

DECEMBER 7, 2015 | BOSTON, MA



Energy Efficiency, ICT & Small and Mid-Sized Businesses

2015 ACEEE Intelligent Efficiency Conference

Adam Procell

PRESIDENT & CEO

SMBs Have Peak Load < 350 kW

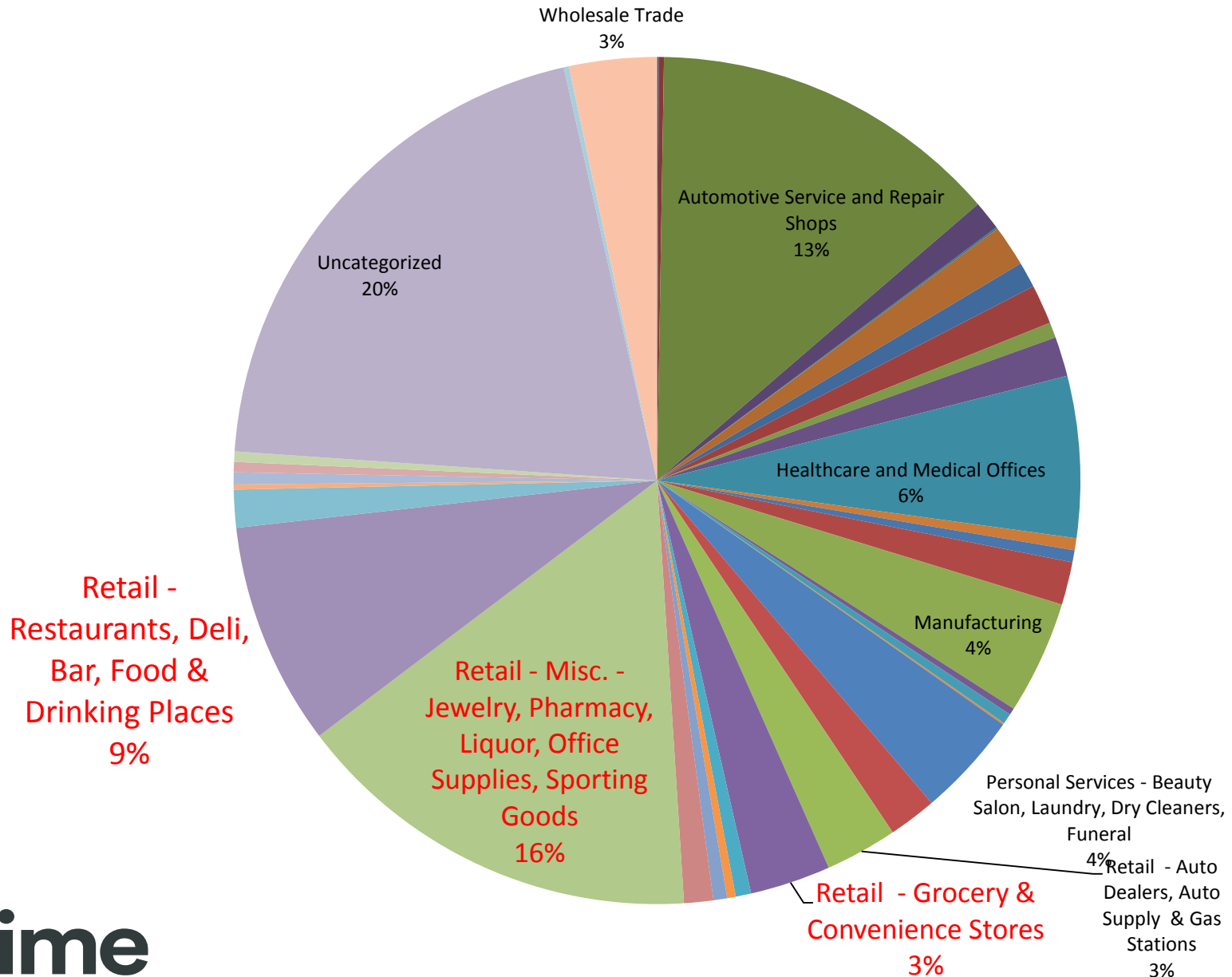
96%

of Utility
Customers

50%

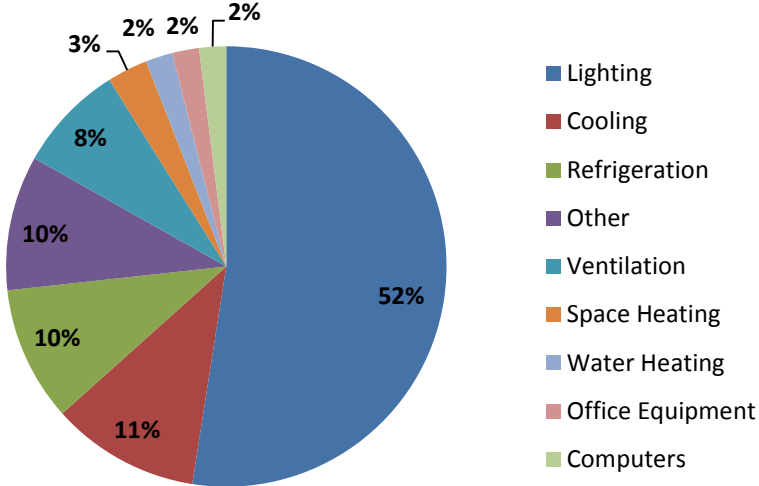
of Energy
Usage

Who Are These SMBs?

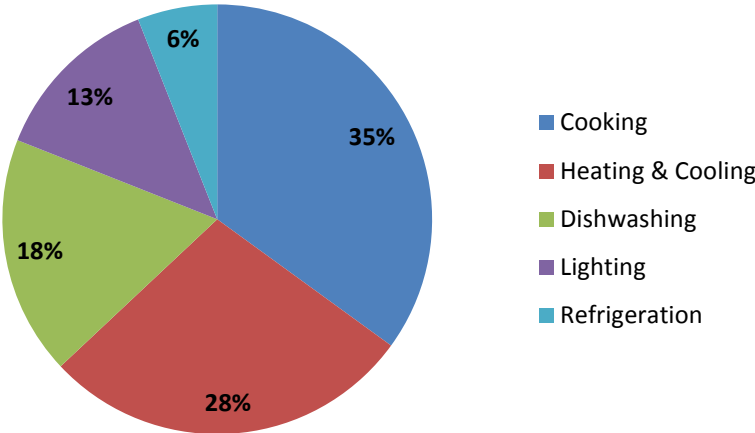


How Do SMBs Use Energy?

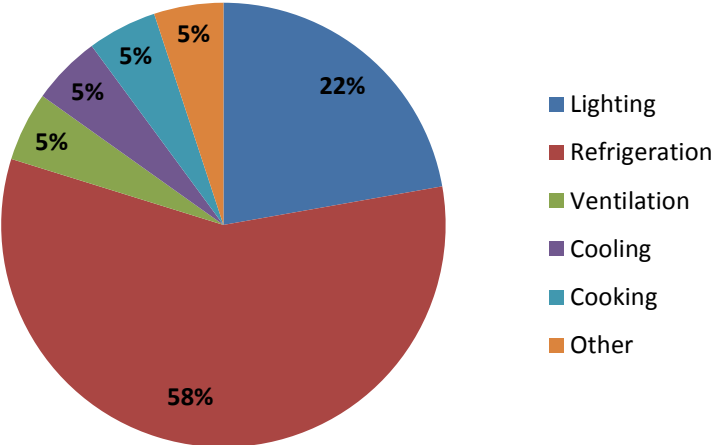
Energy Use in Retail Stores



Energy Use in Restaurants



Energy Use in Grocery Stores



Selling Energy Efficiency – *or Making it Happen*

Census Category	Purchased Electricity as % of Total OpEx
General Merchandise	3.1
Grocery Stores	4.3
Food Service	3.0
Retail Trade	2.5

If energy efficiency can save roughly 30% of an average building's energy usage,

What is our message to the customer?

"You should pay attention dear customer, we can help you save **0.75%** of your business expenses!!!"

Unfortunately that's NOT a compelling message. We can't "sell" energy efficiency.

Selling Energy Efficiency – *or Making it Happen*

Census Category	Survey Anecdotes
General Merchandise	A Columbus OH, convenience store owner said, “Security and safety are a big issue for us. I'm always concerned when I get to the store in the morning and find that one of the security lights burned out. It's a liability for us.”
Grocery Stores	A Rochester NY, Grocery Store owner said, “Every once in a while, one of my refrigerator compressors fails. I arrive at work the next morning to a whole refrigerator of spoiled food. An event like that can be the difference of whether we make that quarter or not. “
Food Service	A Redlands, CA Pizza Shop owner said, “I have to wake up an hour earlier than I normally would just to get to the shop and turn the oven on. It takes an hour to get to pizza making temperature.”

