



MainePERS
PUBLIC EMPLOYEES RETIREMENT SYSTEM

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

2019 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.



Maine Public Employees Retirement System
Sandy Matheson
Executive Director
P.O. Box 349, Augusta Maine 04332-0349

December 1, 2019

Dear Reader,

I am pleased to present you with our 2019 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 that in 2017 the people of Maine voted to amend the State Constitution to reduce volatility in the State pension funding requirements.

A few years ago, Bob Massie, American activist and author working on issues of global leadership and corporate accountability, social justice, and climate change stated *“The concept of sustainability has been moving from the periphery of investment and business toward its center for a generation.”*¹ We believe this statement still holds true today, and is certainly true at MainePERS. For over a decade MainePERS has recognized the importance of ESG considerations as a vital component of successful long-term investing and has 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 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, the MainePERS Board of Trustees adopted the recommended ESG policy. This report outlines how in the last four years this policy has impacted our investment decisions as well as how we address ESG within our own organization.

This report has been 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 “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 considers investment manager environmental partnerships and affiliations during 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 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.

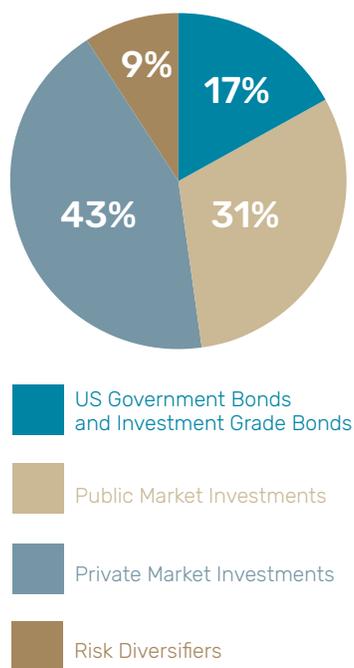


PUBLIC AND PRIVATE MARKET INVESTMENTS

Public Market Investments

MainePERS takes a passive approach when investing in public equity markets. We “index” our stock investments and simply hold the entire stock market. We do this because this approach provides broad market exposure at extremely low cost and portfolio turnover. This approach means that we do 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.

MainePERS Asset Allocation
(as of 6/30/2019)



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, which assist the Team in identifying and monitoring risk factors. We also review each manager’s ESG policy. Governance and labor practices are crucial concerns in our due diligence process. Appropriate governance is a prerequisite for any MainePERS investment. We also carefully study labor practices of both the fund and the companies they manage. The due diligence process provides our Investment Team with a road map of strengths and weaknesses that allows us to make an informed investment recommendation to the Board of Trustees. Our holistic approach means we rarely make an investment decision based on a single issue (ESG-related or otherwise). Bringing all these factors into consideration, MainePERS is careful to partner with asset managers that operate in an environmentally responsible manner, foster a fair and meritocratic work environment, and provide responsible corporate citizenship. Our Investment Team also believes that conducting due diligence into the ESG practices of potential managers is itself an important act, and in many cases serves to alert managers to a need 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.

ANIMAL WELFARE

In 2018 MainePERS used its status as a shareholder of McDonalds to engage with the company in the area of animal welfare. MainePERS communicated its position that the company should employ modern methods and humane management standards for the poultry used by the corporation.

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. Example of this type of engagement activity include letters sent in 2018 to Walmart and McDonalds.

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 and ESG proponents 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 boards 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). For example, from July 1, 2017 to June 30, 2018, 100% of MainePERS proxy votes on shareholder proposals regarding improvements in animal welfare, adoption of comprehensive recycling strategies, and sustainability reporting were against management and in favor of the shareholder proposal.



INFRASTRUCTURE AND NATURAL RESOURCES

ESG CONSIDERATIONS

While ESG considerations are never an exclusive reason to pursue an investment, in many cases an ESG factor can be the sole reason an investment opportunity is foregone. Recent examples include a mining project which had insufficient engagement with the local aboriginal population, and a port project opposed by much of the local community.

AGRICULTURAL EFFICIENCY

Capital provided by MainePERS and other institutional investors was used by a private asset manager to precision-level a rice farm, reduced water requirements by 30-40%, increasing investment returns and providing environmental benefits.

Mining

Although mining activities can sometimes be controversial, there is no question that implementing best management practices in conjunction with constantly improving mining practices can minimize environmental impacts. MainePERS invests in firms that demonstrate wise-use principles and seek to ensure observance of ESG best practices. For example, a MainePERS General Partner recently made two decisions to invest and four decisions not to invest; each decision illustrates the strategic commitment to ESG principles that is a hallmark of groups receiving MainePERS support.

