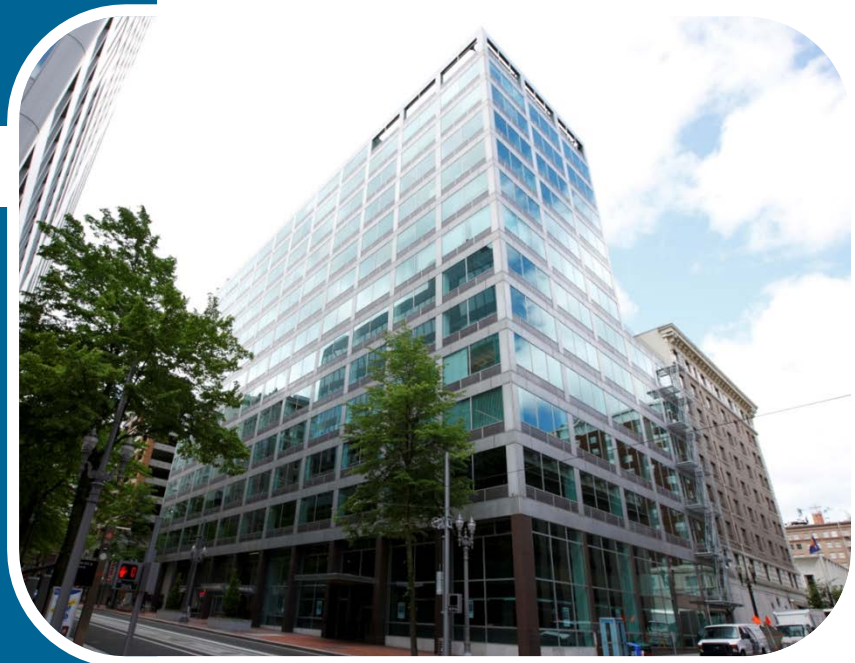

Commercial Trends 2012: Measures, Markets, and Sources of Savings

EnergyTrust of Oregon

Commercial Sector
2012 Accomplishments

Commercial Sector		PGE	PAC	NWN	CNG
Achievement	2012 Achievement (Rpt kWh or therm)	103,045,434	71,819,738	2,422,889	161,154
	% of Conservative Goal	123%	180%	147%	118%
	% of Stretch Goal	104%	153%	125%	100%

