Commercial Trends 2011: Measures, Markets, and Sources of Savings

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Commercial Sector
2011 Accomplishments

Commercial Sector		PGE	PAC	NWN	CNG
Achievement	2011 Achievement to Date (Rpt kWh or therm)	80,030,435	53,410,178	1,857,775	219,045
	% of Conservative goal	111%	142%	131%	145%
	% of stretch goal	94%	121%	111%	123%

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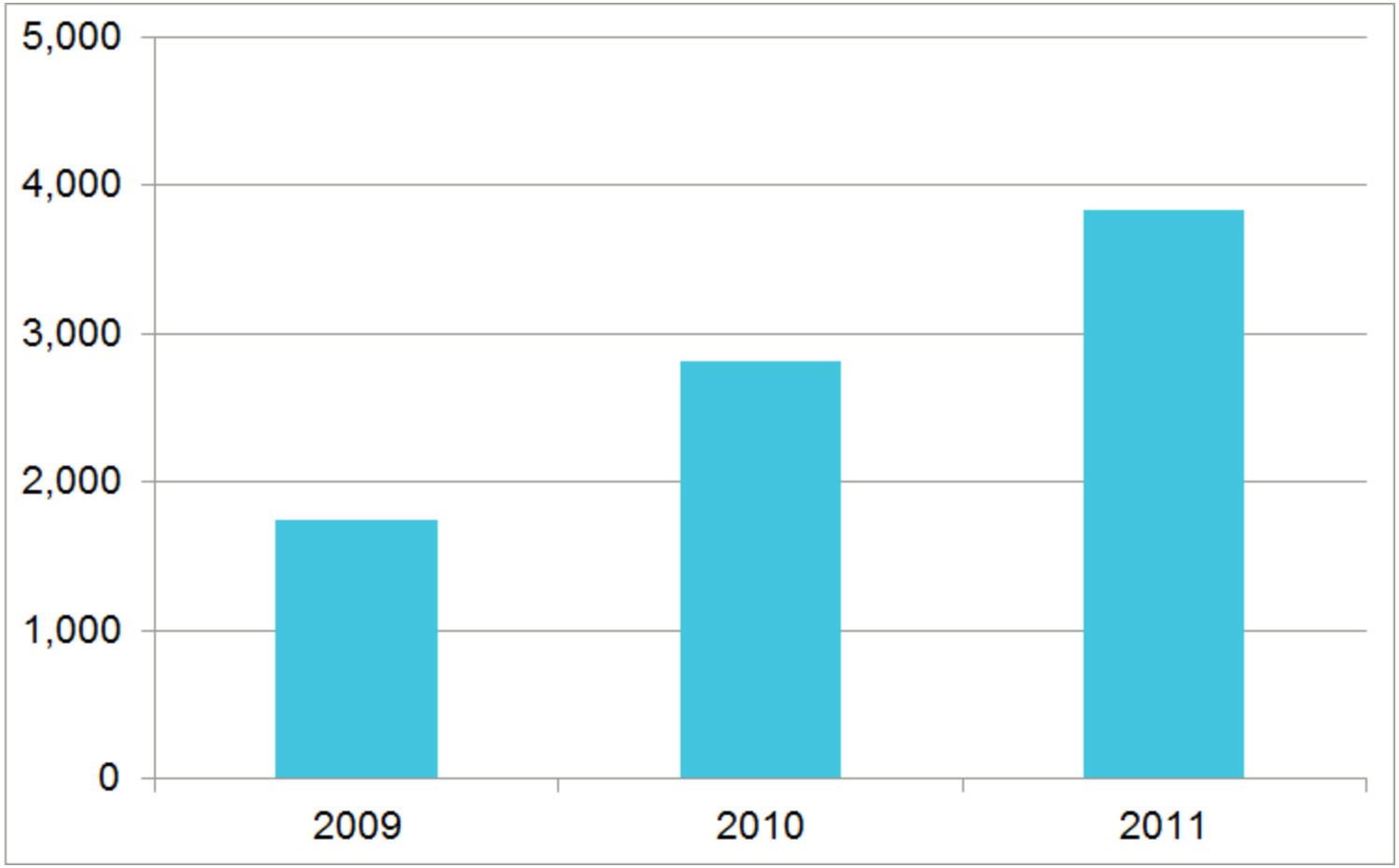
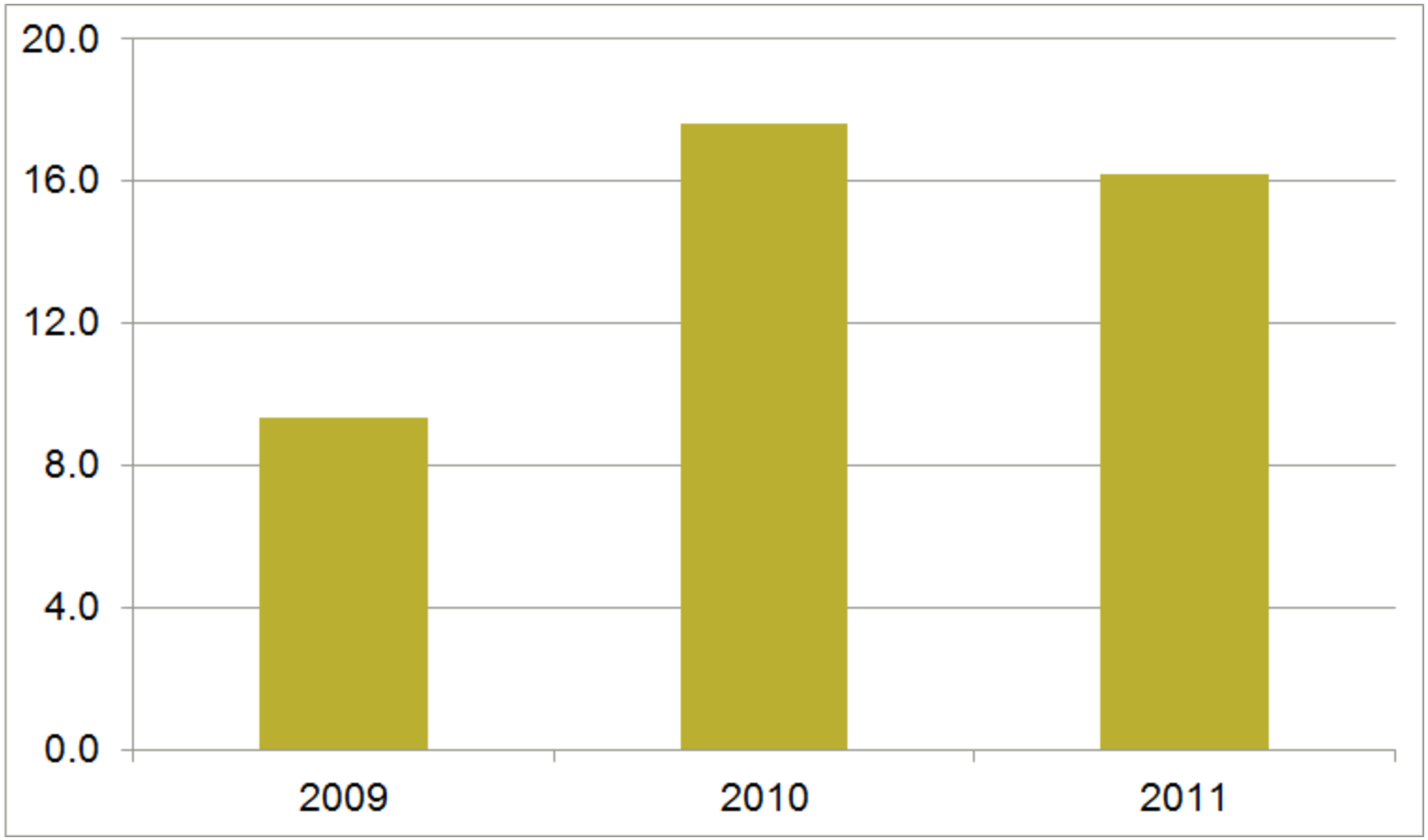
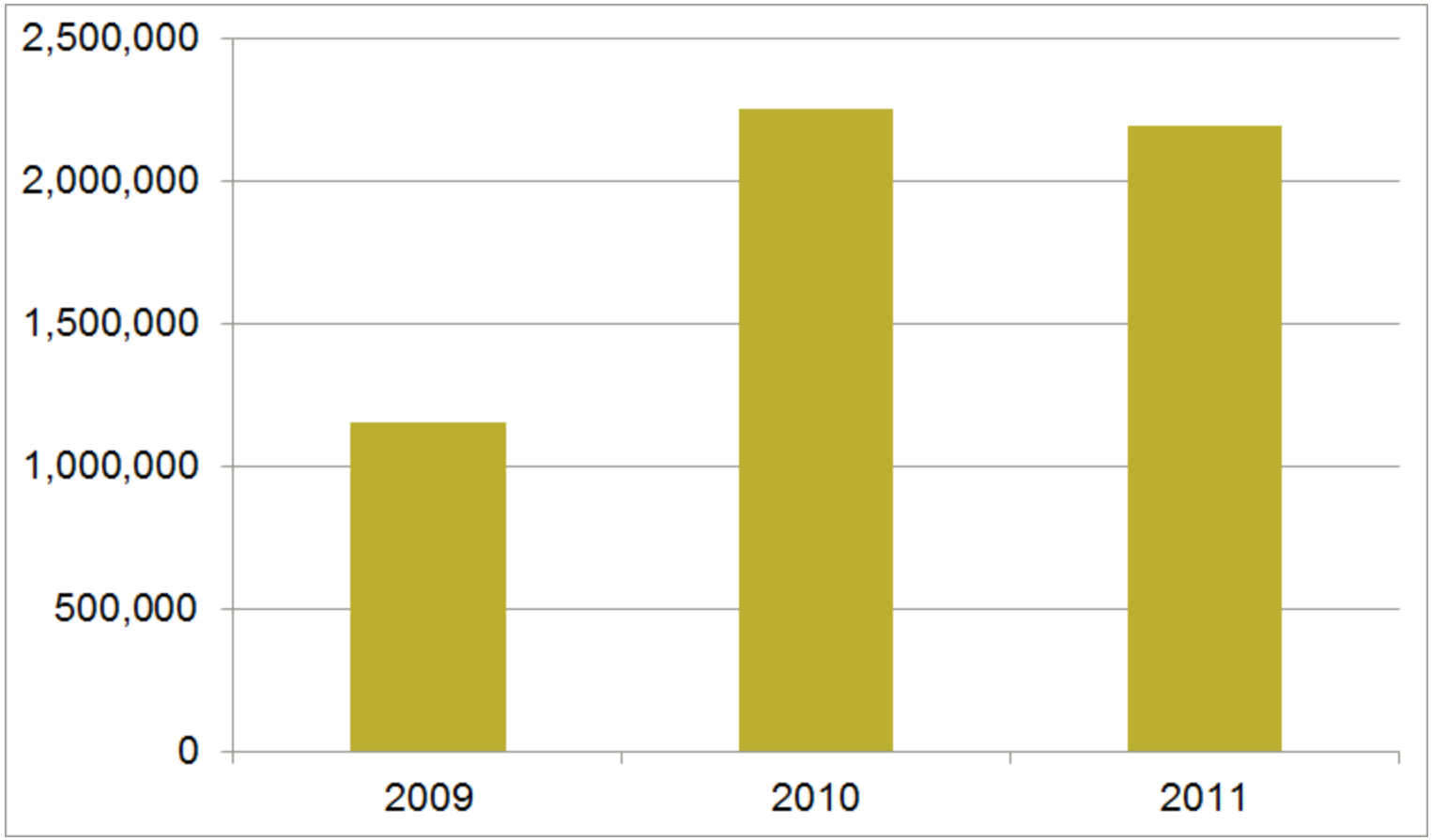
Commercial Sector
Number of Sites Served