Precision Agriculture

MainePERS private market Natural Resources portfolio includes companies that use 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. Recent MainePERS investments have contributed to advances in this burgeoning industry, reducing both water use and energy costs per acre.

MainePERS invests in firms that demonstrate wise-use principles and seek to ensure observance of ESG best practices.

INFRASTRUCTURE AND NATURAL RESOURCES, CONTINUED

WATER SUPPLY

MainePERS is an investor in a Southern Californian reverse-osmosis desalination plant producing over 50 million gallons of drinking water daily.

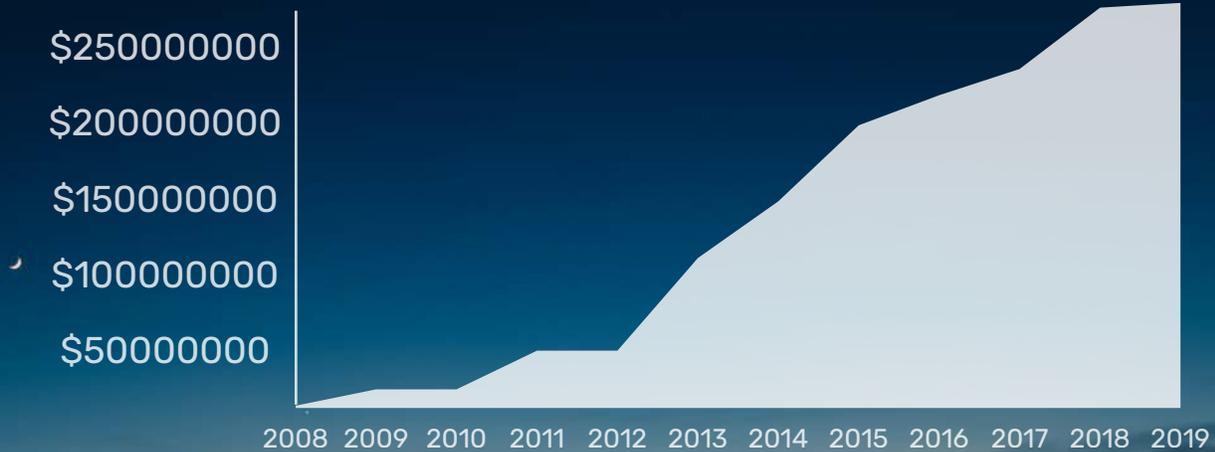
Water

MainePERS understands that many of the sustainability issues facing humanity revolve around use of water. Critical water-related risks exist for large populations in both developed and undeveloped countries, and MainePERS supports partners that are helping develop solutions to these problems. Among these problems is water shortage in urban areas. One solution, among many others, that MainePERS has supported in this arena is large-scale seawater desalination technology.

Renewable Energy

MainePERS invests in Renewable Energy across its portfolio. Recent investments include hydro, solar, biomass, geothermal and wind projects around the world. MainePERS has invested \$264 million in renewables through private market investments. This includes numerous direct co-investments in renewable energy generation projects (see below).

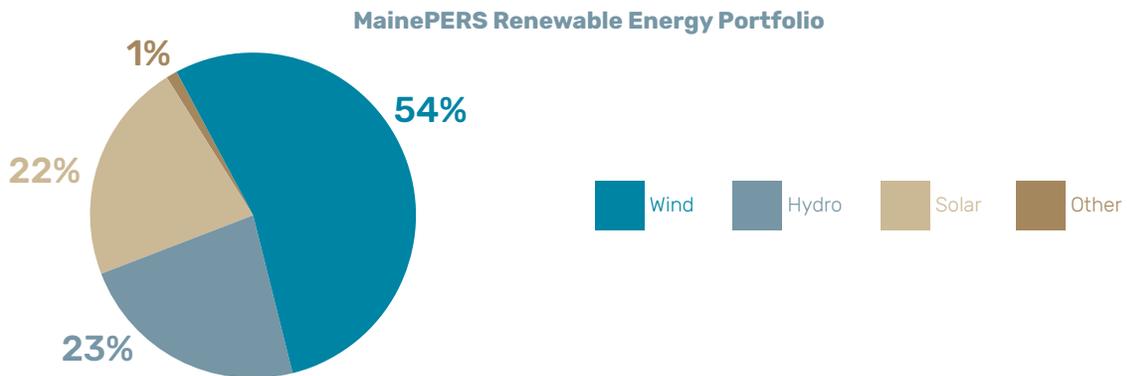
Cumulative Private Market Renewable Energy Investments



