



Sustainability Report 2021

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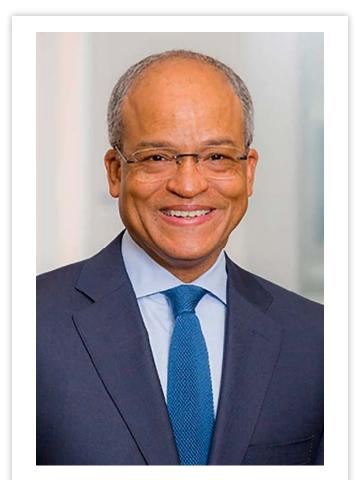
This Is FuelCell Energy, Inc. (FCEL) CEO Statement

I am pleased to share with you our first sustainability report. FuelCell Energy's board, executive leadership team, and team members are all committed to reporting on our environmental, social, and governance (ESG) programs and initiatives in a comprehensive way. Although much of our work isn't new, we are proud to establish a solid ESG reporting baseline with this report. We intend to improve both our performance and disclosure in the coming years.

Imagine waking up one morning and hitting the light switch, only to be stuck in utter darkness because there is no power and your lights don't work. Or even worse, imagine a life without a reliable power source, all while existing in the throes of poverty. According to the World Health Organization (WHO), more than 1 billion people in the world suffer from energy poverty or lack of energy. Further, more than 4 million people die each year because they lack access to power and are forced to cook food with wood chips, cow dung and other toxic materials.

The question is: Is it possible to produce scalable clean energy from many different sources? With our platform, the answer is yes. Each customer's carbon zero energy journey is unique. We help organizations around the world reimagine their specific energy needs while remaining authentic to their sustainability commitments.

C The climate crisis is an urgent health emergency. The World Health Organization estimates that bringing air pollution to guideline levels would reduce global deaths from air pollution by 80% and dramatically reduce greenhouse gas emissions that fuel climate change. 29



Jason Few President, Chief Executive Officer and Chief Commercial Officer

We believe in a world where we can:

- 1. Produce scalable energy
- 2. Create and maintain energy when and where it's needed
- 3. Enable the transition to a cleaner, hydrogen-based energy infrastructure
- 4. Create value from energy byproducts while generating power at the same time

We want to empower a safe, secure and practical journey to carbon zero, and our platform delivers on this in two ways by:

A Statement from the Chairman of the Board

Our ESG strategy and initiatives have the full support of and participation from the board of directors. The Environmental, Social, Governance, and Nominating Committee has responsibilities for ESG oversight, creating and implementing ESG best practices, and contributing to the development of overall ESG strategy. The Senior Vice President, Investor Relations, provides quarterly updates to the board on the company's ESG efforts and progress toward its ESG-related goals.

— James England

Decarbonizing power

- Produce low to zero carbon power
- Capture carbon and greenhouse gases while generating power at the same time
- Negligible nitrogen oxide (NOx) and sulfur oxide (SOx) emissions

Producing hydrogen

- Supply green hydrogen power (using electrolysis of water) or blue hydrogen power (using natural gas)
- Store: Working to commercialize a solution that scales renewables by converting excess power to hydrogen – then converting hydrogen back to power when needed

Since there is no one-size-fits-all answer for the world's complex energy problems, we are well positioned to chart a path to a carbon zero world in a more realistic and achievable way, by delivering new ways to enhance carbon utilization. We are confident FuelCell Energy will help shape the future of reliable clean energy and assist in mitigating climate change, improving air quality, and transforming the global energy landscape.

This Is FuelCell Energy, Inc. (FCEL) About This Report

This inaugural sustainability report is meant to describe how we fulfill our corporate purpose by managing environmental, social, and governance risks and opportunities material to our business and stakeholders.

In fulfilling our corporate purpose, we find ourselves in the enviable position of helping customers achieve their own sustainability goals and better the communities in which they operate.

We conducted an initial materiality assessment to identify the sustainability issues that impact our business. The assessment underlined the material importance of certain topics to multiple stakeholders.

We also will discuss how our commitment to sustainability fully extends into operations and the management of related resources that support execution of our sustainability plan.

While we have many patents and innovative technologies, our people are our most important asset. Through this report, we aim to inform and inspire current and future colleagues.

Our executive leadership's and board's commitment to sustainability is demonstrated through the ways they support and supervise the operationalization of our ambitions, goals, and practices.

The disclosures in this report are aligned with the reporting standards of the Sustainability Accounting Standards Board (SASB) and United Nations Sustainability Development Goals (UN SDG).

SASB Standards include topics that are financially material to the Fuel Cells & Industrial Batteries businesses, and therefore relevant to us.

The alignment with UN SDG links us to the betterment of societies around the world. This sustainability report discusses our alignment with Task Force for Climate-Related Financial Disclosures (TCFD) recommendations for governance, strategy, risk management, and metrics and targets.



Look for the UN SDG icons at the top of pages that discuss our relevant sustainability goals.

Our purpose: Enable the world to be empowered by clean energy



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About Us



We Are Committed to Net Zero

We know that time is running out to avoid the catastrophic impacts of climate change. At Fuel Cell Energy, we're doing our part by developing a plan to reduce our carbon emissions to net zero by 2050. This year, we are:

- Calculating our organizational carbon footprint baseline
- Conducting product life cycle assessments (LCAs) to understand emissions throughout the value chain
- · Setting short term goals (2030) and long-term goals (2050) aligned with science-based targets
- Developing a roadmap to net zero emissions to guide our Scope 1, 2 and 3 emissions reduction goals
- Engaging employees on our net zero journey

Our next zero commitment is supported by a cross-functional team of strategic and operational leaders across the company and sponsored by our Chief Financial Officer. Oversight of the project is provided by the Nominating and Governance Committee of the Board of Directors, which oversees our ESG initiatives.

This Is FuelCell Energy, Inc. (FCEL)

An Energy Platform Based on Fuel Cell Technology

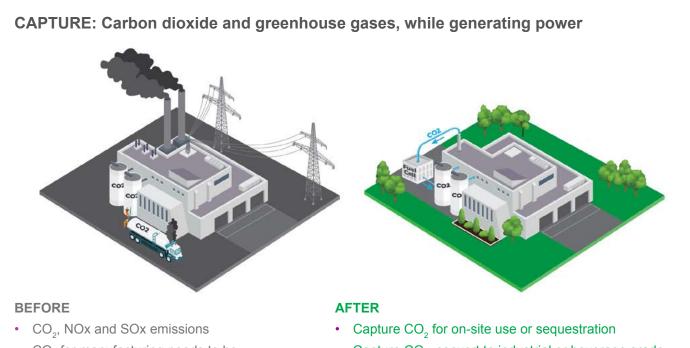
PRODUCE: Low-to-negative carbon power from a flexible array of inputs – from biogas to natural gas to hydrogen in the future



