



INVESTOR PRESENTATION  
OTCQX: TGEN

ABINAND RANGESH, CEO/CFO

# SAFE HARBOR STATEMENT



This presentation and accompanying documents contain “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.

There can be no assurance that Tecogen will expand its activities in the CEA market as described in this press release or that if the company does so that it will be successful in developing a CEA business unit or generating significant additional revenue from the CEA market. 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 the ability to obtain financing on favorable terms to fund existing operations and anticipated growth.

In addition to GAAP financial measures, this presentation includes certain non-GAAP financial measures, including adjusted EBITDA which excludes certain expenses as described in the presentation. We use Adjusted EBITDA as an internal measure of business operating performance and believe that the presentation of non-GAAP financial measures provides a meaningful perspective of the underlying operating performance of our current business and enables investors to better understand and evaluate our historical and prospective operating performance by eliminating items that vary from period to period without correlation to our core operating performance and highlights trends in our business that may not otherwise be apparent when relying solely on GAAP financial measures.

# THE UNCOMFORTABLE TRUTH ABOUT AGRICULTURE...

## *TRANSPORTATION DISTANCE*

Food grown outdoors is transported long distances to end consumers

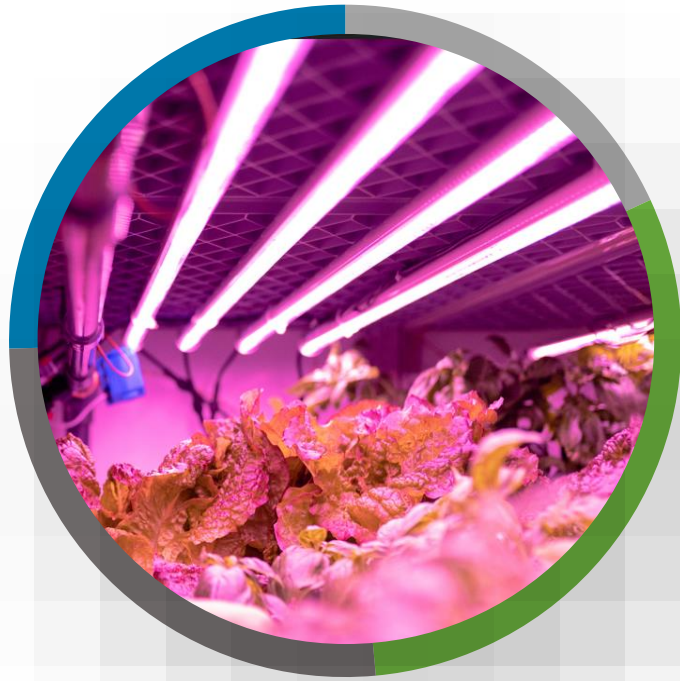


The CO<sub>2</sub> impact of food transportation is larger than people think

# THE UNCOMFORTABLE TRUTH ABOUT AGRICULTURE...

## *ENERGY INTENSITY*

Food grown indoors is not entirely environmentally friendly



Grid powered grow lights and climate control are energy intensive resulting in significant greenhouse gas emissions

# THE UNCOMFORTABLE TRUTH ABOUT AGRICULTURE...

## *CLIMATE CHANGE*

Outdoor food production is being impacted by climate change



CEA can limit the impact of floods, droughts, and intense heat

INTRODUCING TECOGEN'S

# NetZero Greens

Locally grown produce using environmentally friendly technology



- ✓ Clean cooling
- ✓ Clean power generation
- ✓ CO<sub>2</sub> recycling
- ✓ Carbon offsets
- ✓ Improved crop yields

**NetZero Greens**  
Locally grown produce that's good for the environment





# ENABLING LOW CARBON AGRICULTURE



Using smart computer algorithms, our **Cogeneration + Hybrid drive chiller** will blend utility or **solar power** with engine power to choose the greenest and lowest cost source of energy.

