

# Bloomenergy™

9/30/19

Frederick C. Braun III, Chairman  
Town of Brookhaven IDA  
1 Independence Hill  
Farmingville, NY 11738

Dear Chairman Braun,

Orbit Bloom Energy, LLC, a Delaware limited liability company (the "Company") is a wholly owned enterprise of Bloom Energy Corporation ("Bloom"). Bloom is a national leader in creating clean, reliable, and affordable energy for everyone in the world. To fulfill this mission, we have developed a distributed, on-site electric power solution that is redefining the electric power market and transforming how power is generated and delivered. Simply put, the company is creating cleaner and more reliable energy through on-site fuel cells. These fuel cells take up a fraction of the size of the land needed to generate similar energy.

The company has entered into three Power Purchase Agreements (each, a PPA) with PSEG. After careful, yet extensive consideration we have decided on a 1.5 acre vacant lot located on Horseblock Road in Medford for our Fuel Cell location. Currently this lot is not providing any meaningful property tax revenue for the Town of Brookhaven. The total developed fuel cell site will be 5,000 square feet generating 6MW of power. This site will be equipped with the latest Fuel Cell technology that will undoubtedly make the Town a showcase location demonstrating their forward thinking of hosting such cutting edge alternative energy production.

Economically the project's cost is estimated at \$32,000,000. This consists of manufacturing the fuel cell along with the supply and labor costs of installation. We anticipate 15 construction jobs during the installation phase of the project. The on-site labor working on the project will be local. The costs will be financed by a sale of the Company to an investor, who will then engage Bloom to do the installation pursuant to an engineering, procurement and construction contract, and provide the operations and maintenance services pursuant to an operations and maintenance contract. We are hoping to close the sale of the membership interests and execution of the contracts in this quarter. Given this abbreviated timeframe we are respectfully requesting a timely closing process with the IDA should we be granted approval.

We will not be seeking the mortgage recording tax exemption. Our request is for a 20-year property tax PILOT and an exemption from sales tax for the project's installation.

Thank you for your consideration. We look forward to calling the Town of Brookhaven home for our project.