Increasing volume of weather interruptions

particulate matter (PM), NOx or SOx emissions

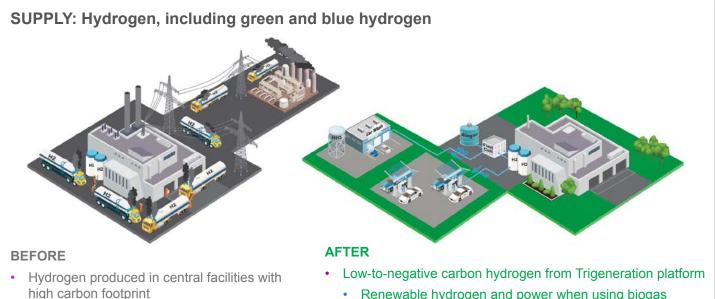
Resilient distributed power



- CO₂ for manufacturing needs to be purchased and delivered by diesel trucks
- Grid-dependent power

- Capture CO₂, convert to industrial or beverage grade
- Produce power and capture CO2 for the facility at the same time; able to produce hydrogen if needed

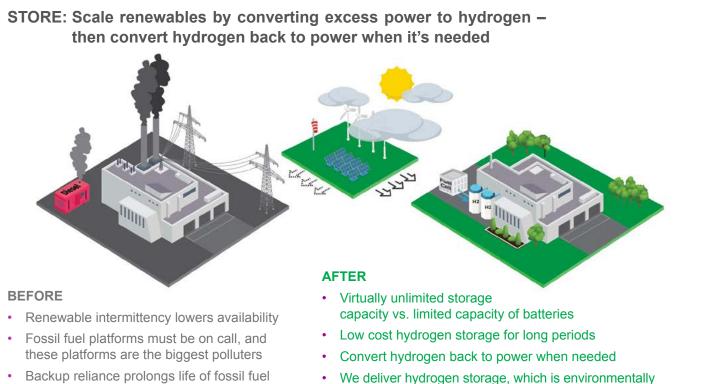
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Central hydrogen production relies on truck distribution across long distances, adding cost and emissions

platforms

- Renewable hydrogen and power when using biogas
- Simultaneously produce power, water, and hydrogen
- High efficiency hydrogen from power with solid oxide electrolysis



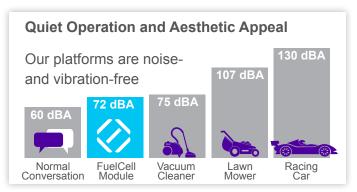
superior to mineral-based storage

This Is FuelCell Energy, Inc. (FCEL)



Wins for our Customers are Wins for Society

In creating economic value for our customers, we help support their own sustainability goals and benefit the communities in which they operate.



Improving Air Quality while Generating Power

Our platforms generate power through electrochemical reactions, rather than combustion. Virtually no pollutants are emitted as a result, making it safe to be amidst population centers. Our platforms not only generate clean power, but also help clean dirty sources of power generation, thus improving air quality.

Our platforms are designated as "Ultra-Clean" under California Air Resources Board (CARB) standards.

Projects Support Local Economies

Situating our platforms on brownfield land helps reclaim valuable land and raise local tax revenue while enhancing local power reliability.

More Land for Community Use

One acre of land supports a fuel cell plant capable of generating 10 MW of power, a fraction of the land needed by a solar farm to generate the same output. A typical solar farm needs ~450 times the space required for the same annual Megawatt-hours – (MWh) output. This means more land for parks, schools, or other productive and sustainable uses. The platform can be situated on polluted properties where the project pays for remediation, returning the property to city tax rolls.

Waste Management

The use of biogas as a fuel to the system means converting a waste product into something valuable: ultra-clean electricity and heat. Our platform's adaptability to use biogas means that we will be able to scale this benefit with greater availability of biogas. Additionally, the productive use of anaerobic digester gas or biogas promotes the reduction of landfills, increasing sustainability.

Less Energy Wasted

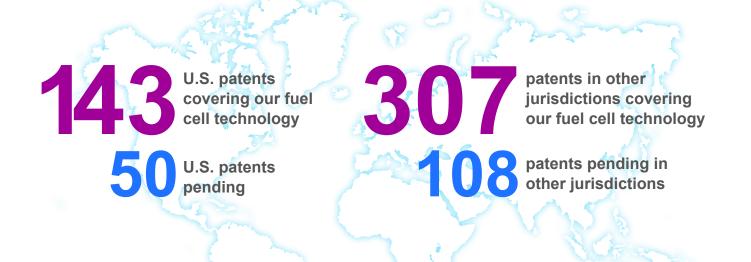
The electrical efficiency of our carbonate fuel cell solutions ranges from approximately 47% to 60% upon initial operations of our platforms, depending on the configuration. When configured for combined heat and power (CHP), our system efficiencies can potentially reach up to 90%, depending on the application. This compares favorably to average efficiency of the U.S. electrical grid of about 40%.

Our solutions are designed to deliver high electrical efficiency where the power is used, avoiding transmission. Transmission line losses average about 5% for the U.S. grid, which represents inefficiency, results in additional emissions, and is a hidden cost to ratepayers. In addition, overhead transmission lines have contributed to the ignition of wildfires in certain geographies.





Sustainable Competitive Advantages A global leader in fuel cell technology innovation¹



- Intellectual property that we believe makes new entry to the market challenging
- Technology platforms that are attractive based on market economics, not government mandates
- **Products characterized by sustainability over their full lifecycles** compared to other technologies, such as wind turbines, solar panels and batteries for which recycling is neither economical nor practical, and that often rely on limited supply minerals, disruptive mining, and geopolitical risk
- **Technical expertise** through a high level of employee engagement with a tenured, highly skilled workforce, operating complex processes to deliver our platform solutions
- **Operational excellence** programs and lean resource management aim to maximize cost-reduction opportunities while improving safety and product quality
- Lean management which drives proprietary manufacturing processes that increase speed to market and cost competitiveness
- Strategic innovation and development relationships with the U.S. Department of Energy (DOE) and ExxonMobil Research and Engineering Company (EMRE) provide funding and encourage technology development

1 Patents are for FuelCell Energy, Inc., including our subsidiary Versa Power Systems, Inc.

FuelCell Energy has multiple patented technologies including: carbon capture, electrolysis, fuel cell efficiency

Fulfilling Our Corporate Purpose The Cost of Energy



Industrialization, fueled by the energy industry, has played a vital role in pulling billions of people out of poverty. But now there is wide recognition that future growth needs a cleaner mix of energy sources to avoid the destruction of the environment and our health.

However, the move to cleaner energy at scale poses several challenges, with energy security and reliability being the most important. Widespread intermittency is unacceptable at a time when the world needs more reliability in powering growth, not less. Decarbonization, therefore, cannot come at the cost of deindustrialization. Resiliency and reliability of critical infrastructure, including power, have been tested within American borders as Texas experienced power outages after a snowstorm and California battled a series of wildfires that knocked down transmission lines.

