

# Unlocking ZNE Potential in Small & Medium Businesses at National Scale

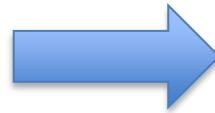
NASEO Jolt Session  
9.17.13

# Ecology Action

- 43 year old nonprofit
- 70 Staff



1970

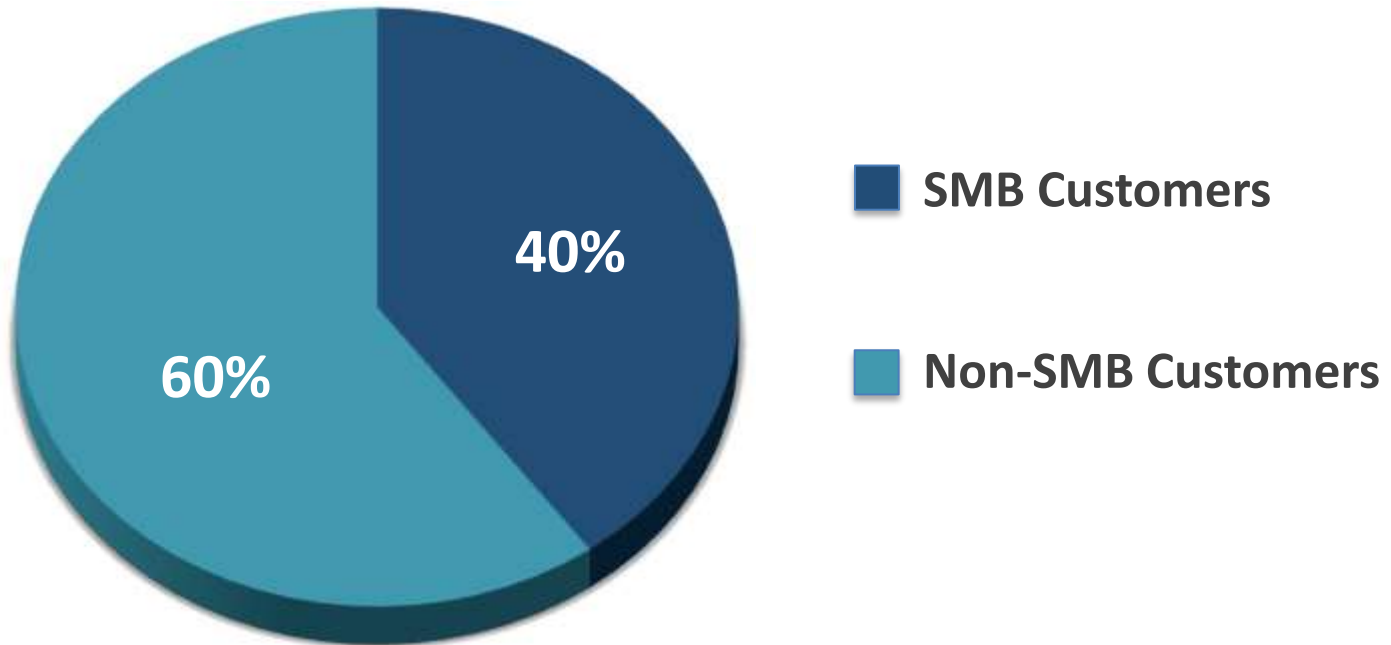


2013

# Ecology Action

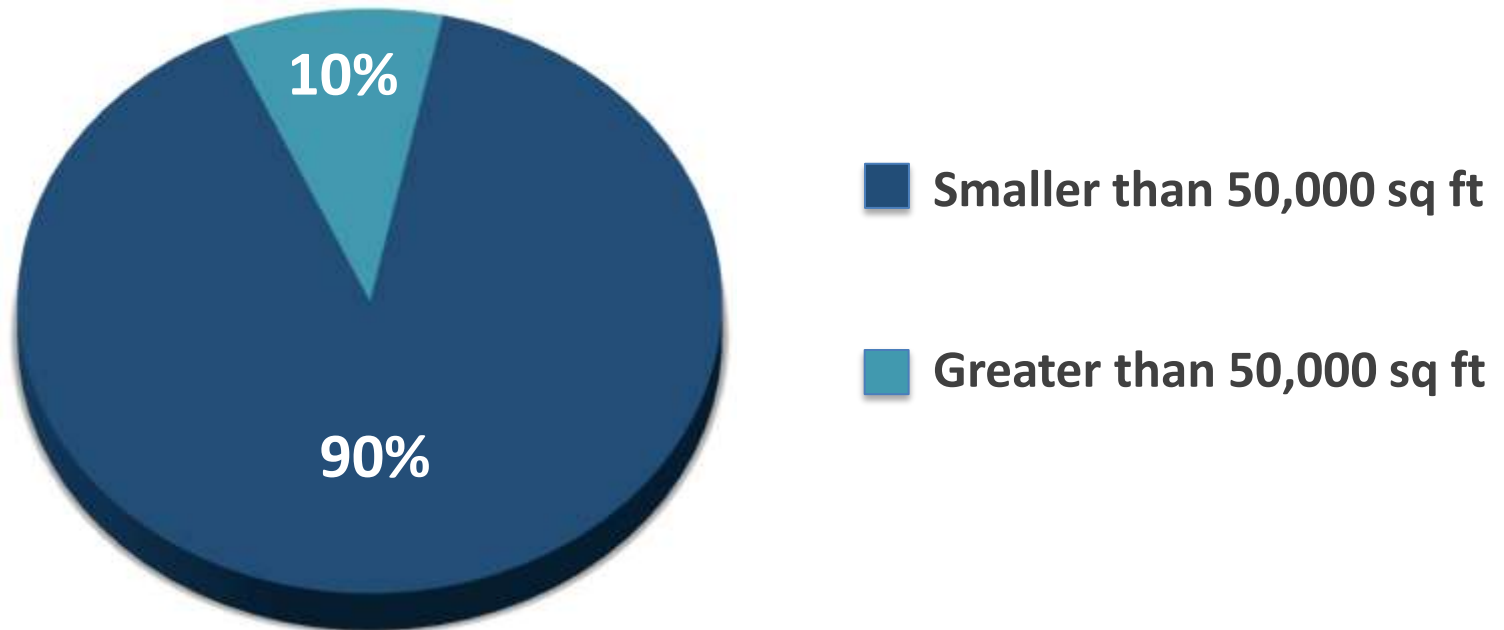
- Innovative marketing & engagement programs
  - Energy, Transportation, Pollution Prevention & Zero Waste
- 12 years specializing in commercial deep energy retrofits for
  - PGE, SCE, SMUD, CPAU, CEC
- Governors Environmental and Economic Leadership Award - 2x
- Exceeded goal on every energy efficiency program to-date
- Installed 365,000,000 kWh of savings in last decade

