board	\$	83,565
Massachusetts Pension Reserves Investment Trust	\$	56,911
Oregon Public Employees Retirement System	\$	53,000
Colorado Public Employees' Retirement Association	\$	52,301
Minnesota State Board of Investment	\$	46,644
Chicago Teachers' Pension Fund	\$	26,763
TOTAL	\$	2,126,395



Peabody Energy

Alaska Permanent Fund Corporation	\$	1,223,646
Massachusetts Pension Reserves Investment Trust	\$	173,301
Minnesota State Board of Investment	\$	155,147
Washington State Investment Board	\$	100,736
Chicago Teachers' Pension Fund	\$	30,256
TOTAL	\$	1,683,086



Duke Energy

California Public Employees' Retirement System	\$	704,559,102
California State Teachers' Retirement System	\$	182,112,000
New York State Teachers' Retirement System	\$	159,346,803
Washington State Investment Board	\$	112,260,647
Colorado Public Employees' Retirement Association	\$	85,626,163
Minnesota State Board of Investment	\$	77,358,494
New Jersey Pension Funds	\$	75,647,398
Alaska Permanent Fund Corporation	\$	48,679,043
Massachusetts Pension Reserves Investment Trust	\$	38,891,323
Alaska Retirement Management Board	\$	28,943,958
Oregon Public Employees Retirement System	\$	15,796,000
Chicago Teachers' Pension Fund	\$	10,404,920
Maine Public Employees Retirement System	\$	5,539,746
San Mateo County Employees' Retirement	\$	1,281,915
TOTAL	\$	1,546,447,512

**AEP**

California Public Employees' Retirement System	\$	44,925,755
Oregon Public Employees Retirement System	\$	35,400,000
California State Teachers' Retirement System	\$	17,538,878
Washington State Investment Board	\$	7,851,813
Minnesota State Board of Investment	\$	4,814,623
Alaska Retirement Management Board	\$	4,650,623
Alaska Permanent Fund Corporation	\$	2,411,358
Massachusetts Pension Reserves Investment Trust	\$	1,120,788
San Mateo County Employees' Retirement	\$	269,252
TOTAL	\$	1,189,783,090



TAR SANDS INVESTMENTS

Canadian Natural resources (CNRL)



Canadian Natural

Washington State Investment Board	\$	7,628,115
Colorado Public Employees' Retirement Association	\$	7,188,626
Chicago Teachers' Pension Fund	\$	2,374,335
Alaska Retirement Management Board	\$	631,519
San Mateo County Employees' Retirement	\$	192,896
TOTAL	\$	18,015,491

Cenovus Energy



California Public Employees' Retirement System	\$	27,735,328
California State Teachers' Retirement System	\$	15,855,000
Colorado Public Employees' Retirement Association	\$	14,600,467
New Jersey Pension Funds	\$	7,262,494
New York State Teachers' Retirement System	\$	4,509,616
Minnesota State Board of Investment	\$	4,039,655
Massachusetts Pension Reserves Investment Trust	\$	2,169,259
Alaska Permanent Fund Corporation	\$	1,850,207
Washington State Investment Board	\$	1,846,357
Alaska Retirement Management Board	\$	\$452,94
TOTAL	\$	80,321,339

Conoco Phillips

California State Teachers' Retirement System	\$	136,017,000
New York State Teachers' Retirement System	\$	\$10,163,532
California Public Employees' Retirement System	\$	107,742,545
New Jersey Pension Funds	\$	56,937,779
Minnesota State Board of Investment	\$	51,875,173
Alaska Permanent Fund Corporation	\$	40,371,158
Alaska Retirement Management Board	\$	29,339,610
Massachusetts Pension Reserves Investment Trust	\$	23,875,173



Massachusetts Pension Reserves Investment Trust	\$	23,875,173
Colorado Public Employees' Retirement Association	\$	\$,428,181
Washington State Investment Board	\$	8,190,321
Chicago Teachers' Pension Fund	\$	6,473,738
Oregon Public Employees Retirement System	\$	4,099,000
Maine Public Employees Retirement System	\$	3,551,592
TOTAL	\$	588,064,802