Renewable sources like solar and wind have helped keep environmental costs down, but they are intermittent sources of energy and don't work everywhere we need them or will need them in the future. By themselves, they cannot scale to meet today's demand. Current and future growth in wind and solar are beset with challenges, such as land availability, overextraction of raw materials, and aesthetic preferences of people who live near the installations.

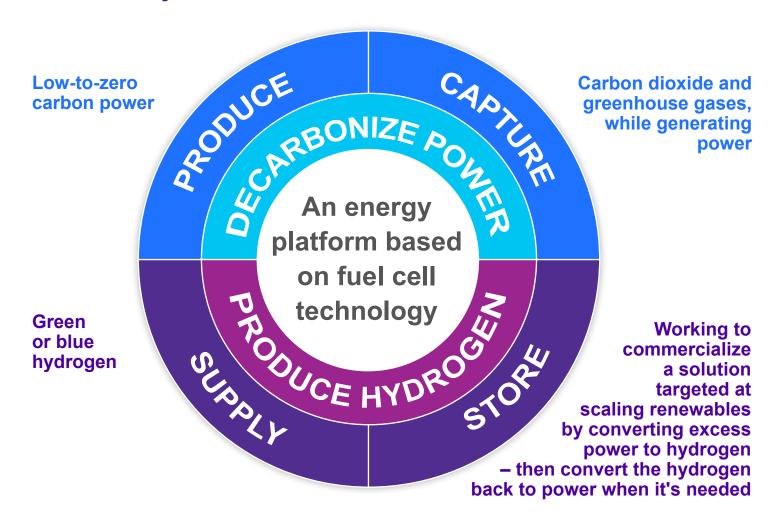
Our technology plays a key role in answering this multi-dimensional energy challenge.



¹ The Brookings Institution ² The World Economic Forum



The Journey to Carbon Zero



The FuelCell Energy Difference

We believe we have the only technology that can

- Capture CO₂ while producing power
- Produce H₂, power, and water simultaneously
- Provide a number of value streams, including: electricity, heat, CO₂, H₂, and water at the same time

Low-cost green hydrogen via high efficiency electrolysis technology

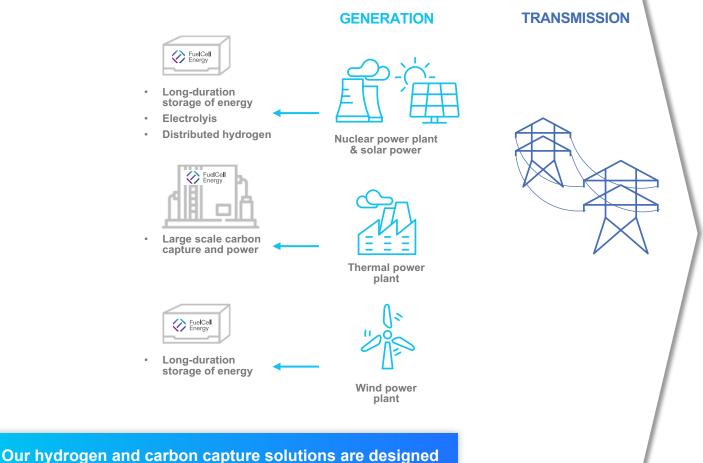
Fulfilling Our Corporate Purpose Our Value Proposition and the Evolving Grid



Electricity generation from coal, oil, and natural gas represented 60% of all power generated worldwide in 2021, down from 67% in 2010¹. That is likely to drop to 42% to 48% by 2030, depending on how aggressively countries move toward renewables.

Hydrogen has been identified as critical for the energy industry of the future. We believe that the rising demand for reliable energy globally and the urgency of slowing and reversing its negative environmental impacts have brought us to a tipping point where hydrogen's importance in the energy mix is beyond question. We believe hydrogen's sustainability credentials are superior to mineral-based storage. Conventional battery storage is reliant on mined minerals, such as lithium and cobalt, both of which have supply constraints for broad adoption, require extensive , and present long-term disposal challenges post-use.

Our current technologies and those in development have advantages over others that make us well suited for diverse use cases. In addition, we leverage these strengths by effectively partnering with others to make the grid cleaner, more efficient, and accessible.



to adapt to the grid and mitigate its negative impacts.

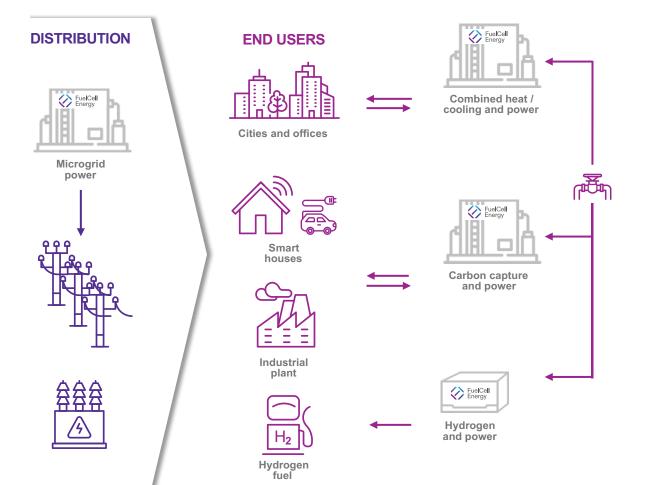


Unique Technologies

- The only platform that can capture carbon while producing power and hydrogen
- The only platform that can produce hydrogen, power, and water simultaneously
- The only platform that provides value streams across every energy segment: power, heat, hydrogen, CO₂, and water
- Low cost green hydrogen via high efficiency electrolysis technology versus currently available technology

The Advantages of Hydrogen

- Produced through the electrolysis of water or from reforming of methane
- Zero greenhouse gas (GHG) emissions from consumption
- Clean energy carrier
- The infrastructure used to transport fossil fuels have the capacity to transport hydrogen, thus avoiding the need to build new infrastructure



Fulfilling Our Corporate Purpose



Improving the Effectiveness of Renewables

According to the International Renewable Energy Agency (IRENA), a 300% increase in the installed power production capacity for onshore wind and a 1,000% increase in offshore wind will be necessary in the next decade to stay within the 2-degree global warming objective by 2050. Without wider use of and improvements in energy storage technologies, such a substantial build-out of renewables would be impossible. The intermittency of power supply could even destabilize existing power supply grids, which are built for predictable methods of generation.

Our technologies, both current and in development, help solve this problem by providing clean power to compensate for undersupply and store power during oversupply using hydrogen.





Our energy storage system will utilize solid oxide electrolysis cells (SOEC) to convert power efficiently into hydrogen, an energy carrier. The stored energy is compressed and can be transported for use elsewhere. So, the intermittent energy from sources like wind and solar are available for consumption anytime, anywhere.