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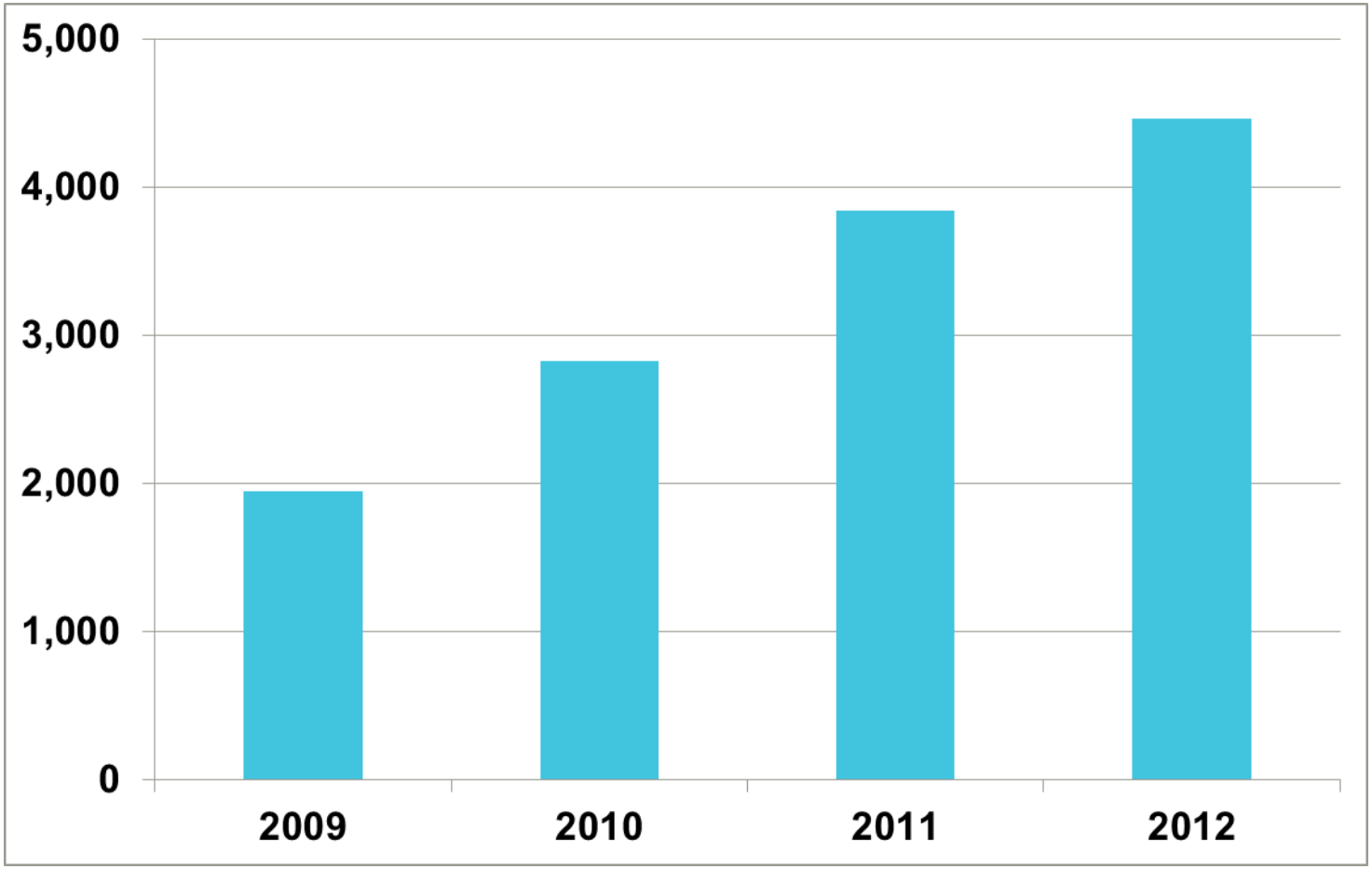
