MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

# DIVESTMENT REPORT

Public Law 2021, c. 231

January 2023
Prepared by the Maine Public Employees Retirement System

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

CHIEF EXECUTIVE OFFICER
Dr. Rebecca M. Wyke



January 17, 2023

Chairs, Joint Standing Committee on Labor and Housing
100 State House Station
Augusta, ME 04333-0100

Re: Divestment Report

Dear Committee Chairs:

I am pleased to submit the enclosed Divestment Report, which is required by Public Law 2021, c. 231.

We look forward to assisting the Committee in its review of this report.

Sincerely,

Dr. Rebecca M. Wyke
Chief Executive Officer

Enclosure

www.mainepers.org

LOCATION
139 Capitol Street, Augusta, ME 04330

LOCAL
207-512-3100

FAX
207-512-3101

MAILING ADDRESS
P.O. Box 349, Augusta, ME 04332-0349

TOLL-FREE
1-800-451-9800

MAINE RELAY
711

**Table of Contents**


I. Executive Summary……………………………………………………………………………………………1

II. Introduction to MainePERS…………………………………………………………………………………3

III. Divestment Legislation………………………………………………………………………………………..4

IV. Legal and Policy Framework……………………………………………………………………………….4

V. Investments at MainePERS…………………………………………………………………………………6

VI. Impacts of Divestment………………………………………………………………………………………11

VII. Update to Investment Policy Statement…………………………………………………………………15

Appendices

A. Maine Constitution, Article IX, Section 18
B. Divestment Legislation, Public Law 2021, c. 231
C. Letter from Attorney General Aaron Frey to the Joint Standing Committee on Labor and Housing, April 9, 2021
D. Letter from Assistant Attorney General Andrew Black to MainePERS, December 8, 2022
E. MainePERS Governance Manual, 2.1 Investment Policy Statement
F. Request for Proposal 2022-03, Divestment Consulting Services
G. NEPC Divestment Consulting Services Proposal, April 2022
H. NEPC Divestment Memo, November 2022

## I. EXECUTIVE SUMMARY

Public Law 2021, c. 231, An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry (Appendix B), became effective on October 18, 2021. This divestment statute (5 M.R.S. §1957) directs the Board of Trustees of the Maine Public Employees Retirement System (MainePERS) to refrain from future investment in fossil fuel companies and divest of any existing holdings by January 1, 2026, subject to the limitation that these actions be achieved "in accordance with sound investment criteria and consistent with fiduciary obligations."

Article IX, Section 18, of the Maine Constitution (Appendix A) establishes a fiduciary duty to hold, invest, and disburse MainePERS pension trust funds solely in the best financial interest of the members as pension recipients. In fulfilling its fiduciary obligations, the Board appropriately relies on staff members and consultants with investment expertise.

The Board, based on investment staff and consultant recommendations, has adopted a passive, index-based approach to investing in the public markets as being in the best interests of members as pension recipients. For private market investments, the Board has adopted an approach to hire managers following due diligence that includes the manager's approach to environmental, social, and governance issues, and then to rely upon the manager's selection of portfolio investments as being in the best interest of members as pension recipients.

In October 2021, in accordance with sound investment criteria and consistent with fiduciary obligations, the Board of Trustees voted to continue its current approach to investing in the public and private markets while directing staff to explore the financial implications of alternative strategies to avoid fossil fuel investments. This included continuing discussions with MainePERS' investment consultants and with asset managers who provide fossil fuel-free or climate-aware investment options, including the extent to which alternatives are available with comparable risk and return profiles and fees.

Additionally, in November 2021, the Board of Trustees approved a plan to engage a specialty consultant to assist the staff in a review of the portfolio's exposure to fossil fuel and an evaluation of investment implications resulting from the divestment statute. A working group was formed to develop a request for proposals (RFP) for this engagement. This group consisted of staff, MainePERS' general consultant -- Cambridge Associates, and several external investment professionals with public plan experience related to these issues. The working group held a series of meetings during January and February 2022 to develop an appropriate scope of work for the RFP. One meeting was used to provide stakeholders an opportunity for input. Six individuals offered oral testimony, and 25 individuals submitted written comments.

MainePERS issued the RFP (Appendix F) directly to 13 potential bidders and via public media in March 2022. Five responses were received by the deadline in April 2022. Following a review of the RFP responses MainePERS engaged NEPC, formerly New England Pension Consultants, in June 2022 for the below scope of work (Appendix G):

A. Broad review of divestment and the climate change-related landscape;
B. Identify and quantify the System's portfolio holdings subject to divestment;

C. Identify and quantify direct divestment costs; and
D. Identify and quantify divestment impact on the portfolio.

NEPC delivered its report to the Board of Trustees in November 2022 (Appendix H). The report notes MainePERS' holdings of fossil fuel investments are both substantial at 7.63% and widespread, with a majority of asset classes containing fossil fuel exposure. Importantly, these exposures are not intentional, but rather arise as a result of investment decisions made in order to best balance the System's goals of generating returns while minimizing investment risks. Achieving and maintaining a fossil fuel-free portfolio by 2026 would require both disposing of significant existing investments as well as making fundamental changes to MainePERS' investment approach.

Subsequent to the receipt of the NEPC report, MainePERS sought advice from the Office of the Attorney General on how to interpret certain provisions of the fossil fuel and for-profit prison divestment statutes. The Office of the Attorney General issued a letter dated December 8, 2022, (Appendix D). The letter states, in part:

> The subject statutes do not affect the Board's exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on "accordance with sound investment criteria" and "consisten[cy] with fiduciary obligations." As such, they reiterate rather than modify the Board's fiduciary obligations as a trustee – both constitutional and statutory.

The letter also states:

> The Board's focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of [the divestment statutes].

The Board of Trustees are expected to modify Board Policy 2.1 (Appendix E), the System's Investment Policy Statement, to recognize the divestment statute, require annual divestment reporting, and provide guidance on investments that include exposure to fossil fuels.

The majority of MainePERS' fossil fuel exposure resides in its private market investments, concentrated within the infrastructure and private equity asset classes. It is worth noting that the last private market commitments to investments with a fossil fuel-focus occurred in 2017 and that the capital invested in these strategies should be returned in the next 3-4 years as these investments wind down. No further commitments to funds with a fossil fuel-focus are anticipated. As a result, MainePERS projects the portfolio's exposure to fossil fuels will decline by roughly one-third by 2026.

## II. INTRODUCTION TO MAINEPERS

The Maine Public Employees Retirement System (MainePERS) is an incorporated public instrumentality of the state governed by a Board of Trustees pursuant to Maine law. Since 1942, MainePERS has joined with public employers to help their employees prepare for retirement. The System's active contributing members include teachers; state, county, and municipal employees; legislators; judges; and others. Upon retirement, our members receive monthly benefits from their respective defined benefit plans. The System also administers disability retirement, group life insurance, survivor services, and a tax-deferred retirement savings program known as MaineSTART. Management of these programs includes financial and investment administration, recordkeeping of members' work and compensation data, and administration of retirement and related services.

The defined benefit plans are the prevailing program administered by MainePERS. The basic defined benefit retirement plan funding equation provides that, over the long term, contributions plus investment earnings must be equal to benefit obligations. While investment market performance affects plan funding levels and funding requirements, it does not affect benefit obligations.

The Board of Trustees' management of MainePERS investments is guided by the System's investment policy. The policy states the Board's underlying investment objectives, sets out the investment strategies intended to realize the objectives, and establishes guidelines and criteria for implementation of the strategies.

The foundation of the investment policy is the mix of investment types in which assets are invested and the allocation of assets across asset classes. The Board is responsible for establishing the policy that serves as the framework for investment of the programs' assets. The Board employs in-house investment professionals as well as a general consultant to advise it on investment policy and asset class specialty consultants to advise it on specific investments.

The Board's choice of asset classes reflects its assessment of expected investment returns and the nature, level, and management of risk. The defined benefit programs' assets perform two functions: they collateralize the benefits owed to participants, and they provide investment earnings. All benefit payments must eventually be funded from a combination of contributions and investment earnings.

The return on invested contributions has historically supplied a significant amount of the benefit funding resources of defined benefit plans. In periods when the investment markets provide lower returns than expected, the resulting funding shortfall has historically been supplemented by a combination of increased contributions and investment market returns in other periods that exceed expectations. For this reason, the performance of the investment markets is a significant factor affecting the financial activities or position of the System, and the effects of market performance flow through to contribution requirements.

The recent two-decade low interest rate environment has affected the potential volatility of employer contributions. This is because low interest rates mean that the fund is no longer able to earn attractive returns from relatively safer fixed-income assets and as a result is more reliant on earnings from riskier assets, such as equities. As interest rates have fallen and to help maintain contribution stability, the trust fund has decreased its earnings assumption by 1.5% (from 8% to 6.5%) and shifted assets away from fixed-income. At the same time the trust fund has increased diversification by expanding its asset allocation to include a number of alternative asset classes.

## III. DIVESTMENT LEGISLATION

The 130th Legislature enacted Public Law 2021, c. 231, An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry, which became effective in October of 2021. The divestment statute requires MainePERS to refrain from certain types of investments and to divest of any existing holdings of these investments to the extent doing so would be "in accordance with sound investment criteria and consistent with fiduciary obligations." The statute includes an exception for de minimis exposure and sets a January 1, 2026 target for completing divestment.

The investments covered by the divestment statute are "stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company." PL 2021, c. 231, § 3. "Fossil fuel company" is defined as any company that:

- Is among the 200 publicly traded companies with the largest fossil fuel reserves;
- Is among the 30 largest public company owners in the world of coal-fired power plants;
- Has as its core business the construction or operation of fossil fuel infrastructure (e.g., wells, pipelines, refineries, power plants, storage tanks, export terminals);
- Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels; or
- Receives more than 50% of its gross revenues from companies meeting the above definitions.

## IV. LEGAL AND POLICY FRAMEWORK

### <u>Constitutional, Statutory, and Regulatory Context</u>

The Maine Constitution protects the retirement benefit of MainePERS members by establishing a fiduciary duty to hold, invest, and disburse pension trust funds solely in the best financial interest of members as pension recipients. Article IX, Section 18, of the Constitution (Appendix A) states:

> All of the assets, and proceeds or income therefrom, of the Maine State Retirement System or any successor system and all contributions and payments made to the system to provide for retirement and related benefits shall be held,

> invested or disbursed as in trust for the exclusive purpose of providing for such benefits and shall not be encumbered for, or diverted to, other purposes.

This "exclusive benefit rule" is also reflected in the Maine Uniform Trust Code, which applies to the MainePERS Board of Trustees and states, "A trustee shall administer the trust solely in the interests of the beneficiaries." *18-B M.R.S. § 802(1); see also 5 M.R.S. §17153(3)*. The exclusive benefit rule is further reflected in the federal statutes and regulations that qualify MainePERS retirement plans for federal tax deferment. Under federal law, qualified retirement fund assets must not be "used for, or diverted to purposes other than the exclusive benefit of [the] employees or their beneficiaries." *26 U.S.C. §401(a)(2)*. The "phrase 'purposes other than for the exclusive benefit of [the] employees or their beneficiaries' includes all objects or aims not solely designed for the proper satisfaction of all liabilities to employees or their beneficiaries covered by the trust." *26 C.F.R. § 1.401-2(a)(3)*.

Additionally, the MainePERS Board of Trustees must comply with the Maine Uniform Prudent Investor Act, which requires the Board to "invest and manage trust assets, as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances of the trust." *18-B M.R.S. §902(1)*. The general provisions of Title 5, Part 20, Maine Public Employees Retirement System, lays out these purposes, terms, distribution requirements and other circumstances of the trust administered by the Board, and the findings declare "The Legislature finds that the State owes a great debt to its retired employees for their years of faithful and productive service. Part of that debt is repaid by the benefits provided to retirees…" through the retirement programs administered by MainePERS. *5 M.R.S. §17151*.

**<u>Fiduciary Duty of Trustees</u>**

As noted above, the MainePERS Board of Trustees owes fiduciary duties to MainePERS' members, retirees, and beneficiaries.

First, the Board owes a duty of loyalty – to follow the exclusive benefit rule established in the Maine Constitution by acting solely in the interests of the members, retirees, and beneficiaries as recipients of retirement or related benefits. This duty includes not using the Board's position of trust for personal gain or to advance other causes.

Second, the Board owes a duty of prudence. This requires the exercise of reasonable care, skill, and caution. In making investment decisions, this requires considering the portfolio as a whole, the role each investment plays in the portfolio, and diversification. *See 18-B M.R.S. §§ 804, 902, 903*. Additionally, the Board "may incur only costs that are reasonable in relation to the trust property, the purposes of the trust and the skills of the" Board. *18-B M.R.S. § 805*.

The fossil fuel divestment statute does not alter these fiduciary duties. Analyzing this and the for-profit prison divestment statute, the Attorney General's Office explains:

> The subject statutes do not affect the Board's exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings

> unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on "accordance with sound investment criteria" and "consisten[cy] with fiduciary obligations." As such, they reiterate rather than modify the Board's fiduciary obligations as a trustee – both constitutional and statutory.

The Attorney General's Office further explains:

> The Board's focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of [the divestment statutes].

(Appendix D). This analysis echoes that provided by the Attorney General to the Joint Standing Committee on Labor and Housing when the bills that became the divestment statutes were under consideration. (Appendix C).

## V. INVESTMENTS AT MAINEPERS

**Investment Policy Statement**

The Board's Investment Policy Statement (Policy) directs staff in the investment of trust assets, by spelling out both high-level goals and specific implementation guidelines (Appendix E).

As spelled out at the start of the Policy, all investments are made consistent with the need to balance two competing objectives:

- Generating investment returns (to ensure growth of the trust funds); and
- Minimizing investment risks (loss of capital and cash flow shortfalls);

while maintaining the volatility of contribution rates and the plan's funded status at acceptable levels. As the Policy notes, these two goals are in opposition – generating adequate returns requires constructing a portfolio that exposes trust assets to investment risk.

The Policy defines a strategic asset allocation specifying and defining the asset classes to be invested in and provides target portfolio weights for each asset class. The Policy acknowledges that these choices are the primary determinants of the level of investment risk contained in the System's portfolio.

The Policy also provides implementation guidance to investment staff in a number of key areas. Specifically, the Policy:

- Defines each asset class and requires that individual investments be consistent with these definitions.
- Identifies benchmarks for each asset class and specifies that asset class performance be measured against these benchmarks.
- Directs that a passive approach be taken in public market equity investments.
- Requires that investments be made consistent with the Board's Environmental, Social and Governance Policy and Engagement Policy.
- Specifies high-level processes used to select and monitor individual managers.
- Discusses the use of derivatives, leverage, hedging, and securities lending.

**Investment Policy Design**

The System's strategic asset allocation spans a number of asset classes:

| | Policy Weight |
|---|---|
| **Public Market Assets** | |
| Domestic Equity | 19.0% |
| International Equity | 11.0% |
| Total Public Equity* | 30.0% |
| Traditional Credit | 5.0% |
| US Gov. Securities | 10.0% |
| **Total Public Markets** | **45.0%** |
| **Risk Diversifiers** | **7.5%** |
| **Private Market Assets** | |
| Infrastructure | 10.0% |
| Private Equity | 12.5% |
| Alternative Credit | 10.0% |
| Natural Resources | 5.0% |
| Real Estate | 10.0% |
| **Total Private Markets** | **47.5%** |

**Domestic Equity and International Equity policy proportions are based on floating MSCI ACWI weights*

Investment implementation varies across asset classes. In broad terms, MainePERS employs a passive "buy the market" approach for its investments in public markets where the likelihood of generating outperformance is low. In contrast, the System uses an active "beat the market" approach for other asset classes, where it is reasonable to believe that an active approach will add value. Brief descriptions of each asset class and rationale for the choice of investment approach are discussed below.

**Public Market Investments**

Public market investments span three distinct asset classes:
- Public Equity: 30% target allocation
- US Government Securities: 10% target allocation
- Traditional Credit: 5% target allocation

Each of these asset classes play a different role in the portfolio. Public Equities are "growth" assets that involve ownership of shares in a business. These are riskier investments and expected to produce commensurately higher returns, substantially through price appreciation. Their values are volatile and annual fluctuations in excess of 20% are to be expected.

Traditional Credit assets involve the lending of capital in return for contractual interest payments and return of capital. While these investments are exposed to the risk that borrowers will default, they are less risky than equity investments and are expected to earn lower returns. US Government Securities are the least risky of all asset classes and are viewed as having no default risk. This asset class generally benefits from a "flight to safety" when investors exit other asset classes due to a perceived increase in the risks of those asset classes. As such, this asset class is expected to serve MainePERS as a source of liquidity, if needed, in extreme market conditions.

Investment implementation within these asset classes is guided by three foundational principles:

- **Efficiency**: Public markets are generally efficient, with prices fairly reflecting investment risks.
- **Diversification**: Broad diversification allows exposure to the full spectrum of return sources and reduces exposure to uncompensated risks.
- **Costs**: Investment costs matter, and as a long term investor small cost savings will compound meaningfully over time. For example, the annual return difference between $1B invested at 10% versus 9.9% is $1M. However, over 10 years a portfolio invested at 10% will be worth $23M more than one invested at 9.9%.

Based on these views, MainePERS invests in public securities on a passive basis, benchmarked to broad market indices. MainePERS does not pay managers to attempt to beat the market by choosing securities or sectors to over- or under-weight. Costs are therefore extremely low (management fees average around 0.011% annually), and these investments require minimal staff oversight. This small allocation of MainePERS resources is consistent with the small likelihood of adding investment value by taking an active investment approach in public market asset classes, as discussed below.

### ***Data Supporting Public Markets Investment Methodology***

A substantial body of evidence provides strong support for MainePERS' low cost passive index-based investment approach for public markets. For example, S&P Dow Jones Indices measures the performance of active managers relative to their benchmarks on an annual basis. The results of this analysis are contained in their publicly available SPIVA (S&P Indices Versus Active) report. The most recent SPIVA study as of June 30, 2022, shows that over 93% of actively managed domestic (US) funds underperformed the S&P 1500 Composite over the trailing 20 years. Results are similar outside the US, where they again find that over 93% of actively managed funds underperform a broad market index (the S&P 700) over a 20-year period.

### Risk Diversifiers

The System's strategic asset allocation specifies a target weight of 7.5% for the Risk Diversifiers asset class. Investments in this asset class are made via private funds employing active strategies to invest in assets such as public stocks, bonds, and commodities. These strategies are expected to have little correlation to public markets (i.e., are just as likely to produce gains when public markets are down as they are to produce gains when public markets rise) and are intended to provide diversification away from growth assets. The principles guiding investment implementation within the Risk Diversifiers are:

- **Diversification**: Diversification across strategy types and managers
- **Complexity**: MainePERS devotes appropriate resources (staff & consultants) to develop the ability to understand this asset class and to identify and invest with top managers in order to meet the goals of the asset class

These strategies are highly dependent upon manager skill and require close monitoring on the part of MainePERS investment staff. Investment management fees in this actively managed asset class average 1.25% per year.

### Private Market Investments

Private market investments span five asset classes:

- Alternative Credit: 10% target allocation
- Infrastructure: 10% target allocation
- Natural Resources: 5% target allocation
- Private Equity: 12.5% target allocation
- Real Estate: 10% target allocation

While these asset classes play different roles in the overall portfolio, the below set of common core principles guide the System's investments in private market assets:

- **Diversification:**
  - Across asset classes to provide exposure to a broad spectrum of return sources,
  - Across managers within asset classes to avoid undue concentration, and
  - Over time to avoid concentration of investments in any given year;

- **Efficiency**: Private markets are generally inefficient, and MainePERS is able to identify and invest with managers that are able to source and invest in opportunities that exploit inefficiencies;

- **Illiquidity Premium**: A return premium exists for illiquid assets, and as a patient long-term investor MainePERS is able to earn excess returns by investing in illiquid assets as compared to public markets; and

- **Complexity**: MainePERS devotes appropriate resources (staff & consultants) to develop the ability to understand this asset class and to identify and invest with top managers in order to meet the goals of the asset class.

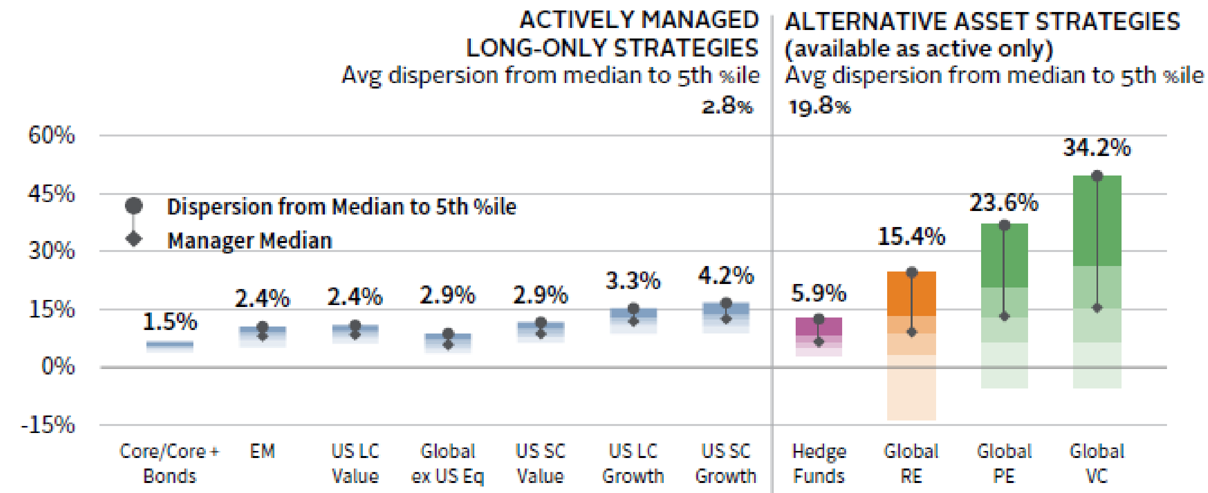
Based on these principles, MainePERS commits capital as a limited partner to long-term private investment funds. The general partners (GPs) of these funds agree to serve as fiduciaries to MainePERS, and have wide discretion in the sourcing, managing, creating value, and timing of the acquisition and disposition of investments. MainePERS typically partners with managers pursuing a generalist investment approach in their funds, which allows the GP to direct capital into industries and sectors based on what it perceives as the most attractive investments based on current market conditions and the long-term opportunity set. Outcomes are driven by GP skill, and there is wide dispersion in performance across the universe of private market managers. MainePERS investment staff devote the majority of their time to the management of these asset classes. Annual management fees are high across the private market assets classes and average nearly 1.2%.

***Data Supporting Private Market Investment Methodology***

MainePERS "active" private market investment approach is also strongly supported by data. In contrast to public markets, where evidence supports a low cost, passive index-based approach, investing in private market assets is very different for several key reasons.

First, there is no such thing as a passive approach to private market investing. Unlike public markets, private market investors cannot "buy the market." In addition, the dispersion of returns for alternative asset managers is much wider than for public markets managers. For example, a recent study by Cambridge Associates documents that differences in returns between a median manager and one in the $5^{th}$ percentile is 1.5% for core bond managers, 2-4% for public equity managers, and averages nearly 20% for strategies involving alternative assets, as shown below.

**Average Annual Manager Returns by Asset Class**
January 1, 2006 – December 31, 2020




| | Core/Core + Bonds | EM | US LC Value | Global ex US Eq | US SC Value | US LC Growth | US SC Growth | Hedge Funds | Global RE | Global PE | Global VC |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *n* | *147* | *43* | *201* | *130* | *131* | *163* | *102* | *250* | *770* | *1,179* | *1,031* |
| 5th %ile | 6.7% | 10.5% | 10.9% | 8.8% | 11.7% | 15.3% | 16.8% | 12.6% | 24.7% | 36.9% | 49.7% |
| Median | 5.2% | 8.1% | 8.5% | 5.9% | 8.8% | 12.0% | 12.6% | 6.7% | 9.3% | 13.3% | 15.5% |
| Dispersion | 1.5% | 2.4% | 2.4% | 2.9% | 2.9% | 3.3% | 4.2% | 5.9% | 15.4% | 23.6% | 34.2% |

Source: Cambridge Associates LLC.

This means that the sourcing, underwriting, due diligence, and selection of alternative asset managers is the primary key to achieving attractive long-term rates of returns in those asset classes. This is a labor-intensive process that requires a skilled and dedicated team. MainePERS has deliberately focused its' investment team's efforts on these alternative asset classes, where there is the best risk-return potential from active manager selection.

## VI. IMPACTS OF DIVESTMENT

As shown in NEPC's report (Appendix H), MainePERS' holdings of fossil fuel investments are both substantial at 7.63% and widespread, with a majority of asset classes containing fossil fuel exposure. Importantly, these exposures are not intentional, but rather arise as a result of investment decisions made in order to best balance the System's goals of generating returns while minimizing investment risks. Achieving and maintaining a fossil fuel-free portfolio by 2026 would require both disposing of significant existing investments as well as making fundamental changes to MainePERS' investment approach, as discussed below.

<u>**Initial One-time Costs Associated with Divestment**</u>

**Public Market Assets**

Fossil fuel exposures in the public market portion of the portfolio are shown below.

| Asset Exposure | Portfolio Allocation ($M) | Total Number of Holdings | Number of Holdings Tagged for Divestment | Fossil Fuel Exposure ($M) | Private Prison Exposure ($M) | Source |
|---|---|---|---|---|---|---|
| Russell 1000 | $2,491.4 | 1,033 | 69 | $192.6 | $0.0 | MSCI ESG Manager |
| Russell 2000 | $171.5 | 1,978 | 97 | $13.1 | $0.2 | MSCI ESG Manager |
| ACWI ex US | $1,755.2 | 2,371 | 218 | $198.7 | $0.0 | MSCI ESG Manager |
| Traditional Credit | $1,029.3 | 14,355 | 913 | $41.0 | $0.0 | MSCI ESG Manager |
| **TOTAL** | | | | **$445.4** | **$0.2** | |

The System holds its Russell 1000 investments directly, in a Separately Managed Account (SMA), and these holdings can be sold at will. Removing fossil fuel exposure from this portion of the portfolio would incur transactions costs associated with the sale and reinvestment of shareholdings valued at $192.6M.

Investments in the other public market asset classes shown above are made via investments in commingled funds. In these cases, divestment would require exiting these commingled vehicles and redeploying capital into SMAs where the capital could be directly invested into the non-fossil fuel constituents of each benchmark index. In addition to the transactions costs associated with liquidating and then redeploying capital, SMA creation involves custodial and legal costs, in particular for those accounts holding non-US assets.

**Private Market Assets**

The System's private market investments generally consist of interests in fixed-life private partnerships. While these interests can be transferred, their illiquid nature requires a lengthy sales process and transactions typically occur at a discount to Net Asset Value (NAV). The below table summarizes the System's current holdings of private market investments containing fossil fuel exposure and projects that these existing exposures will drop by nearly two thirds over the next 3 years as funds dispose of investments and return capital.

| | Projected # of Funds with Exposure | Projected FF Exposure ($M) | Projected Total NAV of FF Funds ($M) |
|---|---|---|---|
| Current | 58 | $930.0 | $2,486.5 |
| 12/31/2023 | 52 | $560.9 | $1,929.2 |
| 12/31/2024 | 50 | $441.7 | $1,548.9 |
| 12/31/2025 | 48 | $327.2 | $1,166.2 |

Complete removal of fossil fuel exposure would require MainePERS to sell its entire interest in any private market fund containing a fossil fuel asset. Based on indicative quotes obtained by NEPC, the System could expect to incur discounts on the sale of its partnership interests ranging from 10% to 60% depending on the asset class and fund characteristics. This suggests a minimum discount of over $100M, calculated as a 10% discount applied to a projected year-end 2025 net asset value of $1,166.2M, to remove existing fossil fuel exposure from the System's private market investments by 2026, and substantially more if divestment were to occur sooner. The System would also incur substantial legal and other costs associated with the transfer of partnership interests.

## Implications for Investment Methodology and Ongoing Costs

### Public Market Assets

As discussed above, MainePERS' approach to investing in public market assets is guided by three foundational principles: market efficiency, diversification, and costs. Excluding fossil fuel securities from public market investments raises issues related to each of these principles.

As a reminder, MainePERS takes a passive "buy the market" approach when investing in public market asset classes, which generally are viewed as efficient. This approach is guided by the evidence that over the long-term passive approaches will consistently outperform active strategies that select specific securities or sectors to over- or underweight. MainePERS would be precluded from employing its current evidence-based approach to public market investing if it were to exclude fossil fuel assets from its public market holdings. As shown above, MainePERS has $445M in fossil fuel exposure across its public market asset classes.

Relatedly, holding less than the broad market portfolio necessarily results in a lower level of diversification. Diversification is one of the few true "free lunches" available in investments. Broadly speaking, diversification allows an investor to reduce risk without sacrificing return simply by constructing a portfolio with capital spread over a large number of assets. Divestment would necessarily reduce the level of diversification in the MainePERS portfolio, thereby exposing MainePERS to a higher level of investment risk than it would otherwise bear.

The final issue concerns costs – the MainePERS approach is consistent with its general fiduciary duty to manage expenses in a prudent manner. Investment management fees across the System's public market investments are very low. MainePERS achieves these low investment costs in large part due to structural choices made with respect to investment vehicles. As noted above, MainePERS holds public market assets in both SMAs and commingled funds. Investment via commingled funds allows MainePERS to benefit from economies of scale created via pooling capital with other institutional investors.

In FY22 MainePERS paid approximately $900,000 in management fees on an average of $8.1B of public market assets, or 0.011% (1.1 basis point). As NEPC notes, management fees for customized strategies avoiding fossil fuel investments are likely to be 1-3 basis points higher. In addition to this doubling (or more) of management fees, MainePERS would face higher costs for portfolio servicing (e.g., proxy advisor) and transactions, costs associated with additional staffing needs, as well as ongoing costs for data and portfolio screening.

**Private Market Assets**

MainePERS' investment policy calls for investing 47.5% of assets across five private market asset classes, and investment staff devote a majority of their time to the oversight of these asset classes. The decision to invest in private markets is driven by key principles related to efficiency, illiquidity, and complexity. As noted above, MainePERS considers private markets to be inefficient, meaning that skilled managers must be retained to identify, invest, and manage assets that will provide returns that more than compensate for the risks being taken. Investments in these markets are illiquid, and as such carry an "illiquidity premium" providing long-term investors the ability to earn higher returns on private market investments than on public market investments of comparable risk. Finally, MainePERS recognizes that private market investments are complex and that resources must be devoted both internally and externally in order to successfully invest in these asset classes.

The majority of MainePERS' fossil fuel exposure resides in its private market investments. As shown below, this exposure is concentrated within the Infrastructure and Private Equity asset classes, while Private Credit and Natural Resources contain small exposures, and Real Estate currently has no exposure.

| Asset Exposure | Portfolio Allocation ($M) | Total Number of Funds | Number of Funds Tagged for Divestment | Fossil Fuel Exposure ($M) | Weighted Exposure | NAV of Funds with FF Exposure ($M) |
|---|---|---|---|---|---|---|
| Infrastructure | $2,017.3 | 49 | 25 | $703.2 | **3.90%** | $1,355.4 |
| Private Equity | $3,793.5 | 149 | 22 | $197.3 | **1.09%** | $648.7 |
| Private Credit | $1,219.0 | 45 | 8 | $22.3 | **0.12%** | $455.7 |
| Natural Resources | $902.9 | 16 | 3 | $7.2 | **0.04%** | $26.7 |
| Real Estate | $1,884.6 | 43 | 0 | $0 | **0%** | $0 |
| **TOTAL PRIVATE MARKETS** | **$9,817.3** | **302** | **58** | **$930.0** | **5.16%** | **$2,486.5** |

The heavy exposure within Infrastructure exists for two reasons. First, the System historically made commitments to specialized funds having a focus on investments involving fossil fuel distribution and power generation. It is worth noting that 2015 marked the last commitment to such specialized infrastructure funds, that remaining capital invested in these specialized funds should be returned over the next 3-4 years, and that no further commitments to funds with a fossil fuel-focus are anticipated. Second, MainePERS holds "generalist" infrastructure funds, where investments are sourced from a variety of sectors such as transportation, telecommunications, power generation and transmission, and social infrastructure such as hospitals and electric vehicle charging stations. While these commitments are likely to lead to some fossil fuel exposure, fossil fuel investments are unlikely to represent a majority of any single fund's investments.

Fossil fuel exposure within Private Equity totals $197M. Nearly $150M of this amount arises from funds managed by a single GP having a specific focus on fossil fuel exploration, production, and distribution. Investment returns on these "pure play" funds may be heavily influenced by (globally-determined) fossil fuel prices, which can easily negate the value expected to be added by the manager's skill in sourcing and managing assets. MainePERS last committed to these fossil fuel-focused private equity funds in 2017. The $150M invested in these funds is expected to be returned over the next 3-4 years as funds liquidate existing investments, and no further fossil fuel-focused private equity investments are anticipated.

As discussed earlier, MainePERS' private market investments take the form of interests in private partnerships. MainePERS participates in these investments as a limited partner, while the partnership is managed by the GP. The GP has wide discretion concerning the types and timing of investments subject to broad limits specified in partnership documents. This point is crucial in understanding the investment policy changes required in order to achieve and maintain a fossil fuel-free portfolio. While the above table shows that only 58 out of 302 individual private market investments currently contain fossil fuel exposure, it is important to note that essentially all of MainePERS' private investment funds have the latitude to make fossil fuel investments. This flexibility is by design – MainePERS' private market investments intentionally provide GPs with the ability to devote capital to what they see as the most attractive investment opportunities.

