

ClearSign Technologies Corporation Announces Successful Testing of Ultra-Low NOx Hydrogen Burner

Company Submitting Application for Phase 2 Commercial Development

TULSA, Okla., April 5, 2023 /PRNewswire/ -- ClearSign Technologies Corporation (Nasdaq: CLIR) ("ClearSign" or the "Company"), an emerging leader in industrial combustion and sensing technologies that improve energy, operational efficiency and safety while dramatically reducing emissions, today announces the successful development and demonstration of a ClearSign Core™ Ultra Low NOx burner fueled with 100% Hydrogen.

"We had high confidence going into this project about the capabilities of our ClearSign Core™ technology," said Jim Deller, Ph.D., Chief Executive Officer of ClearSign. "We very much appreciate the DOE for this grant and opportunity to advance and demonstrate the capabilities of ClearSign Core™ technology to provide burners for the developing hydrogen economy, which we believe has potential massive global ramifications, reducing the pollutant emissions necessary to maintain a healthy environment today," continued Dr. Deller.

"Additionally, this project has raised the visibility of ClearSign and garnered the attention of customers and other stakeholders in the industry who have expressed interest in adopting this technology or providing sponsorship and collaboration to accelerate its deployment."

This project is being funded by a government grant through the Small Business Innovative Research (SBIR) program with the Department of Energy to Support Scientific Innovation in Clean Energy Development and Climate Solutions. The project and funding are in phases. The initial funding amount was approximately \$250,000 and commenced in June. With this completion of the Phase 1 work, the Company will submit a follow-up proposal with testing data and documented industry support to continue the development work with a Phase 2 grant. The application is for the maximum Phase 2 grant funding, which can be up to \$1.6 million over a two-year duration.

As a reminder, the goal of this project is to develop ultra-low NOx hydrogen burner technology, which we believe will enable the adoption of hydrogen fuel for industrial heating, leading to reductions in the industrial emissions of both carbon dioxide and nitrogen oxides. Current burners and previous efforts to decarbonize industrial combustion processes through the utilization of hydrogen fuel are inhibited by the lack of industrial hydrogen burners capable of burning pure hydrogen while preventing additional Nitrogen Oxides (NOx) emissions.

About ClearSign Technologies Corporation

ClearSign Technologies Corporation designs and develops products and technologies for the purpose of improving key performance characteristics of industrial and commercial systems, including operational performance, energy efficiency, emission reduction, safety and overall cost-effectiveness. Our patented technologies, embedded in established OEM products as ClearSign Core™ and ClearSign Eye™ and other sensing configurations, enhance the performance of combustion systems and fuel safety systems in a broad range of markets, including the energy (upstream oil production and down-stream refining), commercial/industrial boiler, chemical, petrochemical, transport and power industries. For more information, please visit www.clearsign.com.

Cautionary note on forward-looking statements

All statements in this press release that are not based on historical fact are "forward-looking statements." You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "hopes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," "could," "may," "will" or other similar expressions. While management has based any forward-looking statements included in this press release on its current expectations on the Company's strategy, plans, intentions, performance, or future occurrences or results, the information on which such expectations were based may change. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of our control, that could cause actual results to materially differ from such statements. Such risks, uncertainties and other factors include, but are not limited to, the likelihood that we are able to submit and are approved for the Department of Energy's Phase 2 grant funding, general business and economic conditions, the performance of management and our employees, our ability to obtain financing, competition, whether our technology will be accepted and adopted and other factors identified in our Annual Report on Form 10-K filed with the Securities and Exchange Commission and available at www.sec.gov and other factors that are detailed in our periodic and current reports available for review at www.sec.gov. Furthermore, we operate in a competitive environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward-looking

statements as a prediction of actual results. We disclaim any intention to, and, except as may be required by law, undertake no obligation to, update or revise forward-looking statements to reflect events or circumstances that subsequently occur or of which we hereafter become aware.

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