



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT 2017 EDITION

Highlighting how sustainability factors influence investment decisions

MainePERS . . . considers material environmental, social and governance (ESG) risks and value creation opportunities for inclusion in its due diligence and ongoing monitoring of investments subject to its fiduciary duties, constitutional requirements and in accordance with local laws and regulations.

MAINEPERS ENVIRONMENTAL, SOCIAL AND GOVERNANCE POLICY. ADOPTED ON JUNE 8, 2015.



December 1, 2017

Dear Reader,

I am pleased to present you with our first Environmental, Social and Governance (ESG) Report.

At MainePERS, our primary duty is to serve as good fiduciaries to our members. Our constitutional mandate requires "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 retirement and related benefits shall be held, invested or distributed as in trust for the exclusive purpose of providing for such benefits and shall not be encumbered for, or diverted to, other purposes." We are proud that Maine is one of the few states that protect pension funding in our state constitution and very pleased the people of Maine recently voted "yes" on Question 4 to reduce the volatility in our Maine pension funding requirements.

In a recent article in *Institutional Investor*, Bob Massie, American activist and author working on issues of global leadership and corporate accountability, social justice and climate change, states "The concept of sustainability has been moving from the periphery of investment and business toward its center for a generation."¹ That is certainly true at MainePERS. Over the past decade, we have continued to recognize that ESG considerations are a vital component of successful long-term investing and have taken steps to ensure that ESG factors are carefully weighed during our investment decision-making process. In 2012, MainePERS engaged GMI Ratings to assist in the development of our ESG policy and provide an independent review of MainePERS existing practices. This led in part to the Maine State Legislature passing Public Law 2013, Chapter 602, Part C, supporting our ESG policy efforts with a task force that was joined by several national ESG experts. On January 8, 2015, MainePERS Board of Trustees adopted the resulting ESG policy. This report outlines how that policy impacts our investment decisions as well as how we address ESG within our own organization.

This report was prepared as part of our ongoing effort to share our ESG practices with our stakeholders. We look forward to publishing this information each year when we release our Comprehensive Annual Financial Report.

Sincerely,

Sandy Matheson Executive Director Maine Public Employees Retirement System

^{1 &}quot;Welcome to the ESG Evolution." Bob Massie. Institutional Investor. March 9, 2016.

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RISKS AND OPPORTUNITIES

"There is now broad recognition that ESG factors are fully part of governance and of equal weight in evaluating the value and the risk of portfolio companies."

> —Stephen Davis ICGN Founder and Associate Director of Corporate Governance and Institutional Investors Programs at Harvard Law School

In implementing the Board of Trustees' ESG policy, the MainePERS Investment Team has developed a robust process to monitor the level of ESG risk factors in the MainePERS investment portfolio. Before making any new investment, MainePERS completes a due diligence checklist monitoring over 100 factors, including ESG. Such factors include: whether an investment partner engages in profitable capital investment that also has a positive environmental impact; whether partners work constructively with deal stakeholders and are good community members themselves; and the degree of transparency an investment partner provides. MainePERS recognizes the strong correlation between good governance and investment performance and therefore considers it an important consideration in the due diligence process.

MainePERS carefully examines how current and potential partners address diversity, how they incorporate ESG training within their organization and in their portfolio companies.

MainePERS considers environmental partnerships and affiliations during the due diligence process.

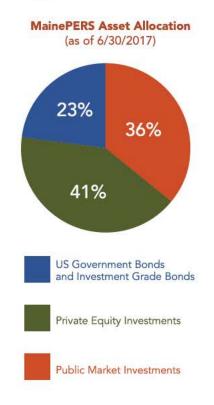
MainePERS takes a holistic view when evaluating investments. No single factor is necessarily a definitive reason to invest or not invest in a strategy, rather all factors are important inputs into the overall decision.