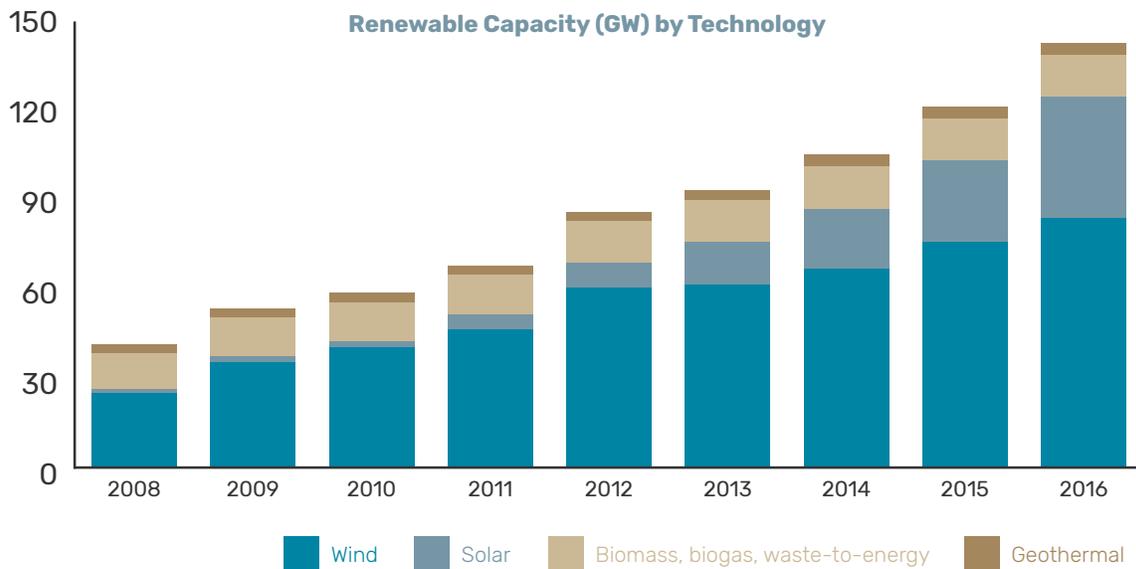
INFRASTRUCTURE AND NATURAL RESOURCES, CONTINUED

ENERGY EFFICIENCY

A number of MainePERS investments complement the growing use of renewable energy sources by improving efficiency. A recent private market investment that MainePERS was involved in provided major energy efficiency upgrades to the lighting and air treatment systems at a large international airport.



The largest growth in private MainePERS renewable energy investments since 2012 has been in wind energy, followed by solar. This is consistent with US trends for installation of new renewable energy generation capacity²:



² Schiermeier, Q. 2017. Solar and wind energy propel growth in US renewables. Nature News. doi:10.1038/nature.2017.21472.

INFRASTRUCTURE AND NATURAL RESOURCES, CONTINUED

Within the renewable energy sector and in other sectors, the MainePERS investment approach can amplify effectiveness. For example, MainePERS often uses *co-investment* to increase the System’s exposure to investments in these sectors. Three recent examples of this type of leverage from the renewable energy sector include:

Investment	Funded Activity	MainePERS Activity	Impact
Co-investment #1	Wind Farm	\$15M direct investment in the wind project plus investment via the sponsoring/parent fund	Energy savings of 705,000 kWh
Co-investment #2	Wind Farms	\$22M direct investment in one wind project plus investment in multiple wind projects across the sponsoring/parent fund	Energy savings of 2.2 GW from projects across 11 countries in the fund
Co-investment #3	Hydroelectric Installations	\$10M direct investment in one hydroelectric project plus investment in multiple hydroelectric projects across the sponsoring/parent fund	Energy savings of 584MW from projects across 13 facilities in the fund



REAL ESTATE

ROOFTOP SOLAR

MainePERS is an investor in New York City's Stuyvesant Town / Peter Cooper Village solar rooftop project. This is the largest private multi-family residential solar array in the country. The project is a leading participant in the NYC Carbon Challenge and is doubling Manhattan's solar power generation capacity.

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

These factors include the degree to which building energy, water, and waste practice and investments support renewable energy innovation and lead to energy conservation and expense savings. Many of these properties achieve “LEED”, “ENERGY STAR”, or such measures of green building practices, and some have earned recognition as major achievements.

Social Impact

These factors include the degree to which regular engagement with stakeholders such as employees, tenants, and the community result in strong stakeholder relations.

Governance

These factors include the degree to which company management reflects good governance principles including transparency in disclosing and managing potential conflicts of interest and accountability to investors and stakeholders.