Commercial Sector Electric Savings (aMW)

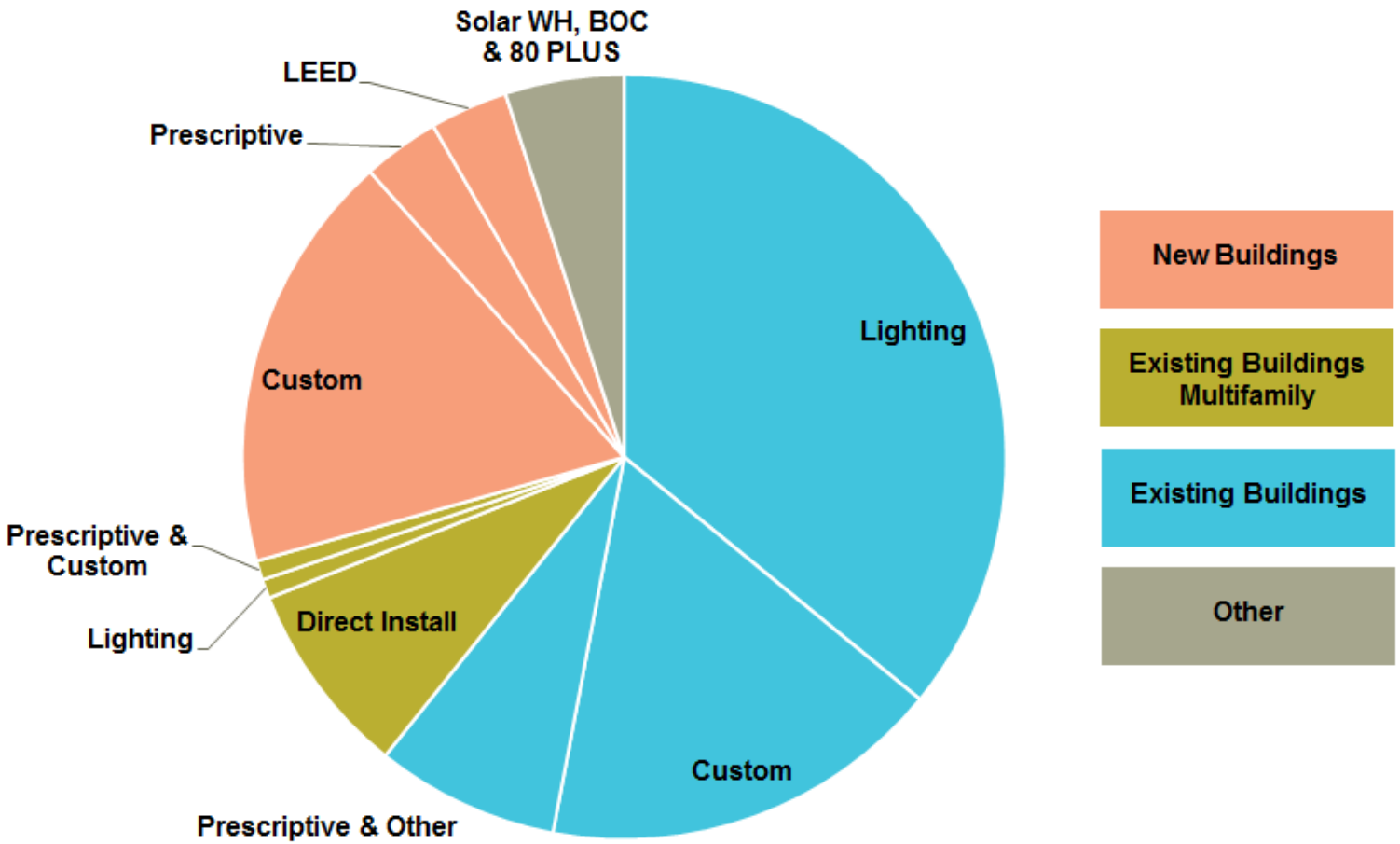


Commercial Sector Gas Savings (Therms)

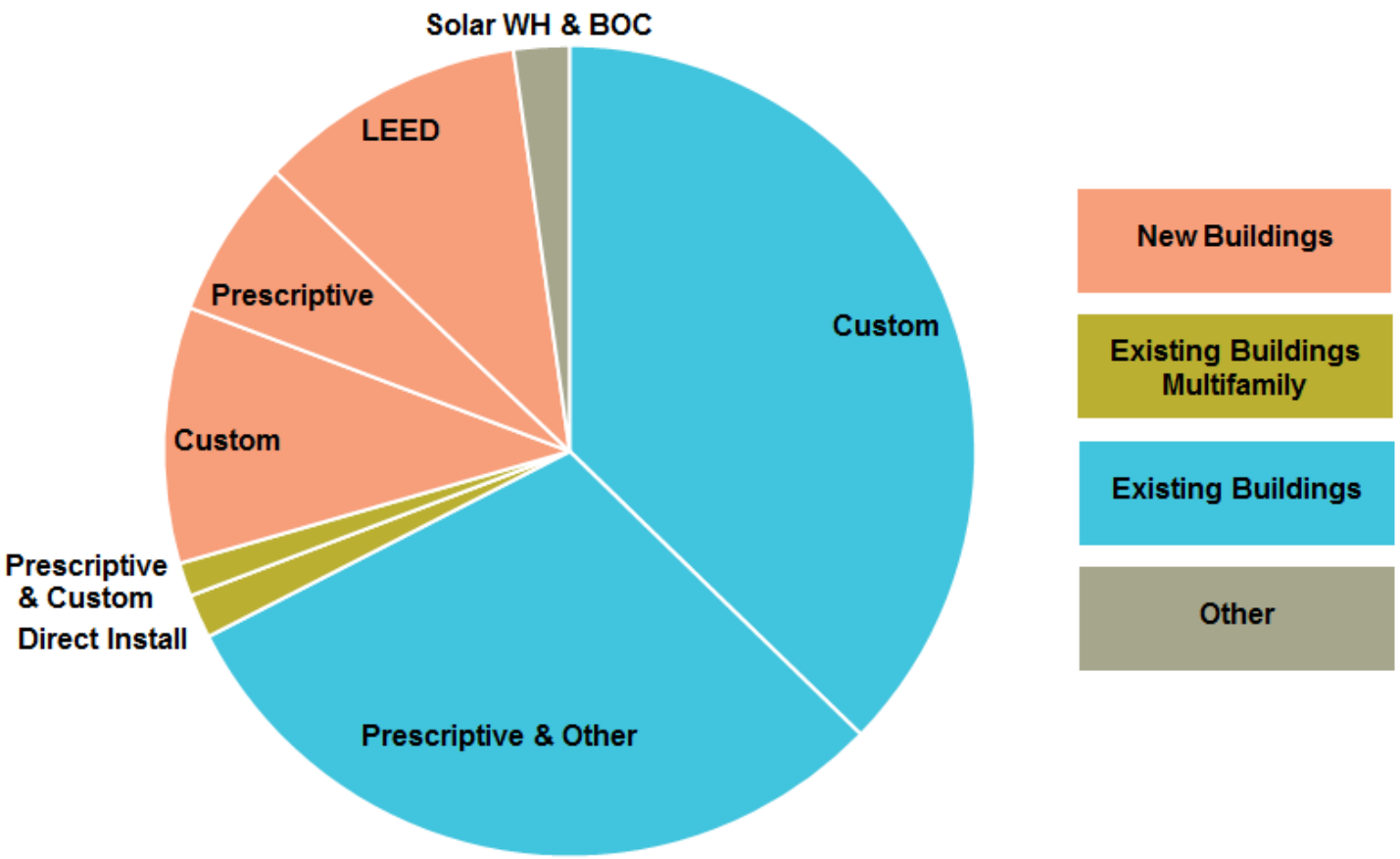


Savings by Sector

Commercial Sector
Sources of Electric Savings, 2011, By Track



Commercial Sector
Sources of Gas Savings, 2011, By Track



Existing Buildings

Existing Buildings Overview

Steady growth in electric and gas savings from 2009-2011.