## VII. Update to Investment Policy Statement

Trustees are expected in early 2023 to modify Board Policy 2.1, the System's Investment Policy Statement, to recognize the divestment statutes, require annual divestment reporting, and provide guidance on investments that include exposure to fossil fuels as follows:

> The System may invest in strategies providing managers with broad discretion in the selection of investments. The potential for fossil fuel or for-profit prison investment must be disclosed to the Board prior to the Board's approval of a strategy. Disclosures will include a description of the expected role of such investments in the proposed strategy and discussion of the process leading to the selection of the strategy.
>
> On an annual basis, the Board will be provided with a report summarizing the System's fossil fuel and for-profit prison investments. This report will include a discussion of the actual and expected changes in these exposures, and analysis of these exposures within the context of the divestment statutes, 5 M.R.S. §§ 1957 and 1958.

**APPENDICES**

A. Maine Constitution, Article IX, Section 18
B. Divestment Legislation, Public Law 2021, c. 231
C. Letter from Attorney General Aaron Frey to the Joint Standing Committee on Labor and Housing, April 9, 2021
D. Letter from Assistant Attorney General Andrew Black to MainePERS, December 8, 2022
E. MainePERS Governance Manual, 2.1 Investment Policy Statement
F. Request for Proposal 2022-03, Divestment Consulting Services
G. NEPC Divestment Consulting Services Proposal, April 2022
H. NEPC Divestment Memo, November 2022

# Excerpt from the Constitution of the State of Maine

## Article IX.

## General Provisions.

**Section 18. Limitation on use of funds of the Maine State Retirement System**. All of the assets, and proceeds or income therefrom, of the Maine State Retirement System or any successor system and all contributions and payments made to the system to provide for retirement and related benefits shall be held, invested or disbursed as in trust for the exclusive purpose of providing for such benefits and shall not be encumbered for, or diverted to, other purposes. Funds appropriated by the Legislature for the Maine State Retirement System are assets of the system and may not be diverted or deappropriated by any subsequent action.

APPROVED

JUNE 16, 2021

BY GOVERNOR

CHAPTER

231

PUBLIC LAW

**STATE OF MAINE**

**IN THE YEAR OF OUR LORD**

**TWO THOUSAND TWENTY-ONE**

**H.P. 65 - L.D. 99**

# An Act To Require the State To Divest Itself of Assets Invested in the Fossil Fuel Industry

**Be it enacted by the People of the State of Maine as follows:**

**Sec. 1. 5 MRSA §135,** as amended by PL 2005, c. 386, Pt. CC, §2 and PL 2013, c. 16, §10, is further amended by adding at the end a new paragraph to read:

The Treasurer of State may not invest in any prime commercial paper or corporate bonds issued by a fossil fuel company, as defined in section 1957, subsection 1, paragraph C.

**Sec. 2. 5 MRSA §138,** as amended by PL 2001, c. 44, §11 and affected by §14, is further amended by adding at the end a new paragraph to read:

The Treasurer of State shall review the extent to which the assets of any permanent funds held in trust by the State are invested in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company, as defined in section 1957, subsection 1, paragraph C. The Treasurer of State shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings and may not invest any assets in any such stocks, securities or other obligations. Divestment pursuant to this paragraph must be complete by January 1, 2026. Nothing in this paragraph precludes de minimis exposure of any permanent funds held in trust by the State to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

**Sec. 3. 5 MRSA §1957** is enacted to read:

**§1957. Limitation on investment in fossil fuel companies; divestment**

**1. Definitions.** As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Board" means the Board of Trustees of the Maine Public Employees Retirement System.

B. "Fossil fuel" means coal, petroleum, natural gas or any derivative of coal, petroleum or natural gas that is used for fuel.

C. "Fossil fuel company" means any company that:

(1) Is among the 200 publicly traded companies with the largest fossil fuel reserves in the world;

(2) Is among the 30 largest public company owners in the world of coal-fired power plants;

(3) Has as its core business the construction or operation of fossil fuel infrastructure;

(4) Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels; or

(5) Receives more than 50% of its gross revenue from companies that meet the definition under subparagraph (1), (2), (3) or (4).

D. "Fossil fuel infrastructure" means oil or gas wells, oil or gas pipelines and refineries; oil, coal or gas-fired power plants; oil and gas storage tanks; fossil fuel export terminals; and any other infrastructure used exclusively for fossil fuels.

**2. Limitation on investment in fossil fuel company.** The board, in accordance with sound investment criteria and consistent with fiduciary obligations, may not invest the assets of any state pension or annuity fund in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

**3. Review and divestment of assets.** The board shall review the extent to which the assets of any state pension or annuity fund are invested in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company. The board shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings. Divestment pursuant to this subsection must be complete by January 1, 2026. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

**4. Post on website.** On a quarterly basis, the board shall post on the publicly accessible website of the Maine Public Employees Retirement System information detailing all its holdings in the public market and private equity investments.

**5. Annual report.** Beginning January 1, 2022 and annually thereafter, the board shall issue a report reviewing its environmental, social and governance investment policy. The report must disclose commonly available environmental performance metrics on the environmental effects of the board's investments.

**Sec. 4. Report to Legislature.** The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement System shall report annually to the joint standing committee of the Legislature having jurisdiction over retirement matters by January 1, 2023, 2024 and 2025 regarding the progress of divestment under and the implementation of the Maine Revised Statutes, Title 5, sections 138 and 1957. The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement

System shall make a final report to the joint standing committee of the Legislature having jurisdiction over appropriations and financial affairs by January 1, 2026 regarding completion of the divestment pursuant to this section.

AARON M. FREY
ATTORNEY GENERAL

TEL: (207) 626 8800
TTY USERS CALL MAINE RELAY 711

STATE OF MAINE
OFFICE OF THE ATTORNEY GENERAL
6 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0006

REGIONAL OFFICES
84 HARLOW ST. 2ND FLOOR
BANGOR, MAINE 04401
TEL: (207) 941 3070
FAX: (207) 941 3075

125 PRESUMPSCOT ST., SUITE 26
PORTLAND, MAINE 04103
TEL: (207) 822 0260
FAX: (207) 822 0259

14 ACCESS HIGHWAY, STE. 1
CARIBOU, MAINE 04736
TEL: (207) 496-3792
FAX: (207) 496 3291

April 9, 2021

The Honorable Craig Hickman, Senate Chair
The Honorable Michael Sylvester, House Chair
Joint Standing Committee on Labor and Housing
Cross Building, Room 202
Augusta, ME 04333

Re: LD 99, *An Act to Require the State to Divest Itself of Assets Invested in the Fossil Fuel Industry*
LD 319, *An Act to Promote Socially Responsible Investing by the Maine Public Employees Retirement System by Prohibiting Investment in the Fossil Fuel Industry or For-profit Prisons*

Dear Senator Hickman and Representative Sylvester:

Thank you for your letter of March 9, 2021 on behalf of the Joint Standing Committee on Labor and Housing regarding LD 99 and LD 319 of the 130th Legislature. Your letter poses two questions:

1. Whether LD 99 and LD 319 as drafted are contrary to the Maine Constitution; and

2. Whether the fiduciary responsibility in the Maine Constitution requiring MainePERS to get the most optimal return for members creates a constitutional issue that would prohibit the Maine Legislature from requesting MainePERS to get the most optimal return for members within specific parameters set by the Legislature.

The short answer to both questions is "yes." Enactment of a statute will not amend constitutional mandates. Article IX, Section 18 of the Maine Constitution reads as follows:

> **Section 18. Limitation on use of funds of Maine State Retirement System.** All of the assets, and proceeds or income therefrom, of the Maine State Retirement System or any successor system and all contributions and payments made to the system to provide for retirement and related benefits shall be held, invested or disbursed as in trust for the exclusive purpose of providing for such benefits and

shall not be encumbered for, or diverted to, other purposes. Funds appropriated by the Legislature for the Maine State Retirement System are assets of the system and may not be diverted or deappropriated by any subsequent action.

The mandate that all MainePERS "assets be held, invested or disbursed as in trust for the exclusive purpose of providing for [retirement and related] benefits" effectively prevents the Legislature from dictating how these funds may be invested. By requiring the assets to be held "as in trust," the Constitution creates the legal framework under which these funds are to be held and managed. Property held in trust is managed by a trustee who is subject to fiduciary duties. The Constitution also defines both the purpose of the fund management and to whom those fiduciary duties run, that is, for retirement and related benefits for MainePERS beneficiaries.

As a fiduciary of a pension trust, the MainePERS Board of Trustees ("the Trustees") has a duty of loyalty to administer the trust solely in the interest of the beneficiaries and for the articulated purpose of the trust providing retirement and related benefits. A trustee's duty of loyalty is a fundamental principle of common law reflected in the Restatement (Third) of Trusts,[1] the Maine Uniform Trust Code,[2] and the Employee Retirement Income Security Act of 1974 ("ERISA").[3] The constitutional intent is clear. By requiring the funds be held as in trust for the exclusive purpose of providing retirement benefits, the Constitution is mandating that the Trustees manage these funds solely in the best interest of MainePERS members as pension recipients.

As drafted, both LD 99 and LD 319 would: (1) prohibit the Trustees from acquiring assets in certain industries;[4] and (2) require the Trustees to divest of any currently held assets in those industries "in accordance with sound investment criteria and consistent with the board's fiduciary obligations." The first requirement conflicts with the constitutional mandate because it requires the Trustees to refrain from certain investment activity regardless of whether it would be in the best interests of the beneficiaries.[5] The second requirement, although arguably not in conflict with the Trustees' fiduciary duties, is essentially hollow. Unless a failure to divest an asset would be a

---

[1] "Except as otherwise provided in the terms of the trust, a trustee has a duty to administer the trust solely in the interest of the beneficiaries." Restatement (Third) of Trusts § 78 (2007).

[2] "A trustee shall administer the trust solely in the interests of the beneficiaries." 18-B M.R.S. § 802(1).

[3] "A fiduciary shall discharge his duties with respect to a plan solely in the interest of the participants and beneficiaries and (A) for the exclusive purpose of (i) providing benefits to participants and their beneficiaries and (ii) defraying reasonable expenses of administering the plan." 29 U.S.C. § 1003(a)(1). "[A]t the heart of the fiduciary relationship is the duty of complete and undivided loyalty to the beneficiaries of the trust." *Donovan* v. *Mazzola,* 716 F.2d 1226, 1238 (9th Cir. 1983) (quoting *Freund* v. *Marshall & Ilsley Bank,* 485 F. Supp. 629, 639 (W.D. Wis. 1979)).

[4] LD 99 would prohibit investment "in any stocks or other securities of any corporation or company within in the fossil fuel industry." LD 319 would prohibit investment "in any stocks or other securities of any corporation or company within the fossil fuel industry or any corporation or company that owns or operates prisons for profit."

[5] One New Hampshire case appears to conflict with this conclusion because the court concluded that a provision in the New Hampshire Constitution similar to that of Maine's did not render New Hampshire's Sudan Divestment Act unconstitutional. *Bd. of Trustees of N.H. Judicial Ret. Plan v. Sec'y of State*, 7 A.3d 1166, 1174 (N.H. 2010). In that case, the court reached its result by construing the language in the underlying ballot initiative, which did not contain the material provisions found in either the New Hampshire or Maine Constitutions. *Id.* at 1173. The case was remanded to the trial court "to determine whether the Act impermissibly interferes with the trustee's statutory or common law fiduciary duties." *Id.* at 1174. Before the trial court ruled on this issue, the New Hampshire Legislature repealed the Act, purportedly because of the high cost of compliance with the Act's mandates. 2011 N.H. Laws ch. 53:1 (eff. May 9, 2011).

breach of the Trustees' existing fiduciary duties (i.e., not in best interest of the members), any attempt to enforce the statutory requirement to divest would be meritless.

On the other hand, a resolution encouraging the Trustees to consider certain non-pecuniary factors (e.g., environmental impact) when making investment decisions may be helpful to the Trustees. Such a resolution may help insulate the Trustees from lawsuits alleging breach of fiduciary duty if the Trustees used such a non-pecuniary factor as a "tiebreaker" when choosing between investment alternatives of comparable risk and return. Although ERISA is not applicable to MainePERS, regulations recently adopted by the U.S. Department of Labor pertaining to ERISA plans indicate that using such factors for tiebreakers would not be inconsistent with a trustee's duty of loyalty.[6]

Although this letter is not a formal Attorney General Opinion pursuant to 5 M.R.S. § 195, I hope it will be helpful to you in the Joint Committee's work sessions.

Sincerely,

Aaron M. Frey
Attorney General

cc. Sandy Matheson, MainePERS Executive Director
Henry E. M. Beck, Esq., State Treasurer and Member, MainePERS Board of Trustees
Members, Joint Standing Committee on Labor and Housing

[6] 29 C.F.R. § 2550.404(a-1)(c)(2) reads as follows:

Notwithstanding the [pecuniary basis only] requirements of paragraph (c)(1) of this section, when choosing between or among investment alternatives that the plan fiduciary is unable to distinguish on the basis of pecuniary factors alone, the fiduciary may use non-pecuniary factors as the deciding factor in the investment decision provided that the fiduciary documents:

(i) Why pecuniary factors were not sufficient to select the investment or investment course of action;
(ii) How the selected investment compares to the alternative investments with regard to the factors listed in paragraphs (b)(2)(ii)(A) through (C) of this section; and
(iii) How the chosen non-pecuniary factor or factors are consistent with the interests of participants and beneficiaries in their retirement income or financial benefits under the plan.

Although this regulation became effective on January 12, 2021, the Department of Labor issued an enforcement statement on March 10, 2021, stating that until further notice it would not enforce the new regulation.

AARON M. FREY
ATTORNEY GENERAL

TEL: (207) 626-8800
TTY USERS CALL MAINE RELAY 711

STATE OF MAINE
OFFICE OF THE ATTORNEY GENERAL
6 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0006

REGIONAL OFFICES
84 HARLOW ST. 2ND FLOOR
BANGOR, MAINE 04401
TEL: (207) 941-3070
FAX: (207) 941-3075

125 PRESUMPSCOT ST., SUITE 26
PORTLAND, MAINE 04103
TEL: (207) 822-0260
FAX: (207) 822 0259

14 ACCESS HIGHWAY, STE. 1
CARIBOU, MAINE 04736
TEL: (207) 496-3792
FAX: (207) 496-3291

December 8, 2022*

Dr. Rebecca M. Wyke
MainePERS Chief Executive Officer
P.O. Box 349
Augusta, ME 04332-0349

Dear Dr. Wyke,

You asked this Office for advice on how to interpret certain provisions of 5 M.R.S. §§ 1957 and 1958. Together, these statutes direct the Board of Trustees ("the Board") of the Maine Public Employees Retirement System ("the System") to (1) cease future investment in fossil fuel companies and for-profit prisons and (2) divest any such current holdings by January 1, 2026. Notably, these directives are subject to a limitation that they be accomplished "in accordance with sound investment criteria and consistent with fiduciary obligations."[1]

As I understand your request, your concerns are whether and to what extent these statutes may affect the Board's exercise of its fiduciary duties and whether and to what extent the Board must adhere to the directives if ceasing to invest or divesting would be inconsistent with sound investment criteria or fiduciary obligations, such as the duty of loyalty or the prudent investor rule.

The subject statutes do not affect the Board's exercise of its fiduciary duties. And they do not require the Board to either cease investing in or divest such holdings unless sound investment criteria and fiduciary obligations require such actions. Both statutes specifically condition their directives on "accordance with sound investment criteria" and "consisten[cy] with fiduciary obligations." As such, they reiterate rather than modify the Board's fiduciary obligations as a trustee both constitutional[2] and statutory.[3]

* This version corrects a typographical error that appeared in the original letter.

[1] As an example, section 1957(2) reads in pertinent part: "The board, *in accordance with sound investment criteria and consistent with fiduciary obligations*, may not invest the assets of any state pension or annuity fund in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company." 5 M.R.S. § 1957(2) (emphasis added). Sections 1957(3) and 1958(2) and (3) contain the same emphasized language.

[2] All the assets of the System "shall be held, invested or disbursed as in trust for the exclusive purpose of providing [retirement and related] benefits." Me. Const. art. IX, §18.

[3] "The members of the board shall be the trustees of the several funds created by this Part [20 of Title 5]." 5 M.R.S. §17153(2). "The board may cause the funds created by this Part to be invested and reinvested in accordance with

Chiefly relevant in this context are the Board's duty of loyalty and its obligation to adhere to the prudent investor rule. Its duty of loyalty requires it to "administer the trust soley in the interests of the beneficiaries."[4] The prudent investor rule requires it to "invest and manage trust assets, as a prudent investor would"[5] and evaluate and make investment decisions "as part of an overall investment strategy having risk and return objectives reasonably suited to the trust."[6] If adherence to sound investment criteria and fiduciary obligations prevents achievement of the investment and divestiture objectives of sections 1957 and 1958, failure to achieve those objectives is not a violation of the directives in those statutes. In short, the Board's focus should remain on adhering to sound investment criteria and fulfilling its fiduciary obligations. However, if the Board encounters a situation where the application of sound investment criteria and its fiduciary obligations neither favors nor disfavors either of two potential investment options, the Board shall pursue the option that more closely complies with the directives of sections 1957 and 1958.

Although this is not a formal Attorney General Opinion pursuant to 5 M.R.S. § 195, I hope it is of assistance to you.

Sincerely,

Andrew L. Black
Assistant Attorney General
Chief, PFR Division

cc: Aaron M. Frey, Attorney General

---

the standards defined in Title 18-B, sections 802 to 807 and chapter 9," 5 M.R.S. §17153(3), which provisions of the Maine Uniform Trust Code (sections 802 to 807) delineate the fiduciary duties of trustees and provisions of the Maine Uniform Prudent Investor Act (chapter 9) require adherence to the prudent investor rule.

[4] 18-B M.R.S. § 802(1).

[5] 18-B M.R.S. § 902(1).

[6] 18-B M.R.S. § 902(2).

# Board Responsibilities – Investment Policy for Defined Benefit Plans

## 2.1 – Investment Policy Statement

Date Adopted: June 9, 2016

Date Amended: November 10, 2016; May 11, 2017; June 8, 2017; September 14, 2017; December 14, 2017; November 12, 2020; January 14, 2021; May 12, 2022

## Policy

The Board of Trustees of the Maine Public Employees Retirement System is authorized and responsible for administering defined benefit retirement programs at the State and local levels. The Board carries out this responsibility by adopting investment objectives and establishing an investment program through which the policy is implemented. In the case of conflicts, this policy statement supersedes previous policies and actions by the Board.

This policy covers the investment management of the assets of the following defined benefit programs administered by the Board:

- Legislative Retirement Program;
- Judicial Retirement Program;
- State Employee and Teacher Retirement Program, which includes State employees and public school members; and
- Participating Local District Retirement Program, which includes retirement plans of withdrawn participating local districts and the Consolidated Plan for Participating Local Districts.

Collectively, the assets of these programs are referred to as the DB Plan Assets. Statutes allow for the pooling of the DB Plan Assets for the purpose of investment. Pooling provides significant efficiencies. Because the relevant characteristics of the DB plans are sufficiently similar, all the DB Plan Assets are pooled for investment.

## Statutory/Legal Provisions

- Me. Const. art. IX, § 18.
- 5 M.R.S. §§ 17102, 17103, 17435; 18-B M.R.S. § 801, et seq. (Maine Uniform Trust Code); 18-B M.R.S. § 901, et seq. (Maine Uniform Prudent Investor Act).
- 5 M.R.S. §§ 17153(4).
- Restatement (Third) of Trusts § 78(1) (2007) (the "sole interest rule").
- Restatement (Third) of Trusts formally permits, and in some cases requires, the delegation of investment decisions from trustees to internal staff or external agents with the necessary skills and knowledge.
- The Employee Retirement Income Security Act ("ERISA"), codified at 29 U.S.C. § 1002, *et seq.*, provides a description of the standard of care that applies to trustees of private

sector retirement plans. Although the System as a public retirement plan is not specifically governed by the fiduciary duty standard set forth in ERISA, courts will often consider the standard set forth in ERISA when addressing public pension plan issues. Under ERISA, a fiduciary must act with the care, skill, prudence and diligence under the circumstances then prevailing that a prudent person (expert) acting in a like capacity would act. This statutory standard is derived from the common law of trusts, which is applicable in the State of Maine.

## Resources

The Board of Trustees implements this investment policy in coordination with:

- in-house investment professionals (the "Investment Team"), with experience, authority and responsibility to implement the investment policy and administer investment operations;
- consultants, with appropriate expertise, to assist the Board and the Investment Team;
- investment managers, selected individually and collectively to reflect and implement the investment policy, having full discretion within policy and contractual limits to manage assets allocated to them;
- custodians qualified to carry out recordkeeping, reporting, measurement and custodial functions; and
- other advisors that the Board deems appropriate and necessary

The Investment Team shall oversee the processes by which Custodians, Consultants, and other Advisors are hired, evaluated, and terminated, and shall work with the General Counsel on the terms of contracts of engagement.

At least every five years, the Investment Team will evaluate the performance and contract terms of all such service providers and make a recommendation to the Board as to whether or not a search process for new providers and/or renegotiation of terms be initiated.

## Investment Objectives

MainePERS' investment objectives balance the System's twin goals of generating investment returns (to ensure growth of the trust funds) and minimizing investment risks (loss of capital and cash flow shortfalls). The Board recognizes and accepts that these goals are in opposition, and that a trade-off exists between expected risk and return. The Board balances these goals by seeking to optimize portfolio returns consistent with an established targeted portfolio risk level. Additionally, by optimizing investment returns on trust assets, rather than attempting to maximize them, the Board seeks to maintain contribution rate and funding level volatility at acceptable levels that have been determined from time to time during strategic asset allocation planning and asset/liability reviews.

## Strategic Asset Allocation and Rebalancing

The Investment Team and Board consultants shall annually review long-term capital market expectations and existing asset class allocations with Trustees. The Board shall review, and when strategically appropriate, approve recommended changes to the existing strategic asset classes, target weights, and ranges for implementation by the Investment Team. (See Appendix 1)

The specified policy weight ranges define minimum and maximum acceptable weights for each asset class. (See Appendix 2) The Investment Team shall maintain asset class weights within target ranges, subject to considerations such as transactions costs and the unique characteristics of private market investments, by reallocating capital within existing strategies and investments. The Investment Team will provide Trustees with reports showing the fund's current asset allocation at least monthly, and report on rebalancing activity quarterly.

## Portfolio Risk Management

The primary method of controlling risk shall be the selection of the strategic asset allocation and asset class target weights within the allocation. (See Appendix 1) Combined with long term capital market expectations, these policy weights define a portfolio with a specific level of risk.

The Chief Investment Officer shall develop a risk strategy for managing assets within the Board approved strategic asset allocation. The risk strategy will specify practices and procedures for the measurement and management of portfolio risk, including the provision of a portfolio risk report to the Board at least quarterly. (See Appendix 3)

Nothing in the risk strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

## Performance Objectives and Benchmarks

The Board acknowledges that benchmarks provide insight into fund and asset class performance, but are not necessarily guides for changing asset allocations or fund managers. The rate of return earned by fund assets will be measured against a policy benchmark comprised of the asset class benchmarks. (See Appendix 4) Returns earned by individual managers will be compared with a benchmark index appropriate to each manager's investment approach.

For performance evaluation purposes, all rates of return will be measured net of the deduction of investment management fees.

During a period of transition from one asset allocation to another, certain transitional allocations to appropriate benchmarks are permitted.

## Investment Implementation

The Investment Team shall implement the investment policy, subject to Board guidelines:

- Exposure to publicly traded equity securities is expected to be obtained passively and with weightings substantially similar to those of the benchmarks specified in Appendix 4. Any exceptions must be approved by the Board.
- Investments within each Asset Class should be consistent with the Asset Class definitions provided in Appendix 1.

## Environmental, Social, and Governance; Engagement

In performing due diligence and monitoring activities, the Board and the Investment Team shall comply with Board Policy 2.6, Environmental, Social and Governance Policy; and Board Policy 2.7, Engagement.

## Investment Manager Selection and Allocation Process

MainePERS invests through external investment managers, who are charged to act as fiduciaries, and allocates fund assets among them in accordance with the strategic asset allocation. The Investment Team identifies, performs due diligence on, and recommends investment managers and allocations to the Board. The Investment Team also monitors performance and recommends retention and termination decisions to the Board. The Board retains final authority for manager selection, retention and termination decisions.

Managers are selected and retained on the basis of an evaluation that establishes sufficient confidence that the manager will improve the return and risk of the investment program. If and when the Investment Team and/or consultant(s) identify an investment manager that they believe will improve the investment program, the Investment Team will make a recommendation to the Board of Trustees that the manager be hired. This recommendation will be accompanied by an opinion by the investment consultant on this recommendation. The Board retains the final authority to accept or reject such recommendations.

The Investment Team will prepare and present to the Board of Trustees selection criteria they deem pertinent for each manager search and recommendation to hire. The Investment Team will provide the Board with all the necessary information and analysis to enable an informed decision. The Board may choose to interview the recommended manager or they may rely on the Investment Team to conduct interviews.

## Derivatives

In general, the use of derivatives is permitted provided that the purpose of the derivative is to achieve an investment objective at lower cost and/or risk than would be the case with direct investments in the underlying securities. The System may also invest in strategies which use derivatives to obtain leverage. In all such cases, the use of derivatives must be disclosed to the

Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

## Leverage

The System may invest in strategies in which managers have discretion to use leverage. The use of leverage in any strategy must be disclosed to the Board prior to the Board's approval, and the strategy must be structured so as to limit System liability to the amount committed to the strategy.

## Hedging

The Board has reviewed the benefits and risks associated with foreign currency exposures. As a general rule the Board has chosen not to hedge currency at the portfolio level. Unless otherwise directed asset managers will have discretion to hedge investments under their management as they deem most beneficial to their mandate.

## Transaction Costs and Brokerage

The Board of Trustees expects investment managers, in their capacity as fiduciaries, to manage transaction costs in the best interests of the System as an investor. To enable the managers to fulfill this fiduciary duty, it is the Board's policy not to be party to directed brokerage programs.

## Securities Lending

The System may participate in a securities lending program either directly through its separately managed portfolios or indirectly through its investments in pooled vehicles. In each case, the securities lending program must focus on low risk, as opposed to maximization of returns. All DB Plan Assets are available for securities lending.

## Monitoring

The Board relies on the Investment Team and the investment consultant(s) to continuously monitor the investment program and to report to the Board as outlined below.

- the Investment Team and investment consultant(s) provide comprehensive periodic reports on the entire investment program, including asset allocation, performance of each component relative to benchmarks, attribution analysis, and commentary.
- the Investment Team and investment consultant(s) monitor changes and developments at investment managers and at custodian(s) on an ongoing basis and report significant changes or events with recommended actions as needed.

## Emergency Measures

Immediate action may be taken beyond the bounds of this policy under extraordinary circumstances and in order to preserve the best interests of the plans' participants by unanimous decision of the following:

- The Chair, or in the Chair's absence, Vice Chair of the Board
- The Chief Executive Officer, or in the Chief Executive Officer's absence, the Chief Operating Officer and General Counsel
- The Chief Investment Officer, or in the Chief Investment Officer's absence, Deputy Chief Investment Officer, or in the absence of both of them, the general investment consultant

Any such action must be reported to the Board of Trustees at the earliest opportunity.

# Appendix 1: Asset Classes, Policy Weights and Ranges

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; September 14, 2017; January 14, 2021; May 12, 2022

The System's assets are invested across nine Asset Classes that play four distinct Roles in the overall Fund. The Trustees define these Roles and Asset Classes and set target policy weights and ranges below.

| | Weights | | |
|---|---|---|---|
| | Minimum | Policy | Maximum |
| **GROWTH** | 35% | 42.5% | 55% |
| Public Equity | 20% | 30% | 40% |
| Private Equity | 5% | 12.5% | 20% |
| **RISK DIVERSIFIERS** | 0% | 7.5% | 12.5% |
| **HARD ASSETS** | 15% | 25% | 35% |
| Real Estate | 5% | 10% | 15% |
| Infrastructure | 5% | 10% | 15% |
| Natural Resources | 0% | 5% | 10% |
| **CREDIT** | 5% | 15% | 20% |
| Traditional Credit | 0% | 5% | 10% |
| Alternative Credit | 0% | 10% | 15% |
| **MONETARY HEDGE** | 5% | 10% | 15% |
| US Government Securities | 5% | 10% | 15% |
| Cash | 0% | 0% | 10% |

**Asset Class Definitions**

The below Asset Class definitions are simplified and are intended to convey the general characteristics of investments held within each class. Some investment strategies involve assets and securities that span multiple asset classes.

*Public Equity*

Investments in publicly-traded shares of companies. May include different classes of common stock, shares of REITs, and MLPs.

*Private Equity*

Investments in non-publicly traded shares of companies. Investments are typically made via private limited partnerships, and may include both equity and debt securities.

Risk Diversifiers

Investments typically made through private funds that generally invest in listed assets such as stocks, bonds, and commodities, via strategies that are expected to have little correlation with declining or rising stock markets.

*Real Estate*

Investments providing direct exposure Real Estate, including investments through private funds.

*Infrastructure*

Investments typically made through private funds that generally invest in assets that meet most or all of the following criteria: provide essential public services, possess monopoly-like characteristics, provide long term contracted cash flows, and bear limited volumetric and price risk.

*Natural Resources*

Investments in private funds that generally invest in businesses focused on natural resources such as timberland, agriculture, and mining. Private energy investments will generally be included in Private Equity, rather than Natural Resources.

*Traditional Credit*

Investments in investment-grade debt instruments that are not issued by the U.S. Government. Such debt may or may not be registered for sale to the general public.

*Alternative Credit*

Investments in debt instruments issued by non-investment grade and unrated entities. This may include, but is not limited to high yield debt, bank loans, structured debt, and asset-backed debt. Alternative credit investments are expected to pay or accrue periodic interest and to return principal at maturity. Distressed debt and other debt or yield-oriented securities that include equity-like exposures are considered Private Equity, not Alternative Credit.

*Monetary Hedges*

Investments in debt instruments issued by the U.S. Government, including nominal Treasury securities and Treasury Inflation Protected Securities (TIPS), held in approximately equal proportions.

**Roles in the Overall Fund**

Each of the above asset classes fills a specific Role in the overall portfolio. These Roles are defined below.

Growth Assets

Growth Assets are intended to reduce the system's funding needs in the long term by appreciating in value. Growth Assets possess inherently higher expected returns than other asset classes. Growth Assets also have higher expected volatility than other asset classes, and are expected to increase funding volatility in the short run.

Risk Diversifiers

Risk Diversifiers are investments that primarily derive their return from alpha (or active manager skill) as opposed to market directionality. Risk Diversifiers are expected to provide significant risk diversification benefits away from Growth Assets.

Hard Assets

Investments in the Hard Assets category provide exposure to long-lived "real" assets, such as real estate, timber, agricultural, and infrastructure assets. Expected return levels of Hard Assets are lower than those of Growth Assets, and a substantial portion of such returns is expected to come from ongoing cash flows. Hard Assets are expected to provide inflation protection, to have low correlation with Growth Assets, and to provide diversification benefits.

Credit Assets

Credit investments provide capital to end-users via loans and the purchase of debt securities. Such investments provide for contractual returns (interest) and repayment of principal. Credit investments possess lower risk and expected returns than equity investments, but have higher risk and expected returns than monetary hedges. Credit investments are expected to provide diversification away from Growth Assets.

Monetary Hedges

The role of Monetary Hedges in the portfolio is to provide liquidity and a safe harbor in times of turbulence. These investments are cash and obligations of the U.S. Government, and are considered to be free of default risk.

**Board Responsibilities – Investment Policy**

# Appendix 2: Rebalancing

Date Adopted: June 9, 2016

Date Amended: May 12, 2022; July 14, 2022

The Board has set target weights for each Asset Class and Role in Portfolio category in Appendix 1, and delegates the management of asset class allocation to the Investment Team. The Investment Team is expected to maintain asset class weights near target, subject to considerations such as transactions costs and the unique funding and liquidity characteristics of private market investments.

To this end, the Team is permitted to reallocate capital within existing strategies and investments for rebalancing purposes. The Investment Team is expected to consider both Role in Portfolio and Asset Class policy weights when rebalancing. The Team will provide Trustees with reports showing the Fund's current asset allocation at least monthly, and report on rebalancing activity at least quarterly.

In the specific case of the System's Risk Diversifier allocation, the Investment Team is permitted to rebalance across existing managers and strategies, consistent with the goal of maintaining diversification within the allocation. Rebalancing activity will be reported to Trustees at least quarterly.

**Board Responsibilities – Investment Policy**

# Appendix 3: Risk Strategy

Date Adopted: June 9, 2016

Date Amended: *New*

While this Risk Strategy is in development the Chief Investment Officer shall rely on the Strategic Asset Allocation and Rebalancing provisions of this policy to manage the Fund's risk.

The Investment Team and the Board believe that this approach will deliver an appropriate expected return with commensurate risk over a long term horizon. However they also recognize that the portfolio's realized risk will vary over time which may result in periods during which the fund bears substantially higher risk than the System initially targeted.

In an effort to achieve more stable (less volatile) returns, the Investment Team will seek to develop management tools and practices that they believe will be better able to keep the fund's risk in an acceptable range.

This Risk Strategy shall be updated from time to time by the Trustees to reflect recommendations developed by the Chief Investment Officer.

Nothing in the Risk Strategy shall override the Asset Classes, Policy Weights and Ranges described in Appendix 1.

