



**BRAEMAR**  
ENERGY VENTURES

**ESG & IMPACT  
REPORT  
2025**



# Reimagining...

...how we move, power, make and build with technology investments that drive massive impact in curbing global climate change.

## HISTORY

Braemar Energy Ventures was formed in 2003 to find, invest in, and scale transformative energy-tech businesses that contribute to global sustainability and combat climate change.

Over two decades, we have built a track record of impactful business partnerships that are revolutionizing the way people use energy and interact with energy infrastructure.



Braemar Castle was built in 1628 and has a unique significance as the only community-run castle in Scotland. For us at Braemar Energy Ventures, it is the perfect example of standing the test of time, all the while serving an important role in the community.

## SHARED MISSION

Our mission is to support teams of individuals rewriting the future of our world with breakthrough climate technologies and business models tackling the global energy transition to net-zero carbon. We commit to a more sustainable, resilient, and equitable global energy system for all stakeholders by backing early-stage companies and helping them scale to transform industry. In addition, we as a firm commit to constantly re-evaluate our own ways of thinking, working and governing ourselves, honoring open mindedness and open discourse as core contributing values.



Braemar has been an impact investor from its inception with the strong belief that the world needs market-driven innovative sustainable energy and environmental solutions that will improve the quality of life and security of citizens of the global community. Using our deep knowledge of this complex ecosystem, we help our portfolio companies build critical partnerships necessary to scale their solutions to meet the challenges posed by the devastating effects of climate change.

### BILL LESE

Co-founder and Managing Partner



# Global Energy Demand Surges

Energy demand across the world is surging, countering global efforts to decarbonize. Artificial intelligence and digitalization are expanding exponentially, increasing pressure on data centers to find new sources of power. Electricity demand is rising due to strong economic growth, increasing adoption of electric vehicles, and heat waves driving up the use of air conditioning. In emerging markets, population growth and the rise of the middle class are driving energy consumption to new levels.

To meet this demand, clean energy technologies must advance in new ways while mitigating greenhouse gas emissions. Braemar believes that addressing this global challenge will require innovation and new technologies across every sector of the economy, reinforcing Braemar’s commitment to investing in transformative solutions that answer the world’s most pressing needs.

**3X**

Increase in power needs of data centers by 2030, driven by AI and digitalization

McKinsey

**\$811 BIL.**

Annual investment required by 2030 to prepare the electric grid

BNEF



# Innovation to Meet the Moment

The twin imperatives of satisfying growing energy demand and reducing emissions create new opportunities, stretching beyond maturing clean energy technologies. New load demand, increasing electrification and aging energy infrastructure are pushing innovation to a wider range of sectors, including harder-to-abate industries such as steel and aviation. Accelerating modernization at the grid edge is central to ensuring connectivity and optimization of scarce resources.

Investment in energy solutions and growing interest in AI-based climate tech remain strong, particularly in the U.S. Despite softening in global climate tech investment overall, energy technologies increased their share of climate tech investments to 35% in 2024.<sup>1</sup>

**\$2.1 TRIL.**

Investment in the global energy transition in 2024

BNEF

**5X**

Increase in investment in global energy transition since 2016

BNEF

**65%–80%**

Low-carbon share of global power generation by 2050, up from 32% today

McKinsey

<sup>1</sup> PWC, 2024

# Working to benefit all stakeholders

We launched our formal ESG program in 2019 when we instituted our first ESG policy.

Since then we have further developed our approach by expanding aspects of our due diligence, ESG governance team, and reporting. Today our program is governed by our current policy, which covers ESG integration into the following broad processes:

**EXCLUSIONARY PRACTICE**

**INVESTMENT ANALYSIS AND DECISION-MAKING**

**ASSET OWNERSHIP**

**REPORTING AND DISCLOSURE**

**ACCOUNTABILITY AND TRANSPARENCY**

While our policy is a static depiction of our approach to ESG integration, we live and breathe ESG dynamically on a day-to-day basis. ESG concerns get raised and discussed by our management teams regularly, and we constantly re-evaluate ESG in our portfolio and engage with our portfolio leaders on ESG issues as they arise.

