## Tecogen: 3Q 2016 Earnings



#### NASDAQ: TGEN

November 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





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## Why Tecogen?

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

"Unregulated Utility"			<b>Emissions Control</b>	
CHP Modules	Ilios Water Heaters	TECOCHILL	Ultera	
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Electricity & Heat	2-3x Heat Efficiency	Cooling & Heat	Ultra-Clean Emissions	

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





## **Recent Achievements**

#### **Performance**

- <u>Financial inflection point,</u> <u>achievement of profitability on both</u> <u>operating and net income basis</u>
- Net income of ~\$208,000
- Positive results primarily through margin improvement

#### American DG Energy Deal

- Creates vertically integrated clean energy company
- Stabilizes combined company revenue profile with ~50% of revenues from contracted sources

#### **Emissions**

- PERC research grant for fork truck development work
- ULTRATEK Phase 2 vehicle testing completed
- CA air permit for stationary stand-by generators





Ultera system modified for gasoline automotive application



## **Sales Growth Drivers**

# InVerde e+

#### GE Equipment Insight



#### Key Relationships



#### TTcogen JV

Indoor Growing





## **30 2016 Results:**

Advanced Modular CHP Systems	3Q 2016 Results:
REVENUE	<ul> <li>Total Revenues: \$6.6M in 3Q16 vs. \$4.7M in 3Q15 &amp; \$5.7M in 2Q16</li> <li>Products: \$2.9M in 3Q16 vs. \$1.7M in 3Q15 &amp; \$2.4M in 2Q16</li> <li>Cogeneration sales driving Product revenue growth</li> <li>Benefitting from key repeat customer relationships</li> <li>Service: \$3.8M in 3Q16 vs. \$2.8M in 2Q15 &amp; \$3.3M in 2Q16</li> <li>Growth primarily due to up-tick in sales of 'turnkey lite' solutions</li> </ul>
PROFIT & Op. INCOME	<ul> <li>Gross Profit: \$2.8M in 3Q16 vs. \$1.7M in 3Q15 &amp; \$2.1M in 2Q16</li> <li>Income from Operations: \$249.5k in 3Q16 op. income vs. \$(923.7)k op. loss in 3Q15 &amp; \$(386.0)k in 2Q16</li> </ul>
MARGIN	<ul> <li>41.9% gross margin in 3Q16 vs. 35.7% in 3Q15 &amp; 37% in 2Q16</li> <li>Service margin growth from sale of high margin 'turnkey lite' accessories and operational improvement by Service team</li> <li>Product margin growth from cost control initiatives and product mix shift to new InVerde e+</li> </ul>
NET INCOME	\$207,868 in 3Q16 vs \$(948,842) in 3Q15 & \$(415,539) in 2Q16
	3Q 2016 Earnings Call 7





**Backlog** 

#### Installed Base\*



\$11.9M 3Q16 backlog vs. \$10.6M 3Q15 backlog \$13.1M Current Product and Installation Backlog as of Nov. 7, 2016 Backlog growth driven by increasing demand for InVerde e+ and Installation services





#### American DG Energy Profile

- On-Site Utility business model that installs, owns, and maintains primarily natural gas powered cogeneration systems;
- Portfolio of 92 systems totaling 5,445kW of installed capacity
- Total approximate lifetime value of contracted revenue of \$203M
- Backlog of 13 systems totaling 975kW of capacity with cash on hand to complete installation
- History incorporated in 2001, split from Tecogen in 2005, IPO (NYSE MKT: ADGE) in 2010

#### **Combined Company Benefits**

- Cost Savings approx. \$1M benefit as operational and administrative cost savings are achieved
- Asset Revaluation allows improved financial basis
- Additional technical support will further improve fleet performance and profitability
- Stable Revenue Base approximately half of total combined company revenue from long-term contracted sources, making the company's revenue profile more predictable

Creates a vertically integrated clean technology company with a complete end-to-end distributed generation offering – design, manufacturing, financing, installation, and maintenance.