**Board Responsibilities – Investment Policy**

## Appendix 4: Policy Benchmarks

Date Adopted: June 9, 2016

Date Amended: June 8, 2017, January 14, 2021, May 12, 2022

| Asset | Benchmark | Weight |
|---|---|---|
| Total Public Equity | Russell 3000 & MSCI ACWI ex-USA, based on ACWI weights | 30% |
| Private Equity | Russell 3000 + 3% | 12.5% |
| Diversifiers | 0.3 Beta MSCI ACWI | 7.5% |
| Real Estate | NCREIF Property (lagged one quarter) | 10% |
| Infrastructure | CA Infrastructure Median | 10% |
| Natural Resources | CA Natural Resources Median | 5% |
| Traditional Credit | Barclays US Aggregate, ex Treasury | 5% |
| Alternative Credit | 50% BAML US HY II + 50% S&P/LSTA US Leveraged Loan Index | 10% |
| U.S. Government Securities | 50% Bloomberg Barclays U.S. Government Bond Market Index + 50% Bloomberg U.S. TIPS Index | 10% |

**Board Responsibilities – Investment Policy**

# Appendix 4: Co-Investment

Date Adopted: June 9, 2016

Date Amended: June 8, 2017; January 14, 2021; May 12, 2022

Co-investments are permitted within private market asset classes, subject to the below guidelines.

| | |
|---|---|
| **Target Allocation** | 7.5% of total Fund.<br>This target is a subset of the total 47.5% allocation to private market asset classes, and is not in addition to that allocation. |
| **Asset Classes** | Co-investment may be made in each of the private market asset classes. |
| **Discretion** | Investment Team has discretion to make co-investments, in conjunction with the asset class consultant. |
| **Signatories** | The Chief Executive Officer, Chief Investment Officer, and General Counsel are authorized as signatories to execute documents in connection with co-investments. |
| **Permissible Partners** | Unless otherwise authorized, co-investments will only be made alongside Funds in which the System is a current investor. |
| **Size Limits** | Unless otherwise authorized, maximum of $25m invested into any single co-investment.<br><br>Unless otherwise authorized, maximum of $200m aggregate co-investment in a single asset class with any single General Partner.<br><br>The Investment Team will provide additional co-investment portfolio reporting to Trustees for those General Partners with more than $100m of aggregate co-investment in any single asset class. |

# Maine Public Employees Retirement System
# Request for Proposals 2022-03
# Divestment Consulting Services

1. **About:** The Maine Public Employees Retirement System (MainePERS) is a quasi-governmental agency operating in Augusta and Portland, Maine. For more information about MainePERS please visit our website at www.mainepers.org.

2. **Scope:** The objective of this Request for Proposals ("RFP") is for MainePERS to procure consulting services from one or more qualified firms to assist MainePERS as it evaluates divestment of certain fossil fuel and private prison assets as specified in Maine statutes, Public Laws 2021, chapters 231 and 234, copies of which may be found at Attachment A.

3. **Definition of Parties:** Respondents to this Request for Proposal (RFP) will hereinafter be referred to as "Bidders" and each Bidder to whom a contract is awarded will hereinafter be referred to as the "Contractor."

4. **Description of Requirements**: Attachment B describes the products and/or services to be provided by the Contractor to MainePERS pursuant to this RFP.

5. **Terms of Contract:** The Contractor will be required to enter into MainePERS' standard contract, a copy of which may be found at Attachment C.

6. **Insurance:** For the duration of the contract, the Contractor will be required to procure, maintain, and provide proof of a liability policy encompassing the services described in this RFP with liability coverage of at least $2,000,000 to protect the Contractor and MainePERS from suits, along with workers' compensation insurance as required by law.

7. **Qualifications:** Each Bidder must demonstrate a minimum of five years of experience in the business of providing the services and products described in this RFP and have access to appropriate resources to perform as necessary to meet the obligations of this RFP.

8. **Substantive Questions:** All substantive questions must be voiced during the Bidders' Conference (see below) or submitted in writing via e-mail to RFP@mainepers.org no later than 5:00 p.m. EDT on April 11, 2022. We anticipate issuing answers to substantive questions on or before April 15, 2022.

9. **Bidders' Conference:** A mandatory Bidders' conference call for this RFP will be held at 1:00 p.m. EDT on April 11, 2022. Participants are asked to register in advance for this call by calling (207) 512-3292 no later than April 8, 2022. A Bidder who fails to register by the time of the call may not participate in the call. During the conference call, questions may be asked regarding the RFP. MainePERS may provide answers to questions at that time or provide a written response. All participants in the Bidders' conference will receive a copy of any written response to questions.

10. **Evaluation Committee:** An Evaluation Committee will review, evaluate and score all proposals. The Evaluation Committee may include or be advised by MainePERS' general investment consultant, Cambridge Associates, LLC. Following a preliminary review of all proposals submitted by the deadline, the Evaluation Committee may or may not interview those Bidders whose proposals have received the highest scores. The interview would be an opportunity for a Bidder to respond to questions and to clarify its proposal. It will not be an opportunity for the Bidder to submit new information not included in the proposal. If

interviews of the top-scoring Bidders are conducted, the Evaluation Committee will conduct a post-interview review of the proposals and any further clarification as conveyed through the interview process. Bids will be evaluated using the following weighted criteria:

| CRITERIA | WEIGHT |
|---|---|
| Firm's Experience | 25% |
| Experience and Qualifications of Team Members | 25% |
| Quality of Proposal (Depth, Rigor, Consistency with Work Specifications) | 25% |
| Price | 25% |

11. **Proposal Package:** Proposals must be submitted by email and include the following:

    a. Transmittal email which shall include:

       i. Name and address of the Bidder;
       ii. Name, title, telephone number, and email address of the contact person for the Bidder;
       iii. A statement that the proposal is in response to this Request for Proposal; and
       iv. The Bidder's federal tax I.D. number.

    b. As an attachment to the transmittal email, a PDF file containing the substance of the proposal, including the following mandatory items:

       i. An executive summary of the proposal;
       ii. A description of the Bidder's business; a summary of the Bidder's experience (including any experience with MainePERS); answers to the questions contained in Attachment D; any other information that the Bidder believes is material to its qualifications; and at least three recent references for whom the Bidder has provided similar services; and
       iii. A statement that all provisions of Attachment C are acceptable or specifically state any objections to any provisions.

    c. All proposals are due no later than 2:00 p.m. EDT on April 29, 2022. Only proposals received as of 2:00 p.m. will be considered. Proposals must be submitted by email to RFP@mainepers.org. Mailed, faxed, or hand delivered proposals will not be considered. Bidders will receive an email acknowledging receipt of their proposal. A Bidder who has submitted a proposal and not received an acknowledgment should call (207) 512-3292.

12. **Freedom of Access**: Proposals and any other communications received from Bidders are subject to Maine's Freedom of Access law, 1 M.R.S. ch. 13. If a Bidder believes that a portion of its proposal is exempt from public disclosure under that law, the Bidder must specifically identify that portion and the exemption. Blanket designation of an entire proposal as confidential would be ineffective.

13. **Award**: MainePERS intends to award a contract to one or more Bidders who receive the highest scores following the final review.

14. **Award Notification:** All Bidders will be notified of the award decision in writing. MainePERS will initiate contract negotiations with the selected Bidder. Should MainePERS be unable to reach an acceptable contract agreement with a selected Bidder, MainePERS

reserves the right to withdraw the award to that Bidder and to make an award in favor of another Bidder based on the scoring.

15. **Rights of MainePERS:** The Request for Proposal does not commit MainePERS to award a contract. MainePERS reserves the right to accept or reject any or all proposals received. MainePERS reserves the right not to check any or all references. MainePERS has the right to interview any or all Bidders after the RFP deadline. MainePERS may also cancel or amend this Request for Proposal in part or in its entirety.

16. **Timeline for this RFP**: MainePERS has developed the following list of key events related to this RFP. All dates are subject to change at the discretion of MainePERS.

| EVENT | DATE |
|---|---|
| RFP Issued | March 21, 2022 |
| Register for Bidders' Conference | April 8, 2022 |
| Bidders' Conference | April 11, 2022 |
| Deadline for Questions | April 11, 2022 |
| Questions Answered | April 15, 2022 |
| Proposal Due Date | April 29, 2022 |
| Evaluation of Proposals | May 2-13, 2022 |
| Execution of Contract | May 31, 2022 |
| Contract Start Date | June 1, 2022 |

APPROVED JUNE 16, 2021 BY GOVERNOR

APPENDIX E

CHAPTER 231 PUBLIC LAW

## STATE OF MAINE

## IN THE YEAR OF OUR LORD

## TWO THOUSAND TWENTY-ONE

## H.P. 65 - L.D. 99

## An Act To Require the State To Divest Itself of Assets Invested in the Fossil Fuel Industry

**Be it enacted by the People of the State of Maine as follows:**

**Sec. 1. 5 MRSA §135,** as amended by PL 2005, c. 386, Pt. CC, §2 and PL 2013, c. 16, §10, is further amended by adding at the end a new paragraph to read:

The Treasurer of State may not invest in any prime commercial paper or corporate bonds issued by a fossil fuel company, as defined in section 1957, subsection 1, paragraph C.

**Sec. 2. 5 MRSA §138,** as amended by PL 2001, c. 44, §11 and affected by §14, is further amended by adding at the end a new paragraph to read:

The Treasurer of State shall review the extent to which the assets of any permanent funds held in trust by the State are invested in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company, as defined in section 1957, subsection 1, paragraph C. The Treasurer of State shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings and may not invest any assets in any such stocks, securities or other obligations. Divestment pursuant to this paragraph must be complete by January 1, 2026. Nothing in this paragraph precludes de minimis exposure of any permanent funds held in trust by the State to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

**Sec. 3. 5 MRSA §1957** is enacted to read:

**§1957. Limitation on investment in fossil fuel companies; divestment**

**1. Definitions.** As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Board" means the Board of Trustees of the Maine Public Employees Retirement System.

B. "Fossil fuel" means coal, petroleum, natural gas or any derivative of coal, petroleum or natural gas that is used for fuel.

C. "Fossil fuel company" means any company that:

(1) Is among the 200 publicly traded companies with the largest fossil fuel reserves in the world;

(2) Is among the 30 largest public company owners in the world of coal-fired power plants;

(3) Has as its core business the construction or operation of fossil fuel infrastructure;

(4) Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels; or

(5) Receives more than 50% of its gross revenue from companies that meet the definition under subparagraph (1), (2), (3) or (4).

D. "Fossil fuel infrastructure" means oil or gas wells, oil or gas pipelines and refineries; oil, coal or gas-fired power plants; oil and gas storage tanks; fossil fuel export terminals; and any other infrastructure used exclusively for fossil fuels.

**2. Limitation on investment in fossil fuel company.** The board, in accordance with sound investment criteria and consistent with fiduciary obligations, may not invest the assets of any state pension or annuity fund in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

**3. Review and divestment of assets.** The board shall review the extent to which the assets of any state pension or annuity fund are invested in the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company. The board shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings. Divestment pursuant to this subsection must be complete by January 1, 2026. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any fossil fuel company or any subsidiary, affiliate or parent of any fossil fuel company.

**4. Post on website.** On a quarterly basis, the board shall post on the publicly accessible website of the Maine Public Employees Retirement System information detailing all its holdings in the public market and private equity investments.

**5. Annual report.** Beginning January 1, 2022 and annually thereafter, the board shall issue a report reviewing its environmental, social and governance investment policy. The report must disclose commonly available environmental performance metrics on the environmental effects of the board's investments.

**Sec. 4. Report to Legislature.** The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement System shall report annually to the joint standing committee of the Legislature having jurisdiction over retirement matters by January 1, 2023, 2024 and 2025 regarding the progress of divestment under and the implementation of the Maine Revised Statutes, Title 5, sections 138 and 1957. The Treasurer of State and the Board of Trustees of the Maine Public Employees Retirement

System shall make a final report to the joint standing committee of the Legislature having jurisdiction over appropriations and financial affairs by January 1, 2026 regarding completion of the divestment pursuant to this section.

APPROVED
JUNE 16, 2021
BY GOVERNOR

CHAPTER
234
PUBLIC LAW

**STATE OF MAINE**

**IN THE YEAR OF OUR LORD**

**TWO THOUSAND TWENTY-ONE**

**H.P. 223 - L.D. 319**

# An Act To Promote Socially Responsible Investing by the Maine Public Employees Retirement System by Prohibiting Investment in For-profit Prisons

**Be it enacted by the People of the State of Maine as follows:**

**Sec. 1. 5 MRSA §138,** as amended by PL 2001, c. 44, §11 and affected by §14, is further amended by adding at the end a new paragraph to read:

The Treasurer of State shall review the extent to which the assets of any permanent funds held in trust by the State are invested in the stocks, securities or other obligations of any corporation or company or any subsidiary, affiliate or parent of any company that owns or operates prisons for profit. The Treasurer of State shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings and may not invest any assets in any such stocks, securities or other obligations. Nothing in this section precludes de minimis exposure of any permanent funds held in trust by the State to the stocks, securities or other obligations of any corporation or company or any subsidiary, affiliate or parent of any company that owns or operates prisons for profit.

**Sec. 2. 5 MRSA §1957** is enacted to read:

**§1957. For-profit prisons**

**1. Definitions.** For the purposes of this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Board" has the same meaning as in section 17001, subsection 7.

B. "Retirement system" means the Maine Public Employees Retirement System.

**2. Board may not invest.** The board, in accordance with sound investment criteria and consistent with fiduciary obligations, may not invest the assets of the retirement system in any stocks or other securities of any corporation or company that owns or operates prisons for profit. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any corporation or company that owns or operates prisons for profit.

**3. Board to divest.** The board shall review the extent to which the assets of the retirement system are invested in any stocks or other securities of any corporation or company that owns or operates prisons for profit. The board shall, in accordance with sound investment criteria and consistent with fiduciary obligations, divest any such holdings. Nothing in this subsection precludes de minimis exposure of any funds held by the board to the stocks, securities or other obligations of any corporation or company that owns or operates prisons for profit.

**Sec. 3. Policy review.** The Board of Trustees of the Maine Public Employees Retirement System shall review its "Environmental, Social and Governance Policy" adopted January 8, 2015 and shall make any changes necessary to its policy to conform to the requirements of the Maine Revised Statutes, Title 5, section 1957. The board shall submit its report of the review of the policy and any amendments adopted by the board to the Joint Standing Committee on Labor and Housing by January 1, 2022.

**Attachment B**
**Specifications of Work to be Performed**
**and Products to be Provided**

Maine Public Employees Retirement System seeks a consultant to assist the System as it evaluates divestment of certain assets as specified in Maine statutes PL2021 c. 231 and PL2021 c. 234.

MainePERS views the evaluation of divestment as the necessary first step in the process of complying with legislation, and further RFPs are expected for any subsequent steps arising from the results of this RFP.

The evaluation of divestment is expected to include, but need not be limited to, the below items. All work must be documented for the System in a comprehensive and detailed manner. The consultant will prepare a written report for delivery no later than November 1, 2022.

**A. Broad review of divestment and the climate change-related risk landscape**
Aspects of this should include, but need not be limited to:

1. A broad overview of climate change-related legal and regulatory trends, both in the U.S. and globally.
2. A summary of key climate change-related investment risks and their implications for institutional investors.
3. A summary of peer U.S. public pension funds' experiences with divestment, including discussion of type of divestment (e.g., fossil fuel, firearms, etc.) and whether or not divestment was legislatively mandated.

**B. Identify and quantify the System's portfolio holdings subject to divestment**
For public market holdings this should include:

1. Development of a clear and repeatable methodology for identifying exposures to companies that are subject to divestment based on legislative definitions. This should include identification of any required data sources.
2. Identification of MainePERS holdings of securities subject to divestment, classified and aggregated by:
    a. Asset class & holding structure type (e.g., Domestic Equity SMA, or corporate bonds held in commingled funds)
    b. Sector / Industry / Sub-Industry using the Global Industry Classification Standard (GICS) taxonomy
    c. Fossil fuel type(s) (i.e., oil, natural gas, thermal coal, etc.)
    d. Relevant legislation (231 or 234) and specific legislative definition(s) (e.g., C(1) or C(2), etc.)

MainePERS will identify and provide to the winning bidder information regarding private market portfolio holdings that are subject to divestment.

**C. Identify and quantify direct divestment costs**

In this section the consultant will, for all portfolio assets subject to divestment:

1. Identify the types of potential direct costs and/or cost savings that may be associated with divestment, develop estimates of these, and summarize costs/cost savings by category and asset class. These should include, but need not be limited to:
    a. Transaction costs related to divestment of existing public holdings
    b. Secondary market pricing, legal expenses, and any reputational considerations associated with seeking to exit from private closed-end funds
    c. Potential servicing costs/cost savings arising from changes in investment structures and management agreements, including proxy and custodial services
    d. Other potential ongoing costs or cost savings (e.g., changes in data and compliance resources required to monitor holdings, etc.)

**D. Identify and quantify divestment impact on portfolio**

This section should employ various measures and methodologies to provide MainePERS with an evaluation of the impact of divestment on the System's portfolio. Components should include:

1. Identify and explain measures and methodologies that can be used to analyze the impact of divestment on the System's investment portfolio.
2. Compute and discuss these measures.
    a. This initial phase of the impact analysis should assume that any proceeds from divestment will be re-invested ratably across the remaining asset classes in the current portfolio.

**Attachment C**
**DIVESTMENT CONSULTING SERVICES AGREEMENT**

THIS DIVESTMENT CONSULTING SERVICES AGREEMENT ("Agreement") is made this 1st day of June 2022, by and between the MAINE PUBLIC EMPLOYEES RETIREMENT SYSTEM ("MainePERS") and ___________________________________ (the "Contractor").

NOW, THEREFORE, MainePERS and the Contractor hereby agree as follows:

## Section 1 SERVICES OF THE CONTRACTOR

1.1 Scope of Services. The Contractor shall furnish services as requested by MainePERS and as set forth in the Divestment Consulting Services Request for Proposals, Number 2022-003, issued March 21, 2022, ("RFP") and the Contractor's proposal in response to the RFP, which are incorporated herein by reference and portions of which are attached hereto as Exhibits 1 and 2, respectively. To the extent that there is a conflict among the body of this Agreement and the exhibits, the body of this Agreement shall take priority.

1.2 Compliance with Law. The Contractor warrants and represents that it will comply with all governmental ordinances, laws and regulations. This Agreement shall be governed in all respects by the laws, statutes and regulations of the United States of America and the State of Maine. Any judicial proceeding brought by one party against the other party shall be brought in the courts of the State of Maine.

1.3 Licenses, Permits, and Fees. The Contractor shall obtain, at its sole cost and expense, such licenses, permits and approvals as may be required by law for the performance of the services required by this Agreement.

1.4 Insurance. The Contractor shall keep in force insurance as specified in the RFP. Prior to the execution of this Agreement, and subsequently at the request of MainePERS, the Contractor shall furnish MainePERS with written or photocopied verification of the existence of such insurance.

## Section 2 COMPENSATION

2.1 Contract Pricing. [To be filled in.]

2.2 Method of Payment. [Payment terms to be filled in.] Invoices and all other billing communications should be directed to:

Maine Public Employees Retirement System
Accounts Payable
P.O. Box 349
Augusta, ME 04332-0349
accounting@mainepers.org
(207) 512-3117

2.3 Independent Contractor. In the performance of this Agreement, the parties hereto agree that the Contractor, and any agents and employees of the Contractor, shall act in the capacity of an independent contractor and not as officers or employees or agents of MainePERS.

## Section 3 COORDINATION OF WORK

3.1 Agreement Administrator. James A. Bennett hereby is designated to be the MainePERS Agreement Administrator during the term of this Agreement ("Agreement Administrator"). MainePERS shall have the right to designate another Agreement Administrator upon written notice to the Contractor. All correspondence and related submission from the Contractor shall be submitted to:

James A, Bennett
Chief Investment Officer
Maine Public Employees Retirement System
P.O. Box 349
Augusta, ME 04332-0349

3.2 Amendments. This Agreement may be modified, amended, changed, added to or subtracted from by the mutual consent of the parties hereto, if such amendment or change is in written form and executed with the same formalities as this Agreement and attached to the original Agreement to maintain continuity.

3.3 Assignment. The Contractor shall not assign or subcontract the whole or any part of this Agreement without the prior written consent of MainePERS, and any attempt to so assign or subcontract shall be invalid. No assignment shall relieve the Contractor of its obligations hereunder. This Agreement will be binding upon the Contractor's successors and permitted assignees.

## Section 4 TERM

4.1 Term. Unless earlier terminated by MainePERS in accordance with subsection 4.2 below, the term for this Contract shall begin on June 1, 2022, and shall continue through December 31, 2022, except that subsections 5.5, 5.8, 5.9, and 5.10 below shall survive.

4.2 Termination. MainePERS may terminate this agreement for any reason by giving the Contractor at least 30-days written notice of termination.

## Section 5 MISCELLANEOUS PROVISIONS

5.1 Conflicts of Interest. The Contractor shall not engage any Trustee or employee of MainePERS in a position that would constitute a violation of 17 M.R.S. § 3104.

5.2 Background Checks. The Contractor shall perform a criminal background check on all of its employees who perform work on MainePERS' property. The Contractor's employees performing work on MainePERS' property must not have been convicted of a felony or any crime involving theft. A list of employees authorized to work on MainePERS' property and the results of their background checks shall be provided to MainePERS by the Contractor upon request.

5.3 ID Badges. While on MainePERS' property, all employees of the Contractor shall wear on their person an ID badge or wear a uniform containing the Contractor's business name.

5.4 Unauthorized Persons. Unless specifically authorized by the Agreement Administrator, under no circumstance shall another person or persons accompany the Contractor or the Contractor's employees onto MainePERS' property while the Contractor is conducting work under this contract.

5.5 Confidential Information/Security. Confidentiality of MainePERS information is required. All materials and documents provided by MainePERS, employers or participants in the plans administered by MainePERS, or MainePERS' vendors, or located in MainePERS buildings, shall constitute confidential information. The Contractor shall maintain confidentiality in accordance with industry standards and State and federal law. Neither the Contractor nor its employees will disclose, release or communicate any confidential information to any third person, individual, organization or entity without specific authorization by MainePERS. Any violation or breach of this provision will constitute grounds for immediate termination of the Agreement and shall entitle MainePERS to all remedies available in law or equity.

5.6 Solicitors. The Contractor warrants that it has not employed or contracted with any company or person, other than for assistance with the normal study and preparation of a proposal, to solicit or secure this Agreement and that it has not paid, or agreed to pay, any company or person, other than a bona fide employee working solely for the Contractor, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon, or resulting from the award for making this Agreement. For breach or violation of this warranty, MainePERS shall have the right to annul this Agreement without liability or, in its discretion to otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

5.7 Non-Discrimination in Employment: MainePERS' contracts for services are subject to statutory conditions related to non-discrimination in employment, 5 M.R.S. § 784. The Contractor has read and agrees to these conditions.

5.8 Access to Records. The Contractor shall maintain all books, documents, payrolls, papers, accounting records and other evidence pertaining to this Agreement for a period of seven (7) years following termination of this Agreement. The Contractor shall allow inspection of pertinent documents by MainePERS or its authorized representatives at the Contractor's office upon reasonable notice and shall furnish copies of the documents if requested.

5.9 MainePERS Held Harmless. The Contractor will indemnify, defend, and save harmless MainePERS, its Trustees, employees, and agents from any and all claims, costs, expenses, injuries, liabilities, losses and damages of every kind and description resulting from or arising out of the performance of this Agreement by the Contractor, its employees, agents, or subcontractors. This indemnification does not extend to a claim that results solely and directly from (i) MainePERS' negligence or unlawful act, or (ii) action by the Contractor taken in reasonable reliance upon an instruction or direction given by an authorized person acting on behalf of MainePERS in accordance with this Agreement. Nothing in this Agreement shall be construed as a waiver of the privileges or immunities of MainePERS, its Board of Trustees, or its employees.

5.10 Notice of Claims. The Contractor shall give the Agreement Administrator immediate notice in writing of any legal action or suit filed related in any way to this Agreement or which may affect the performance of the Contractor under this Agreement.

5.11 Severability. The invalidity or unenforceability of any particular provision or part thereof of this Agreement shall not affect the remainder of said provisions, and this Agreement shall be construed in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

5.12 Force Majeure. The performance of an obligation by a party under this Agreement shall be excused in the event that performance of that obligation by that party is prevented by an act of God, act of war, riot, fire, explosion, flood or other catastrophe, sabotage, severe shortage of fuel, power or raw materials, change in law, court order, national defense requirement, or strike or labor dispute, provided that any such event and the delay caused thereby is beyond the control of, and could not reasonably be avoided by, that party. In the event of the Contractor's non-performance caused by any of the foregoing reasons, MainePERS may, at its discretion, extend the time period for performance of the obligation excused under this section by the period of the excused delay together with a reasonable period to reinstate compliance with the terms of this Agreement.

5.13 Vendor Security Requirements. The Contractor will comply with MainePERS' Vendor Security Requirements, which are attached hereto as Exhibit 3 and incorporated herein by reference.

5.14 Entire Agreement. This document contains the entire Agreement of the parties, and neither party shall be bound by any statement or representation not contained herein. No waiver shall be deemed to have been made by any of the parties unless expressed in writing and signed by the waiving party. The parties expressly agree that they shall not assert in any action relating to the Agreement that any implied waiver occurred between the parties which is not expressed in writing. The failure of any party to insist in any one or more instances upon strict performance of any of the terms or provisions of the Agreement, or to exercise an option or election under the Agreement, shall not be construed as a waiver or relinquishment for the future of such terms, provisions, option or election, but the same shall continue in full force and effect, and no waiver by any party of any one or more of its rights or remedies under the Agreement shall be deemed to be a waiver of any prior or subsequent rights or remedy under the Agreement or at law.

IN WITNESS WHEREOF, MainePERS and the Contractor, by their representatives duly authorized, have entered into this Agreement as of the date first written above.

| | |
|---|---|
| Maine Public Employees<br>Retirement System | Company Name |
| By: ______________________________ | By: ______________________________ |
| Name: | Name: |
| Title: | Title: |

**EXHIBIT 3**

MainePERS Vendor Security Requirements

The Contractor shall cooperate with MainePERS in protecting the integrity, security, and confidentiality of MainePERS' information and assets by:

- participating in an annual vendor due diligence process by providing information reasonably requested by MainePERS within 10 business days;

**[Other requirements to be identified based on particular Bidder and proposal and subject to negotiation]**

**Attachment D**
**Questions for RFP Respondents**

## A: General Information

1. Name and business address of responding party.

2. Name, address, email address and phone number of primary point of contact for all communications.

3. Provide a brief overview of your firm's business.

4. If applicable, please describe your firm's membership of and/or partnerships with investment-related organizations.

5. Please describe the composition and qualifications of the team that would work on this assignment.

## B: Experience with Investment Consulting and Divestment

1. Please describe your firm's experience consulting with institutional investors on general investment topics such as asset allocation, portfolio construction, and performance measurement.

2. Please describe your firm's experience, if any, consulting with U.S. public pension plans on divestment, particularly of fossil-fuel companies.

3. Please describe your firm's experience consulting on climate change-related investment risks.

4. Please describe the data sources and analytical methods your firm would use for this engagement.

## C: Other Items

1. Please disclose any potential conflicts of interest your firm may have related to this engagement such as managing investment products that have ownership of or exclude investment from fossil fuel companies.

2. Please provide at least three references for prior investment consulting engagements, preferably focused on divestment analysis for U.S. public pension plans.

**Kristine Pelletier**
Partner

**Dulari Pancholi, CFA, CAIA**
Principal, Head of Credit and Multi-Asset Investments

**Kevin Leonard**
Partner

April 29, 2022

Maine Public Employees Retirement System
139 Capitol Street
Augusta, ME 04330

**RE: Divestment Consulting Services for Maine Public Employees Retirement System**

Dear MainePERS Board of Trustees:

NEPC and MSCI are submitting a joint divestment consulting services proposal as outlined in the attached Executive Summary. NEPC has been providing investment consulting services since 1986. NEPC was founded on three main principles: strive to maintain **independence**, provide **proactive counsel** in an attempt to help our clients exceed their goals and objectives, and service our clients with **seasoned professionals**. As you evaluate firms, we would ask you to consider the following points that differentiate NEPC from the competition.

1. We are one of the largest **independent** investment consulting firms in the industry. We advise 399 retainer clients with $1.5 trillion in assets[1]. Our growth is attributed to the high quality results our clients have achieved and our high service model.
2. We have a **dedicated public fund team** that advises 68 public funds representing $802 billion in assets[2]. These team members have all spent virtually their entire careers working with Public Fund clients.
3. NEPC is a **thought leader in Impact Investing**; we are proud to work with more than 70 organizations that pursue Impact Investing to further their missions.

Thank you in advance for your consideration and we hope to have the opportunity to present our divestment consulting capabilities to you in person. Should you have any questions, please call us at (617) 374-1300.

Best regards,

Enclosures

[1] As of 1/1/2022, includes 86 clients with discretionary assets of $66.3 billion.
[2] As of 1/1/2022

APPENDIX G

APRIL 2022

# DIVESTMENT CONSULTING SERVICES PROPOSAL

Maine Public Employees Retirement System

# TABLE OF CONTENTS

| | |
|---|---|
| **Executive Summary** | **4** |
| **Response to Questionnaire** | **8** |
| **Divestment Consulting Agreement** | **25** |
| **Proposed Fees** | **27** |
| **Disclosures** | **29** |

# EXECUTIVE SUMMARY

NEPC was founded in 1986 on three main principles: maintain **independence**, provide **proactive solutions**, and serve our clients with **seasoned professionals**. This focus, combined with client performance, has allowed us to provide investment consulting services to our clients for **36 years.**

**100%**
Independently owned by 45 partners

**100% employee-owned** NEPC is neither an affiliate nor a subsidiary of any organization. Our independence ensures our impartiality, aligning our interests with the success of our clients. We do not accept any form of compensation other than the consulting fees paid by our clients.


- 117 CLIENT SERVICES
- 64 RESEARCH
- 65 PERFORMANCE REPORTING
- 81 OPERATIONS & SUPPORT

At NEPC, we've created a thriving company culture that appeals to the industry's finest talent — with **327 professionals** in seven offices nationwide.

NEPC's consulting business is divided into distinct practice areas. We work with **68 public fund clients** representing $802 billion in assets. Public funds account for 55% of NEPC's clients' total assets. These funds are served by our dedicated Public Fund team of 34 investment professionals, including 7 partners.

## How We Help Our Clients

Our dedicated Public Fund Consulting Team has deep knowledge of asset allocation, asset liability hedging as well as a proactive strategic approach, which understands the nuances specific to the public fund marketplace. Everything we do is driven by our passion to gain a clear understanding of your situation and deliver investment advice specific to your needs.

**68**
**PUBLIC FUND CLIENTS**
50 with NEPC for 5+ Years

**$802**
**BILLION**
Total Public Fund Assets

We assess our clients' progress against their own unique goals and objectives as well as the largest Public Fund performance measurement universe in the industry.

To help our public fund clients build **customized investment programs** that meet their unique investment goals and fulfill their fiduciary obligations, we incorporate data from the plan's actuarial valuation statements when performing our comprehensive **asset liability studies**. As a result, we can forecast the impact of changes to fund provisions, workforce, and actuarial assumptions on funding and contributions. Additionally, our **risk budgeting and scenario analysis** tools allow plan sponsors to test alternative asset allocations under multiple economic environments to confidently build an investment program that meets their needs.

In response to our clients' growing concern about **liquidity**, we've developed an analysis that enables us to examine each client's current and projected liquidity needs, and to profile the potential sources of these needs. We're careful to define these liquidity needs not only as actuarial forecasts of contributions vs. benefit payments, but also as forecasts of the liquidity needs rising from their alternative asset programs. This gives our clients a complete picture of their liquidity profile, which then becomes a key factor in determining how much exposure their portfolio can handle within illiquid asset classes.

## Investing Is Complex, But We Love Every Part

We love great investment ideas. Superior investing is grounded in superior research and knowledge. NEPC has built one of the largest dedicated research teams in the consulting industry. The Research Group comprises 20% of NEPC's total work force and plays an integral role in supporting client relationships. Be it searching for the next investment strategy for your portfolio, considering a mosaic of perspectives while constructing portfolios, or monitoring existing managers, our mission is to provide sound financial advice. When you work with us, you get:

- A **boutique consulting experience** backed by a 64-person research team
- A forward-looking, multi-faceted asset allocation process that involves a comprehensive understanding of risk
- Actionable investment advice based on original, on-the-ground research and a comprehensive and exhaustive due diligence process
- A **Discovery Platform** dedicated to uncovering the next great investment idea off the beaten path of traditional areas of focus
- An open mind, relentless curiosity, **diversity in thought and experience**, and a vibrant mix of ideas
- Investment opportunities across the entire liquidity spectrum, not just within a single asset class
- **Independent and unbiased insights** on traditional and alternative assets, market and economic events, and industry trends

We are proactive in bringing new ideas and investment opportunities to clients and are widely viewed as a thought leader in our field. As a firm, we do this formally through our **annual asset allocation letter**, **quarterly market thoughts**, and **monthly market updates**, as well as through **client webinars**, our **annual investment conference**, "**Market Chatter**" pieces that focus on topical issues and **white papers** on key investment topics including new investment opportunities.

## Divestment Consulting Services

NEPC and MSCI are submitting a joint divestment consulting services proposal as outlined below based on the System's project scope of services:

**A. Broad review of divestment and the climate change-related risk landscape**
**Aspects of this should include, but need not be limited to:**

1. **A broad overview of climate change-related legal and regulatory trends, both in the U.S. and globally.**
2. **A summary of key climate change-related investment risks and their implications for institutional investors.**
3. **A summary of peer U.S. public pension funds' experiences with divestment, including discussion of type of divestment (e.g., fossil fuel, firearms, etc.) and whether or not divestment was legislatively mandated.**

NEPC will have primary responsibility for providing a broad review of divestment and the climate change-related risk landscape with support from MSCI using MSCI's existing research (e.g., whitepapers, case studies, research blogs, etc.).

