



**technology ventures**

# **future energy funds**

**investing in innovation with potential to play a critical role in the future energy system**

## **industrial decarbonization**



**integrate emerging low-carbon technologies such as carbon capture, utilization and storage (CCUS) and hydrogen into hard-to-abate sectors**

## **emerging mobility**



**lower the carbon intensity of transporting people and goods, applying innovation to emerging platforms, infrastructure, energy storage and future fuels**

## **energy decentralization**



**support development of localized and modular solutions for both power generation and consumption**

## **circular carbon economy**



**advance the transition toward more resilient and sustainable energy systems, with a focus on carbon-to-product and waste-to-product innovation**

Since 1999, Chevron Technology Ventures has been investing in startups across a wide cross section of energy innovation and has a track record of collaboration to bring innovation to scale. Our future energy funds, the most recent of which launched in February 2021, have committed \$400 million to invest in companies with low-carbon technologies.

## future energy fund investments



Aurora Hydrogen is an Edmonton, Canada-based startup, developing and commercializing a hydrogen production technology that uses methane as a feedstock and leverages potentially more efficient microwave-energy based pyrolysis for conversion. The byproduct from this process is solid carbon which is easier to capture and sequester than CO<sub>2</sub>, which is often produced in more conventional technologies.



ChargePoint is 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.



Blue Planet Systems Corporation is a startup company in San Jose, California, that is developing technology, products and services related to carbon capture and mineralization, whereby carbon dioxide (CO<sub>2</sub>) is expected to be permanently sequestered in building materials for beneficial reuse, specifically as aggregate for concrete.



Enmacc GmbH is a German-based company that powers a platform that has the potential to improve efficiencies for trading gas, power and lower carbon commodities. The platform increases transparency while also providing new and smaller energy traders access to wholesale markets.



Boomitra is a Mountain View, California-based startup that is developing an AgTech platform technology designed to efficiently and cost-effectively grow the supply of carbon offsets to meet increasing demand.



GR3N is a Swiss-based startup. The company is developing plastics recycling technology to enable chemical recycling of PET-based waste that's generated from plastics widely used in single-use food and beverage packaging. GR3N has the potential to both help lower the carbon footprint of plastics manufacturing while also supporting a broader global circular economy related to plastics.



Carbon Clean Solutions Limited is a company focused on low-cost carbon dioxide (CO<sub>2</sub>) separation technology for industrial and gas treating applications. The company's patented APBS technology reduces the costs of CO<sub>2</sub> 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.



Hydrogenious LOHC Technologies GmbH is a Germany-based developer of Liquid Organic Hydrogen Carriers (LOHCs) technology. Hydrogenious' technology has the potential to unlock the economic value of hydrogen through lower transportation, storage and distribution costs.



Carbon Engineering is a Canadian-based energy company working on the commercialization of technology that captures CO<sub>2</sub> directly from the atmosphere and synthesizes it into transportation fuels.



Infinitum Electric is a Texas-based company reengineering aspects of traditional motor technology, providing products with the potential to decrease carbon emissions and improve performance, reliability and cost. Infinitum's customers are producers of HVAC, industrial, mobility and consumer goods products.

## future energy fund investments



Ionmr Innovations is a Vancouver, Canada-based startup developing and marketing ion-exchange membranes and polymers for lower carbon solutions including hydrogen production, fuel cells and a range of other electrochemical applications.



Ocergy is an Oakland, California-based technology developer of floating offshore wind platforms and environmental monitoring solutions. Ocergy technology's stability, low steel weight and ease of dockside assembly allows for flexible deployment and maintenance in more challenging sea and weather conditions.



Mainspring is an Oakland, California-based startup developing a linear generator that contains two 125-kW piston cores, which operate independently or simultaneously to provide continuous power at high efficiency across the full spectrum of loads.



Australia-based startup RayGen is developing low-cost, high-efficiency proprietary PV Ultra (solar cogeneration) and Thermal Hydro (electrothermal storage) technologies. RayGen's technology has the potential to impact long-duration energy storage and grid stability.



Make My Day is an Israel-base startup that has developed a technology platform designed to optimize electrical vehicle (EV) routing and charging for fleets and drivers. The app uses proprietary analytics based on a driver's routines to help simplify and manage routing and charging for cost and carbon savings. Make My Day's innovation has the potential to provide a more seamless operating experience for EV drivers and fleet owners.



Sapphire Technologies is a California-based developer of a waste energy recovery system for natural gas and, ultimately, hydrogen industrial applications. Sapphire's FreeSpin® technology is designed to harness the power of gas expansion and convert wasted energy into usable electricity, potentially reducing carbon emissions in industry operations while increasing operational efficiency.



Malta Inc. is a Cambridge, Massachusetts-based startup that is developing molten storage systems to achieve 10–24 hours of storage for grid-scale applications. Our investment in Malta supports innovation in the future of energy storage. Its technology has the potential to efficiently and cost-effectively create a scalable long-term energy storage system that can support renewables as they potentially become a greater portion of the future energy mix.



Spear Power Systems is 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.



Natel is an Alameda, California-based startup. The company's hydro power-based technology has the potential to unlock distributed hydro resources and aims to provide a reliable, dispatchable power resource to balance intermittent renewables.



Starfire is a Boulder, Colorado-based startup developing a modular, distributed ammonia production and cracking system. Starfire designed its system to be cost competitive.



Natron Energy is 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 is commercializing batteries with the potential to survive tens of thousands of deep discharge cycles, be fully charged or discharged in just minutes and cost significantly less than incumbent lead acid batteries.



Syzygy is a Houston-based developer of a photocatalytic reactor designed to electrify chemical manufacturing and decarbonize many hard-to-abate industries. The company's reactor is powered by light instead of heat and operates at a lower temperature than conventional chemical reactor technology.

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TAE Technologies is a California-based fusion power company that has developed a scalable process that has the potential to make fusion cleaner, safer and more abundant than other approaches. Additionally, the company has developed its Power Management line from its work in fusion that enables versatile, more efficient, faster charging and energy storage systems.



Vutility is a provider of real-time, high-resolution energy monitoring solutions. The technology has the potential to enable businesses to optimize their energy consumption and improve operational efficiencies.



Zap Energy is a Seattle-based startup developing a modular fusion reactor. The technology is 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.