## IMPACT & ESG LEADS

Our ESG program is governed by Lori Collins, ESG Leader and Bill Lese, Managing Partner. Together they oversee all aspects of the ESG program and are responsible for the implementation of our Impact and ESG policy.



**LORI COLLINS**  
ESG Leader



**WILLIAM D. LESE**  
Managing Partner



[DOWNLOAD OUR IMPACT AND ESG POLICY HERE](#)



[DOWNLOAD OUR EMISSIONS REPORT HERE](#)

## UN PRINCIPLES FOR RESPONSIBLE INVESTMENT



We believe that transparency is important for our business and all of our stakeholders. Braemar Energy Ventures became a signatory to the UN Principles for Responsible Investment (PRI) in 2019 in an effort to align with best practice approaches to ESG and to help our stakeholders understand the central nature of ESG in our work.

## GLOBAL ESG FRAMEWORKS

While we participate in the UN PRI as our main framework for ESG reporting, we also look for opportunities to align with other ESG frameworks relevant to our business, including but not limited to:

- The Task Force on Climate-Related Financial Disclosures (TCFD)
- The UN Sustainable Development Goals (SDGs)

# Prioritizing People and the Environment

At Braemar, we have been engaging with our portfolio companies on ESG and impact related aspects of their businesses for decades.

We have taken steps to formalize our portfolio data tracking procedures with the goal of developing a comprehensive and referenceable baseline of ESG metrics for our companies. While we engage with all of our portfolio companies on ESG, we have embarked on a more formal program of metrics with a subset of our portfolio, including:



## Today, we track the following KPIs in our portfolio:



### EMPLOYEE

- Number and percentage of diverse employees
- Ratio of female to male board members
- Gender pay-gap



### ESG MANAGEMENT

- Diversity, Equity, and Inclusion Policy
- Employee Satisfaction tracking
- Data Security Policy
- Ecological impacts on surrounding communities
- Hazardous Waste Policy



### ESTIMATED GHG EMISSIONS

- Scope 1
- Scope 2
- Scope 3 (Business air travel and employee commute, with the exclusion of portfolio's supply chain emissions)



### POTENTIAL GHG IMPACT

- Reduction in tons of CO<sub>2</sub>e
- Reduction in tons of CO<sub>2</sub>e per employee
- Reduction in tons of CO<sub>2</sub>e per dollar of revenue

A blue-tinted photograph of an industrial facility, likely a refinery or chemical plant. The image shows a complex network of metal structures, pipes, and walkways. In the foreground, a worker wearing a white hard hat and safety gear stands on a metal walkway, looking towards the left. The background is filled with more industrial equipment, including large cylindrical tanks and intricate piping systems. The overall scene is dimly lit, with a strong blue color cast.

**ESG IN ACTION**  
Case Studies in Impact



## Revolutionizing Calcium Carbonate for a Sustainable Future

### ENDUROCAL: THE WORLD'S FIRST ZERO-CARBON FOOTPRINT MINERAL

#### What is endurocal?

endurocal is the first-of-its-kind zero-carbon calcium carbonate, designed to replace conventional calcium carbonates, either precipitated calcium carbonate (PCC) or ground calcium carbonate (GCC) in multiple industries. Manufactured using recycled CO<sub>2</sub> and a variety of low carbon recycled calcium sources, endurocal not only delivers superior performance but also significantly reduces environmental impact.



#### Key Benefits of endurocal

- **Zero Carbon Footprint** – Unlike traditional calcium carbonate products, endurocal is manufactured without contributing to greenhouse gas emissions.
- **Drop-in Replacement** – Can seamlessly integrate into existing formulations in industries such as food, pharmaceuticals, nutraceuticals, coatings, and plastics.
- **Performance Enhancement** – Offers increased brightness, superior particle control, and high purity for industrial and consumer applications.
- **Scalable & Cost-Effective** – A commercially viable solution that helps businesses meet sustainability targets without compromising product quality.