Sincerely,



Mark Mesler, Vice President

# **Bloom Energy Overview for the Town of Brookhaven**

# Bloomenergy®

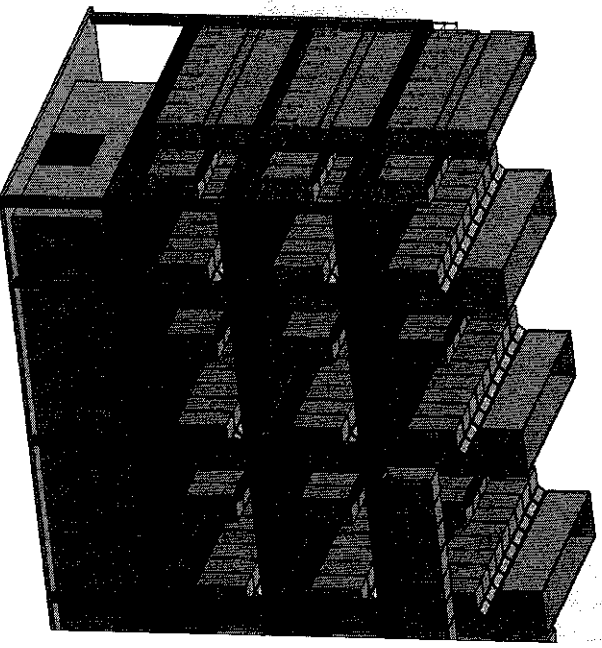
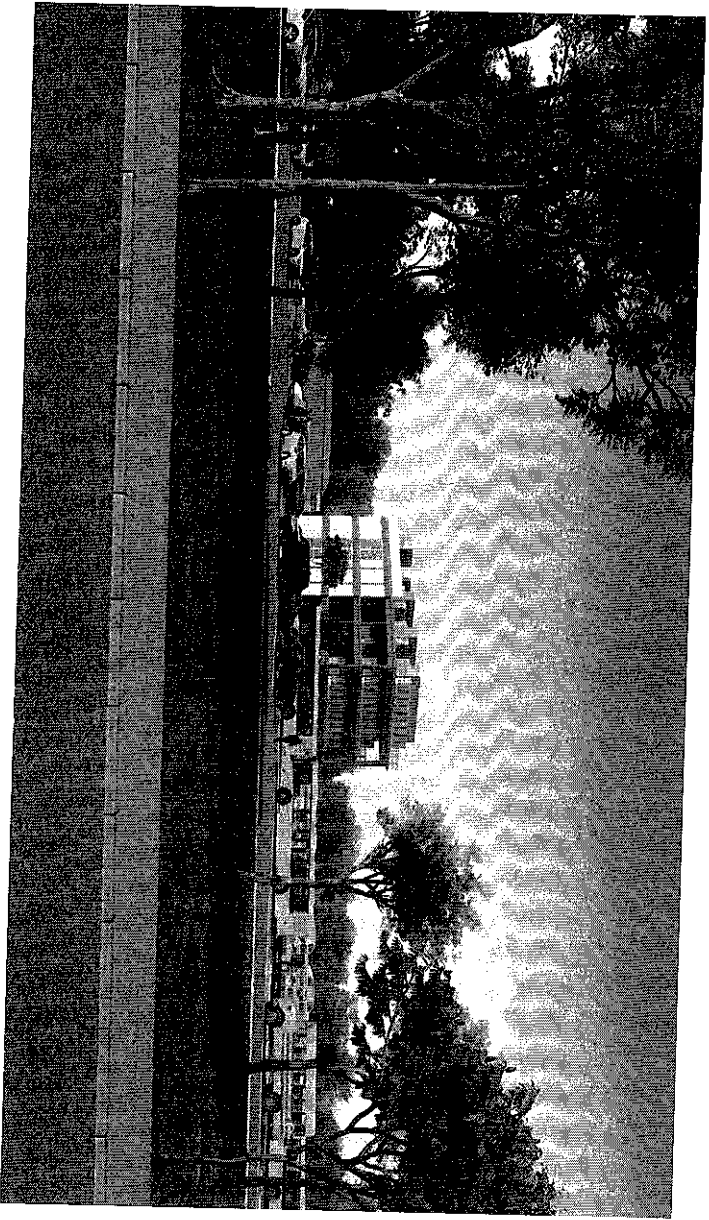
## Bloom Energy Overview