**B. Identify and quantify the System's portfolio holdings subject to divestment**
**For public market holdings this should include:**

1. **Development of a clear and repeatable methodology for identifying exposures to companies that are subject to divestment based on legislative definitions. This should include identification of any required data sources.**
2. **Identification of MainePERS holdings of securities subject to divestment, classified and aggregated by:**
   a. **Asset class & holding structure type (e.g., Domestic Equity SMA, or corporate bonds held in commingled funds)**
   b. **Sector / Industry / Sub-Industry using the Global Industry Classification Standard (GICS) taxonomy**
   c. **Fossil fuel type(s) (i.e., oil, natural gas, thermal coal, etc.)**
   d. **Relevant legislation (231 or 234) and specific legislative definition(s) (e.g., C(1) or C(2), etc.)**

NEPC and MSCI plan to work in partnership to deliver a comprehensive analysis to MainePERS for the public market holdings. NEPC will secure the license and leverage MSCI Fossil Fuel and For-Profit Prison Screens for identifying and quantifying holdings subject to divestment. This data can be accessed via data feed and/or through the MSCI ESG Manager portal. MSCI will support NEPC in mapping "fossil fuel" definitions specific to Maine legislation to MSCI Fossil Fuel screening criteria e.g., mapping to asset class, strategy/vehicle, GICS, fossil fuel types, etc.

**C. Identify and quantify direct divestment costs**
**In this section the consultant will, for all portfolio assets subject to divestment:**

1. **Identify the types of potential direct costs and/or cost savings that may be associated with divestment, develop estimates of these, and summarize costs/cost savings by category and asset class. These should include, but need not be limited to:**
   a. **Transaction costs related to divestment of existing public holdings**
   b. **Secondary market pricing, legal expenses, and any reputational considerations associated with seeking to exit from private closed-end funds**
   c. **Potential servicing costs/cost savings arising from changes in investment structures and management agreements, including proxy and custodial services**
   d. **Other potential ongoing costs or cost savings (e.g., changes in data and compliance resources required to monitor holdings, etc.)**

NEPC will have primary responsibility for identifying and quantifying direct divestment costs with support from MSCI as applicable (e.g., changes in data resources required to monitor holdings).

**D. Identify and quantify divestment impact on portfolio**
**This section should employ various measures and methodologies to provide MainePERS with an evaluation of the impact of divestment on the System's portfolio. Components should include:**

1. **Identify and explain measures and methodologies that can be used to analyze the impact of divestment on the System's investment portfolio.**
2. **Compute and discuss these measures.**

a. **This initial phase of the impact analysis should assume that any proceeds from divestment will be re-invested ratably across the remaining asset classes in the current portfolio.**

NEPC will have primary responsibility identifying and quantifying divestment impact on the portfolio with support from MSCI (e.g., utilizing off the shelf or potentially custom ex-Fossil Fuel/ex Thermal Coal indexes to help analyze divestment impact on risk/return profile of total opportunity set(s), tracking error, country/sector weights, style factors, climate risk metrics, etc.). NEPC will leverage MSCI Index Metrics reports for the analysis.

**Let us use our experience and customized solutions, in collaboration with MSCI, to help MainePERS meet its divestment goals.**

Data as of 1/1/2022

# RESPONSE TO QUESTIONNAIRE

## A. General Information

**1. Name and business address of responding party.**

NEPC, LLC
255 State Street
Boston, MA 02109

**2. Name, address, email address and phone number of primary point of contact for all communications.**

For the purpose of this proposal, your proposed primary NEPC contacts are:

Kristine Pelletier
Partner
kpelletier@nepc.com
(617) 314-3141

Dulari Pancholi, CFA, CAIA
Principal, Head of Credit and Multi-Asset Investments
dpancholi@nepc.com
(617) 395-7323

Kevin Leonard
Partner
kleonard@nepc.com
(617) 314-3128

**3. Provide a brief overview of your firm's business.**

NEPC, LLC has been providing investment consulting services since 1986. NEPC was founded on three main principles: strive to maintain **independence**, provide **proactive solutions** in an attempt to help our clients exceed their goals and objectives, and service our clients with **seasoned professionals**. This focus has generated 36 consecutive years of thoughtfully-managed growth.

NEPC takes pride in our long record of success providing independent, objective investment counsel to our clients. Clients can be confident in NEPC's integrity, as our revenue model is completely aligned with our clients' interests and goals. NEPC receives **100% of our revenue** exclusively from providing advisory consulting and discretionary investment services to our clients. NEPC's client-focused approach, paired with our experience and deep research resources, helps to ensure that we will continue to meet our clients' needs, through all types of market conditions.

**4. If applicable, please describe your firm's membership of and/or partnerships with investment-related organizations.**

NEPC has a small number of client relationships (currently four) with companies that have a money manager subsidiary whereby we (a) provide advice regarding the employee retirement plan, or (b) provide research and advice connected to the selection of third-party investment managers. Although these relationships contribute less than 1% to our annual revenue, all are fully disclosed when NEPC conducts manager searches. The fees NEPC receives from these relationships are not affected by a rating that may be assigned by our research team, or by investments that any client may make.

In addition, we use the services of investment management firms to manage our employee Profit Sharing and 401(k) Plans, as do nearly all firms offering retirement plan benefits to their employees.

NEPC is an active member of several professional organizations, including:

- American Academy of Actuaries
- Associated General Contractors of America (AGC)
- Association for Financial Professionals (AFP)
- Association of Benefit Administrators (ABA)
- California Association of Public Retirement Systems (CALAPRS)
- Defined Contribution Institutional Investment Association (DCIIA)
- Economic Club of Chicago
- Family Office Exchange Members
- Financial Industry Regulatory Authority (FINRA)
- Gartner Leadership Council
- Georgia Association of Public Pension Trustees (GAPPT)
- Intentional Endowment Network (IEN)
- International Foundation of Employee Benefits Plans (IFEBP)
- Investment Consultants Sustainability Working Group - United States (ICSWG-US)
- Louisiana Trustee Education Council (LATEC)
- MA Coalition of Taft-Hartley Trust Funds, Inc
- MCA of Las Vegas SMACNA
- Michigan Association of Public Employee Retirement Systems (MAPERS)
- National Association of Securities Professionals (NASP)
- National Association of State Retirement Administrators (NASRA)
- National Conference on Public Employee Retirement Systems (NCPERS)
- National Coordinating Committee Multiemployer Plans (NCCMP)
- National Council of Real Estate Investment Fiduciaries (NCREIF)
- New America Alliance (NAA)
- NMS Endowment & Foundation Service Provider Membership (NMS)
- Principles for Responsible Investment Association (PRI)
- Private Equity Women Investor Network (PEWIN)
- Society for Info. Management
- Society of Actuaries (SOA)
- State Association of County Retirement Systems (SACRS)
- Texas Association of Public Employee Retirement Systems (TEXPERS)

5. **Please describe the composition and qualifications of the team that would work on this assignment.**

If we are chosen as your investment consultant, your NEPC project service team will consist of Kristine Pelletier, Partner, Dulari Pancholi, CFA, CAIA, Principal, Head of Credit and Mult-Asset Investments and Kevin Leonard, Partner. They will be supported by a dedicated Consulting Analyst and dedicated Research Specialists where appropriate.

**Kristine M. Pelletier**
**Partner**

Krissy joined NEPC in 2008. She is a Partner and senior member of NEPC's Endowment and Foundation practice. She also serves as Co-Head of NEPC's Impact Investing Committee.

Krissy brings nearly 20 years of investment experience, having spent most of her career focused on impact investing, portfolio construction, and the evaluation and selection of investment managers. In her current role, Krissy works with many of NEPC's philanthropic clients that are leading the industry on alignment of mission and money. Krissy is often featured in industry publications and a frequent speaker at conferences on the topic of Impact Investing. At the end of 2019, Krissy published an Op-Ed in Wealth Management titled "New Decade, New Fundamentals for Investing" defining three pillars that will be the largest drivers of investment success: sustainability, diversity and inclusion, and innovation. Krissy was named in CIO magazine's "The Knowledge Brokers 2021" edition as one of the world's most influential investment consultants[3].

Prior to joining NEPC, Krissy worked at Wellington Management Company, LLP as a Research Associate, and served as a researcher and grant writer for Think:Kids, of Massachusetts General Hospital.

Krissy earned her M.B.A. from the Darden Graduate School of Business at the University of Virginia, and her B.A. in Finance and Economics from Simmons University (formerly Simmons College).

Krissy serves as a member of NEPC's Women's Leadership Forum, she is also on the Board of Trustees at Cushing Academy, is a mentor for Girls Who Invest, is an active volunteer with her alma mater, Simmons University, and previously served on the board for the Student Leadership Training Program.

**Dulari Pancholi, CFA, CAIA**
**Principal, Head of Credit and Multi-Asset Investments**

Dulari's investment career began in 2000 and she joined NEPC in 2006. She is the Head of Credit and Multi-Asset Investment Group at NEPC. Dulari is also the Co-Head of NEPC's Impact Investing Committee. As a research team leader, Dulari is a member of multiple investment committees and serves as the Co-Head of the Credit Beta Group. Dulari is also frequent speaker at industry conferences on the topic of Impact Investing.

Prior to joining NEPC in August of 2006, Dulari was Vice President of Operations of the Hedge Fund at Venus Capital Management. Prior to that, Dulari was employed as a Research Associate at the Center for International Securities and Derivatives Market (CISDM). As a Research

[3] Please see Disclosures for important disclosures related to awards and recognitions.

Associate, Dulari's responsibilities included understanding various databases, statistical models, software and analytical tools used for efficient financial analysis. While at CISDM, Dulari authored and co-authored several research papers, one of which was published in the Journal of Alternative Investments in the Spring of 2004.

Dulari received her M.B.A. from the University of Massachusetts, Amherst and holds L.L.B. and B.S. degrees from the University of Mumbai. Dulari has attained both of the Chartered Financial Analyst and Chartered Alternative Investment Analyst designations. She is also a member of the Boston Security Analysts Society. She has recently completed the Sustainable Finance program at Yale SOM Executive Education.

**Kevin M. Leonard**
**Partner**

Kevin joined NEPC in 2007 and his career in the financial services industry began in 1991 and the investment consulting industry in 1994. His consulting responsibilities and background include servicing public pension plans, Taft-Hartley pension funds, hospital, endowments, and foundations. Kevin is the team leader for the NEPC Public Fund Consulting Practice and is also a member of NEPC's Due Diligence Committee and Large Cap Equity Research Advisory Committee.

Prior to joining NEPC, Kevin was a Vice President/Partner at Segal Advisors. Prior to working at Segal Advisors, he was a Consultant at The Hannah Consulting Group, and worked at State Street Bank and Trust Company.

Kevin received his B.A. in Business Management from Assumption College. He served on the Board of Directors for the Massachusetts Public Pension Forum and is a frequent speaker at educational conferences and association seminars. Kevin was recognized as the 2012 Public Plan Consultant of the Year by Money Management Intelligence. Kevin was also a nominee for the same award in 2011. Kevin was named in CIO magazine's "The Knowledge Brokers 2019" list as one of the world's most influential investment consultants[4].

**NEPC's Research Group**

Research is a core competency at NEPC and a hallmark of our service to our clients. NEPC's Research Group is comprised of 64 dedicated research professionals (approximately 20% of NEPC's total work force) organized into seven teams: Asset Allocation, Portfolio Construction, Global Research, Marketable Securities Research, Private Markets Research, Operational Due Diligence, and OCIO Portfolio Strategy. Our CIO, Tim McCusker, FSA, CFA, CAIA, Partner, is responsible for leading the overall research effort. The research teams are supported by NEPC's research operations group.

NEPC's Research Group provides customized solutions across a range of asset classes and investment strategies to help our clients meet their long-term financial objectives within their individual risk constraints.

[4] CIO's Most Influential Investment Consultants: CIO Magazine interviews pension and non-profit CIOs, asset managers and former consultants to approximate what it calls "the hierarchy of today's institutional consultant industry". The results should not be considered a recommendation of any specific firm or individual consultant. For more information, please visit CIO Magazine's web site at https://www.ai-cio.com/lists/

When you work with us, you get:

- A boutique consulting experience backed by a 64-person Research team
- A forward-looking, multi-faceted asset allocation process that involves a comprehensive understanding of risk
- Actionable investment advice based on original, on-the-ground research and a comprehensive and exhaustive due diligence process
- A Discovery Platform dedicated to uncovering the next great investment idea off the beaten path of traditional areas of focus
- An open mind, relentless curiosity, diversity in thought and experience, and a vibrant mix of ideas
- Investment opportunities across the entire liquidity spectrum, not just within a single asset class
- Independent and unbiased insights on public markets and alternative assets, market and economic events, and industry trends

## B. Experience with Investment Consulting and Divestment

**1. Please describe your firm's experience consulting with institutional investors on general investment topics such as asset allocation, portfolio construction, and performance measurement.**

NEPC has been consulting to public retirement plans since its inception over 36 years ago. Our dedicated Public Fund Consulting Team has deep knowledge of asset allocation, asset liability hedging as well as a proactive strategic approach, which understands the nuances specific to the public fund marketplace. Over the past (5+) years, NEPC has also worked with several of its clients who have considered divestment, with some choosing to move forward with divestment and others choosing to take a more holistic sustainability approach to the portfolio. We serve 399 retainer clients with $1.5 trillion in assets across 1,053 separate portfolios[5].

| Client Type | Retainer Clients | Total Assets |
|---|---|---|
| Corporate | 113 | $367 billion |
| Not-for-Profit/Charitable | 80 | $95 billion |
| Healthcare Related | 43 | $122 billion |
| Private Wealth | 42 | $13 billion |
| Public Fund | 68 | $802 billion |
| Taft-Hartley | 53 | $66 billion |
| Total Clients | 399 | $1,465 billion |

NEPC's full-service retainer relationships are characterized by a trustworthy service commitment, featuring ready access to our staff and resources, state-of-the-art technology, and comprehensive solutions to our clients' investment needs. We offer an array of services to our clients, highlights of which are outlined below.

**Investment Policy - Your Goals, Your Plan**

Creating/reviewing your Investment Policy Statement (IPS) is our first priority. A well-conceived, actionable plan developed in close collaboration with the client, the IPS sets forth your goals and objectives within risk tolerances and investment constraints. Serving as the investment

[5] As of 1/1/2022, includes 86 clients with discretionary assets of $66.3 billion.

program's blueprint, the IPS defines asset classes and investment managers, an asset allocation target, investment guidelines and restrictions, including rebalancing guidelines and performance benchmarks, and the roles of the plan's fiduciaries and reporting requirements. We extend and reinforce the IPS by developing investment guidelines for each investment manager in a client's portfolio.

**Asset Allocation - Multifaceted, Customized, Risk-controlled**
Along with leveraging our dedicated research group and asset class experts, NEPC uses sophisticated and comprehensive proprietary asset modeling systems to customize each client's investment program. After a careful analysis of your objectives and constraints — cash flow projections, risk aversions, rate of return requirements, permissible asset classes, and any unique policy or regulatory considerations — we seek to develop investment portfolios. Employing a multifaceted approach that integrates several asset allocation models, including mean-variance optimization, risk budgeting, economic scenario analysis, factor analysis and liquidity analysis to minimize risk, we identify strategies that represent the most efficient risk-return-liquidity tradeoffs.

**Manager Search – A Rigorous, Proprietary Process**
We believe that identifying managers that can meet a fund's objectives is one of the most important parts of an investment consultant's role. Our proprietary process begins with documenting the reasons for the search, and taking note of the client's specific needs, objectives, and sensitivities. NEPC has developed minimum criteria for each asset class, and we monitor a variety of internal systems and databases, including eVestment to find and track managers for our focused placement list of managers.

Of most impact to finding the best managers first are two resources unique to us: the NEPC database, housing all of our Due Diligence data, and our proprietary Performance Analytics Statistical Software (PASS), which allows our analysts to validate and compare investment returns and other key performance indicators.

We review investment manager candidates objectively and methodically. When a list is vetted, we can assist with the interview process, either with you or on your behalf, to create the most appropriate portfolio of managers to reach the risk and return goals of the Fund.

**Alternative Assets – Improving Diversification and Risk-adjusted Returns**
NEPC has significant experience building alternative asset programs and identifying high quality private equity, private debt, hedge funds and real assets managers for our clients' alternative investments programs. NEPC has actively advised our clients regarding alternative investments for the past 28 years. Our clients have $246.9 billion in alternative assets across 286 client relationships[6]. We have the commitment, experience, and research resources to meet all of your alternative assets consulting needs and to drive a positive outcome. Our alternative assets services include education, portfolio design, manager search, due diligence reviews, and monitoring/reporting. We currently have 24 full-time individuals dedicated to Alternative Investments led by Sarah Samuels, CFA, CAIA, Partner, Head of Investment Manager Research.

**Performance Measurement - Broader, Deeper Analysis**
Investment Performance Analysis (IPA) reports are highly graphic, customized documents, providing performance results, risk analyses and comparisons for the total fund, all asset classes, capitalization ranges, and style combinations and investment managers versus goals

[6] As of 12/31/2020, NEPC provides some form of advice to all clients counted but does not advise all clients on all asset classes.

and objectives. We work with each client to develop an appropriate reporting tool for their program.

### Client Education - Timely, Tailored Programs

As a research-driven organization whose consultants are among the industry's foremost thought leaders, we take every opportunity to share our resources and insights with our clients. As we see it, the better informed you are, the stronger our collaboration. That's why, in addition to your access to a team of NEPC consultants and analysts, we provide a range of tailored educational programs and services. Of course, we also offer informative resources such as white papers, in which we present our perspectives on industry issues, legislative changes, and investment strategies that can affect an investment program.

### Impact Investing Committee

As part of our commitment to impact investing, we have an internal **Impact Investing Committee** responsible for overseeing trends, researching managers and working with clients to develop strategies that meet their needs and align with their respective organizations' mission. This group includes a mix of client consultants and research professionals across asset classes. Kristine Pelletier, Partner and Dulari Pancholi, CFA, CAIA, Principal, Head of Credit and Multi-Asset Investments serve as Co-Heads of this Committee. As we have seen increasing interest in ESG and impact investing from across our diverse client base, we felt that an integrated committee approach would offer the ability to better tailor our focus to each client's unique need – leveraging information and views from peers across the firm. In addition, NEPC's research professionals all play an important role in discussing and evaluating the role that ESG plays in the respective processes of all investment managers we evaluate.

NEPC meets regularly with impact-oriented investment managers across asset classes as we continue to source preferred strategies and options for our clients. Importantly, we have sourced several preferred strategies for clients that target attractive risk-adjusted returns and align with the respective missions and values of our client base. While our Impact Investing Committee may source and identify strategies, its vetting and approval process follows the standard NEPC research process.

### Ongoing Efforts to Enhance Impact Investing Best Practices

The NEPC ESG rating system, Impact Investing Committee and related ESG evaluation approach reflects a commitment to being a best-in-class option for impact-oriented investors. However, we also recognize that effective impact investing demands ongoing evolution, evaluation, and education. To that end, NEPC engages in numerous efforts to track developments, evaluate new sources of information, and promote better practices in our industry. For example:

- NEPC is a founding member of the US Investment Consultants Sustainability Working Group (ICSWG). Dulari Pancholi serves as our primary representative to this group. The ICSWG is a collaboration among investment consulting firms to engage with its collective stakeholders, and empower asset owners and their ultimate beneficiaries, to advance sustainable investment practices across the investment industry.
- We participate in national conversations about the evolution of ESG investing, such as the Department of Labor and the White House Office of Social Innovation's stakeholder roundtable.
- We regularly host opportunities for our clients to explore ESG topics and share their own best practices, such as our annual Investment Conference, webinars and outside speaker events.

- We are a signatory to the United Nations Principles for Responsible Investing (PRI) Initiative, a leading global network for investors to publicly demonstrate their commitment to impact investment.

**NEPC Research**

NEPC is a research-driven consulting firm, as evidenced by the list of papers generated by our research and consulting teams over the past few years. Please see a sampling listing of research papers below. A complete list can be found at ***https://www.nepc.com/insights***.

- **Taking Stock: China Transitions, an NEPC 2022 Key Market Theme** (February 2022)
- **Taking Stock: Globalization Backlash, an NEPC 2022 Key Market Theme** (February 2022)
- **Taking Stock: Economic Crossroads, an NEPC 2022 Key Market Theme** (February 2022)
- **NEPC's 2022 Asset Allocation Letter: The Case for Curing Investment Amnesia** (February 2022)
- **Taking Stock: Permanent Interventions, an NEPC 2022 Key Market Theme** (February 2022)
- **A Decade in Review: The 2021 Defined Benefit Trends Survey** (January 2022)
- **China Bears and Inflation Scares: Positioning Portfolios for Success in 2022 and Beyond – Q3 Quarterly Market Webinar** (October 2021)
- **Taking Stock: NEPC's August 2021 Pension Monitor** (September 2021)
- **NEPC Market Outlook: Taking Profits in a Period of Market Strength** (August 2021)
- **Meeting You Where You Are: Client Input About the Future of Meetings** (June 2021)
- **Should Investors be Bracing for a Tidal Wave of Inflation** (May 2021)
- **Taking Stock: Stimulus Package Provides Respite to Single-Employer Pension Plans** (March 2021)
- **Taking Stock: China Transitions** (March 2021)
- **Taking Stock: Globalization Backlash** (March 2021)
- **Taking Stock: Permanent Interventions, an NEPC 2021 Key Market Theme** (February 2021)
- **Taking Stock: Virus Trajectory, an NEPC 2021 Key Market Theme** (February 2021)
- **NEPC's 2021 Asset Allocation Letter: Time for Your Portfolio's Annual Wellness Check** (February 2021)
- **Taking Stock: LDI-Focused Corporate Pension Plans Win in 2020** (January 2021)
- **Taking a Leap of Faith into a New Decade: NEPC's 2020 Asset Allocation Letter** (January 2020)
- **Winter Is Coming, But When?: NEPC's 2019 Asset Allocation Letter** (January 2019)
- **Markets Take Flight: NEPC's 2018 Asset Allocation Letter** (February 2018)
- **The Curse of Greed** (January 2018)
- **Power Up Your Pension Plans** (October 2017)
- **Terminated-Vested Lump Sum Payouts** (October 2017)
- **The Essential Guide to Third-Party Valuations for Hedge Fund Investors** (May 2017)
- **Fossil Fuel Divestment: Considerations for Institutional Portfolios** (March 2017)
- **The Times Are A-Changin': NEPC's 2017 Annual Asset Allocation** (February 2017)
- **Behind the Curtain: Operational Capabilities Are a Must for OCIOs** (October 2016)
- **NEPC Corporate Pension Focus – Interest Rate Risk and Asset/Liability Management for Cash Balance Plans** (October 2016)
- **Class is in Session: Lawsuits Against Higher Education Retirement Plans** (October 2016)

- **The Disease of Doubt** (July 2016)
- **Thinking Ahead to Stay Ahead: Strategic Private Equity Investing in Healthcare** (April 2016)
- **Embrace Opportunities Amidst Uncertainty: NEPC's 2016 Asset Allocation Letter** (January 2016)

2. **Please describe your firm's experience, if any, consulting with U.S. public pension plans on divestment, particularly of fossil-fuel companies.**

We have a handful of clients that currently engage in some type of divestment approach. NEPC believes in utilizing a broad opportunity set and flexible strategies to construct a diversified investment portfolio. We are committed to working with our clients to design customized solutions that meet the specific goals and objectives of their organization. When it comes to divestment, we believe that there is no "one size fits all" solution – each organization and investment portfolio has unique issues that will impact the decision. We believe that decision makers should contemplate and discuss a number of factors that fall into three main categories:

1) What do you hope to accomplish through divestment?
2) How will you measure or define success?
3) What approach is best for your investment program?

Working in partnership with the MainePERS, we would help the Board discuss these factors to determine if divestment is the best path forward for your organization. NEPC has worked extensively with the Board, staff and stakeholders in providing education, recommendations, and investment analysis related to negative screening and pursuing best practices with respect to assessing ESG related risks, and in particular, climate change risk. We have generated intellectual content and topical white papers and are currently in the process of developing a framework for climate change risk scenario analysis tool to aid clients with strategic asset allocation process within an asset-liability framework.

We have worked with several clients who have considered divestment, with some choosing to move forward with divestment and others choosing to take a more holistic ESG approach to the portfolio. When it comes to implementation, each organization's path will look somewhat different. The chart below demonstrates some of the available options to the MainePERS should you choose to pursue a divestment strategy.

| Potential Options | Description | Example | Comments |
|---|---|---|---|
| **Full divestment** | Divest from a specified list of fossil fuel companies across entire investment portfolio (i.e. Carbon Tracker 200 list) | ▪ **Sterling College**: Portfolio was solely invested in index products<br>▪ Endowment completely divested from fossil fuels and utilized a sole fossil fuel free investment manager for implementation | Small and liquid investment program allows for easer implementation |

| Potential Options | Description | Example | Comments |
|---|---|---|---|
| **Partial divestment from specific asset classes** | Divest from fossil fuel companies (i.e. Carbon 200 list), but only within certain asset classes | ▪ **Pitzer College**: Committed to divesting the endowment/s investments in fossil fuel stocks by the end of 2014 | Potential to prioritize certain asset classes where greater breadth of options exist (public equities) |
| **Partial divestment from specific industries** | Commit to divesting from companies in select high carbon emitting industries (e.g. coal) | ▪ **Stanford University**: Committed to divesting a list of 100 coal companies | Easier option to implement for larger investment programs with separate accounts. |

In addition to the options listed above, there are also extensions to divestment. Some of those extensions include:

- Allocating to sustainable investments, including those with a focus the energy transition
  - This can be achieved through investment in green bonds, private equity funds and other specialized funds
- Considering investments in strategies with an ESG focus
  - Broader approach that promotes environmental, social and governance best practices
  - Will likely reduce exposure to fossil fuels and provide exposure to the best ideas from an ESG perspective
- Company engagement on key issues
  - Requires significant resources and a well-defined mission
  - Efforts may be combined with other organizations to increase bargaining power
  - Active proxy voting (requires investment in carbon emitting companies)
- Public Policy work
  - Time intensive, but can create awareness
- Allocating a percentage of investment proceeds to green projects within the organization
  - Examples include solar/wind power for buildings, LEED certification, providing grants for carbon emission reduction research, etc.

NEPC would work in partnership with MainePERS to discuss all of these options to determine which path forward is the best for your organization. In considering the potential effects on MainePERS we believe there are a few different frameworks from which to evaluate the divestment decision:

1) Asset Allocation could be impacted by a decision to divest as solutions may be limited within certain asset classes or strategies (e.g. alternative investments, real assets, or global asset allocation). Eliminating these asset classes from an investment portfolio could dramatically alter the risk and return profile
2) Risk Management should be considered when discussing divestment. Exposure to the energy sector has been a valuable source of return, diversification and inflation protection. Limiting exposure to diversifying strategies may impact overall return and risk expectations. Evaluating currency, country and regional concentration is important if divesting from international companies and re-allocating capital.

3) Manager Selection will likely be significantly limited. Larger organizations may have greater ability to access separate accounts or influence the terms of commingled funds. The current universe of managers/strategies that divest is limited and may have low asset levels, shorter track records and higher management fees. There is a substantial universe of managers/strategies that integrate ESG factors into their analysis, however this will not guarantee a fossil fuel free strategy.
4) Investment performance may be influenced by divestment and there are a number of ways to assess the potential impact. Some organizations have evaluated the performance impact of divestment by reviewing performance of the energy sector versus that of the overall market. Restricting investments in a certain sector or industry limits the investment manager opportunity set and may impact performance positively or negatively. Other organizations have concluded that divestment would require the forfeiture of future alpha. If fossil fuel companies are viewed as a risk likely to underperform going forward, the decision to divest could be interpreted as an active management decision. Divesting an actively invested program by reallocating funds to a fossil fuel free index fund may sacrifice alpha. The limited number of established actively managed fossil fuel free funds may leave investors with few choices in reallocating capital. Requesting that a manager implement negative screening shrinks the investment universe, so investors may experience underperformance and/or heightened volatility
5) Investment Related Fees are important to quantify when assessing divestment, specifically: transaction costs to divest and re-invest securities in separately managed accounts; transaction costs associated with changing investment products; potential changes to investment management fees.
6) Investment Policy Statements will have to be updated if the decision is made to divest. A description of the divestment approach (asset classes, timeline, etc.), monitoring process and roles and responsibilities for the Board, Investment Committee and any sub-Committees are critical.

**3. Please describe your firm's experience consulting on climate change-related investment risks.**

Because climate change is expected to have a material impact on virtually all markets in coming decades, the NEPC **Impact Investing Committee** has sought to formalize and expand its understanding of climate related impacts and make appropriate recommendations to clients regarding their investment portfolios to reflect climate risks and opportunities.

**Climate Change Research** Climate change is a critical theme that we embrace as part of our Impact Investing Research. While NEPC has cultivated an awareness of long-term potential climate impacts for many years, we began formally analyzing client portfolios in 2019 for specific climate risk factors. This is a long-term project and an evolving process to assess climate risk factors at the asset class, country, and eventually the sector/industry level.

Our research efforts have produced the following key learnings that inform our recommendations to clients:

- Climate change will impact numerous fundamental building blocks of capital markets such as inflation, real growth, profit margins, and credit defaults.
- Wealthier countries are most able to adapt to climate change, exacerbating global wealth inequality. Emerging markets are most vulnerable with higher sensitivity to climate change risk factors, specifically nations with a fragile socio-economic profile.
- Climate change transition costs are likely to pressure profit margins across industries in coming decades, and the physical costs of climate change could have a potentially

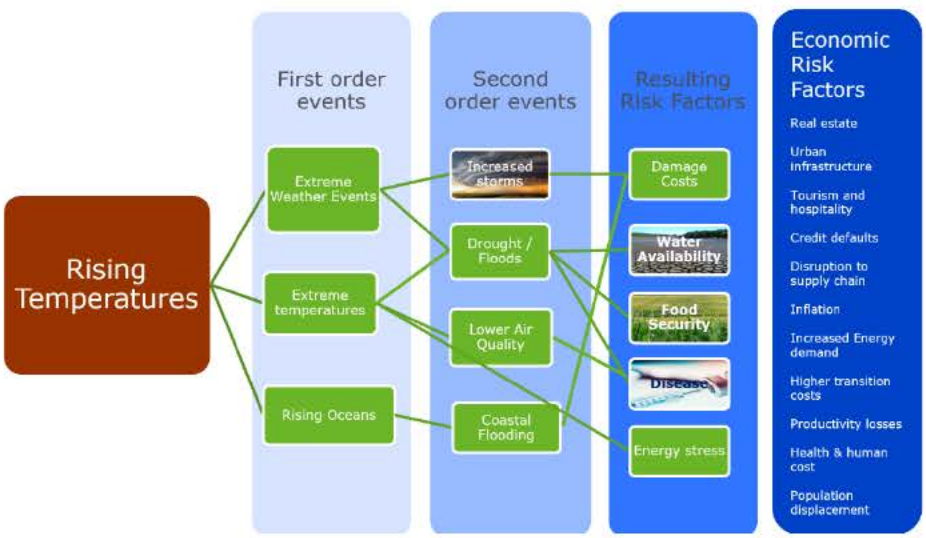
inflationary effect. Credit markets may be most exposed to this risk, with higher defaults associated with climate events and large disruptions to business models.

- The capital market risks of climate change can be seen today but it is an unknown when the market may fully discount the range of outcomes associated with climate change costs.
- COVID-19 has had a significant impact on the global climate as many people globally slowed travel and transportation.
- Potential portfolio actions over time may include identifying private equity opportunities in new technologies and analyzing geographical diversification for real estate.

We focus on climate change risk factors because they help us categorize systematic exposures to long-term impacts of climate change. Vulnerability to these risk factors (and each economy's ability to adapt) will ultimately determine the winners and losers across geographies and industries. Our climate change "policy scenarios" are defined by the mitigation policies of global nations. The scenarios highlight the severity and economic implications of an economy's risk factors and adaptability to climate change.

The policy scenarios impact the core building blocks of capital markets and are used to define potential investment effects. Below is an example of economic risk factors of climate change that could affect economic factors.

**Working through first and second order effects, we identify the economic risk factors of climate change, which then inform our asset class assumptions for each policy path**




**How Climate Research Is Integrated into Client Portfolios** Our research approaches climate-related portfolio solutions through a multi-step process which links to client's goals and objectives. It begins with collaborating to set strategy around the climate solution in context of overall portfolio objectives and constraints. In this area, there are several approaches, but we seek to optimize the client's goals and objectives using our "four pillars" framework. Below is a schematic of the four pillars as it relates to climate change.


| Reduce Carbon Emissions | Benefit from decarbonization trend | Carbon Offset<br>Reduce Emissions | Engage with corporate on lowering emission and Net Zero agenda |
|---|---|---|---|
| Fund's portfolio would exclude investments or screen out investments in all or key fossil fuel emitters | Opportunistic mandates benefiting from industry winner/losers | Replacing fossil/carbon exposure with renewable energy<br>Control total emission at portfolio level | Collaboration at issuer level with similar minded allocators |
| • Low carbon index<br>• Fossil Free Indices<br>• Screen out fossil fuel exposure or high emitters | ESG Integrated products across asset classes and liquidity spectrum | Environment focused Thematic liquid and illiquid funds (e.g. renewables energy, water, etc.) | Case specific situations specifically targeted towards emissions |

It is our view that climate change data and policies are likely to change considerably in coming years, and as such it is incumbent on us to continually update our research approach and investment recommendations around climate issues. For example, the Biden administration has rejoined the Paris Climate Accord and has stated its intent to support the development of renewable energy.