**Offers significant operating savings, precision climate control, resiliency, and GHG reductions.**




90% less land and water usage

Avoids the use of fertilizers made from fossil fuels

100% Organic with no harmful pesticides

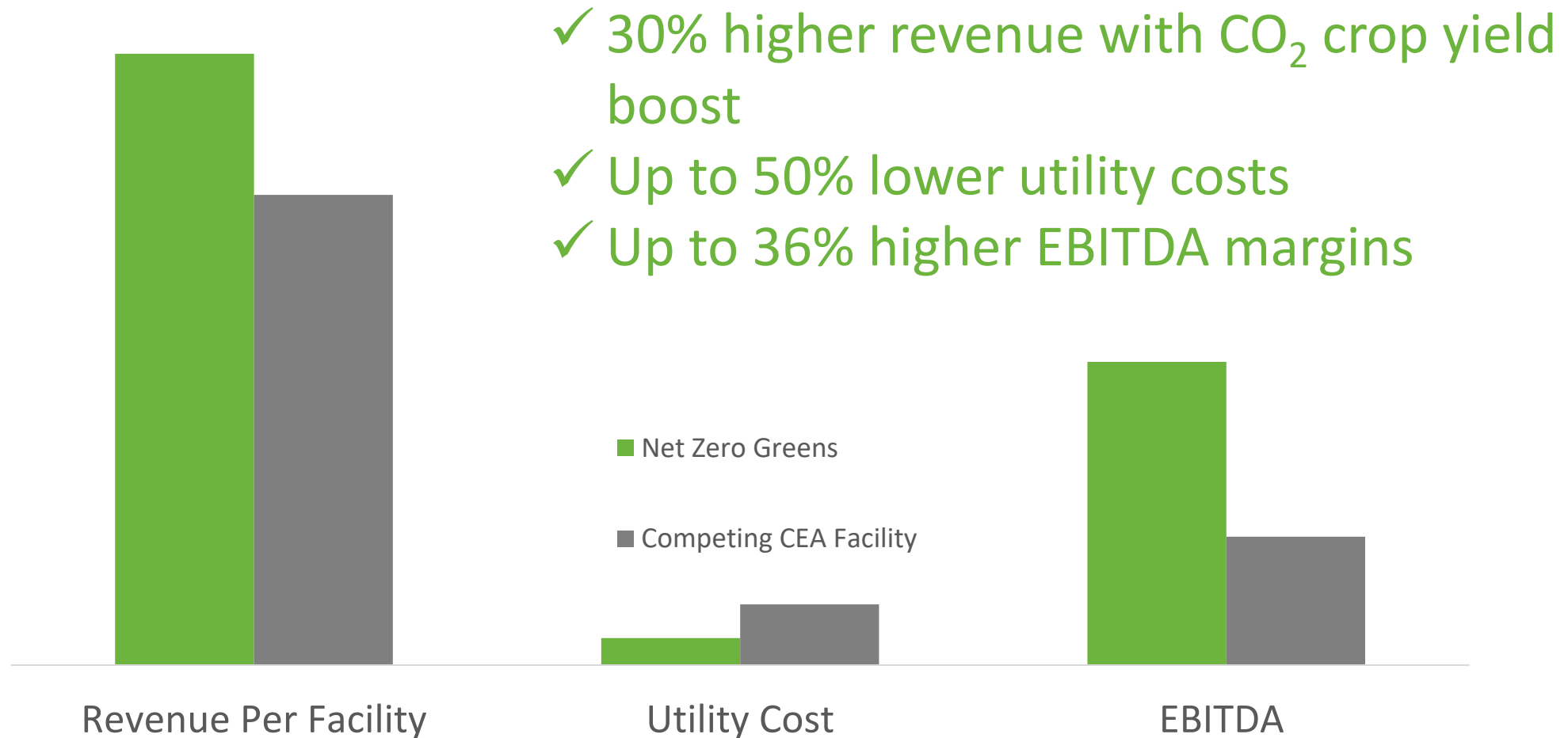


# COMPARED TO THE ALTERNATIVES

	Indoor Agriculture with Grow lights	 NetZero Greens <small>Locally grown produce that's good for the environment</small>	Outdoor Agriculture
Energy Intensity	High	Net Zero Target	Low
Embedded CO <sub>2</sub> due to Transportation	Low	Low	High
Freshness	Very Fresh	Very Fresh	Not Fresh
Crop Cycles Per year	>15	>15	1 to 2
Water Usage	Low	Low	High