### Prepared for Town of Brookhaven

October 2019



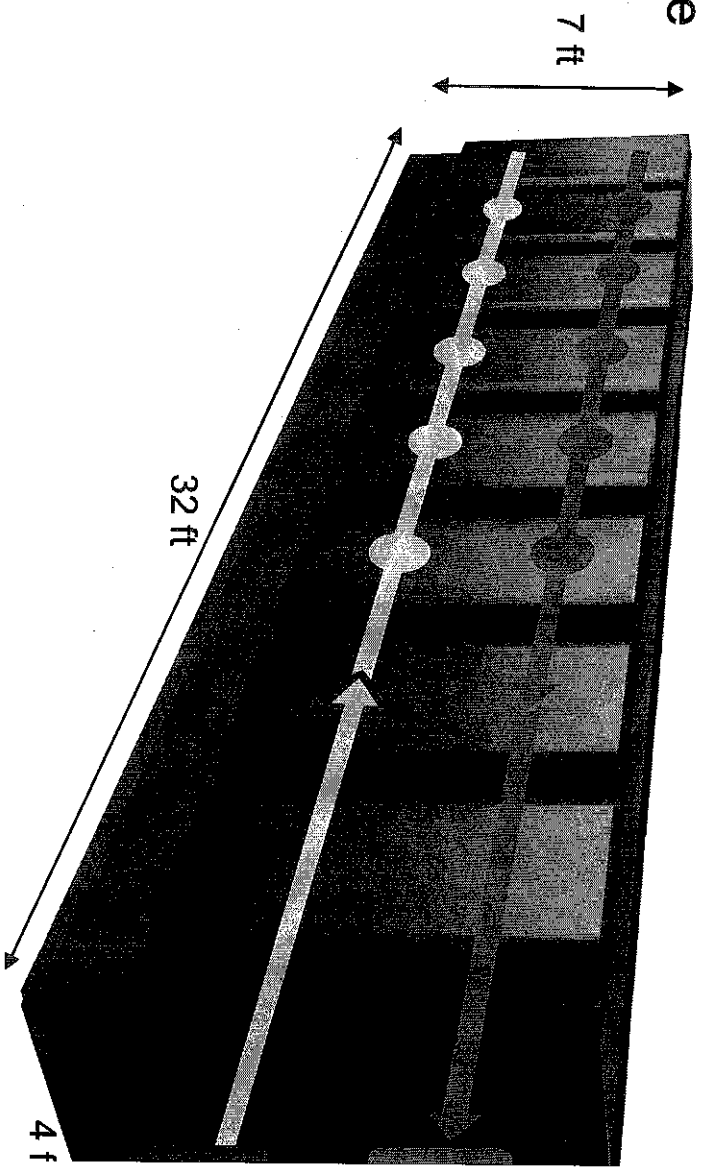
# SAMPLE RENDERING OF MEDFORD SITI



**Note: Images provided are of an 8MW solution, the Medford site will be 6MW (~25% smaller)**

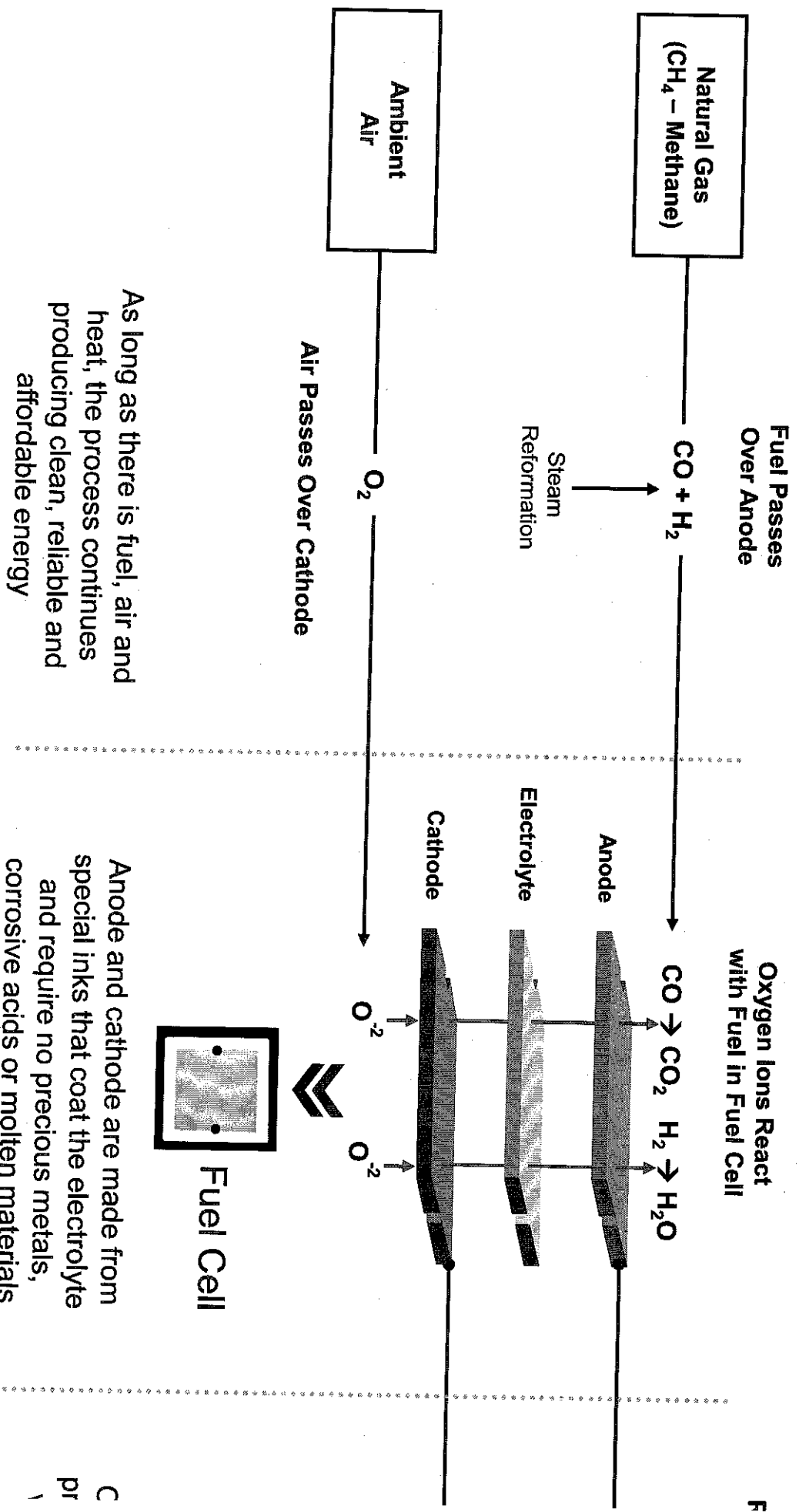
# THE BLOOM ENERGY SERVER

- Modular Fault-Tolerant Architecture
- Converts Low Pressure Natural Gas/Biogas to Electricity without Combustion
- Mission Critical Reliability
- No Downtime for Maintenance
- World leading efficiency: <6,000 btu/kWh starting heat rate
- Clean: Low/no CO<sub>2</sub>, Virtually no NOX, SOX, or Particulate Emissions



