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Tecogen Announces Issuance of Two Additional US Patents Protecting Its Ultera Emissions Reduction Technology

WALTHAM, MA, Sept. 24, 2020 (GLOBE NEWSWIRE) -- via [NewMediaWire](#) -- [Tecogen Inc.](#) (OTCQX: TGEN), a clean energy company providing ultra-efficient and clean on-site power, heating and cooling equipment, is pleased to announce that on September 15, 2020 the US Patent and Trademark Office issued two additional patents to Tecogen relating to its Ultera emissions reduction technology.

The technology covered by US patent No. 10,774,720 titled, *'NOx Reduction Using a Dual-Stage Catalyst System with Intercooling in Vehicle Gasoline Engines under Real Driving Conditions,'* improves the removal of Non-Methane Organic Gases (NMOG) and Carbon Monoxide (CO) from vehicle emissions. The improved performance, consisting of up to 90% reductions in NMOG and CO results from increased oxidation of NMOG and CO due to a lower temperature environment in the second stage catalyst. Conventional single stage catalysts reform NOx in the high temperature environment of the vehicle exhaust. The second stage catalyst provides up to a 30% reduction in NOx by improved ammonia storage. A secondary benefit of the Ultera technology covered by the patent is improved NOx reduction without using a urea reductant. Urea reductant-based systems need to be replenished periodically whereas the catalyst-based systems are not consumed as part of the emissions reduction process. The technology is described in the [linked technical paper](#) published by SAE International in 2018.

The second patent, US Patent No. 10,774,724, titled, *'Dual Stage Internal Combustion Engine Aftertreatment System Using Exhaust Gas Intercooling and Charger Driven Air Ejector,'* relates to the use of turbo compressors and exhaust gas intercoolers in turbocharged engines to reduce the complexity and cost of Ultera emissions reduction systems.

"I am pleased that Tecogen's Ultera emissions reduction technology will benefit from the expanded IP protection provided by these additional patents," stated Robert Panora, President and COO at Tecogen. "The Ultera emissions reduction technology provides significant environmental benefits and we hope to expand the use of Ultera in a variety of applications. We are already implementing Ultera in stationary engine applications, and we are working toward implementation in off-road vehicle applications, including forklift trucks."

About Tecogen

[Tecogen Inc.](#) designs, manufactures, sells, installs and maintains high efficiency, ultra-clean, cogeneration products including combined heat and power, air conditioning systems and high-efficiency water heaters for residential, commercial, recreational and industrial use. The

company provides cost efficient, environmentally friendly and reliable products for energy production that, through patented technology, nearly eliminate criteria pollutants and significantly reduce a customer's carbon footprint.

In business for over 35 years, Tecogen has shipped more than 3,000 units, supported by an established network of engineering, sales and service personnel throughout North America. For more information, please visit www.tecogen.com or contact us for a free [Site Assessment](#).

Tecogen, InVerde e+, Ilios, Tecochill, Tecofrost, Tecopower and Ultera are registered or pending trademarks of Tecogen Inc.

Forward Looking Statements

This press release contains "forward-looking statements" which may describe strategies, goals, outlooks or other non-historical matters, or projected revenues, income, returns or other financial measures that may include words such as "believe," "expect," "anticipate," "intend," "plan," "estimate," "project," "target," "potential," "will," "should," "could," "likely," or "may" and similar expressions intended to identify forward-looking statements. These statements are only predictions and involve known and unknown risks, uncertainties and other factors that may cause our actual results to differ materially from those expressed or implied by such forward-looking statements. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Forward-looking statements speak only as of the date on which they are made and we undertake no obligation to update or revise any forward-looking statements.

In addition to those factors described in our Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q under "Risk Factors," among the factors that could cause actual results to differ materially from past and projected future results are the following: fluctuations in demand for our products and services, competing technological developments, issues relating to research and development, the availability of incentives, rebates and tax benefits relating to our products and services, changes in the regulatory environment relating to our products and services, integration of acquired business operations, and our ability to obtain financing on favorable terms to fund existing operations and anticipated growth.

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