## EZ Green

An Innovative Automated Building Energy Management Solution



#### **November 30, 2012**

<u>Team</u>

Jason Trager – Mechanical Eng. PhD

Ryan Holtan – Haas MBA

Samir Das – Haas MBA

Tony Le Verger – Haas MBA

Yuri Yakubov – Haas MBA (Team Lead)

**Scientist** 

Jiechao Li

PΙ

David Culler





#### **FOUNDERS**

Founded by two UC Berkeley Alums - Jiechao Li and Gayathri Raghavendra in 2012

# INTELLECTUAL PROPERTY

Currently working on filing a patent

# CURRENT STATUS OF BUSINESS

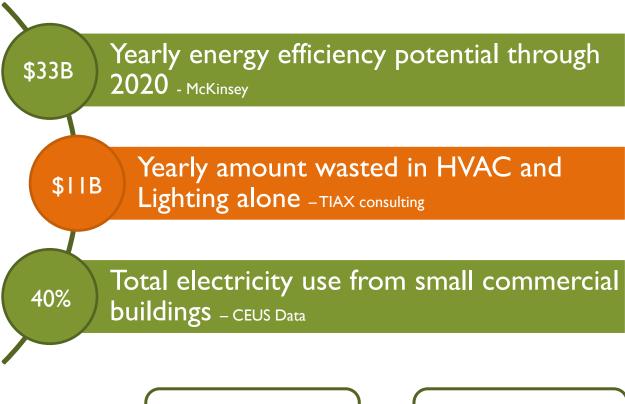
Two pilots in progress

#### **AWARDS**

Won the YUM! Global sustainability challenge and UC Berkeley Big Ideas competition



## A significant market with growing customer needs



Small Business Key Facts 6-10% of expenses

Boost profit margins

Principle/Agent problem

Need for simple solution



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#### Stakeholders highlight three major concerns

#### **EZ** Green Solution

# CUSTOMER COMFORT

"Automatically pre-cooling when a large party is coming in is intriguing" Independent restaurant owner

- Consistent temperature
- Optimal lighting

## EMPLOYEE SAFETY

Scheduling lighting could improve employee safety Panera Bread Franchisee

- Scheduled lighting

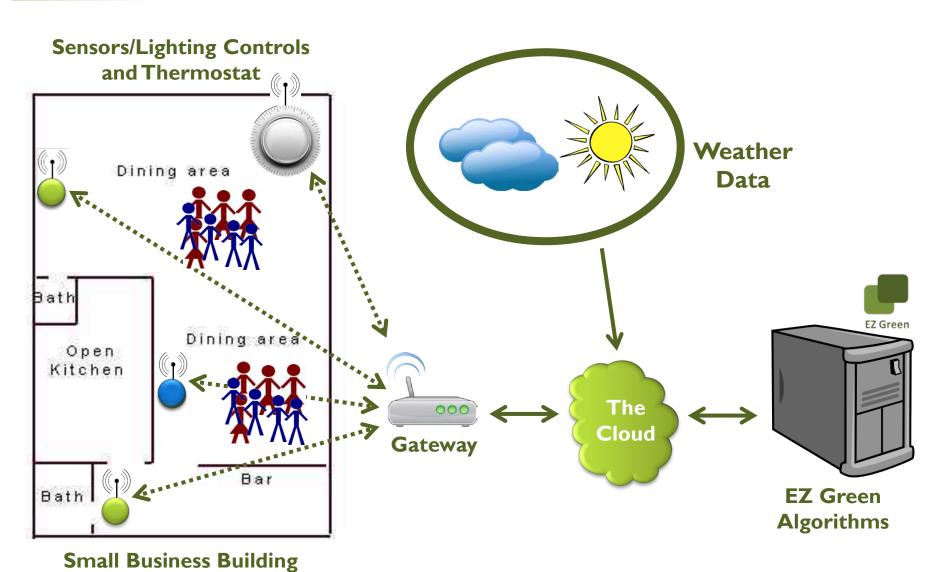
#### **SAVINGS**

"I would be interested if I could save 10% on my energy bill" Independent restaurant owner