Evolution Of C&I EE Programs

Traditional SBDI

- **EE Retrofits**
 - Lighting

- **SMB 0-100 kW**
- **Unit Pricing Model**
- **Fixed % Incentive**

Lime Energy SMB EE

- **EE Retrofits**
 - Lighting
 - Controls
 - Refrigeration
 - HVAC

- **SMB 0-350 kW; Municipal**
- **PPA - Cost per kWh**
- **\$/kWh Incentive with % Cap**
- **Customer Web Engagement**

Evolving/Future C&I EE

- **EE Retrofits**
 - Lighting
 - Controls
 - Refrigeration
 - HVAC & Process
 - Electricity & Gas
 - EE & DR
- **SMB 0-350 kW; Municipal**
- **Open Market**
- **\$/kWh**
- **Customer Web Engagement**
- **Energy Reporting**
- **Real-time Metering**
- **Automated DR**

Benefits Of ICT For C&I EE Deployment

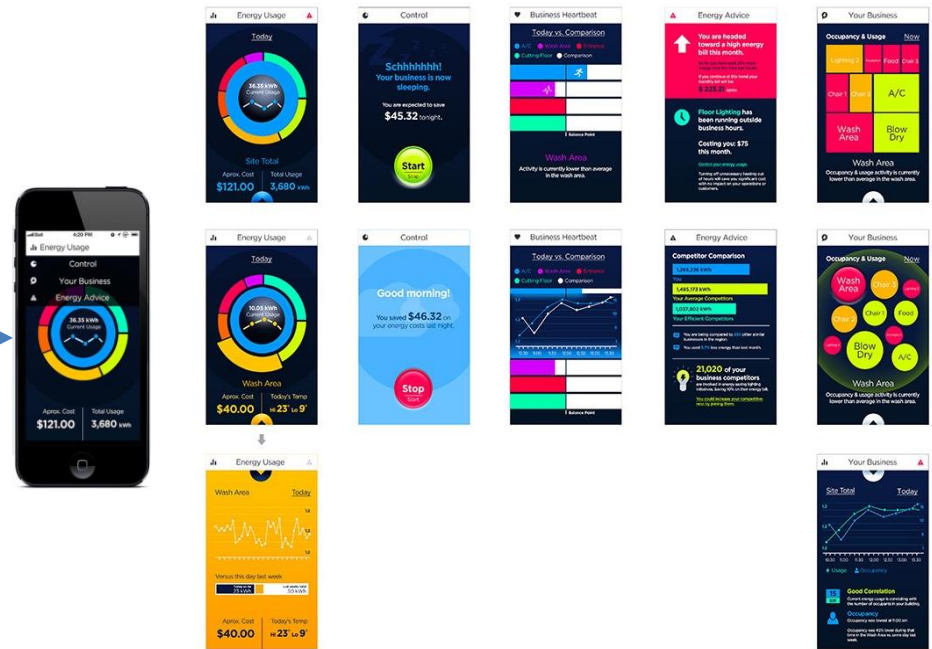
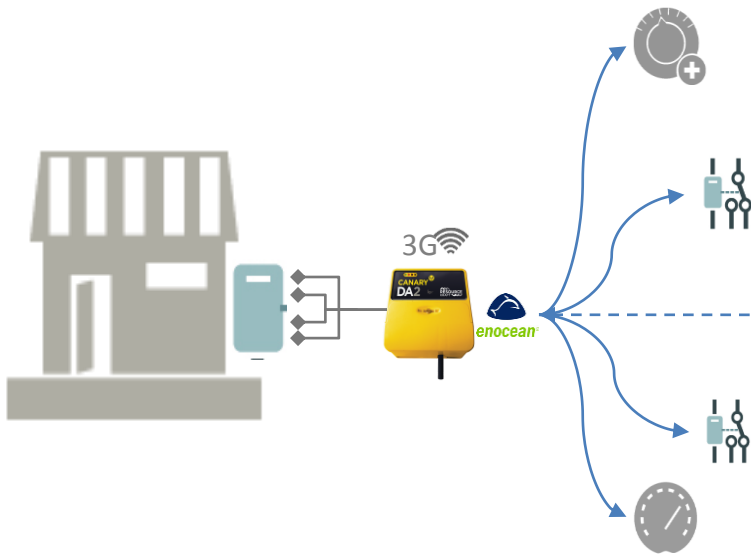
- Real-time EE resource M&V - “EE-Meter”
- Giving consumers of EE projects something that they want
- Consumer confidence in energy cost savings
- Securitization of EE project investment
- Follow-on EE measures
- Behavioral energy conservation
- Combining EE and DR

