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GasTechno to Offer Exclusive Country-Level Mini-GTL® Technology Licenses

June 4, 2018, Gas Technologies LLC, and its wholly-owned subsidiary GasTechno Energy & Fuels Holding (UK) Limited (GEFH), will begin this month to market exclusive country-level licenses to its patented, single-step GasTechno® gas-to-liquid (“Mini-GTL”) process. GEFH is the exclusive global licensee of the GasTechno® process.

Exclusive licenses will allow for deployment of the patented GasTechno® process within that country. The GasTechno® process is designed to convert natural gas, associated gas, biogas, landfill gas and other methane-containing gases directly into commercially saleable methanol, ethanol, and formalin with up to 70% lower costs and at smaller-scales than traditional GTL or small-scale methanol technologies.

Coupled with either conventional NGL processing equipment, or our latest proprietary shipping container based NGL (“natural gas liquids”) system, GasTechno’s Mini-GTL® plant converts \$9-12 BOE (“barrel oil equivalent”) associated gas into \$70+ BOE fuels and chemicals at the well-site while reducing carbon emissions to meet compliance targets. While traditional NGL systems recover up to **25% of the associated flared gas volume**, our combined GasTechno NGL-GTL solution recovers up to **89% of the associated gas** and creates additional cash flow and economic value from formerly wasted resources, bolstering Return on Capital Employed for our customers.



During 2018, the most advanced Mini-GTL® system was reconfigured to incorporate a patented drop-in diesel fuel distillation system that completed testing in 2016 using funding from a US Department of Energy Grant. A successful feasibility study followed in 2018 on a compact, modular system that will be offered in the exclusive licensing package. The GasTechno diesel technology solution is the lowest cost diesel production system in the world.

“We continue to receive a significant number of requests worldwide to license our technology on a project-by-project basis. However, given our global infrastructure with headquarters in London, UK, and country offices in Moscow, Mumbai, Singapore, and Kuala Lumpur, we decided to offer exclusive country-level technology licenses” stated GasTechno CEO Walter Breidenstein. “Our exclusive country-level partners will gain deep expertise on our technology and through them, we will offer turn-key flaring solutions to end customers including oil & gas, biogas, landfill gas and waste-to-energy producers. GasTechno Energy & Fuels will provide our licensees with fully

integrated system designs and access to our global manufacturing partners as we work together to address the massive global gas flaring problem and the growing biogas-to-biomethanol markets” said Mr. Breidenstein.

In 2016-17, DNV GL from the UK completed a Pre-Feasibility Study on a GasTechno NGL-GTL combined system processing 10 million standard cubic feet per day (mmscfd) and their independent design will be included in the licensing package. In 2018, GasTechno also filed a patent application a new Tri-Fuel Methanol, Natural Gas and Propane Generator Conversion Kit system. Their first complete conversion of a 110 KW generator was completed in May, 2018. This new Tri-Fuel Generator system is included.

During 2017, Optimization, one of GasTechno’s key manufacturing partners, engineered several improvements to the compact, modular design of the Mini-GTL® 300 unit and the Mini-GTL® 750 unit. Both units are in fabrication with targeted completion in 4Q 2018. GasTechno intends to offer both the new Mini-GTL® 300 unit (40+ bbl/day) and Mini-GTL® 750 unit (150+ bbls/day) to the first two exclusive country-level licensees that partner with us. These plants are the ideal size for on-site demonstration, training and operations, and under the right conditions are economically attractive. GasTechno has plans for new development of their Mini-GTL® and Methanol-In-A-Box® systems processing gas up to 100 mmscfd.

Bill Pollock, CEO of Optimization commented, “GasTechno’s compact, modular Mini-GTL® design holds great promise for deployment at remote sites. It has been exciting for Optimization to play a role in the progress of this game-changing technology. As advanced manufacturers, we are always looking for ways to reduce costs and increase efficiency. Configuring a complete GasTechno® plant to fit into a 45-foot container is one of Optimization’s most significant contributions and we believe that this technology will create significant value for GasTechno customers.”

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About Gas Technologies LLC

Gas Technologies LLC, or GasTechno® as it is known, has developed advanced, proprietary technologies for turning stranded flare gas, landfill gas, and other sources of gas that currently aren’t economical to use commercially, into valuable liquid fuels and other chemicals – quickly and inexpensively. The company is headquartered in northern Michigan with operations worldwide. For more information, visit www.gastechno.com. Mini-GTL, Methanol In A Box, GTL In A Box and GasTechno are a registered trademark of Gas Technologies LLC.

About Optimization

Optimization is a leader in the design and fabrication of skid-based manufacturing systems in the United States. Optimization is unique in its ability to provide complete engineering, automation, construction and maintenance services, from the conceptual stage, through prototyping, all the way to full production-scale operations. Optimization's multidiscipline engineers, designers and skilled tradespeople work together to successfully deliver thousands of projects each year through the US and the world. Optimization has contracts with over 100 manufacturers including many fortune 500 companies. Headquartered in Rochester, NY since 1985, with locations throughout the US, we serve clients across a wide spectrum of industries, including chemical, life sciences, oil & gas, glass, utilities, automotive and aerospace. <http://optimization.us/>