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## Tecogen Reports Positive Results from ULTRATEK JV Automotive Emissions Testing

WALTHAM, Mass., May 11, 2016 /PRNewswire/ --[Tecogen® Inc.](#) (NASDAQ: TGEN) is pleased to announce its joint venture company, Ultra Emissions Technologies Inc. (known as "ULTRATEK"), has completed its first phase of testing of the Ultra™ emissions reduction system on a gasoline powered light duty vehicle. The results, which will be reported in detail upon full internal evaluation, conclusively proved the Ultra technology to be highly effective in reducing pollutants from the test vehicle. This phase of testing focused on simulated driving cycles prescribed by federal regulations for vehicle certification. In these tests, criteria pollutants (those contributing to smog and negatively impacting human health) were reduced in all simulated drive conditions. Ultra benefits were particularly noteworthy during aggressive driving conditions found in certain federal test cycles. The push for regulatory testing under real-world driving conditions is expected to further the Ultra enhancement.



Top level findings show the cutting-edge system reduced levels of carbon monoxide emitted from a gasoline powered test vehicle by as much as 90 percent during simulated driving cycles prescribed by federal regulations for vehicle certification. In addition, Ultra was found

to decrease levels of non-methane hydrocarbons (NMOG) by as much as 80 percent. This is the first time Ultera has been tested on traditional gas powered engines, confirming the technology can be used for gasoline automotive applications.

Robert Panora, Tecogen President and COO and ULTRATEK co-CEO noted, "We were very pleased to validate the chemistry of the Ultera process in the gasoline vehicle application. We especially look forward to optimizing the process and expanding our research to alternative drive cycles, closer to real world driving conditions, where we anticipate Ultera to have maximum impact. These positive results motivate us to continue our mission of reducing emissions for the betterment of our health and the environment."

The phase one testing was completed at the AVL California Technology Center in Lake Forest, California utilizing their state of the art vehicle test cell. The laboratory, in addition to its ability accurately replicate driving conditions, can measure pollution output of the vehicle in real time with extreme precision. The vehicle was a new 2016 model driven for several months to complete its "break in" period, as recommended by the manufacturer's specifications, and was in compliance with emissions regulations as currently tested on federally prescribed simulated driving cycles.

The Ultera emissions technology, developed with funding from the California Energy Commission and Southern California Gas Company, has been previously independently verified as effective by third party experts. Emissions measurements from stationary systems equipped with the ultra-low emissions technology conform to the current California Air Resource Board (CARB) 2007 carbon monoxide (CO) and nitrogen oxide (NOx) standards for distributed power generation. Stationary engines retrofitted with Tecogen's Ultera technology measure at or below current natural gas powered fuel cell emissions levels (according to publicly available data). Because of the Tecogen's strong belief in the value of its emissions technology, patent infringement insurance has been secured by Lloyds of London to defend unlicensed use of Tecogen's intellectual property.

In October 2015, in light of the emerging vehicle emissions crisis, Tecogen formed an Emissions Advisory Group to evaluate the application of its breakthrough emissions control technology to the gasoline vehicle market. After careful study of the chemistry, regulatory, and automotive market environment, the Advisory Group recommended Tecogen pursue a funded effort to develop Ultera for gasoline vehicles. Ultra Emissions Technologies Ltd. ("ULTRATEK"), a 50/50 joint venture, was launched in December to adapt the near-zero emissions technology for transportation applications powered by spark-ignited engines (including gasoline, natural gas, and propane fueled vehicles) in the automotive and truck categories.

Members of Tecogen's senior management will hold a conference call and webcast today at 11:00 AM Eastern Time to discuss the company's first quarter financial performance and recent news. Details and dial in information for the event may be found at: <http://investors.tecogen.com/2016-04-19-Tecogen-Schedules-Earnings-Release-and-Conference-Call-for-First-Quarter-2016-Results>.

### **About AVL**

AVL is the world's largest independent company for development, simulation and testing technology of powertrains (hybrid, combustion engines, transmission, electric drive, batteries and software) for passenger cars, trucks and large engines. From diesel engines to electric

drives, from alternative fuels to control software, from transmissions to batteries, AVL has been working in partnership with companies all over the world for more than 60 years. Unique synergies with AVL Instrumentation and Test Systems and AVL Advanced Simulation Technologies enable the development of highly creative, advanced and application-specific solutions for the future of safe, sustainable mobility.

### **About Ultra Emissions Technologies Ltd.**

Ultra Emissions Technologies Ltd, known as ULTRATEK, is a 50/50 joint venture company formed in December 2015 and incorporated in the Island of Jersey, Channel Islands. The company's mission is to develop and adapt Tecogen's patented Ultera ultra-low emissions control technology for the gasoline transportation markets. ULTRATEK maintains the exclusive licensing rights to the Ultera technology for the global vehicle market. The company is funded by a group of Strategic Investors and staffed by an expert team of engineers and consultants.

### **About Tecogen**

Tecogen manufactures, installs, and maintains high efficiency, ultra-clean, combined heat and power products including natural gas engine-driven cogeneration, air conditioning systems, and high-efficiency water heaters for residential, commercial, recreational and industrial use. The company is known for 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 20 years, Tecogen has shipped more than 2,300 units, supported by an established network of engineering, sales, and service personnel across the United States. For more information, please visit [www.tecogen.com](http://www.tecogen.com) or follow us on [Twitter](#), [Facebook](#), and [LinkedIn](#).

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### **Forward Looking Statements**

This press release may contain forward-looking statements under the Private Securities Litigation Reform Act of 1995 that involve a number of risks and uncertainties. Important factors could cause actual results to differ materially from those indicated by such forward-looking statements, as disclosed on the Company's website and in Securities and Exchange Commission filings. The statements in this press release are made as of the date of this press release, even if subsequently made available by the Company on its website or otherwise. The Company does not assume any obligation to update the forward-looking statements provided to reflect events that occur or circumstances that exist after the date on which they were made.

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To view the original version on PR Newswire, visit <http://www.prnewswire.com/news-releases/tecogen-reports-positive-results-from-ultratek-jv-automotive-emissions-testing-300266790.html>

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