The hydrogen produced from SOEC can be stored and used for grid power during periods of high demand or supplied to hydrogen fueling stations or industry as an alternative to natural gas. When power is needed, the hydrogen will be cleanly and efficiently converted back into power using the same solid oxide system in fuel cell power generation mode. Unlike mineral-based storage technologies, such as batteries, hydrogen is regenerative, produced locally, and does not require mining.

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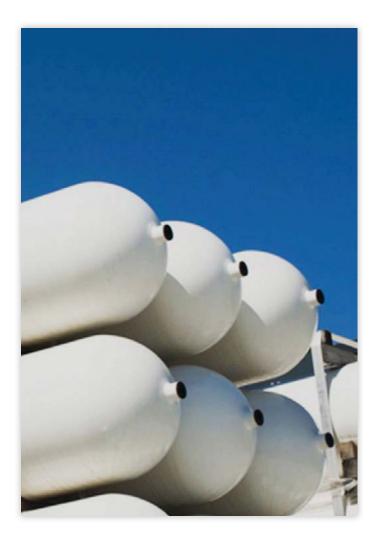


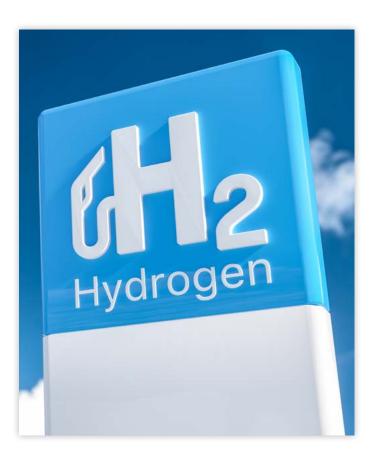
As utilities adjust to manage increased levels of intermittent renewable power generation supplying the electric grid, the value of our solution rises.

Hydrogen vs. Batteries

While batteries might be efficient, the capacity of a battery pack is limited. Hydrogen can store larger amounts of energy, often at much lower cost than batteries, making it a good potential storage solution for wind-turbine parks or grid applications.

In several use cases, our technology makes for a compelling substitute to batteries for storage from wind and solar, without the environmental and social problems associated with mining.





Land Use: While wind and solar produce clean energy, the land use in both generation and transmission can create environmental and social problems, such as loss of biodiversity and the opportunity cost of not using the land for parks, homes, or other uses beneficial to society. The land use per MW produced on our platform is approximately 0.2% of the land needed for solar.

Costs of Transportation: Wind and solar energy are often produced far away from where they are consumed. Our technology turns the power from solar and wind into hydrogen, which can then be transported to where it's needed, making it more useable. Since the transportation involves economic and ecological costs, locating our platform where the power is needed removes the need for long distance high voltage transmission or transportation.

Fulfilling Our Corporate Purpose



The Big Cleanup

About 35 billion tons of CO_2 are emitted globally per year. No storage solution will significantly reduce carbon emissions if power generation continues to rely heavily on coal and other fossil fuels without carbon capture. We believe better storage will boost a broad-based roll-out of renewables, but global reliance on coal and gas will continue for the foreseeable future as large emerging economies like India and China grow their economies and lift people out of poverty. This means mitigating the impact of the use of fossil fuels is also critical and an absolute necessity to achieve the Paris Agreement's goal of limiting global warming to 2 degrees Celsius from pre-industrial levels by 2100. Our technology is well positioned to contribute by:

- Capturing emissions from existing coal or gas-fired power platforms while destroying up to 70% of the plant's smog-producing pollutants, and cleanly generating power at the same time
- Capturing methane leaks from oil and gas production. Methane is a far worse greenhouse gas than CO₂ and these leaks are the second largest source of methane emissions after agriculture globally
- · Producing clean baseload power with lower emissions than the grid





Microgrid Reliability

Recent natural calamities have demonstrated the vulnerability of the grid in the United States. The natural pairing of two of our technologies, fuel cells and microgrids, allow us to meet the demand for reliable, distributed energy. Important customers, such as hospitals and military bases, value the reliability we offer. As virtually pollutant-free and quiet sources of energy, our microgrids come with community-friendly siting advantages.



Flexibility

Our platform can use biogas, onsite or directed, and is the preferred method of powering systems for most use cases. But our platforms also use natural gas, a necessary transition fuel that cannot be ignored in the battle against energy poverty, unreliability, and the critical need for continuous power. In addition to its abundant availability, natural gas emits 50% less CO_2 than coal.

Valuable Byproducts Increase Efficiency

Depending on the configuration, our power platforms produce useable byproducts that result in higher efficiency, including high quality thermal energy suitable for heating facilities or water, or steam for industrial processes or for absorption cooling. The higher efficiency means lesser need to draw resources like power and water from the supply of local communities, driving better economics and environmental stewardship and supporting both social responsibility goals and public policy objectives.



Fulfilling Our Corporate Purpose Diverse Use Cases and Benefits

Our current and emerging technologies' numerous features mean we have a wide array of users, ranging from global conglomerates to a local high school.



Driving economic value while conserving natural resources

Our platform being constructed for Toyota at the Port of Long Beach, California will deliver multiple value



Operational MW in the U.S.	
Industry	MW
Commercial/Hospitality	5.6
Education/Healthcare	7.0
Gas Transmission	2.8
Government	3.6
Industrial/Process	2.6
Utilities/Independent Power Producers	25.6
Wastewater Treatment	14.25
Grand Total	61.45

streams to Toyota and will have a positive impact on the local community. The

carbon neutral 2.3 MW plant will completely power the facilities, significantly aiding the fight against air pollution at the port, and will export the balance of the electricity to the Southern California grid. The hydrogen generated from the plant will be used to power Toyota's zero-emission class 8 fuel cell trucks and passenger vehicles, which is expected to improve air quality in the community and lower transportation emissions. Long Beach is in severe drought conditions, and our platform will generate water as a byproduct, which is expected to decrease Toyota's water usage in that area, and greatly reduced the water burden at its port operations.

Rebirth and reuse of contaminated land

Since 2014, the Bridgeport FuelCell Park in Connecticut has been cleanly, quietly and efficiently supplying enough power to the electric grid to power about 15,000 homes. We helped convert this previously contaminated brownfield land into a valuable resource for the local community that is also the highest property taxpayer for the City of Bridgeport on a per square foot basis.







Capturing carbon on a large scale

Our joint development agreement with ExxonMobil Research and Engineering Company is focused on research to develop carbonate fuel cell technology for industrial-scale carbon capture. Our proprietary technology is the only CO2 capture technology potentially capable of simultaneously capturing carbon dioxide from an external source, producing power and hydrogen, and delivering cost and scale advantages.



Empowering an entire local community



A 2.2 MW fuel cell heats the Amity Regional High School and powers a microgrid serving the school, the local Town Hall, library, senior center, police headquarters, fire department, and public works

department in Woodbridge, CT. Keeping the power on is why our microgrid solutions help keep communities safe and essential services up and running during grid power outages.