MODULAR  
TARGETED  
ALWAYS-ON

# SOLID OXIDE FUEL CELL: HOW IT WORKS

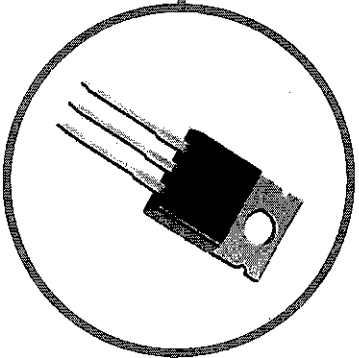


As long as there is fuel, air and heat, the process continues producing clean, reliable and affordable energy

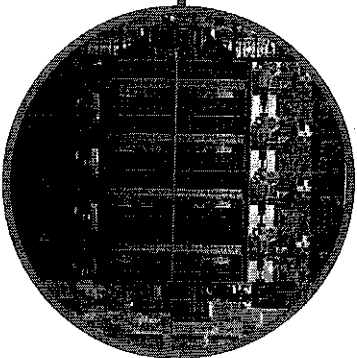
Anode and cathode are made from special inks that coat the electrolyte and require no precious metals, corrosive acids or molten materials

# DRIVING INNOVATION: COMPUTING AND DIGITAL POWER

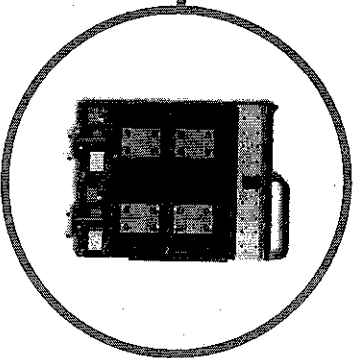
**Computing**  
for the Digital  
Economy