Prepared by the MainePERS Investment Team

PUBLIC AND PRIVATE MARKET INVESTMENTS

Public Market Investments

MainePERS takes a passive approach when investing in public equity markets. The System "indexes" its stock investments and simply holds the entire stock market. This approach provides broad market exposure at extremely low cost and portfolio turnover. This approach means that MainePERS does not evaluate the ESG merits of any individual public company in order to make buy or sell decisions. However, as a shareholder MainePERS is still able to actively engage with company management, particularly through the proxy voting process.



Private Market Investments

MainePERS invests in a number of private "alternative" asset classes, such as Private Equity, Infrastructure, and Real Estate. Prior to investing with any particular private asset manager, the MainePERS Investment Team completes a Due Diligence Check List, containing a number of ESG-specific items, that assists the Team in identifying and monitoring risk factors. Managers are asked to provide their ESG policies, and these are reviewed. Governance is a crucial concern, and appropriate governance is a prerequisite for a MainePERS investment. MainePERS carefully studies labor practices of both the fund and the companies they manage. The due diligence process provides the Investment Team with a road map of strengths and weaknesses that allows for an informed investment recommendation to be made. The Investment Team takes a holistic approach in evaluating potential investments, and it is rarely the case that a single issue (ESG-related or otherwise) is cause for making or rejecting an investment. The Investment Team believes that conducting due diligence into the ESG practices of potential managers is itself an important act and in many cases serves to prod managers to improve their ESG practices and disclosures.

ENGAGEMENT AND PROXY VOTING

ACTIVE OWNERSHIP

"Active ownership refers to the practice of entering into a dialogue with companies on ESG issues and exercising both ownership rights and voice to effect change. Active ownership is in sharp contrast to the idea that investors should vote with their feet—that is, simply sell off the investments with questionable practices."

CFA Institute, Environmental, Social and Governance Issues in Investing: A Guide for Investment Professionals. MainePERS owns both public and private equity investments. We acknowledge that it is not always feasible to ensure any particular investment's commitment to ESG considerations, especially in cases where MainePERS is a minority owner and has limited ability to influence the organization. In the case of investments in large publicly traded securities, the MainePERS Investment Team selectively engages companies with which we currently invest where engagement can have meaningful impact relevant to ESG-related issues.

We view ourselves as an "active owner" of the companies in which we invest and will directly engage with company management as appropriate. MainePERS views such engagement as an important and effective means of managing risk. Additionally, as opportunities arise, MainePERS works collaboratively with other investors to broaden our engagement reach and impact.

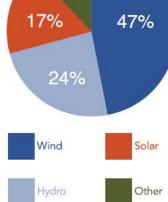
The MainePERS Investment Team believes that being active owners and making our voice heard by voting of proxies of publicly traded companies has economic value and can serve to reduce portfolio risk. Proxies are the vehicle by which board of directors are elected, bylaws are changed, and other actions in which owners are involved are accomplished. In conjunction with our proxy agent, Glass Lewis, MainePERS votes on management and shareholder proxy proposals in a manner consistent with our Environmental, Social and Governance Policy as articulated in the MainePERS Engagement Policy (2.7).

MainePERS casts ballots on over 20,000 proxy items every year.

INFRASTRUCTURE AND NATURAL RESOURCES



MainePERS Renewable Energy Portfolio



Precision Agriculture

MainePERS private market Natural Resources portfolio includes companies that utilize Precision Agriculture (PA) in order to conserve and protect natural resources. PA is a crop management system that is information and technology based, is site specific and uses GPS mapping, targeted applications of fertilizer and best practices in water management for optimum profitability, sustainability, and protection of the environment.

Renewable Energy

MainePERS invests in Renewable Energy and Infrastructure. Recent investments include hydro, solar, biomass, geothermal and wind projects around the world. MainePERS has invested \$210 million in renewables through private market investments.

REAL ESTATE

LEED IS GREEN BUILDING.

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"LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world. Availability for virtually all building, community and home project types, LEED provides a framework to create healthy, highly efficient and cost-savings green buildings. LEED certification is globally recognized symbol of sustainability achievement."