Powering the lab that

Pfizer's largest R&D facility globally is in Groton, CT. The facility has a storied past of developing blockbuster pharmaceuticals, such as Zoloft, which treats anxiety, and Zithromax, which kills bacteria. Last year, about 200 scientists and staff produced arguably the most important breakthrough, arguably the most important breakthrough, the COVID-19 vaccine. We are proud that our 5.6 MW plant at the facility generated continuous power while capturing heat to produce steam for the research that went into making the breakthrough vaccines, as well as for the research in developing the experimental COVID-19 treatment drug Paxlovid.



Managing Resources for Success Operations

Our commitment to sustainability extends to the resources we use to support our corporate purpose.

It Begins with the Design

We utilize Design for Environment (DfE) principles in the design, manufacturing, installation, and servicing of our power platforms. DfE principles aim to reduce the overall negative human health and environmental impact of a product, process, or service, when such impacts are considered across the product's lifecycle.

Our power platforms typically are designed to have operating lives of 25 to 30 years, at which time metals such as steel and copper are reclaimed for scrap value.

By weight, ~93% of the entire power plant can be re-used or recycled at the end of its useful life.



Longevity

The power plant is designed for a life of 25-30 years. Our current generation of fuel cell modules have a targeted design life of 7 years, and we continue to work on extending the life of the fuel cell module.

Repairability

Power platforms are designed to be accessible for servicing and maintenance of equipment that needs periodic care. Fuel cell modules have ports for entry to perform repairs and upgrades. We have a global service center to perform repairs on fuel cell modules if needed.

Upgradability

We conduct R&D work on power plant and module components. Upgrades are periodically made and implemented to improve performance and life of both the balance of plant equipment and fuel cell modules.

Recyclability

Many of the fuel cell power plant's metallic components can be recycled, including the fuel cell module. Fuel cell modules are designed to be restacked reusing most of the hardware after refurbishment.

We are committed to manufacturing efficiency. Among our key performance indicators are two that track yields and scrap in the manufacturing process.



Certified Environmentally Friendly Business Processes

From our production through end-of-life management, we use environmentally friendly business processes and practices, certified to ISO 14001:2015. Our main manufacturing facility in Torrington, our corporate and R&D operations in Danbury, and our German operations are all certified to this high standard.

The certification requires annual internal and external compliance audits and an effective Environmental Management System (EMS) and can be used by companies of any size in any industry. Compliance, and eventual certification, serves as proof to current and potential customers, suppliers, and stakeholders that the impact the company has on the environment (no matter how small) is being consistently measured and improved upon.

We maintain a chain of custody and responsibility of our products throughout the product life cycle and strive for "cradle-to-cradle" sustainable business practices, incorporating sustainability in our corporate culture.

In keeping with our commitment to ISO 14001:2015, some of our operational initiatives include:

- Routing excess heat from production processes throughout the facility to reduce both heating costs and associated emissions
- The installation of high efficiency lighting
- Partially powering the corporate offices with power generated by the various fuel cell configurations undergoing development in the research area.
- Utilizing cross-functional teams to evaluate additional areas for continual improvement

Waste Management

While our DfE principles minimize waste generation in manufacturing, we have well-established processes in place to manage the waste that is generated. Our waste management includes:

- Recovery of metals via recycling
- Energy recovery through the conversion of non-recyclable waste materials into usable heat, electricity, or fuel
- Dirty water is converted into clean water and contaminants are sequestered

After the above processes, in FY2021 our global operations generated 14.57 metric tons of hazardous waste, 48.2% of which is being recycled, including energy metals recovery and wastewater treatment. The choice and audit of the vendors who manage our waste includes site visits to all appropriate downstream facilities. We had no reportable spills in FY2021.

We are aiming for a 10% reduction in hazardous waste per MW manufactured in FY2022.

Energy Use and Intensity (FY2021)

Electricity:

- Used in Operations 43,212 gigajoules (11.7% from renewables)
- Intensity 172 MWh/m in U.S. dollar revenue

Natural Gas:

- Used in Operations 55,784
 gigajoules
- Intensity 223 MWh/m in U.S. dollar revenue



Managing Resources for Success

Choosing Our Suppliers with Care

We use various commercially available raw materials and components to construct a fuel cell module, including nickel and stainless steel, which are key inputs in our manufacturing process.

Our fuel cell power plants utilize very minimal amounts of 3TG minerals (tin, tungsten, tantalum, and gold) that are classified as conflict minerals. In FY2020, only 0.00048% of the total shipment weight represented 3TG minerals.



See our latest conflict minerals disclosure filed with the SEC here.

Our fuel cell stack raw materials are sourced from multiple vendors and are not considered precious metals. We have a global integrated supply chain with qualified sources of supply, many of which are located in the regions in which we have established manufacturing and service operations, including Europe and Asia. We conduct an annual review of each supplier's conflict mineral content.

Despite a somewhat volatile nickel market and increased pricing pressure on stainless steel direct materials, our strategic inventory purchases and negotiated fixed-price supply contracts helped mitigate the impact on our product costs. Primarily driven by the consequential impact of the COVID-19 pandemic, we are also seeing extended shipping lead times and pricing pressure on transportation and logistics. We have implemented several initiatives to mitigate the effect of these impacts by optimizing domestic supplier shipping volumes, leveraging competition across multiple qualified freight forwarders, establishing selective direct relationships with steamship lines, and aggregating shipments with qualified suppliers. While we manufacture the fuel cells in our Torrington facility, the electrical and mechanical balance of plant (BoP) are assembled by and procured from several suppliers. All of our suppliers must undergo a stringent and rigorous qualification process. We continually evaluate and qualify new suppliers as we diversify our supplier base in our pursuit of lower costs and consistent quality. We purchase mechanical and electrical BOP components from third party vendors, based on our own proprietary designs.

Overall, as we continue to grow our business, we remain focused on improving quality, increasing the competitive supply landscape, maintaining existing supplier relationships, as well as building strong new key supplier relationships to expand our supply chain options.

Disclosure of environmental policies, health and safety programs, management system certifications, and compliance programs is mandatory for all suppliers. We conduct an annual review of each suppliers' conflict mineral content. Compliance to labor laws is checked through both supplier questionnaires and on-site supplier audits. Going forward, our carbon mitigation plans may influence supplier and procurement considerations. In 2020, 81% of our direct material spend was based in the U.S., 7% in Europe, 9% in Asia, and 4% in China.



Yes, in My Backyard (#YIMBY)

The clean and quiet operation our customers value can also be seen at our North American manufacturing facility in Torrington, CT. Here, within a couple of miles of a church and a high school, our plant manufactures products that provide clean energy to support our manufacturing process - all the while situated in the most populated municipality and only city in Litchfield County, Connecticut. Our team members and customers will soon be able to power their hydrogen-fueled vehicles and trucks onsite.

