Improving efficiency, unlocking returns

Transforming Corporate Resource Management

Energy efficiency alone could cause greenhouse gas emissions to peak before 2020, a key target of the Paris Agreement on climate change

Dr. Fatih Birol, Executive Director, International Energy Agency
A Letter from Our Director of ESG Research

Dear Reader,

I am excited to share our first progress report on our ambitious initiative to engage companies on Eco-Efficiency. We began this multi-year initiative of sustained dialogue with companies in 2015, supported by an investor coalition of $1 trillion in assets under management, with roots back to our 2007 engagement on the energy efficiency of buildings. We named our campaign “Eco-Efficiency” as a call to action to corporations to increase their resource productivity and cut resource use — namely energy, emissions, water, and waste. In this age of resource scarcity, we believe companies should go beyond merely doing old tasks more efficiently. We wanted to challenge and inspire companies to re-imagine products, re-conceptualize strategy, and redesign processes.

This type of path-breaking innovation in products and processes is critical to meeting the Paris Agreement climate goals. In 2018, the International Energy Agency concluded that “energy efficiency alone could cause greenhouse gas emissions to peak before 2020, a key target of the Paris Agreement on climate change” and is now a major focus of the IEA’s efforts.1

The unpredictable and often interconnected impacts of climate change were highlighted by the Fourth National Climate Assessment report in the US and at the vital UN COP24 climate talks in Poland. Both concluded that failure to step up climate action now would leave industries, agriculture, and society vulnerable to climate risk.2

Increased Eco-Efficiency is rapidly becoming a necessity for companies, not a choice. Companies that adopt “Circular Economy” concepts exemplify leadership by diverting their wastes from landfills, saving on the operational cost of disposal, and finally repurposing those “wastes” as fuel for another company’s process. This win-win for both corporations and the environment can help companies become more sustainable and more profitable.

We aim to create a narrative around Eco-Efficiency within companies that helps embed this concept at a management and corporate governance level, so that doing more with less is a consideration for every business decision.

If energy and water efficiency and eliminating waste are so vital to improving returns and addressing climate change, why aren’t more companies already doing more?

Our report finds that though Eco-Efficiency measures are economically compelling, and ecologically beneficial, corporations still face internal barriers to adoption, which vary by industry. Overcoming these barriers requires a redesign of internal processes. We identified five key areas where companies can improve productivity and reduce resource use and waste:

1. Data, Analysis, and Reporting
2. Targets and Goals
3. Capital Allocation
4. Governance of Sustainability
5. Board and Executive Accountability

Through active, sustained dialogue with companies, industries, and investors, we work to identify and refine the questions in these five areas — with the ultimate goal to provide results that can be used by investors as a benchmark of Best Eco-Efficiency Practices across sectors.

It is gratifying to see how our portfolio companies with very different challenges on Eco-Efficiency have made groundbreaking changes, and we share many of those highlights with you in this report. See for example, our case study on Air Liquide on page 7.

I am happy to report that the Eco-Efficiency Framework that Boston Common devised has now been adopted by Ceres for its energy efficiency program and the standard-setting body Sustainability Accounting Standards Board (SASB) has mapped our Eco-Efficiency criteria versus the SASB standards for various industries.

As engaged shareholders, we can create meaningful change by shining a spotlight on this important, albeit unglamorous, work — because so much progress can result from changes within reach. Companies don’t have to achieve the ideal to make a difference. Just taking small steps cumulatively can make a real impact until their larger processes and strategic changes take hold.

We look forward to your continued partnership in the pursuit of financial return and social change.

Sincerely,

Steven Heim
Managing Director

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2 https://nca2018.globalchange.gov
Leading Eco-Efficiency Practices

BMW has saved €150 million through efficiency initiatives since 2006. One BMW plant site in San Luis Potosi, Mexico uses 100% renewable energy and recycles all wastewater. The company now invests in electric vehicles and toward making cars lighter with carbon fiber in order to increase gas mileage. BMW achieved a 36% per vehicle reduction in energy consumption since 2006 and is already on track to double its energy productivity by 2025.

Origin Energy revamped its capital allocation processes to align with its long-term sustainability goals. As a result, Origin decided to avoid investing in additional coal-fired power plants on the market in Australia, diverting millions of dollars away from coal.

Air Liquide committed to adopt new energy efficiency goals and to undertake a global water risk and use assessment.

National Grid reports that by 2020 it will include carbon pricing targets for all projects, reduce embedded carbon emissions in construction projects by 50%, and increase the energy efficiency of its property portfolio by 10%.

