THE ROLE OF INVESTORS IN REALIZING NATURE POSITIVE OUTCOMES

Over half of global GDP is moderately or highly dependent on nature. Yet most human economic activity not only undercuts the sustainability of nature by altering how land and oceans are used, but also exacerbates climate change, pollution, animal exploitation, and the spread of invasive non-native species. Scientists estimate that humanity has eradicated 83 percent of wild mammals, 80 percent of marine animals, 50 percent of plants and 15 percent of fish. The combined biomass of humans and livestock now far outstrips that of wild mammals. Our planet currently faces an unprecedented crisis of biodiversity loss as a result of the revolutions in humankind's agricultural and industrial behavior. We therefore need to look to the business community to identify and implement solutions that will help reverse the planet's biodiversity loss. Governments can help establish legislative and regulatory regimes to address these issues. Civil society and philanthropy can encourage investment in promising, cutting-edge, nature-forward technologies. But it is the business community that must be at the vanguard of the effort to address this planetary crisis.

Businesses directly impact biodiversity through their operations and supply chains and investors in those businesses therefore have a fundamental role to play in realizing the transition to a sustainable economy. According to the World Economic Forum, three socio-economic production and consumption systems — food, infrastructure, and energy — are responsible for the largest pressures on biodiversity. Approximately 80% of threatened and near-threatened species are currently endangered by these three systems with the impacts from food, land, and ocean use posing by far the greatest biodiversity threat. Accordingly, those companies that recognize the biodiversity-related risks to their companies and our planet, and actively work to transform their business models to support the regeneration of nature, can offer compelling investment opportunities for capital market participants. Through investment in solution-oriented companies operating in these three socio-economic systems, investors can help transform individual industries, build a more robust global economy, and ultimately ensure the vitality of our planet.

By harnessing the power of the capital markets, investors can also influence the policies and procedures of companies, altering their behavior and consequent impact on nature. The recent COP26 meeting held in Glasgow, Scotland sought to advance these very objectives. The problem, however, is

WHO WE ARE

Karner Blue Capital is an SEC-registered, woman majority-owned firm that designs and manages investment strategies dedicated to biodiversity, animal welfare and environmental stewardship. KBC was co-founded by two seasoned executives from the socially responsible investing space, Vicki Benjamin and Andrew Niebler.

Through research and corporate benchmarking, Karner Blue Capital is pioneering investment solutions centered around leaders in biodiversity and sustainability.

Vicki Benjamin, President
Prior to co-founding KBC, Ms. Benjamin served as a partner at KPMG for over ten years, later joining Calvert Investments as its Chief Financial Officer until KBC's inception in 2018.

Andrew Niebler, Executive VP
Prior to co-founding KBC, Mr. Niebler served in senior roles within the legal department at Calvert Investments, including General Counsel & SVP. He was also an international economist at the Federal Reserve Bank of NY.

Robert Clapham, ESG Research Analyst
Robert joined KBC in March 2019 and serves as an Equity and ESG Research Analyst. He holds a B.B.A in Finance & Statistics from George Washington University.

Karner Blue Capital, LLC
6931 Arlington Road
Suite 238
Bethesda, MD 20814

Connect With Us:

833-527-6372

info@karnerbluecapital.com

@Karner Blue Capital

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that governments face real-world limitations when their parochial interests' conflict with global concerns, even extremely urgent ones. In many ways the finance industry is better suited to quickly allocate the capital needed for transformational change by assessing risks and uncovering new business opportunities. The Biodiversity Finance Initiative of the United Nations Development Program and the Finance for Biodiversity Pledge are just two examples of promising new efforts to mobilize financial resources and develop innovative financial solutions. The Finance for Biodiversity Pledge is a commitment of financial institutions to protect and restore biodiversity through finance activities and investments. Pledge signatories engage with companies, assess the environmental impacts of corporate actions, and set nature-based targets. Currently the Pledge has been signed by 75 institutions that together represent €12 trillion in assets across 17 countries.

This type of investment approach requires investors to integrate biodiversity impacts and dependencies into their investment decision-making by accurately assessing the related risks, evaluating the efforts companies are making to manage those risks, and identifying new nature-forward business opportunities. The size and scope of the business operations of publicly traded companies make them a ripe target for this type of analysis. Even seemingly small improvements to the business models of large companies can significantly move the biodiversity preservation needle and enhance the outlook for the sustainability of our planet. This is especially true since **public equity is the biggest asset class in the sustainable investment universe, representing 51% of assets under management**, compared to annual impact investments in biodiversity conservation, which make up less than 0.5% of the total private equity impact investment market. The demand for differentiated triple bottom-line investment opportunities is also expected to rise with the ongoing intergenerational transfer of wealth. To meet this demand for green equity, investment managers will need to develop strategies that thoroughly evaluate public equities against both financial and sustainability criteria.