# ECONOMIC BENEFITS



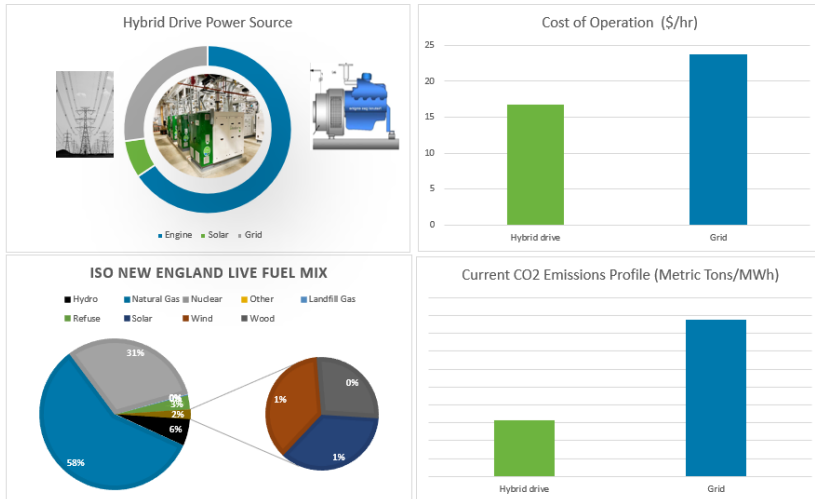
# NetZero Greens

## DEVELOPMENT PLAN



Optimize for GHG Savings

Current engine power	82 KW
Current heat generated	164 KW
CO2 reuse	6.56 lbs/hr
Current solar output	9 KW
Grid Power Into Hybrid Drive	34 KW



✓ **Phase 1** – Prototype energy solution and due diligence for pilot grow facility

✓ **Phase 2** – Build pilot facility with grower and finance partner

✓ **Phase 3** – Replicate and scale for commercial operations



# PHASE 1 DEVELOPMENT



- Test and document the effects of the CO<sub>2</sub> exhaust system including crop yield increases and emissions output.
- Financial due diligence, confirmation of costs and the development of engineering drawings for building a modular CEA facility.
- Create energy solution building blocks that are easy to install and result in significant improvements to CEA facility GHG footprint and operating costs.

# VALUE PROPOSITION



- ✓ Fresh produce grown near the consumer
- ✓ 30% higher revenue with CO<sub>2</sub> crop yield boost
- ✓ Up to 50% lower utility costs
- ✓ Up to 36% higher EBITDA margins
- ✓ No pesticide use
- ✓ Avoids the use of fertilizers that are made from fossil fuels
- ✓ 90% lower water use than outdoor agriculture



# ABOUT US



NetZero Greens was founded to develop Controlled Environment Agriculture (CEA) facilities with the lowest carbon footprint. NetZero Greens is a business unit of Tecogen Inc. which has been manufacturing clean power generation and clean cooling products since 1983. Originally founded as a division of Thermo Electron Corporation, Tecogen has been a separate public company since 2014.

Initially CEA was predominantly used for cannabis cultivation with Tecogen equipment used in nearly 50% of the cannabis facilities in Massachusetts because Tecogen's clean energy solutions lower both operating costs and CO<sub>2</sub> footprint.

As CEA is now being used for food crop cultivation, we believe that our expertise in energy savings and greenhouse gas reductions will allow us to increase crop yield while simultaneously reducing operating costs and greenhouse gas emissions in a CEA facility, offering significant competitive advantage in a capital intensive industry.

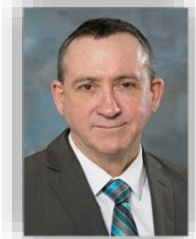
# LEADERSHIP TEAM



ABINAND RANGESH

CEO/CFO

Abinand Rangesh is the CEO and a member of the Company's Board of Directors. Prior to his appointment as CEO he was the CFO of the company since 2021. He has been with the Company since 2016 and has held roles in various divisions including sales, business development and strategy. Prior to joining Tecogen, he was the CTO of Lumisolair, a solar and wind powered off-grid energy company, COO of Peek You a software company and CEO of Lumi Ventures where he oversaw multiple startup investments for a high net worth investor. In addition, Dr. Rangesh has multiple design patents and has published multiple scientific papers in peer reviewed journals. Dr. Rangesh earned both his Ph.D. and engineering degree from the University of Cambridge, United Kingdom.