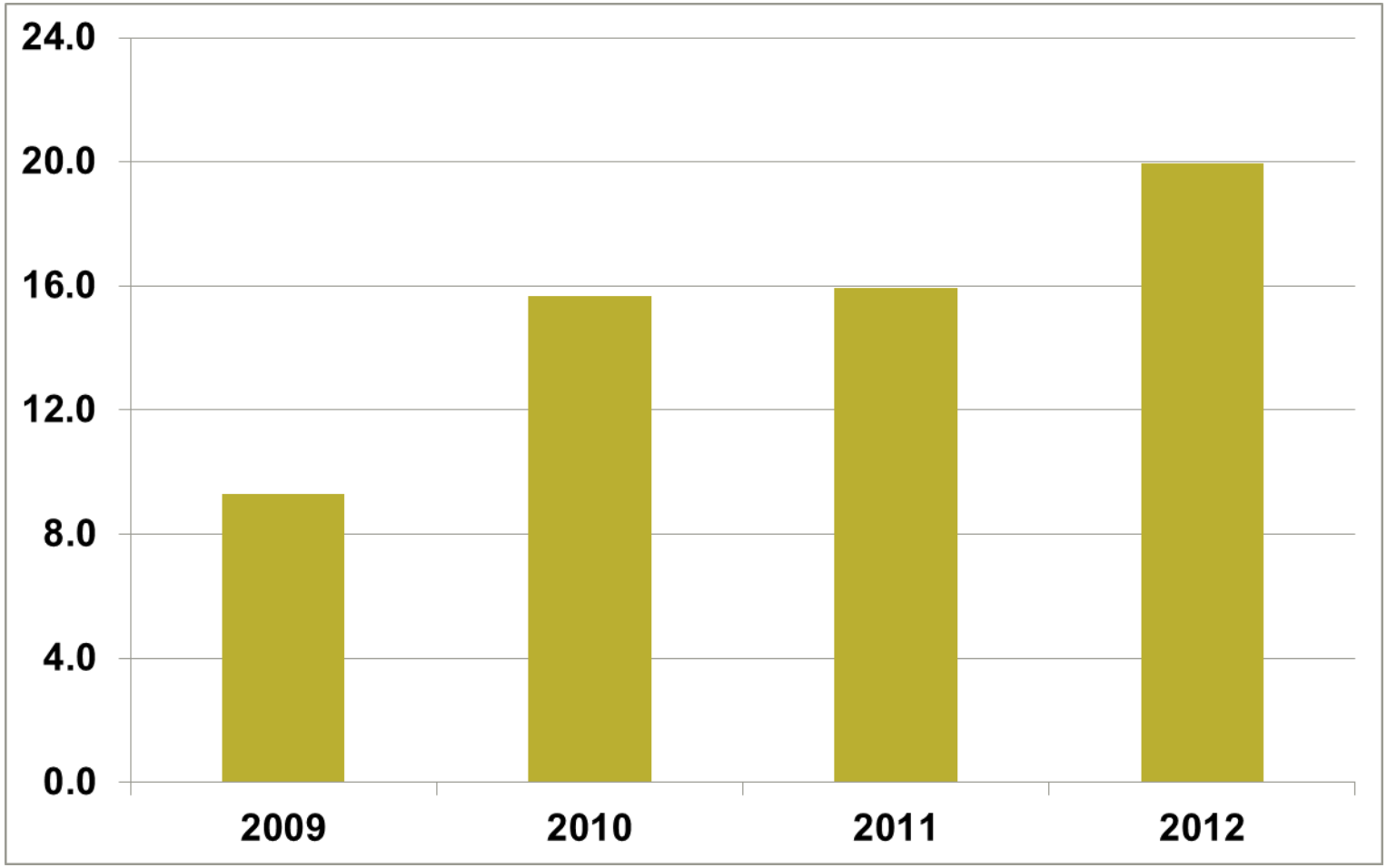
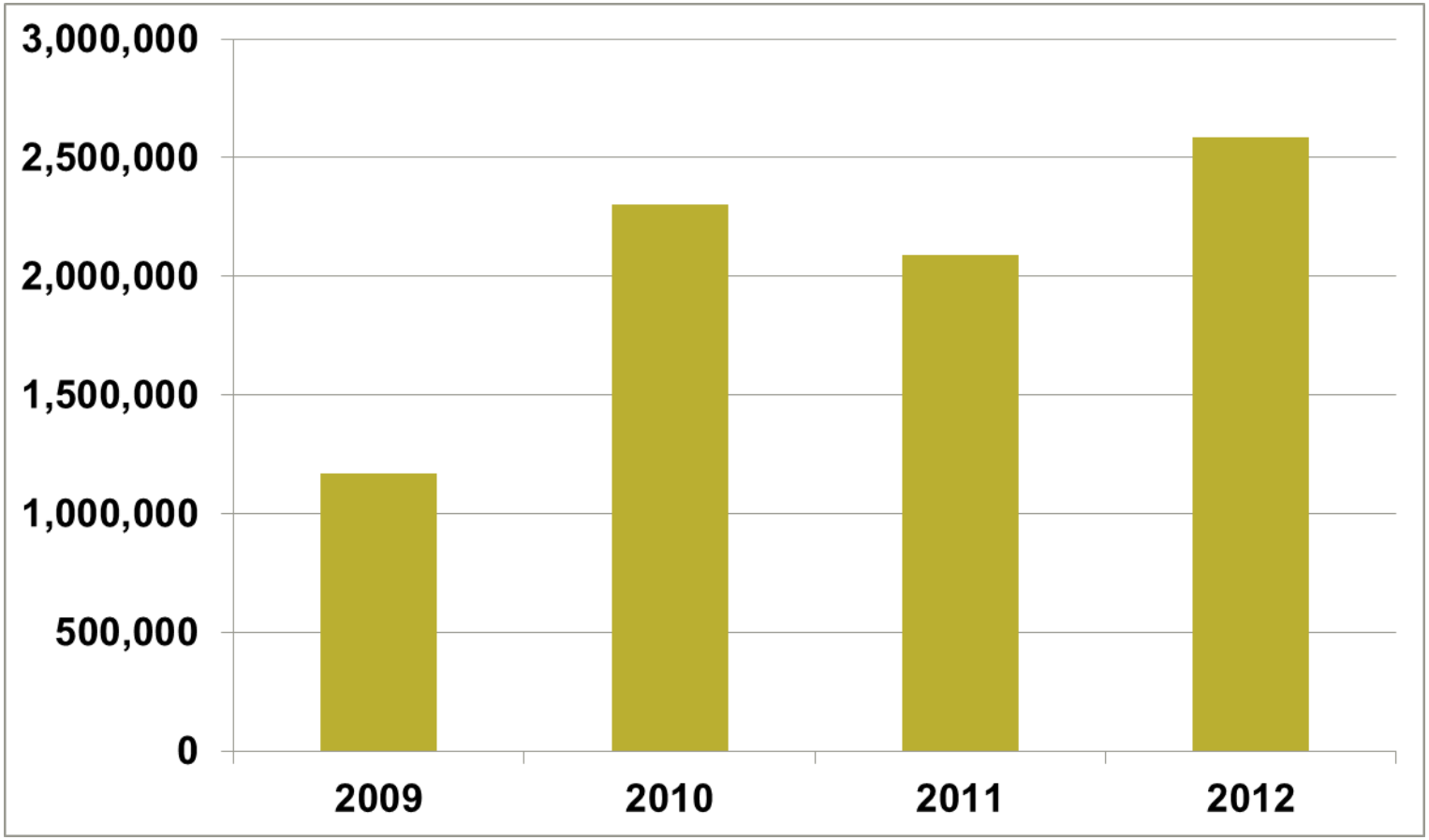
Commercial Sector
Number of Sites Served



