BOSTON COMMON
ASSET MANAGEMENT

BOSTON
84 State Street, Suite 940
Boston, MA 02109
TEL (617) 720-5557
FAX (617) 720-5665

SAN FRANCISCO
111 Pine Street, Suite 1420
San Francisco, CA 94111
TEL (415) 757-5760
FAX (415) 233-4871

www.bostoncommonasset.com
invest@bostoncommonasset.com

Active Investor Social Update

Second Quarter, 2016

Less is More: Eco-Efficiency & Climate Change

Eco-Efficiency is "low-hanging fruit" for addressing global climate change, but many companies are missing opportunities to save energy and water and to reduce costs—perhaps due to lack of data or competing capital demands. While reducing wastes of all kinds is vital, **our immediate goal is to encourage our portfolio companies to achieve rapid, absolute reductions of greenhouse gas (GHG) emissions in their own operations and supply chains.** As investors for the long term, **our end-goal is to prompt companies to redesign their products and reconceptualize their processes in ways that are appropriate for the new era of carbon budgets and water shortages**. Furthermore, companies with products and processes that address the global challenge of climate change, **advance energy and water productivity**, and reduce emissions and waste will be critical to society's transition to a low-carbon future consistent with a 2°C or lower global warming goal.

As a starting point, we seek "Eco-Efficiency." The idea of Eco-Efficiency expands upon our engagement work over the years—in alliance with other investors— to encourage companies to adopt GHG emissions reduction targets and to report to CDP on their climate impact and water use and management. **We believe forward-thinking companies have the opportunity to take a unified approach to retooling their products, processes, and policies in order to achieve sustainable profitable growth. Companies can create desirable products that enable energy productivity**—and organize production in efficient, zero-waste ways that also improve margins. They can align operations and activities with sustainable natural resources. **Doing so will enable a win/win scenario for investors, communities, employees, and the planet.**

We are taking **a total portfolio approach**, engaging companies across all sectors, including those that rank in the top 1000 GHG emitters in the MSCI All Country World Index (ACWI) stock index universe. Our initial engagement focuses on targeted questions to learn (and encourage) best practices:

Public Policy Participation: *Steven Heim testified as an expert witness in Washington, D.C. before the Subcommittee on Energy and Mineral Resources of the U.S. House Committee on Natural Resources, as one of the co-authors of* "Disclosing the Facts: Transparency and Risk in Hydraulic Fracturing." *He spoke on the state of voluntary disclosure by the oil and gas industry on hydraulic fracturing operations.*

- **Data, Analysis, Reporting** – collecting, managing, tracking, and reporting on energy and water data, including emissions
- **Targets** – SMART (specific, measureable, assignable, realistic, and time-related) internal and external carbon emissions reduction, energy, and water efficiency targets; EP100 member
- **Capital Allocation** – allocating capital, types of funding, and fair financial evaluation of eco-efficiency projects
- **Governance of Sustainability** – assessing climate and water risks, incorporating Eco-Efficiency strategies and policies, and public lobbying
- **Board Leadership and Responsibility** – board oversight and senior management responsibility of the company's energy and water use, efficiency investments, and performance

We intend to aggregate and consolidate what we learn to benchmark company performance on Eco-Efficiency. We aim to publish our findings and engagement results in early 2017. Our goal is to **advance the conversation on Eco-Efficiency at the public level and through the advancement of best practice guidance.** We have successfully used this approach before. Previous examples of our work include collaborative publications "Extracting the Facts" and "Disclosing the Facts," which have increased transparency in hydraulic fracturing operations.

Inside the Issue

- ESG Company Spotlight: Croda..2
- Taking Antibiotics Off the Menu.......................................3
- Portfolio Carbon Footprint: The Montréal Pledge...........4

Active Investor Social Update

Second Quarter, 2016

Active Ownership Updates

ESG Company Spotlight: Croda

AT A GLANCE

Croda is a UK specialty chemical company that uses renewable, natural sources for approximately 70% of its raw materials to produce highly customized, small volume, high-margin ingredients for its consumer, healthcare, and industrial products, especially for the personal care industry. The company's ingredients are critical components but account for a fraction of the cost of its customers' final products.