Program strategy emphasizes:

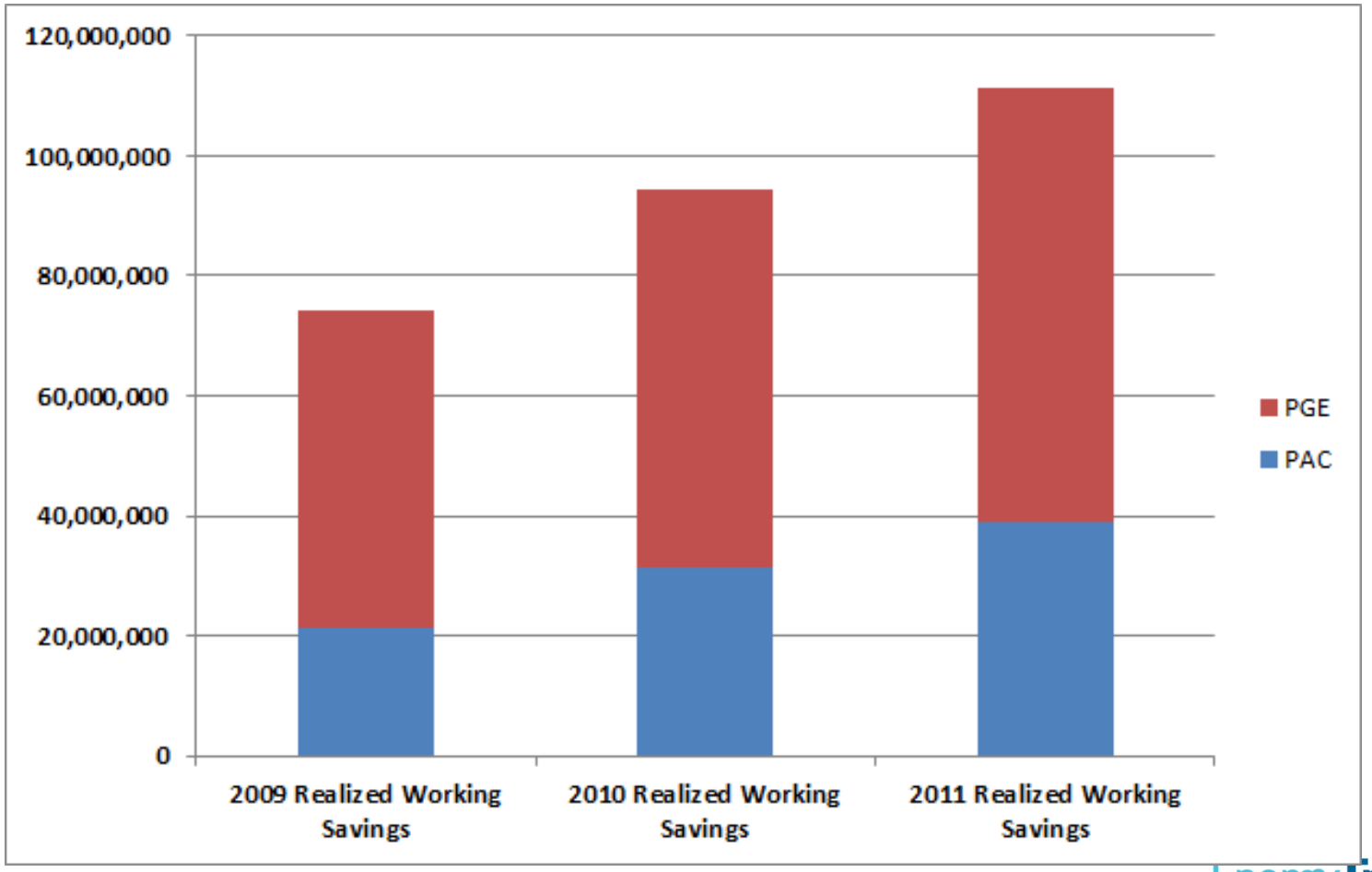
1. Developing existing customer relationships to help customers maximize their energy efficiency project potential
2. Expanding the reach of the program to serve customers that are harder to contact and influence
3. Supporting a network of Trade Allies to provide services

Market Conditions:

- 2011 changes to BETC
- Pending changes to lighting baseline
- Economic downturn still limiting investment in energy efficiency