Emerging ICT Driving SMB EE Adoption

Low Cost
Energy
Monitoring
&
Wireless
Controls

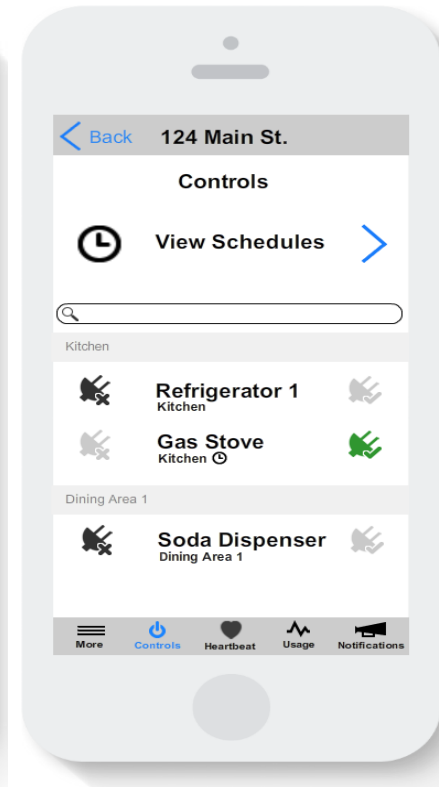
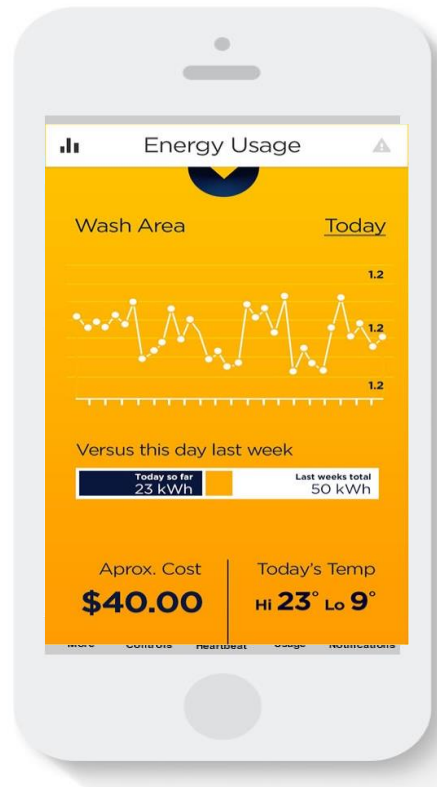
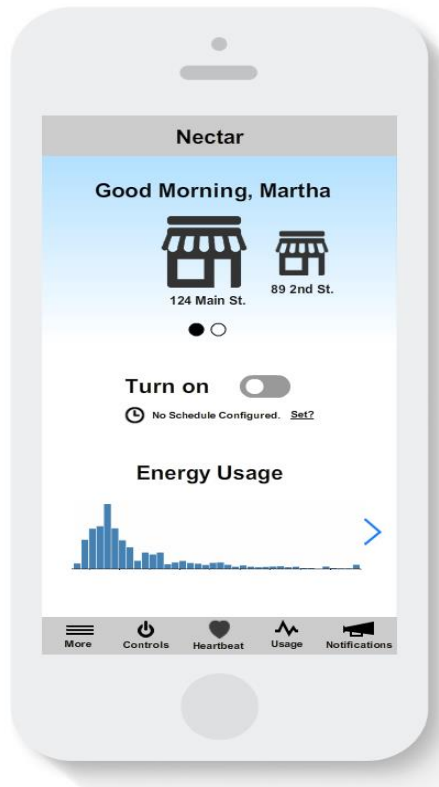


Long Term Customer Engagement
Performance Guarantees
Real-time M&V
Automated Demand Response