Though we fully operate and service our platforms, customers are provided product safety sheets to improve their safety awareness. We are proud of our safety record. In the 15 years of shipping commercial products, we had zero on site safety incidents which further reassures municipalities that our platforms can safely be situated near population centers.



Managing Resources for Success Human Capital

Introducing the Chief People Officer

Now, perhaps more than ever before, organizations of all types and sizes - from all industries and sectors - are recognizing just how valuable of an asset their team members are. At FuelCell Energy, we agree that our people are our most important asset. In 2021, we reinforced their importance to our company by creating a Chief People Officer role that reports directly to our CEO. To fill that role, we brought in Andrea Jones, an experienced HR leader who has a strong track record of spearheading change management and transformation initiatives in the manufacturing industry. Andrea's progressive approaches have helped shape organizations' talent strategies while ensuring that the culture, practices and operations are aligned with the strategic organizational priorities.

Andrea brings her talents to FuelCell Energy at an important moment. Today we have a unique opportunity to reimagine how we lead in our industry, especially as we help businesses around the world decarbonize. Andrea will play an essential role in helping us recruit, develop, retain and direct our human capital resources toward our biggest global opportunities. The diversity of our team and our team members' ideas drive the innovation that permeates everything we do, from our current suite of products and advanced technologies to the development of industry-leading, future-focused power platform solutions.

— Jason Few, August 2021



Andrea Jones Chief People Officer

A Note from Andrea

People are the most important resource in our business. HR is at the heart of helping the leadership team form a positive employee and customeroriented workplace. With so much responsibility and so much potential impact coming from the senior leadership team, there is no better choice for the steward of our employees than to have HR at the table. Conversely, decisions about the business are made with a full understanding of how it will impact our teammates, the culture, and the work environment.

We are growing at a very fast pace, so staffing a full team is essential right now, in addition to outlining our diversity and inclusion framework. At FuelCell Energy, we believe diversity and inclusion is a mindset that is required for us to realize our full potential. We leverage diversity and inclusion to better understand global markets and how to create a company

that attracts exceptional talent, where amazing talent wants to build their careers and contribute to enabling the world to live a life empowered by clean energy. Having these ideals at the foundation of our culture is what will help us win.

I get up every morning, looking forward to what I will learn next, and how I can be part of building a legacy.

Our People at FuelCell Energy

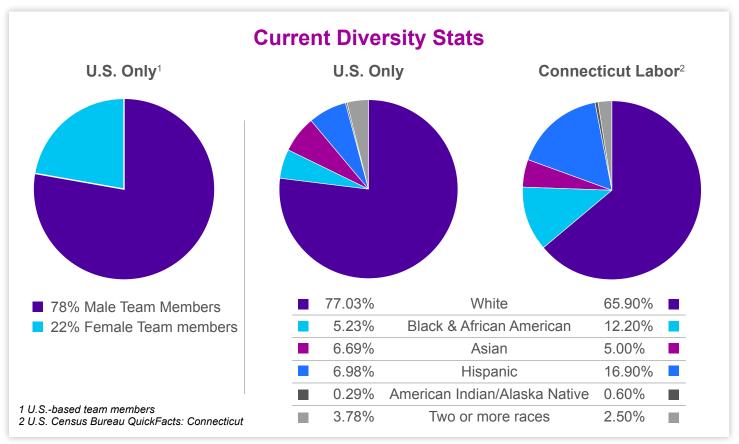
As part of our efforts to recruit and retain the best talent, we reimagined our mission and vision for human capital management and created the following mission statement:

Delivering clean innovative solutions one employee at a time by enabling a work environment that stimulates passion, collaboration, engagement, and speed, to ensure a performance-based culture built upon a total rewards program with three main goals:

- Attracting and retaining talented and diverse team members
- Alignment of employee and shareholders' mutual purpose

Diversity, Equity and Inclusion

We view diversity, equity and inclusion in the workplace as a business asset. The modern workforce wants to be a part of organizations that embrace these values. Our corporate purpose attracts highly qualified candidates who want to make a career among colleagues that embrace our purpose, that value our rich heritage of innovation and deep knowledge of clean energy technology.



 Winning as a team – as a company, and with our broad ecosystem of customers, partners, suppliers, and the communities in which we operate

Managing Resources for Success

Health and Safety

At FuelCell Energy, we are committed to conducting business in a safe and environmentally sound manner by promoting a culture of shared responsibility throughout the organization. We integrate environmental, occupational health, and safety management practices in all aspects of our business and strive towards the prevention of pollution and minimization of waste. Our Environmental, Health and Safety (EH&S) systems and related performance targets promote continual improvement, the prevention of injuries and incidents, and compliance with all applicable statutes and regulations.

As an essential employer, we never stopped operations, implemented safety protocols, and developed a COVID management plan based on the guidance provided by the CDC, OSHA, Connecticut, and California. Projects, R&D, and power plant servicing continued, and remote work was ongoing. For three months, we closed our manufacturing locations while we secured the necessary personal protective equipment and revamped our workspace and processes to keep our team safe. During the three months when our factory team members could not work, they received full pay and benefits. Not a single job was lost during the period.

We take EH&S very seriously and we have an expert at the helm: Joe Ulevicus, our Senior Director, EH&S, Plant Engineering and Operational Excellence. Joe has been with us for 15 years and has over 30 years of EH&S experience in construction, remediation, R&D, and manufacturing. He also has a Masters in Occupational Health & Safety with a concentration in Environmental Management.



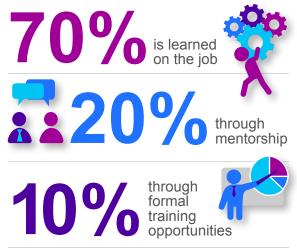
ISO Joe leads the team effort to protect the safety and **45001** health of personnel and the environment by:

- · Providing the tools, training, information, and support necessary, in accordance with all applicable local, state, and federal requirements
- · Fostering and maintaining an excellent relationship with our staff to advance our program and culture
- Maintaining ISO 45001:2018 certification regarding occupational health and safety management

Training and Development

We offer opportunities for our team members to continue to learn and develop new skills through on-the-job training programs and continuing education classes; this is how we believe we will attract, recruit, hire, and retain the best talent.

70/20/10 Development/Training Model



Looking to the future:

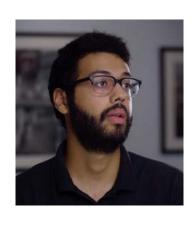
We currently have a rewards and recognition program in place, and we're in the process of creating/enhancing:

- Wellness program
- Recruitment efforts within the community/ efforts to keep talent in Connecticut
- DE&I commitment statement
- ESG raters and reporting standards inputs
- Expanded employee stock ownership plan in 2022



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Employee Spotlight



Marcos De Los Santos Associate Instrumentation & Controls Engineer

"Biogas is something that every community has whenever there's a wastewater treatment plant. Biogas is just part of the byproducts that are normally burned off, contributing to air pollution. That's where FuelCell is able to play a part. We can take that biogas and use it to produce energy instead of it going off into the atmosphere wastefully. We can use it to make energy and have it right in the power plant next to communities with no impact to their health. FuelCell has a unique role to play in the future of the green energy grid."



