



# 2Q 2016 Earnings



NASDAQ: TGEN

August 10, 2016

# Participants

John Hatsopoulos

- Co-Chief Executive Officer, Director

Benjamin Locke

- Co-Chief Executive Officer

Robert Panora

- President & Chief Operating Officer

David Garrison

- Chief Financial Officer

Ariel Babcock

- Director, Investor Relations





# Safe Harbor Statement

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This presentation includes forward-looking statements within the meaning of Section 27-A of the Securities Act of 1933, and Section 21-E of the Securities Exchange Act of 1934. Such statements include declarations regarding the intent, belief, or current expectations of the Company and its management. Prospective investors are cautioned that any such forward looking statements are not guarantees of future performance, and involve a number of risks and uncertainties that can materially and adversely affect actual results as identified from time to time in the Company's SEC filings. Forward looking statements provided herein as of a specified date are not hereby reaffirmed or updated.

# Why Tecogen?

Heat, Power & Cooling that is Cheaper, Cleaner, & More Reliable

← “Unregulated Utility” →

**CHP Modules**



Electricity & Heat

**Ilios Water Heaters**



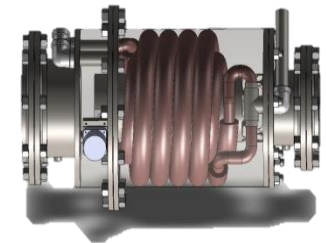
2-3x Heat Efficiency

**TECOCHILL**



Cooling & Heat

**Emissions Control  
Ultra**



Ultra-Clean Emissions

*Tecogen's compelling ROI proposition meets the needs of a diverse range of customers.*

Hospitality



Health Care



Education



Multi-Unit Residential



Industrial



Municipal



Recreation



## Products

- Launched InVerde e+ reinforcing competitive advantage in key markets
- GE Equipment Insight real-time monitoring and cloud-based data analytics deployment

## Sales

- Repeat orders won from key ESCOs, developers and property managers demonstrating traction in customer relationship development initiatives
- Gas Company selling agreement
- Expansion of Tecochill to indoor agriculture industry opens up new potential market

## TTcogen JV

- Combined product portfolio quadruples addressable market for cogeneration products
- Brings renewable biofuel capability

## ULTRATEK

- Phase 1 tests prove Ultera highly effective for automotive emissions reduction
- \$6.2M in cash on hand ensures flexibility to pursue any potential opportunity
- Phase 2 testing begins later this month



Tecochill chillers keep Mexican factories cool, despite often unreliable grid power.

# 2Q 2016 Results:

## REVENUE

- Total Revenues - \$5.7M in 2Q16 vs. \$6.4M in 2Q15 & \$5.1M in 1Q16
- Products - \$2.4M in 2Q16 vs. \$3.3M in 2Q15 & \$2.3M in 1Q16
  - Chiller & Heat Pump sales growth offset by challenged Cogeneration sales
  - Incentive programs recently began taking new applications
- Service - \$3.3M in 2Q16 vs. \$3.0M in 2Q15 & \$2.8M in 1Q16
  - Improved due to up-tick in Installation activity

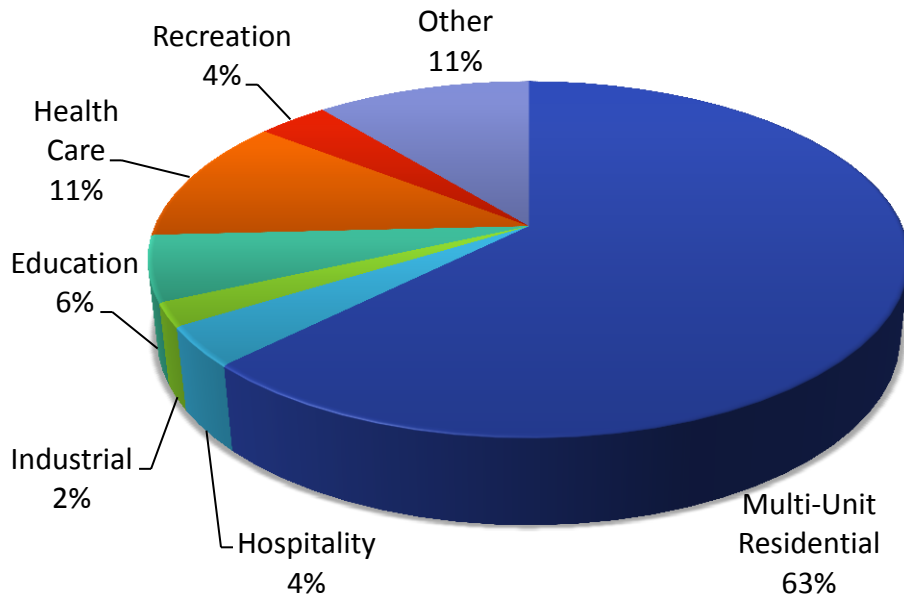
## GROSS PROFIT & MARGIN

- \$2.10M in 2Q16 gross profit vs. \$2.14M in 2Q15 & \$1.7M in 1Q16
- 37.0% gross margin in 2Q16 vs. 33.5% in 2Q15 & 33.9% in 1Q16
- Service margin improvement from increased Installation activity
- Product margin impacted by write down of inventory and supply agreements for legacy first generation InVerde