Commercial Sector Electric Savings (aMW)



Commercial Sector Gas Savings (Therms)



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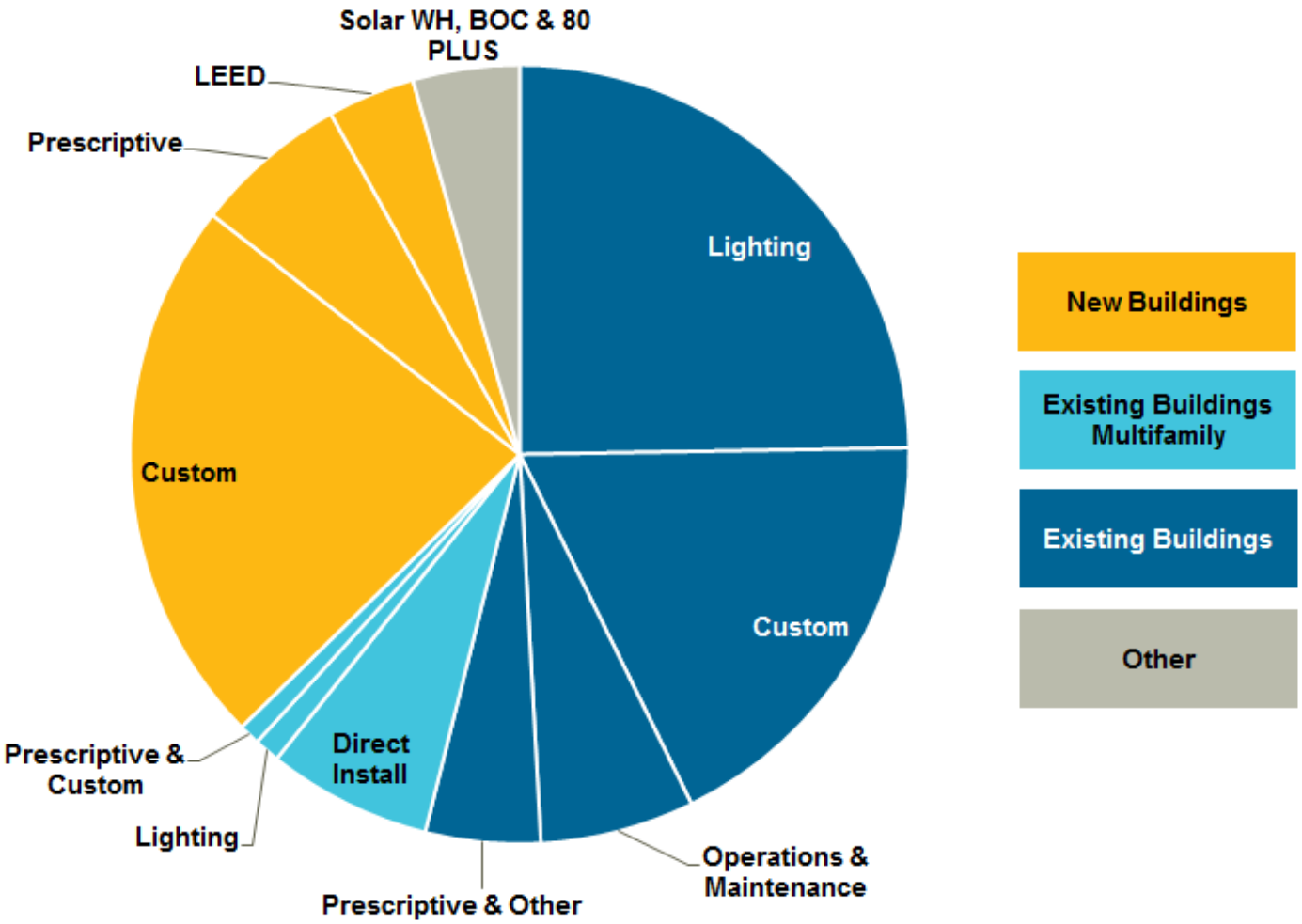
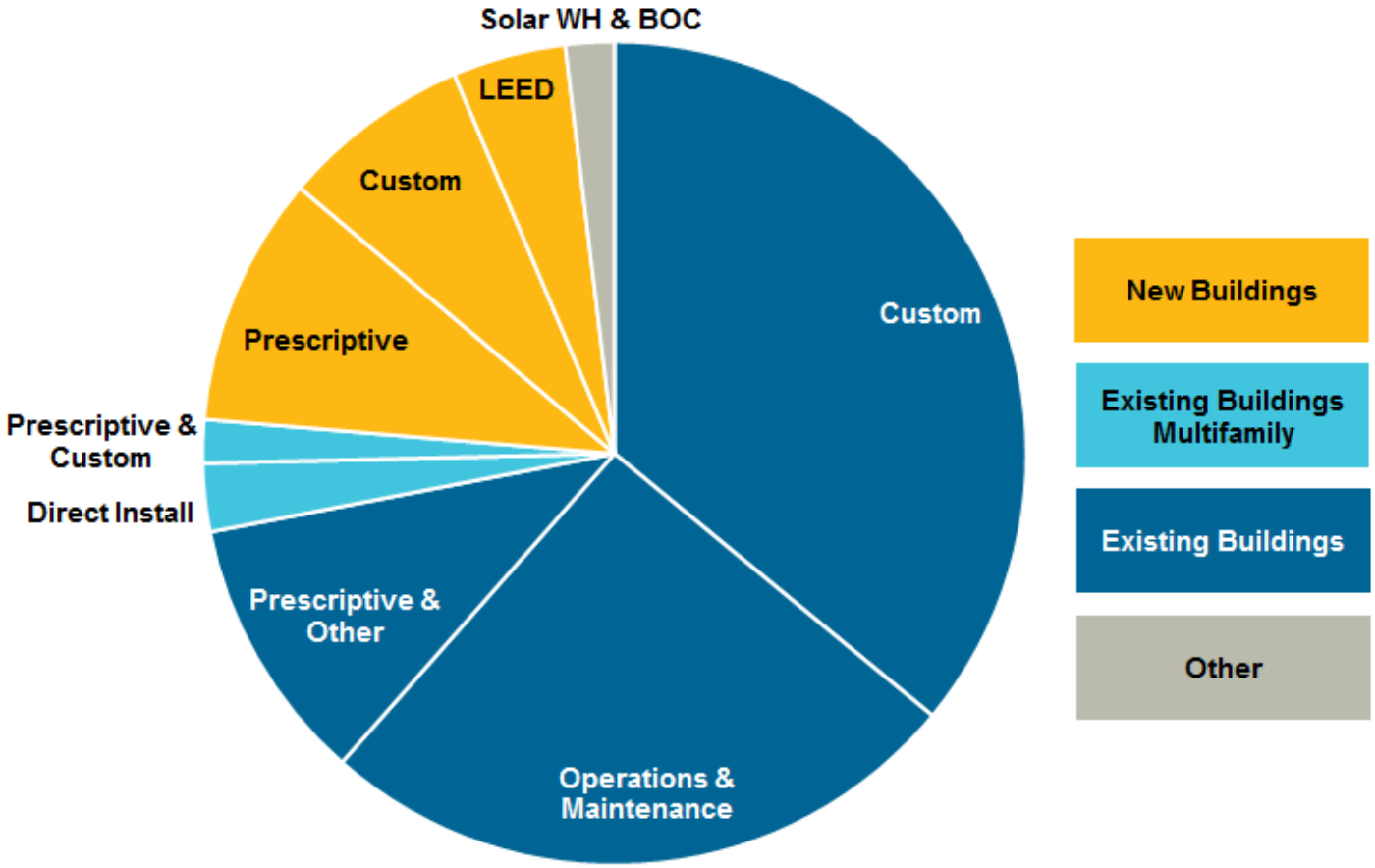
Savings by Track