- Optimization of HVAC
- Smart lighting controls

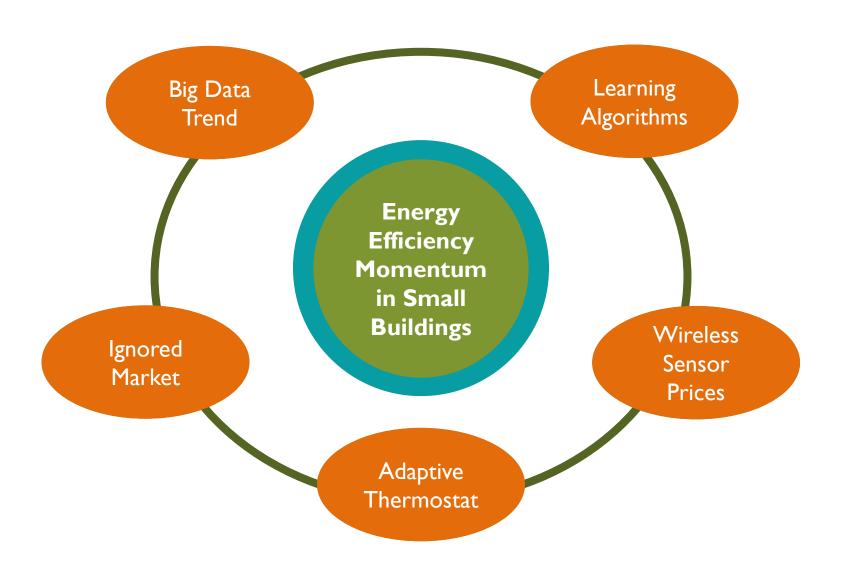






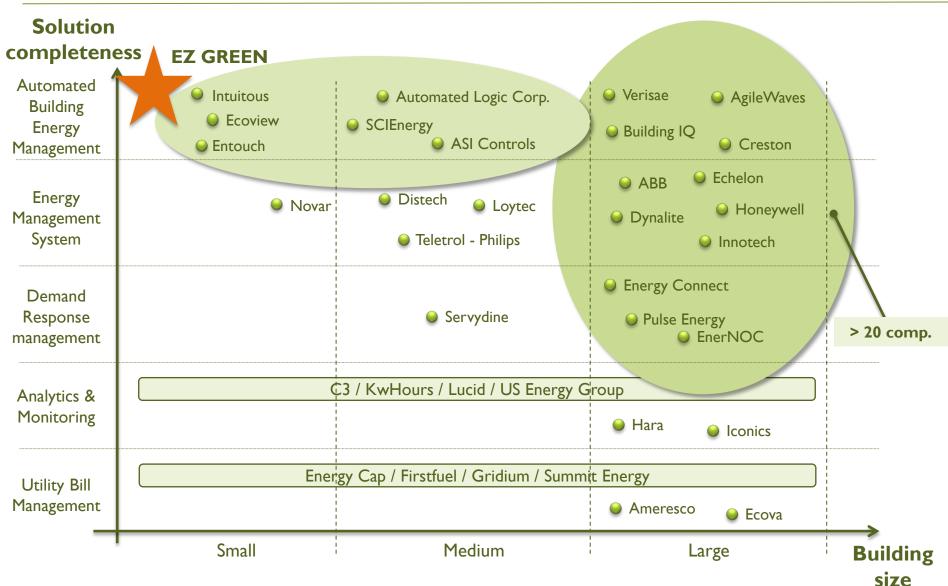


## New trends push towards small commercial buildings





## Fragmented competition and crowded mature markets





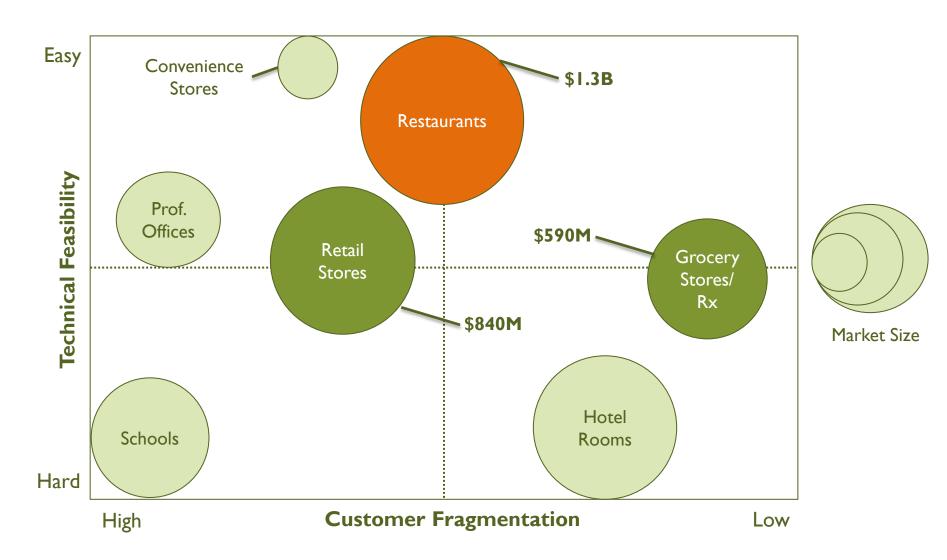
## EZ Green offers technological differentiators