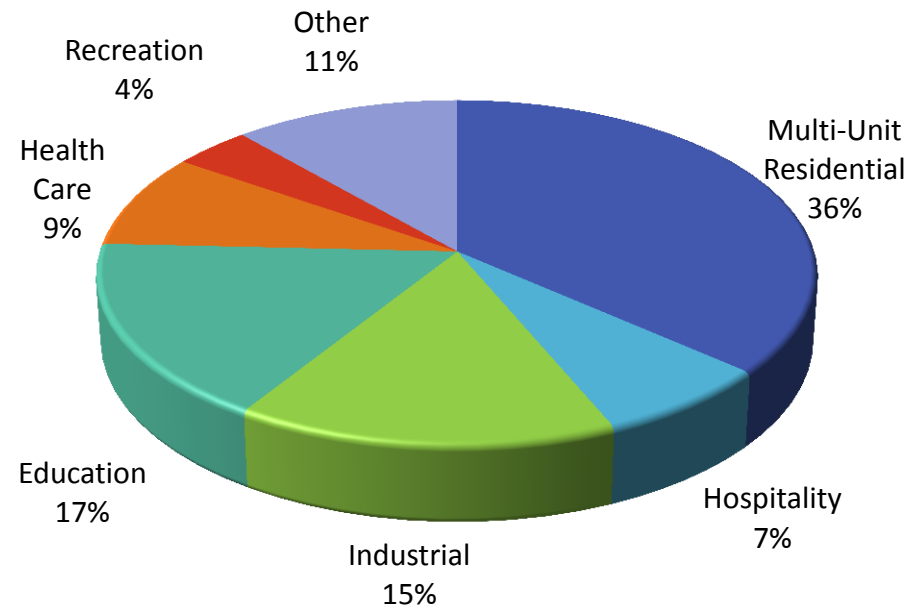
## BACKLOG

- \$15.9M in current backlog as of Aug. 5, 2016
- \$14.1M 2Q16 end backlog vs \$9.3M prior year backlog
- Backlog growth from strong orders for InVerde e+ and continued demand for Installation services

Backlog



Installed Base\*



**\$14.1M 2Q16 backlog up 50% Y/Y vs. \$9.3M 2Q15 backlog**  
**2Q16 up 21% Q/Q vs. \$11.5M 1Q16 backlog**  
**\$15.9M Current Product and Installation Backlog**

\* Approximate recently installed base by end market as of YE 2015. 2Q 2016 Earnings Call



