

# Early Adapters: Results of a pilot to engage small businesses in climate action

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bowman|global change.

## Assumption

When it comes to global warming, small businesses don't really have a role to play

- Little policy support
  - Little effective outreach
- 
- “You’re too small to matter”
  - “But thanks for your can-do attitude”

Nearly 30 million SMEs in the United States

Nearly 50% of GDP

Nearly 50% of the workforce

## Why is this opportunity being lost?

- Misunderstanding of business owners' motivations
- Demoralizing misinformation about costs and priorities
- Wrong messengers: lack of peer-to-peer mentorship



## Tackle the sustainability “wicked problem”

- 4-hour workshop
- Peer mentorship, proven results
- Green Business Plan workbook

## Introduction: The big picture on sustainability

- Why me? Risks to markets, business and costs
- Why me? Opportunities to cut costs, improve image and loyalty
- Why a green business plan?

## Step 1: Pick your goals

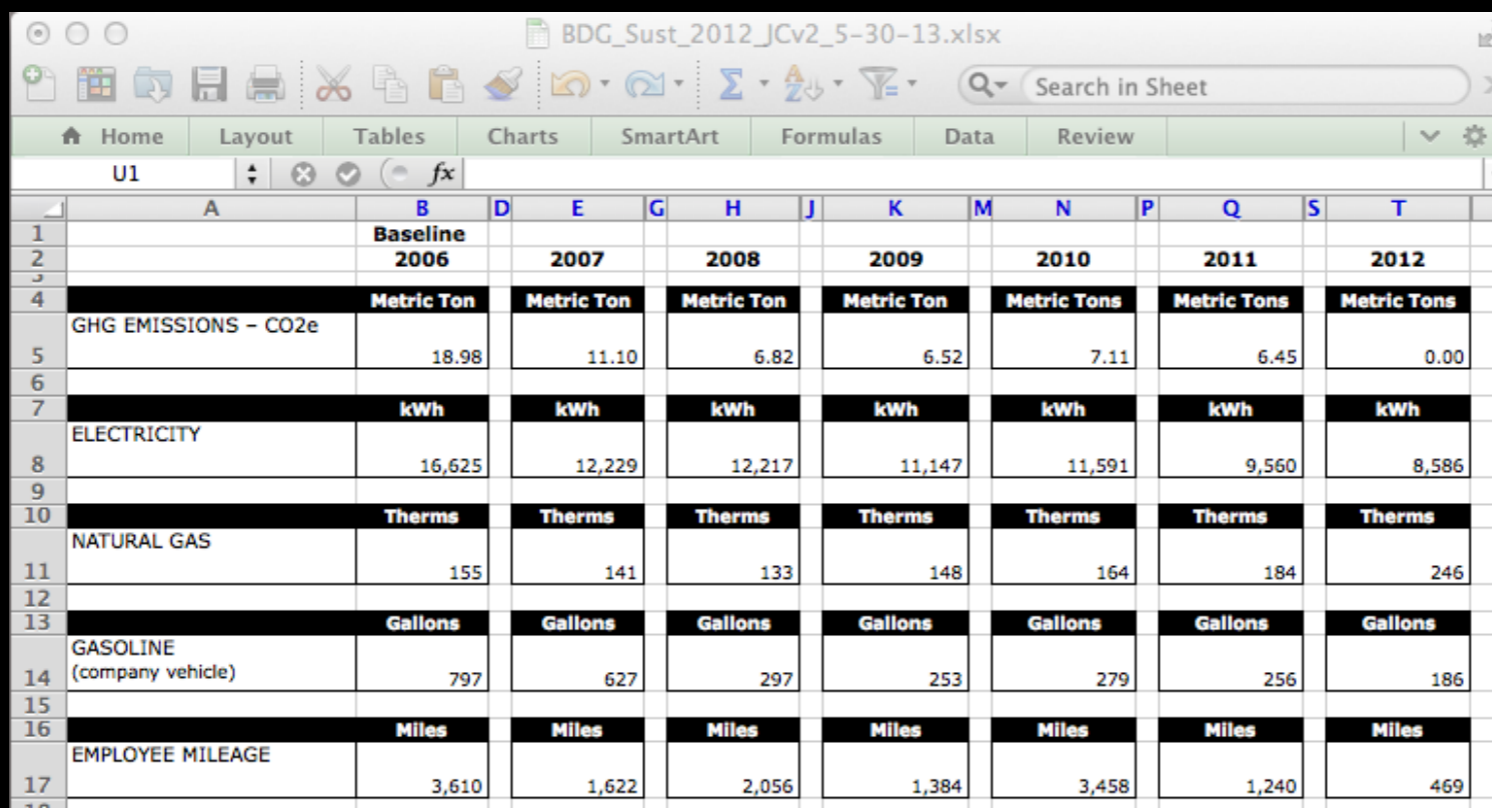
- “Stretch goals” and incremental targets
- Example: Bowman Design Group’s goals vs. 2006 baseline

