

ClearSign 2016 CEO Shareholder Letter

Dear ClearSign Shareholder,

I am pleased to have this opportunity to reflect on the ClearSign business activities and key events during 2016, as well as provide some insight into the exciting potential opportunities we see for ClearSign in the near future.

During 2016 we remained focused on building our base of customer advocates by increasing our number of successful field installations and expanding our applications experience from refinery process heaters to enclosed ground flares. Independent emissions testing of our Duplex™ burner shows that we can achieve Best Available Control Technology or BACT performance among multiple installations. This continued success has engendered keen interest among a wide range of industrial operators and environmental regulators, all of whom are seeking cost effective solutions to achieve their environmental compliance and operational performance objectives.

In 2016, we began the development of a pre-engineered standardized Duplex product platform called Duplex Plug & Play™. This product, which was officially introduced in February 2017, has all the capabilities inherent in our Duplex Technology. The pre-engineered design reduces the amount of custom engineering and the cycle time necessary to retrofit an existing customer installation. This new product platform has created significant interest from our existing clients, channel partners, and potential licensees.

Again in 2016, we were requested by one of our customers in California to retrofit their existing enclosed ground flare in order to allow them to meet their required permitted emissions. This ground flare was used for well head gas at an oil field production facility. Based on our successful retrofit of the Duplex Technology, we were awarded an additional contract for five other enclosed ground flares at this location. Our demonstrated ability to dramatically reduce emissions from enclosed ground flares has led to meaningful dialogue with regulators who are looking at ground flares as a potential source of emissions reduction. While the majority of enclosed ground flares are not currently regulated, our ability to dramatically reduce emissions from enclosed ground flares could create a new category killer for us within this emerging potential market. Greater regulations of existing enclosed ground flares could lead to a potential billion dollar market for ClearSign over the next five to ten years.

Finally, in 2017 we began to develop and test our Duplex packaged boiler burner. We have set aggressive performance targets for this product for ultra low emissions without the use of flue gas recirculation. Preliminary discussions with major boiler OEM's in the US, Europe, and China show keen interest in this ground-breaking product. Management estimates the potential market for institutional, commercial, and small industrial (ICI) boilers at up to \$1.7 billion over the next ten years in the US alone with even greater market potential for the rest of the world, including Europe and China.


Throughout 2016, we have continued to build on our knowledge of our Duplex Technology and expand our application range while we continue to develop new and innovative solutions to solve our customers' environmental and operational problems. Our pipeline of interest continues to fill with new and existing satisfied customers and the profound impact this technology may bring to the industry has even gotten the attention of super major oil companies who, as of this writing, are considering field testing of our technology in their facilities.

Throughout 2017, we will continue to capitalize on the momentum we have built and pursue our current go to market strategy which involves selective direct sales through trusted subcontractors and/or partners and the separate development of key licensors globally. This asset light model will allow us to leverage the existing industry infrastructure and meet customers' increasing demand for our technology without adding significant bricks and mortar to our operation. Beyond our focus on the US/North America, we are actively looking at expanding our industry presence in Europe and China. To that objective, we have engaged seasoned industry veterans located within Europe and China to help us assess and harvest these opportunities. Anecdotally, the Chinese market represents a tremendous opportunity for ClearSign's proven patented environmental solutions. China not only provides a fertile market environment for sales, but also provides significant opportunities for strategic investment.

While no one is less patient than I am, I believe we have made tremendous progress in introducing a bold new innovative technology into an industry which by its nature tends to be slow to change. Nevertheless, I remain excited and optimistic about the future of ClearSign Combustion, our ability to expand our product range, global markets, and overall sales long term.

Sincerely,

Steve Pirnat
Chairman and CEO

Additional assets available online:  [Documents \(1\)](#)

<https://ir.clearsign.com/company-news?item=150>