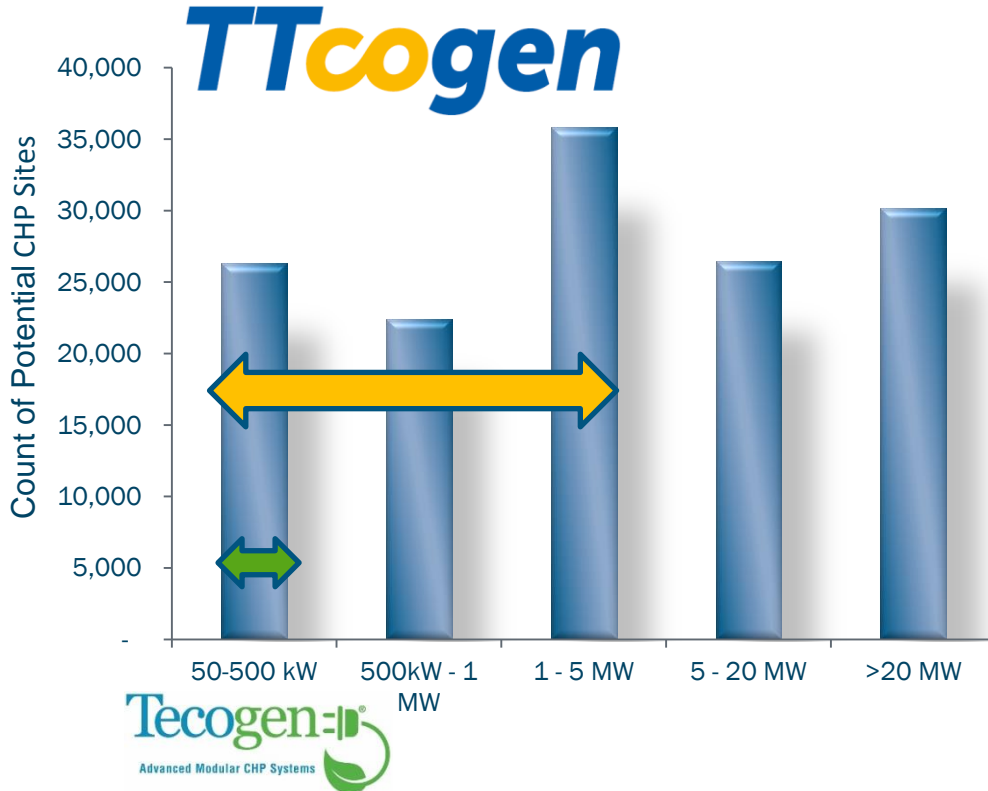
# Tecogen JV: INFINITE POTENTIAL



INFINITE POTENTIAL  
**Tecogen**



## On-Site CHP Potential Capacity (MW)



## U.S. Market Projection

- DOE CHP U.S. market potential capacity for on-site Industrial and Commercial CHP addressable market ~85 GW.
- Tecogen portfolio offers CHP solutions that meet ~60% of total CHP market potential vs. just ~20% of CHP market served by Tecogen.
- Assuming 2020 U.S. target CHP deployment of 40 GW is met – Tecogen addressable market is ~20-25 GW over the next 4 years.
- Conservative 10% market share target equates to ~\$12B sales potential.

Taken from U.S. DOE CHP Deployment Program, 2016: “Total U.S. CHP Technical Potential Across All Facility Types” March 2016. Totals represent estimated potential capacity for both on-site industrial and commercial CHP installations in the U.S.

# TEDOM Portfolio: *from Tecogen*

## Micro

- Compact 35kW CHP unit
- The most efficient small CHP unit on the market in the U.S.
- Plug & Play installation
- Flexible fuel options inc. nat. gas, propane, & biofuel
- Silent operation



## Cento

- Packaged CHP ranging in size from 125 – 330kW
- Powered by TEDOM custom proprietary engine for superior efficiency
- Flexible fuel options
- Serves needs of mid-size customers

