



Chevron Technology Ventures Portfolio Update

Chevron is committed organizational capability, technology, and venture capital to pursue new and promising lower-carbon opportunities.

Chevron Technology Ventures (CTV) was launched in 1999 to identify and integrate externally developed technologies with the potential to enhance the way Chevron produces and delivers affordable, reliable, and ever-cleaner energy now and into the future.

[20 Things to Know About Chevron Technology Ventures — Chevron.com](#)

CTV engages a range of startup companies, investors, incubators, and accelerators to access external technologies that can be used across our businesses to enable Chevron to operate with higher efficiencies and productivity and with lower environmental impact and safety risk.

Chevron's Core Venture Fund invests in technologies with the potential to add efficiencies to Chevron's core business in the areas of operational enhancement, digitalization, and lower-carbon operations.

In 2018, CTV launched the Future Energy Fund with an initial commitment of \$100 million to invest in innovative startups with the potential to play a critical role in an energy system that is increasingly electrified, decarbonized, digitized, and decentralized. We make investments in the areas of macro decarbonization, the mobility-energy nexus, and energy decentralization.

[Chevron Technology Ventures Launches Future Energy Fund — Chevron.com](#)



"What we are doing with the Future Energy Fund is part of a broader effort to produce and deliver affordable, reliable and ever-cleaner energy. As part of the broader effort, Chevron has committed to reduce the carbon intensity of our operations and increase renewables and offsets in support of our business."

--- Barbara Burger, VP, Innovation and President of Technology Ventures at Chevron

[Chevron advancing industry tech with Future Energy Fund - BIC Magazine](#)

For Chevron, reducing the carbon intensity of oil and gas represents a tremendous opportunity to advance the global net zero ambitions of the Paris Agreement. Here we highlight some of Chevron's venture capital investments in low carbon technologies.



In 2020, Chevron invested in Blue Planet Systems Corporation, a startup company in San Jose, California that is developing technology, products and services related to carbon capture and mineralization, whereby carbon dioxide (CO₂) is permanently sequestered in building materials for beneficial reuse, specifically as aggregate for concrete.



In 2020, Chevron invested in Carbon Clean Solutions Limited, a company focused on low-cost carbon dioxide (CO₂) separation technology for industrial and gas treating applications. The company's patented APBS technology reduces the costs of CO₂ separation, when compared to existing techniques. CCSL was awarded a 'Technology Pioneer' award by the World Economic Forum in 2015. The technology has been proven at demonstration scale in over 10 locations, including the UK, U.S., Germany, India, Norway, and the Netherlands.



In 2019, Chevron invested in Carbon Engineering, a Canadian-based clean energy company working on the commercialization of technology that captures CO₂ directly from the atmosphere, and synthesizes it into clean, affordable transportation fuels. From a pilot plant in Squamish, B.C., CE has been removing CO₂ from the atmosphere since 2015 and converting it into fuels since 2017.



In 2018, Chevron invested in ChargePoint, the leading electric vehicle (EV) charging network with charging solutions in every category where EV drivers charge - at home, work, and on the road. ChargePoint provides access to hundreds-of-thousands of charging stations in North America and Europe with more than 85 million charging sessions delivered, as of January 2021.



In 2019, Chevron invested in Emerald, a globally recognized investment firm in the areas of energy, water, advanced materials, and industrial IT. Since 2000, Emerald has raised five venture capital funds, backed 70 emerging industrial technology

leaders through more than 400 venture investment transactions, and managed five third-party investment mandates, providing loan guarantees for more than 100 startups.



In 2019, Chevron invested in Infinitum Electric, a Texas-based company re-engineering aspects of traditional motor technology, providing products that decrease carbon footprint and improve performance, reliability, and cost. Infinitum's customers are producers of HVAC, industrial, mobility, and consumer goods products.



In 2020, Chevron invested in Natron Energy, a spin-out from research originally performed at Stanford University. Natron is developing new battery products for mission critical stationary applications including data-center UPS, electric forklifts, smart grids/microgrids, and renewables support. Natron's batteries survive tens of thousands of deep discharge cycles, can be fully charged or discharged in just minutes, and cost significantly less than incumbent lead acid batteries.



In 2019, Chevron invested in Spear Power Systems, a battery technology company providing advanced energy storage solutions for maritime, aerospace, and industrial applications across the globe. Spear delivers the cell, battery pack, or integrated energy storage system needed to provide the highest value in terms of cost, performance, and reliability.



In 2020, Chevron commissioned a pre-front end engineering design (pre-FEED) study with Svante, a company developing carbon capture technology. With the ability to capture CO₂ directly from industrial sources at less than half the capital cost of existing solutions, Svante has the potential to deliver commercial-scale carbon capture to global industries.



In 2020, Chevron invested in Vutility, a provider of real-time, high-resolution, energy monitoring solutions. The technology enables businesses to optimize their energy consumption and improve operational efficiencies.



In 2019, Chevron invested in Voyage, a Palo Alto, California-based startup company with the mission to build the technology to bring autonomous transportation to those who need it most. Voyage's technology and services are currently focused on mobility in retirement communities.



ZAP ENERGY

In 2020, Chevron invested in Zap Energy, a Seattle-based company developing plasma confinement technology as an extension of work originally pioneered at the University of Washington and Lawrence Livermore National Laboratory and funded by the U.S. Department of Energy. By stabilizing the plasma with a sheared flow — with plasma flowing at different velocities at different radii — the high-temperature, high-density reactive medium can be confined long enough for fusion reactions to occur.

In addition to CTV's portfolio of low-carbon technologies, Chevron is a member of the Oil and Gas Climate Initiative (OGCI) with \$100 million committed to OGCI Climate Investments, a US\$1B+ fund investing in technologies and projects that accelerate decarbonization in oil and gas, industry, and commercial transport.

Chevron continues to focus our capabilities toward investing in innovation that adds efficiencies to Chevron's core business and supports technologies with the potential to play a critical role in an evolving energy system.