Given the significant data and policy changes ahead, NEPC will be reviewing and revising its climate analysis in the near term. NEPC is also in the beginning stages of fine tuning its investment manager ESG rating system to highlight manager climate engagement. In addition, NEPC has continued to expand our thematic manager Focused Placement Lists to distinguish best-in-class climate-focused managers for recommendation to clients. Several of the managers we work with have relationships with climate advisors, or solid internal expertise and experience – we would be happy to work with you and these experts to develop an educational session if that is of interest.

**Example of Client Projects**: West Coast Public Pension Client: NEPC has been engaged as the Board's strategic advisor providing advice on planning, policy setting, governance, investment research and implementation regarding investment sustainability/ ESG integration. We have encouraged the plan to integrate ESG holistically into their investment process. This includes ongoing focus and refinement on ESG integration versus purely negative screens, education and writing white papers for the Board recommending pursuing ESG integration, encouraging affiliation with industry groups that are focused on ESG related risks and encouraging the build out of ESG related employee resources at the Plan. This client hired a Director of ESG, who has since developed complex models projecting the impact of global warming on financial results of energy companies as a guide to engaging with company management; NEPC reviewed and opined positively on the results. We have aided the plan with governance and policy setting around the topic of sustainability and long-term strategic investment priorities such as the inclusion of extensive ESG related evaluation criteria in investment manager searches and ongoing monitoring of exposures related to climate change risk. We have aided the Plan in providing investment management solutions related to climate change risk. Our work has also focused on active ownership and shareholder advocacy, and detailed review of proxy voting policies and manager voting process.

**Example of an Investment Underwritten In Past Two Years** NEPC has made a concerted effort to source and underwrite thematic impact ideas with theses that align with our clients' missions. In particular, NEPC has underwritten strategies across themes such as sustainability, education/workforce development, and investing in underserved communities. One recent example is Vision Ridge III, a sustainable infrastructure fund that invests across the energy, transportation and agriculture sectors, targeting opportunities in renewable energy, energy storage, charging infrastructure, maritime and commercial vehicle electrification, sustainable agriculture, and water infrastructure. The manager's team has over 30 years of collective experience investing across various real assets sectors and has developed comprehensive sector knowledge and a diverse and deep network to leverage.

4. **Please describe the data sources and analytical methods your firm would use for this engagement.**

NEPC and MSCI plan to work in partnership to deliver a comprehensive analysis to MainePERS for the public market holdings. NEPC will secure the license and leverage MSCI Fossil Fuel and For-Profit Prison Screens for identifying and quantifying holdings subject to divestment. This data can be accessed via data feed and/or through the MSCI ESG Manager portal. MSCI will support NEPC in mapping "fossil fuel" definitions specific to Maine legislation to MSCI Fossil Fuel screening criteria e.g., mapping to asset class, strategy/vehicle, GICS, fossil fuel types, etc. The information outlined on public markets data below was provided by MSCI.

**Fossil Fuel Reserves Data**
MSCI ESG Research provides reported fossil fuel reserves data under the following reserve categories for 9,300+ companies (including the MSCI ACWI IMI). MSCI ESG Research has a dedicated team of analysts responsible for identifying companies with fossil fuel reserves and revenue. Sources include company publications (e.g. annual reports, 10K, 20F) and other public records (such as sustainability reports). Fossil fuel reserves data is updated annually.

- Metallurgical coal
- Thermal coal
- Conventional oil
- Shale oil
- Oil shale & tar sands
- Natural gas
- Shale gas

**Fossil Fuel Revenue Data**
**Oil and Gas Revenue related to Extraction and Production** To help clients screen their portfolios for companies involved in various types of oil and gas production, MSCI ESG Research provides an oil and gas revenue exposure module for Integrated Oil and Gas and Exploration and Production companies available for 9,300+ companies including the MSCI ACWI IMI.

**Oil & Gas Revenue related to Other Business Activities in the Value Chain** MSCI ESG Research collects data on revenue derived from following oil & gas-related business activities (beyond Extraction and Production):

- Oil & Gas equipment and services;
- Oil & Gas refining;
- Oil & Gas pipelines and transportation;
- Oil & Gas distribution and retailing;
- Petrochemical products;
- Trading of Oil & Gas and related products; and
- Biofuel

**Thermal Coal Mining Revenue Data**

In addition to Oil & Gas revenue, MSCI ESG Research also identifies revenue associated with thermal coal mining. This screen identifies the percentage of revenue (either reported or estimated) that companies derive from the mining of thermal coal (including lignite, bituminous, anthracite and steam coal) and its sale to external parties, and contract mining services.

**Power Generation**

In order to help clients screen their portfolios/universes for companies involved in carbon-intensive power generation operations, MSCI ESG Research provides a power-generation module containing power-generation volumes, installed capacity data and power- generation revenue by fuel type for 9,300+ companies.

For the divestment of private prison assets, MSCI's Business Involvement Screening Research would be utilized, and specifically, our For-Profit Prisons screen which identifies companies that derive any detectable revenue from the operation of private prisons, jails, detention centers or correctional facilities or from the provision of integral services to these types of facilities. Integral services include complete facilities management (end-to-end), security services and detention services. For-Profit Prisons may be alternatively known as private prisons. Please reference the attached Business Involvement Screening Research document for the full methodology and definitions.

In addition to the datasets mentioned above, MSCI can create customized screens tailored to adhere to specific legislation or client mandates as well as creating customized indexes for policy/mandate benchmarks or as the basis of passive exposures to align with divestment legislation and/or investment policies.

**Private Markets**

NEPC will work with MainePERS to understand the private market portfolio holdings, and work with you as well as your investment managers as appropriate in the evaluation of those portfolios. NEPC has also, on occasion, worked with clients to determine if a sale of private assets is in their best interest. In this process, NEPC works with a combination of secondary funds, private equity secondary brokers, and other intermediaries that might be useful in determining the approximate desirability and representative pricing of those assets.

## C. Other Items

1. **Please disclose any potential conflicts of interest your firm may have related to this engagement such as managing investment products that have ownership of or exclude investment from fossil fuel companies.**

   We are unaware of any potential conflicts of interest that would be created in serving MainePERS. **You should never wonder if your interests are first and foremost when working with your consultant.** NEPC strives to avoid and mitigate conflicts of interest whenever possible, and we have structured our business model with this in mind. Examples of our focus on mitigating potential conflicts of interest include the following:

   - We do not have a complicated business model which can inhibit the ability of plan sponsors to understand fee transparencies and conflicts
   - We do not provide management consulting to investment management firms to help them with strategic decision-making and product positioning
   - We are not affiliated with divisions or firms that offer investment products
   - We do not provide brokerage services
   - We do not offer actuarial services
   - We do not accept or pay referral fees, finder's fees or other commissions for placing managers with clients or for any other activity
   - We do not incent our consultants to switch clients to a higher-fee service model
   - We do not charge investment managers for inclusion in our manager search databases
   - All fees paid to NEPC are cash-based ("hard dollars") and we do not accept any "soft dollars"
   - Our annual investment conference is not subsidized by investment managers

   Our business model has been designed to mitigate potential conflicts of interests so that we maintain our independence and objectivity and align our interests with those of our clients.

2. **Please provide at least three references for prior investment consulting engagements, preferably focused on divestment analysis for U.S. public pension plans.**

   Our clients are our only customers, and we have grown substantially through their referrals over the years. While we submit client references per your request, we respectfully request that you not contact them without notifying us first at which time we will provide full contact information.

   **NEPC References:**

   **San Francisco Employees' Retirement System**
   Andrew Collins
   Head of ESG and Responsible Investing

   **University of Maine System**
   Tracy Elliott, CPA, CIA
   VP of Finance and Controller

**MSCI References:**

- **UC Investments** - *https://www.ucop.edu/investment-office/_files/uc-investments-tcfd2021.pdf*
- **United Nations Joint Staff Pension Fund** - *https://www.unjspf.org/wp-content/uploads/2022/03/UNJSPF_Report_March8.pdf*
- **Regents of the University of Michigan**

# DIVESTMENT CONSULTING AGREEMENT

NEPC would like to request the following additions to the proposed agreement. We would be pleased to discuss these items at your convenience.

**Section 5.5 - Confidential Information/Security**

**Please add:**

Notwithstanding the foregoing, the Contractor shall be permitted to disclose or communicate to a proper party information received from MainePERS, MainePERS's custodian bank or MainePERS's investment managers if such disclosure or communication is necessary for the Contractor to perform the services required in this Agreement or is required by law.

**NEPC also requests that the following new sections be added:**

**Responsibility of Contractor**

Contractor shall have no responsibility or authority to (i) manage or in any way direct the investment of any assets of MainePERS or (ii) enter into any agreement with any investment manager on behalf of, or otherwise bind, MainePERS. Nothing contained herein shall require MainePERS to engage any investment manager recommended by Contractor or to follow any advice provided by Contractor.

**Acknowledgments**

MainePERS acknowledges and agrees that:

1. Contractor has not made and cannot make any promise, guarantee or other statement or representation regarding the future investment performance of MainePERS's investments;
2. the past performance of the accounts of other clients of Contractor is not necessarily indicative of the future performance of MainePERS's investments;
3. in the performance of its services under this Agreement, Contractor shall be entitled to rely on information furnished by investment managers, it being understood that Contractor shall have no liability for the accuracy or completeness of any information furnished or representation made by the investment managers, provided Contractor conducted due diligence and evaluation of such investment managers with reasonable care;
4. to the extent permitted by applicable law, Contractor will not be liable for any losses or expenses incurred as a result of any action or omission by an investment manager, custodian or unrelated third party;
5. with respect to funds-of-funds, if applicable, Contractor's analysis will be conducted at the fund-of-funds level and will not generally include a direct review of underlying funds; and
6. Contractor's services do not include tax or regulatory advice, or interpretation of legal documents.

**Miscellaneous Terms**

Contractor shall be permitted to give advice and take action with respect to MainePERS which differs from the advice made or recommended or actions taken with respect to such other accounts and clients even though the investment objectives may be the same or similar. Contractor shall not be obligated to give MainePERS treatment more favorable than or preferential to that provided to such other accounts and clients.

Nothing in this Agreement shall limit or restrict Contractor or any of its shareholders, officers or employees from buying, selling, or trading in any securities for their own account or accounts, subject to Contractor's obligations as an SEC-registered entity and the restrictions set forth in Contractor's Code of Ethics and Personal Trading Policy. MainePERS acknowledges that Contractor and its shareholders, officers, affiliates and employees, and its other clients, may at any time have, acquire, increase, decrease, or dispose of positions in investments which are at the same time being acquired or disposed of for the account of MainePERS.

### Electronic Signatures and Records

Both the Contractor and MainePERS consent to the use of electronic signatures. This Agreement, and any other documents requiring a signature hereunder, may be signed electronically. The Parties agree not to deny the legal effect or enforceability of the Agreement solely because it is in electronic form or because an electronic record was used in its formation. The Parties agree not to object to the admissibility of the Agreement in the form of an electronic record, or a paper copy of an electronic document, or a paper copy of a document bearing an electronic signature, on the basis that it is an electronic record or electronic signature or that it is not in its original form or is not an original.

# PROPOSED FEES

NEPC and MSCI are submitting a joint divestment consulting services proposal as outlined below based on the System's project scope of services:

NEPC is proposing a project fee of $75,000 with travel, postage, and related expenses will be billed back at cost. The pricing for access to the MSCI data to perform work on identifying and quantifying holdings subject to divestment are included in this project fee.

**A. Broad review of divestment and the climate change-related risk landscape**
**Aspects of this should include, but need not be limited to:**

1. **A broad overview of climate change-related legal and regulatory trends, both in the U.S. and globally.**
2. **A summary of key climate change-related investment risks and their implications for institutional investors.**
3. **A summary of peer U.S. public pension funds' experiences with divestment, including discussion of type of divestment (e.g., fossil fuel, firearms, etc.) and whether or not divestment was legislatively mandated.**

NEPC will have primary responsibility for providing a broad review of divestment and the climate change-related risk landscape with support from MSCI using MSCI's existing research (e.g., whitepapers, case studies, research blogs, etc.).

**B. Identify and quantify the System's portfolio holdings subject to divestment**
**For public market holdings this should include:**

1. **Development of a clear and repeatable methodology for identifying exposures to companies that are subject to divestment based on legislative definitions. This should include identification of any required data sources.**
2. **Identification of MainePERS holdings of securities subject to divestment, classified and aggregated by:**
   a. **Asset class & holding structure type (e.g., Domestic Equity SMA, or corporate bonds held in commingled funds)**
   b. **Sector / Industry / Sub-Industry using the Global Industry Classification Standard (GICS) taxonomy**
   c. **Fossil fuel type(s) (i.e., oil, natural gas, thermal coal, etc.)**
   d. **Relevant legislation (231 or 234) and specific legislative definition(s) (e.g., C(1) or C(2), etc.)**

NEPC and MSCI plan to work in partnership to deliver a comprehensive analysis to MainePERS for the public market holdings. NEPC will secure the license and leverage MSCI Fossil Fuel and For-Profit Prison Screens for identifying and quantifying holdings subject to divestment. This data can be accessed via data feed and/or through the MSCI ESG Manager portal. MSCI will support NEPC in mapping "fossil fuel" definitions specific to Maine legislation to MSCI Fossil Fuel screening criteria e.g., mapping to asset class, strategy/vehicle, GICS, fossil fuel types, etc.

**C. Identify and quantify direct divestment costs**
**In this section the consultant will, for all portfolio assets subject to divestment:**

1. **Identify the types of potential direct costs and/or cost savings that may be associated with divestment, develop estimates of these, and summarize costs/cost savings by category and asset class. These should include, but need not be limited to:**
   a. **Transaction costs related to divestment of existing public holdings**

   b. **Secondary market pricing, legal expenses, and any reputational considerations associated with seeking to exit from private closed-end funds**
   c. **Potential servicing costs/cost savings arising from changes in investment structures and management agreements, including proxy and custodial services**
   d. **Other potential ongoing costs or cost savings (e.g., changes in data and compliance resources required to monitor holdings, etc.)**

NEPC will have primary responsibility for identifying and quantifying direct divestment costs with support from MSCI as applicable (e.g., changes in data resources required to monitor holdings).

**D. Identify and quantify divestment impact on portfolio**

**This section should employ various measures and methodologies to provide MainePERS with an evaluation of the impact of divestment on the System's portfolio. Components should include:**

1. **Identify and explain measures and methodologies that can be used to analyze the impact of divestment on the System's investment portfolio.**
2. **Compute and discuss these measures.**
   a. **This initial phase of the impact analysis should assume that any proceeds from divestment will be re-invested ratably across the remaining asset classes in the current portfolio.**

NEPC will have primary responsibility identifying and quantifying divestment impact on the portfolio with support from MSCI (e.g., utilizing off the shelf or potentially custom ex-Fossil Fuel/ex Thermal Coal indexes to help analyze divestment impact on risk/return profile of total opportunity set(s), tracking error, country/sector weights, style factors, climate risk metrics, etc.). NEPC will leverage MSCI Index Metrics reports for the analysis.

# DISCLOSURES

### Awards and Recognitions Disclosure

- Pension Bridge Institutional Asset Management Awards 2020. For more information, please visit https://iamanagementawards.awardstage.com/#!/judging-methodology--criteria.
- CIO's Most Influential Investment Consultants: CIO Magazine interviews pension and non-profit CIOs, asset managers and former consultants to approximate what it calls "the hierarchy of today's institutional consultant industry". The results should not be considered a recommendation of any specific firm or individual consultant. For more information, please visit CIO Magazine's web site at https://www.ai-cio.com/lists/
- These rating or awards may not be representative of any one client's experience with NEPC. Any rating or award is representative of NEPC's past performance only and is not indicative of NEPC's future performance, nor does it indicate an endorsement of NEPC. NEPC did not pay any of these organizations to be considered for an award.
- An award presented to a client of NEPC is not a recognition of NEPC's performance and should not be considered an endorsement of NEPC.

### Client Results Disclosure – All Clients

- Past performance is no guarantee of future results.
- NEPC acts in an advisory capacity-only for many clients and does not have discretion over those client assets. As a result, a client's investment performance may not be attributable solely to NEPC's advice.
- NEPC's Overall Composite is compiled from all Pension Plans, Endowments and Foundations for which NEPC is the sole full-retainer consultant. Plans are included in the Composite provided they have exposure to equity and bonds (including alternatives) of at least 25% each, and no more than 20% to other assets such as cash and GIC's.
- New clients are added to the Overall Composite with the first full quarter of a new manager selected from an NEPC search, or after one year as an NEPC client, whichever comes first, provided that the plan is globally diversified.
- Results are reported gross of NEPC advisory fees.
- NEPC's fees for advisory clients vary considerably depending on client size and complexity.

### Information Disclosure

- Investment Metrics Plan Universe
- As of 12/31/2021, the Investment Metrics Universe contained actual, custodian-supplied and audited data on over 3,100 plan sponsors, representing roughly $2.5 trillion in assets. This data is drawn from 52 independent investment consulting firms, including NEPC.
- ICC Universe
- Through 2011, universe rankings were based on the ICC Universe, which was populated by 12 independent investment consulting firms, including NEPC, and supplemented by many of the performance measurement clients of State Street Bank.
- Certain information, including that relating to market indices, was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- This document may contain confidential or proprietary information and is intended only for the designated recipient(s). If you are not a designated recipient, you may not copy or distribute this document.

### Alternative Investment Disclosure

It is important that investors understand the following characteristics of non-traditional investment strategies including hedge funds, real estate, real assets and private equity:

- Performance can be volatile and investors could lose all or a substantial portion of their investment.

- Leverage and other speculative practices may increase the risk of loss.
- Past performance may be revised due to the revaluation of investments.
- These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms.
- A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value.
- These funds are not subject to the same regulatory requirements as registered investment vehicles.
- Managers may not be required to provide periodic pricing or valuation information to investors.
- These funds may have complex tax structures and delays in distributing important tax information.
- These funds often charge high fees.
- Investment agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy.

APPENDIX G

www.NEPC.com

November 2022

MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

# DIVESTMENT MEMO

NEPC, LLC

## TABLE OF CONTENTS

**INTRODUCTION** ........ 3

**SECTION A:** Broad review of divestment and the climate change-related risk landscape ........ 4

**SECTION B:** Identify and quantify the system's portfolio holdings subject to divestment........ 11

**SECTION C:** Identify and quantify the direct investment costs........ 16

**SECTION D:** Identify and quantify the direct investment impact on MainePERS portfolio ........ 19

**SUMMARY**........ 23

**APPENDIX** ........ 25

**DISCLOSURES**........ 32

## INTRODUCTION

The purpose of this report is to assist MainePERS in evaluating the divestment of certain assets as specified in Maine statutes PL2021 c.231 and PL2021 c.234. The report will cover the following items:

- A review of the divestment and climate change-related risk landscape
- Identify and quantify the System's portfolio holdings subject to divestment
- Identify and quantify direct divestment costs
- Identify and quantity divestment impact on portfolio

The information provided within is intended to give the System a more detailed understanding of the impact of the Maine legislation and the implied costs (investment and operational) of divesting as contemplated by the legislation. This report will not include alternatives to divesting, but rather focus on the impact of divesting.

# SECTION A: BROAD REVIEW OF DIVESTMENT AND THE CLIMATE CHANGE-RELATED RISK LANDSCAPE

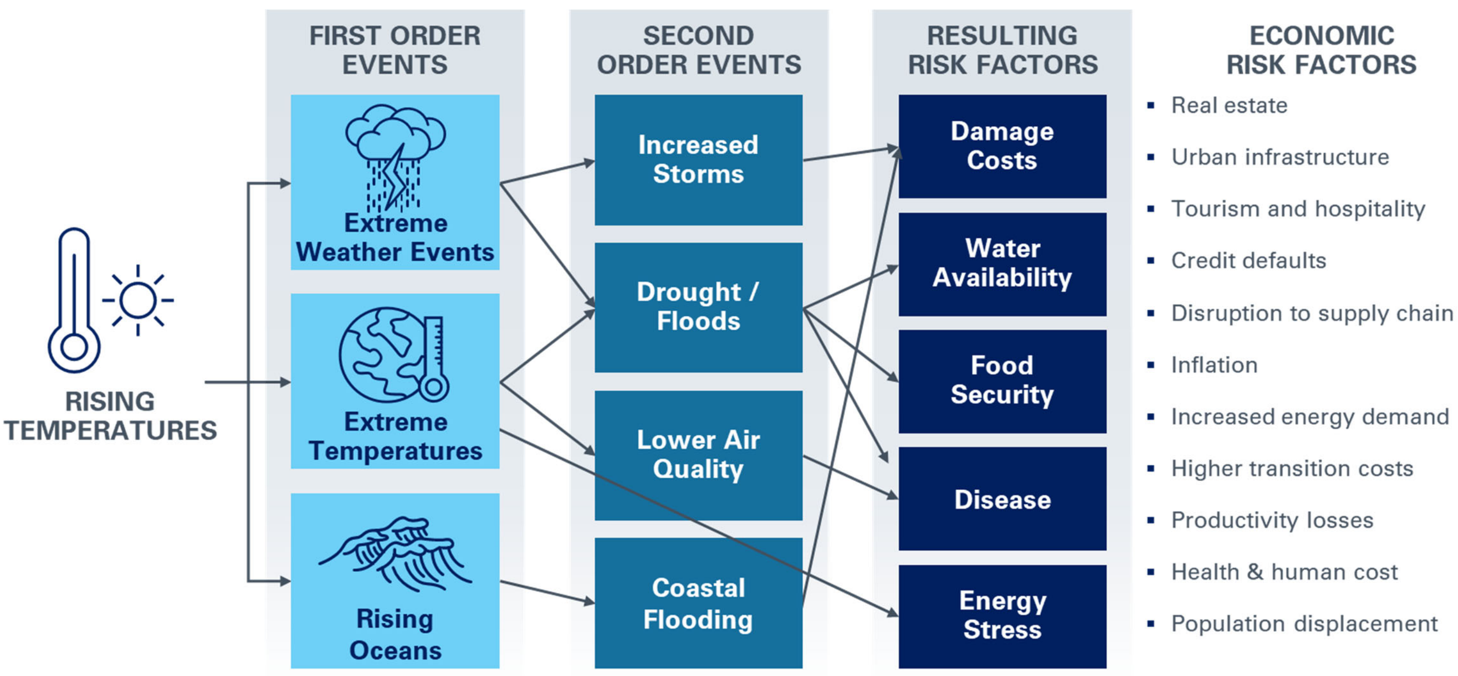
Over the last decade, investors have increased their understanding of climate related risks and have considered those risks in various ways for portfolio construction. This section will provide a brief overview of those risks, the potential investment implications, and how institutional investors are considering those implications through portfolio mandates. We will also highlight some of the state legislative trends.

## Risks

As investors strive to understand the investment implications associated with climate change, it is important to begin with an understanding of *risk factors* and potential government *policy reactions* to those risks. These combine to influence the eventual investment implications.

Climate change risk factors categorize systematic exposures to long-term impacts of climate change. Vulnerability to these risk factors and each economy's ability to adapt will ultimately determine the winners and losers across geographies and industries.

Working through first and second order effects, the economic risk factors of climate change can then inform asset class views for each government policy path.

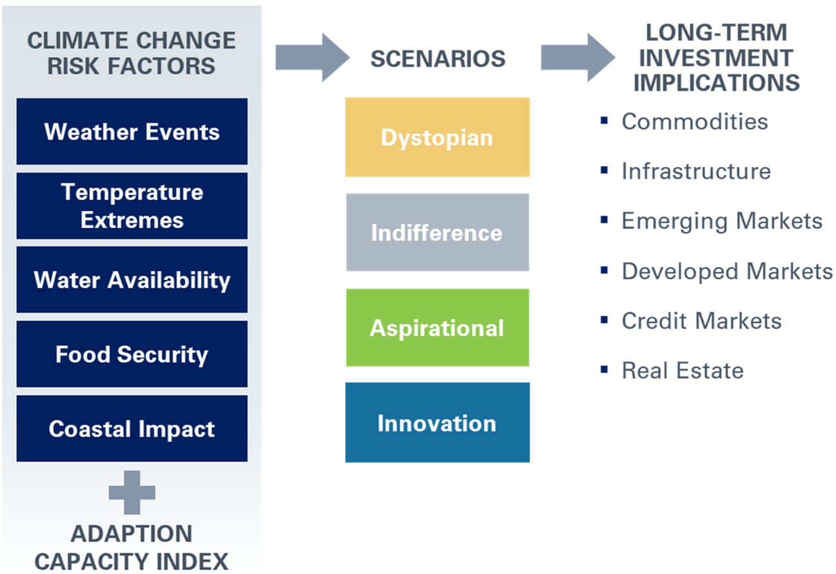



Countries may have the ability to mitigate or offset exposures to certain risk factors by taking some type of action in response to climate change. Ultimately, it depends on readiness in regard to economics (mobility of private capital), governance (stability of society and institutional arrangements), and social conditions (that help society make efficient and equitable use of capital).

We view potential policy scenarios under the following framework:

- **Dystopian:** Industrialized nations reverse current policies in place to mitigate greenhouse gas emissions. Potential global temperature change of 5°C or greater
- **Indifference:** Current mitigation policies in place continue with potential global temperature change of 3°C to 3.5°C
- **Aspirational:** Current pledges of industrialized nations are implemented along with current policies (e.g., Paris Accord) with potential global temperature change of 3°C or less
- **Innovation:** Revolutionary technological change reduces greenhouse gas emissions to 20th century levels. Potential global temperature change of 2°C or less

Investors can turn to investment implications by engaging this type of climate risk model – beginning with economic risk factors, overlaying scenario work on potential policies, leading to varied outcomes depending on the asset class.




Climate change is expected to have an effect on asset classes as it will impact the core building blocks of capital markets: Inflation, Real Growth, Profit Margins, and Credit Defaults. Wealthier countries are most able to adapt to climate change, exacerbating global wealth inequality. Emerging markets are most vulnerable with higher sensitivity to climate change risk factors, especially nations with fragile socio-economic profiles.

Climate change transition costs are likely to pressure profit margins across industries with physical costs of climate change having a potentially inflationary effect. Credit markets may be most exposed with higher defaults associated with climate events and large disruptions to business models. The capital market risks of climate change can be seen today but it is still to be determined when the market may fully discount the range of outcomes associated with climate change costs.

## Investor Response

As investors grapple with how to evaluate exposure to climate risks and consider portfolio implications, multiple approaches are typically discussed. The four most reviewed include negative screening, ESG integration, thematic investing, and engagement. A description of each of these approaches follows, with a note about the adoption of each by pension plans.

### Approach 1: Cancel

**Strategy:** Negative Screening

**Description:** Avoid companies, products, or industries that you don't support. This strategy has been around for decades because it's a straightforward approach.

**Example:** Historically, lots of people have sought to avoid 'sin stocks' like guns, liquor, or tobacco. More recently, many investors with a particular concern about climate change have sought to divest from companies that produce or are dependent on fossil fuels, as opposed to renewable energy sources.

**Suitable for:** Negative-screening portfolios place blunt limits on portfolio managers and are not necessarily designed to find the best long-term investments. For that reason, negative-screening strategies are best used by organizations with strong missions or specific philanthropic goals, such as religious institutions. Screening can be challenging to implement as it is often accompanied by higher investment management fees and a more restricted universe of options. At times, sector exclusion may pose a challenge from a fiduciary standpoint.

### Approach 2: Consider

**Strategy:** ESG Integration

**Description:** ESG integration looks at a firm's environmental, social and governance data to glean intelligence on its long-term viability and value. In addition to portfolio managers assessing each company on the basis of its financial fundamentals, they also consider material information about its environmental impacts, stakeholder relationships, and governance record. Investments that are strong on these counts are viewed as quality investments that are less likely to be derailed by unforeseen risks.

**Example:** The implosion of Equifax in 2017, when a data breach exposed the personal information of 145.5 million Americans and wreaked havoc on its reputation and its stock price. Monitoring the firm's ESG data could have helped in forming a clearer picture of the true risks of investing in Equifax.

**Suitable for:** This strategy has the broadest appeal for most investors because it builds on traditional analysis, rather than trying to replace or constrain it. A well-developed ESG rating system allows investors to benefit from a firm's financial gains while being aware of risks that might not show up on a balance sheet. It also gives investors an opportunity to get an early look at firms that are exploring–and potentially utilizing–impact-related opportunities.

### Approach 3: Sharpen your focus

**Strategy:** Thematic Investing

**Description:** A specialized approach that prioritizes specific impact issues, such as expanding the use of renewable energy, improving access to healthcare, or addressing racial equity. Unlike negative screening, these strategies tend to take a more constructive approach, actively investing in firms that have solutions to offer while also achieving financial goals.

**Example:** As environmental concerns have become more severe, investment managers are responding by presenting public and private investments that target companies offering sustainable solutions. We have seen a variety of themes here, ranging from agriculture technology, energy efficiency, water and waste management, to food security and access. Investors also are increasingly focused on DEI, that is, diversity, equity, and inclusion, and are taking steps to view and assess their portfolio through this lens.

**Suitable for**: The idea with thematic investing is to be proactive with your capital. The approach is a good fit for investors with a specific interest, especially those who prefer to focus on investing in companies offering solutions rather than avoiding firms deemed problematic.

### Approach 4: Progress by proxy

**Strategy**: Engagement

**Description:** Invest in the firms you like but take an active approach to discussing ESG and impact issues with company management, and/or utilize proxy votes to focus the company's attention on matters of concern. This strategy tends to work best when investors join forces in voting blocs or other organized campaigns to communicate with the company.

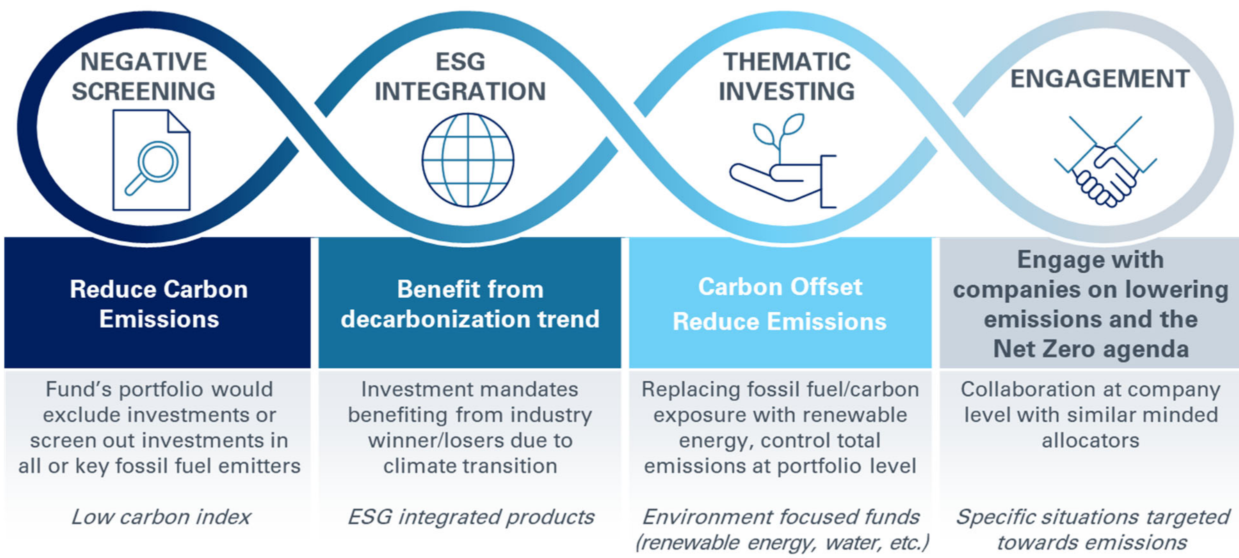
**Example**: Shareholder initiatives by large institutional investors, like New York City's pension fund, which has pressured major companies to release workforce data on race and gender or face a shareholder vote.

**Suitable for**: Engagement demands time and organization, so the strategy is best employed by professionals with the time and resources to build alliances and see the strategy through.

These approaches are not mutually exclusive, and investors often explore multiple options depending on their goals and objectives. When pension plans are considered specifically, the following trends emerge:

- Negative screening: Some plans explore this option for low-carbon or fossil fuel free mandates. Sector exclusion may pose a challenge from a fiduciary standpoint.
- ESG Integration: An ongoing area of focus.
- Thematic investing: An increasing area of focus as some pensions explore emission targets and diversity mandates.
- Engagement: Pension plans dominate this segment. Most engagement efforts are geared towards emissions, equity, and governance issues.

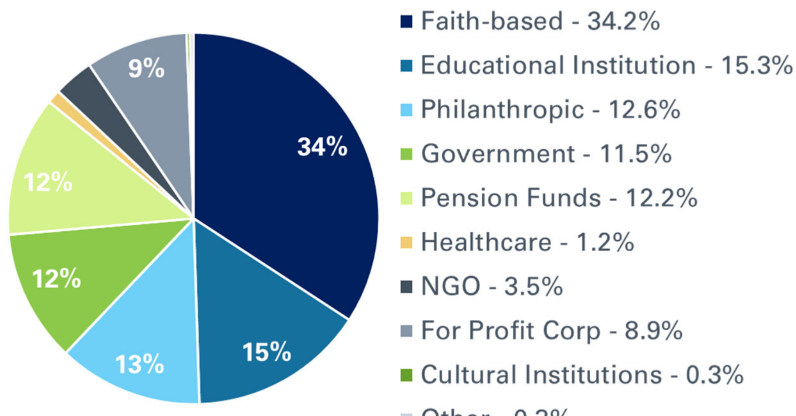
Taking these four approaches and applying them specifically to climate may result in the following types of portfolio mandates.



Prior to selecting an approach, investors may benefit from undergoing a process to determine portfolio exposures that may be most impacted by climate risks. Depending on the investor type, a process to reduce or eliminate (divest) exposure may follow. In NEPC's 2017 paper "Fossil Fuel Divestment: Considerations for Institutional Portfolios" we described the many considerations that investors should evaluate when evaluating a divestment approach, including, but not limited to the impact on asset allocation, volatility, returns and costs.