Schneider Electric and 3M are both examples of companies gaining from a more rigorous management system for energy efficiency. Over a five-year period, both doubled the rate of energy productivity improvements in U.S. facilities that used the ISO 50001 framework.

Taiwan Semiconductor Manufacturing Co (TSMC) reported public energy productivity, water use, and waste targets to reduce wafer power usage to 12%, water usage by 30%, and outsourced unit waste output by 2020. Further, by 2025 TSMC commits to work with raw material suppliers to convert waste into electronic-grade chemicals.

Our goal is to provide results that can be used by investors as a benchmark of Best Eco-Efficiency Management Practices across sectors.

Coalition of 60 investors with $1 trillion in assets under management.

Investor collaboration is key in urging companies to cut their use of resources and increase their energy productivity. None of us can do it alone; we must join our voices together to inspire the change we want to see across companies and industries.

Brian Rice, Co-Acting Director of Corporate Governance, California State Teachers’ Retirement System (CalSTRS)

Alignment with Sustainable Development Goals (SDGs)

We measure the impact of our engagement work as it aligns with the UN Sustainable Development Goals – 17 ambitious goals set forth by the UN in 2015 to create a more sustainable and inclusive future. Our Eco-Efficiency initiative, overlaps with several of the Goals including:

- SDG 6 – Ensure availability and sustainable management of water and sanitation for all.
- SDG 7 – Ensure access to affordable, reliable, sustainable and modern energy for all.
- SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation.
- SDG 12 – Ensure sustainable consumption and production patterns.
- SDG 13 – Take urgent action to combat climate change and its impacts by regulating emissions and promoting developments in renewable energy.

Our goal is to provide results that can be used by investors as a benchmark of Best Eco-Efficiency Management Practices across sectors.

Impact with Standard Setting Organizations

The Sustainability Accounting Standards Board (SASB) mapped our Eco-Efficiency metrics vs. the SASB framework, including specific topics and quantitative metrics, to determine how companies communicate Eco-Efficiency performance across its industry-specific disclosure standards.

Ceres adapted Boston Common’s Eco-Efficiency framework in its new energy efficiency program. Boston Common also partnered with Ceres and US Department of Energy to introduce 50001 Ready program to various industries.

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Brian Rice, Co-Acting Director of Corporate Governance, California State Teachers’ Retirement System (CalSTRS)
Unlocking Opportunity: Five Key Findings

1. Measure and Report!

Most companies report on GHG emissions, water use, and waste metrics, but many do not report how they manage energy use. Yet energy management systems such as ISO 50001 can help companies double energy productivity by helping them act on their data effectively and ensure executive support.

2. Set Public Goals!

Adopting ambitious goals for energy and water use, and committing to eliminate wastes through circular economy systems, can galvanize companies to transform the productivity of their business operations. EP100 is a leadership standard for energy productivity goals.

3. Radically Redesign Capital Allocation!

Fair capital allocation for Eco-Efficiency investments seems to be the biggest internal barrier to improved performance. Companies are leaving “money on the table” if they don’t resolve internal capital competition for Eco-Efficiency through updated integrated tools for budgetary decision-making, planning and funding.

4. Align Corporate Culture!

The governance of sustainability can vary by corporate culture. A good governance framework allows a company to implement its Eco-Efficiency goals by properly setting the expectations of all constituencies: employees, investors, suppliers, and customers.

5. Assign Responsibility!

Explicit Board and executive leadership responsibility, oversight, and accountability for Eco-Efficiency is missing from most companies. However, corporate disclosure about board oversight on climate risk is a cornerstone of the Climate Action 100+ initiative and may lead to corporate improvements generally.

Overall Progress

<table>
<thead>
<tr>
<th>Investor questions4</th>
<th>Progress</th>
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<tbody>
<tr>
<td>Data/Analysis/Reporting</td>
<td>Strong</td>
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<tr>
<td>Goals and Targets</td>
<td>Weak</td>
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<tr>
<td>Capital Allocation</td>
<td>Average</td>
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<tr>
<td>Governance of Sustainability</td>
<td>Average</td>
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<tr>
<td>Board and Executive Accountability</td>
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Case Study

Air Liquide – A Dilemma and an Opportunity

We invested in Air Liquide because its industrial gas products and services have strong end-market growth potential by helping other companies be more Eco Efficient. However, Air Liquide itself was also one of our worst portfolio companies for total GHG emissions. We valued the company’s products and services but had serious concerns about the climate impacts of their processes. To resolve this contradiction, we decided to engage Air Liquide to improve its Eco-Efficiency practices and indirectly help other industries that rely on its products.