United States Green Building Council.org

As part of the due diligence and monitoring process for real estate investment partners who buy, hold, and sell commercial and residential real estate, MainePERS examines the following ESG factors:

Environmental

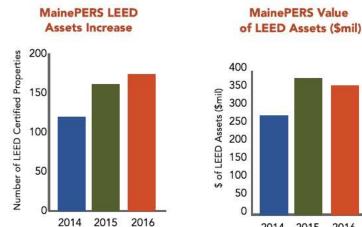
The measurement and reduction of building energy, water, and waste, leading to energy conservation and expense savings. Many of these properties achieve "LEED", "ENERGY STAR", or such measures of "green" building practices.

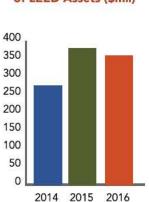
Social Impact

The regular engagement with stakeholders such as employees, tenants, and the community resulting in strong stakeholder relations.

Good Governance

The degree of transparency in disclosing and managing potential conflicts of interest and being accountable to investors and stakeholders.







MAINEPERS ESG Practices

Energy conservation is a priority at MainePERS offices. In 2018, MainePERS Green Building Committee will launch communications to staff in all facilities to encourage energy conservation both in and out of the offices. Some of the System's facilities are outfitted with energy efficient, cost effective LED lighting and hydrohot water systems, and feature exterior windows covered with blinds and a water cooling tower on the rooftop helps reduce energy consumption. HVAC systems are programmed to go in unoccupied mode in the evenings and on the weekend, reducing natural gas consumption. In 2019, MainePERS plans to move into a new building incorporating a number of energy efficient building practices.

MainePERS operates under a governance structure designed by the state Legislature. The ultimate responsibility for the operations of MainePERS is held by the System's Board of Trustees. State law specifies the composition of the Board, whose eight members are confirmed by the Legislature. All appointed trustees are required to have "a working knowledge of retirement policy and legal issues and a general knowledge and understanding of banking, finance and investment practices." In 2015, the Board voted to approve MainePERS ESG policy, which requires annual reviews of the implementation of the policy and allows for updates and revisions as necessary.

The Investment Team reports the System's proxy voting record to the Board of Trustees on a semiannual basis. In addition, the Investment Team works with Glass Lewis on an ongoing basis as to ensure its policy guidance is implemented appropriately.

MainePERS tracks participation in the Global Real Estate Sustainability Board (GRESB).

ESG TIMELINE AT MAINEPERS

2012

Policy Development Maine Public Employees Retirement System (MainePERS) began development of an Environmental, Social and Governance (ESG) Policy in 2012. MainePERS engaged GMI Ratings to assist in the development of this policy and to provide an independent view of MainePERS existing ESG practices.

2013

The Maine State Legislature passed Public Law 2013, Chapter 602, Part C, supporting the System's work on corporate governance with a task force to assist in completing an environmental, social and governance policy that includes securities and manager selections; monitoring and proxy voting; company engagement; and inclusion of environmental, social and governance within investment policies.

2014

MainePERS joined CERES A group Mobilizing Business Leadership for a Sustainable World.

MainePERS ESG Task Force assembled Drafts Recommended MainePERS ESG Policy and Practices.

2015

Adopts ESG Policy On January 8, 2015 MainePERS Board of Trustees adopted the ESG Policy.

Joins the International Corporate Governance Network (ICGN) whose mission is to promote effective standards of Corporate Governance and Investor Stewardship to advance efficient markets and sustainable economies worldwise.

Sandy Matheson, MainePERS Executive Director, moderated the ESG Panel at the New England Institutional Investment ESG Forum on October 14, 2015.

Andrew Sawyer, MainePERS' Chief Investment Officer, presents at Annual CERES conference in San Francisco on April 25, 2016.

2017

ONGOING

2016

MainePERS publishes its first annual ESG Report.