ExxonMobil

California Public Employees' Retirement System	\$	660,868,815
New York State Teachers' Retirement System	\$	394,455,253
California State Teachers' Retirement System	\$	379,241,000
Minnesota State Board of Investment	\$	295,890,190
New Jersey Pension Funds	\$	167,813,093
Massachusetts Pension Reserves Investment Trust	\$	96,589,561
Alaska Permanent Fund Corporation	\$	66,430,840
Alaska Retirement Management Board	\$	58,598,497
Colorado Public Employees' Retirement Association	\$	34,297,329
Washington State Investment Board	\$	31,780,475
Chicago Teachers' Pension Fund	\$	22,538,878
Oregon Public Employees Retirement System	\$	16,797,000
Maine Public Employees Retirement System t	\$	\$14,372,590
TOTAL	\$	2,239,673,521



Suncor

California Public Employees' Retirement System	\$	\$88,153,074
California State Teachers' Retirement System	\$	\$84,971,000
Alaska Permanent Fund Corporation	\$	\$45,683,757
Minnesota State Board of Investment	\$	\$21,996,586
New Jersey Pension Funds	\$	\$18,533,032
New York State Teachers' Retirement System	\$	\$15,047,734
Washington State Investment Board	\$	\$11,673,062

Suncor



Washington State Investment Board	\$	11,673,062
Chicago Teachers' Pension Fund	\$	9,108,713
Massachusetts Pension Reserves Investment Trust	\$	7,668,507
Colorado Public Employees' Retirement Association	\$	6,708,663
Alaska Retirement Management Board	\$	3,121,058
San Mateo County Employees' Retirement	\$	165,553
TOTAL	\$	312,830,706



WHY DIVEST PENSION FUNDS

With 10 years of data there is now hard evidence that divestment is a winning financial strategy. Early adopters of divestment strategies are reporting neutral or positive financial results. Surveys and analyses by Wall Street firms support it.

View the 2021 **Invest/Divest: A Decade of Progress Towards a Just Climate Future** report [here](#)³.

Historical data indicates that divesting from fossil fuel companies is very unlikely to lower the rate of return for pension funds. At present, [fossil fuel stocks are providing a lower rate of return](#) for investors compared with the overall stock index.⁴

The fossil fuel energy sector is now the smallest sector in the S&P 500. The S&P 500's Fossil Fuel Free Total Return Index has consistently outperformed the S&P 500 overall since 2012. As fossil fuel equity prices plummet, holding onto these companies has been [value-destroying](#) for many shareholders.⁵

After examining worldwide divestment actions, BlackRock found that the portfolios of hundreds of funds experienced [no negative financial impacts](#) from divesting from fossil fuels.⁶ [“Fossil fuel stocks have underperformed”](#)⁷ for the last five years and forward-looking analysis shows they are exposed to significant regulatory, technological and market risks.”

Divesting from fossil fuels will allow pensions to avoid major losses and gain the opportunity to reinvest in less risky sectors including in climate solutions, local business and clean energy companies.

³ [Invest/Divest: A Decade of Progress Towards a Just Climate Future Report](#)

⁴ [2019 Divest/Invest Guide](#)

⁵ [Markets are Divesting you from Fossil Fuels Bloomberg](#), by Nathaniel Bullard Oct 20th 2020

⁶ [“Major Investment Advisors BlackRock and Maketa provide a fiduciary path through the Energy Transition” IEEFA](#), by Tom Sanzillo, March 22nd 2021

⁷ [Fossil Fuel shares drop in value as compared with clean energy](#) Reuters, March 30th 2021



DIVESTMENT IS WINNING

Divestment by public pension funds demonstrates how government officials understand the importance of meeting their fiduciary duty to protect their assets and to tackle the climate crisis head on.

These top pension funds have divested billions from fossil fuels.

\$189B

New York City employee retirement fund

\$265B

New York State Common Retirement fund

\$17B

Maine Public Employees retirement fund

\$17.4B

ABP
(Europe's biggest Pension fund - Netherlands)

\$133.9M

MP Pension
Denmark

Caisse de dépôt et placement du Québec (CDPQ)

1. Hold \$54 billion in green assets by 2025 to actively contribute to a more sustainable economy.
2. Achieve a 60% reduction in the carbon intensity of the total portfolio by 2030.
3. Two new pillars have been added to move CDPQ's climate action into the next stage:
 - Create a \$10-billion transition envelope to decarbonize the main industrial carbon-emitting sectors.
 - Complete our exit from oil production by the end of 2022.