Air Liquide produces industrial gases used in many industries including health care, energy, electronics, and steel. These products help other companies – including polluting and high GHG emitters – to improve their process efficiencies. Air Liquide is also helping to lead over 50 energy, transport, and industrial gas companies to develop the use of hydrogen as a fuel, which, when burned with oxygen, hydrogen fuel produces zero emissions.

Yet our 2015 portfolio carbon footprint analysis for the Montreal Carbon Pledge showed Air Liquide ranked second worst among all our holdings, and was at the time ranked in the top 100 globally, for combined Scope 1 & 2 emissions. Air Liquide’s own large GHG emissions are primarily Scope 1 emissions from its own steam methane reformers and cogeneration units and Scope 2 emissions from purchased electricity used to separate oxygen, nitrogen, and other gases from the atmosphere.

In our initial engagement in 2016, Air Liquide said it was reaching engineering limits to improving the efficiency of its Air Separation Units (ASU) to extract oxygen, nitrogen, and other gases from the atmosphere. At that time, it was focusing on improving transportation logistics to reduce truck transport of gas products by using pipelines. However, in 2018 Air Liquide confirmed it was working to attain additional ASU efficiency, committed to adopt new energy efficiency targets, and was actively looking to further decarbonize its electricity supply. By November 2018, the company announced its objective to reduce its carbon intensity by 30% (between 2015–2025) and made a commitment to low-carbon growth.

In 2016, we also asked Air Liquide to undertake a water use and risk assessment for its entire global operations. They did this analysis for approximately 5% of its locations where water was scarce in 2016. We are pleased to report that in 2018 Air Liquide committed to perform the water risk and use assessment globally.

Air Liquide recently announced a new agreement to purchase 50 megawatts of renewable wind electricity in Texas from a subsidiary of NextEra Energy Resources, LLC. By using the wind-generated electricity, the company will save 1.5 million tons of CO2 emissions over the term of the agreement!

By challenging Air Liquide to take additional incremental steps toward efficiency improvements over a multi-year engagement, we are beginning to see results that are beneficial not only to the environment and the company’s bottom line, but also to other companies that use their products.

3 For more specific findings and leading practices, see page 10
4 See more details on page 14
Portfolio Company
Best Practices

Data/Analysis/Reporting

3M and Schneider Electric. Both companies implemented ISO 50001 energy management systems at select US facilities. Each doubled the rate of energy productivity improvements at these facilities vs “business as usual” facilities.

EGG Resources is rare among US E&P companies in that it reports to both CDP Climate and CDP Water. In EOG’s inaugural sustainability report in 2018, EOG reported methane emissions intensity figures for six primary methane sources.

Goals and Targets

Covestro committed in 2016 to double its energy productivity by 2030 vs 2005 baseline year as a founding member of the EP100 initiative. Companies can now join EP100 in other ways e.g. adopting energy efficiency targets that are time bound.

Air Liquide committed to adopt new energy efficiency targets after updating its GHG targets in late 2018. Air Liquide also committed to do group wide water risk assessment.

Cummins first adopted public GHG and energy efficiency goals in 2006. Cummins has saved $40 to $50 million a year on energy costs. Cummins has strengthened these targets and added water and waste targets.

PPG includes Eco-Efficiency goals for energy, water, GHG emissions and waste intensity in PPG’s corporate sustainability goals that it revised in 2018.

Capital Allocation

Johnson & Johnson helped resolve capital competition blocking energy efficiency projects in 2005 by creating an annual $40 million internal fund for projects globally, which has helped reduce its total GHG emissions by 20%.

Lowe’s is developing corporate-wide criteria to evaluate energy efficiency opportunities that will account for nonfinancial benefits.

National Grid uses a price on carbon for evaluating all new constructions projects to minimize embedded carbon, and therefore uses climate/carbon GHG wastes as part of its investment criteria for capital projects.

Origin Energy spent two years revamping its capital allocation process to align with its long-term sustainability goals. As a result, Origin did not bid for coal fired power plants on the market in Australia.

Governance of Sustainability

ConocoPhilips developed a multi-level climate change governance system from the board of directors and executive leadership to practitioners at field level.