Commercial Sector
Sources of Electric Savings, 2012, By Track



Commercial Sector
Sources of Gas Savings, 2012, By Track



Existing Buildings

Existing Buildings Overview

Steady growth in electric savings 2009-2011 with a leveling from 2011-2012.
Steady growth in gas savings 2009-2012.

Program Design Emphasizing…

- Providing cost-effective measure opportunities that will conform to the needs of commercial customers across market sectors
- Developing existing customer relationships to help customers maximize their energy efficiency project potential
- Expanding reach to serve customers that are harder to contact/influence
- Supporting a network of Trade Allies with enhanced services
- Expanding operations-based offerings

Market Conditions

- 2011 changes to BETC
- Gradual shift away from reluctance to invest capital in a slow economy
- Lighting baseline changes not as dramatic as anticipated due to exempt and conforming products

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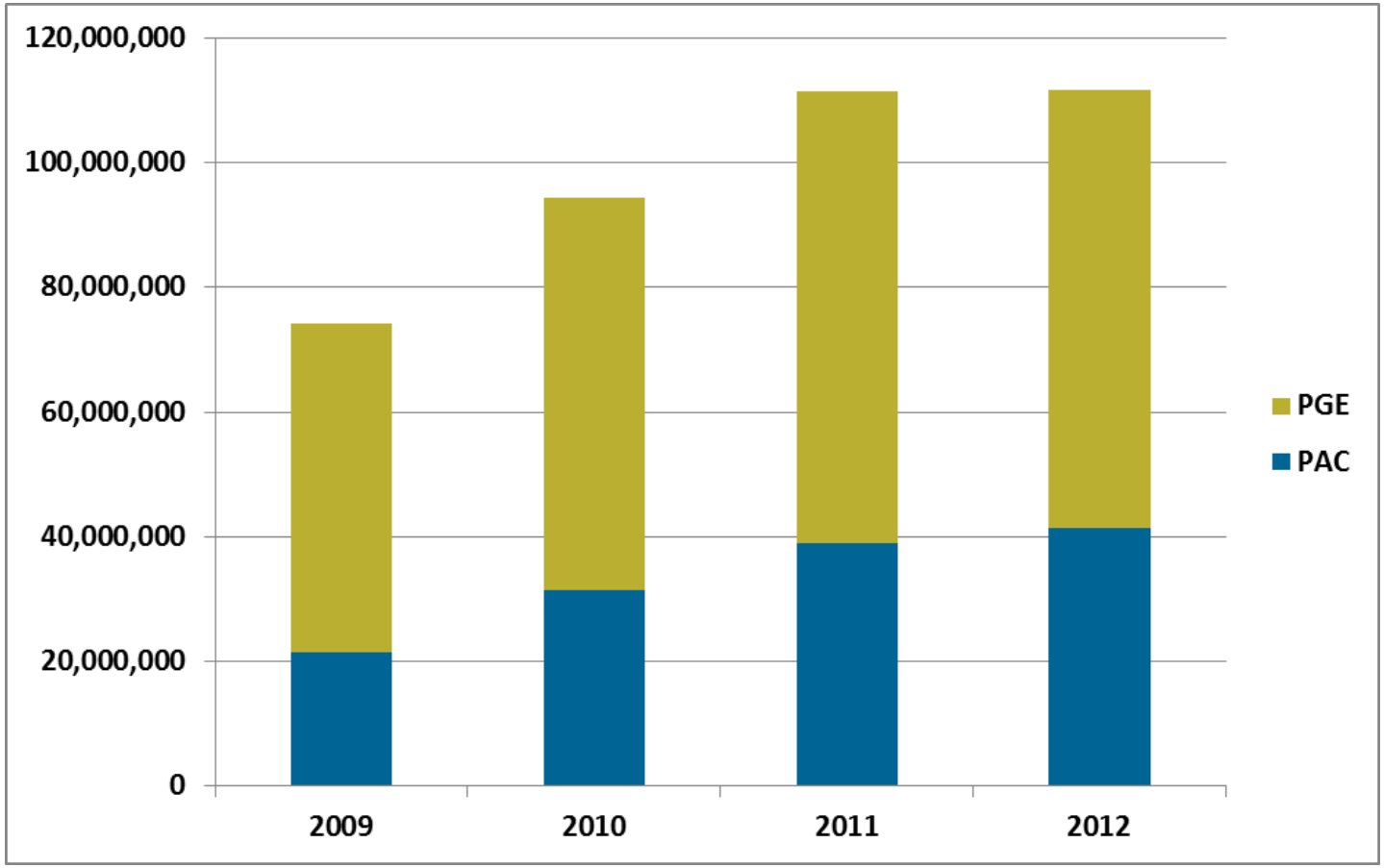
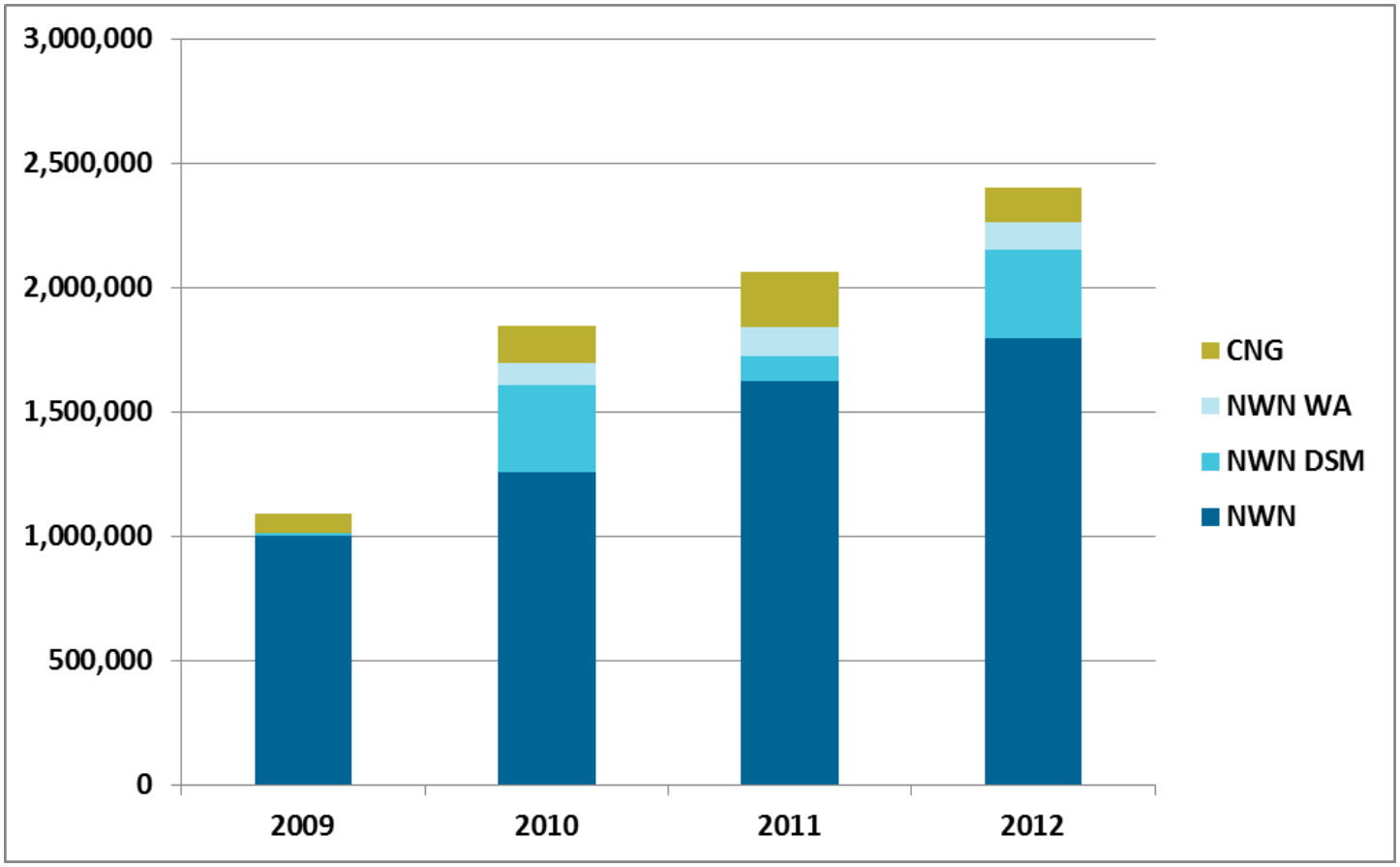
Savings Trends

Existing Buildings Electric Savings Growth (Working Savings)



Savings Trends

Existing Buildings Gas Savings Growth (Working Savings)



Other Key Trends

- Savings from O&M continued to increase rapidly, especially from SEM and rooftop tune-up initiatives
- Custom Track savings have remained steady for the last three years
- After years of steady growth in savings from lighting, 2012 lighting savings dropped to halfway between 2010 and 2011 levels
- Savings from building controls have doubled since 2010
- After doubling between 2009 and 2011, the annual number of sites served by the Existing Buildings program held steady at around 3,000

Key Measures by Savings

Electric (Working kWh)				
Measure Group	**2009**	**2010**	**2011**	**2012**
Lighting & Lighting Controls	45,186,813	43,537,460	66,421,059	51,267,909
Building Controls	5,381,448	10,724,769	16,801,536	18,850,356
Custom HVAC	563,963	3,154,376	4,730,338	8,952,412
Data Centers & Virtualization	879,400	4,303,089	3,505,099	2,962,565
Custom VFD	2,584,953	4,440,554	1,083,295	1,427,427
HVAC tune-ups	437,275	962,460	3,715,846	4,121,442
Gas (Working Therms)				
Measure Group	**2009**	**2010**	**2011**	**2012**
Custom HVAC	169,964	28,847	221,382	233,649
Boilers	238,457	391,796	242,026	371,136
Custom Building Controls	124,457	229,410	615,640	524,995
Insulation	121,408	229,215	132,757	87,929
Custom Gas	122,535	458,932	69,707	43,232
HVAC tune-ups	3,093	119,961	534,815	620,239

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Key Markets by Savings, 2012

Electric Savings (kWh)	
Office	25,076,738
Retail	13,478,249
Grocery	8,582,580
Hospital	8,541,172
Auto Services	7,746,665

Gas Savings (therms)	
Office	436,566
Hospital	347,594
Retail	305,179
Education	294,548
Government	242,245

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New Buildings

New Buildings Overview

Significant growth in savings since 2009 with steady project enrollments.