ROBERT PANORA

President & COO

Robert Panora has served as President of Tecogen since 2000. Mr. Panora had been General Manager of Tecogen's Product Group since 1990 and Manager of Product Development, Engineering Manager, and Operations Manager of the Company since 1984. Over his 41-year tenure with Tecogen, he has been responsible for sales and marketing, engineering, service and manufacturing. He contributed to the development of our first product, the CM-60 cogeneration module, and was Program Manager for the cogeneration and chiller projects that followed. Mr. Panora has had considerable influence on many aspects of our business, from building the employee team, to conceptualizing product designs and authoring many of the original business documents, sales tools, and product literature pieces. Mr. Panora holds B.S. and M.S. degrees in Chemical Engineering from Tufts University.



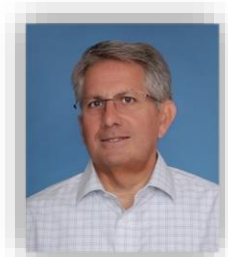
# LEADERSHIP TEAM



Joseph Gehret is our Chief Technical Officer. Mr. Gehret is responsible for leading technology development at Tecogen and defining the company's research and development efforts. With an expansive depth and breadth of classic, as well as cutting edge technology, he has been integral in the development of all Tecogen products and technology for 30 years. He is the primary author on all of Tecogen's major patents. In addition to leadership roles in all Tecogen technology development, Mr. Gehret has designed and developed the necessary hardware, as well as the software code, for all of Tecogen's product lines. Mr. Gehret holds a B.S. in Mechanical Engineering and an M.S. in Nuclear Engineering, both from the Massachusetts Institute of Technology.

## JOSEPH GEHRET

CTO



## ROGER DESCHENES

CAO



## JACK WHITING

General Counsel

Roger Deschenes has led accounting and finance functions in high-technology manufacturing and consumer products and distribution companies for over 30 years, including as Division Chief Financial Officer at L3 Security Detection Systems, Inc. in 2017 and 2018, and as Vice President, Finance, Chief Financial Officer and Chief Accounting Officer at Implant Sciences Corporation from 2010 to 2017. Mr. Deschenes received a B.S. in Business Administration from Salem State University and is a Certified Management Accountant.

John K. Whiting, IV has been the Company's General Counsel since January 2018, handling all legal matters for the company, including commercial transactional matters, corporate financing and governance matters, securities compliance work and SEC filings, and providing support for risk management and the consideration of strategic options. Since April 2017 Mr. Whiting has also served as General Counsel & CFO of Inspired Therapeutics LLC. Previously, he served as Vice President, General Counsel & Secretary of Vero Biotech LLC (from January 2012 to 2017), as Vice President, General Counsel & Secretary of Pharos LLC and Levitronix LLC (from 2009 through 2011), as Vice President & General Counsel of American Renal Associates Inc. (from 2002 to 2008), and as Associate General Counsel of Thermo Electron Corporation (now Thermo Fisher Scientific Inc.) (from 1996 through 2002). Mr. Whiting holds a B.A. in Political Science and History from the University of Vermont, a J.D. from Boston University School of Law, and an MBA from F.W. Olin Graduate School of Business at Babson College.

# INDEPENDENT BOARD MEMBERS

## JOHN HATSOPOULOS Lead Director

Mr. Hatsopoulos is Lead Director of Tecogen. He has been a member of the Company's board of directors since its founding in 2000 (other than the period between June 6, 2018 and February 1, 2019). He was Tecogen's CEO until 2014 when he became Co-CEO until he retired in 2018. Mr. Hatsopoulos was also Chief Executive Officer and Director of American DG Energy Inc. from its inception in 2001 until 2014 when he became Co-CEO. He remained Co-CEO and Director until American DG Energy or ADGE merged with Tecogen in 2017. In addition, Mr. Hatsopoulos was Chairman of EuroSite Power Inc., a former affiliate of the Company, from 2009 until 2016. Mr. Hatsopoulos is a co-founder of Thermo Electron Corporation, which is now Thermo Fisher Scientific. He was formerly the President and Vice Chairman of the Board of Directors of that company. He is a former "Member of the Corporation" of Northeastern University. He graduated from Athens College in Greece and holds a B.S. in history and mathematics from Northeastern University, as well as honorary doctorates in business administration from Boston College and Northeastern University.