ESG/SUSTAINABILITY

Croda incorporates product stewardship principles, including green chemistry, into the design and development of all new products, positioning the company to capitalize on increasing consumer demand. Recent innovations include a Volatile Organic Compound (VOC)-free water based coating and a bio-based ingredient that improves adhesion. Croda exceeded its goal of reducing VOC emissions at the group level by reducing total VOC emissions by 48.9% at its six sites with material VOC emissions, versus 2010. In our view, Croda's strong competitive position, targeted strategy, and attractive market niche make its valuation and ESG position look compelling.

ENGAGEMENT

We like Croda's commitment to green chemistry, but we believe there is room for improvement in Croda's corporate governance practices. While Croda has two women (including Chair, Anita Frew) on its board, we voted against Croda's Board of Directors slate in 2015 due to the lack of visible minority representation on its board. This followed our comprehensive proxy voting guidelines on board-level gender and racial diversity for select countries where this information is reported. A recent UK study found that the proportion of non-white senior managers of FTSE 100 companies has fallen slightly from the previous year.[1] Current research supports our view that there is a positive correlation between the levels of diversity and company financial performance.[2] We are encouraging Croda to revise its Directors nomination process to ensure that minority candidates are considered for open board positions.

SUSTAINED DIALOGUE

We formally **launched our Eco-Efficiency initiative** in June by sending letters to several U.S. and international portfolio companies: **International Flavors & Fragrance**, **Ecolab**, **3M**, **Panasonic**, **Akzo Nobel**, **Origin Energy**, and **Taiwan Semiconductor Manufacturing**. We raised the issue in person with **Panasonic's** CFO in June. In the coming months, we plan to engage additional portfolio companies in direct meetings and calls. **Ceres has adopted our framework to support a new energy efficiency campaign**, **encouraging companies to become members of the EP 100 and formalize their commitments to doubling energy productivity by 2030.** Energy Efficiency Global Forum 2016 (EEGF) launched the EP 100 in May. Steven Heim, as a speaker, helped industry, government, and NGO leaders at EEGF understand how Boston Common advances energy efficiency in constructing its portfolios and engaging with companies.

Our engagement with **CVS** paved the way for its **adoption of a Cosmetics Safety Policy in 2007**. We continue to deepen our dialogue with CVS, and encouraged the company to assess and report on chemicals in its supply chain. In April, Boston Common organized an investor call with CVS to discuss its progress toward chemicals safety; we **encouraged CVS to adopt a Restricted Substances List (RSL)** and commit to timelines for phasing out substances of concern. We asked the company to **expand its banned substances list, currently covering CVS baby care products, to include other CVS-brand household products**. The company aims to publish its RSL in 2016, which will cover 100 priority chemicals. CVS is also in the process of assessing supply chain exposure to unsafe chemicals through the tools of Purview and WERCsmart, which is in line with industry best practices. Through their new business partnership, CVS will leverage **Target's** experience and leading position in chemicals safety. CVS is in favor of a collaborative approach with NGOs and investors to help it identify safer alternatives to chemicals, and it is partnering with companies with national brands such as **Johnson & Johnson**, **Unilever**, and **Colgate Palmolive** to work on safer substitutes.

METRICS & SCORECARDS

In May, the **Chemical Footprint Project (CFP)** published its inaugural report. A group of 24 companies both small and large, including **Johnson & Johnson**, **Becton Dickinson**, **Seagate Technology**, **Levis Strauss**, and **California Baby** participated in the project and received scores on their corporate chemical management practices. T**he CFP is the first tool of its kind to publicly benchmark chemicals management.** Most importantly, the tool allows companies to better understand exposure to chemicals through their

[1] Treanor, Jill. "FTSE 100 Boardroom Diversity Set to Decline as Non-white Talent Pool Shrinks," www.theguardian.com, 21 June 2015

[2] McKinsey & Co., "Diversity Matters," January 2015

Active Investor Social Update

Second Quarter, 2016

Active Ownership Updates

supply chains and enables better management of this exposure in the future. Boston Common has been a CFP Project steering committee member since its launch in 2014. **We provided significant input toward the tool methodology development, as well as its use by companies.** Recently, Boston Common reached out to portfolio holdings **Mohawk**, **Unilever**, and **3M**, encouraging them to improve their chemicals disclosure practices by participating in the next round of the Chemical Footprint Project.

