

Agenda

Conservation Advisory Council

Wednesday, May 1, 2013 1:30 p.m. – 4:30 p.m.

Address:

421 SW Oak St., #300
Portland, OR 97204

1:30 Welcome, introductions

1:40 Old Business

CAC Operating principles update

(recommendation)

Priorities: What topics come to CAC?

(discussion)

2:15 Industry & Ag Sector savings trends

(information)

A deep dive into 2012 outcomes of the Production Efficiency program and how they compare to historical trends, including sources of savings, markets and measures.

3:00 Break

3:15 Market research on Energy Trust Business Customers

(information)

Findings from the recent market research studies done for our business programs and the current industrial marketing strategy

3:45 Looking forward: Industrial Issues and Opportunities

(discussion)

Discussion on some of the sector's biggest opportunities and threats and potential programmatic responses to these for CAC input.

4:30 Adjourn

**The next scheduled meeting of the Conservation Advisory Council will be on
June 19, 2013**

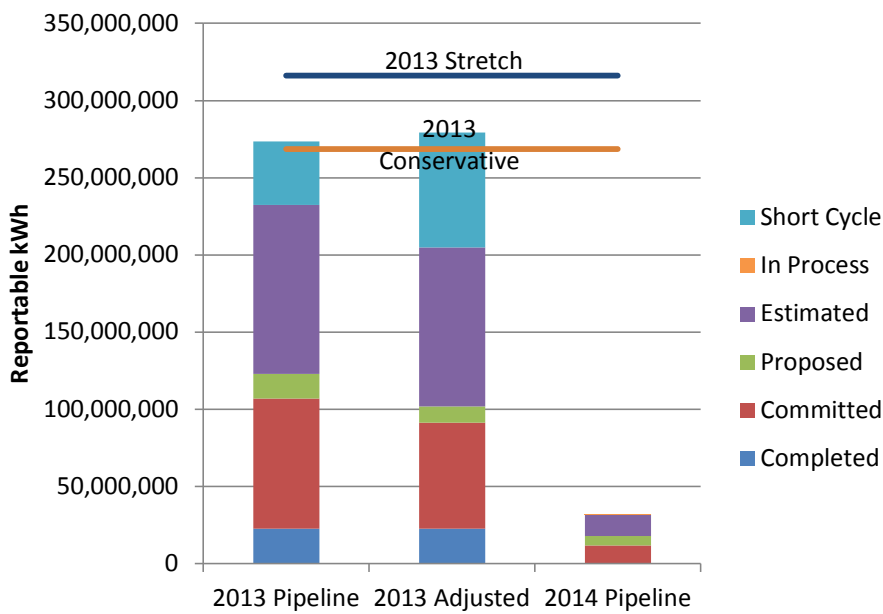
Efficiency Summary with Market Transformation

April 1, 2013

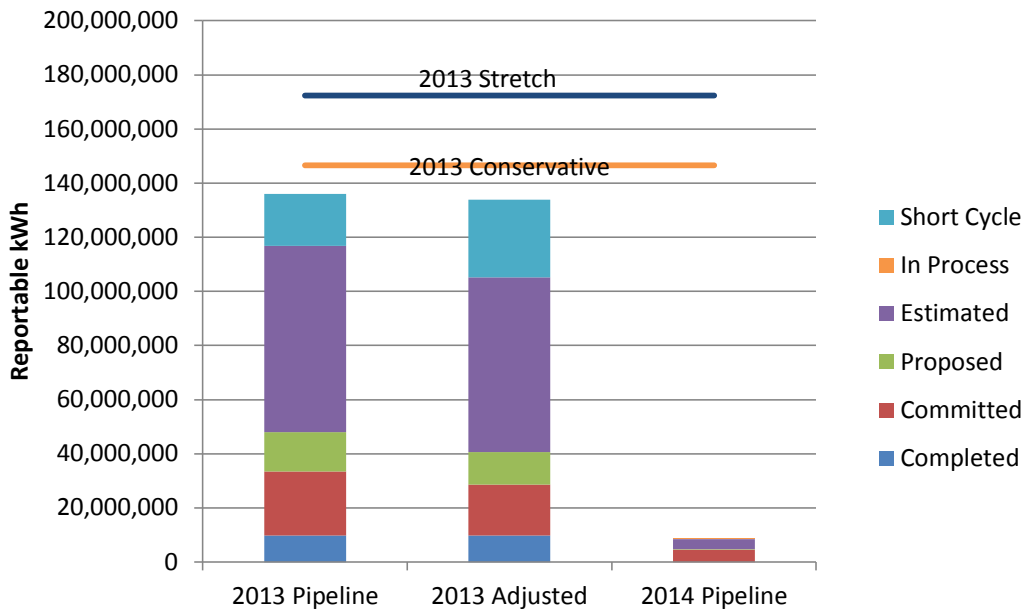
Combined Efficiency		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	22,850,813	9,837,156	383,111	27,815
	To date % of Conservative goal	9%	7%	9%	7%
	To date % of stretch goal	7%	6%	8%	6%
Context	Historical % of actual accomplishment	11%	13%	10%	9%
Budget	To Date % of Incentive Budget Spent	9%	6%	7%	1%