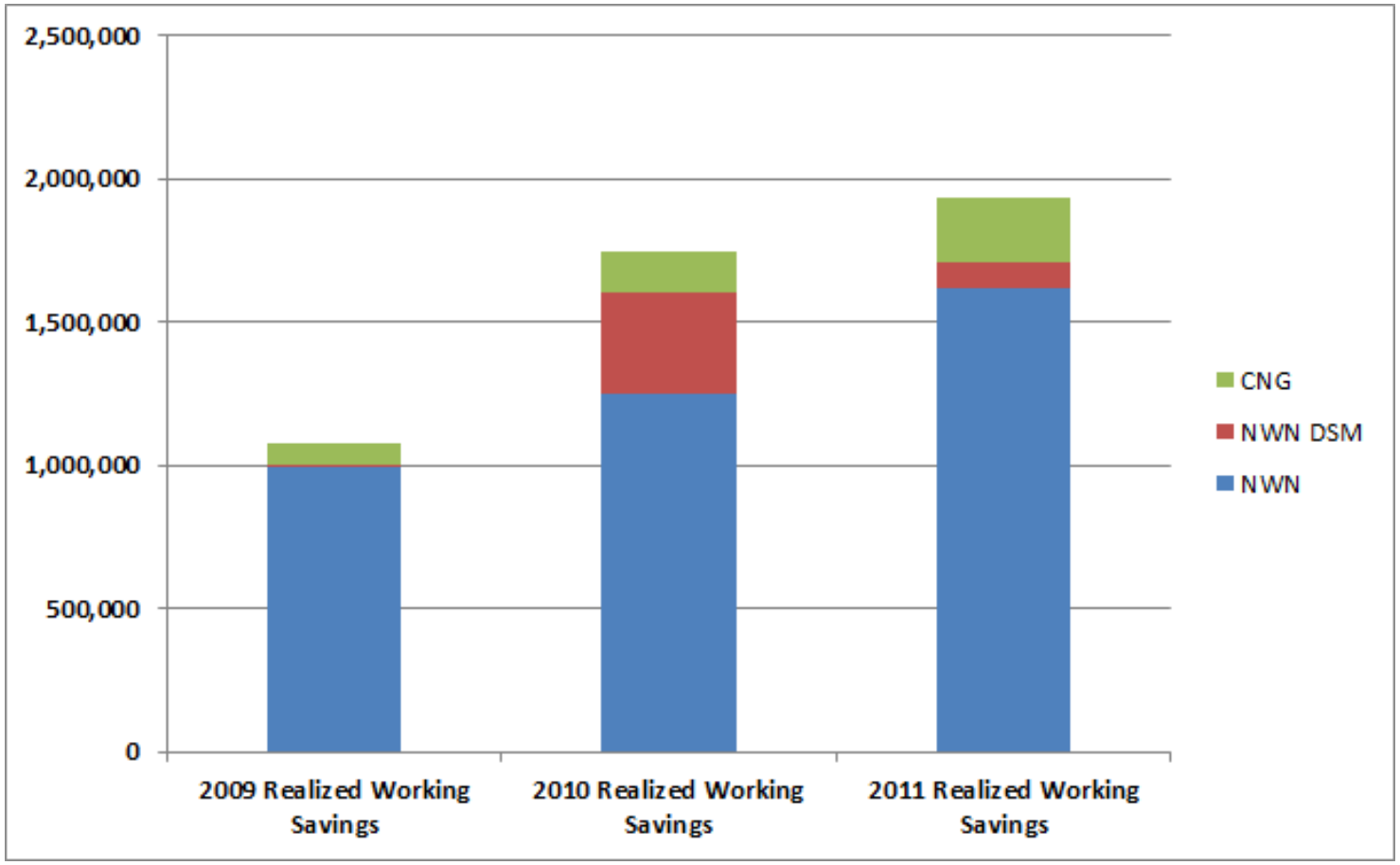
Savings Trends

Existing Buildings Electric Savings Growth (Working Savings)



Savings Trends

Existing Buildings Gas Savings Growth (Working Savings)



Key Trends

- Number of sites served by the program increased from 1,540 in 2009 to 3,041 in 2011
- Average savings per project is down from 2010, 21% for electric and 10% percent for gas
- Custom Track electric savings grew from 2009 to 2010 and fell off in 2011.
- Lighting track activity grew from 2009 to 2010 and exploded in 2011
- Standard Track project activity has increased steadily from 2009-2011.
- O&M solutions have experienced a dramatic growth in last three years.

Key Measures by Savings

Electric			
Measure Group	**2009**	**2010**	**2011**
Lighting & Lighting Controls	33,320,281	42,061,803	51,022,249
Building Controls	3,428,645	9,203,763	11,184,413
Custom HVAC	807,352	3,113,681	3,684,616
Data Centers & Virtualization	899,947	3,181,440	3,718,180
Custom VFD	1,906,809	4,285,753	834,137
HVAC tune-ups	338,492	2,882,947	3,394,901
Gas			
Measure Group	**2009**	**2010**	**2011**
Custom HVAC	106,291	25,189	157,181
Custom Boiler	146,461	329,495	158,000
Custom Building Controls	63,820	193,785	397,587
Insulation	74,569	153,648	57,707
Custom Gas	75,782	418,266	87,884
HVAC tune-ups	0	142,743	404,369

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Key Markets by Savings, 2011

Electric Savings (kWh)	
Office	23,469,236
Retail	19,200,855
Warehouse	13,000,522
Grocery	9,202,952
Education	5,878,311

Gas Savings (Therms)	
Office	687,088
Retail	231,478
Education	184,368
Hospital	144,663
Religious/Spiritual	85,713

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New Buildings

New Buildings Overview

Significant growth in savings since 2009 and increasing project enrollments.

- Introduced tiered incentives
- Expanding early design assistance
- Revised calculated savings tools for HVAC and Lighting
- Developed new network of Program Allies.
- Began to develop ways to integrate solar into the NB program

Market Conditions:

- More projects falling under the more stringent 2010 energy code, a 15% baseline change
- Economic slowdown has impacted ability to get deeper savings