Nature-positive business opportunities within the three socio-economic systems previously noted could be worth more than **$10 trillion dollars per year and create 395 million jobs** by 2030. Technological innovation will be critical in aiding this transformation. For example, Google offers satellite imagery to map natural resources and prevent exploitation, while Intel has deployed smart grid solutions to lay the groundwork for sustainable cities. **The Group on Earth Observations (GEO) and Google Earth Engine (GEE) have announced 32 projects** to tackle some of the world's greatest challenges using open Earth data. Together with the United Nations Environment Programme (UNEP) and the United Nations Economic and Social Commission for Western Asia (UNESCWA), the GEO-GEE Program is supporting projects over the next two years that use the Google Earth Engine to address climate change and conduct disaster monitoring activities. Stakeholders around the world are also using Google Earth Engine to better understand environmental changes and to tackle some of the most pressing global issues ranging from forest degradation and flood monitoring to natural resource management and global climate change.

The sustainability of infrastructure is another area of high concern. The Intergovernmental Panel on Climate Change (IPCC) estimates that cities consume 78% of the world's energy and produce more than 70% of greenhouse gas emissions. Seven of every ten people are projected to live in cities by 2050, so urban areas can present unique

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opportunities to address climate and biodiversity challenges. Intel and their partners are leading the shift to open-software-defined smart city solutions that run on off-the-shelf hardware. [The Intel® Partner Marketplace]includes hundreds of smart city products, solutions, and service providers that can drive the growth of sustainable cities.

Important progress is being made to ensure that investors have access to reliable biodiversity and environmental data to incorporate into their company valuations. Last year, the European Union (EU) rolled out the new EU Taxonomy – an economic activity classification system designed to grow green investments – with the goal of advancing six environmental objectives: (i) climate change mitigation, (ii) climate change adaptation, (iii) sustainable use and protection of water and marine resources, (iv) transition to a circular economy, (v) pollution prevention and control, and (vi) protection and restoration of biodiversity and ecosystems. Entities subject to the EU Non-Financial Reporting Directive (NFRD) and the Sustainable Finance Disclosure Regulation (SFDR) are required to provide additional transparency regarding the alignment of their business activities with the EU Taxonomy. The first year of the Biden Administration has also seen a flurry of regulators embracing the notion of enhancing climate-related risk disclosures. While there have been few details regarding specific regulations, there appears to be a coordinated regulatory effort underway to acknowledge the financial impacts caused by climate change. The Securities and Exchange Commission recently issued a request for comment on how it should require companies to disclose “consistent, comparable, and reliable information on climate change” risks to investors. Similarly, the Treasury Department and the Federal Reserve have recently highlighted the staggering costs of extreme weather events and the financial tumult businesses, banks and investors might experience as the economy is weaned from its dependence on fossil fuels. The efforts by these regulators could result in significantly improved information flows and encourage the deployment of private capital to support the development of solutions for climate change and biodiversity loss. Similarly, the Taskforce on Nature-Related Financial Disclosures (TNFD) is working to develop a reporting framework through which companies can report and act on evolving nature-related risks and facilitate the flow of capital away from nature-harmful business practices and toward nature-positive business practices.

As these efforts continue to evolve, Karner Blue Capital is forging ahead with its efforts to be a force for nature through the incorporation of ESG and biodiversity criteria into its investment decision-making process. KBC’s mission is to earn competitive returns for its clients by investing in publicly traded companies that use innovative business models to generate industry-leading impacts regarding biodiversity preservation, climate change mitigation, and environmental stewardship. By identifying those companies that are leading their industries with respect to nature-positive policies and practices, Karner Blue Capital seeks to harness finance as a force for good and lay the foundation for a more sustainable and resilient society.

IMPORTANT DISCLOSURES

Karner Blue Capital, LLC ("KBC") is an investment adviser registered with the Securities and Exchange Commission that develops and manages ESG investment strategies with the intention of generating long-term total returns. Registration does not imply a certain level of skill or training. KBC only furnishes investment advice following its receipt of a fully-executed investment management agreement and its delivery of the Firm Brochure (Part 2A to Form ADV) and, if applicable, Form CRS (Part 3 to Form ADV) to the client. The receipt of this document by any consumer and/or prospective client does not constitute a solicitation to effect, or attempt to effect, transactions in securities or the rendering of personalized investment advice for compensation. The opinions expressed in this document (a) do not consider the particular investment objectives, financial situations, or needs of any investor, (b) are made as of January 25, 2022, (c) are not intended to forecast future events or guarantee future results, and (d) are subject to change without notice. The information included in this document has been obtained or derived from sources believed by KBC to be reliable, however, no representation or warranty, express or implied, is made as to the information's accuracy or completeness. An investor should obtain current information and perform due diligence before making any investment. The value of investments held in any account managed by KBC are subject to market fluctuations caused by, and the value of an account may therefore increase or decrease in response to, economic, financial, political and social events (whether real, expected or perceived) that affect the U.S. and global markets in general or a particular country, industry or company. Investing involves risk, including loss of principal, and there is no assurance that any KBC investment strategy will achieve its investment objective. An investment strategy that invests primarily in the equity securities and ADRs of companies that KBC believes, based on its proprietary research, are industry leaders with respect to biodiversity preservation, environmental management, and animal welfare practices may, under certain market conditions, underperform other investment strategies. For more information, please visit us online at www.karnerbluecapital.com