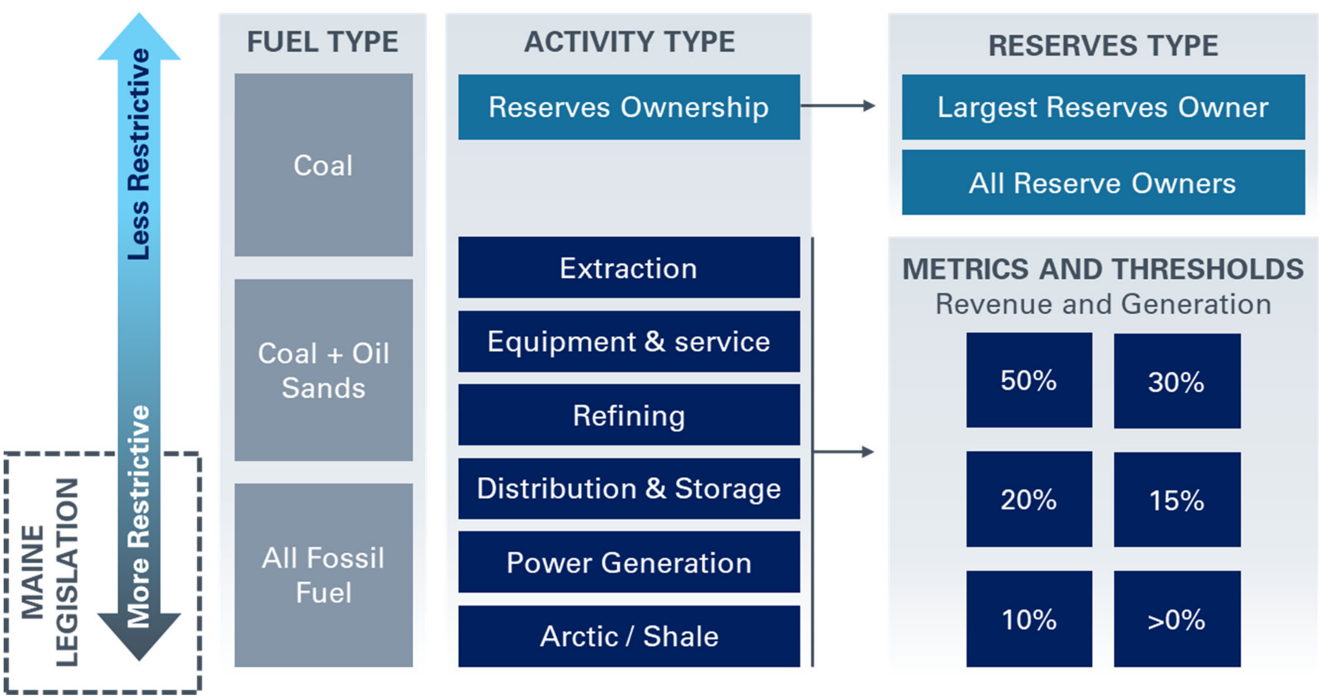
## Divestment Trends

Nearly 1,500 institutions with approximately $40.56 trillion in assets are considering a spectrum of divestment approaches. Implementation varies widely – on scope, flexibility, and timeline. As seen to the right, the majority of these institutions are mission related (faith-based, education, philanthropic, etc.) and may not be subject to the same regulations as pension plans. Relating this back to the possible negative outcomes of a divestment approach on portfolio returns, in the case of public pension funds the government (and ultimately taxpayers) are generally the backstop if returns aren't met, which is an important distinction between public pensions and the other institutions in the chart above.




Source: divestmentdatabase.org

If a determination is made to divest, in this case from fossil fuels, there are still several decisions to make. The below graphic highlights some of these points, including what types of fuels, what type of activity, reserves, and if thresholds will be utilized based on revenue and/or generation.




Source: MSCI

Even after the above points are evaluated, there is a spectrum of divestment commitments among investors which range from less to more restrictive. These implementation approaches may be based on industry membership or only following a security-by-security review on fundamental investment characteristics, often through the lens of a long-term business plan or potential to adapt to the energy transition.

As indicated, many commitments may be partial – such as focusing on the largest fossil fuel companies by reserve, or focusing on a specific asset class. As investors evaluate their portfolios for exposure, we may see commitments become more comprehensive. Importantly, an announcement by an investor does not indicate divestment action is complete. In practice, announcements are usually followed by significant evaluation and discussion about implementation plans.

Less Restrictive

| | |
|---|---|
| **Fossil Free** | An institution or corporation that does not currently have any investments in fossil fuel companies and committed to avoid any fossil fuel investments in the future. Often, those in "The Carbon Underground: The World's Top 200 Companies, Ranked by the Carbon Content of their Fossil Fuel Reserves" have been prioritized for divestment. |
| **Full** | An institution or corporation that made a commitment to divest (direct ownership, shares, funds containing shares, corporate bonds or any assets classes) from any fossil fuel company within a set timeline. |
| **Partial** | An institution or corporation that made a commitment to divest across asset classes from some but not all types of fossil fuel companies or to divest from all fossil fuel companies, but only in specific and not all asset classes (e.g. direct investments, domestic equity). |
| **Coal and Tar Sands** | An institution that has made a commitment to divest (direct ownership, shares, commingled mutual funds containing shares, corporate bonds or any asset classes) from any thermal coal and tar sands companies. |
| **Coal only** | An institution or corporation that made a commitment to divest (direct ownership, shares, commingled mutual funds containing shares, corporate bonds or any assets classes) from any thermal coal companies. |

More Restrictive

Source: divestmentdatabase.org

Importantly, investors rely on flexibility in their divestment statements to accommodate implementation challenges. Areas that require specificity for implementation:

- Define fossil fuels intended for divestment
- Set a time horizon – a longer time horizon leaves room for incremental change rather than forced selling
- Address asset class differences – ability to adopt within an asset class, availability of investment strategies to help achieve goals, the impact that asset classes have on total portfolio construction, etc.
- Scope of divestment within portfolio – active vs. passive, direct vs. indirect holdings, cost effectiveness of implementation in current market

- Determine if engagement will have a role (or not)

A thorough review of the above items would address operational complexity for the investor and anticipated costs. Maximum flexibility assumes no legislation is forcing a specific approach. While many divestment announcements have been made over the last several years, the legislation outcomes are mixed.

For a summary of legislation being explored or implemented by states, Ropes & Gray has periodically published a survey of "State Regulation of ESG Investment Decision-Making by Public Retirement Plans". For this report, the August 2022 update was reviewed, specifically looking at "Actions Promoting Divestment from Fossil Fuel and/or Firearms/Ammunition Companies". We found the following:

| Topic | Number |
|---|---|
| States with initiatives | 12 |
| Legislative announcements only | 3 |
| Initiatives currently referred to committee | 8 |
| Initiatives currently in committee | 1 |
| Initiatives that died in committee | 3 |
| Initiatives currently in effect | 2 |

Notably, only two states have legislation currently in effect – Connecticut and Maine. Connecticut has a Responsible Gun Policy, which applies to Connecticut Retirement Plans and Trust Funds. Maine stands alone as the only state with enacted fossil fuel divestment legislation. This will be important to keep in mind whenever comparisons are made to peers.

# SECTION B: IDENTIFY AND QUANTIFY THE SYSTEM'S PORTFOLIO HOLDINGS SUBJECT TO DIVESTMENT

This section of the report will outline the process conducted to identify and quantify the System's portfolio holdings subject to divestment, across both public and private markets.

## Divestment Legislation

The Maine divestment legislation covers fossil fuels and for-profit prison exposures. The law defines fossil fuels as coal, petroleum, natural gas or any derivative of coal, petroleum or natural gas that is used for fuel:

1. Is among the 200 publicly traded companies with the largest fossil fuel reserves in the world;
2. Is among the 30 largest public company owners in the world of coal-fired power plants;
3. Has as its core business the construction or operation of fossil fuel infrastructure [oil or gas wells, oil or gas pipelines and refineries; oil, coal or gas-fired power plants; oil and gas storage tanks; fossil fuel export terminals; and any other infrastructure used exclusively for fossil fuels];
4. Has as its core business the exploration, extraction, refining, processing or distribution of fossil fuels; or
5. Receives more than 50% of its gross revenue from companies that meet the definition under (1), (2), (3) or (4).

"Fossil fuel infrastructure" means oil or gas wells, oil or gas pipelines and refineries; oil, coal or gas-fired power plants; oil and gas storage tanks; fossil fuel export terminals; and any other infrastructure used exclusively for fossil fuels.

As noted in the legislation, a final report to the joint standing committee regarding the completion of divestment is due on January 1, 2026.

## Process to Identify Current Holdings – as of June 30, 2022

NEPC worked in partnership with MSCI to produce a comprehensive analysis of the MainePERS public market holdings. MSCI created a customized screen to map the Maine legislation into their proprietary ESG Manager portal. All public market holdings were uploaded to the MSCI ESG Manager portal to run through the custom screen. This is a repeatable process for the future, but does come at a cost for access to the MSCI ESG Manager portal. Note that this tool is only useful for the public market, not the private market, holdings.

MainePERS Staff provided information regarding private market portfolio holdings that are subject to divestment. The Staff assessment of holdings was based on fossil fuel Global Industry Classification Standard (GICS) codes.

The fossil fuel and private prison (FF/PP) exposure across the total fund is summarized below. As shown (refer appendix for additional details), the total exposure across the fund is 7.63% (or $1,375.5 million) with the majority in the Private Markets allocation.

| Asset | Estimated FF/PP [$M] | Weighted Exposure |
|---|---|---|
| Public Markets | $445.5 | 2.47% |
| Private Markets | $930.0 | 5.16% |
| **Total** | **$1,375.5** | **7.63%** |

It should be noted that Fossil fuel-related investments represent the vast majority of exposure in the total fund. Private prison exposure accounts for 0.0009% or $0.2M of total Fund market value, so we will primarily focus on Fossil fuel related exposure throughout this report.

## Public Markets Divestment Exposure

As shown in the table below, the divestment exposure of 2.47% in Public Markets is spread across US Equity, International Equity and Traditional Credit. The total market value is $445.5 million. The majority of the public market divestment exposure is concentrated in the public equity allocation.

| Asset | Policy Target (A) | Portfolio Weight (B) | Estimated FF/PP [% of (B)] | Estimated FF/PP [$M] | Weighted Exposure | Source |
|---|---|---|---|---|---|---|
| Domestic Equity | 18% | 14.78% | 7.73% | $205.8 | **1.14%** | MSCI ESG Manager |
| International Equity | 12% | 9.74% | 11.32% | $198.7 | **1.10%** | MSCI ESG Manager |
| **TOTAL PUBLIC EQUITY** | **30%** | **24.5%** | | **$404.5** | **2.24%** | |
| Traditional Credit | 5% | 5.71% | 3.98% | $41.0 | **0.23%** | MSCI ESG Manager |
| US Govt. securities | 10% | 7.68% | No exposure | $0 | **0%** | Staff |
| Risk Diversifiers | 7.5% | 7.17% | No exposure | $0 | **0%** | Staff |
| **TOTAL PUBLIC MARKETS** | **52.5%** | **45.1%** | | **$445.5** | **2.47%** | |

Diving deeper into the Public Markets, the table below details the dollar amount and the number of holdings within each Asset of Public Markets. While the number of holdings is highest in Traditional Credit, the dollar amount is small. The table also notes where the limited amount of Private Prison exposure is held, within the Russell 2000 allocation.

| Asset Exposure | Portfolio Allocation ($M) | Total Number of Holdings | Number of Holdings Tagged for Divestment | Fossil Fuel Exposure ($M) | Private Prison Exposure ($M) | Source |
|---|---|---|---|---|---|---|
| Russell 1000 | $2,491.4 | 1,033 | 69 | $192.6 | $0.0 | MSCI ESG Manager |
| Russell 2000 | $171.5 | 1,978 | 97 | $13.1 | $0.2 | MSCI ESG Manager |
| ACWI ex US | $1,755.2 | 2,371 | 218 | $198.7 | $0.0 | MSCI ESG Manager |
| Traditional Credit | $1,029.3 | 14,355 | 913 | $41.0 | $0.0 | MSCI ESG Manager |
| **TOTAL** | | | | **$445.4** | **$0.2** | |

Going one step further into specific holdings, the top 3 holdings across the Public Markets (along with their dollar exposure) are noted below. Exxon Mobil shows up in both the Russell 1000 and Traditional Credit as a top holding. We have included a full listing of exposures in the Appendix of this report, and noted which aspect of the Maine legislation caused each holding to be tagged.

| Russell 1000 | Russell 2000 | ACWI ex US | Traditional Credit |
|---|---|---|---|
| 1. Berkshire Hathaway Inc. ($32.6M) | 1. Murphy USA Inc. ($0.4M) | 1. Shell PLC ($15.6M) | 1. Energy Transfer LP ($2.0M) |
| 2. Exxon Mobil Corporation ($23.9M) | 2. Matador Resources Company ($0.4M) | 2. BHP Group Limited ($11.4M) | 2. Exxon Mobil Corporation ($2.0M) |
| 3. Chevron Corporation ($18.8M) | 3. Black Hills Corporation ($0.4M) | 3. Total Energies SE ($10.3M) | 3. Enterprise Products Operating LLC ($1.7M) |

## Private Markets Divestment Exposure

As shown in the table below, the divestment exposure of 5.16% in Private Markets is spread across Infrastructure, Private Equity, Private Credit and Natural Resources. The total market value is $930.0 million. The majority of the private market divestment exposure is concentrated in the infrastructure allocation.

| Asset | Policy Target (A) | Portfolio Weight (B) | Estimated FF/PP [% of (B)] | Estimated FF/PP [$M] | Weighted Exposure | Source |
|---|---|---|---|---|---|---|
| Infrastructure | 10% | 11.20% | 34.86% | $703.2 | **3.90%** | Staff |
| Private Equity | 12.5% | 21.05% | 5.20% | $197.3 | **1.09%** | Staff |
| Private Credit | 10% | 6.77% | 1.83% | $22.3 | **0.12%** | Staff |
| Natural Resources | 5% | 5.01% | 0.80% | $7.2 | **0.04%** | Staff |
| Real Estate | 10% | 10.46% | No exposure | $0 | **0%** | Staff |
| **TOTAL PRIVATE MARKETS** | **47.5%** | **54.5%** | | **$930.0** | **5.16%** | |

Diving deeper into the Private Markets, the table below details the dollar amount and the number of funds within each segment of Private Markets. Out of 302 Private Market funds that MainePERS owns, 58 funds have fossil fuel exposure, three of which are co-investments. For further reference, these 58 funds include 25 funds in infrastructure (including two co-investments), 22 funds in private equity (including one co-investment), 8 in private credit, and 3 in natural resources. The number of holdings and market value are the highest in infrastructure.

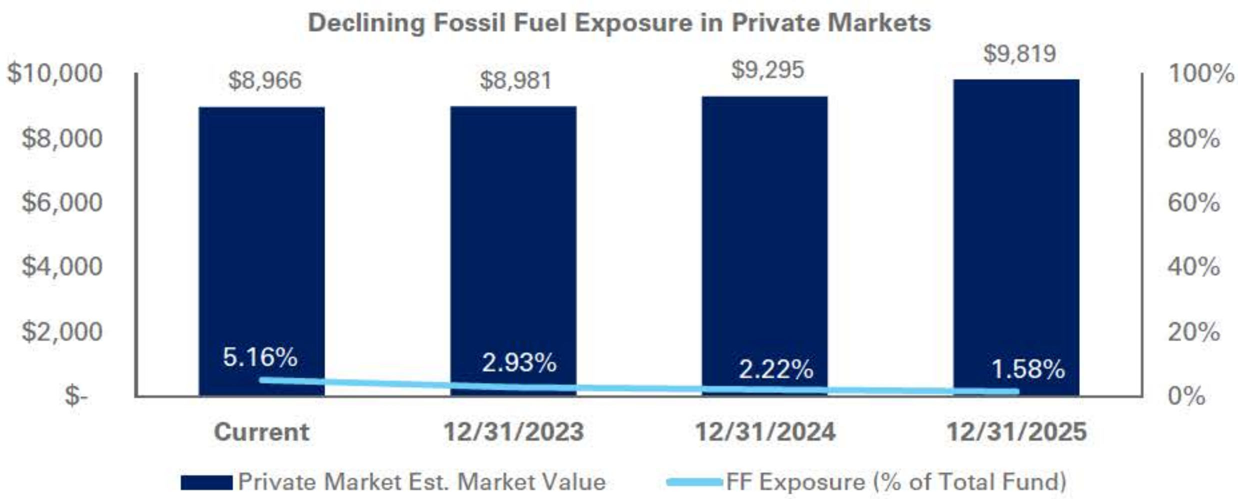
| Asset Exposure | Portfolio Allocation ($M) | Total Number of Funds | Number of Funds Tagged for Divestment | Fossil Fuel Exposure ($M) | Weighted Exposure | NAV of Funds with FF Exposure ($M) |
|---|---|---|---|---|---|---|
| Infrastructure | $2,017.3 | 49 | 25 | $703.2 | **3.90%** | $1,355.4 |
| Private Equity | $3,793.5 | 149 | 22 | $197.3 | **1.09%** | $648.7 |
| Private Credit | $1,219.0 | 45 | 8 | $22.3 | **0.12%** | $455.7 |
| Natural Resources | $902.9 | 16 | 3 | $7.2 | **0.04%** | $26.7 |
| Real Estate | $1,884.6 | 43 | 0 | $0 | **0%** | $0 |
| **TOTAL PRIVATE MARKETS** | **$9,817.3** | **302** | **58** | **$930.0** | **5.16%** | **$2,486.5** |

Since existing private market fossil fuel exposures are held in fixed-life funds, an additional evaluation was run to estimate how these holdings may change through the end of 2025 (keeping in mind that the legislation calls for the completion of divestment to occur by January 1, 2026). NEPC used our internal forecasts to estimate how each fund would wind down over the next three years. Several assumptions were included in this forecast:

- MainePERS continues to make commitments to private market investment opportunities at the 47.5% target
- No new commitments are made to fossil fuel strategies
- Forecasts based on fund lifecycle and a natural wind down of existing investments
- Forecasts apply only to current holdings, and not any subsequent commitments
- No transaction costs are associated with this decline in fossil fuel exposure

The following table and chart summarize the estimated decline of divestment exposure within Private Markets over the next three years. As shown, our forecasts indicate that the number of funds will decrease from 58 to 48, and the market value exposure will drop significantly from $930.0 million to $327.2 million.

| | Projected # of Funds with Exposure | Projected FF Exposure ($M) | Projected Total NAV of FF Funds ($M) |
|---|---|---|---|
| Current | 58 | $930.0 | $2,486.5 |
| 12/31/2023 | 52 | $560.9 | $1,929.2 |
| 12/31/2024 | 50 | $441.7 | $1,548.9 |
| 12/31/2025 | 48 | $327.2 | $1,166.2 |




The chart above demonstrates the impact that this decline in private market exposure will have on the total fossil fuel exposure, declining from 5.16% of the total fund to 1.58% of the total fund. While the above exercise can aid in understanding the anticipated shift in private markets, it is important to highlight that these are only estimates and results could differ significantly depending on market conditions and each manager's results.

# SECTION C: IDENTIFY AND QUANTIFY THE DIRECT INVESTMENT COSTS

In this section of the report, we will discuss the potential costs and considerations to divest completely from fossil fuels and private prisons across the public and private market allocations.

## Public Market Exposure

Currently, 2.47% of the MainePERS total public market allocation is estimated to be from fossil fuels and private prisons. Most of this exposure is from fossil fuel investments within domestic equity, followed by international equity, and then the traditional credit allocation. The typical paths to implement divestment would include either exploring fossil-free products and/or customizing a Separately Managed Account (SMA). While off-the-shelf fossil fuel free products exist in the market today, they may not meet the divestment criteria defined within the State of Maine's legislation nor would they exclude private prisons from the investment mandate. As such, for implementing divestment within its public market allocation, MainePERS will need to consider Separately Managed Accounts (SMAs). SMAs have additional costs and considerations that need to be evaluated such as:

- On average, SMA's incur higher management fees, higher trading costs, legal paperwork, creating custodian accounts, proxy voting expenses, and an increase in time/resource commitment from the staff.
- The predicted tracking error for an SMA account tends be higher relative to its comparable index fund. A fund manager can optimize the portfolio to reduce the tracking error however, the exclusion of sectors or investments from a portfolio limits the diversification benefit as well as the ability to replicate an index holding.
- Other considerations such as retaining other ad-hoc services and licensing expenses such as an updated list of securities/screens to provide to the SMA manager, on-going reporting on exposures and monitoring for compliance.

The table below summarizes the estimations for cost increases for using SMAs and the associated considerations for implementation.

| Consideration for SMAs | |
|---|---|
| **US Equity** | ▪ Increase in management fees on average could range 1-2 bps higher<br>▪ Own custody account and expect increased transaction costs<br>▪ Relatively easy to set up and implement an SMA |
| **International Equity (ACWI)** | ▪ Increase in management fees on average of 2-3 bps higher than US Equity<br>▪ Challenging to set up and implement efficiently as MainePERS will need to set up individual custody accounts in each of the underlying countries. This may take an estimated 6-12 months to open all custody accounts. In addition, there will be licensing requirements to invest directly in some emerging market countries<br>▪ Potentially higher tracking error |
| **Traditional Credit** | ▪ Potentially higher trading costs for fixed income<br>▪ Relatively easy to set up and implement |

Following is a summary of costs that will need to be considered when implementing an SMA vehicle:

- **Custody and Administrative Fees:** These fees generally cover custody, accounting, and audit fees and accrue in a fund on a daily basis. MainePERS would be directly responsible for negotiating and paying these fees in a SMA
- **Conversion Costs:** Moving developed non-US assets from a Fund to a SMA will incur operational costs. In addition, the Emerging Market exposure in a fund may need to be sold and comparable securities re-purchased in a SMA, thereby incurring additional transaction costs in the current market environment
- **Ongoing Annual Costs:** Management fees will be higher in a SMA over a Fund. Additionally, due to the inability to cross-trade, the ongoing trading costs will typically be higher
- **Predicted Tracking Error:** will be higher in a SMA over a comparable Fund due to lower AUM and screens
- **Securities Lending:** Typically, in a SMA the custodian will be the securities lending agent. MainePERS will need to assume responsibility for comparing relative lending yields
- **Other Administrative Considerations:** MainePERS will be directly responsible for account opening and maintenance with their custodian for all markets, including Emerging Markets (currently 49 in MSCI ACWI) for the SMA. This can be particularly challenging with Emerging Markets where account opening can be time intensive and local tax agents and licensing may be required

## Private Market Exposure

Currently, 5.16% of MainePERS fossil fuel exposure is from the private market allocation. Since private market fossil fuel exposures are held in fixed-life funds, our analysis was focused on two options:

**Option#1** was to estimate how these fossil fuel exposures are likely to change before the timeline laid out in the legislation (January 2026). This estimate is outlined in Section B.

**Option#2** was to evaluate the potential discounts in valuation if the funds containing fossil exposures were sold in the secondary market. For clarification, secondary purchases involve one party (a secondaries manager) buying an existing limited partnership (LP) interest in one or more private markets funds from another party (such as MainePERS, for example). Many LPs have explored this avenue to access liquidity or to rebalance a portfolio or as a return seeking/risk management tool. Secondaries managers typically purchase these LP interests at a discount or premium based on their underwriting of fund holdings and market valuations. The secondaries market has grown rapidly over the past few years as more LPs and GPs explore ways to manage liquidity and access opportunities within private market investments.

For Option #2, NEPC contacted four established secondaries fund managers to obtain tentative valuation ranges for the private market portfolio. Initial feedback from these managers provided the following assessment:

| | Infrastructure | Energy PE & Natural Resources | General PE | Private Credit and Special Situations |
|---|---|---|---|---|
| **Fossil Fuel Exposure ($M)** | **$703.2** | **$154.0** | **$50.5** | **$22.3** |
| Pricing Range | 70%-90% | 40%-80% | 70%-80% | 60%-80% |

Note: Feedback based on NAVs that were communicated as 3/31/2022 GP valuations cash adjusted through end of Q2 2022. Also, keep in mind that the above percentages estimated were percentages of these cash adjusted Q2 2022 NAV values – actual proceeds received in any sale would be further adjusted to reflect any capital calls or distributions that have occurred after 6/30/2022.

Based on the valuation estimates provided by these managers, on average, infrastructure funds held value relatively well as the underlying assets remain attractive in this market environment. This is important to note because most of the fossil fuel exposure within private markets is from the plan's infrastructure investments. In contrast, Energy fund interest was low. For those few fund managers with dedicated Energy or Real Asset secondary funds, interest varied based on the quality of the assets with suggested valuation discounts ranging from 30% to 50+%. Finally, Private Equity (PE) funds in general are expected to be discounted in the range of 20%-30% of fund valuation. This is higher than usual due to the lag in PE valuations fully reflecting the current public market and economic outlook. If MainePERS decides to explore a secondary sale, it should be noted that the best practice would dictate retaining services of a third-party broker service for best execution (additional cost). In addition to these one-time costs, there will be other costs to consider such as the on-going monitoring for compliance with the legislation as well as the opportunity cost of significantly reducing the infrastructure allocation for the future.

# SECTION D: IDENTIFY AND QUANTIFY THE DIRECT INVESTMENT IMPACT ON MAINEPERS PORTFOLIO

In this section of the report, we will discuss the impact on MainePERS portfolio return, risk, and asset exposures, from implementing divestment measures.

The overall impact on the portfolio from implementing screening involves three aspects: Reduced diversification benefit which will impact portfolio volatility, increased cost, reduced or lost investment opportunity in the future.

## Public Market Portfolio

To understand the impact on the public market portfolio, NEPC conducted a (back-tested) hypothetical scenario analysis. In this analysis, two portfolios were compared - one (Benchmark Portfolio) consisting of the existing public equity allocation and the other (Divested Portfolio) consisting of the Benchmark Portfolio that was divested from fossil fuel and private prison investments as defined in the state's legislation. This hypothetical performance was prepared for NEPC by the investment firm Parametric at NEPC's request. This performance represents back-tested historical returns based on the exclusion of fossil fuels and private prisons (following Maine's legislative directive), with trailing periods calculated as of June 30, 2022.

The results indicate that the variability of returns (volatility), will be different than the index due to loss of diversification benefit from sector exclusion. Over the long term, the hypothetical Divested Portfolio delivers a marginally higher return with a slightly higher volatility. In the short term, the hypothetical Divested Portfolio experiences a higher drawdown and a higher associated volatility.

| Performance | 1- Year | 3-Year | 5-Year | 10-Year | 25-Year |
|---|---|---|---|---|---|
| Divested Portfolio* | -17.77% | 7.03% | 7.87% | 10.48% | 7.56% |
| Benchmark** | -15.74% | 6.91% | 7.75% | 9.80% | 7.49% |
| Relative Performance | -2.03% | 0.13% | 0.12% | 0.67% | 0.07% |
| **Standard Dev.** | **1- Year** | **3-Year** | **5-Year** | **10-Year** | **25-Year** |
| Divested Portfolio* | 15.53% | 18.05% | 16.32% | 13.44% | 16.14% |
| Benchmark** | 15.37% | 18.20% | 16.37% | 13.46% | 15.93% |
| Relative Vol. | 0.16% | -0.15% | -0.05% | -0.02% | 0.21% |
| Tracking Error | 1.46% | 1.21% | 1.03% | 1.00% | 1.23% |

*Divested Portfolio - Benchmark based hypothetical back-tested portfolio with exclusion screens applied and proceeds re-invested. ** Benchmark: 56.4% Russell 1000 / 3.9% Russell 2000 / 39.7% MSCI ACWI ex US without any screens.

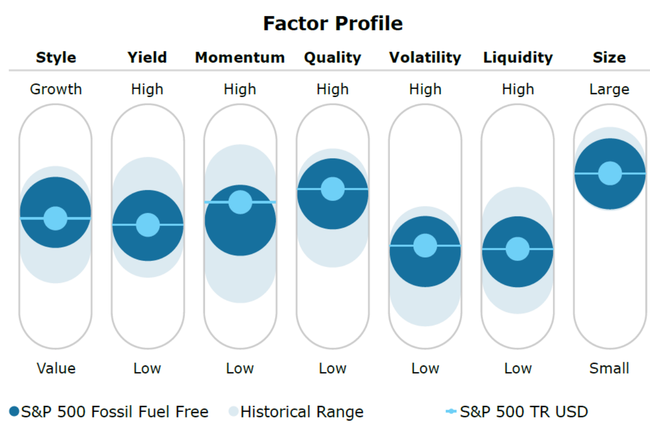
The primary reason for this increase in variability of returns is that the composition of the portfolio changes as sectors are excluded from the investment mandate. Contribution to return varies by sector from year to year as seen in the exhibit below. An increase in portfolio concentration in certain sectors will change the return-risk profile for the portfolio going forward.

| 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022[1*] |
|---|---|---|---|---|---|---|---|---|---|
| Consumer Discretionary 42.72 | Utilities 28.59 | Consumer Discretionary 9.94 | Energy 28.01 | Technology 34.28 | Health Care 6.29 | Technology 49.97 | Technology 43.57 | Energy 53.02 | Energy 33.87 |
| Health Care 41.24 | Health Care 25.18 | Health Care 6.86 | Financials 22.69 | Materials 23.94 | Utilities 4.03 | Financials 31.90 | Consumer Discretionary 29.58 | Real Estate 45.97 | Utilites -6.58 |
| Industrials 40.44 | Technology 17.75 | Consumer Staples 6.83 | Industrials 19.95 | Industrials 23.84 | Consumer Discretionary 1.65 | S&P 500 31.49 | Communication Services 26.82 | Financials 34.77 | Consumer Staples -11.89 |
| Financials 35.37 | Consumer Staples 15.86 | Technology 5.63 | Materials 16.66 | Consumer Discretionary 22.77 | Technology -1.57 | Communication Services 31.23 | Materials 20.34 | Technology 34.53 | Healthcare -13.12 |
| S&P 500 32.39 | Financials 15.03 | S&P 500 1.38 | Utilities 16.00 | Financials 22.04 | Real Estate -2.27 | Industrials 29.12 | S&P 500 18.40 | NYSE Equal Sector Weight 29.46 | NYSE Equal Sector Weight -18.20 |
| NYSE Equal Sector Weight 30.81 | S&P 500 13.69 | NYSE Equal Sector Weight -1.37 | Technology 14.82 | S&P 500 21.83 | S&P 500 -4.38 | Real Estate 28.84 | Healthcare 13.27 | S&P 500 28.71 | Industrials -20.76 |
| Consumer Staples 26.27 | NYSE Equal Sector Weight 13.41 | Financials -1.60 | NYSE Equal Sector Weight 14.31 | Health Care 21.70 | NYSE Equal Sector Weight -6.74 | Consumer Discretionary 28.42 | NYSE Equal Sector Weight 11.29 | Consumer Discretionary 27.83 | Financials -21.24 |
| Energy 26.16 | Industrials 10.45 | Industrials -4.25 | S&P 500 11.96 | NYSE Equal Sector Weight 18.27 | Consumer Staples -8.00 | NYSE Equal Sector Weight 28.21 | Industrials 10.83 | Materials 27.43 | Materials -23.77 |
| Technology 25.97 | Consumer Discretionary 9.49 | Utilities -4.86 | Consumer Discretionary 5.88 | Consumer Staples 12.92 | Financials -13.09 | Consumer Staples 27.45 | Consumer Staples 10.13 | Healthcare 25.92 | S&P 500 -23.87 |
| Materials 25.83 | Materials 7.31 | Materials -8.58 | Consumer Staples 5.00 | Utilities 12.02 | Industrials -13.10 | Utilites 26.08 | Utilites 0.35 | Industrials 20.93 | Real Estate -28.90 |
| Utilities 13.00 | Energy -8.60 | Energy -21.46 | Real Estate 3.19 | Real Estate 10.70 | Materials -14.78 | Materials 24.18 | Financials -1.83 | Utilites 17.58 | Consumer Discretionary -29.88 |
| | | | Health Care -2.83 | Energy -1.06 | Communication Services** -16.98 | Heath Care 20.65 | Real Estate -2.27 | Consumer Staples 17.10 | Technology -31.23 |
| | | | | | Energy -18.15 | Energy 11.85 | Energy -32.81 | Communication Services 15.89 | Communication Services -37.92 |

Source: Bloomberg. Data shown in percentages. 2022 data as of September 30, 2022.

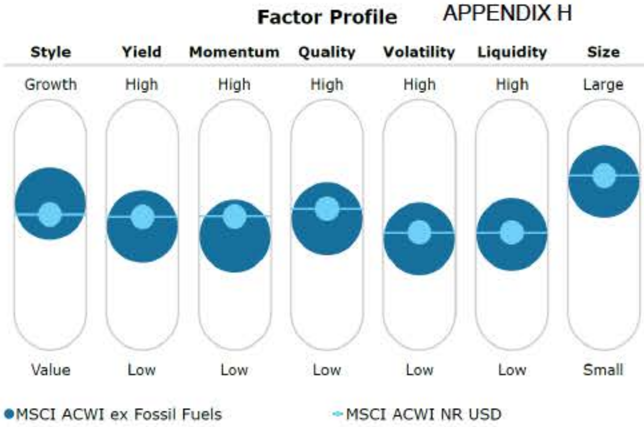
In addition, the Divested portfolio may also exhibit variability with respect to a variety of measures, such as Value/Growth tilt, dividend yield, and other such valuation metrics. For example, when we compare an ex-fossil fuel index with a broad index we find the following difference in characteristics, indicating a growth tilt to ex-fossil fuel index.

| | S&P 500 ex Fossil Fuel | S&P 500 |
|---|---|---|
| P/E | 18.42 | 17.98 |
| P/B | 3.41 | 3.38 |
| Dividend Yield | 1.89% | 1.98% |
| Standard Deviation | 18.02 | 18.07 |
| Sharpe Ratio | 0.52 | 0.51 |
| # of Holdings | 489 | 503 |



| | MSCI ACWI ex Fossil Fuel | MSCI ACWI |
|---|---|---|
| P/E | 15.42 | 14.51 |
| P/B | 2.36 | 2.27 |
| Dividend Yield | 2.66% | 2.84% |
| Standard Deviation | 17.07 | 17.15 |
| Sharpe Ratio | 0.27 | 0.27 |
| # of Holdings | 2,750 | 2,899 |






Source: Morningstar, eVestment and/or Strategy materials. Past performance is no guarantee of future results. As of 9/30/2022.