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

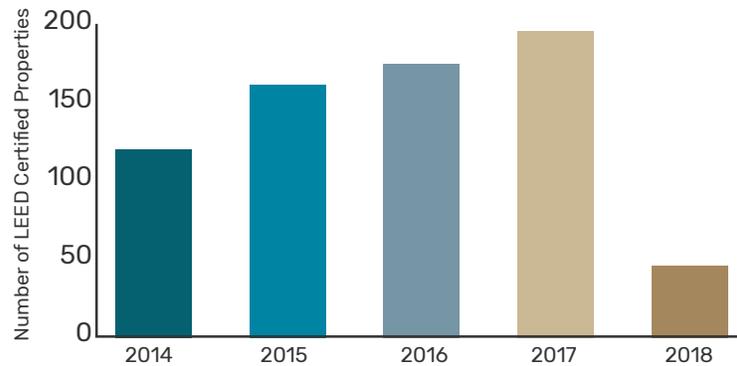
REAL ESTATE, CONTINUED

LEED IS GREEN BUILDING.

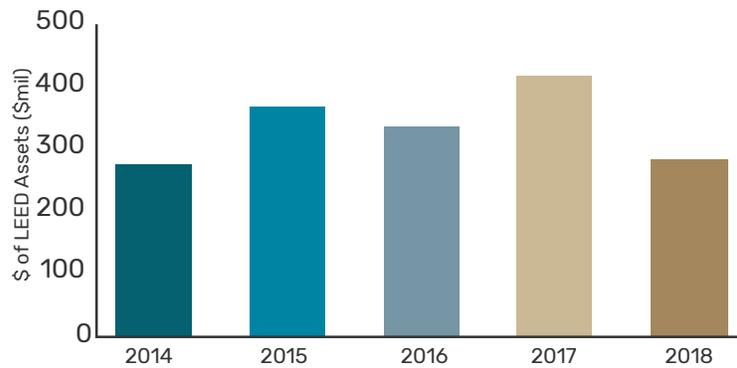
“LEED, or Leadership in Energy and Environmental Design, is the most widely used green building rating system in the world. Availability for virtually all building, community and home project types, LEED provides a framework to create healthy, highly efficient and cost-savings green buildings. LEED certification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

United States Green Building Council.org

MainePERS LEED Assets Increase*



MainePERS Value of LEED Assets (\$mil)*



* In 2018, MainePERS reallocated capital in the Real Estate portfolio, and consolidated the number of managers used. This resulted in a drop in the number of individual properties held, including properties with LEED certification.



MAINEPERS ESG PRACTICES

Within the MainePERS organization, energy conservation is a priority. In 2018, MainePERS Green Building Committee launched 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 hydro-hot 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 moved into a new building incorporating a number of energy efficient building practices.

MainePERS operates under a governance structure designed by Maine's state Legislature. The

MainePERS Board of Trustees maintains ultimate responsibility for the System's operations. 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.

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



GLASS LEWIS

MAINEPERS ESG PRACTICES, CONTINUED

Finally, MainePERS contributes to numerous ongoing ESG initiatives among the larger community of investment groups and advisors. This includes participation in presentations with CERES and related organizations (see timeline below) and development of broad initiatives related to ESG goals such as “Principles for a Responsible Civilian Firearms Industry. This

effort was organized through the California State Teachers’ Retirement System and represents the work of 13 investment funds³. These activities are outward-facing, but they represent an internal philosophy and commitment by MainePERS to the principle of constantly moving the organization toward sustainability, equity, and good governance.

PRINCIPLES FOR A RESPONSIBLE CIVILIAN FIREARMS INDUSTRY

In 2018 MainePERS reviewed, commented on, and supported creation of this set of sensible and non-restrictive intentions. The list is meant to encourage owners of firearm companies to publicly demonstrate their adherence to the principles, for example that “Manufacturers should adopt and follow responsible business practices that establish and enforce responsible dealer standards and promote training and education programs for owners designed around firearms safety.”

³ <http://firearmsprinciples.com/>



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 worldwide.

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

2016

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

2017

MainePERS publishes its first annual ESG Report.

2018

MainePERS attends CERES Investor MEETING and General Conference.

MainePERS attends CIO/CEO Roundtable on Climate Risk in New York City.

MainePERS attends United Nations Investor Summit on Climate Risk.

MainePERS attends CERES Sustainability Salon in New York City.

**ONGOING
ACTIVITIES**

Ceres Investor Network Disclosure Advisory Group

Council of Institutional Investors

Carbon Disclosure Project

Thirty Percent Coalition

Principles for a Responsible Civilian Firearms Industry

One City Center Green Building Committee



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 MainePERS' 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 semi-annually to the Board of Trustees. The Board shall meet with the proxy voting agent annually for an overview of the year's votes.

CONCLUSION

For further information please contact
esg@mainepers.org