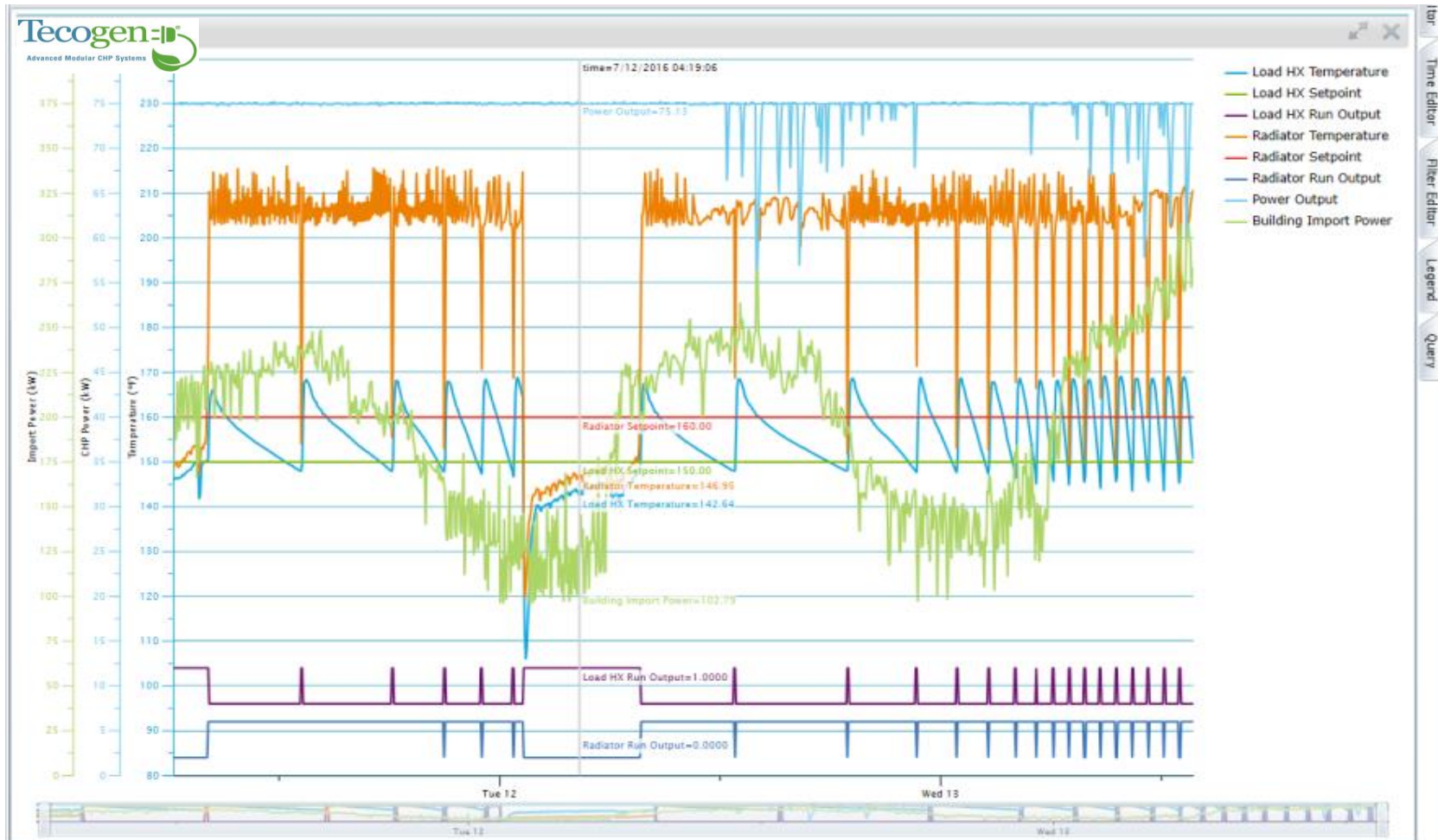


## Quanto

- Meets the requirements of large facilities with high energy demand in the 1-4 MW range
- Completely customizable design to meet exacting customer specifications
- Flexible fuel options
- Various packaging configurations



# Technology Update: *GE Equipment Insight*



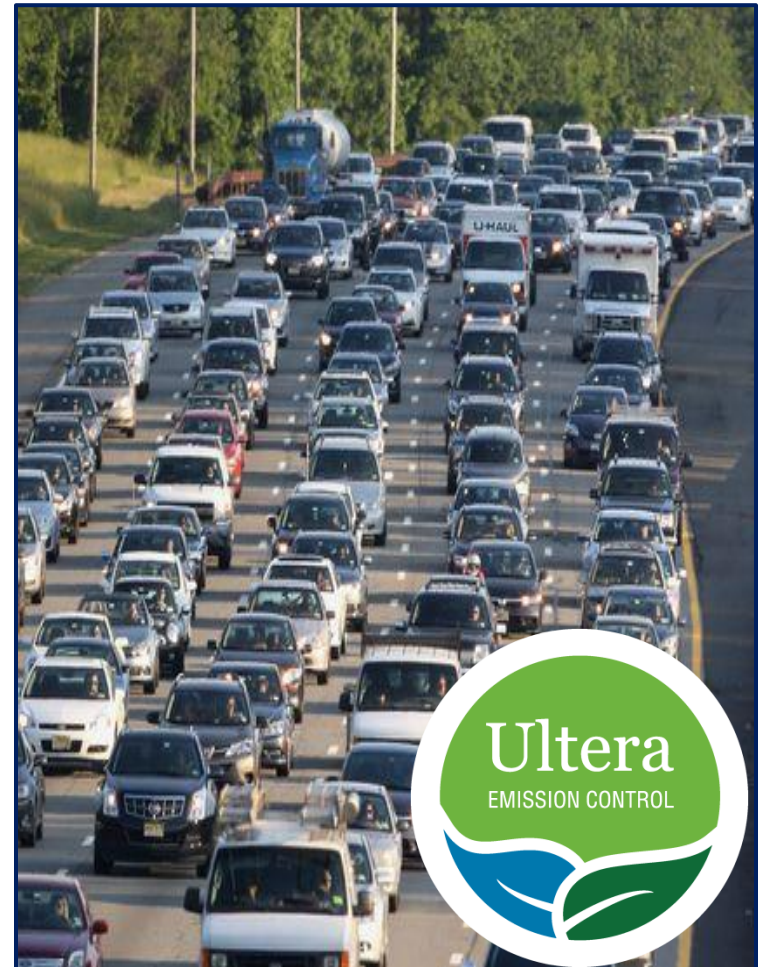
## Unique Cutting-Edge Features

- Superior efficiency
- Quieter operation
- Microgrid enabled for advanced demand response
- DC input capability for renewable and/or battery integration



# ULTRATEK: YTD Emissions Progress

- Additional emissions-related patent awarded with several other filings still pending
- Constructed preliminary test module
- Phase 1 testing at AVL California Technology center completed in April
- Phase 1 results on base-line vehicle platform indicate Ultera highly effective at reduction of CO and NMOG beyond currently available technologies
- Phase 2 testing slated to begin in late August

