

An Exciting Third Act of Climate Impact

If you think about Bill Gates's legacy, two remarkable achievements come to mind. First, Microsoft, which he cofounded with Paul Allen as a small software startup and is now one of the most valuable companies in the world. Second, the Bill & Melinda Gates Foundation, one of the world's largest philanthropic organizations. What could possibly stand alongside both of those? Breakthrough Energy (BE) is becoming a strong contender.

Bill founded BE in 2015. It aims to speed up innovations in climate technology that can reduce or eliminate the green premium hindering many of today's decarbonization efforts. The [recent Breakthrough Energy Summit](#) in London included 1,500 innovators, entrepreneurs, corporate leaders, financiers, and philanthropists—and a team of a dozen of us from BCG led by Christoph.

BE zeroes in on the [five grand challenges](#) that are the primary sources of greenhouse gas emissions: transportation, electricity, agriculture, manufacturing, and buildings. In 2021, BCG became a founding partner of Breakthrough Energy Catalyst, BE's effort to provide catalytic capital to fund first-of-a-kind, at-scale climate innovations.

Powerful Participants

BE's enormous progress in nine years was on display and at the center of conversations at the summit. We took part in a range of these, including a pre-event with CEOs that featured Bill Gates and John Podesta, the White House's global representative on climate. They were great talks, particularly Bill's with Christoph about the technological progress to date and the global investment and collaboration needed for the future.

On the main stage, [Eric Toone's review of the state of climate technology](#) was fascinating. And I enjoyed leading the Moving Forward panel with

John Kerry, John Doerr, and Kerstin Jorna, the EC director-general supporting the single market of the EU. Kerstin's overview of the EC's new Net-Zero Industry Act was particularly encouraging.

Innovations Getting Off the Ground

For me, the highlight was walking through the exhibition halls, where 80 of BE's 120 portfolio companies were sharing their technologies and talking to corporate leaders about how they could collaborate to go faster. I can't do justice to them all, but here's a half-dozen that give a sense of the impressive range and ambition:

- **Alpine Bio**, a leader in molecular farming, has created a plant-based cheese with the same stretch and melt—and many of the same nutrients—as the original.
- **CarbonCure's** technology systems have been licensed by more than 800 concrete producers, allowing them to use captured CO₂ to produce reliable, low-carbon concrete mixes.
- **MagLev Aero** uses magnetic levitation for safer, quieter, more efficient, and faster aircraft for urban air transit.
- **Mill** turns food waste into clean, dry grounds, bringing easy—and odorless—composting to consumers' homes.
- **Source** uses solar panels to pull pure water vapor from the air and turn it into high-quality drinking water.
- **Veir** combines superconductors with a novel cooling system that can deliver 5 to 10 times more power over the same transmission corridor, speeding progress toward a decarbonized grid.

Of course, we all know most new tech doesn't make the journey from lab bench to global impact, and BE's portfolio companies will face those challenges, too. But the BE community includes a remarkable set of leaders committed to supporting each business and de-risking the tech that shows great promise. Even if only a portion of these companies reach global scale, BE will have enabled significant, affordable climate impact.

All that gives me genuine hope for the future, despite the fraught politics of the moment. I'm also feeling encouraged by the accelerating climate tech investing happening outside the BE community, including B-Capital's upcoming climate and sustainability fund, where I will be vice-chair.

But as much as I want early-stage investors to do well, I care just as much that today's leading businesses understand that amazing climate tech is coming faster than most expect. They need to be thinking about how to partner and invest to meet their commitments and support their

customers.

When companies with global scale work with great innovators to solve humanity's biggest challenge, we will surprise ourselves by how much we can achieve.

Thank you, Bill, for creating Breakthrough Energy, an Act III befitting your unique legacy. We at BCG are proud to be a part of this journey with you, your colleagues, and your portfolio companies.

Until next time,



Rich Lesser
Global Chair

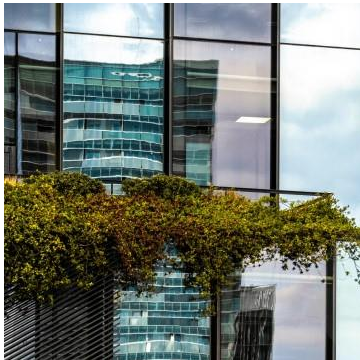
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Boosting Demand for Carbon Dioxide Removal

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