## **Emissions: Summary**

- ✓ ULTRATEK progress with completion of Phase 2 testing
- Received conditional permit for Ultera retrofit to standby generators in Southern CA, final permit issuance contingent on source test following commissioning
- ✓ PERC research grant for development of Ultera for propane powered fork trucks







## **Emissions**: Stand-By Generators

- Southern CA. customer with multiple stand-by generators onsite, need to be in emissions compliance to operate for nonemergency use
- Sample generator fitted with Ultera system and rigorously tested for compliance
- Phase II order received for additional generator retrofit kits, shipped in 4Q 2015
- Permits to operate issued Sept.
   30<sup>th</sup>, contingent on final source testing within 180 days of installation and commissioning



# Tecogen: Emissions: Fork Trucks

- Propane Education & Research Council (PERC) granted research funding to develop Ultera for propane powered fork trucks
- Collaborating with industryleading fork truck manufacturers
- Goal to develop a propane-green brand offering a robust indoor air quality advantage without compromising performance
- R&D program scheduled to begin in early 2017 and run for 9 months

\$30.98 Billion in 2015 global fork truck market sales according to the Materials Handling Association





## **Emissions: ULTRATEK**

- Vehicle emissions problems remain in spotlight
- EU to implement EU6d Emissions Regulation mandating Real Driving Emissions (RDE) compliance testing in the 2017-2020 timeframe
- Phase 2 testing at AVL on 2 vehicles with small, high power density engines completed in October
- Scientific paper abstracts on the subject and testing results submitted and accepted by the Society of Automotive Engineers (SAE) for peer reviewed publication in 2017







## **Financial Metrics**

#### **Revenues, Margins, Growth**

Tecogen Revenue Model & Outlook	
<ul> <li>Three revenue streams</li> <li>Product sales</li> <li>Long-term service contracts provide stable ongoing revenue</li> <li>Turnkey Installation through Tecogen service operations</li> </ul>	REVENUE Cogeneration Chiller & Heat Pump Total Product Revenue Service & Parts Installation Services Total Service Revenue
<ul> <li>Maintain Gross Margins near 40%</li> <li>Quarterly Backlog &gt;\$10M</li> <li>Full Year Op Ex ~\$10M</li> </ul>	Total Revenue COST OF SALES Products Services Total Cost of Sales
<ul> <li>✓ 15<sup>th</sup> consecutive quarter of Y/Y contracted service revenue growth</li> <li>✓ <u>Highest gross margin</u> since the start of public reporting</li> </ul>	Gross Profit GROSS MARGIN Product Gross Margin Service Gross Margin Gross Margin

	For the Qu	<u>Y/Y</u> Growth	<u>% of</u> <u>Total</u>	
	Sept. 30, 2016	Sept. 30, 2015		<u>Revenue</u>
REVENUE				
Cogeneration	2,639,713	1,493,335		39.9%
Chiller & Heat Pump	211,188	367,525		3.2%
Total Product Revenue	2,850,901	1,860,860	53%	43.1%
Service & Parts	2,113,295	1,921,897		31.9%
Installation Services	1,652,259	893,285		25.0%
Total Service Revenue	3,765,554	2,815,182	34%	56.9%
Total Revenue	<u>\$ 6,616,455</u>	<u>\$ 4,676,042</u>	41%	
COST OF SALES				
Products	1,715,462	1,262,480	36%	
Services	2,126,175	1,744,631	22%	
Total Cost of Sales	\$ 3,841,637	\$ 3,007,111	28%	
Gross Profit	\$ 2,774,818	\$ 1,668,931	66%	
GROSS MARGIN				
Product Gross Margin	39.8%	32.2%	24%	
Service Gross Margin	43.5%	38.0%	14%	
Gross Margin	41.9%	35.7%	18%	

## **Consistent Financial Progress**



Tecc

**Advanced Modular CHP Systems** 



## **Opportunities & Outlook**

#### a growing company in a growing industry

- Strong relationships with key strategic partners
- Technological innovation
- Unmatched industry reputation
- Resiliency and Demand Response concerns
- High ROI product

#### Sales

- >\$10M product and installation backlog
- Stable operating expense profile
- Cost of sales
   improvement
- Margins ~40%
- Reliable revenue stream from acquisition of American DG installed fleet

Operations

- >\$40B market potential for CHP
- New market opportunities including additional chiller applications
- Emissions Retrofit kits
- Fork Truck work
- Upside potential from automotive emissions development work at ULTRATEK

Growth









## NASDAQ: TGEN









## **Contact Information**



#### **Company Information**

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