	2010	2013	2020	2025
Greenhouse gas emissions	10% less	20%	80%	95%
Water use	20% less	50%	75%	
Landfill waste	20% less	50%		
Recycling waste	10% more	Unknown		
Recycled paper	100%			
Non-toxic cleaners & supplies	100%			

- **Exercise:** Set goals for this year, next year, 2020 and 2025

## Step 1: Pick your metrics

- What can I measure vs. where do I need help?
- Example: Bowman Design Group's metrics



	Baseline 2006	2007	2008	2009	2010	2011	2012
<b>Metric Ton</b>	<b>Metric Ton</b>	<b>Metric Ton</b>	<b>Metric Ton</b>	<b>Metric Tons</b>	<b>Metric Tons</b>	<b>Metric Tons</b>	<b>Metric Tons</b>
GHG EMISSIONS - CO2e	18.98	11.10	6.82	6.52	7.11	6.45	0.00
<b>kWh</b>	<b>kWh</b>	<b>kWh</b>	<b>kWh</b>	<b>kWh</b>	<b>kWh</b>	<b>kWh</b>	<b>kWh</b>
ELECTRICITY	16,625	12,229	12,217	11,147	11,591	9,560	8,586
<b>Therms</b>	<b>Therms</b>	<b>Therms</b>	<b>Therms</b>	<b>Therms</b>	<b>Therms</b>	<b>Therms</b>	<b>Therms</b>
NATURAL GAS	155	141	133	148	164	184	246
<b>Gallons</b>	<b>Gallons</b>	<b>Gallons</b>	<b>Gallons</b>	<b>Gallons</b>	<b>Gallons</b>	<b>Gallons</b>	<b>Gallons</b>
GASOLINE (company vehicle)	797	627	297	253	279	256	186
<b>Miles</b>	<b>Miles</b>	<b>Miles</b>	<b>Miles</b>	<b>Miles</b>	<b>Miles</b>	<b>Miles</b>	<b>Miles</b>
EMPLOYEE MILEAGE	3,610	1,622	2,056	1,384	3,458	1,240	469

- Exercise: Select metrics to address your goals



## Step 3: Estimate your energy profile

- Different energy profiles: office, manuf., transp., etc.
- **Exercise:** Where do you think your energy use and GHG emissions are concentrated?