#### Decarbonizing Key Industries

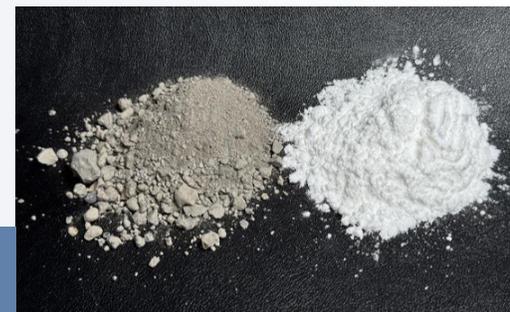
endurocal is poised to disrupt the \$11.5B U.S. calcium carbonate market, providing sustainable alternatives for industries that are prioritizing carbon reduction:

- Paints & Coatings** – Improves opacity, enhances durability, and reduces reliance on energy-intensive white pigments like titanium dioxide.
- Plastics** – Enhances strength, impact resistance, and thermal properties while enabling higher recycled content.
- Food & Nutraceuticals** – Used for calcium fortification, anti-caking, and pH stabilization in food products and dietary supplements.
- Pharmaceuticals** – Functions as an excipient, antacid, and buffering agent in medication formulations.

#### Delivering ESG Impact

endurocal supports global sustainability efforts by eliminating the high carbon footprint associated with traditional calcium carbonate production. As industries move toward Scope 3 emissions reduction, endurocal provides a direct pathway to achieving lower-carbon supply chains.

With endurocal, sustainability and performance go hand in hand—offering industries a powerful tool to meet both regulatory and market-driven environmental goals.



Calcium carbonate pulled out of thin air.



Braemar Energy Ventures shares our belief that sustainability and profitability go hand in hand. Their investment strengthens our ability to deploy our SkyCycle™ technology and endurocal® production at scale, helping industries transition towards a low-carbon future without compromising economic growth. As we advance our mission, we remain committed to innovation and collaboration – ensuring that industrial CO<sub>2</sub> emissions become a resource for the future, not a burden on it.

**MARTIN KEIGHLEY**

Chief Executive Officer, CarbonFree



## Market Leader for EV Charging Solutions

ChargePoint is a leading provider of networked charging solutions for electric vehicles (EVs) operating in 16 countries across North America and Europe.

With over 1 million places to charge across public, private and roaming ports and thousands of customers (businesses, public agencies, and fleet owners), ChargePoint is the only charging technology company on the market that designs, develops and manufactures hardware and software solutions across every use case.

Leading EV hardware makers and other partners rely on the ChargePoint network to make charging station details available online and in mobile apps and navigation systems for popular EVs.



### Driving the electrification of mobility

#### ChargePoint is delivering on its mission with:

- Real-time access to environmental impact data that provides businesses, fleet managers, multifamily property owners and drivers with actionable information to achieve their sustainability goals
- The first ENERGY STAR® certified EV commercial and residential charging stations on the market
- Expanded access to hundreds of thousands of additional places to charge through roaming agreements and integrations in North America and Europe.

### Achievements to Date

12.9B electric miles enabled

295M charges delivered to date

Drivers on the ChargePoint network have avoided:

499M+ gallons of gasoline

2.8M metric tons of GHG emissions

Equivalent to\*:

Energy use in 376K homes for one year

Planting 46M+ tree seedlings and letting them grow for 10 years

Recycling 238M trash bags of waste

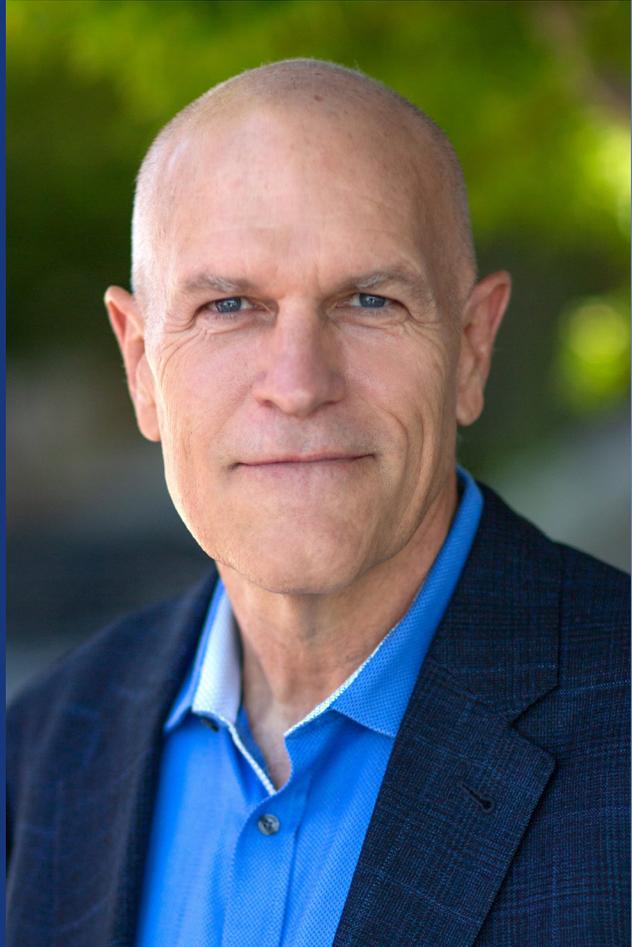
### A leader in North America and paving the way in Europe