3M through a central center integrates sustainability into strategic planning into every 3M market, region, and business. 3M’s groundbreaking “Pollution Prevention Pays” program has saved 3M nearly $2 billion since its 1975 launch.

International Flavors & Fragrances and Repsol use Circular Economy theme to underline their long-term sustainability strategies. This resulted in a savings to Repsol of $1 per barrel of refined products. Circular Economy is a powerful organizing theme for business strategy both for internal “wastes” and connections to other companies and industries.

Panasonic’s Green Factories initiative directs each factory to reduce its environmental impacts and share best practices worldwide.

Ecolab developed with TruCost and Microsoft the free Water Risk Monetizer tool for its own operations to assess risks efficiently and comprehensively across its global operations.

Board and Executive Accountability

Ford has a board committee devoted to innovation and sustainability topics. Ford’s CEO and Chair together lead Ford’s ingrained Creating Value Roadmap Process with senior leadership and stakeholder input.
Improving efficiency, unlocking returns

Next Steps

- Deepen “asks” of companies in the next phase of our Eco-Efficiency engagement, using a collaborative approach with companies designed to uncover the most effective questions to ask across industries.
- Continue to encourage companies to improve their Eco-Efficiency practices in measurable ways, specific to their businesses.
- Drive better disclosure and attention from company management.
- Incorporate Circular Economy strategies – the elimination of wastes and emissions – formally into our Eco-Efficiency dialogue questions.
- Develop a set of metrics that investors can use to gauge Eco-Efficiency performance, companies need to address all these areas.
- Convene multi-industry roundtables with investors and companies to share best practices and build investor support.

If energy and water efficiency and eliminating waste are so vital to improving returns and addressing climate change, why aren’t more companies already doing more?

Companies often need to remove internal barriers that thwart their goals and prevent cost-effective investments. Adopting goals and targets for improved resource efficiency and productivity are key but not sufficient. Barriers can include a lack of energy and water management systems, capital competition, poor governance of sustainability, and weak board and executive oversight. Therefore, to achieve superior performance, companies need to address all these areas.

This is what led Boston Common to form what is, in effect, an Eco-Efficiency governance framework, with the support of our investor coalition. We focused our effort on five main areas where companies can remove internal barriers to improve productivity and reduce resource use and waste.

1. Data, Analysis, and Reporting
2. Goals and Targets
3. Capital Allocation
4. Governance of Sustainability
5. Board and Executive Accountability

For each area, we identified the metrics and questions that would uncover best practices by companies. We then refined these questions through active, sustained dialogue with companies, industries, and investors.

Our goal is to provide results that can be used by investors as a benchmark of Best Eco-Efficiency Management Practices across sectors. It aligns with a key pathway to sustainability and the transformation of the industrial state identified in a new book by professors Nicholas Ashford (MIT) and Ralph Hall (Virginia Tech) to, “Meet essential human needs in a less-expensive and less-resource-intensive way by redesigning products, production, services, and systems.”

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3M and Schneider Electric’s US operations implemented the 50001 program over a five-year program and doubled the rate of energy productivity improvements vs. their “business-as-usual” facilities! Both companies were already leaders in internal Eco-Efficiency, and it is a major feature of their product lines. So it is especially impressive that 50001 enabled them to accelerate operational improvements so quickly. Both internal and external reporting are key for employees, management, stakeholders, and investors. We recommend that companies report total energy and water use annually via CDP in addition to their own sustainability reporting. Total use and intensity of use are two types of metrics.

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**Defining the Terms**

- **Energy Efficiency** = Using less energy per unit of work. For example, a company installs equipment that uses less energy to perform the same task.
- **Energy Productivity** = Doing or producing more using the same (or less) energy. For example, a company could reduce its waste by improving product design.

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Leading Practice Spotlight
Adopting Targets & Goals

Covestro, a plastics and polymer company, was a founding member of the EP100. The company committed in 2016 to double its energy productivity by 2030, from a 2005 baseline. PPG includes Eco-Efficiency goals for energy, water, GHG emissions, and waste intensity in PPG’s full slate of corporate sustainability goals that it revised in 2018.