## ANGELINA GALITEVA Chairperson

Ms. Galiteva has been the Company's Chairperson of the board of directors since 2005. Ms. Galiteva is founder and Chair of the Board for the Renewables 100 Policy Institute, a non-profit entity dedicated to the global advancements of renewable energy solutions since 2008. She is also Chairperson at the World Council for Renewable Energy (WCRE), which focuses on the development of legislative and policy initiatives to facilitate the introduction and growth of renewable energy technologies since 2003. Since 2011, she has served on the Board of Governors of the California Independent System Operator (CA ISO), providing direction and oversight for the CA ISO which operates the California electricity grid. Also, she is a principal at New Energy Options, Inc., a company focusing on advancing the integration of sustainable energy solutions since 2006. She has also been a strategic consultant with Renewable Energy Policy and Strategy Consulting since 2004. Ms. Galiteva holds a M.S. in Environmental and Energy Law, a J.D. from Pace University School of Law, and a B.S. from Sofia University in Bulgaria.

## AHMED GHONIEM Director

Dr. Ghoniem has been a member of the Company's board of directors since 2008. Dr. Ghoniem is the Ronald C. Crane Professor of Mechanical Engineering at MIT. He is also the Director of the Center for 21st Century Energy, and the head of Energy Science and Engineering at MIT, where he plays a leadership role in many energy-related activities, initiatives and programs. He joined MIT as an Assistant Professor in 1983. He is an associate fellow of the American Institute of Aeronautics and Astronautics, and Fellow of American Society of Mechanical Engineers. He was recently granted the KAUST Investigator Award. Dr. Ghoniem holds a Ph.D. in Mechanical Engineering from the University of California, Berkeley, and a M.S. and B.S. in Mechanical Engineering from Cairo University.

## EARL R LEWIS III Director

Earl R. Lewis III has served as Chairman of the Board and as Chief Executive Officer and President of FLIR Systems from 2000 through May 2013, and since May 2013 as Chairman of the Board and as a senior consultant to FLIR Systems. Mr. Lewis also served as Chairman of the Board of Harvard Bio Science from 2013 through June 2018, as CEO and President of Thermo Instrument Systems from 1998 to 2000, as President in 1997, and as COO in 1996. Mr. Lewis also served as CEO and President of Thermo Optek Corporation from 1994 to 1996, as President of Thermo Jarrell Ash Corporation from 1988 to 1994, and in senior operations and manufacturing roles at Thermo Jarrell Ash since 1984 and at other companies in previous years. Mr. Lewis holds a B.S. from Clarkson College of Technology.

## FRED HUBLOW Director

Fred Holubow served as a director of ANI Pharmaceuticals, Inc. from 1999 through May 2018 where he served on the Board's Audit and Finance Committee. Mr. Holubow is, and since 1984 has been a General Partner of Starbow Partners, an investor in early-stage healthcare ventures. In addition, Mr. Holubow serves as a Principal of Petard Risk Analysis, a position he has held since January 2012. From 2001 to December 2011 Mr. Holubow served as a Managing Director of William Harris Investors, Inc., a registered investment advisory firm, and from 1982 to 2001 he served as Vice President of Pegasus Associates, a registered investment advisory firm he co-founded. Mr. Holubow specializes in analyzing and investing in pharmaceutical and biotechnology companies. Mr. Holubow also previously served on the board of directors of the following public companies: Micrus Endovascular Corporation, ThermoRetec Corporation, Savient Pharmaceuticals, Inc. (formerly Bio-Technology General Corp.), Gynex Pharmaceuticals, Inc., and Unimed Pharmaceuticals, Inc.

## JOHN ALBERTINE Director

Dr. Albertine has served on the Board of numerous public companies including Fruit of the Loom, Thermo Electron Corporation (now Thermo Fisher Corporation), American Precision Industries, Intersections Inc, DynaTech Corporation and Kadant inc. He has also served as the Vice Chairman of the Fruit of the Loom Company and has served on two Presidential Commissions under President Reagan. Presently he is the CEO of Albertine Enterprises Inc. a public policy and advocacy firm based in Washington DC. He is also the Managing Partner at JJ&B an investment banking firm. Dr. Albertine has a Ph.D. in Economics from the University of Virginia and Doctor of Humanities (honorary) from King's College, PA. He was also the Chair of the Economics Department at the Mary Washington College of the University of Virginia and an Adjunct Professor at the US Marine Corps, Command and Staff College at Quantico.