329K+ places to charge on the ChargePoint network

828K+ places to charge through roaming integrations with other networks

14 major auto manufacturer integrations

\* Calculated using EPA GHG Equivalencies Calculator



The electrification of transportation continues to play a critical role toward a more sustainable future. At ChargePoint, we are committed to making the transition to electric as simple as possible for all drivers. Our focus remains on ensuring charging is accessible and reliable so that every driver who needs to charge can do so.

**RICK WILMER**

Chief Executive Officer, ChargePoint





# Global technology enabling low-carbon fuels and chemicals production from waste

Enerkem’s proprietary technology converts non-recyclable waste and biomass residues into methanol and other widely used chemicals.

Headquartered in Montreal, Canada, Enerkem pioneered the world’s first commercial-scale demonstration plant converting waste into biofuels in Alberta. Projects in construction or in development across North America and Europe are built on its exclusive technology platform. Enerkem exemplifies the potential of a circular economy by offering an innovative alternative to landfilling and incineration and provides a solution for the energy transition in hard-to-abate sectors.

## Empowering hard-to-abate sectors to reach their net-zero targets

Hard-to-abate sectors account for over 30% of global greenhouse gas emissions (GHG) emissions. In the search for sustainable energy solutions, strategies like electrification can be impractical for certain industries due to their unique characteristics and energy demands. Hard-to-abate sectors, such as shipping, aviation, off-grid energy systems or traditional chemical production, remain heavily reliant on fossil fuel-based feedstocks and energy. Enerkem’s versatile technology offers a transformative opportunity to produce sustainable fuels and chemicals for these sectors.

Marine transportation struggles to cut emissions due to its heavy reliance on fossil fuels. The challenges stem from factors such as the long operational lifespan of vessels, the complexity of global supply chains, and the lack of standardized regulation. Enerkem provides a solution through sustainable methanol for use in various engine types, including dual-fuel engines and direct injection systems, significantly reducing GHG and other pollutants compared to traditional marine fuels.

### VARENNES CARBON RECYCLING (VCR) | [LEARN MORE HERE »](#)

#### The future of maritime transport: Waste-to-Fuels

VCR uses Enerkem’s innovative process to produce biofuels and circular chemicals from non-recyclable waste and residual biomass. Scheduled to be operational in 2026, expected results include:

**200,000**

tonnes of non-recyclable waste and residual biomass to be treated per year

**125 MILLION**

liters of biofuels and circular chemicals to be produced per year

**170,000**

tonnes of CO<sub>2</sub> equivalent of GHG emission reductions per year

The quantities VCR will produce are intended to help maritime transport go green. Biomethanol is the ship fuel with the lowest carbon footprint. Production will help reduce GHGs worldwide.

*VCR project in Varennes, Quebec, Canada*





Through its waste-to-sustainable fuels platform and environmentally sound technology, Enerkem stands at the forefront of the energy transition. We intend to set forth a blueprint for resilience and sustainability in the energy landscape, particularly for hard-to-abate sectors.

**MICHEL CHORNET**

Chief Executive Officer, Enerkem

# generalfusion

General Fusion is a world leader in the global race to commercialize fusion energy

With over two decades of technology development, the company's practical Magnetized Target Fusion (MTF) technology is designed to provide cost-efficient, clean baseload energy.