2. Adopting Targets and Goals

We believe every company should adopt ambitious targets and goals related to Eco-Efficiency to drive greater performance and overall accountability. While reporting Eco-Efficiency performance is useful, targets indicate a company has a plan to improve over time and that the board or executive management has adopted an Eco-Efficiency policy. Ambitious, reach or stretch goals, can galvanize companies into action; setting public goals has a positive impact on corporate culture. Therefore, we asked companies to join the EP100 leadership program to commit to doubling their energy productivity in 20 years from a baseline year of their choosing. The EP100 is a sister program to the RE100, an initiative of over 100 companies committing to source 100% of their energy from renewable sources. The Alliance for Industrial Energy Efficiency found that 43% of 160 large US manufacturing companies have adopted energy efficiency goals, and 79% have climate change goals. As the carbon budget of the planet is finite, it is imperative that companies also set quotas or caps for their GHG emissions.

3. Capital Allocation

Public Eco-Efficiency goals create a budget for the company for natural resources use instead of treating them as externalities. This natural resource budget (for carbon, water, waste) can then frame capital allocation planning. However, capital competition is a key barrier to Eco-Efficiency investments. Energy efficiency investments may pay for themselves in just a few years, but a more immediate project with a higher financial return often gets funded instead, at the factory or regional level. A hurdle rate based only on capital costs may unfairly disadvantage Eco-Efficiency projects. It also shortchanges the company’s true strategic choices (risk/opportunity set) by being an incomplete and flawed measure of the company’s opportunity costs. A proper updated, integrated hurdle rate needs to reflect both the financial and the resource budgets in company-wide planning so that companies can reduce risks and capitalize on opportunities created by lowering future energy, water, and waste disposal costs. Leading companies have adopted a number of strategies to lean against such flawed decision-making, by instituting company-wide changes, such as an internal carbon price to properly drive capital allocation and product design.

(see Spotlight here and on Page 8 and 9 of this report)

4. Governance of Sustainability & 5. Board and Executive Accountability

“Getting Eco-Efficiency Done” requires the right internal governance of sustainability. However, the governance function can vary from company to company depending on corporate culture and industry. Governance of Sustainability starts at the top at the board level. In addition, long-term strategy set by the executive team needs mid-level managers aligned with the strategy and finally field and factory level practitioners to follow through and improve practices. At leading companies, the corporate culture of efficiency engages many constituencies in this quest: customers, suppliers, employees, investors, regulators, industry groups, community, and beyond. Circular Economy, for example, is a powerful organizing theme for business strategy, and has implications for both internal “wastes” and ties to other companies and industries, which can save money (see Spotlights and page 9). For example, 3M’s groundbreaking “Pollution Prevention Pays” program has saved the company nearly $2 billion since its 1975 launch.

The final puzzle piece to overcoming internal barriers is board and executive responsibility and accountability. The Top must take responsibility and ownership for Eco-Efficiency. They need to set the goals and long-term strategy but also monitor performance for Eco-Efficiency. Executive support was a key reason for companies adopting the 50001 energy management system, making remarkable energy productivity gains. Further, leading companies make Eco-Efficiency prominent in communications with investors and in their annual reports.

Investors too have a role to play in this transition. Long-term oriented investors can strengthen corporate resolve and performance by regularly asking companies to demonstrate their leadership in Eco-Efficiency, to ensure they are not “leaving money on the table” by not making more such investments. One company rep told us no investor has asked his IR department about energy efficiency. Another company rep wished investors would take a long-term view on Eco-Efficiency investments instead of a short-term focus on quarterly earnings.

Leading Practice Spotlight
Capital Allocation

Lowe’s is developing corporate-wide criteria to evaluate energy efficiency opportunities that will account for nonfinancial benefits. In 2005, Johnson & Johnson set up an annual, internal $40 million fund to pay for energy efficiency investments globally, unlocking the ability for plant managers to implement energy efficiency projects locally. Over time this has led to a 20% drop in carbon emissions. Origin Energy spent two years revising its capital allocation planning to align with its long-term sustainability strategy to support the transition to a low-carbon economy in Australia. As a result, Origin declined bidding on coal-fired power plants on the market, instead focusing on natural gas, renewables, battery storage, and phasing out its sole coal-fired power plant by 2032.


Committed to Savings: Major U.S. Manufacturers Set Public Goals for Energy Efficiency

Phase 1: We reviewed each company’s sustainability reporting and asked them to respond in detail to the 5 topic areas of our Eco-Efficiency Framework, with a focus on energy and water. We later asked a select group of companies to respond where their public disclosure was lacking in these areas.

1. Data, Analysis, and Reporting
   1a. How does the company collect and manage energy and water data?
   1b. Does the company have an internal reporting system for tracking and recording its energy and water use, and related savings – both direct and indirect – including GHG emissions?
   1c. Does the company respond to the CDP’s annual climate and water questionnaires?
   1d. Please describe how this information is integrated into the company’s public reporting.