Program Design Highlights

- Expanded early design assistance
- The number of program allies has grown to over 70 firms, broadening the program reach to more easily serve new customers.
- Began to develop ways to integrate solar into the NB program
- Provided design reviews, code compliance approaches
- Helping prepare the market to meet more stringent requirements of the Oregon Reach Code and future code changes

Market Conditions

- Project teams seem to be adjusted to the new code, increased costs are still a concern
- Economic slowdown decreased number of large buildings
- Experiencing an increase in small commercial buildings, fewer LEED buildings

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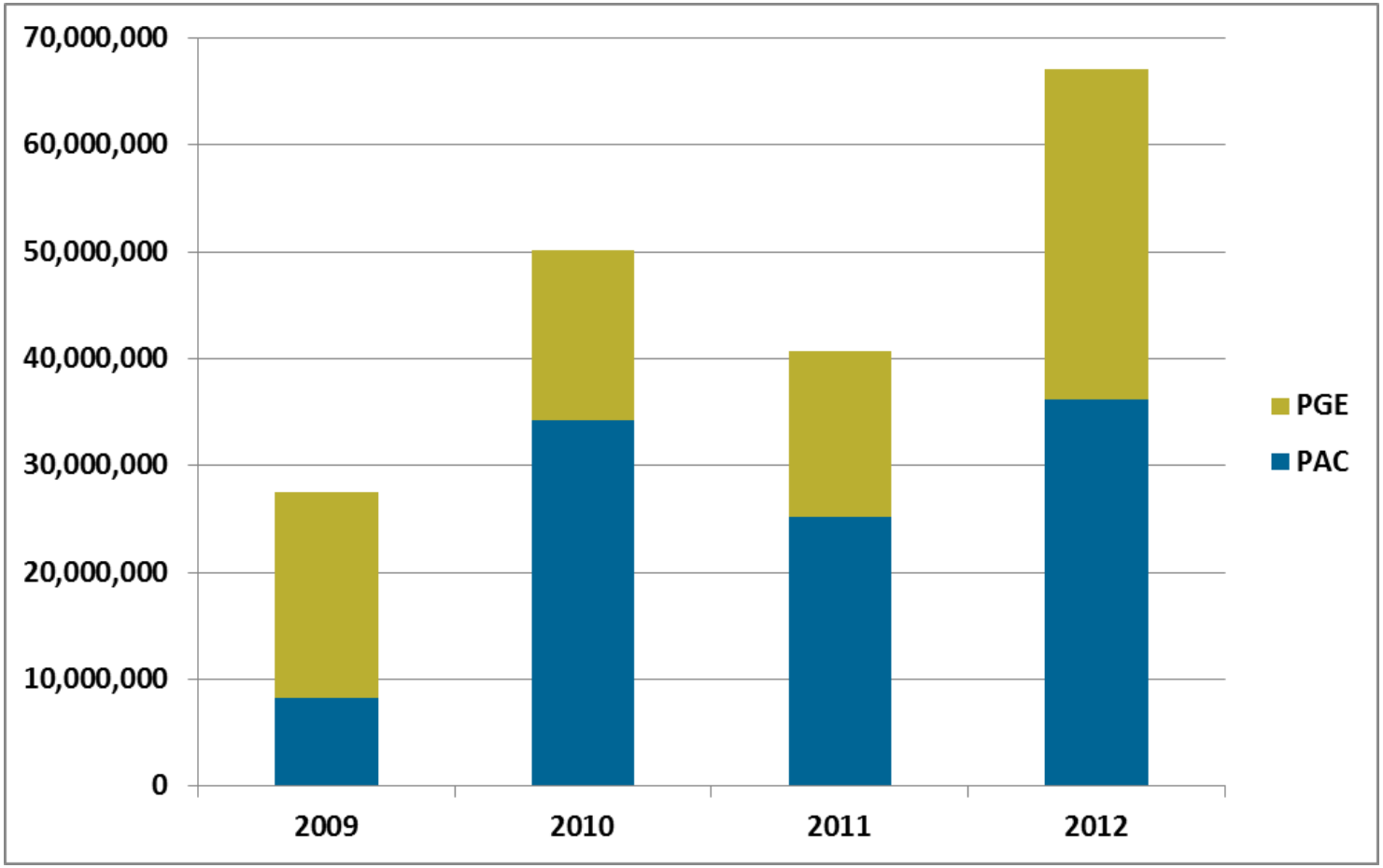
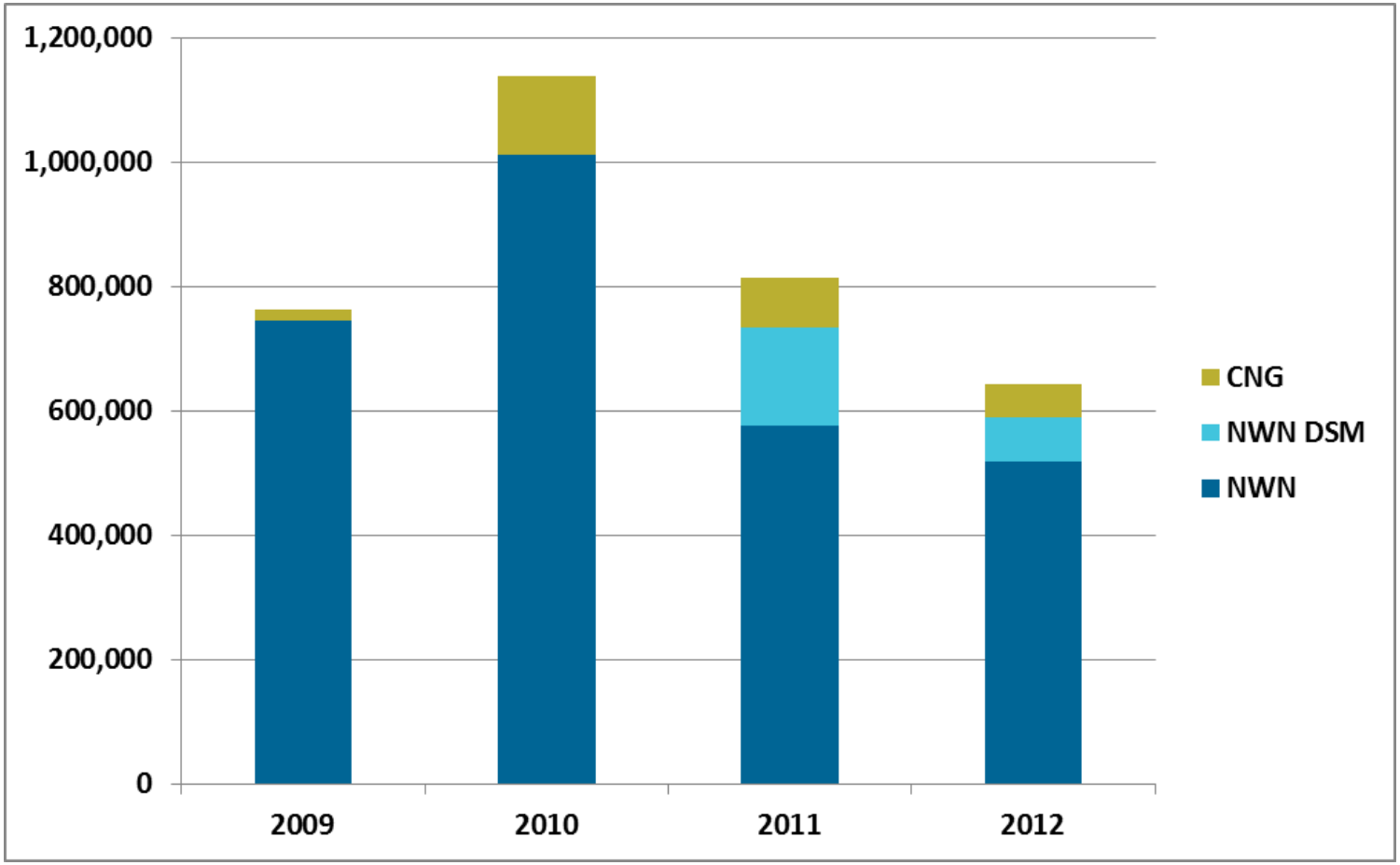
Savings Trends