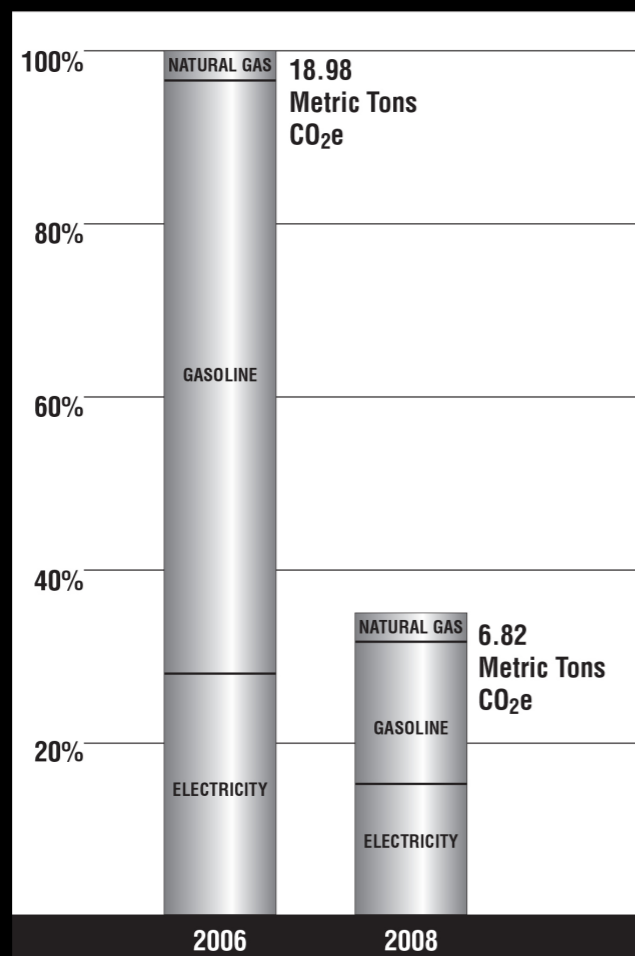
Electricity	_____%
Natural Gas	_____%
Gasoline	_____%
Diesel	_____%
Air Travel	_____%
Other	_____%
<b>Total</b>	<b>100%</b>

+

HVAC	_____%
Lighting	_____%
Office Machines	_____%
Refrigeration	_____%
Driving	_____%
Air Travel	_____%
Production Tools	_____%
<b>Total</b>	<b>100%</b>

## Step 4: Identify & prioritize actions

- Various models: EMS, certifications, etc.
- Example: “Make every decision a green decision”



Bowman Design Group's results

## Step 4: Identify & prioritize actions

- Various models: EMS, certifications, etc.
- Example: “Make every decision a green decision”
- Exercise: Plan specific actions

Action	1 mo	2 mo	6 mo	1 yr	2 yr	Longer
Sign up with a verification provider						
Request an energy audit from the utility						
Turn unnecessary lights off						
Turn unnecessary equipment off						
Eliminate all vampire power						
Replace all incandescent lighting						
Replace all inefficient HID lighting						
Increase daylight						
Increase natural ventilation						
Increase recycling						
Reduce voluntary driving						
Use alternative transportation						
Begin employee telecommuting						

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- Example: “Make every decision a green decision”
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Action