## Private Market Portfolio

To understand the impact of divestment on the private market portfolio, NEPC used the discount estimates provided by the four secondaries investment managers to arrive at the estimated average dollar loss from discount. The table below provides the break-down of the estimated dollar value of discount across private market holdings. It should be noted that, in private funds, to implement divestment completely, the entire interest in the fund containing fossil exposure would need to be sold or wound down. As such, for Maine to divest the full $930 million fossil fuel exposure through secondaries transactions, it would require selling off the entire $2,486.5 million of NAV (full fund value). The approximate loss from the discount from such transactions would be around $565 million, which is subject to change at the time of actual execution.

| | Infrastructure | Energy PE & Natural Resources | General PE | Private Credit and Special Situations | Total ($M) |
|---|---|---|---|---|---|
| Fossil Fuel Exposure ($M) | $703.2 | $154.0 | $50.5 | $22.3 | **$930.0** |
| Fund NAV ($M) | $1,355.4 | $154.8 | $520.6 | $455.7 | **$2,486.5** |
| Average Discount | ~19% | ~39% | ~23% | ~29% | **Average: ~28%** |
| Estimated Discount* ($M) | $254.1 | $60.0 | $120.4 | $131.0 | **$565.5** |

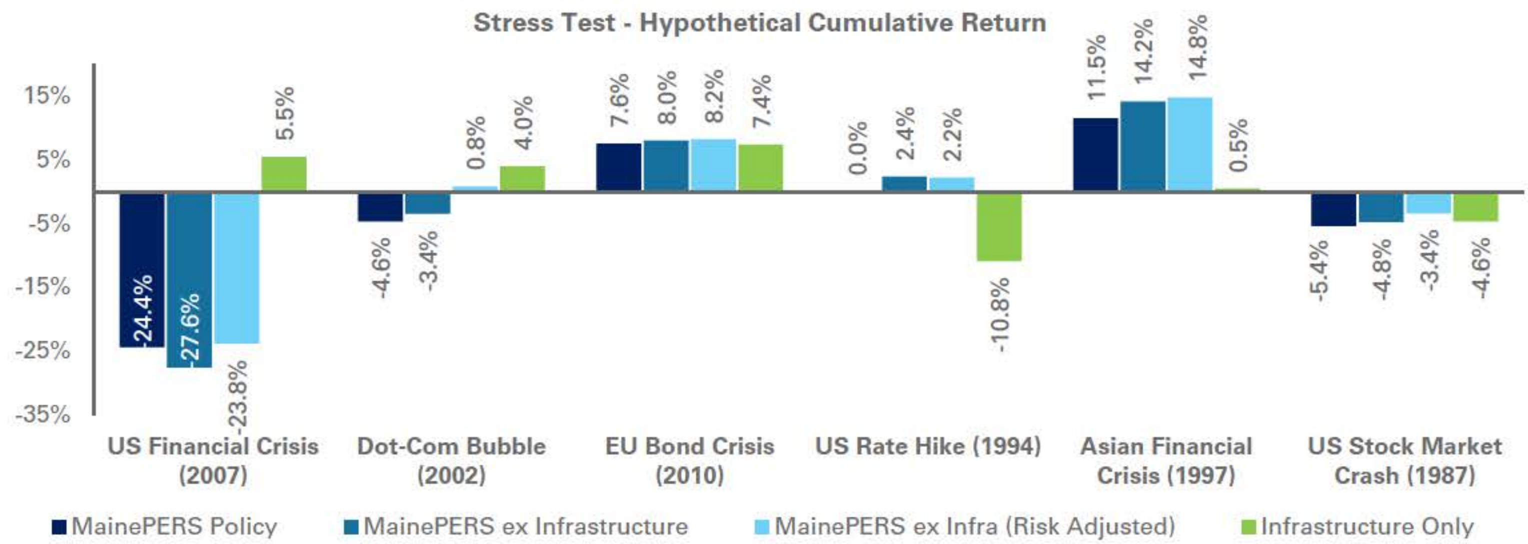
*Estimated Discount was calculated using the middle of each offered range where applicable

NEPC also conducted an asset allocation analysis to understand the impact on the expected portfolio risk and return if MainePERS excluded infrastructure assets from its portfolio. We limited this analysis to just infrastructure because it is the largest contributor to fossil fuel exposure within the portfolio. In the table below, we show three portfolio mixes – one with the Policy mix, second with the portfolio ex-infrastructure and the third being a risk-adjusted ex-infrastructure portfolio. For clarification, MainePERS ex-infrastructure represents a proportional re-allocation of the infrastructure allocation across the remaining private market asset classes. And MainePERS ex-infrastructure (risk adjusted) assumes a consistent private market allocation based on the ex-infrastructure mix and adjusts the public equity and fixed income allocations to bring volatility in-line with the Policy portfolio.

The table below highlights the three portfolio mixes and the difference in allocations across various asset classes and the ultimate impact on the return, risk, and Sharpe ratio (excess return per unit of risk). We also show the results of a stress test that demonstrates the hypothetical impact on these three portfolios during periods of historical market crisis. The results indicate an increase in return variability, which when controlled in the risk-adjusted portfolio may have an impact on future returns due to a reduction in the equity allocation.

| Asset Group | MainePERS Policy | MainePERS ex Infrastructure | MainePERS ex Infrastructure (Risk Adjusted) |
|---|---|---|---|
| Global Equity | 30.0 | 30.0 | 24.0 |
| Private Equity | 12.5 | 15.8 | 15.8 |
| **Equity** | **42.5** | **45.8** | **39.8** |
| IG Credit | 5.0 | 5.0 | 7.0 |
| US Gov | 10.0 | 10.0 | 14.0 |
| Private Credit | 10.0 | 12.7 | 12.7 |
| **Fixed Income** | **25.0** | **27.7** | **33.7** |
| Real Estate | 10.0 | 12.7 | 12.7 |
| Infrastructure | 10.0 | | |
| Natural Resources | 5.0 | 6.3 | 6.3 |
| **Real Assets** | **25.0** | **19.0** | **19.0** |
| Risk Diversifiers | 7.5 | 7.5 | 7.5 |
| **Multi-Asset** | **7.5** | **7.5** | **7.5** |

| Measure | MainePERS Policy | MainePERS ex Infrastructure | MainePERS ex Infrastructure (Risk Adjusted) |
|---|---|---|---|
| Expected Return 10 Yr (Geometric) | 7.4% | 7.7% | 7.5% |
| Standard Deviation (Asset) | 13.5% | 14.5% | 13.5% |
| Sharpe Ratio (10 Years) | 0.34 | 0.33 | 0.35 |

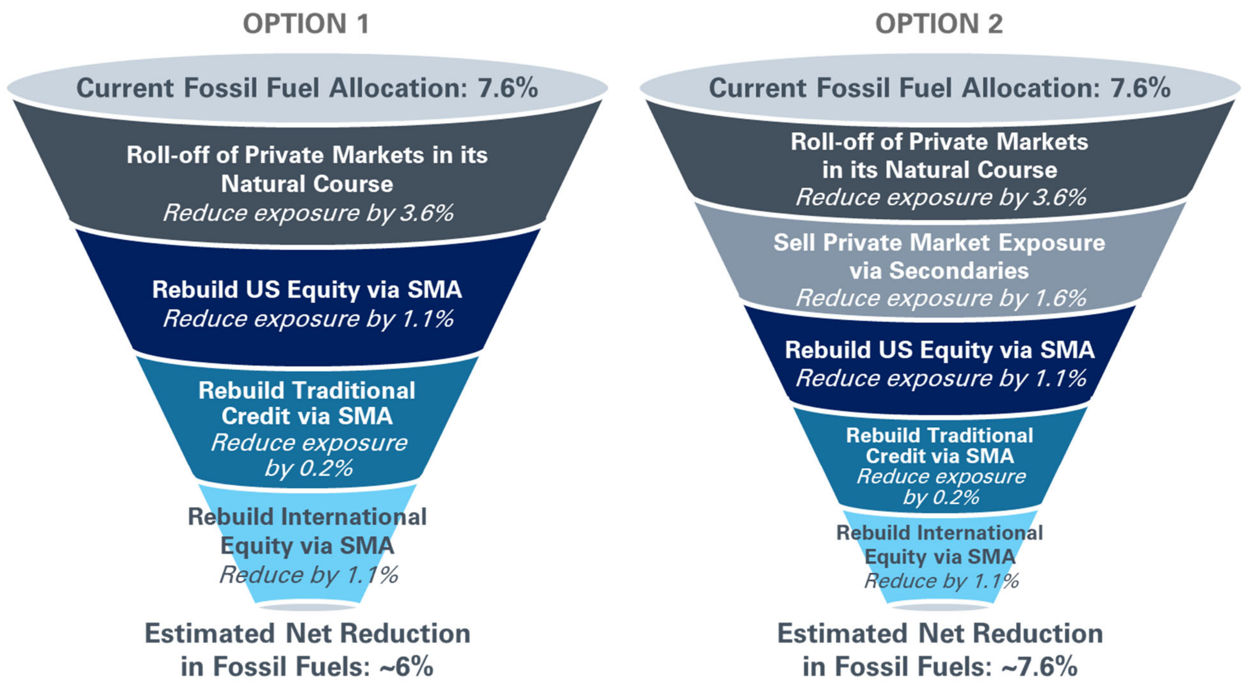


## SUMMARY

In summary, MainePERS currently has 7.6% in holdings that fall within the scope of the new legislation (refer to Appendix for more details). Two options that can decrease this exposure, in order of ease of implementation, are the following:

- Option 1: Do nothing with the public market allocations, allow the existing private markets to roll-off and make no new commitments to private markets that fall under the legislation. This should, over the next three years, reduce the exposure by 3.6%.
- Option 2: Do nothing with the public market allocations, allow the existing private markets to roll-off and make no new commitments to private markets that fall under the legislation (that is, follow Option 1 to reduce by 3.6%). Then, following the roll-off in three years, explore a secondaries sale of remaining Private Markets holdings to reduce the exposure by the outstanding 1.6%. While this approach provides a faster way to reduce the additional exposure from private markets, its implementation may result in a loss (valuation discount).
- Additional actions that can be taken, alongside each option above:
  - Restructure US Equity with specific screening through a separately managed account. This will bring down the fossil fuel exposure by 1.1%. This will involve some operational complexity and cost considerations.
  - Restructure Traditional Credit with specific screening through a separately managed account. This will bring down the fossil fuel exposure by 0.2%. This will involve some operational complexity and cost considerations.
  - Restructure International Equity with specific screening through a separately managed account. This will bring down the fossil fuel exposure by 1.1%. This will be a costly and operationally challenging option.

The chart below depicts these two options (with add-ons) to reduce fossil fuel exposure:



As indicated, Option 1 will not bring the FF exposure to 0% by 2026. Option 2 can bring the FF exposure to 0% by 2026, but would involve a secondary sale. Further analysis would need to be done to evaluate alternatives that could help minimize some of the costs borne by the Plan. The purpose of this report was to clarify the total exposure across the portfolio and to provide a summary of the anticipated costs to divest pursuant to the legislation.

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE-RUSSELL 1000

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Russell 1000 | ALCOA CORPORATION | 0.02% | | | x | | | | | | | | | | |
| Russell 1000 | ALLIANT ENERGY CORPORATION | 0.04% | | | x | | | | | | | | | | |
| Russell 1000 | AMEREN CORPORATION | 0.06% | | | x | | | | | | | | | | |
| Russell 1000 | AMERICAN ELECTRIC POWER COMPANY INC. | 0.13% | | | x | | | | | | | | | x | |
| Russell 1000 | ANTERO MIDSTREAM CORPORATION | 0.01% | | | | x | | | | | | x | | | |
| Russell 1000 | ANTERO RESOURCES CORPORATION | 0.02% | x | | | | x | x | | | | | | | |
| Russell 1000 | APA CORPORATION | 0.03% | x | | | | x | x | | | | | | | |
| Russell 1000 | ATMOS ENERGY CORPORATION | 0.04% | | | | | | | | x | | | | | |
| Russell 1000 | BAKER HUGHES COMPANY | 0.07% | | | | x | | | | | x | | | | |
| Russell 1000 | BERKSHIRE HATHAWAY INC. | 1.31% | | x | x | | | | | | | | | | |
| Russell 1000 | CASEY'S GENERAL STORES INC. | 0.02% | | | | | | | | x | | | | | |
| Russell 1000 | CENTERPOINT ENERGY INC. | 0.05% | | | x | | | | | | | | | | |
| Russell 1000 | CHENIERE ENERGY INC. | 0.09% | | | | x | | | | x | | | | | |
| Russell 1000 | CHESAPEAKE ENERGY CORPORATION | 0.03% | x | | | | x | x | | | | | | | |
| Russell 1000 | CHEVRON CORPORATION | 0.76% | x | | | | x | x | | | | | | | |
| Russell 1000 | CMS ENERGY CORPORATION | 0.05% | | | x | | | | | | | | | | |
| Russell 1000 | CONOCOPHILLIPS | 0.31% | x | | | | x | x | | | | | | | |
| Russell 1000 | CONTINENTAL RESOURCES INC. | 0.01% | x | | | | x | x | | | | | | | |
| Russell 1000 | Coterra Energy Inc. | 0.05% | x | | | | x | x | | | | | | | |
| Russell 1000 | DEVON ENERGY CORPORATION | 0.10% | x | | | | x | x | | | | | | | |
| Russell 1000 | DIAMONDBACK ENERGY INC. | 0.06% | x | | | | x | x | | | | | | | |
| Russell 1000 | Dominion Energy Inc. | 0.17% | | | x | | | | | | | | | | |
| Russell 1000 | DT MIDSTREAM INC. | 0.01% | | | | x | | | | | | x | | | |
| Russell 1000 | DTE ENERGY COMPANY | 0.06% | | | x | | | | | | | | | | |
| Russell 1000 | DUKE ENERGY CORPORATION | 0.22% | | | x | | | | | | | | | | |
| Russell 1000 | ENTERGY CORPORATION | 0.06% | | | x | | | | | | | | | | |
| Russell 1000 | EOG RESOURCES INC. | 0.17% | x | | | | x | x | | | | | | | |
| Russell 1000 | EQT CORPORATION | 0.03% | x | | | | x | x | | | | | | | |
| Russell 1000 | Evergy Inc. | 0.04% | | | x | | | | | | | | | | |
| Russell 1000 | EXXON MOBIL CORPORATION | 0.96% | x | | | | x | | x | | | | | | |
| Russell 1000 | FIRSTENERGY CORP. | 0.06% | | | x | | | | | | | | | | |
| Russell 1000 | FREEPORT-MCMORAN INC. | 0.11% | x | | | | | | | | | | | | |
| Russell 1000 | HALLIBURTON COMPANY | 0.08% | | | | x | | | | | x | | | | |
| Russell 1000 | HESS CORPORATION | 0.08% | x | | | | x | x | | | | | | | |
| Russell 1000 | HF SINCLAIR CORPORATION | 0.02% | | | | | x | | x | | | | | | |
| Russell 1000 | IDACORP INC. | 0.01% | | | x | | | | | | | | | | |
| Russell 1000 | KINDER MORGAN INC. | 0.09% | | | | x | | | | | | x | | | |
| Russell 1000 | MARATHON OIL CORPORATION | 0.04% | x | | | | x | x | | | | | | | |
| Russell 1000 | MARATHON PETROLEUM CORPORATION | 0.12% | | | | | x | | x | | | | | | |
| Russell 1000 | MDU RESOURCES GROUP INC. | 0.01% | | | x | | | | | | | | | | |
| Russell 1000 | NATIONAL FUEL GAS COMPANY | 0.02% | x | | | | | | | | | | | | |
| Russell 1000 | NEW FORTRESS ENERGY INC. | 0.01% | | | | x | | | | x | | | | | |
| Russell 1000 | NEXTERA ENERGY INC. | 0.40% | | | x | | | | | | | | | | |
| Russell 1000 | NISOURCE INC. | 0.03% | | | x | | | | | x | | | | | |
| Russell 1000 | NOV INC. | 0.02% | | | | x | | | | | x | | | | |
| Russell 1000 | NRG ENERGY INC. | 0.02% | | | x | | | | | | | | | | |
| Russell 1000 | OCCIDENTAL PETROLEUM CORPORATION | 0.13% | x | | | | x | x | | | | | | | |
| Russell 1000 | OGE ENERGY CORP. | 0.02% | | | x | | | | | | | | | | |
| Russell 1000 | ONEOK INC. | 0.07% | | | | x | | | | | | x | | | |
| Russell 1000 | OVINTIV INC. | 0.03% | x | | | | x | x | | | | | | | |
| Russell 1000 | PDC ENERGY INC. | 0.02% | x | | | | x | x | | | | | | | |
| Russell 1000 | PHILLIPS 66 | 0.10% | | | | | x | | | x | | | | | |
| Russell 1000 | PINNACLE WEST CAPITAL CORPORATION | 0.02% | | | x | | | | | | | | | | |
| Russell 1000 | PIONEER NATURAL RESOURCES COMPANY | 0.14% | x | | | | x | x | | | | | | | |
| Russell 1000 | PPL CORPORATION | 0.05% | | | x | | | | | | | | x | | |
| Russell 1000 | RANGE RESOURCES CORPORATION | 0.02% | x | | | | x | x | | | | | | | |
| Russell 1000 | Schlumberger N.V. | 0.13% | | | | x | | | | | x | | | | |
| Russell 1000 | SEMPRA ENERGY | 0.13% | | | | | | | | | | x | | | |
| Russell 1000 | SOUTHWESTERN ENERGY COMPANY | 0.02% | x | | | | x | x | | | | | | | |
| Russell 1000 | TARGA RESOURCES CORP. | 0.04% | | | | x | | | | | | x | | | |
| Russell 1000 | Texas Pacific Land Corp | 0.02% | | | | | x | | | | | | | | |
| Russell 1000 | THE AES CORPORATION | 0.04% | | | x | | | | | | | | x | | |
| Russell 1000 | THE SOUTHERN COMPANY | 0.20% | | | x | | | | | | | | x | | |
| Russell 1000 | THE WILLIAMS COMPANIES INC. | 0.10% | | | | x | | | | | | x | | | |
| Russell 1000 | UGI CORPORATION | 0.02% | | | | | | | | x | | | | | |
| Russell 1000 | VALERO ENERGY CORPORATION | 0.11% | | | | | x | | x | | | | | | |
| Russell 1000 | VISTRA CORP. | 0.03% | | | x | | | | | | | | | | |
| Russell 1000 | WEC ENERGY GROUP INC. | 0.08% | | | x | | | | | | | | | | |
| Russell 1000 | Xcel Energy Inc. | 0.10% | | | x | | | | | | | | | | |

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE-RUSSELL 2000

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Russell 2000 | ALLETE INC. | 0.15% | | × | × | | | | | | | | | × | |
| Russell 2000 | ALPHA METALLURGICAL RESOURCES INC. | 0.10% | | × | | | | | | | | | | × | |
| Russell 2000 | ALTO INGREDIENTS INC. | 0.01% | | | | | × | | | | | | | | |
| Russell 2000 | ARCH RESOURCES INC. | 0.10% | | × | | | | | | | | | | × | |
| Russell 2000 | Archaea Energy Inc | 0.04% | | | | | × | | | | | | | | |
| Russell 2000 | ARCHROCK INC. | 0.05% | | | | × | | | | | × | | | | |
| Russell 2000 | ARKO CORP. | 0.03% | | | | | | | | × | | | | | |
| Russell 2000 | AVISTA CORPORATION | 0.13% | | | × | | | | | | | | | | |
| Russell 2000 | BERRY CORPORATION (BRY) | 0.03% | × | | | | × | × | | | | | | | |
| Russell 2000 | BLACK HILLS CORPORATION | 0.21% | | × | × | | | | | | | × | | × | |
| Russell 2000 | Borr Drilling Limited | 0.03% | | | | × | | | | | | | | | |
| Russell 2000 | BRIGHAM MINERALS INC. | 0.06% | × | | | | × | | | | | | | | |
| Russell 2000 | BRISTOW GROUP INC. | 0.02% | | | | × | | | | | | | | | |
| Russell 2000 | BROOKFIELD INFRASTRUCTURE CORPORATION | 0.18% | | | | | | | | | | × | | | |
| Russell 2000 | CACTUS INC. | 0.10% | | | | × | | | | | × | | | | |
| Russell 2000 | CALIFORNIA RESOURCES CORPORATION | 0.13% | × | | | | × | × | | | | | | | |
| Russell 2000 | CALLON PETROLEUM COMPANY | 0.08% | × | | | | × | × | | | | | | | |
| Russell 2000 | CENTENNIAL RESOURCE DEVELOPMENT INC. | 0.05% | × | | | | × | × | | | | | | | |
| Russell 2000 | CHAMPIONX CORPORATION | 0.18% | | | | × | | | | | × | | | | |
| Russell 2000 | CHESAPEAKE UTILITIES CORPORATION | 0.09% | | | | | | | | × | | | | | |
| Russell 2000 | CIVITAS RESOURCES INC. | 0.17% | × | | | | × | × | | | | | | | |
| Russell 2000 | CLEAN ENERGY FUELS CORP. | 0.03% | | | | | × | | | × | | | | | |
| Russell 2000 | CNX RESOURCES CORPORATION | 0.14% | × | | | | × | × | | | | | | | |
| Russell 2000 | COMSTOCK RESOURCES INC. | 0.05% | × | | | | × | × | | | | | | | |
| Russell 2000 | CONSOL ENERGY INC. | 0.07% | | × | | | | | | | | | | × | |
| Russell 2000 | CORECIVIC INC. | 0.06% | | | | | | | | | | | | | × |
| Russell 2000 | CRESCENT ENERGY COMPANY | 0.02% | × | | | | × | × | | | | | | | |
| Russell 2000 | CVR ENERGY INC. | 0.04% | | | | | × | | × | | | | | | |
| Russell 2000 | DELEK US HOLDINGS INC. | 0.08% | | | | | × | | × | | | | | | |
| Russell 2000 | DENBURY INC. | 0.13% | × | | | | × | × | | | | | | | |
| Russell 2000 | DMC GLOBAL INC. | 0.01% | | | | × | | | | | × | | | | |
| Russell 2000 | Dorian LPG Ltd. | 0.02% | | | | × | | | | | | × | | | |
| Russell 2000 | DRIL-QUIP INC. | 0.04% | | | | × | | | | | × | | | | |
| Russell 2000 | EARTHSTONE ENERGY INC. | 0.03% | × | | | | × | × | | | | | | | |
| Russell 2000 | Equitrans Midstream Corporation | 0.11% | | | | × | | | | | | × | | | |
| Russell 2000 | EXPRO GROUP HOLDINGS N.V. | 0.04% | | | | × | | | | | × | | | | |
| Russell 2000 | FLEX LNG LTD. | 0.03% | | | | × | | | | | | × | | | |
| Russell 2000 | FRONTLINE LTD. | 0.05% | | | | × | | | | | | × | | | |
| Russell 2000 | GEVO INC. | 0.02% | | | | | × | | | | | | | | |
| Russell 2000 | GREEN PLAINS INC. | 0.04% | | | | | × | | | | | | | | |
| Russell 2000 | GULFPORT ENERGY CORPORATION | 0.04% | × | | | | × | × | | | | | | | |
| Russell 2000 | HELIX ENERGY SOLUTIONS GROUP INC. | 0.02% | | | | × | | | | | × | | | | |
| Russell 2000 | HELMERICH & PAYNE INC. | 0.19% | | | | × | | × | | | | | | | |
| Russell 2000 | INTERNATIONAL SEAWAYS INC. | 0.05% | | | | × | | | | | | × | | | |
| Russell 2000 | KINETIK HOLDINGS INC. | 0.02% | | | | × | | | | | | × | | | |
| Russell 2000 | KOSMOS ENERGY LTD. | 0.12% | × | | | | × | × | | | | | | | |
| Russell 2000 | LAREDO PETROLEUM INC | 0.05% | × | | | | × | × | | | | | | | |
| Russell 2000 | LIBERTY ENERGY INC. | 0.08% | | | | × | | | | | × | | | | |
| Russell 2000 | MAGNOLIA OIL & GAS CORPORATION | 0.15% | × | | | | × | × | | | | | | | |
| Russell 2000 | MATADOR RESOURCES COMPANY | 0.23% | × | | | | × | × | | | | | | | |
| Russell 2000 | MGE ENERGY INC. | 0.12% | | | × | | | | | | | | | | |
| Russell 2000 | Montauk Renewables Inc | 0.03% | | | | | | | | × | | | | | |
| Russell 2000 | MURPHY OIL CORPORATION | 0.20% | × | | | | × | × | | | | | | | |
| Russell 2000 | MURPHY USA INC. | 0.23% | | | | | | | | × | | | | | |
| Russell 2000 | NABORS INDUSTRIES LTD. | 0.05% | | | | × | | × | | | | | | | |
| Russell 2000 | NEW JERSEY RESOURCES CORPORATION | 0.19% | | | | | | | | × | | | | | |
| Russell 2000 | NextDecade Corp | 0.01% | | | | × | | | | | | × | | | |
| Russell 2000 | NEXTIER OILFIELD SOLUTIONS INC. | 0.07% | | | | × | | | | | × | | | | |
| Russell 2000 | NOBLE CORPORATION | 0.04% | | | | × | | × | | | | | | | |
| Russell 2000 | NORTHERN OIL AND GAS INC. | 0.07% | × | | | | × | | | | | | | | |
| Russell 2000 | NORTHWEST NATURAL HOLDING COMPANY | 0.08% | | | | | | | | × | | | | | |
| Russell 2000 | NORTHWESTERN CORPORATION | 0.14% | × | | × | | | | | | | | | | |
| Russell 2000 | NOW INC. | 0.05% | | | | | | | | | × | | | | |
| Russell 2000 | OCEANEERING INTERNATIONAL INC. | 0.05% | | | | × | | | | | × | | | | |
| Russell 2000 | ONE GAS INC. | 0.19% | | | | | | | | × | | | | | |
| Russell 2000 | Otter Tail Corporation | 0.12% | | | × | | | | | | | | | | |
| Russell 2000 | PAR PACIFIC HOLDINGS INC. | 0.03% | × | | | | × | | × | | | | | | |
| Russell 2000 | PATTERSON-UTI ENERGY INC. | 0.15% | | | | × | | × | | | | | | | |
| Russell 2000 | PBF ENERGY INC. | 0.12% | | | | | × | | × | | | | | | |
| Russell 2000 | PEABODY ENERGY CORPORATION | 0.11% | | × | | | | | | | | | | × | |
| Russell 2000 | PNM RESOURCES INC. | 0.18% | | | × | | | | | | | | | | |
| Russell 2000 | PORTLAND GENERAL ELECTRIC COMPANY | 0.19% | | | × | | | | | | | | | | |
| Russell 2000 | PROPETRO HOLDING CORP. | 0.04% | | | | × | | | | | × | | | | |
| Russell 2000 | RAMACO RESOURCES INC. | 0.01% | | | | | | | | | | | | × | |
| Russell 2000 | Ranger Oil Corporation | 0.03% | × | | | | × | × | | | | | | | |
| Russell 2000 | REX AMERICAN RESOURCES CORPORATION | 0.02% | | | | | × | | | | | | | | |
| Russell 2000 | RPC INC. | 0.02% | | | | × | | | | | × | | | | |
| Russell 2000 | SANDRIDGE ENERGY INC. | 0.01% | × | | | | × | × | | | | | | | |
| Russell 2000 | SELECT ENERGY SERVICES INC. | 0.02% | | | | × | | | | | × | | | | |
| Russell 2000 | SILVERBOW RESOURCES INC. | 0.01% | × | | | | × | × | | | | | | | |
| Russell 2000 | SM ENERGY COMPANY | 0.18% | × | | | | × | × | | | | | | | |
| Russell 2000 | SOUTH JERSEY INDUSTRIES INC. | 0.18% | | | | | | | | × | | | | | |
| Russell 2000 | Spire Inc. | 0.17% | | | | | | | | × | | | | | |
| Russell 2000 | TALOS ENERGY INC. | 0.05% | × | | | | × | × | | | | | | | |
| Russell 2000 | TEEKAY CORPORATION | 0.01% | | | | × | | | | | | × | | | |
| Russell 2000 | TELLURIAN INC. | 0.07% | × | | | | × | × | | | | | | | |
| Russell 2000 | THE GEO GROUP INC. | 0.03% | | | | | | | | | | | | | × |
| Russell 2000 | TIDEWATER INC. | 0.04% | | | | × | | | | | × | | | | |
| Russell 2000 | TRAVELCENTERS OF AMERICA INC. | 0.02% | | | | | | | | × | | | | | |
| Russell 2000 | U.S. SILICA HOLDINGS INC. | 0.04% | | | | × | | | | | × | | | | |
| Russell 2000 | UNITED STATES LIME & MINERALS INC. | 0.01% | × | | | | | | | | | | | | |
| Russell 2000 | Valaris Limited | 0.11% | | | | × | | × | | | | | | | |
| Russell 2000 | W&T OFFSHORE INC. | 0.02% | × | | | | × | × | | | | | | | |
| Russell 2000 | WARRIOR MET COAL INC. | 0.07% | | × | | | | | | | | | | | |
| Russell 2000 | WEATHERFORD INTERNATIONAL PUBLIC LIMITED COMPANY | 0.06% | | | | × | | | | | × | | | | |
| Russell 2000 | WHITING PETROLEUM CORPORATION | 0.12% | × | | | | × | × | | | | | | | |
| Russell 2000 | WORLD FUEL SERVICES CORPORATION | 0.06% | | | | | × | | | × | | | | | |