New Buildings Electric Savings Growth (Working Savings)



Savings Trends

New Buildings Gas Savings Growth (Working Savings)



Other Key Trends

- Total enrollments and completed projects are steady from year to year – even in a down economy, small commercial expanded as large projects declined.
- Projects under 70,000 square feet represented 85 percent of all 2012 projects but only 60 percent of electric savings and 50 percent of gas savings
- Code transition has happened: more than 80 percent of projects that closed in 2012 fell under the more stringent 2010 energy code (a 15% baseline change); in 2011, about one third of projects fell under the 2010 code
- Data centers were a significant source of highly cost-effective savings in 2011 and 2012, a trend we expect to continue.

Savings by Track

Electric (kWh)				
Track	**2009**	**2010**	**2011**	**2012**
Custom	6,861,491	30,623,085	29,343,218	45,519,900
LEED	11,814,087	11,268,299	5,409,556	7,486,326
Standard	8,568,777	7,084,838	4,362,710	10,570,605
Other	272,645	1,150,478	1,541,109	3,552,992
Gas (Therms)				
Track	**2009**	**2010**	**2011**	**2012**
Custom	145,618	215,593	304,701	175,976
LEED	239,159	633,695	308,900	119,924
Standard	344,736	279,229	156,671	254,367
Other	34,193	9,382	43,665	93,414

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Key Markets by Savings, 2012

Electric Savings (kWh)	
Data Center	25,862,615
Manufacturing	7,539,339
Retail	6,271,218
Grocery	5,843,829
Education	5,550,190

Gas Savings (therms)	
Education	185,861
Multifamily	103,059
Hospital	70,588
Restaurant	53,642
Office	46,463

EnergyTrust of Oregon

Multifamily

Existing Multifamily Overview

Savings are up in every utility territory, with goals continuing to grow annually.

Program Design Highlights

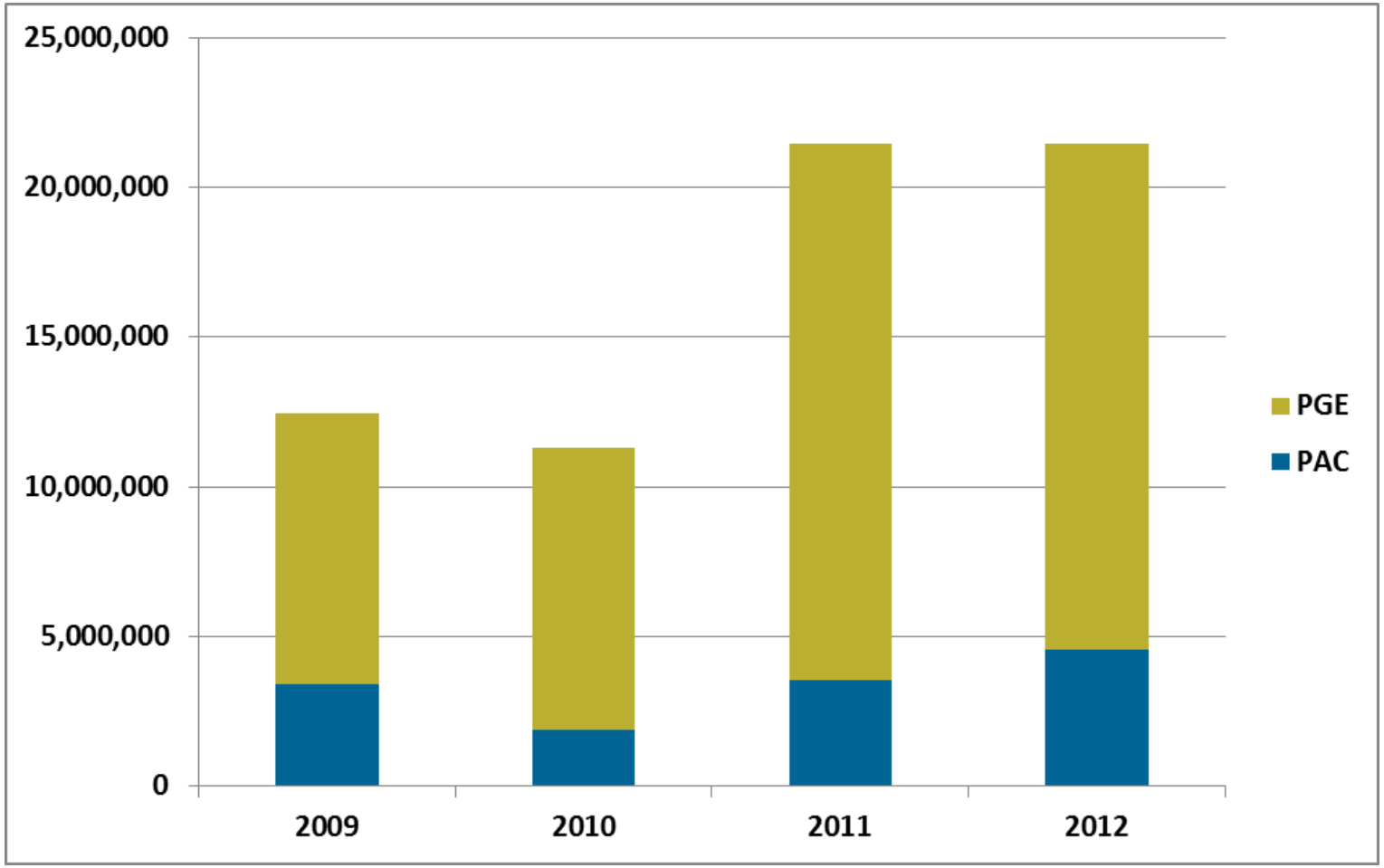
- Continuing the shift towards achieving savings through long-term key customer relationship management with portfolio managers and owners
- Involving equipment distributors through mid-stream incentives

