

Dear Friends of Capstone Green Energy,

Happy New Year! As we launch into 2022, changes in the global energy markets continue to accelerate, and the market's fundamentals for growth continue to strengthen. Below are some highlights of what's happening in our cleantech space and what Capstone Green Energy is doing to leverage this significant opportunity.

### **Clean Energy Landscape**

The clean energy landscape continues to shift worldwide as companies look to respond to global climate change and rising pressure from shareholders and consumers. As you know, large institutional investors such as BlackRock and Vanguard argue that avoiding climate-related damages helps the economy and improves investor financial returns. The current Biden administration favors climate-friendly technologies to help grow the post-COVID-19 economy, as does most of Europe, Australia, Japan, Korea and Columbia.

Meanwhile, we're hearing that young parents are demanding action as they worry about the world their children will inhabit if the impact of climate change goes unchecked. According to a recent Nielsen study, 73% of consumers say they would likely change a behavior to reduce their impact on the environment, and eco-aware mindsets and behavior adaptation have only increased in recent years. Sustainable and ethical business practices are the second-highest reason consumers return to a brand, and only product quality scores higher according to a CGS 2019 U.S. Consumer Sustainability Survey.

Adding to this shifting landscape is the fact that the world is experiencing a rapid increase in extreme weather events ranging from hurricanes to wildfires, freak snow or ice storms to tornadoes, and floods to devastating droughts. Together, these forces call attention to the risks people believe they will ultimately face if nothing is done to address global climate change now.

### **Clean Energy Growth**

According to the International Renewable Energy Agency in 2020, the world added a record of more than 260 gigawatts of renewable electricity capacity, almost 50% more than in 2019. The U.S. was one of the biggest growth markets, the agency said, adding 29 gigawatts of capacity, nearly 80% more than the year before.

The U.S. now generates almost 20% of its electricity from renewable sources such as wind, solar, and hydropower, while nuclear accounts for another roughly 20%. The Biden administration, which is targeting at least a 50% reduction in carbon emissions by 2030, wants Congress to pass its clean-electricity standard, which calls for 80% of U.S. power to come from clean sources by the end of the decade. To that end, the White House's infrastructure bill included billions of dollars of investment in renewable energy.

Biden's new Infrastructure Law provides more than \$20 billion to establish a new U.S. DOE Office of Clean Energy Demonstrations to support technology demonstration projects in areas

including clean hydrogen, carbon capture, grid-scale energy storage, small modular reactors, and more. Demonstration projects prove the effectiveness of innovative technologies in real-world conditions at scale in order to pave the way toward widespread adoption and deployment. The founding of this office represents a new chapter that builds on DOE's long-standing position as the premier international driver for clean energy research and development, expanding DOE's scope to fill a critical innovation gap on the path to net-zero emissions by 2050.

According to Bloomberg, in 2020, global investment in the low-carbon energy transition totaled \$501.3 billion, up from \$458.6 billion in 2019 and just \$235.4 billion in 2010. Investments in clean energy are driving markets and consumer decision-making now, as opposed to being viewed as promising technologies of the future.

### **The Rise of Microgrids & CHP**

Wind and solar alone cannot meet all the world's clean energy requirements and carbon reduction goals. Therefore, initiatives by governments worldwide to encourage the development of microgrids and high-efficiency combined heat and power (CHP) systems will further drive the shift to a clean energy future. The global microgrid market is estimated to grow from \$24.6 billion in 2021 to \$42.3 billion by 2026 at a CAGR of 11.4% during that time. It is estimated that the Commercial and Industrial (C&I) markets for solar (PV), battery storage, and CHP will grow the fastest over the next 5-10 years.

According to the U.S. DOE, CHP systems can be deployed quickly, cost-effectively, and with few geographic limitations. CHP can use a variety of fuels, both fossil- and renewable-based. It has been employed for many years, mostly in industrial, large commercial, and institutional applications. CHP may not be widely recognized outside these industries and utility circles, but it has quietly been providing highly efficient electricity and process heat to some of the most vital applications worldwide.