Ceres Investor Network Disclosure Advisory Group Andrew Sawyer, MainePERS Chief Investment Officer

Institutional Investing Guidance (Thought Leadership) Andrew Sawyer, MainePERS Chief Investment Officer

One City Center Green Building Committee: Bartley Parker, Managing Director at Maine-PERS, Founding Member

ESG POLICY

Board Responsibilities - Investments and Administration

2.6 – Environmental, Social and Governance Policy

Date Adopted. 1/8/15 Date Amended. 5/11/17

Policy

The MainePERS Board of Trustees considers material environmental, social, and governance (ESG) risks and value creation opportunities critical for inclusion in its due diligence and ongoing monitoring of investments subject to its fiduciary duties, constitutional requirements and in accordance with local laws and regulations. The MainePERS Board of Trustees directs the Executive Director and MainePERS Investment Team to incorporate ESG considerations into all investments considered or made by MainePERS following the adoption date of this policy, and to examine opportunities for ESG integration in existing investments.

MainePERS acknowledges that it will not always be feasible to ensure a particular investment's integration of ESG considerations, especially in cases where MainePERS is a minority owner and has limited ability to influence the organization. In these cases, the MainePERS Investment Team shall engage organizations with which it currently invests to strongly consider relevant ESG-related issues. In addition, MainePERS will consider its ability to influence ESG considerations when weighing prospective investments.

The MainePERS Board of Trustees shall annually review implementation of this policy and update or revise this policy as appropriate.

This policy shall also apply to investment consultants hired by MainePERS to provide guidance on investment due diligence matters.

Statutory/Legal Provisions

- Me. Const. art. IX § 18
- 5 M.R.S. §§ 17102 and 17103

ESG POLICY, CONTINUED

Roles and Responsibilities

The Executive Director shall ensure that the MainePERS Investment Team integrates this policy into the investment due diligence process. The MainePERS Chief Investment Officer and Deputy Chief Investment Officer shall ensure that material ESG issues are continually reviewed, revised and integrated by the investment team in the due diligence process. A report describing the implementation of this policy, including recommendations for updates or revisions to this policy, will be provided to the Trustees as part of the year-end reporting process.

ESG Due Diligence

MainePERS believes that organizations that understand the benefit of and openly practice sound environmental, social and governance business practices create strong business models and investment opportunities. Consistent with its fiduciary duties, constitutional requirements and in accordance with local laws and regulations, MainePERS shall:

- 1. Maintain awareness of new and existing key ESG considerations and their impact on investment valuation, and update the due diligence process used to identify material ESG issues accordingly.
- 2. Examine and understand each potential or existing investment's material ESG risk exposure and use this knowledge when evaluating potential investments and during the duration of investment ownership.
- 3. Be accessible to, and engage with, relevant stakeholders.
- 4. Encourage and support the adoption and implementation of sound environmental, social, and governance practices by companies and managers in which MainePERS invests.
- 5. Encourage governance structures that provide appropriate levels of oversight in the areas of audit, risk management, and potential conflicts of interest.
- 6. Encourage MainePERS investments, and MainePERS business partners to commit to aligning their operations and strategies with the United Nations Global Compact's principles regarding human rights, labor, environment, and anti-corruption.
- 7. Provide timely and transparent information accessible by stakeholders on the matters addressed in this policy.

ESG ENGAGEMENT POLICY

2.7 – Engagement

Date Adopted: February 11, 2016

Policy

MainePERS is the fiduciary for funds it is assigned to manage. MainePERS shall be a good steward for the funds entrusted to it, managing and investing these funds as a "prudent investor" in accordance with the "exclusive benefit rule" and the laws and Constitution of the State of Maine. MainePERS shall also promote the long term success of companies with which the System invests through engagement activities.

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").
- 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.

ESG ENGAGEMENT POLICY, CONTINUED

Engagement

Engagement is encouraging long term success and growth of publicly traded companies with whom MainePERS invests through activities such as:

- Direct engagement
- Participating in or sponsoring shareholder litigation
- Proxy voting

DIRECT ENGAGEMENT

MainePERS will maintain a direct engagement effort consistent with the need for and resources available to encourage the publicly traded companies in its portfolio to achieve long term growth and success, balancing the long term focus of good stewardship with the short term challenges the company faces. Direct engagement opportunities may be based on continuous monitoring of its investments including investment analysis, trade publications, trade organizations, or coordination with other institutional investors.