When

Possible Assistance

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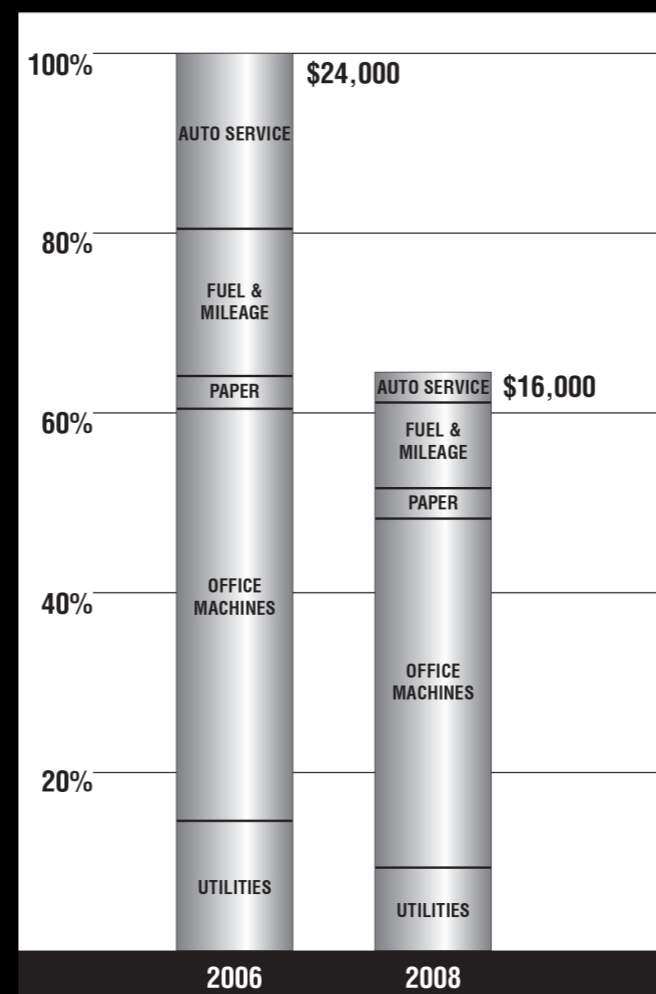
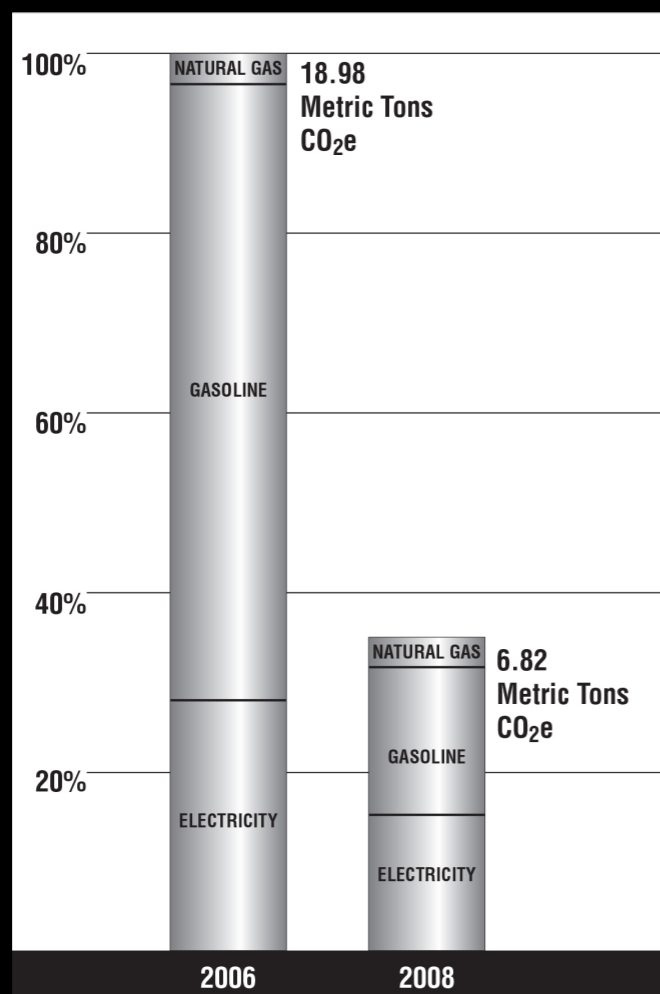
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## Step 5: Account for success