INTERNATIONAL COLLABORATION

Most of the meat we eat comes from factory farms. **Factory farming is now the biggest consumer of antibiotics globally with over 80% of antibiotic use in the U.S. and over 50% in UK being used for livestock production. This is in addition to global livestock as a whole releasing approximately 14.5% of all human-induced GHG emissions**.[3] Antibiotics are usually administered to farm animals daily not to treat illness, but rather to promote growth or to prevent common illnesses, which spread easily in the crowded environments of factory farms.

Academic research has established that the overuse of antibiotics in livestock is causing the development of antimicrobial-resistant bacteria that can spread to humans. It not only endangers human health, but also presents significant regulatory, reputational and financial risks, which if not adequately managed, can endanger a company's financial health. Antibiotic resistance costs the U.S. $20 billion annually, while a recent research paper from the UK government estimates drug resistant infections could cost the world $100 trillion in lost output by 2050.[4] Investors are increasingly interested in how food manufacturers and restaurants manage the use of antibiotics within their supply chains.

Boston Common and a $1 trillion coalition of 53 other investors are taking action by calling on ten of the U.S. and UK's largest restaurant chains to end the excessive use of antibiotics in their meat supply. The coalition is brought together by the Farm Animal Risk and Return (FAIRR) initiative and UK NGO ShareAction. For more details, watch Lauren Compere's interview on CNBC's Squawk Box Asia: http://video.cnbc.com/gallery/?video=3000508774

Taking Stock: Reflecting on the Quarter

Milestones	**Banks & Climate Change:** Boston's Common's 2016 bank engagement focused on new policies and practices. **Results following our October 2015 report include PNC's** second environmental stress test on short-, medium-, and long-term climate risk using Moody's environmental risks heat map; **TD Bank's enhanced disclosure of exposure to carbon intensive sectors**; and **HSBC's new climate change strategy policy** and sector-specific guidance on the metals and mining sector, including coal.
	Gender Diversity: Boston Common joined Pax World Investments and the Sustainability Group in withdrawing a gender diversity proposal at **Cognizant Technologies** after the **Board of Directors amended its Corporate Governance Guidelines to specify gender and other forms of diversity as considerations in director searches**. In addition, Cognizant agreed to update the language around board diversity in its 2016 proxy statement to better articulate its commitment to seeking out qualified women and minority director candidates.
Work in Progress	**Responsible Sourcing:** We met with the CEO of chocolate and cocoa producer **Barry Callebaut** to discuss how the company is **integrating responsible sourcing practices across its enterprise value chain** through specific policies that ensure **sustainable sourcing for cocoa, dairy products, sugar, palm oil, vanilla, and nuts**.
	Human Rights & Governance: During Governance Week in New York in June, we convened a Human Rights and Governance **Roundtable examining investors' role in holding companies accountable for their human rights policies and practices**—specifically with board of directors oversight and training and the role of internal and external auditors. **Apache Corp.** and **Microsoft Corporation** provided their perspectives in addressing human rights from their operations and suppliers up to the boardroom as best practices examples for others to emulate.
	Labor Standards in Agricultural Supply Chain: Our multi-year engagement on labor standards in the agricultural sector with several portfolio companies includes **Barry Callebaut**, **Mondelēz**, **PepsiCo**, and **Unilever**. This year, we will focus on **sustainable wages and child labor, with an estimated 98 million children found on smallholder farms, livestock production, fishing, and aquaculture**.[5]
New Initiatives	**Child Labor and Cobalt:** An estimated **40,000 children work in the mines in the Democratic Republic of the Congo's copper- and cobalt-rich province of Katanga** according to UNICEF. Boston Common is jointly **engaging ICT portfolio companies with potential exposure in their supply chain** due diligence procedures including **Apple**, **Microsoft**, and **Panasonic**.[6]