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE - ACWI EX-US

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACWI ex US | ABOITIZ EQUITY VENTURES INC. | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | ABU DHABI NATIONAL OIL COMPANY FOR DISTRIBUTION PJ | 0.02% | | | | | | | | x | | | | | |
| ACWI ex US | AC Energy Corporation | 0.01% | | | | | | | | | | | x | | |
| ACWI ex US | ACWA POWER Company | 0.01% | | | x | | | | | | | | x | | |
| ACWI ex US | ADANI ENTERPRISES LIMITED | 0.04% | | | | | | | | | | | | x | |
| ACWI ex US | ADANI POWER LIMITED | 0.01% | | | | | | | | | | | x | | |
| ACWI ex US | ADANI TOTAL GAS LIMITED | 0.04% | | | | | | | | x | | | | | |
| ACWI ex US | ADANI TRANSMISSION LIMITED | 0.04% | | | x | | | | | | | | | | |
| ACWI ex US | AFRICAN RAINBOW MINERALS LIMITED | 0.01% | | x | | | | | | | | | | x | |
| ACWI ex US | AK ALROSA PAO | 0.00% | x | | | | | | | | | | | | |
| ACWI ex US | AKER BP ASA | 0.04% | x | | | | x | x | | | | | | | |
| ACWI ex US | ALFA S.A.B. de C.V. | 0.01% | x | | | | | | | | | | | | |
| ACWI ex US | ALIMENTATION COUCHE-TARD INC. | 0.15% | | | | | | | | x | | | | | |
| ACWI ex US | AltaGas Ltd. | 0.03% | | | | | | x | | | | | | | |
| ACWI ex US | Aluminum Corporation of China Limited | 0.01% | | | | | | | | | | | | x | |
| ACWI ex US | Aluminum Corporation of China Limited | 0.00% | | | | | | | | | | | | x | |
| ACWI ex US | AMPOL LIMITED | 0.03% | | | | | x | | x | | | | | | |
| ACWI ex US | APA Group | 0.04% | | | | | | | | | | x | | | |
| ACWI ex US | ARC RESOURCES LTD. | 0.04% | x | | | | x | x | | | | | | | |
| ACWI ex US | AYALA CORPORATION | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | B.Grimm Power Public Company Limited | 0.00% | | | | | | | | | | | x | | |
| ACWI ex US | BASF SE | 0.17% | x | | | | | | | | | | | | |
| ACWI ex US | BEIJING ENTERPRISES HOLDINGS LIMITED | 0.01% | | | | | | | | | | x | | | |
| ACWI ex US | BHARAT PETROLEUM CORPORATION LIMITED | 0.02% | | | | | x | | x | | | | | | |
| ACWI ex US | BHP GROUP LIMITED | 0.65% | x | x | | | | | | | | | | x | |
| ACWI ex US | BP P.L.C. | 0.42% | x | | | | x | | x | | | | | | |
| ACWI ex US | CANADIAN NATURAL RESOURCES LIMITED | 0.29% | x | | | | x | x | | | | | | | |
| ACWI ex US | Cenovus Energy Inc. | 0.12% | x | | | | x | | | | | | | | |
| ACWI ex US | Centrais Eletricas Brasileiras S.A. | 0.04% | | | x | | | | | | | | | | |
| ACWI ex US | Centrais Eletricas Brasileiras S.A. | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | CEZ a.s. | 0.04% | | x | x | | | | | | | | | x | |
| ACWI ex US | China Coal Energy Company Limited | 0.01% | | x | x | | | | | | | | | x | |
| ACWI ex US | CHINA GAS HOLDINGS LIMITED | 0.02% | | | | | | | | | | x | | | |
| ACWI ex US | CHINA LONGYUAN POWER GROUP CORPORATION LIMITED | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | China Oilfield Services Limited | 0.01% | | | | x | | | | | x | | | | |
| ACWI ex US | China Petroleum & Chemical Corporation | 0.05% | x | | | | x | | | | | | | | |
| ACWI ex US | China Petroleum & Chemical Corporation | 0.01% | x | | | | x | | | | | | | | |
| ACWI ex US | China Power International Development Limited | 0.02% | | | x | | | | | | | | x | | |
| ACWI ex US | CHINA RESOURCES GAS GROUP LIMITED | 0.02% | | | | | | | | x | | | | | |
| ACWI ex US | China Resources Power Holdings Company Limited | 0.02% | | | x | | | | | | | | x | | |
| ACWI ex US | China Shenhua Energy Company Limited | 0.04% | | x | x | | | | | | | | | x | |
| ACWI ex US | China Shenhua Energy Company Limited | 0.01% | | x | x | | | | | | | | | x | |
| ACWI ex US | China Suntien Green Energy Corporation Limited | 0.00% | | | | x | | | | | | x | | | |
| ACWI ex US | Chubu Electric Power Company Incorporated | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | CITIC Limited | 0.03% | x | | x | | | | | | | | | x | |
| ACWI ex US | CK HUTCHISON HOLDINGS LIMITED | 0.08% | x | | | | | | | | | | | | |
| ACWI ex US | CK INFRASTRUCTURE HOLDINGS LIMITED | 0.02% | | | x | | | | | | | | | | |
| ACWI ex US | CLP HOLDINGS LIMITED | 0.06% | | | x | | | | | | | | | | |
| ACWI ex US | COAL INDIA LTD | 0.02% | | x | | | | | | | | | | x | |
| ACWI ex US | COMPAGNIE PETROLIERE IMPERIALE LTEE | 0.05% | x | | | | x | | x | | | | | | |
| ACWI ex US | COSAN S.A. | 0.02% | | | | | x | | | x | | | | | |
| ACWI ex US | COSCO Shipping Energy Transportation Co. Ltd. | 0.00% | | | | x | | | | | | x | | | |
| ACWI ex US | DCC PUBLIC LIMITED COMPANY | 0.03% | | | | | | | | x | | | | | |
| ACWI ex US | DIALOG GROUP BERHAD | 0.01% | | | | x | | | | | x | | | | |
| ACWI ex US | E.ON SE | 0.08% | | | x | | | | | | | | | | |
| ACWI ex US | ECOPETROL S.A. | 0.02% | x | | | | x | | x | | | | | | |
| ACWI ex US | EDP - Energias de Portugal S.A. | 0.06% | | | x | | | | | | | | | | |
| ACWI ex US | ELECTRICITE DE FRANCE SA | 0.02% | | | x | | | | | | | | | | |
| ACWI ex US | ELECTRICITY GENERATING PUBLIC COMPANY LIMITED | 0.01% | | x | x | | | | | | | | x | x | |
| ACWI ex US | EMERA INCORPORATED | 0.06% | | | x | | | | | | | | x | | |
| ACWI ex US | Empresas Copec S.A. | 0.01% | | | | | x | | | x | | | | | |
| ACWI ex US | Enagas S.A. | 0.02% | | | | | | | | | | x | | | |
| ACWI ex US | Enbridge Inc. | 0.39% | | | | x | | | | | | x | | | |
| ACWI ex US | Endesa Sociedad Anonima | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | ENEL - SPA | 0.20% | | | x | | | | | | | | | | |
| ACWI ex US | Enel Americas S.A. | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | Enel Chile S.A. | 0.00% | | | x | | | | | | | | | | |
| ACWI ex US | ENEOS Holdings Inc. | 0.05% | x | | | | x | | x | | | | | x | |
| ACWI ex US | ENGIE BRASIL ENERGIA S.A. | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | ENGIE SA | 0.09% | x | | x | | | | | | | x | | | |
| ACWI ex US | ENI S.P.A. | 0.14% | x | | | | x | | | | | | | | |
| ACWI ex US | ENN ENERGY HOLDINGS LIMITED | 0.06% | | | | | | | | x | | | | | |
| ACWI ex US | ENN Natural Gas Co. Ltd. | 0.00% | | | | | | | | x | | | | | |
| ACWI ex US | EQUINOR ASA | 0.15% | x | | | | x | | x | | | | | | |
| ACWI ex US | EXXARO RESOURCES LIMITED | 0.01% | | x | | | | | | | | | | x | |
| ACWI ex US | FORMOSA PETROCHEMICAL CORPORATION | 0.02% | | | | | x | | x | | | | | | |
| ACWI ex US | Fortis Inc. | 0.10% | | | x | | | | | | | | | | |
| ACWI ex US | Fortum Oyj | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | FOSUN INTERNATIONAL LIMITED | 0.01% | x | | | | | | | | | | | | |
| ACWI ex US | Franco-Nevada Corporation | 0.11% | x | | | | | | | | | | | | |
| ACWI ex US | GAIL (INDIA) LIMITED | 0.01% | x | | | | | | | x | | | | | |
| ACWI ex US | Galp Energia SGPS S.A. | 0.03% | x | | | | x | | | | | | | | |
| ACWI ex US | GAZPROM PAO | 0.00% | x | | | | x | | | | | | | | |
| ACWI ex US | GD POWER DEVELOPMENT CO. LTD. | 0.00% | | | x | | | | | | | | x | | |
| ACWI ex US | GLENCORE PLC | 0.24% | x | x | | | | | | | | | | x | |
| ACWI ex US | Global Power Synergy Public Company Limited | 0.01% | | | x | | | | | | | | x | | |

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE - ACWI EX-US

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACWI ex US | GMK NORIL'SKIY NIKEL' PAO | 0.00% | x | | | | | | | | | | | | |
| ACWI ex US | GUANGDONG INVESTMENT LIMITED | 0.02% | | | x | | | | | | | | | | |
| ACWI ex US | Guanghui Energy Co. Ltd. | 0.00% | x | x | | | x | x | | | | | | x | |
| ACWI ex US | Gulf Energy Development Public Company Limited | 0.02% | | | | | | | | | | | x | | |
| ACWI ex US | HD HYUNDAI CO. LTD. | 0.01% | | | | | x | | x | | | | | | |
| ACWI ex US | HENAN SHENHUO COAL & POWER CO. LTD | 0.00% | | x | x | | | | | | | | | | |
| ACWI ex US | HINDUSTAN PETROLEUM CORPORATION LIMITED | 0.01% | x | | | | x | | x | | | | | | |
| ACWI ex US | HK ELECTRIC INVESTMENTS LIMITED | 0.01% | | | x | | | | | | | | x | | |
| ACWI ex US | Huadian Power International Corporation Limited | 0.00% | | x | x | | | | | | | | x | x | |
| ACWI ex US | Huaibei Mining Holdings Co. Ltd. | 0.00% | | | | | | | | | | | | x | |
| ACWI ex US | HUANENG POWER INTERNATIONAL INC. | 0.01% | | | x | | | | | | | | x | | |
| ACWI ex US | HUANENG POWER INTERNATIONAL INC. | 0.00% | | | x | | | | | | | | x | | |
| ACWI ex US | HYUNDAI GLOVIS Co. LTD. | 0.01% | | | | | | | | | | | | x | |
| ACWI ex US | Iberdrola S.A. | 0.27% | | | x | | | | | | | | | | |
| ACWI ex US | Idemitsu Kosan Co. Ltd. | 0.02% | x | | | | x | | x | | | | | x | |
| ACWI ex US | INDIAN OIL CORPORATION LIMITED | 0.01% | x | | | | x | | x | | | | | | |
| ACWI ex US | Indraprastha Gas Ltd | 0.01% | | | | | | | | x | | | | | |
| ACWI ex US | INNER MONGOLIA DIAN TOU ENERGY CORPORATION LIMITEI | 0.00% | | | | | | | | | | | | x | |
| ACWI ex US | Inner Mongolia ERDOS Resources Co. Ltd. | 0.00% | | x | | | | | | | | | | x | |
| ACWI ex US | INNER MONGOLIA YITAI COAL CO. LTD | 0.01% | | x | | | | | | | | | | x | |
| ACWI ex US | INPEX CORPORATION | 0.05% | x | | | | x | x | | | | | | | |
| ACWI ex US | INTER RAO YEES PAO | 0.00% | | | x | | | | | | | | | | |
| ACWI ex US | ITOCHU Corporation | 0.14% | | x | | | | | | | | | | x | |
| ACWI ex US | JARDINE MATHESON HOLDINGS LIMITED | 0.05% | | | | | | | | | | | | x | |
| ACWI ex US | JINDAL STEEL AND POWER LIMITED | 0.01% | | x | x | | | | | | | | | | |
| ACWI ex US | Jizhong Energy Resources Co. Ltd. | 0.00% | | x | | | | | | | | | | x | |
| ACWI ex US | JSW STEEL LIMITED | 0.02% | | | x | | | | | | | | | | |
| ACWI ex US | KEPPEL CORPORATION LIMITED | 0.03% | x | | | | | | | | | | | | |
| ACWI ex US | KEYERA CORP. | 0.02% | | | | x | | | | x | | | | | |
| ACWI ex US | KOC HOLDING ANONIM SIRKETI | 0.01% | | | | | | | | | | | | x | |
| ACWI ex US | KOREA ELECTRIC POWER CORPORATION | 0.02% | | | x | | | | | | | | | | |
| ACWI ex US | KUNLUN ENERGY COMPANY LIMITED | 0.01% | x | | | | | | | x | | | | | |
| ACWI ex US | MISC BERHAD | 0.01% | | | | | | | | | | x | | | |
| ACWI ex US | Mitsubishi Corporation | 0.17% | x | x | | | | | | | | | | x | |
| ACWI ex US | MITSUI & CO. LTD. | 0.14% | x | x | | | | | | | | | | x | |
| ACWI ex US | MOL Magyar Olaj- es Gazipari Nyilvanosan Mukodo Reszvenyt | 0.02% | x | | | | x | | x | | | | | | |
| ACWI ex US | Naturgy Energy Group S.A. | 0.02% | | | x | | | | | x | | | | | |
| ACWI ex US | Neste Oyj | 0.08% | | | | | x | | | | | | | | |
| ACWI ex US | NK LUKOIL PAO | 0.00% | x | | | | x | | x | | | | | | |
| ACWI ex US | NK ROSNEFT' PAO | 0.00% | x | | | | x | | x | | | | | | |
| ACWI ex US | NOVATEK PAO | 0.00% | x | | | | x | x | | | | | | | |
| ACWI ex US | NTPC LIMITED | 0.03% | | x | x | | | | | | | | x | | |
| ACWI ex US | OFFSHORE OIL ENGINEERING CO. LTD. | 0.00% | | | | x | | | | | x | | | | |
| ACWI ex US | OIL AND NATURAL GAS CORPORATION LIMITED | 0.02% | x | | | | x | | x | | | | | | |
| ACWI ex US | OK RUSAL MKPAO | 0.00% | | x | | | | | | | | | | | |
| ACWI ex US | OMV Aktiengesellschaft | 0.03% | x | | | | x | | x | | | | | | |
| ACWI ex US | ORIGIN ENERGY LIMITED | 0.03% | x | | x | | | | | | | | | | |
| ACWI ex US | Orsted A/S | 0.09% | | | x | | | | | | | | | | |
| ACWI ex US | OSAKA GAS CO. LTD. | 0.03% | | | | | | | | | | x | | | |
| ACWI ex US | PARKLAND CORPORATION | 0.02% | | | | | x | | | x | | | | | |
| ACWI ex US | PEMBINA PIPELINE CORPORATION | 0.09% | | | | x | | | | | | x | | | |
| ACWI ex US | PETRO RIO S.A. | 0.01% | x | | | | x | x | | | | | | | |
| ACWI ex US | PetroChina Company Limited | 0.04% | x | | | | x | | | | | | | | |
| ACWI ex US | PetroChina Company Limited | 0.00% | x | | | | x | | | | | | | | |
| ACWI ex US | Petroleo Brasileiro S.A. (Petrobras) | 0.11% | x | | | | x | | x | | | | | | |
| ACWI ex US | Petroleo Brasileiro S.A. (Petrobras) | 0.10% | x | | | | x | | x | | | | | | |
| ACWI ex US | PETRONAS DAGANGAN BERHAD | 0.01% | | | | | x | | | x | | | | | |
| ACWI ex US | PETRONET LNG LIMITED | 0.01% | | | | x | | | | x | | | | | |
| ACWI ex US | PGE POLSKA GRUPA ENERGETYCZNA SPOLKA AKCYJNA | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | PINGDINGSHAN TIANAN COAL. MINING CO. LTD. | 0.00% | | | | | | | | | | | | x | |
| ACWI ex US | POLSKI KONCERN NAFTOWY ORLEN SPOLKA AKCYJNA | 0.02% | x | | x | | x | | | | | | | | |
| ACWI ex US | POLSKIE GORNICTWO NAFTOWE I GAZOWNICTWO SPOLKA A | 0.01% | x | | x | | x | | | | | x | | | |
| ACWI ex US | POSCO Holdings Inc. | 0.06% | | | x | | | | | | | | | | |
| ACWI ex US | Power Assets Holdings Limited | 0.04% | | | x | | | | | | | | | | |
| ACWI ex US | PT Adaro Energy Indonesia Tbk | 0.01% | | x | | | | | | | | | | x | |
| ACWI ex US | PT Aneka Tambang Tbk | 0.00% | | x | | | | | | | | | | x | |
| ACWI ex US | PT Astra International Tbk | 0.04% | | x | | | | | | | | | | x | |
| ACWI ex US | PT United Tractors Tbk | 0.01% | | x | | | | | | | | | | x | |
| ACWI ex US | PTT EXPLORATION AND PRODUCTION PUBLIC COMPANY LIM | 0.03% | x | | | | x | x | | | | | | | |
| ACWI ex US | PTT Oil and Retail Business PCL | 0.01% | | | | | | | | x | | | | | |
| ACWI ex US | PTT Public Company Limited | 0.04% | x | x | x | | x | | | | | | | x | |
| ACWI ex US | PUBLIC POWER CORPORATION S.A. | 0.00% | | | x | | | | | | | | | | |
| ACWI ex US | Qatar Fuel Company QPSC | 0.01% | | | | | x | | | x | | | | | |
| ACWI ex US | Qatar Gas Transport Company Limited (Nakilat)QPSC | 0.01% | | | | x | | | | | | x | | | |
| ACWI ex US | Rabigh Refining and Petrochemical Company SJSC | 0.01% | | | | | x | | x | | | | | | |
| ACWI ex US | RATCH GROUP PUBLIC COMPANY LIMITED | 0.01% | | | x | | | | | | | | x | | |
| ACWI ex US | RELIANCE INDUSTRIES LIMITED | 0.47% | x | | | | x | | | | | | | | |
| ACWI ex US | Repsol S.A. | 0.10% | x | | | | x | | | | | | | | |
| ACWI ex US | Ressources Teck Limitee | 0.07% | x | | | | | | | | | | | | |
| ACWI ex US | RWE Aktiengesellschaft | 0.10% | | | x | | | | | | | | | | |
| ACWI ex US | Samsung Engineering Co. Ltd. | 0.01% | | | | | | | | | x | | | | |
| ACWI ex US | SANTOS LIMITED | 0.07% | x | | | | x | x | | | | | | | |
| ACWI ex US | SASOL LIMITED | 0.06% | x | x | | | | | | | | | | x | |
| ACWI ex US | Saudi Arabian Oil Company | 0.11% | x | | | | x | x | | | | | | | |

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE - ACWI EX-US

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ACWI ex US | Saudi Electricity Company SJSC | 0.02% | | | | | | | | | | | x | | |
| ACWI ex US | SDIC Power Holdings Co. Ltd. | 0.00% | | | x | | | | | | | | | | |
| ACWI ex US | SEVERSTAL' PAO | 0.00% | | | | | | | | | | | | x | |
| ACWI ex US | Shaanxi Coal Industry Company Limited | 0.01% | | x | | | | | | | | | | x | |
| ACWI ex US | SHAN XI HUA YANG GROUP NEW ENERGY CO. LTD. | 0.00% | | x | x | | | | | | | | | x | |
| ACWI ex US | Shanxi Coking Coal Energy Group Co. Ltd. | 0.00% | | | x | | | | | | | | | x | |
| ACWI ex US | Shanxi Lu'an Environmental Energy Dev. Co. Ltd | 0.00% | | x | | | | | | | | | | x | |
| ACWI ex US | SHELL PLC | 0.89% | x | | | | x | | x | | | | | | |
| ACWI ex US | Shenzhen Energy Group Co. Ltd. | 0.00% | | | x | | | | | | | | x | | |
| ACWI ex US | SICHUAN CHUANTOU ENERGY CO. LTD. | 0.00% | | | x | | | | | | | | | | |
| ACWI ex US | Sinopec Shanghai Petrochemical Company Limited | 0.00% | | | | | | | x | | | | | | |
| ACWI ex US | SK Inc. | 0.03% | | | | | | | | | | | | x | |
| ACWI ex US | SK Innovation Co. Ltd. | 0.04% | | | | | x | | x | | | | | | |
| ACWI ex US | SNAM S.P.A. | 0.05% | | | | | | | | | | x | | | |
| ACWI ex US | S-Oil Corporation | 0.02% | | | | | x | | x | | | | | | |
| ACWI ex US | SOUTH32 LIMITED | 0.06% | | x | | | | | | | | | | x | |
| ACWI ex US | SSE PLC | 0.09% | x | | | | | | | | | | | | |
| ACWI ex US | SUMITOMO CORPORATION | 0.07% | | | | | | | | | | | | x | |
| ACWI ex US | Suncor Energy Inc. | 0.23% | x | | | | x | | x | | | | | | |
| ACWI ex US | SURGUTNEFTEGAZ PAO | 0.00% | x | | | | x | x | | | | | | | |
| ACWI ex US | SURGUTNEFTEGAZ PAO | 0.00% | x | | | | x | x | | | | | | | |
| ACWI ex US | TATNEFT' PAO | 0.00% | x | | | | x | | | | | | | | |
| ACWI ex US | TBEA CO. LTD. | 0.00% | | | | | | | | | | | | x | |
| ACWI ex US | TC Energy Corporation | 0.23% | | | | x | | | | | | x | | | |
| ACWI ex US | TENAGA NASIONAL BERHAD | 0.02% | | | | | | | | | | | x | | |
| ACWI ex US | TENARIS S.A. | 0.03% | | | | x | | | | | x | | | | |
| ACWI ex US | Thai Oil Public Company Limited | 0.01% | | | | | x | | x | | | | | | |
| ACWI ex US | THE HONG KONG AND CHINA GAS COMPANY LIMITED | 0.05% | x | | | | | | | x | | | | x | |
| ACWI ex US | The Kansai Electric Power Company Incorporated | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | THE TATA POWER COMPANY LIMITED | 0.02% | | x | x | | | | | | | | x | x | |
| ACWI ex US | Tokyo Electric Power Company Holdings Incorporated | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | TOKYO GAS CO. LTD. | 0.04% | | | | | | | | x | | | | | |
| ACWI ex US | TotalEnergies SE | 0.59% | x | | | | x | | | | | | | | |
| ACWI ex US | TOURMALINE OIL CORP. | 0.07% | x | | | | x | x | | | | | | | |
| ACWI ex US | TURKIYE PETROL RAFINERILERI ANONIM SIRKETI | 0.01% | | | | | x | | x | | | | | | |
| ACWI ex US | ULTRAPAR PARTICIPACOES S.A. | 0.01% | | | | x | | | | x | | | | | |
| ACWI ex US | Uniper SE | 0.01% | | | x | | | | | | | | | | |
| ACWI ex US | VALE S.A. | 0.26% | | x | | | | | | | | | | x | |
| ACWI ex US | VEDANTA LIMITED | 0.01% | x | x | x | | | | | | | | | | |
| ACWI ex US | VEOLIA ENVIRONNEMENT SA | 0.07% | | | x | | | | | | | | | | |
| ACWI ex US | VERBUND AG | 0.03% | | | x | | | | | | | | | | |
| ACWI ex US | VIBRA ENERGIA S/A | 0.02% | | | | | | | | x | | | | | |
| ACWI ex US | WASHINGTON H. SOUL PATTINSON AND COMPANY LIMITED | 0.02% | x | x | | | | | | | | | | x | |
| ACWI ex US | WOODSIDE ENERGY GROUP LTD | 0.19% | x | | | | x | x | | | | | | | |
| ACWI ex US | Yankuang Energy Group Company Limited | 0.02% | | x | x | | | | | | | | | x | |
| ACWI ex US | Yankuang Energy Group Company Limited | 0.00% | | x | x | | | | | | | | | x | |
| ACWI ex US | Yantai Jereh Oilfield Services Group Co. Ltd. | 0.00% | | | | x | | | | | x | | | | |
| ACWI ex US | Zijin Mining Group Company Limited | 0.01% | | x | | | | | | | | | | | |

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE – TRADITIONAL CREDIT

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maine Agg | Alabama Power Company | 0.04% | | | x | | | | | | | | x | | |
| Maine Agg | AMEREN CORPORATION | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | AMERICAN ELECTRIC POWER COMPANY INC. | 0.02% | | | x | | | | | | | | | x | |
| Maine Agg | APACHE CORPORATION | 0.00% | x | | | | | x | | | | | | | |
| Maine Agg | Appalachian Power Company | 0.02% | | | x | | | | | | | | x | | |
| Maine Agg | ARIZONA PUBLIC SERVICE COMPANY | 0.03% | | | x | | | | | | | | x | | |
| Maine Agg | ATMOS ENERGY CORPORATION | 0.03% | | | | | | | | x | | | | | |
| Maine Agg | AVISTA CORPORATION | 0.00% | | | x | | | | | | | | | | |
| Maine Agg | BERKSHIRE HATHAWAY ENERGY COMPANY | 0.09% | | x | x | | | | | | | | | | |
| Maine Agg | BERKSHIRE HATHAWAY INC. | 0.02% | | x | x | | | | | | | | | | |
| Maine Agg | BLACK HILLS CORPORATION | 0.02% | | x | x | | | | | | | x | | x | |
| Maine Agg | CANADIAN NATURAL RESOURCES LIMITED | 0.05% | x | | | | x | x | | | | | | | |
| Maine Agg | Cenovus Energy Inc. | 0.05% | x | | | | x | | | | | | | | |
| Maine Agg | CENTERPOINT ENERGY INC. | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | CHEVRON CORPORATION | 0.07% | x | | | | x | x | | | | | | | |
| Maine Agg | CMS ENERGY CORPORATION | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | CONOCOPHILLIPS | 0.02% | x | | | | x | x | | | | | | | |
| Maine Agg | CONTINENTAL RESOURCES INC. | 0.01% | x | | | | x | x | | | | | | | |
| Maine Agg | Coterra Energy Inc. | 0.02% | x | | | | x | x | | | | | | | |
| Maine Agg | DEVON ENERGY CORPORATION | 0.04% | x | | | | x | x | | | | | | | |
| Maine Agg | DIAMONDBACK ENERGY INC. | 0.03% | x | | | | x | x | | | | | | | |
| Maine Agg | DOMINION ENERGY SOUTH CAROLINA INC. | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | Dominion Energy Inc. | 0.06% | | | x | | | | | | | | | | |
| Maine Agg | DTE ELECTRIC COMPANY | 0.04% | | | x | | | | | | | | | | |
| Maine Agg | DTE ENERGY COMPANY | 0.02% | | | x | | | | | | | | | | |
| Maine Agg | Duke Energy Carolinas LLC | 0.08% | | | x | | | | | | | | | | |
| Maine Agg | DUKE ENERGY CORPORATION | 0.07% | | | x | | | | | | | | | | |
| Maine Agg | DUKE ENERGY FLORIDA LLC | 0.04% | | | x | | | | | | | | x | | |
| Maine Agg | DUKE ENERGY INDIANA LLC | 0.02% | | | x | | | | | | | | x | | |
| Maine Agg | Duke Energy Progress LLC | 0.05% | | | x | | | | | | | | | | |
| Maine Agg | ENABLE MIDSTREAM PARTNERS LP | 0.02% | | | | | | | | | | x | | | |
| Maine Agg | ENBRIDGE ENERGY PARTNERS L.P. | 0.02% | | | | | | | | | | x | | | |
| Maine Agg | Enbridge Inc. | 0.06% | | | | x | | | | | | x | | | |
| Maine Agg | Enel Americas S.A. | 0.00% | | | x | | | | | | | | | | |
| Maine Agg | Enel Chile S.A. | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | Enel Generacion Chile S.A. | 0.00% | | | x | | | | | | | | | | |
| Maine Agg | ENERGY TRANSFER LP | 0.20% | | x | | x | | | | | | x | | | |
| Maine Agg | ENTERGY ARKANSAS LLC | 0.02% | | | x | | | | | | | | | | |
| Maine Agg | ENTERGY CORPORATION | 0.02% | | | x | | | | | | | | | | |
| Maine Agg | ENTERGY LOUISIANA LLC | 0.05% | | | x | | | | | | | | x | | |
| Maine Agg | ENTERGY MISSISSIPPI LLC | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | ENTERGY TEXAS INC. | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | ENTERPRISE PRODUCTS OPERATING LLC | 0.17% | | | | x | | | | | | x | | | |
| Maine Agg | EOG RESOURCES INC. | 0.02% | x | | | | x | x | | | | | | | |
| Maine Agg | EQT CORPORATION | 0.02% | x | | | | x | x | | | | | | | |
| Maine Agg | EQUINOR ASA | 0.09% | x | | | | x | | x | | | | | | |
| Maine Agg | EVERGY KANSAS CENTRAL INC. | 0.01% | | | | | | | | | | | x | | |
| Maine Agg | Evergy Metro Inc. | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | Evergy Inc. | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | EXXON MOBIL CORPORATION | 0.19% | x | | | | x | | x | | | | | | |
| Maine Agg | FLORIDA POWER & LIGHT COMPANY | 0.09% | | | x | | | | | | | | x | | |
| Maine Agg | Fortis Inc. | 0.01% | | | x | | | | | | | | | | |

# APPENDIX: FOSSIL FUEL/PRIVATE PRISON EXPOSURE – TRADITIONAL CREDIT

| Strategy | Issuer Name | Portfolio Weight | O&G Reserves | Coal Reserves | Coal Generate Output | Energy Supplier | Energy Producer | O&G Extraction Producer | O&G Refining | O&G Distribution | O&G Equip Services | O&G Storage Transport | Max Rev Fossil Fuels | Max Rev Coal | Private Prisons |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Maine Agg | FREEPORT-MCMORAN INC. | 0.04% | x | | | | | | | | | | | | |
| Maine Agg | GEORGIA POWER COMPANY | 0.04% | | | x | | | | | | | | | | |
| Maine Agg | GULF POWER COMPANY | 0.00% | | | x | | | | | | | | x | | |
| Maine Agg | HALLIBURTON COMPANY | 0.06% | | | | x | | | | | x | | | | |
| Maine Agg | HELMERICH & PAYNE INC. | 0.01% | | | | x | | x | | | | | | | |
| Maine Agg | HESS CORPORATION | 0.04% | x | | | | x | x | | | | | | | |
| Maine Agg | HF SINCLAIR CORPORATION | 0.01% | | | | | x | | x | | | | | | |
| Maine Agg | INDIANA MICHIGAN POWER COMPANY | 0.02% | | | x | | | | | | | | | | |
| Maine Agg | IPALCO ENTERPRISES INC | 0.01% | | | | | | | | | | | x | | |
| Maine Agg | KENTUCKY UTILITIES COMPANY | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | KINDER MORGAN INC. | 0.08% | | | | x | | | | | | x | | | |
| Maine Agg | LOUISVILLE GAS AND ELECTRIC COMPANY | 0.00% | | | x | | | | | | | | x | | |
| Maine Agg | MAGELLAN MIDSTREAM PARTNERS L.P. | 0.03% | | | | x | | | | | | x | | | |
| Maine Agg | MARATHON OIL CORPORATION | 0.02% | x | | | | x | x | | | | | | | |
| Maine Agg | MARATHON PETROLEUM CORPORATION | 0.05% | | | | | x | | x | | | | | | |
| Maine Agg | MIDAMERICAN ENERGY COMPANY | 0.04% | | | x | | | | | | | | | | |
| Maine Agg | MPLX LP | 0.12% | | | | x | | | | | | x | | | |
| Maine Agg | NATIONAL FUEL GAS COMPANY | 0.01% | x | | | | | | | | | | | | |
| Maine Agg | NEVADA POWER COMPANY | 0.01% | | | | | | | | | | | x | | |
| Maine Agg | NISOURCE INC. | 0.07% | | | x | | | | | x | | | | | |
| Maine Agg | Northern States Power Company (Minnesota) | 0.04% | | | x | | | | | | | | | | |
| Maine Agg | NORTHWESTERN CORPORATION | 0.00% | x | | x | | | | | | | | | | |
| Maine Agg | NOV INC. | 0.01% | | | | x | | | | | x | | | | |
| Maine Agg | OGLETHORPE POWER CORP | 0.02% | | | x | | | | | | | | x | | |
| Maine Agg | OKLAHOMA GAS AND ELECTRIC COMPANY | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | ONE GAS INC. | 0.01% | | | | | | | | x | | | | | |
| Maine Agg | ONEOK INC. | 0.06% | | | | x | | | | | | x | | | |
| Maine Agg | OVINTIV INC. | 0.01% | x | | | | x | x | | | | | | | |
| Maine Agg | PHILLIPS 66 | 0.06% | | | | | x | | | x | | | | | |
| Maine Agg | Piedmont Natural Gas Company Inc. | 0.01% | | | | | | | | x | | | | | |
| Maine Agg | PINNACLE WEST CAPITAL CORPORATION | 0.00% | | | x | | | | | | | | | | |
| Maine Agg | PIONEER NATURAL RESOURCES COMPANY | 0.02% | x | | | | x | x | | | | | | | |
| Maine Agg | PLAINS ALL AMERICAN PIPELINE L.P. | 0.05% | | | | x | | | | | | x | | | |
| Maine Agg | Progress Energy Inc. | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | PUBLIC SERVICE COMPANY OF COLORADO | 0.03% | | | x | | | | | | | | | | |
| Maine Agg | PUGET ENERGY INC. | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | PUGET SOUND ENERGY INC. | 0.02% | | | x | | | | | | | | | | |
| Maine Agg | Ressources Teck Limitee | 0.02% | x | | | | | | | | | | | | |
| Maine Agg | SABINE PASS LIQUEFACTION LLC | 0.07% | | | | | | | | x | | | | | |
| Maine Agg | SEMPRA ENERGY | 0.05% | | | | | | | | | | x | | | |
| Maine Agg | SIERRA PACIFIC POWER COMPANY | 0.00% | | | x | | | | | | | | | | |
| Maine Agg | SOUTHWESTERN ELECTRIC POWER COMPANY | 0.02% | | | x | | | | | | | | x | | |
| Maine Agg | SOUTHWESTERN PUBLIC SERVICE COMPANY | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | Suncor Energy Inc. | 0.04% | x | | | | x | | x | | | | | | |
| Maine Agg | TAMPA ELECTRIC COMPANY | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | TARGA RESOURCES CORP. | 0.02% | | | | x | | | | | | x | | | |
| Maine Agg | TC PIPELINES LP | 0.01% | | | | | | | | | | x | | | |
| Maine Agg | TENNESSEE GAS PIPELINE COMPANY L.L.C. | 0.01% | | | | | | | | | | x | | | |
| Maine Agg | TEXAS EASTERN TRANSMISSION LP | 0.00% | | | | | | | | | | x | | | |
| Maine Agg | THE AES CORPORATION | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | THE SOUTHERN COMPANY | 0.06% | | | x | | | | | | | | x | | |
| Maine Agg | THE WILLIAMS COMPANIES INC. | 0.10% | | | | x | | | | | | x | | | |
| Maine Agg | TRANSCANADA PIPELINES LIMITED | 0.10% | | | | | | | | | | x | | | |
| Maine Agg | TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC | 0.02% | | | | | | | | | | x | | | |
| Maine Agg | TUCSON ELECTRIC POWER COMPANY | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | UNION ELECTRIC COMPANY | 0.04% | | | x | | | | | | | | x | | |
| Maine Agg | VALE S.A. | 0.01% | | x | | | | | | | | | | x | |
| Maine Agg | VALERO ENERGY CORPORATION | 0.05% | | | | | x | | x | | | | | | |
| Maine Agg | VEOLIA ENVIRONNEMENT SA | 0.00% | | | x | | | | | | | | | | |
| Maine Agg | Virginia Electric and Power Company | 0.11% | | | x | | | | | | | | x | | |
| Maine Agg | WEC ENERGY GROUP INC. | 0.01% | | | x | | | | | | | | | | |
| Maine Agg | WISCONSIN POWER AND LIGHT COMPANY | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | WISCONSIN PUBLIC SERVICE CORPORATION | 0.01% | | | x | | | | | | | | x | | |
| Maine Agg | Xcel Energy Inc. | 0.04% | | | x | | | | | | | | | | |

## DISCLOSURES

Past performance is no guarantee of future results.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

Some of the information presented herein has been obtained from external sources NEPC believes to be reliable. While NEPC has exercised reasonable professional care in preparing this content, we cannot guarantee the accuracy of all source information contained within.

The opinions presented herein represent the good faith views of NEPC as of the publication date and are subject to change at any time.

This presentation contains summary information regarding the investment management approaches described herein but is not a complete description of the investment objectives, portfolio management and research that supports these approaches. This analysis does not constitute a recommendation to implement any of the aforementioned approaches.

APPENDIX H

www.NEPC.com | in @NEPC_LLC