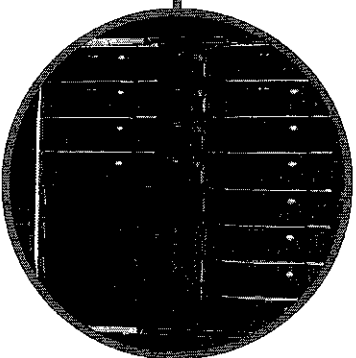
Transistor



Integrated Chip

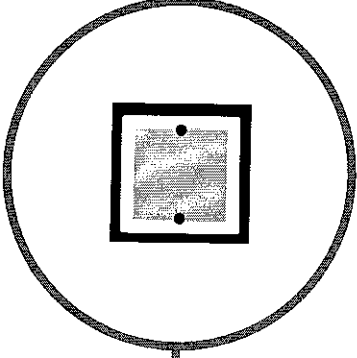


Server Blade

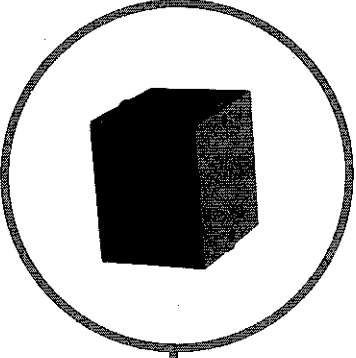


Rack

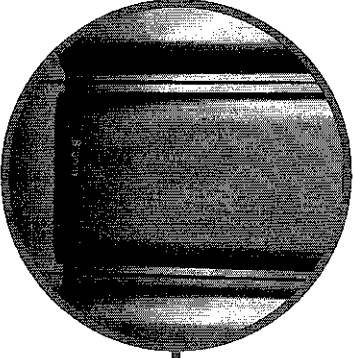
**Power**  
for the Digital  
Economy



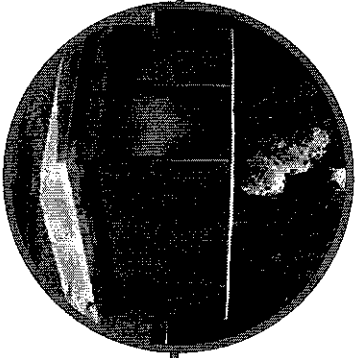
Fuel Cell



Stack



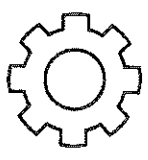
Server Module



System

# DESIGNED WITH SUSTAINABILITY IN M

NO COMBUSTION

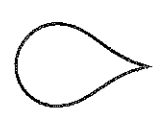
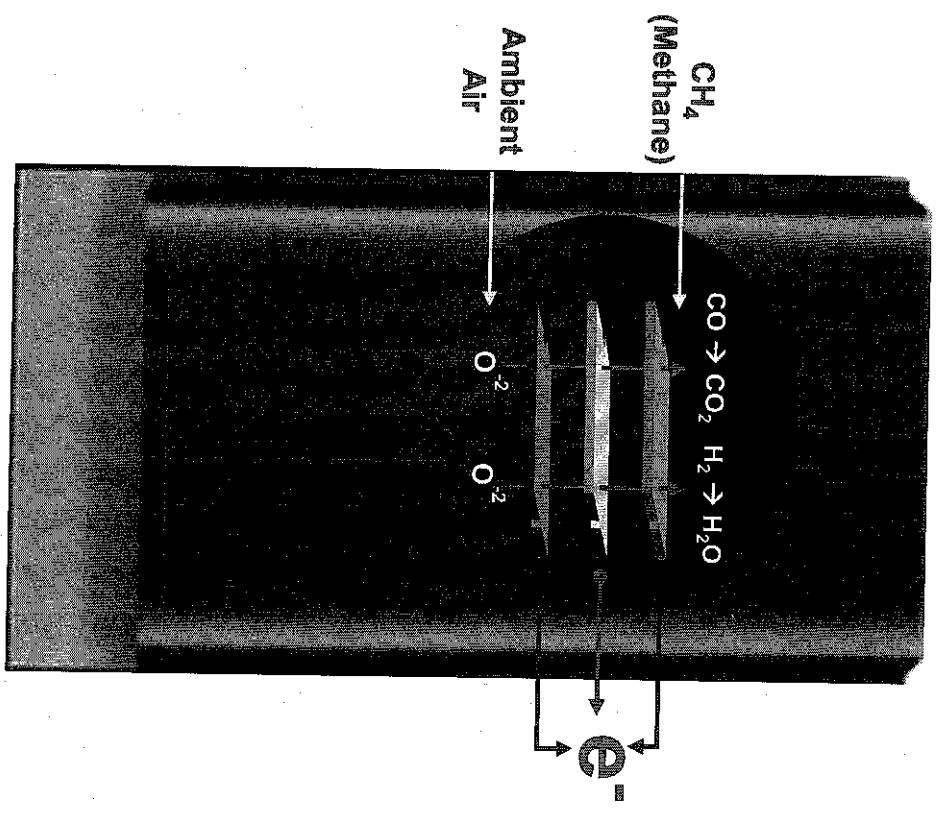


**Highly Efficient**

Electrochemical process  
reduces CO<sub>2</sub> emissions;  
eliminates criteria  
pollutants such as NOX,  
SO<sub>2</sub>, and PM