Divestment is winning

With iconic, sector-leading institutions like Harvard University and University of Toronto, Dutch and Canadian pension fund giants PME and CDPQ, French public bank La Banque Postale, and the Ford Foundation and John D. and Catherine T. MacArthur Foundation committing to divest in just the past few months, the movement has reached a threshold moment. It is increasingly difficult for major institutions to make the argument that ongoing fossil fuel investment is financially sound.



The movement is growing fast

Public divestment commitments have grown by 49 percent in just the last three years. **There are now over 1500 different institutions committed to some form of fossil fuel divestment in 71 countries around the world, representing a total of \$39.8 trillion in assets under management**⁸. The assets under management metric is standard within the financial sector, is useful for comparing the size of the movement to other components of the economy, and is easily verifiable. Not all institutions included in this list have fully divested all assets from fossil fuels, which remains a movement demand (see below). This number only tracks public commitments to divest; the true amount of fossil fuel divestment is almost certainly significantly larger⁹. Despite recent short-term surges, the outlook for fossil fuels is grim. Long-term trends unmistakably point to a decline in value for fossil fuel investments, and major financial analysts agree that it is only going to get worse.

⁸ <https://divestmentdatabase.org/>

⁹ <https://divestmentdatabase.org/>

¹⁰ **Cost of Capital spikes for Fossil Fuel Producers**, Bloomberg Green, November 9th 2021 by Tim Quinson

¹¹ Press release **"ABP Stops Investing in Fossil Fuel Producers"** October 26th 2021

The movement is now a market factor

Oil companies and market analysts both say the movement has gotten so big it is affecting fossil fuel company profits and increasing the cost of accessing capital for new fossil fuel projects, making them that much more unviable. Ten years ago the "cost of capital" was comparable to renewable energy, somewhere between 8-10% today the threshold of projected return that can financially justify a new oil project is now at 20% for long-cycle developments, while for renewables it's dropped to somewhere between 3% and 5%, according to Goldman Sachs¹⁰ "That's an extraordinary divergence, which is leading to an unprecedented shift in capital allocation. This year will mark the first time in history that renewable power will be the largest area of energy investment."

Engagement is not enough

Shareholder engagement with fossil fuel companies, which some investors have tried to suggest as an alternative to divestment, has proven ineffective and too slow. Institutions are increasingly realizing this and moving to divest as a result. "We part with our investments in fossil fuel producers because we see insufficient opportunity for us as a shareholder to push for the necessary, significant acceleration of the energy transition at these companies" - **ABP Pension Fund upon announcing its intention to divest \$15 billion Euros in fossil fuel assets**¹¹.

More investment in climate solutions is badly needed

While divestment has been winning, there is much more that needs to be done investing in climate solutions. We need to triple the amount of money flowing into renewable energy and sustainable infrastructure.

A just transition makes sense for everyone

We need a just transition to a clean energy economy, one that supports communities and workers that have depended on the fossil fuel economy and centers economic, gender, and racial justice. The transition also must include the nearly one billion people who don't have access to energy today. Investing in such a transition supports the values of mission-based investors, and the economic goals of all investors.

The divest-invest movement is absolutely having an impact. Fossil fuel companies are losing their political power. Wall Street has been forced to agree that the movement is making it harder for the industry to raise capital and complete new infrastructure. That is critical if we are going to succeed in limiting carbon emissions.

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 to make transformative changes to the world's energy systems and economies before facing dangerous and irreversible damage to the climate. Going forward, the divest-invest movement must keep up the pressure and make three demands of pension funds across the world:

1. **All pension funds 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 pension funds must align their policy, regulatory positions, and political expenditures with this commitment.
2. **All pension funds 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 pension funds 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.



METHODOLOGY

Full asset listings and details for public pension funds are inconsistently available. Some public pension funds like New York State and California annually publish on their website full asset listings for the funds which include number of shares, market value and base costs along with the names of individual companies held. Other funds, such as Oregon and Alaska make such information available upon request with some requests fulfilled quickly, others requiring significant follow-up or time. Some funds only share information after the filing of a formal Freedom of Information type request.

[Stand.earth](#) commissioned Third Rail Economy to assist campaigners in the acquisition of the asset listings for funds and to analyze these for exposure to fossil fuel companies and assets. Holdings considered “fossil fuel” investments are flagged and put in one of a handful of discrete groups.

The value of these holdings are based on the data available in the disclosures from funds themselves.