- Consider *all* costs and savings associated with your green decisions



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Search in Sheet

Home Layout Tables Charts SmartArt Formulas Data Review

Q5 =GHGIQ12

	Baseline Year 2006		2007		2008		2009		2010		2011		2012	
	Metric Ton		Metric Ton		Metric Ton		Metric Ton		Metric Tons		Metric Tons		Metric Tons	
GHG EMISSIONS - CO2e	18.98		11.10		6.82		6.52		7.11		6.45		0.00	
	kWh Dollars		kWh Dollars		kWh Dollars		kWh Dollars		kWh Dollars		kWh Dollars		kWh Dollars	
ELECTRICITY	16,625	3,391.72	12,229	2,107.11	12,217	2,030.19	11,147	1,834.14	11,591	1,980.95	9,560	1,673.92	8,586	1,547.86
	Therms Dollars		Therms Dollars		Therms Dollars		Therms Dollars		Therms Dollars		Therms Dollars		Therms Dollars	
NATURAL GAS	155	222.08	141	197.40	133	205.83	148	175.34	164	184.36	184	213.62	246	246.42
	Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars	
GASOLINE (company vehicle)	797	2,439.27	627	2,046.45	297	992.71	253	740.64	279	856.13	256	989.10	186	788.05
	Miles Dollars		Miles Dollars		Miles Dollars		Miles Dollars		Miles Dollars		Miles Dollars		Miles Dollars	
EMPLOYEE MILEAGE	3,610	1,462	1,622	738.22	2,056	1,038.40	1,394	745.70	3,458	1,731.75	1,240	654.95	469	247.95
	Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars		Gallons Dollars	
WATER	180,268	601.32	171,292	558.04	147,356	483.14	153,340	520.35	154,836	552.64	161,768	585.84	152,592	552.08
	Gallons		Gallons		Gallons		Gallons		Gallons		Gallons		Gallons	
LANDFILL WASTE	6,760		5,070		3,718		3,718		3,718		3,718		3,718	
	Gallons		Gallons		Gallons		Gallons		Gallons		Gallons		Gallons	
RECYCLING	5,070		5,070		3,380		3,380		3,380		3,380		3,380	
	Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars	
AUTO SERVICE (company vehicle)	4,914.00		706.00		530.00		710.00		490.00		370.00		824.05	
	Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars	
OFFICE MACHINES (Canon 4080, HP 4100, HP 5500)	7,595.00		6,998.00		6,665.00		5,992.00		8,927.99		7,215.13		6,756.68	
	Dollars		Dollars		Dollars		Dollars		Dollars		Dollars		Dollars	
LARGE FORMAT PRINTERS (Mutt, Jeff & Xerox 3300)	3,643.00		3,698.00		3,693.00		3,516.86		3,950.70		4,371.09		2,915.27	
	Reams Dollars		Reams Dollars		Reams Dollars		Reams Dollars		Reams Dollars		Reams Dollars		Reams Dollars	
COPIER PAPER	76	363.00	50	204.00	71	498.00	94	547.75	82	721.00	72	571.21	41	208.74
	Sheets Dollars		Sheets Dollars		Sheets Dollars		Sheets Dollars		Sheets Dollars		Sheets Dollars		Sheets Dollars	
PLOTTER PAPER	2,648	185.36	921	64.47	636	44.52	900	63.00	1,000	230.00	1,001	240.24	645	147.78

SUMMARY GHG ELEC NAT GAS WATER EMP MILEAGE GASOLINE AUTO WASTE\_RECYCLE OFFICE MACHINES LG FORMAT COPIER PAPER PLOTTER PAPER

## Step 6: Go public

- Declaring your intentions creates expectations
- Publicizing results builds good will
- Exercise: make the pledge

On behalf of

\_\_\_\_\_

Company Name

I commit the company to fulfilling  
the goals and objectives of our GreenAction<sup>TM</sup> Plan.

\_\_\_\_\_

Date





## Pilot workshop: June 1, 2013

- Long Beach Green Business Council
- The Climate Registry
- Southern California Edison
- Aquarium of the Pacific
- 12 Long Beach area small businesses





## Testimonials

“...takes the guesswork out of creating a green business plan.”

“...demonstrated how we can continue our greening process at our own, quicker pace and, more importantly, on our own terms.”

“...packed with ideas that my office can use.... We made simple changes the following Monday.”



## Where do workshops fit into behavioral change?

- A necessary enabling / initiating activity:
  - Frames issues and goals
  - Creates a coherent approach
  - Demonstrates proven results
- Businesses might also need longer-term engagement



## Next steps:

- Partnership with:
  - City of Long Beach (long-term engagement & recognition)
  - Long Beach Green Business Council
  - California Business Alliance for a Green Economy
- Seeking other partnerships



Thank you

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