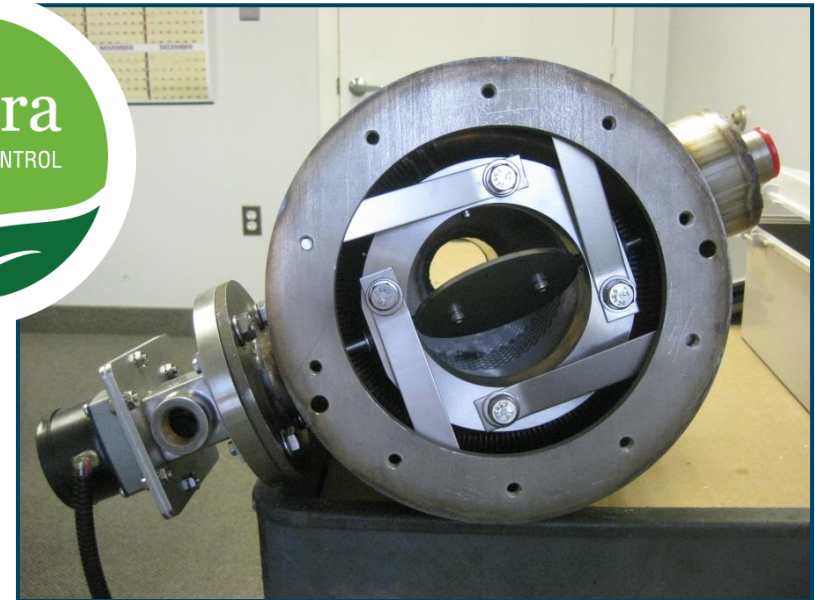


# ULTRATEK: Results

- ✓ Ultra chemistry confirmed as effective on gasoline automotive engines
- ✓ Phase 1 focus on federally prescribed standard drive cycle tests
- ✓ 2016 light duty vehicle was compliant with current federal regulations on the standard test cycle
- ✓ Ultra proved especially effective during aggressive driving conditions
- ✓ Regulatory testing under real-world driving conditions would benefit Ultra technology

## US06 Drive Cycle Test Results

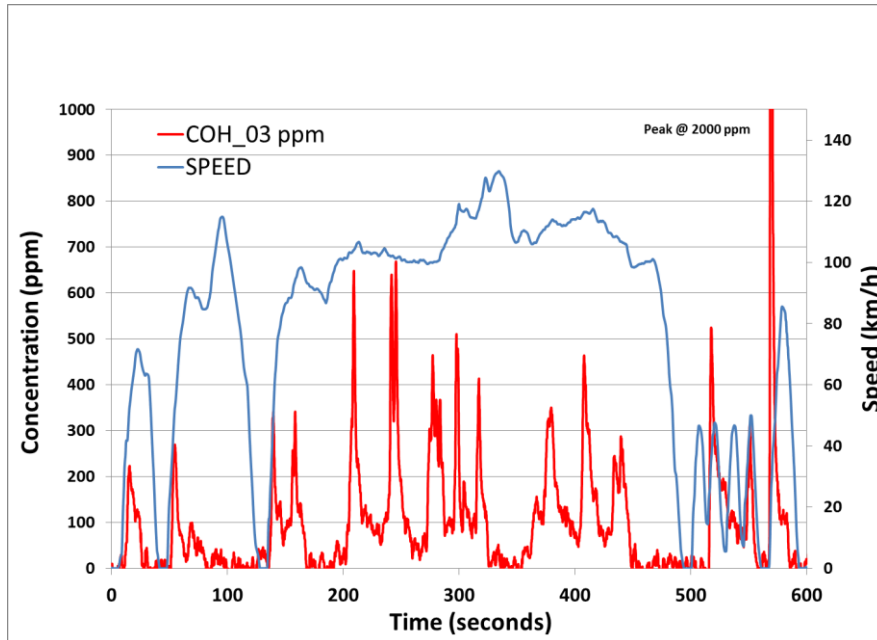
	Emissions (mg/mile)			
	CO	NMOG	NOx	NOx + NMOG
<b>Standard Vehicle</b>	332	5.234	5.763	10.997
<b>With Ultra</b>	20	1.001	5.072	6.074
<b>% Reduction</b>	<b>94%</b>	<b>81%</b>	<b>12%</b>	<b>45%</b>
<b>ULEV Regulation</b>	8000			140
<b>2025 Regulation</b>	1000			30