Data included in this dashboard are preliminary and represent the best available data at this time. Energy Trust annual and quarterly reports to the Oregon Public Utility Commission contain the official Energy Trust data. All OPUC reports are published online at www.energytrust.org.

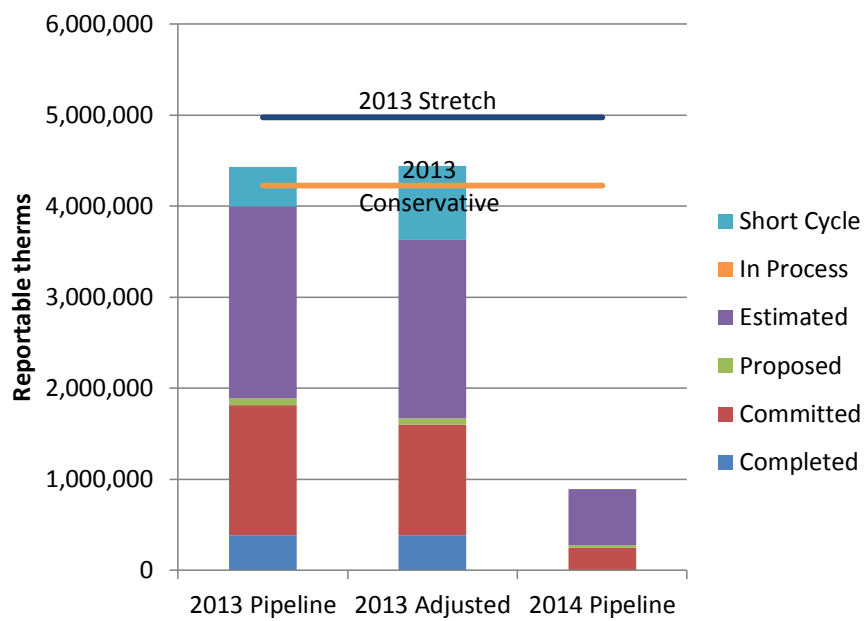
PGE Savings Pipeline 2013-2014



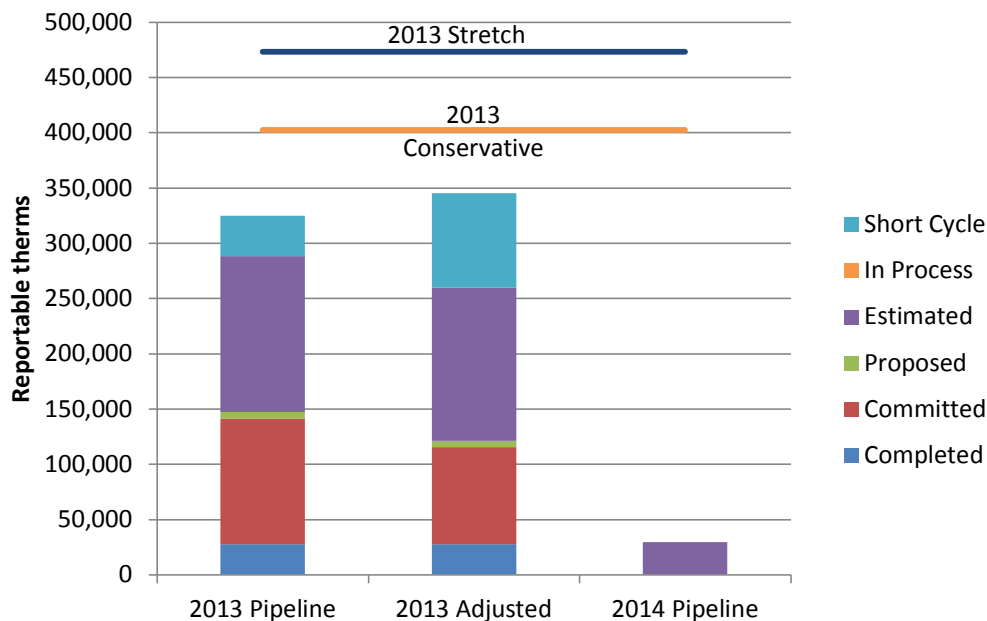
PAC Savings Pipeline 2013-2014



NWN Savings Pipeline 2013-2014



CNG Savings Pipeline 2013-2014