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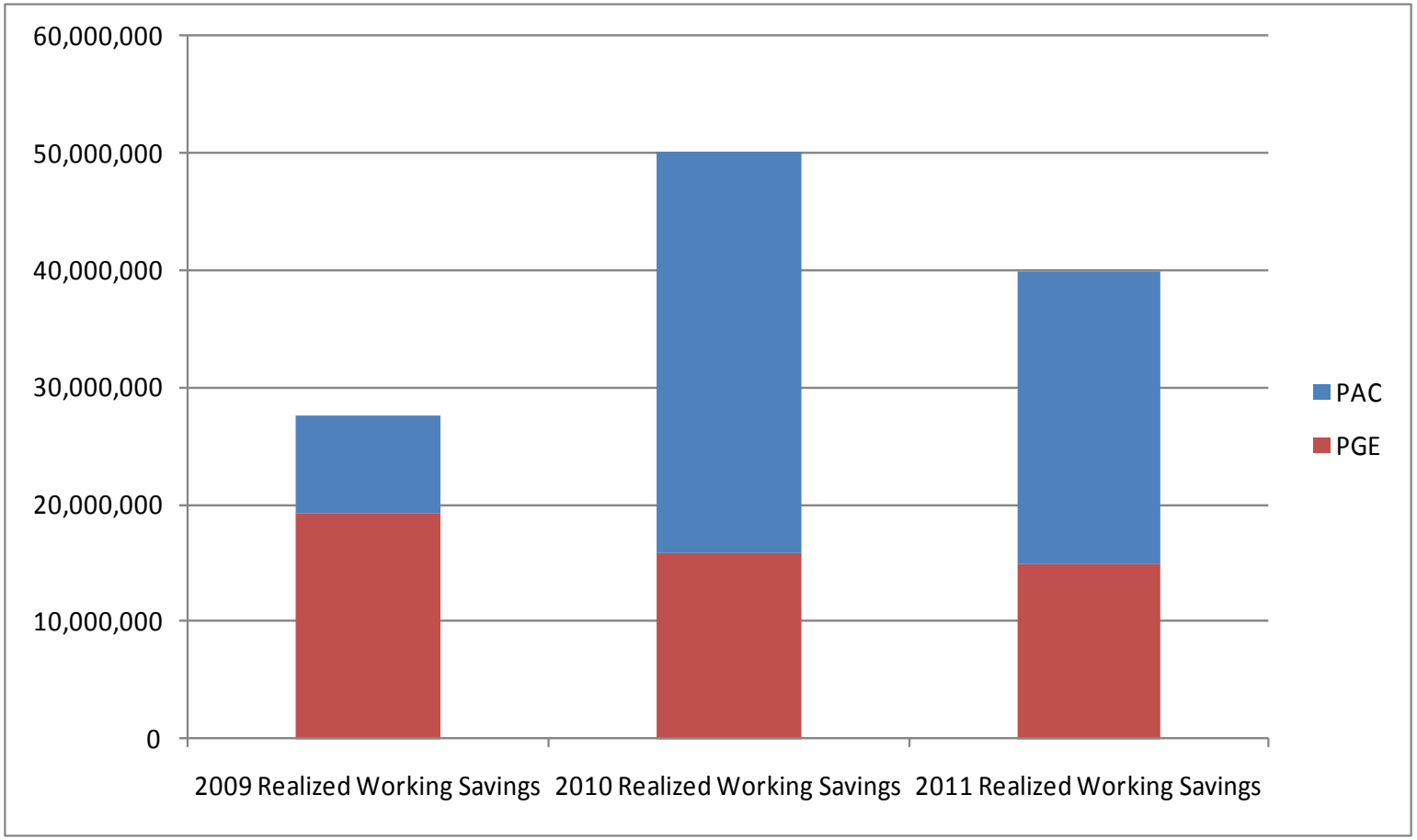
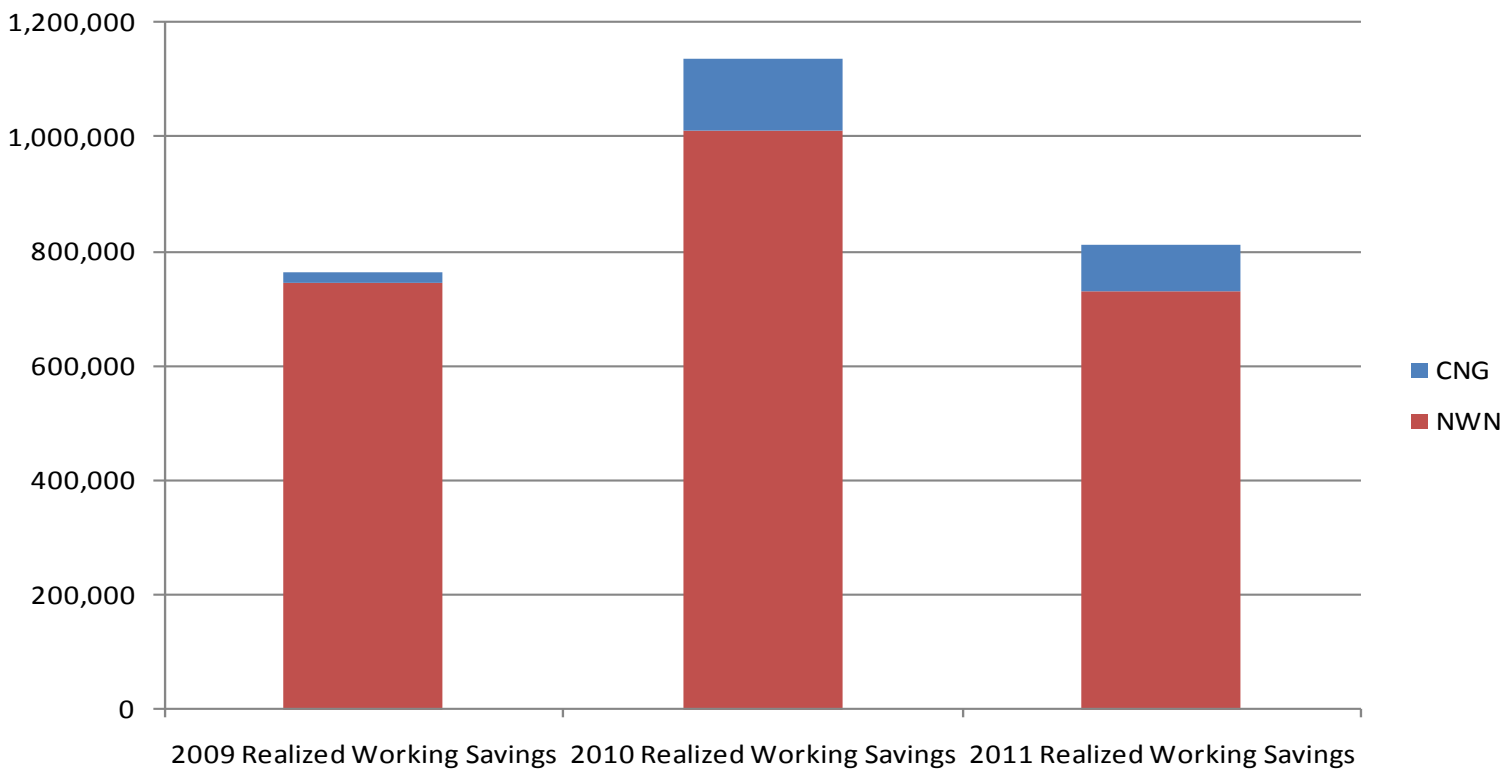
Savings Trends

New Buildings Electric Savings Growth (Working Savings)