2. Adopting Goals and Targets
   2a. Has the company adopted a carbon emissions reduction target or energy and water efficiency targets?
   2b. Are they publicly disclosed?
   2c. Are these targets specific, measurable, assignable, realistic, and time-related (SMART)?
   2d. Please provide some examples (e.g., shifting purchases of electricity from coal-fired power plants).
   2e. Has the company studied the benefits of doubling its energy productivity by 2030?
   2f. Would the company consider joining the EP100, the world’s leading companies that commit to doubling their energy productivity by 2030?

3. Capital Allocation
   3a. How does the company allocate capital for energy and water efficiency projects?
   3b. Does it use annual plans or centralized funding as opposed to factory- or plant-level funding?
   3c. Does it have a “green” revolving fund?
   3d. How does the company employ fair financial evaluation of energy and water efficiency projects?
   3e. Has the company explored issuing green bonds to finance its Eco-Efficiency investments?

4. Governance of Sustainability
   4a. Does the company assess corporate climate and water risks? Please provide some examples.
   4b. Is energy and water efficiency included in the company’s core business strategy, corporate policies, or operational guides?
   4c. Is the company active in industry groups, lobbying activities, or has the company made public statements to support energy and water efficiency?

5. Board & Executive Accountability
   5a. Is there board-level oversight for the company’s energy and water use, efficiency investments, and performance?
   5b. At what level does senior leadership provide active support, oversight, and accountability?

Investor Questions

Key Partners

Alliance for Industrial Energy Efficiency
Alliance to Save Energy
California State Teachers’ Retirement System (CalSTRS)
The Climate Group
ClimateWorks Australia
Ceres
CDP
Climate Action 100+
EP100

Environmental Defense Fund
Interfaith Center on Corporate Responsibility (ICCR)
Joele Frank
Lawrence Livermore National Laboratory
ONE Future
Principles for Responsible Investment (PRI)
RE100
Sustainability Accounting Standards Board (SASB)
U.S. Department of Energy

Appendix

Companies Engaged by Sector

Energy
Apache
ConocoPhillips
EOG Resources
Equinor (formerly Statoil)
Spectra Energy

Consumer Discretionary
BMW
Ford Motor Co.
Lowe’s Cos.
Panasonic

Health Care
Baxter International
Johnson & Johnson
Pfizer

Industrials
3M
Cummins
Kansas City Southern

Real Estate
Alexandria Real Estate Equities
Simon Property Group

Technology
Taiwan Semiconductor Mfg.

Utilities
Beijing Enterprise Water
ENN Energy
National Grid
Origin Energy
Veolia Environnement

Companies engaged in 2018 Eco-Efficiency Roundtable with Energy Companies:

Companies engaged in 2018 Eco-Efficiency Roundtable (Multi-Industry):
Alexandria Real Estate Equities, ConocoPhillips, Ford Motor Co, Johnson & Johnson, Noble Energy, and Pfizer
The information in this document should not be considered a recommendation to buy or sell any security. There is no assurance that any securities discussed in this report will remain in an account’s portfolio at the time you receive this document. The securities discussed do not represent an account’s entire portfolio and may represent only a small portion of an account’s holdings. It should not be assumed that any securities transactions we discuss were or will prove to be profitable. Past performance does not guarantee future results. All investments involve risk, including the risk of losing principal.

Timeline

2006–2008
First Engagements on Energy Efficient Vehicle Fleets & Small Cap REITs Buildings

2014–2015
Baxter International Dialogue
(Energy Efficiency and Shift from Coal Electricity)
Montreal Carbon Pledge
(carbon footprint portfolio assessment on core strategies)
Eco-Efficiency Framework Developed
(energy, water, waste) and Veolia & Simon Property Dialogues

2016
Formal Eco-Efficiency Engagement Initiative Launched with written inquiries to 12 companies & initial Air Liquide Dialogue

2017
Active Dialogues with key companies
(BMW, International Flavors & Fragrances, National Grid, Origin Energy, Panasonic)
Methane – PRI steering committee for new PRI engagement and ICCR leadership team
Joined Climate Action 100+

2016–2018
Methane Roundtables and ONE Future methane conference

2018
Eco-Efficiency Industry Roundtables
(Auto, Energy, Pharma, REIT participation)
Eco-Efficiency in Emerging Markets and Asia
(Beijing Enterprise Water, ENN, Panasonic)