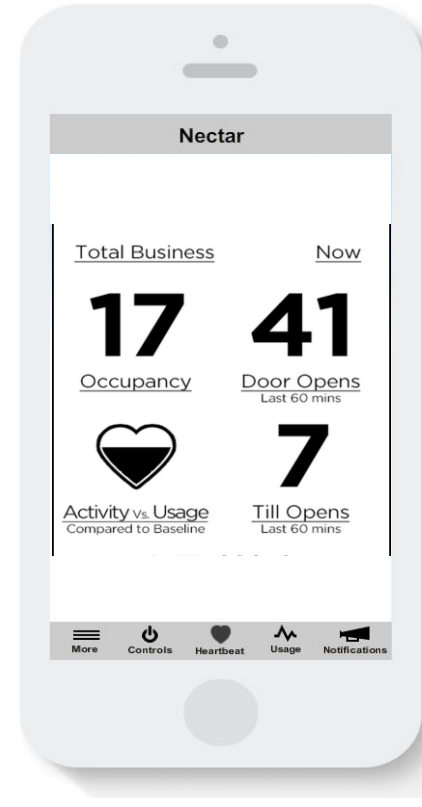
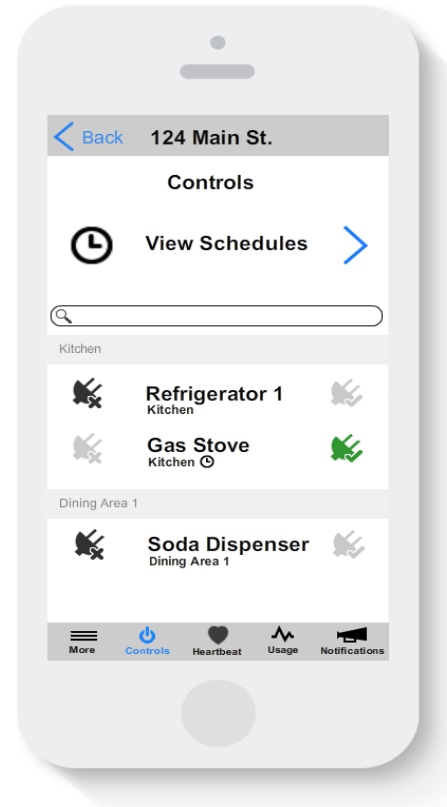
Emerging ICT Driving SMB EE Adoption

Keep in touch with your business without stepping foot inside



Emerging ICT Driving SMB EE Adoption

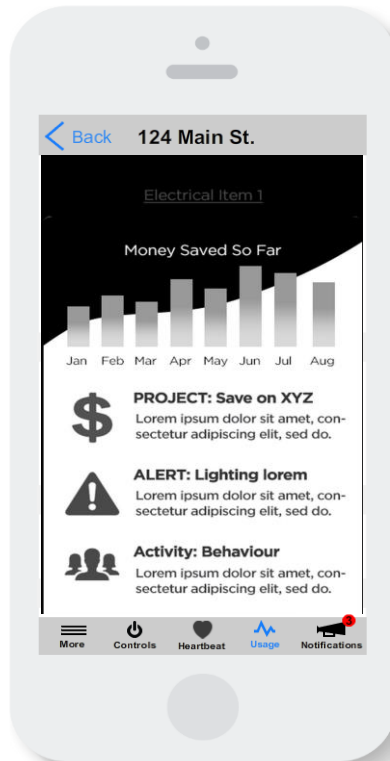
- Remote **CONTROL**
 - ▶ Turn on and off appliances while away
 - ▶ Geofencing
 - ▶ Scheduling
 - ▶ Modern UI
- Your business's **HEARTBEAT**
 - ▶ Door opens
 - ▶ Cash register opens
 - ▶ Motion sensing



Emerging ICT Driving SMB EE Adoption

• NOTIFICATIONS

- ▶ Energy use consumption alerts
- ▶ Motion detection outside of regular business hours
- ▶ Personalized Energy Saving Insights



PERSONALIZED INSIGHTS:

Show All Insights Show Only Liked

Based on the profile that you have built up the following personalized insights have been generated.
Like the insights that you plan to action & enjoy the savings.



Your lighting is costing you \$580 per annum more than your average competitor.

Did you know that capital investment required to make your lighting energy efficient will have a ROI of less than 2 years.



Shift large scale printing to off-peak night shift.

Your competitors have moved energy intensive printing runs to the night shift. Allowing them to reduce their cost base.



Have you given your HVAC a service recently?

You save energy and money, and your system may last years longer with minimal costs for yearly maintenance fees.



Automatic switching to sleep mode or manually turn off monitors.

Turning off machines when they are not in use can result in enormous energy savings. There is a common misconception that screen savers reduce energy use by monitors; they do not.



Get the whole office involved. Reducing cost saves jobs.

Appoint an energy champion within each department of your company. Your team will make the difference if they are engaged.



Lighting Sensors

Install switch plate occupancy sensors in proper locations to automatically turn off lighting when no one is present and back on when people return.