**Biogas ready**  
Natural gas or  
biogas as fuel  
input



**Water**

Water is reused  
electrochemic  
process; no we  
usage during ope

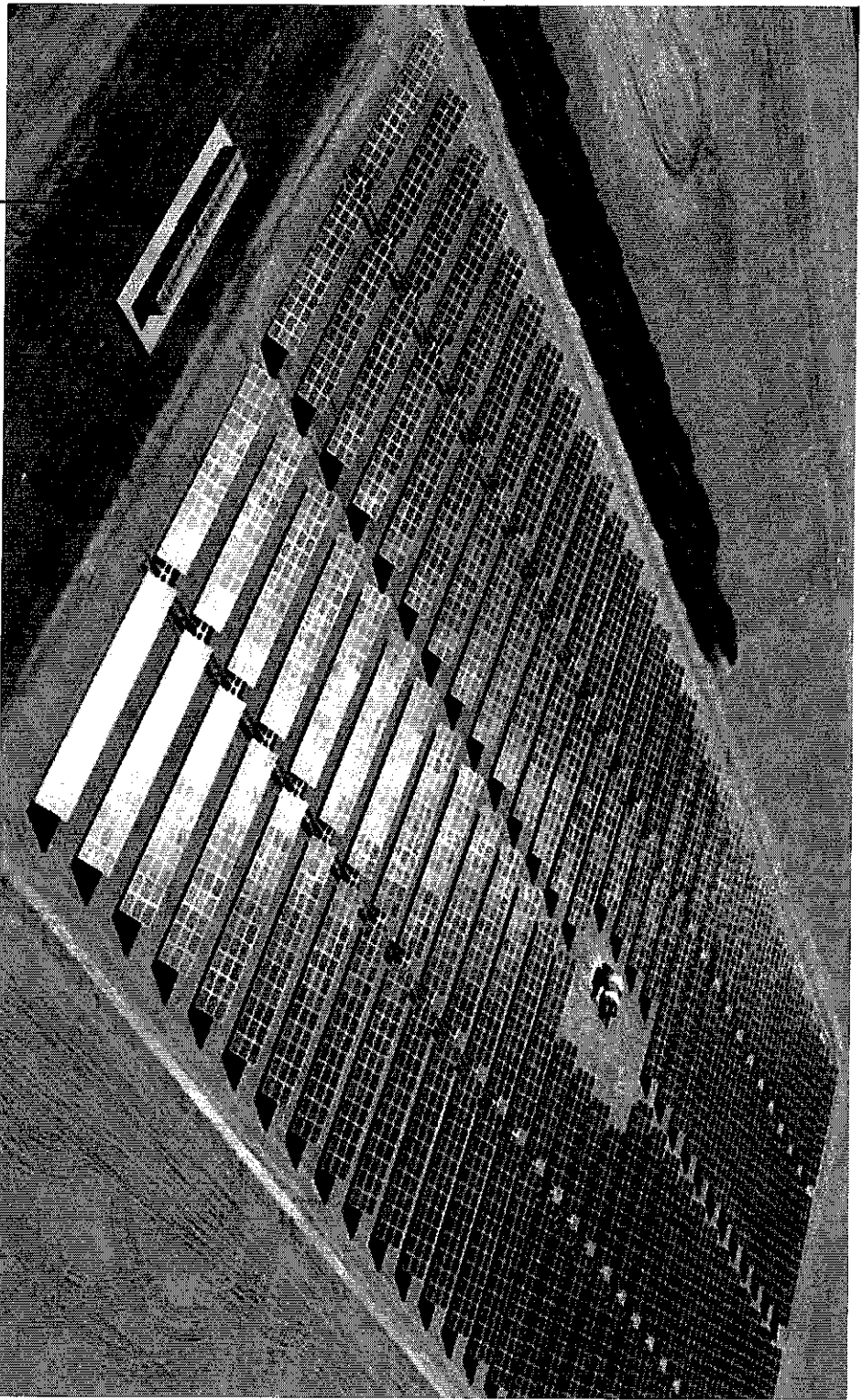


**Power Densi**  
High power  
output in a sm  
footprint



# POWER DENSITY

- Solar requires 12,500% more land than Bloom<sup>1</sup>
- Advantage in space
- constrained areas
- If the Bloom Energy Servers are stacked Bloom Systems can be ~50,000% more power dense than 1 MW of solar<sup>2</sup>