Savings Trends

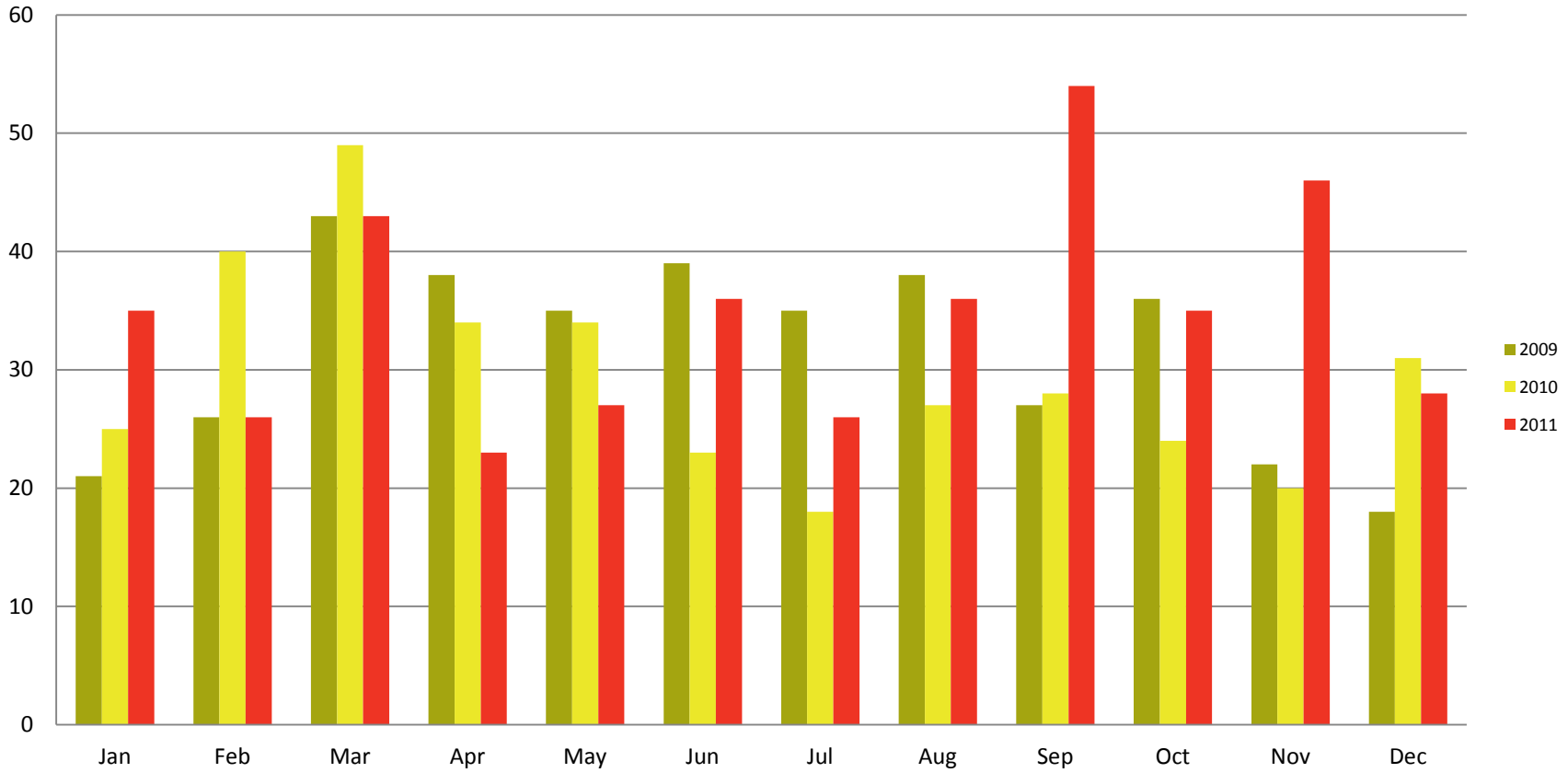
New Buildings Gas Savings Growth (Working Savings)



Key Trends

- Newly enrolled projects set a record at 415 projects for the year
- Number of projects completed increased by 40 percent compared to 2009
- Projects under 70,000 square feet represented 84 percent of all 2011 projects but only 31 percent of electric savings and 46 percent of gas savings.
- We started to see code transition in 2011 with approximately 8% of savings from projects under the new code.
- In 2012 around 40% will be under the new code, in 2013 majority of projects will be under new code.
- LEED went from 42 projects in 2010 down to 33 in 2011
- Major renovations were 15% of 2010 and 14% of 2011 total program savings.

Enrollment trends



Savings by Track

Track	2009	2010	2011
Electric (kWh)			
Custom	1,281,617	25,126,164	15,988,534
Standard & Custom	3,381,163	2,837,896	7,740,069
Standard	6,003,064	4,824,654	4,346,159
LEED	8,437,311	6,671,054	4,403,378
Gas (Therms)			
Custom	13,389	54,176	16,867
Standard & Custom	77,372	53,636	208,016
Standard	228,301	141,277	138,609
LEED	147,610	314,946	234,764

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Key Markets by Savings, 2011

Electric Savings (kWh)		Gas Savings (Therms)	
Data Center	18,835,635	Hospital	347,649
Hospital	8,960,796	College/University	199,589
Grocery	3,779,001	Office	110,804
College/University	3,621,849	Restaurant	70,839
Office	2,324,669	Schools K-12	48,682

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Multifamily

Multifamily Overview

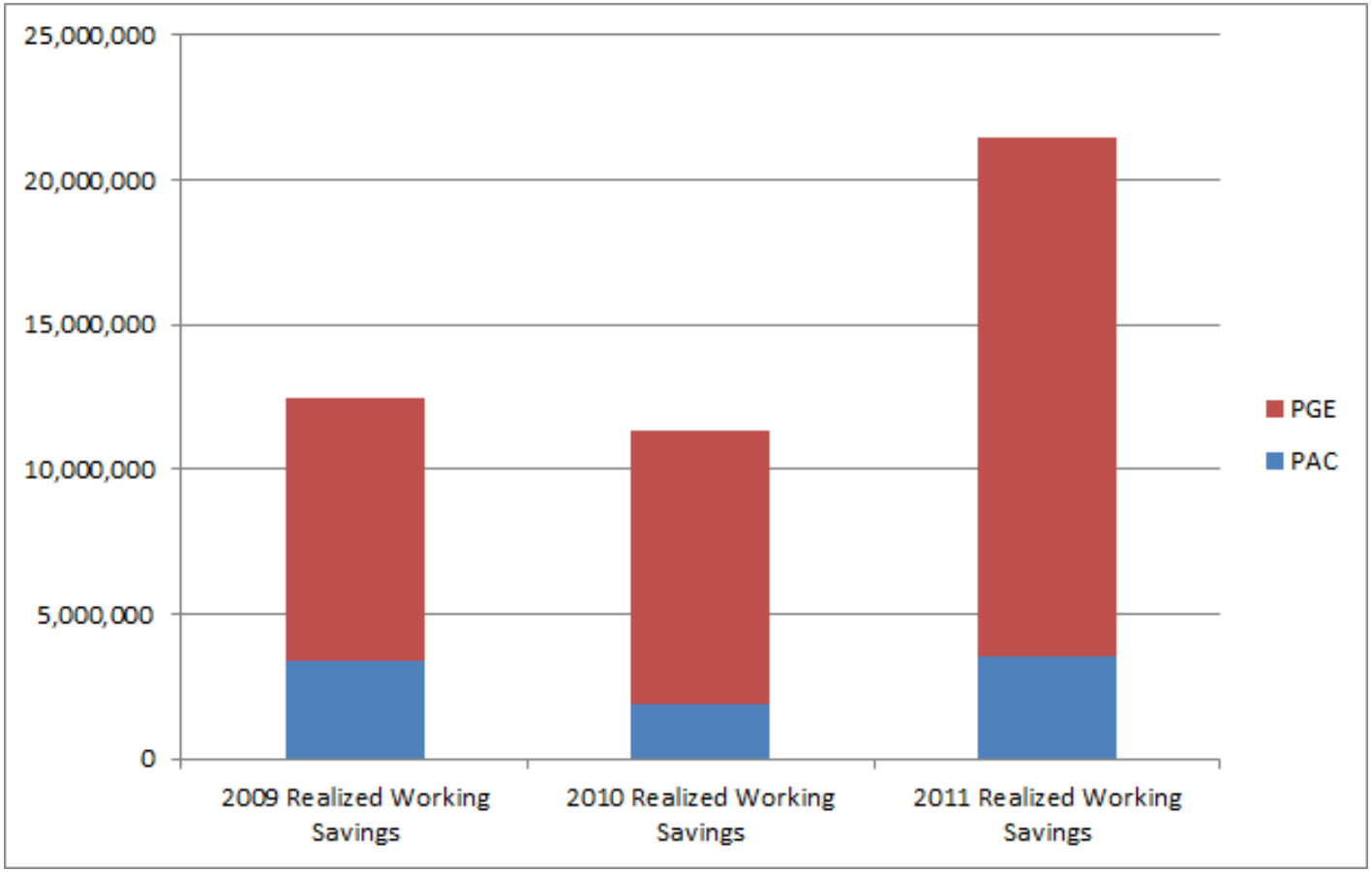
Savings are up in every utility territory