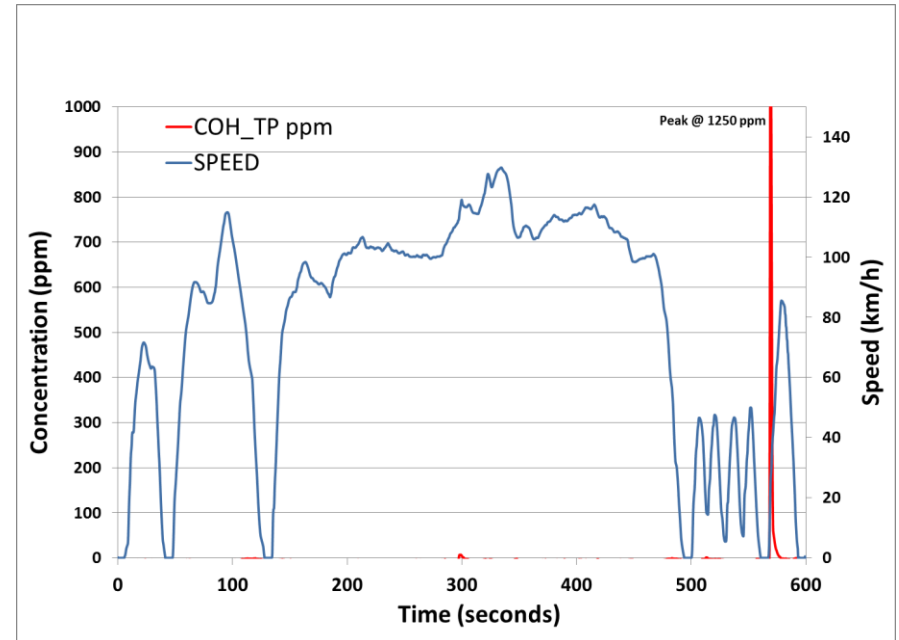
# ULTRATEK: Results

Ultra Reduction of CO Concentration – US06 Cycle

Standard Vehicle Emission System



With the addition of the Ultera System



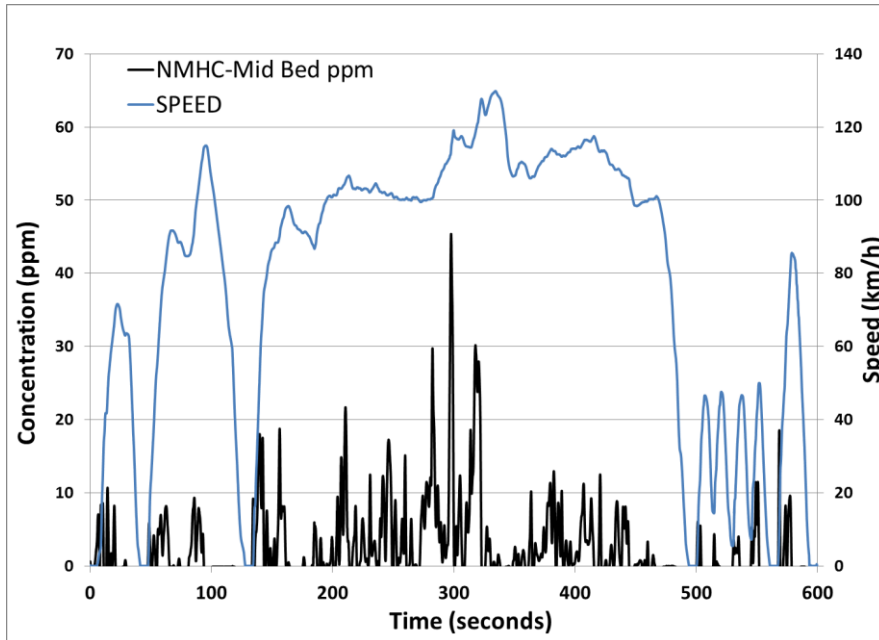
Graphs present the reduction of measured CO concentration where CO concentration (ppm) is represented by the red line and the speed (in kilometer per hour) is represented by the blue line and depicts patterns of acceleration/deceleration.

***CO is nearly eliminated by the Ultera system.***

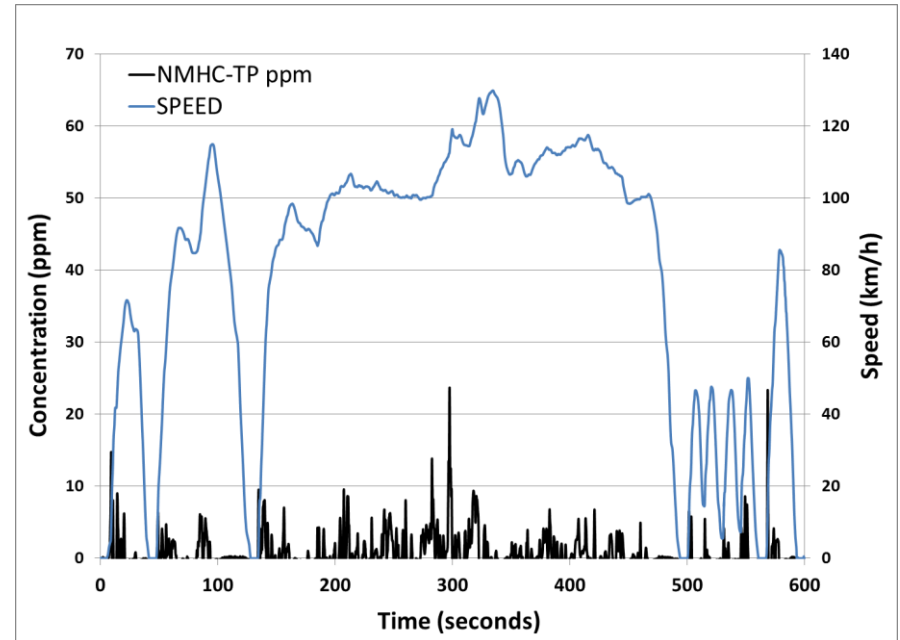
# ULTRATEK: Results

Ultra Reduction of NMHC Concentration – US06 Cycle

Standard Vehicle Emission System



With the addition of the Ultera System



Graphs present the reduction of NMHC (non-Methane Hydrocarbons) throughout the drive cycle where NMHC concentration (ppm) is represented by the black line and the speed (in kilometer per hour) is represented by the blue line and depicts patterns of acceleration/deceleration.