# Nationwide Commercial Energy Consumption



*\* Figures derive from 2003 CBECS*

# Commercial Building Stock By Size



4.6 million small commercial buildings total

*\* Figures derive from 2003 CBECS*

# Direct Install 2.0



**4.7x** savings per retrofit

**4x** savings from “high hanging fruit”


**30%** less cost per kwh

**29%** of installed cost is covered by customer

*Comparison of 2010 data of four programs serving customers < 200kW in demand*

# ***Direct Install 2.0***

## **Average Job Profile**



<b>Baseline Reduction =</b>	<b>12%</b>
<b>Job cost =</b>	<b>\$6,051</b>
<b>Co pay =</b>	<b>\$1,739</b>
<b>Payback =</b>	<b>4 months</b>
<b>Annual bill savings =</b>	<b>\$5,308</b>
<b>kWh per site =</b>	<b>39,476</b>

*0-200 kW customers*

# SMARTScale Team

Shared Commitment to Scaling SMB Deep Retrofits

EcologyAction

nbi new buildings  
institute

EGIA Electric & Gas  
Industries Association



Building Science

Retrofit Productivity Software Tools

Market Assessment

Contractor Training & Engagement

Field Delivery



# SMARTScale

1. Move *Direct Install 2.0* from 12% to 20%....30%....50%
2. Remove the Delivery Bottlenecks



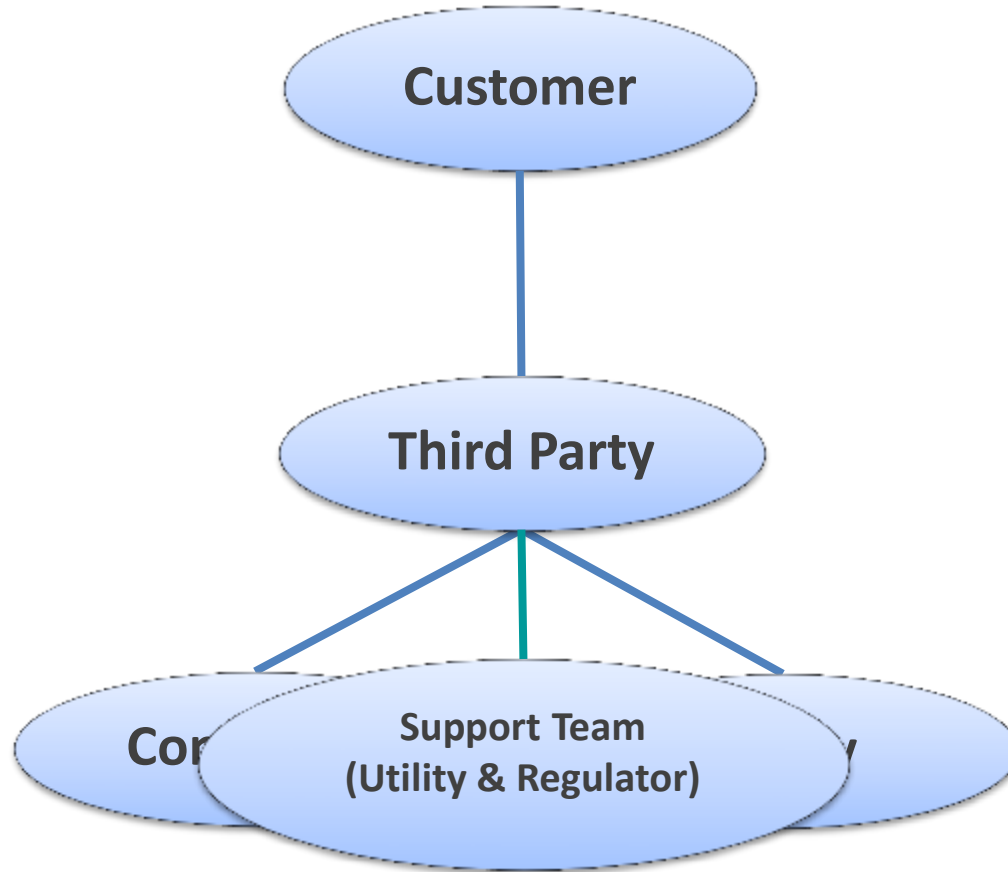
# The *SMARTScale* End Game

A nationwide contractor network that is trained and supported to deliver deep, integrated retrofits to the SMB market.

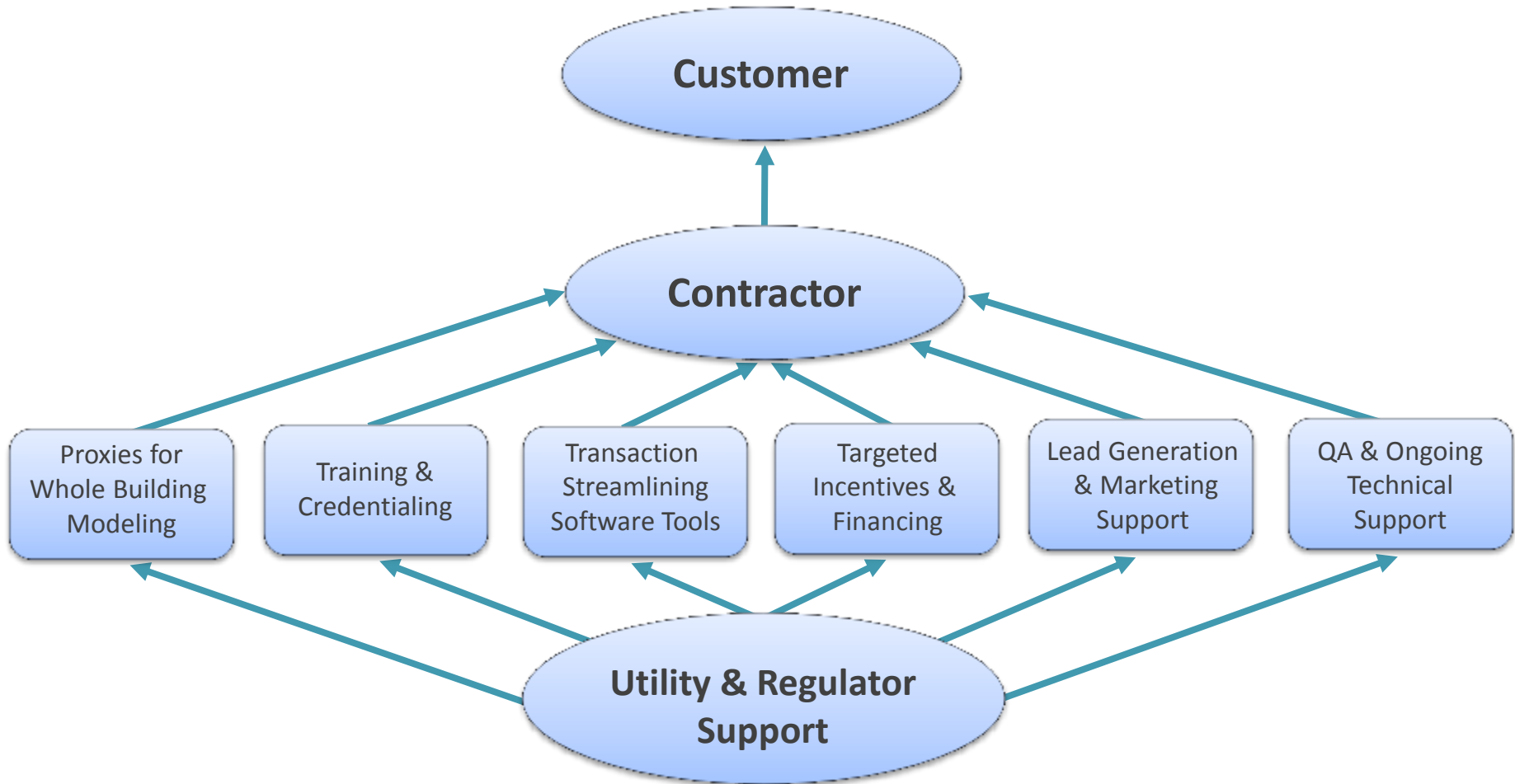


A network of professionals and a trade organization supporting contractors facilitating this market transformation.

# Removing the Delivery Bottleneck



# SMARTScale Rapid Scaling Model



**Mahlon Aldridge**

**831-227-9257**

**emahlon@ecoact.org**