LM26 will compress plasmas at large scale to achieve key technical milestones

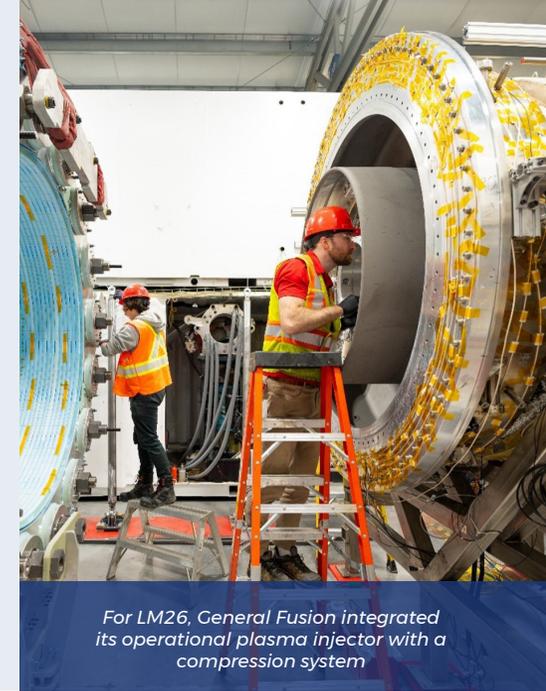
## Transformative Lawson Machine 26 (LM26) is assembled and ready to start operations

General Fusion completed the assembly of its LM26 fusion demonstration machine in December 2024, targeting transformational technical milestones that position the company to provide zero-carbon fusion power to the grid by the early to mid-2030s. LM26 is designed to ultimately achieve scientific breakeven equivalent (100% Lawson criterion).

Demonstration program builds on a solid foundation of peer-reviewed plasma compression research

General Fusion's groundbreaking plasma compression achievements were published in 2024 in the scientific journal *Nuclear Fusion*, demonstrating the feasibility of their MTF technology.

The peer-reviewed results validate and de-risk LM26, confirming that mechanically compressing plasmas can significantly increase neutron yield and that volumetric compression of a spherical tokamak plasma is practical. This success gives the company confidence in its large-scale fusion yield targets.



For LM26, General Fusion integrated its operational plasma injector with a compression system

## Third party analyses support General Fusion's MTF path to commercialization

General Fusion's unique MTF design, supported by analyses from UK Atomic Energy Authority (UKAEA) and Savannah River National Laboratory (SRNL), effectively addresses key barriers to commercial fusion power, including sustainable tritium production and the 'first wall problem.'

The UKAEA's modelling shows that General Fusion can generate sufficient tritium for its operational lifespan, a scarce resource that is crucial for self-sustaining fusion fuel. The SRNL study highlights that General Fusion requires less tritium for start-up, breeds tritium faster for subsequent plants, and achieves a higher breeding ratio compared to traditional tokamaks.

General Fusion's innovative liquid metal wall technology also mitigates neutron damage, enhancing efficiency and reducing costs by minimizing the need for equipment replacements. This addresses the "first wall problem" – the damage fusion machine vessels incur when bombarded with neutrons produced by fusion.



In 2024, General Fusion made significant strides towards transforming the global energy system with practical MTF. Our LM26 machine showcased our scaling and fusion engineering capabilities. Peer-reviewed science and analyses confirmed the advantages of our technology. A General Fusion MTF power plant will uniquely address challenges in fusion power commercialization by sustainably producing fuel and reliably harnessing fusion energy. Soon, LM26 will start compressing plasmas on a large scale, paving the way for a landmark year as we near key fusion temperature thresholds and aim for 100% Lawson.

**GREG TWINNEY**

Chief Executive Officer, General Fusion



## Sustainable home improvement projects with a bold vision

Renew Financial is the pioneer and one of the nation’s leading Residential Property Assessed Clean Energy (R-PACE) financing providers for sustainable home improvement projects.

The Company has a bold vision to create equitable financial access to a safe, healthy, and sustainable world.