Laine Blummer Associate Mechanical Engineer

"What I think everybody can agree with is that of course we should switch to green energy: solar power or wind power, hydropower... whatever it may be. But it's really difficult to do that just at the drop of a hat. Making these big changes and shifts to green energy really takes a lot of time and dedication. I think fuel cell technology is the perfect transition between the infrastructure that we already have and a greener future."



Tony Leo

Executive Vice President, Chief Technology Officer

"The new thing coming along is our hydrogen generation technologies, and I think they have the potential to be a game-changer in either finding a way to use curtailed wind and solar power to make something valuable (hydrogen), or making hydrogen where hydrogen is needed, like in vehicle fuels. Drivers will have another alternative for zero carbon vehicle fuel with a longer range and faster filling up compared to battery vehicles, for example. We think we can do it cleaner than current ways of making hydrogen more efficiently. But as we put more and more wind and solar on the grid, we have to find a way to store that energy when it makes too much so that we can deliver it back when it's not making enough. What the average person would enjoy from that is a lower and lower carbon footprint of the power that they're using."

Corporate Governance Board of Directors

We are committed to board diversity, as evidenced by the makeup of our board, including diversity of gender, race, and professional experience/thought. We are also committed to board refreshment and maintaining board independence.

Areas of Expertise/Professional Experience

Financial Expertise/Literacy									
Energy					88%				
Leadership/Mana	gement			75%					
Business Operation	ons			75%					
Capital Managem	75%								
Company Execut									
Accounting/Auditi									
Investment Marke									
Oil & Gas	38%								
DE&I	33%								

Board Diversity



Oversight

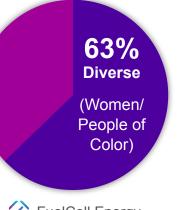
The Environmental, Social, Governance, and Nominating Committee has ESG oversight and is responsible for creating and implementing ESG best practices and contributing to the development of overall ESG strategy. FuelCell Energy's Senior Vice President, Investor Relations, provides quarterly updates to the board with regard to the company's ESG efforts and progress toward its ESG-related goals.

Business Ethics

Our team members are trained on business ethics. We have formal rules and practices that address topics such as:

- Bribery, corruption, and improper payments with guidelines on what is acceptable behavior
- Intellectual property protection
- Sexual harassment and bullying

We have both a written whistleblower policy and a hotline where team members can anonymously make complaints. Our formal non-retaliation policy on all complaints is intended to give team members the confidence to keep us informed of behaviors that may put other team members or the business at risk.





BOARD MEMBER James H. England Corporate Director and Former Multi-industry CEO	 COMMITTEE RESPONSIBILITY Chairman of the Board of Directors Member of the Executive Committee Member of the Environmental, Social, Governance, and Nominating Committee
Betsy Bingham Lean Operations Leader, Sustainability and EH&S at GE Aviation	 Member of the Audit and Finance Committee Member of the Environmental, Social, Governance, and Nominating Committee
Jason Few President, CEO and CCO at FuelCell Energy	Chair of the Executive Committee
Chris Groobey Former Partner at Wilson Sonsini Goodrich & Rosati	Member of the Executive CommitteeMember of the Audit and Finance Committee
Cynthia Hansen Executive Vice President and President, Gas Distribution and Storage at Enbridge, Inc.	 Member of the Environmental, Social, Governance, and Nominating Committee Member of the Compensation Committee
Matthew Hilzinger Former Executive Vice President and CFO at USG Corporation	 Chair of the Audit and Finance Committee Chair of the Compensation Committee Member of the Environmental, Social, Governance, and Nominating Committee
Donna Sims Wilson Chief Operating Officer at Kah Capital Management	Member of the Audit and Finance CommitteeMember of the Compensation Committee
Natica von Althann Founding Partner of C&A Advisors and a Former Financial Executive at Bank of America and Citigroup	 Member of the Audit and Finance Committee Member of the Compensation Committee Chair of the Environmental, Social, Governance, and Nominating Committee

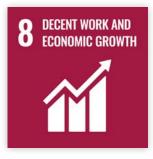
Discloser Alignments

The disclosures in this report are aligned with the following United Nations Sustainability Development Goals



- **Target 6.3**: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- **Target 6.4**: By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

AFFORDABLE AND	Target 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services
CLEAN ENERGY	Target 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix
NV.	Target 7.3: By 2030, double the global rate of improvement in energy efficiency
- Ministry - Contraction - Con	Target 7.b : By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, Small Island Developing States (SIDS), and land-locked developing countries, in accordance with their respective programmes of support



Target 8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead



Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all





Target 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources

Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

Target 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse



Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries



Target 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world

Discloser Alignments

Table of disclosures aligned with SASB standards -Fuel Cells and Industrial Batteries

Торіс	Accounting Metric	Code
	Total energy consumed	RR-FC-130a.1
Energy Management - Operations	Percentage grid	RR-FC-130a.1
	Percentage renewable	RR-FC-130a.1
	Total recordable incident rate (TRIR)	RR-FC-320a.1
Workforce Health & Safety	Fatality rate	RR-FC-320a.1
	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	RR-FC-320a.2
	Average storage capacity of batteries, by product application and technology type	RR-FC-410a.1
	Average energy efficiency of fuel cells as (1) electrical efficiency and (2) thermal efficiency, by product application and technology type	RR-FC-410a.2
Product Efficiency	Average battery efficiency as coulombic efficiency, by product application and technology type	RR-FC-410a.3
	Average operating lifetime of fuel cells, by product application and technology type	R-FC-410a.4
	Average operating lifetime of batteries, by product application and technology type	RR-FC-410a.5
Product	Percentage of products sold that are recyclable or reusable	RR-FC-410b.1
Lifecycle and End-of-life	Weight of end-of-life material recovered, percentage recycled	RR-FC-410b.2
Management	Description of approach to manage use, reclamation, and disposal of hazardous materials	RR-FC-410b.3
Materials Sourcing	Description of the management of risks associated with the use of critical materials	RR-FC-440a.1
Droduct Sofety	Number of recalls issued, total units recalled	
Product Safety	Total amount of monetary losses as a result of legal proceedings associated with product safety	



FCEL Response Electricity - 43,212 GJ 8% 12% Torrington Manufacturing - 2.6 Danbury Corporate Offices and R&D - 0.60 These two locations represent 90.7% of the global workforce. 0 Our Occupational Health & Safety Management System is certified to ISO 45001:2018 – the whole standard provides the framework to assess, monitor and reduce exposure of the workforce to human health hazards.