All available fund holdings are assigned to one of the following groups based on publicly available data on the individual companies, their revenue stream and business operations and their own disclosures of their business segments:

Group 0 - Coal Exit List Companies

Group 1 - Production Companies

Group 2 - Support Companies

Group 3 - Utilities

Group 4 - Other Fossil Fuel Companies

Group 0 - Coal Exit - Holdings tied to entities on the [Global Coal Exit List](#). The Coal Exit list is the most comprehensive list of thermal coal related companies along the full value

chain coal mining companies as well as coal transport & logistics companies, coal plant manufacturers, providers of EPC services to the coal industry, and coal-to-gas producers. Coal related companies in Group 0 are also included groups 1-4. Group 0 generally shows a fund's exposure to a full spectrum of thermal coal companies.

Group 1 - Production - This group primarily contains coal, oil and gas producers and explorers. Vertically integrated oil and/ or gas companies, meaning companies with oil and/ or gas reserves as well as midstream or refining operations, are typically flagged as Group 1.

Group 2 - Support - This group contains coal, oil and gas field services and equipment companies, refiners, pipeline, storage and other midstream companies.

Group 3 - Utility - Fossil fuel power producers, electric and gas utilities. Utilities with primary focus on renewable energy production are not included in this group unless they hold a significant material connection to fossil fuels.

Group 4 - More Fossil Fuels - Holdings tied to entities with clear fossil fuel interests and actions not fitting easily into groups 1-3. Holdings in fossil fuel dominated private equity funds are assigned here. Diversified companies such as Berkshire Hathaway or Mitsubishi with large hydrocarbon reserves (especially those appearing on the Global Coal Exit List (GCEL) or Carbon Underground 200 (CU200)) are assigned here if they do not fit in Groups 1-3.

Groups 1-4 are used to flag holdings where fossil fuels appear central to the related entity's primary interests and actions. In a minority of cases, namely with some holdings tied to large fossil fuel reserves, holdings might be flagged when fossil fuels represent a peripheral business.

SOURCE MATERIAL

California Public Employees' Retirement System (CalPERS)_20200630	https://www.calpers.ca.gov/docs/forms-publications/annual-investment-report-2020.pdf	\$393,914,413,756
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/sites/main/files/file-attachments/private-equity-performance-september2020.pdf	\$67,871,607,416
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/domestic-equities	\$62,696,636,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/international-equities	\$50,475,299,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/debt-securities	\$41,396,712,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/real-estate-0	\$34,994,865,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/limited-partnerships	\$21,912,068,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/cash-equivalents	\$11,618,738,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/international-currencies	\$296,670,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/residential-loans-0	\$34,619,000
California State Teachers' Retirement System (CalSTRS)_20200630	https://www.calstrs.com/investment-table/derivative-instruments	-\$706,000

Washington State Investment Board (WSIB)_20200630	https://www.sib.wa.gov/financial/pdfs/annual/ho20.pdf	\$141,334,804,792
New York State Teachers' Retirement System (NYSTRS)_20210630	https://www.nystrs.org/NYSTRS/media/PDF/About%20Us/equity_domestic.pdf	\$53,230,684,575
New York State Teachers' Retirement System (NYSTRS)_20210630	https://www.nystrs.org/NYSTRS/media/PDF/About%20Us/fixed_domestic.pdf	\$21,586,114,326
New York State Teachers' Retirement System (NYSTRS)_20210630	https://www.nystrs.org/NYSTRS/media/PDF/About%20Us/equity_global.pdf	\$20,775,969,055
New York State Teachers' Retirement System (NYSTRS)_20210630	https://www.nystrs.org/NYSTRS/media/PDF/About%20Us/fixed_global.pdf	\$3,150,409,856
Minnesota State Board of Investment (MSBI)_20200630	https://mn.gov/sbi/publications/MSBI_DetailedAsset-Listing_June2020.pdf	\$94,685,041,843
New Jersey Pension Funds (NJ)_20210331	OPRA Request W174700 received from Treasury Government Records Access Unit (7/27/21).	\$56,988,274,890
New Jersey Pension Funds (NJ)_20210331	OPRA Request W174700 received from Treasury Government Records Access Unit (7/27/21).	\$25,690,322,460
Alaska Permanent Fund Corporation (APFC)_20210630	https://apfc.org/wp-content/uploads/2021/08/20210630StockHoldingsbyCountry.pdf	\$26,033,523,329
Alaska Permanent Fund Corporation (APFC)_20210630	FI-Cash 0630.21.pdf Received from APFC in response to 9/1/21 holdings request.	\$22,216,654,499
Alaska Permanent Fund Corporation (APFC)_20210630	https://apfc.org/report-archieve/#14-122-2021-1631733992	\$16,077,559,055
Alaska Permanent Fund Corporation (APFC)_20210630	https://apfc.org/report-archieve/#14-121-2021-16317339844	\$9,396,797,783
Alaska Permanent Fund Corporation (APFC)_20210630	RE- 0630.21.pdf Received from APFC in response to 9/1/21 holdings request.	\$4,570,821,304