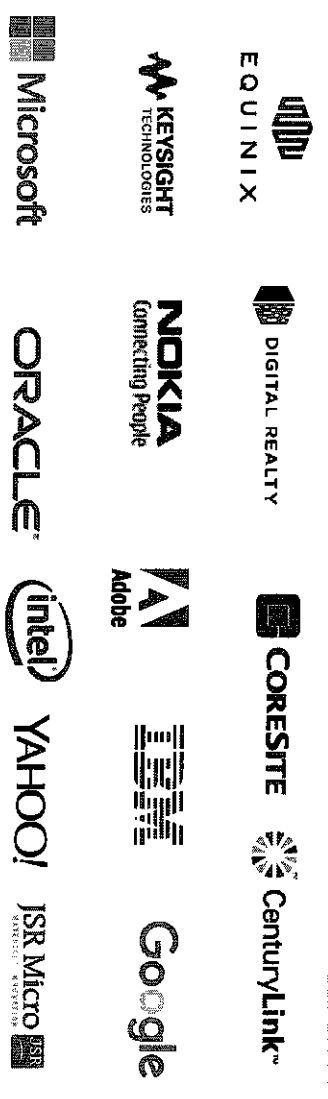
**1 MW Bloom Energy**

**1 MW Solar**

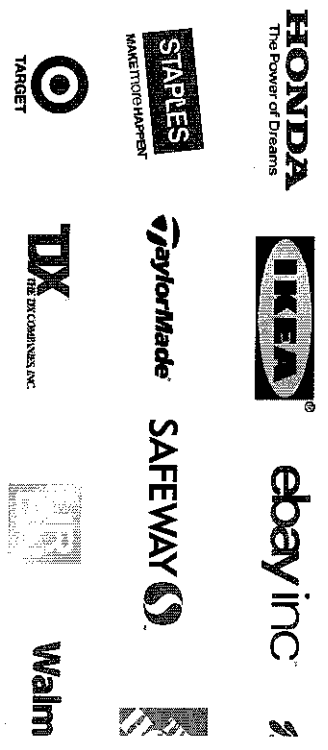
1. 1 MW Bloom Energy = 50 m<sup>2</sup> and 1 MW Solar PV = 6,250 m<sup>2</sup>; Energy Servers can be stacked up to four stories high  
2. If Bloom's Energy Servers were stacked vertically with four 250 kW systems on top of one another, the power density in a given footprint would quadruple

# BLUE CHIP C&I CUSTOMERS ACROSS VEF

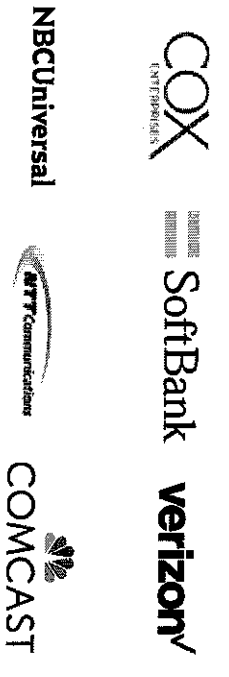
## CLOUD SERVICES AND TECHNOLOGY



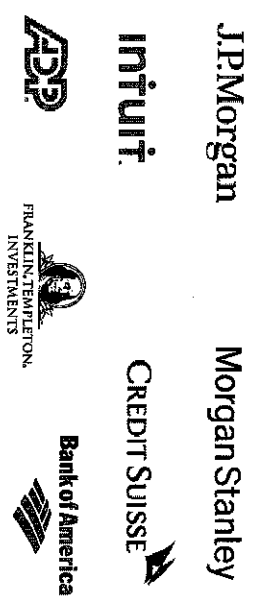
## CONSUMER AND RETAIL



## MEDIA AND TELECOM



## FINANCIAL SERVICES



## HEALT

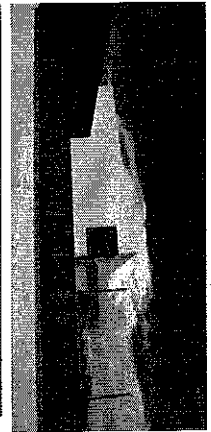


Over 600 Sites Deployed, Including 25 of the Fortune 100 and 42 of the Fortune

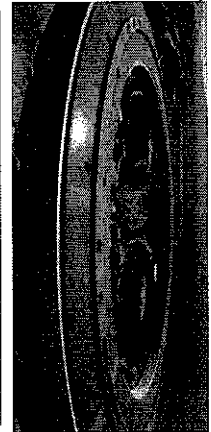
Representative sample for select verticals