Direct engagement includes written and oral communication to companies, including attending shareholder meetings and sponsoring shareholder resolutions in unusual circumstances.

SHAREHOLDER LITIGATION

MainePERS will participate in shareholder litigation only to the extent that participation is likely to benefit MainePERS members as pension beneficiaries. MainePERS generally will not assume the role of lead plaintiff in a securities class action unless no other investor with interests similar to MainePERS and sufficient resources to support the litigation is willing to serve as lead plaintiff and the System otherwise will lose the benefit of the litigation to members.

PROXY VOTING

MainePERS will vote its proxies in the best interests of its members as pension beneficiaries. This will generally mean focusing on good stewardship by the companies with which MainePERS invests, including:

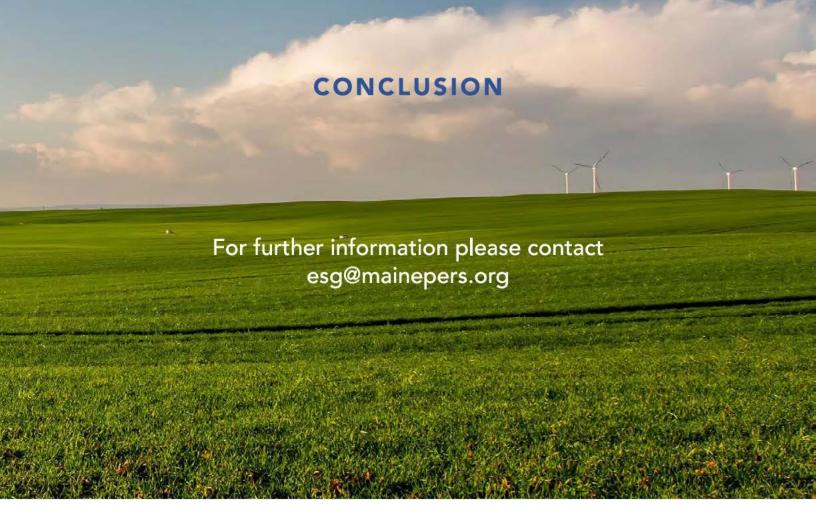
- Voting to optimize each company's value to shareholders, balancing the long-term focus of good stewardship with the short-term challenges the company faces. Good stewardship includes establishment of effective governance and management practices, responsibility to employee and customer welfare, and responsibility to the environment;
- When there is a conflict between long- and short-term interests, voting shall be in favor of proposals that maximize shareholder control consistent with effective business operations of the company;
- Refraining from voting to further the interests of any group other than the best interests of MainePERS members as pension beneficiaries.

ESG ENGAGEMENT POLICY, CONTINUED

The Executive Director and Chief Investment Officer shall implement this direction by engaging a proxy voting agent to vote shares of stock owned by MainePERS. The MainePERS investment team shall create, maintain and update general guidance in the following areas that the proxy voting agent can use to map to proxy votes available to MainePERS:

- Management resolutions
 - Elections of officers
 - Ratification of auditors
 - Governance structure and shareholder rights
 - Compensation
- Shareholder proposals
 - Environment
 - Social matters
 - Governance
 - Compensation
- Mergers and proxy contests

The MainePERS Investment team shall work with the proxy voting agent to determine Maine-PERS' position on proxies not directly covered by the implementation guidance. The Investment team shall monitor the proxy voting agent's implementation of the MainePERS guidance and report semiannually to the Board of Trustees. The Board shall meet with the proxy voting agent annually for an overview of the year's votes.



Chief Investment Officer Statement

At MainePERS, ESG issues are continually reviewed, revised and integrated into the MainePERS Investments team's decision making processes. This report, describing the implementation of the ESG policy, will be published on an ongoing basis and will be made available for review at Mainepers.org.

Andrew H. Sawyer Chief Investment Officer, MainePERS