At Capstone, we believe that the C&I market will see substantial growth for both microgrids with and without CHP. Multiple factors will drive such growth: first, is the estimated 2X increase in demand of electricity from electrification; second, is the historically low number of new large-scale, fossil fuel-based generation projects; third, is the increasing utility kWh costs; and lastly, is the implementation of higher customer demand charges. These factors combined should lead to higher kWh costs in the C&I market and will drive improved ROIs. At the same time, CEOs are being pushed to deliver higher ESG scores, and Boards of Directors are pushing for new carbon reduction targets. In addition, it is estimated that 95% of C&I building rooftops are available to become distributed generation microgrid assets. Now add to the mix of new financing vehicles and innovative EaaS business structures like the ones Capstone offers today, and the ingredients for growth are complete.

## The New Capstone

In April, as part of Earth Day, we announced that we were changing our name from Capstone Turbine Corporation to Capstone Green Energy (Nasdaq: CGRN). However, this was much more than a simple name change or a new ticker symbol. It was a bold new strategy in direct response to the changing clean energy markets and the shifting energy landscape.

To become a global partner in carbon reduction and on-site resilient green energy solutions, Capstone Green Energy began to add new business lines, product offerings, network partners, and services as part of the transition. These carbon reduction solutions included new clean energy generation technologies like Baker Hughes large frame gas turbines and a new DC hybrid energy Lithium-Ion battery energy storage system (BESS) designed to meet a broad range of customized, peak shaving, and remote energy applications.

Capstone continued to penetrate the long-term rental market that helps customers avoid using dirty diesel reciprocating engines. In October, we were proud to announce four new long-term rental contracts representing 3.2 MW of clean energy systems, and as a result, we announced the expansion of our long-term rental fleet from 13.1 MW to 17.1 MW by December 31, 2021. We then subsequently announced that we had entered into a 4 MW, two-year, long-term rental contract with a new end-use customer in the cryptocurrency mining space. The new two-year contract represents another 4 MW of clean Energy as a Service (EaaS) rental systems and continues Capstone Green Energy's expansion of its current long-term rental fleet to 21.1 MW by March 31, 2022.

In December, we further reported that we had entered into a strategic licensing and manufacturing agreement with PowerTap Hydrogen. PowerTap has developed and patented a compact Steam Methane Reforming (SMR) technology to create on-site hydrogen production versus traditional methods. As a result of the new strategic agreement, Capstone Green Energy will manufacture the small footprint product for use in fueling stations and as part of its distributed energy, low emission microgrid solutions. The PowerTap product turns natural gas, including renewable natural gas (RNG), into on-site hydrogen, and PowerTap intends to leverage an innovative carbon capture system.

At the same time, we continue to expand and develop our own Hydrogen and Sustainable Products (H2&S). In 2021, we demonstrated that Capstone microturbines could safely run on a 10% Hydrogen - 90% Natural Gas blend, and we are currently testing a 30% Hydrogen - 70% Natural Gas configuration through our Research & Development partnerships with Argonne National Laboratory and University of California, Irvine. These are promising milestones on the development roadmap to 100% Hydrogen solutions.

More recently, in January, we announced that after a detailed review of C&I solar industry products, we have entered into a supply agreement with Global RAIS<sup>®</sup> Energy & Storage Solutions for the supply of modular, low voltage, DC to DC solar photovoltaic (PV) kits for use in Capstone's commercial and industrial-focused microgrid and battery storage projects.

## Conclusion

As a result of our hard work and accomplishments in 2021, we enter calendar 2022 well positioned as a provider of high efficiency, low emission power generation products and services that enable customers to lower their energy costs, increase their power resilience and reduce their carbon emissions. The changes we have undertaken have increased our total addressable market or TAM to an estimated \$11.7 billion and positioned us well for continued accelerating growth. In addition, it affords us an extremely compelling Energy as a Service (EaaS) business model, which today accounts for approximately 50% of our revenue.

Today at Capstone Green Energy, we invite customers to partner with us for smart, practical green energy solutions to help lower their carbon footprint, increase cost efficiencies, and add resiliency to their business. This is also a reflection of what the customers of our customers value, and they are increasingly demanding green and sustainable products and services.

In 2022, we will continue to chase our goal of improving the global climate by providing sustainable Energy as a Service solutions. We invite you to please listen to our upcoming Q3 Earnings Call on Thursday, February 10 at 4:45 pm ET to hear about our third-quarter results, fourth-quarter plan, and updated strategies for the New Year.

Best regards,



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President & Chief Executive Officer



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