Shift in program strategy towards achieving savings through long-term key customer relationship management

Market Conditions:
- Historically Low Vacancy Rates
- Split incentive

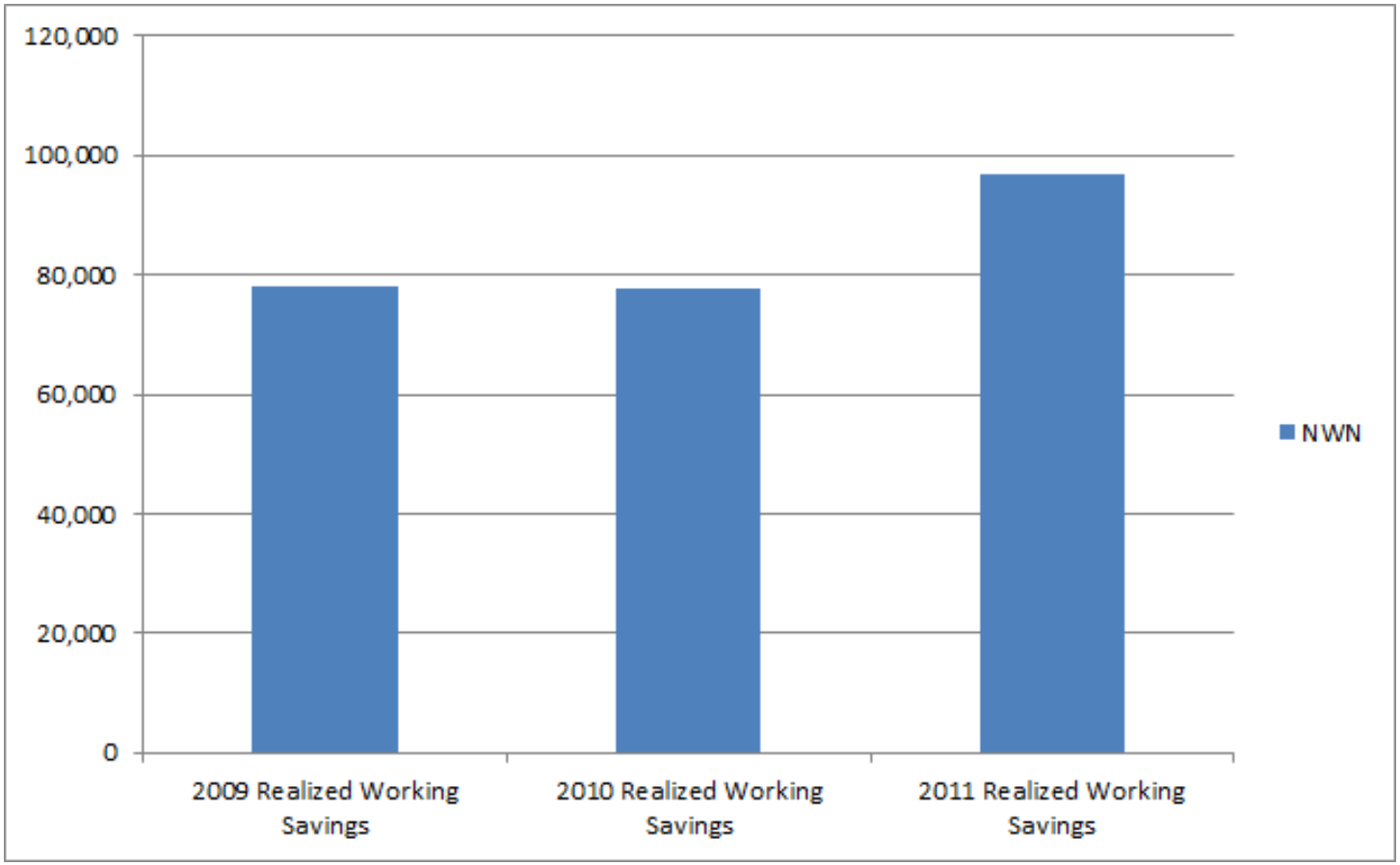
Savings Trends

Existing Buildings Multifamily Electric Savings (Working Savings)



Savings Trends

Existing Buildings Multifamily Gas Savings (Working Savings)



Program Trends

- 2011 Electric Savings nearly double 2010
- Trade Allies Are More Active
- Increase in Sites Served from 204 in 2009 to 581 in 2011
- Average electric savings per project is up 11% from 2010
- Average gas savings per project is down 9%
- Increasing savings from Affordable and Low Income Housing
  - In 2010, proportion of savings from affordable/low income was 7% (electric) and 15% (gas).
  - In 2011 savings increased to 8% (electric—a 15% increase) and 35% (gas—a 131% increase)

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Key Measures by Savings

Electric			
Measure Group	**2009**	**2010**	**2011**
Water Saving Devices	1,292,478	3,966,979	8,679,260
CFL ISMs	1,032,755	2,704,683	2,774,144
Common Area Lighting	4,164,840	1,471,223	575,319
Windows	602,217	594,217	529,264
Insulation	260,375	321,062	128,843
Gas			
Measure Group	**2009**	**2010**	**2011**
Water Saving Devices	6,894	31,677	38,455
Custom	0	9,961	15,351
Windows & Insulation	5,453	11,001	2,921
Clothes Washers	1,901	1,632	3,239
Boilers	29,561	4,416	1,392

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