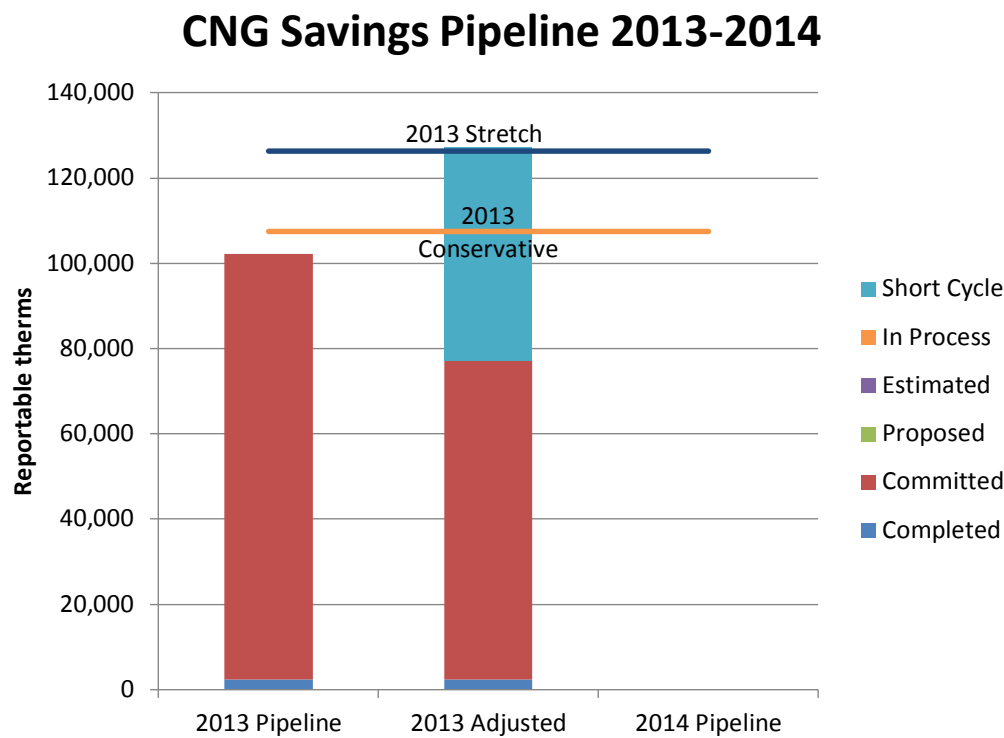
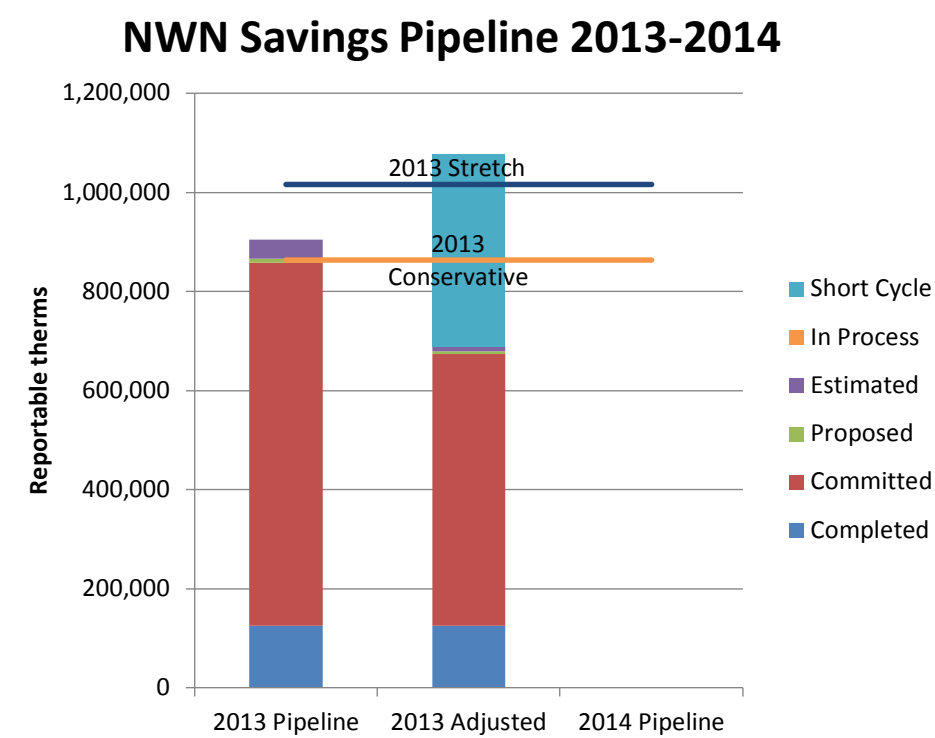
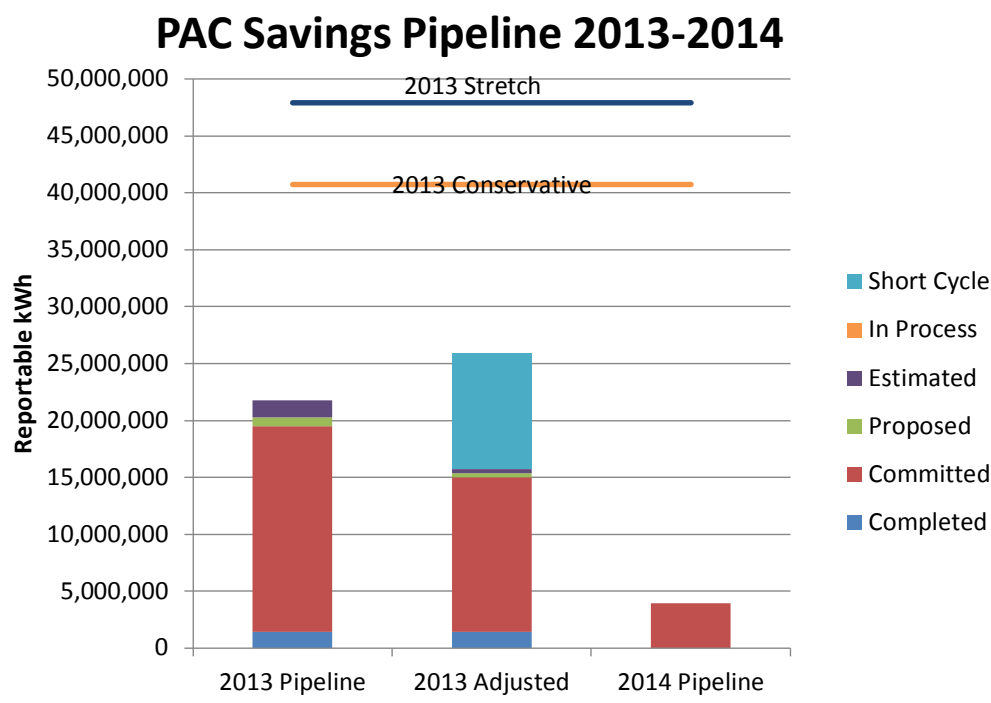
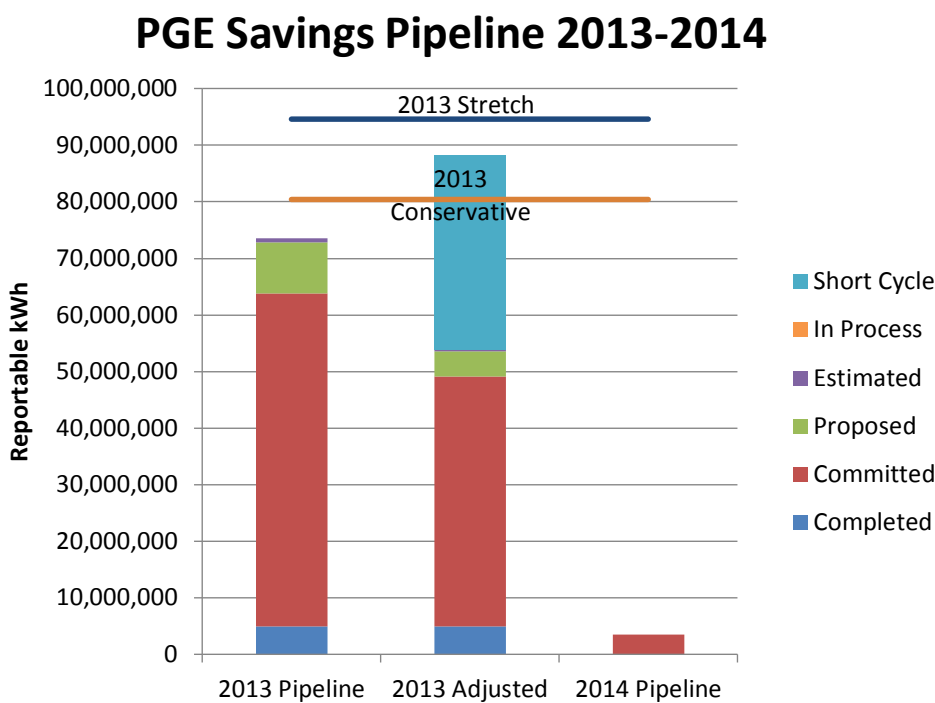
2013 Adjusted Pipeline percent of Stretch Goal	
PGE: 88.34%	PAC: 77.67%
NWN: 89.29%	CNG: 72.95%