# ULTRATEK: *Phase 2 Testing*

- AVL Testing to resume this month
  - Six weeks planned
- Upgraded system
  - Quicker response
  - More accurate sizing
  - Improved chemistry for gasoline application
- Two vehicles procured for evaluation
  - Strategic selection process





# Financial Metrics

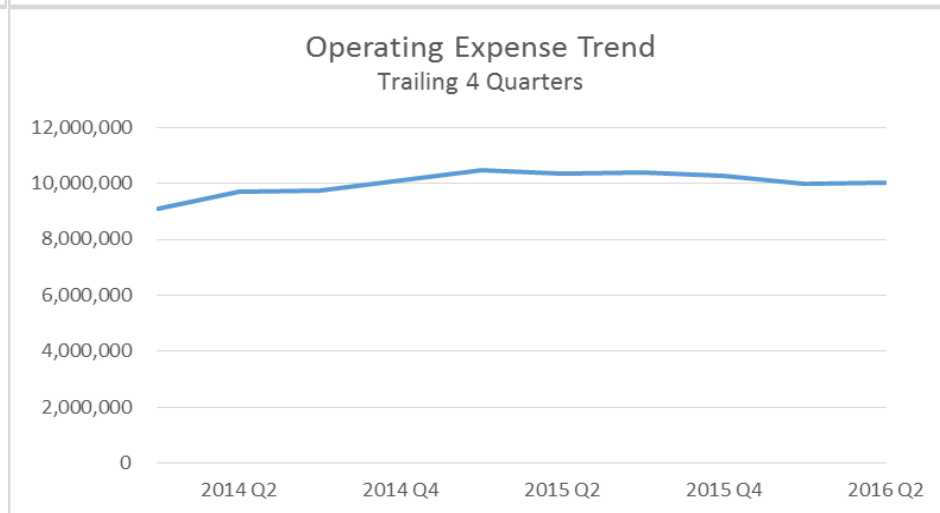
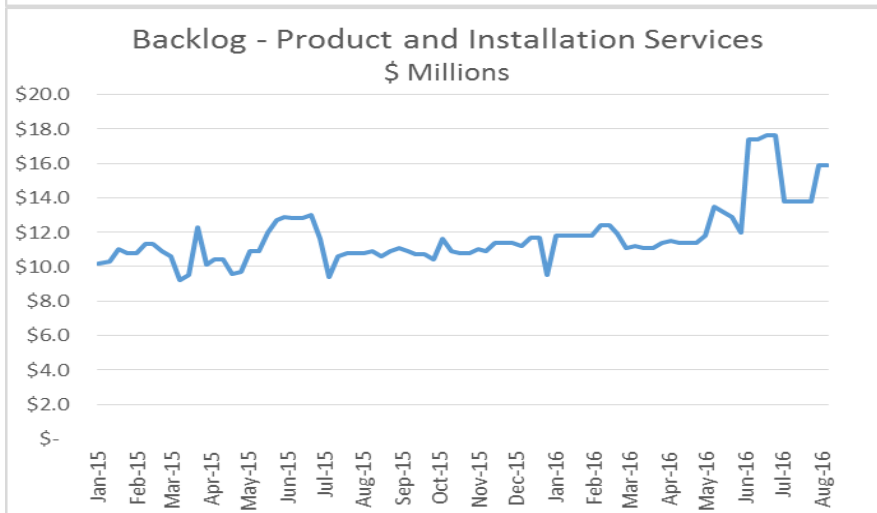
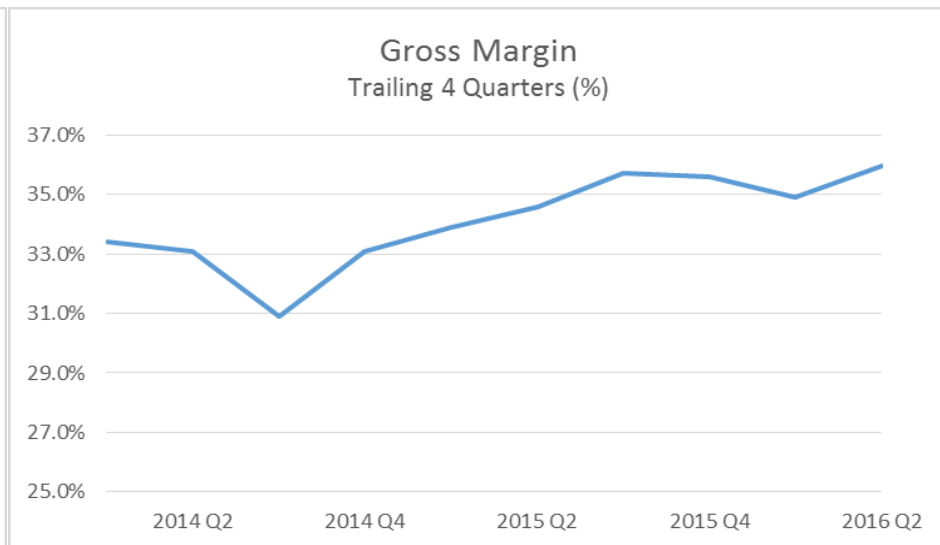
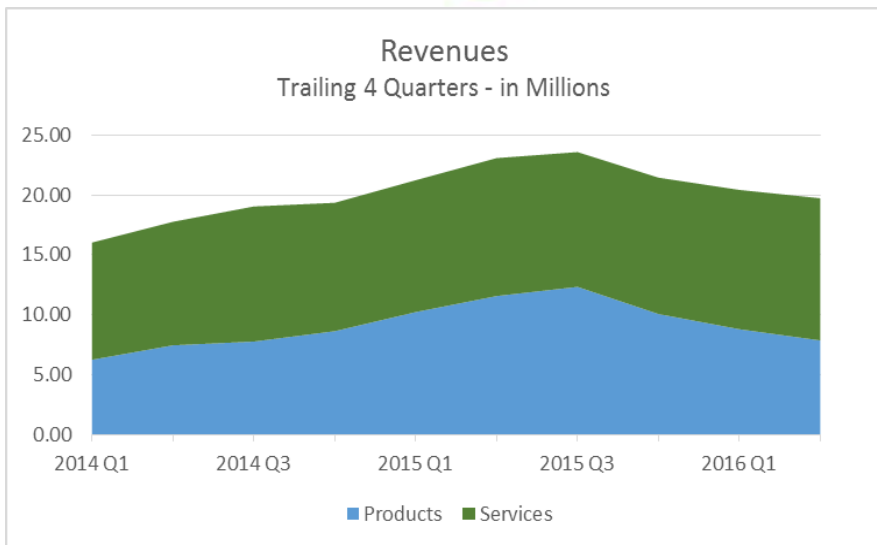
## Revenues, Margins, Growth