EZ Green						
	EZ Green	EcoView <sup>™</sup> Wallcovering	ENT@UCH CONTROLS	intuitous ENERGY CONSERVATION	novar	Smart Therm.*
Lighting	I I <b>√</b>		×	×		×
BMS Integration	COMING	×	×	<b>*</b>	×	×
Multisite Capability	COMING SOON!	   <b>√</b>	✓	<b>√</b>	<b>√</b>	×
Real Time Optimization	     <u> </u>	×	₹	<b>√</b>	×	•
Wireless	 	   	<b>√</b>	×	×	<b>√</b>
Remote Management	     <b>\sqrt</b>		<b>*</b>	×		<b>√</b>

<sup>(\*)</sup> includes companies such as Nest, Ecobee, Tendril



## Three significant sub-markets are the initial targets









#### **Background:**

- The group owns 13 West Coast stores
- Avg. revenue per store is \$1 million
- Energy bill is 3<sup>rd</sup> biggest cost at
   8% of sales or \$80,000 per store

#### **Predicted Results:**

- Reducing energy use by 15% results in a
   \$12,000 per store annual savings
- The franchise group saves \$156,000 a
   year on energy by using our system
- System payback in as little as 4 months

Across all Taco Bell Stores in the US = \$70 million/year



#### What it means for EZ Green: unit economics









#### **EZG** Economics Per Taco Bell Store:

Revenue	
Equipment Sales	\$2,500
Energy Savings Share	\$3,600
Year 1 Revenue	\$6,100
Year 2+ Revenue	\$3,600
Costs	
Equipment/Installation	\$2,000
Acquisition Costs	\$3,010
IT and Maintenance	\$290
Year 1 Cost	\$5,300
Year 2+ Cost	\$290
Gross Profit	
Year 1 Profit	\$800
Year 2+ Profit	\$3,310



13 stores

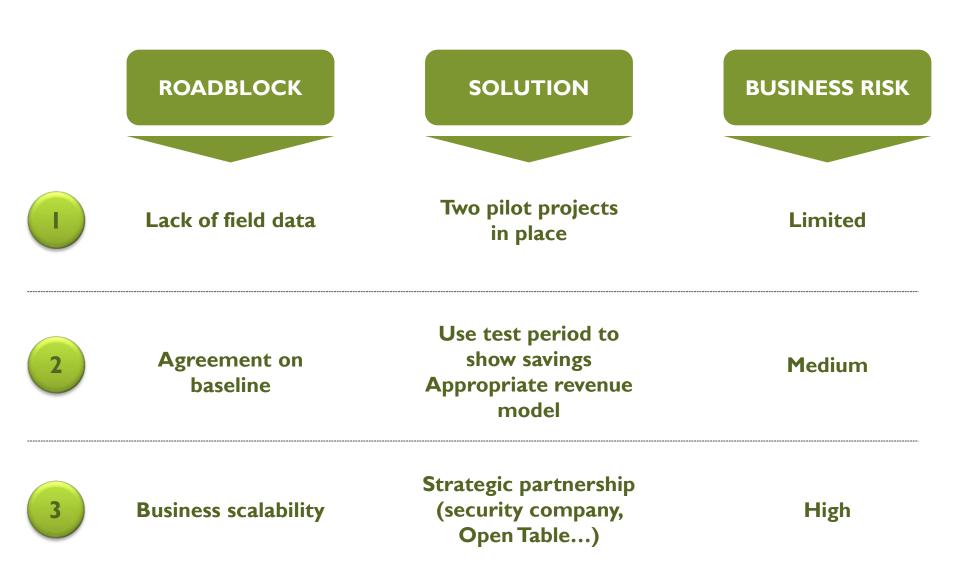
#### **EZG** Economics for Franchise:

Revenue		
Year 1 Revenue	\$79,300	
Year 2+ Revenue	\$46,800	
Costs		
Year 1 Cost	\$60,970	
Year 2+ Cost	\$3,770	
Gross Profit		
Year 1 Profit	\$18,330	
Year 2+ Profit	\$43,030	

<sup>\*</sup> Assumes EZ Green captures 30% of savings



#### Challenges must be overcome to reach full scalability





## A 3-year go-to-market strategy to a leading position

	6 -12 months	I – 3 years	3+ years  Expand to retail and grocery stores  US and potentially abroad  Bundling service with partners	
TARGET	Independent restaurants	Franchise Restaurants		
GEOGRAPHY	California	High \$/kWh US States		
REVENUE MODEL	Free up-front to customer,  Monthly fee	Full up-front costs, Monthly fee		
ADDITIONAL FEATURES	User friendly interface	Multisite capability	Enhanced features (DR, BMS integration)	
BUSINESS OBJECTIVES	Validate repeatability of business model	Acquire significant customers	Scale up business	





**Customer reach** 

**Opportunity** 

Market Specific



Network of 26,000 restaurants

Access to real time occupancy can improve EE and comfort

HVAC Service Companies





Have contracts with restaurants and retail stores and 2,000+ service professionals

Ability to sell products through trusted advisors

Home
Security
Companies



Millions of residential and small business customers

Ability to build on to existing services





**OPPORTUNITY** 

Large addressable market with consumer needs

**SOLUTION** 

Easy to implement solution with short payback period

BUSINESS MODEL Focus on franchise restaurants and channel partnerships















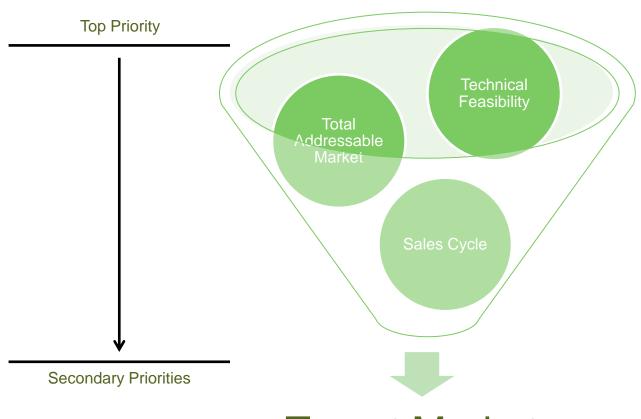












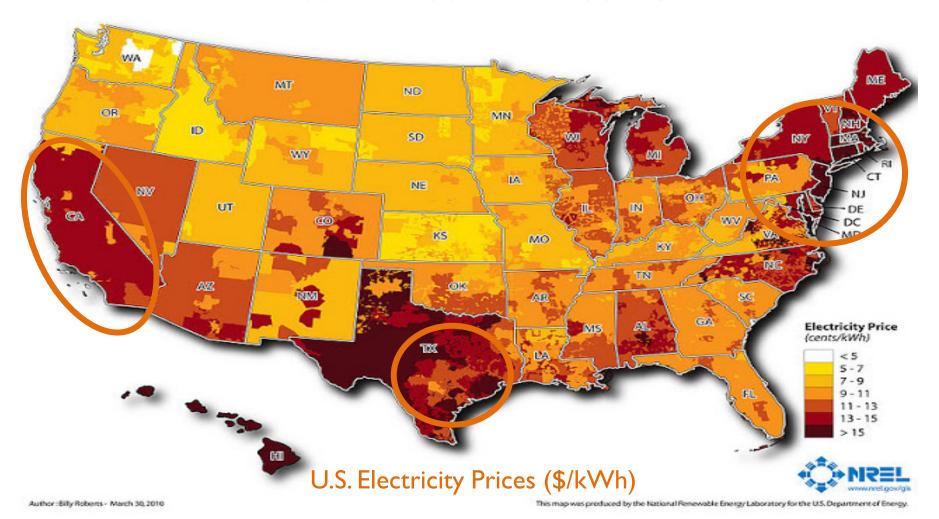
**Target Markets** 

In total we used 8 different market screens



# Geographical targeting must be considered for the go-to-market strategy

## Criteria: (1) Rates (2) Climate (3) Population









User Experience  The ease of use is a critical factor for wide adoption

Multisite integration

 Corporate clients manage would like to have one integrated solution

Latest Technology

- Demand Response integration
- Total Building management : Customer would like a complete solution for energy and safety



## Sustainable growth for the first 3 years before scaling up