# WIDE RANGE OF APPLICATIONS

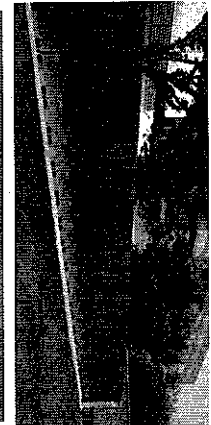
Mission Critical  
Data Center



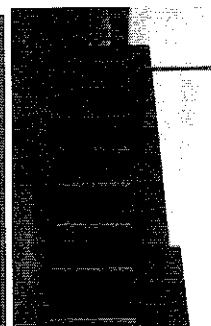
Advanced Microgrid  
Secure HQ Campus



Enhanced Reliability  
R&D Campus



Standalone Micro  
Retailer Operatic



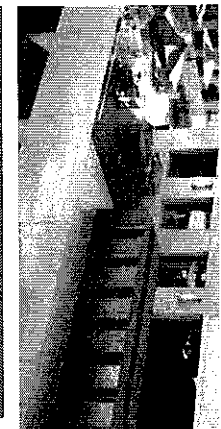
Standalone Microgrid  
Emergency Services



Utility-Scale Substation



Office Rooftop



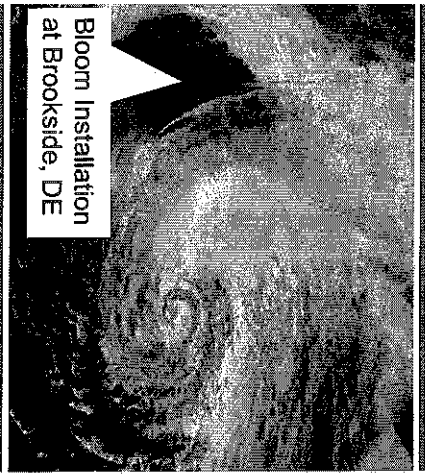
Zero Carbon Soluti



# CASE STUDIES: DISRUPTIVE EVENT



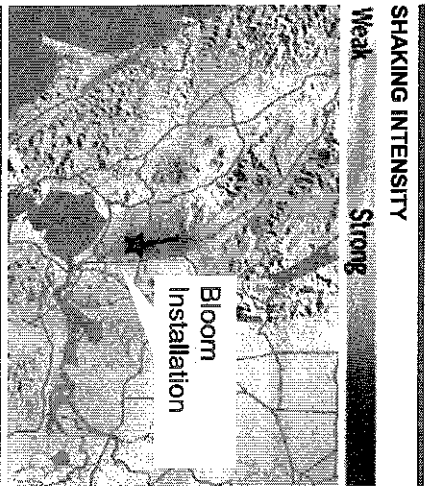
## Hurricanes



"Bloom Energy electrical project in New Castle was unaffected by Hurricane Sandy."  
—Delmarva, Regional President



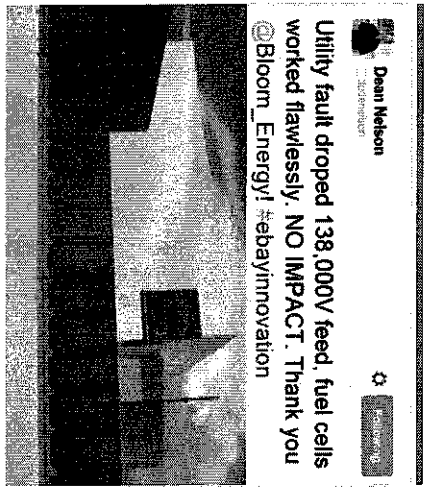
## Earthquakes



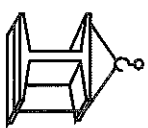
SHAKING INTENSITY  
Weak Strong  
Magnitude: 6.0 Earthquake  
1MW Bloom Unaffected



## Grid outages



Bloom protects against grid outages for mission critical loads



## Physical damage



Independent system architecture continues operations through disruptions

Bloomenergy®

Be the  
Solution