[3] FAO, "By the numbers: GHG emissions by livestock," http://www.fao.org/news/story/en/item/197623/icode/
[4] http://managedhealthcareexecutive.modernmedicine.com/managed-healthcare-executive/news/antibiotic-resistance-impact-cost-outcomes?page=full
[5] https://www.amnesty.org/en/documents/afr62/3183/2016/en/
[6] http://www.unicef.org/childsurvival/drcongo_62627.html

Active Investor Social Update

Second Quarter, 2016

Portfolio Carbon Footprint: Montréal Carbon Pledge[7]

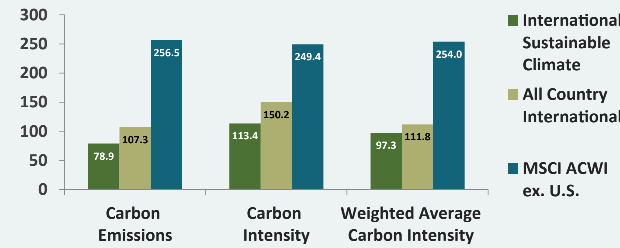
Last year, we took the first steps to **measure, disclose, and set a baseline for the carbon footprint of our portfolios** as an early signatory and ambassador for the **Montréal Carbon Pledge**, which is overseen by the UN-supported Principles for Responsible Investment. In our 2016 analysis, we add metrics on carbon intensity and weighted average intensity besides total greenhouse gas (GHG) emissions. The results show that **Boston Common's major strategies produce fewer emissions and are less carbon-intensive than their respective benchmarks, primarily due to stock selection rather than allocation. For example, our Sustainable Climate strategy produces 70% fewer emissions and is 62% less carbon-intensive (weighted average) than its benchmark.**

Our ESG approach excludes from our portfolios what we view as the riskiest, highest-emitting companies, and we analyze key sector-specific environmental factors. We seek to identify leaders and laggards and to select companies that provide solutions to environmental challenges. **We aim to support society's transition to a low-carbon economy over a manageable time horizon**.

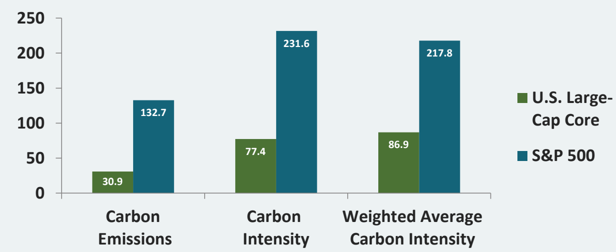
Assessing our portfolios' carbon footprints further informs our integrated ESG investment decision-making process and our engagement with portfolio companies. We recognize that **carbon footprinting is only one element of a much larger picture, since assessing environmental and climate risks and impact is only partly informed by total GHG emissions or carbon intensity**. Missing, for example, is how one company may help others avoid GHG emissions. Our forthcoming 2016 report will explore how analyzing a company's ability to effectively manage energy, water, and waste can help fill in the gaps until more sophisticated metrics such as avoided GHG emissions become available.

Note: Figures for 2016 not directly comparable to those presented in 2015 due to additional metrics & evolving methodology.

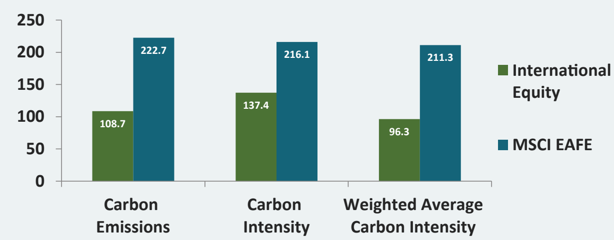
Tons of CO2e by $MM invested



- 70% fewer emissions: International Sustainable Climate
- 58% fewer emissions: All Country International



- 77% fewer emissions: U.S. Large-Cap Core



- 51% fewer emissions: International Equity

CARBON EMISSIONS →	**What is my portfolio's normalized carbon footprint per million dollars invested?**
CARBON INTENSITY →	**How efficient is my portfolio in terms of emissions per unit of output?**
WEIGHTED AVG. INTENSITY →	**What is my portfolio's exposure to carbon-intensive companies?**

Source: MSCI