The R-PACE financing model was designed by Renew Financial to enable homeowners to access low-cost, upfront financing for energy efficiency, renewable energy, water conservation, and safety improvements. R-PACE is also a powerful resource that enables state and local governments to meet important sustainability goals due to the program’s ability to help local governments advance key policy priorities, such as natural disaster preparation, reduced carbon emissions, higher energy savings, and water conservation.

### R-PACE Program

Renew Financial administers the R-PACE program in California and Florida to provide affordable financing for home upgrades to millions of homeowners in those states.

R-PACE allows homeowners to make energy efficiency, renewable energy and climate resiliency home improvements with no money down. Financing is paid back over time as part of the homeowner’s property taxes. Projects may include solar, HVAC, roofing, hurricane and earthquake protection, windows and doors.

Renew Financial has funded more than \$1.9 billion in R-PACE projects to date providing significant reductions in greenhouse gas emissions.



**2.0 Million**  
Metric Tons Lifetime GHG Emissions Reductions  
for total projects installed

Equivalent to:

**431,000**  
Cars no longer on the road

**2.7 Billion**  
Gallons of Water Saved

Renew Financial’s total GHG reductions for 2024:

**5,326**  
Tonnes CO<sub>2</sub>e/year for 6,250 projects



As energy costs rise and extreme weather events increasingly threaten homes, American homeowners are turning to upgrades that reduce energy consumption, lower utility costs, and safeguard their families and their most significant investment. Renew Financial, through the residential PACE (R-PACE) program, leads this effort by providing homeowners from all backgrounds with an accessible path to afford essential home upgrades—helping them save energy, reduce costs, and strengthen their homes and their communities against the elements.

**VINAY GUPTA**

Chief Executive Officer, Renew Financial



# Capturing a generational opportunity at the grid edge

Utilidata is an AI-powered technology company that provides utilities with robust, real-time insights to operate a connected grid and better serve their customers.

The company's patented grid optimization technology enables real-time insights and interventions on the electric grid to increase grid efficiency and better detect grid anomalies. The company's distributed AI platform, Karman, is built on a custom NVIDIA module and provides unparalleled processing power to transform the way utilities operate. Karman unlocks robust data currently trapped at every endpoint to accelerate decarbonization and bring more value to utility customers. With AI models running and learning locally, Karman can identify, classify, and predict grid conditions and manage distributed energy resources in real-time. Karman makes it easy to turn existing grid hardware into software-defined AI infrastructure, starting with smart meters. The company has partnered with Aclara, a division of utility solutions provider Hubbell, to offer an AI-enabled smart meter starting in 2025.

## Climate Impact

Today, Utilidata's grid optimization software delivers 3-5% energy savings across all electric distribution grid circuits that it operates, which results in substantial GHG emissions reductions.

The company's distributed AI platform, Karman, will increase the amount of distributed clean energy that can be connected to the distribution grid. The technology is accelerating decarbonization and electrification, which will ultimately have a tremendous climate impact. The company's software solutions will streamline the ways in which EVs interact with the grid, further advancing the transition to electrified transportation, and will enable communities to become far more resilient in the face of climate disasters. Utilidata will enable utilities to take a much more precise approach to forced outages, mitigating severe blackouts that have impacted communities.

Karman turns existing grid hardware into software-defined AI infrastructure



Partnered with NVIDIA to deploy a game-changing system-on-a-module



Karman Platform

Utilidata's total GHG reduction for 2024:

297,932 tonnes CO<sub>2</sub>e

These reductions in tonnes CO<sub>2</sub>e per year are equivalent\* to:

69,494  
gasoline-powered passenger  
vehicles driven for one year

62,088  
homes' electricity use  
for one year

105,276  
tons of waste recycled  
instead of landfilled

89  
wind turbines running  
for a year

\* EPA Greenhouse Gas Equivalencies Calculator



AI is driving the future of energy, optimizing the grid for greater efficiency, sustainability, and resilience. Our technology solutions enable significant energy savings and seamless integration of renewables like solar and EVs, accelerating a more cost-effective clean energy transition. This is the power of AI-driven innovation, shaping a smarter and more sustainable energy future.

**JOSH BRUMBERGER**

Chief Executive Officer, Utilidata



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