Market Conditions

- Historically Low Vacancy Rates
- Split Incentive
- Low Cost of Natural Gas

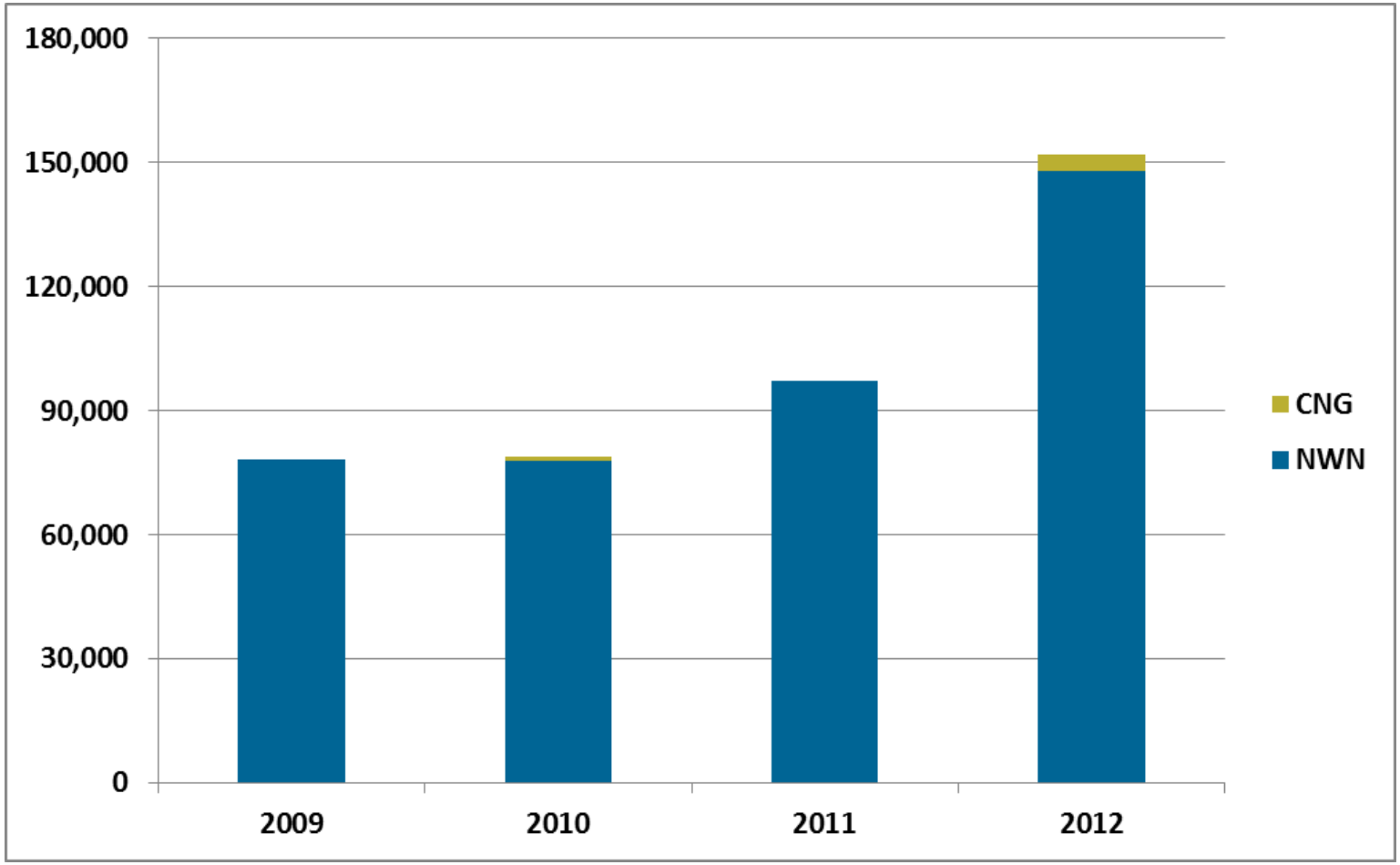
Savings Trends

Existing Buildings Multifamily Electric Savings (Working Savings)



Savings Trends

Existing Buildings Multifamily Gas Savings (Working Savings)



Other Key Trends

Overall

- Served over 1,000 sites in 2012 – nearly double from 2011
- Increase in affordable housing projects over the past three years: served over 10,000 units through instant savings measures (ISMs) and other incentives

Electric

- Increase in savings achievement across both utility areas
- Decrease in share of ISMs needed to meet goals with other strategies (custom, common area lighting, midstream promotions) providing the growth in savings

Gas

- Custom Track savings more than tripled from 13,000 therms in 2010 to 47,000 therms in 2012
- Growing market demand for Energy Trust services in CNG territory
- Minimal savings from weatherization and windows measures

Key Measures by Savings

Electric (Working kWh)				
Measure Group	**2009**	**2010**	**2011**	**2012**
Water Saving Devices	1,807,659	4,110,253	11,274,262	9,786,328
CFL ISMs	1,485,391	2,794,872	7,387,559	7,764,098
Common Area Lighting	4,394,029	2,992,989	1,394,476	2,116,373
Windows	3,239,445	615,683	687,352	666,140
Insulation	1,400,610	332,661	167,328	119,272
Gas (Working Therms)				
Measure Group	**2009**	**2010**	**2011**	**2012**
Water Saving Devices	10,605	41,968	54,936	92,658
Custom	0	13,196	28,448	47,207
Windows & Insulation	14,719	14,575	4,174	3,212
Clothes Washers	1,924	2,162	4,628	4,046
Boilers	45,478	5,850	1,989	1,556

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