N/A

The electrical efficiency of our fuel cell power plants starts at 47% and declines slightly over stack life, averaging about 45% with slight variations due to local conditions, such as elevation or extreme temperatures. Our platforms also co-produce other energy streams, usually thermal but also (in the case of our Trigen platform) hydrogen. Total thermal efficiency depends on the customer use of these thermal streams, and ranges from 60% to 90%.

For the hydrogen based reversible solid oxide system we are developing, energy efficiency (the combination of coulombic and voltaic efficiency plus system losses) will range from 60% to 70% depending on the application and the age of the stacks. The main driver for energy efficiency is stack voltage in discharge (fuel cell) mode and system losses. Coulombic efficiency of the stacks will be in the 90% range.

Fuel cell life for our carbonate platform ranges from five to seven years, depending on the year of manufacture. Our latest stack module designs have a seven year life expectation.

N/A

By weight, 93% of the entire power plant can be re-used or recycled at the end of its useful life. We are conducting a National Energy Technology Laboratory (NETL) product life cycle analysis (LCA) and expect to have detailed informatin towards the end of FY2022.

Our use of conflict or rare earth minerals is virtually zero. Trace amounts of 3TG minerals add up to less than 0.0005% of our total shipments by weight (in FY2020).

0 - No recalls.

\$0 - No monetary losses.

Discloser Alignments

Task Force on Climate-Related Financial Disclosures (TCFD)

Governance

Our governance around climate-related risks and opportunities

- FuelCell Energy's Board of Directors is actively engaged in guiding the company's ESG strategy. The Nominating and Governance Committee has oversight responsibilities for the creation, implementation and communication of our climate-related risks and opportunities. Quarterly updates, provided by the Senior Vice President of Investor Relations, ensure that the board is up-to-date on progress against goals.
- Accountability for our net zero strategy sits with our Chief Financial Officer and is supported by a crossfunctional team of senior leaders including the Chief Operating Officer and Chief Technology Officer.

Strategy

Material impacts of climate-related risks and opportunities on our business, strategy and financial planning

We are incorporating climate and carbon considerations into every aspect of our business. See the following sections of this report:

- \rightarrow Wins for our Customers are Wins for Society
- \rightarrow Sustainable Competitive Advantages
- \rightarrow Improving the Effectiveness of Renewables
- \rightarrow The Big Cleanup
- → Our Vaue Proposition in the Evolving Grid
- → Unique Technologies
- \rightarrow Diverse Use Cases and Benefits

Metrics & Targets

Metrics and targets we use to assess and manage material climate-related risks and opportunities

- Metrics and targets we use to assess and manage material climate-related risks and opportunities
- We're committed to achieving net zero emissions by 2050 across our value chain. This year, we are:
- Calculating our organizational carbon footprint baseline
- Conducting product life cycle assessments (LCAs) to understand emissions throughout the value chain
- Setting short term goals (2030) and long-term goals (2050) aligned with science-based targets
- Sharing our metrics and targets in our next ESG report.

Risk Management

How we identify, assess, and manage climate-related risks

In the coming year, we will be supplementing our net zero strategy with a formal climate risk assessment. This project will inform our efforts to future-proof our business by building capacity and resilience to thrive in a climate-altered world.

Forward-Looking Statements

This Sustainability Report (this "report") contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Statements contained in this report that are not strictly historical facts, including statements regarding our future financial condition, results of operations, plans, objectives, expectations, future performance, business operations and business prospects, are forward-looking statements. Words such as "expect," "anticipate," "estimate," "goal," "project," "intend," "plan," "believe," "predict," "should," "seek," "will," "could," "would," "may," "forecast," and similar expressions and variations of such words are intended to identify forward-looking statements. Forward-looking statements are neither historical facts, nor assurances of future performance. Instead, such statements are based only on our beliefs, expectations, and assumptions regarding the future. As such, the realization of matters expressed in forward-looking statements involves inherent risks and uncertainties. Forward-looking statements in this report may include, without limitation, statements regarding our anticipated financial results, our plans and expectations regarding the continuing development, commercialization and financing of our fuel cell technology and products and the market for such products, our business plans and strategies, our plans and goals for reducing emissions and achieving net zero carbon emissions, and the expected efficiencies and/or capabilities of our projects and products that are in development or under construction.

The forward-looking statements contained in this report are subject to risks and uncertainties, known and unknown, that could cause actual results and future events to differ materially from those set forth in or contemplated by the forward-looking statements. Factors that could cause such a difference include, without limitation: general risks associated with product development and manufacturing; general economic conditions; changes in interest rates, which may impact project financing; supply chain disruptions; changes in the utility regulatory environment; changes in the utility industry and the markets for distributed generation, distributed hydrogen, and fuel cell power plants configured for carbon capture or carbon separation; potential volatility of commodity and energy prices that may adversely affect our projects: availability of government subsidies and economic incentives for alternative energy technologies; our ability to remain in compliance with U.S. federal and state and foreign government laws and regulations and the listing rules of The Nasdag Stock Market; rapid technological change; competition; the risk that our bid awards will not convert to contracts or that our contracts will not convert to revenue; market acceptance of our products; changes in accounting policies or practices adopted voluntarily or as required by accounting principles generally accepted in the United States; factors affecting our liquidity position and financial condition; government appropriations; the ability of the government and third parties to terminate their development contracts at any time; the ability of the government to exercise "march-in" rights with respect to certain of our patents; our ability to successfully market and sell our products internationally; our ability to implement our strategy; our ability to reduce our levelized cost of energy and deliver on our cost reduction strategy generally; our ability to protect our intellectual property; litigation and other proceedings; the risk that commercialization of our products will not occur when anticipated or, if it does, that we will not have adequate capacity to satisfy demand; our need for and the availability of additional financing; our ability to generate positive cash flow from operations; our ability to service our long-term debt; our ability to increase the output and longevity of our platforms and to meet the performance requirements of our contracts; our ability to expand our customer base and maintain relationships with our largest customers and strategic business allies; changes by the U.S. Small Business Administration or other governmental authorities to, or with respect to the implementation or interpretation of, the Coronavirus Aid, Relief, and Economic Security Act, the Paycheck Protection Program or related administrative matters; and concerns with, threats of, or the consequences of, pandemics, contagious diseases or health epidemics, including the novel coronavirus, and resulting supply chain disruptions, shifts in clean energy demand, impacts to our customers' capital budgets and investment plans, impacts to our project schedules, impacts to our ability to service existing projects, and impacts on the demand for our products, as well as other risks set forth in the Company's filings with the Securities and Exchange Commission.

The forward-looking statements contained herein speak only as of the date of this report. The Company expressly disclaims any obligation or undertaking to update or revise any such statement contained herein to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based. Investors are advised to review disclosures in our filings with the Securities and Exchange Commission. It is not possible to foresee or identify all factors that could cause actual results to differ from expected or historic results. Therefore, investors should not consider the foregoing factors to be an exhaustive statement of all risks, uncertainties or factors that could potentially cause actual results to differ from forward-looking statements.





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