Alaska Permanent Fund Corporation (APFC)_20210630	Absolute Return hedge funds 0630.21.pdf Received from APFC in response to 9/1/21 holdings request.	\$4,214,898,857
Alaska Permanent Fund Corporation (APFC)_20210630	https://apfc.org/report-archive/#14-122-2021-1631733991	\$10,300,000
Alaska Permanent Fund Corporation (APFC)_20210630	https://apfc.org/report-archive/#14-122-2021-1631733990	\$5,000,000
Massachusetts Pension Reserves Investment Trust (PRIT)_20200630	PRIT - Fund Asset Mix - PRA 06302020.xlsx	\$57,974,190,121
Colorado Public Employees' Retirement Association (PERA)_20201231	2020 Public Market Holdings - Final.xlsx Received from Colorado Public Employee's Retirement Association (PERA) 8/5/21.	\$49,483,907,139
Oregon Public Employees Retirement System (PERS)_20200630	https://www.oregon.gov/treasury/invested-for-oregon/Documents/Invested-for-OR-Performance-and-Holdings/2020/FOIA-Q2-2020-OPERF-Private-Equity.pdf	\$18,479,300,000
Oregon Public Employees Retirement System (PERS)_20200630	https://www.oregon.gov/treasury/invested-for-oregon/Documents/Invested-for-OR-Performance-and-Holdings/2020/OPERF-RealEstate-Q2-2020.pdf	\$8,378,800,000
Oregon Public Employees Retirement System (PERS)_20200630	https://www.oregon.gov/treasury/invested-for-oregon/Documents/Invested-for-OR-Performance-and-Holdings/2020/FOIA-Q2-2020-OPERF-Alt.pdf	\$7,954,700,000
Oregon Public Employees Retirement System (PERS)_20200630	https://www.sec.gov/Archives/edgar/data/1107314/000110731420000003/xslForm13F_X01/SEC13FPosSSB06302020v1Report.xml	\$6,762,486,000
Oregon Public Employees Retirement System (PERS)_20200630	https://www.oregon.gov/treasury/invested-for-oregon/Documents/Invested-for-OR-Performance-and-Holdings/2020/FOIA-Q2-2020-OPERF-Opportunity.pdf	\$1,708,200,000
Oregon Public Employees Retirement System	Total assets and fossil fuel holdings for Oregon PERS is partial due to delays in disclosure by the pension fund.	
Alaska Retirement Management Board (ARMB)_20210630	ARMB Holdings 6-30-21.xlsx Received from the Alaska Department of Revenue September 13, 2021.	\$23,846,809,359

Maine Public Employees Retirement System (MainePERS)_20201231	https://www.mainebers.org/wp-content/uploads/pdfs/investments/MainePERS-Private-Investments-2020-Q4.pdf	\$11,267,963,000
Maine Public Employees Retirement System (MainePERS)_20201231	https://www.mainebers.org/wp-content/uploads/pdfs/investments/2020-12-Public-Holdings.xlsx	\$7,701,911,273
Maine Public Employees Retirement System (MainePERS)_20201231	https://www.mainebers.org/wp-content/uploads/pdfs/investments/2020-12-Risk-Diversifiers.xlsx	\$1,058,046,349
Chicago Teachers' Pension Fund (CTPF)_20210630	FOIA_2021_057_Asset_Detail_20210630.xls Provided by CTPF on September 17, 2021.	\$12,732,674,410
San Mateo County Employees' Retirement Association (SamCERA)_20200630	Third Rail Economy Public Records Request 7-12-2021.pdf Received from San Mateo County Employees' Retirement Association 7/12/21. Response also indicated that, "PanAgora has notified us that it is asserting that the requested information about their SamCERA account holdings constitutes a Trade Secret and thus is exempt from disclosure..."	\$1,104,671,437

More info
climatesafepensions.org