### Tecogen Revenue Model & Outlook

- Three revenue streams
  - Product sales
  - Long-term service contracts **provide stable ongoing revenue**
  - Turnkey Installation through Tecogen service operations
- Targeting stable book-to-bill ratio of 1-1.5x
- Deliver ongoing expense improvement from lean manufacturing initiatives
- Targeting Gross Margins 35-40%
- Quarterly Backlog >\$10M
- Full Year Op Ex ~\$10M

	<u>For the Quarter Ended</u>		<u>Y/Y</u>	<u>% of</u>
	<u>June 30,</u>	<u>June 30,</u>	<u>Growth</u>	<u>Total</u>
	<u>2016</u>	<u>2015</u>		<u>Revenue</u>
<b>REVENUE</b>				
Cogeneration	1,270,499	2,526,812		22.3%
Chiller & Heat Pump	<u>1,138,361</u>	<u>818,759</u>		20.0%
Total Product Revenue	2,408,860	3,345,571	<b>-28%</b>	<b>42.4%</b>
Service & Parts	2,082,644	2,035,041		36.6%
Installation Services	<u>1,195,804</u>	<u>1,003,219</u>		21.0%
Total Service Revenue	3,278,448	3,038,260	<b>8%</b>	<b>57.6%</b>
<b>Total Revenue</b>	<b><u>\$ 5,687,308</u></b>	<b><u>\$ 6,383,831</u></b>	<b>-11%</b>	
<b>COST OF SALES</b>				
Products	1,767,052	2,224,415	-21%	
Services	<u>1,817,362</u>	<u>2,018,526</u>	-10%	
Total Cost of Sales	<b><u>\$ 3,584,414</u></b>	<b><u>\$ 4,242,941</u></b>	<b>-16%</b>	
<b>Gross Profit</b>	<b><u>\$ 2,102,894</u></b>	<b><u>\$ 2,140,890</u></b>	<b>-2%</b>	
<b>GROSS MARGIN</b>				
Product Gross Margin	26.6%	33.5%	-20%	
Service Gross Margin	44.6%	33.6%	33%	
<b>Gross Margin</b>	<b>37.0%</b>	<b>33.5%</b>	<b>10%</b>	

# Consistent Financial Progress



# Opportunities & Outlook

a growing company in a growing industry

- High ROI product
- Technological innovation
- Relationships with key partners
- Increasing environmental and regulatory pressures
- Resiliency and Demand Response concerns

## Sales



- Turnkey installation
- Long term service agreements
- Nationwide presence
- High margin revenue stream
- Additional growth anticipated

## Service



- Double digit CAGR
- >\$40B market potential for CHP
- Margins 35-40%
- >\$10M product and installation backlog
- <50% manufacturing capacity utilization
- Stable operating expense profile

## Growth & Margins





# Q & A

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# Contact Information



## Company Information

Tecogen Inc.  
45 First Avenue  
Waltham, MA 02451

[www.tecogen.com](http://www.tecogen.com)

## Contact

John Hatsopoulos, Co-CEO  
781.622.1122  
[John.Hatsopoulos@tecogen.com](mailto:John.Hatsopoulos@tecogen.com)

Ariel Babcock CFA, Director of Investor Relations  
781.466.6413  
[Ariel.Babcock@tecogen.com](mailto:Ariel.Babcock@tecogen.com)