Industrial Summary

April 1, 2013

Program: Industrial		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	4,920,750	1,415,700	125,539	2,282
	To date % of Conservative goal	6%	3%	15%	2%
	To date % of stretch goal	5%	3%	12%	2%
Context	Historical % of actual accomplishment	5%	4%	7%	2%
Budget	To Date % of Incentive Budget Spent	12%	5%	17%	1%

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Special Considerations:

Overall:

- The pipelines for two of the utilities are robust for this time of the year, with NWN gas projected to reach stretch, and PGE projected well above the conservative goal.
- PAC is lagging, needing an additional 22 million kilowatt-hours to reach stretch. The CNG pipeline appears robust, but because it has the fewest number of total projects there is a moderate level of uncertainty around 2013 savings projections. The strength of NWN’s pipeline reflects the carryover of a handful of big projects from 2012 into the current year.
- In terms of savings to date, all four utilities are tracking well against historical values.
- Incentives are outpacing savings at this point, which is normal. It is typical for there to be a higher proportion of technical studies and services to occur early in the year with the associated savings coming later in the following months.
- Production Efficiency received the ACEEE Exemplary Program Award in the Third National Review of Exemplary Energy Efficiency programs.

PGE

- To date, savings in PGE are 5 percent toward stretch goal. This is on track with historical trends through the first quarter.
- Twelve percent of the budget has been spent. The asynchronicity of spending to savings to date is part of a historical trend where studies and technical services are paid for early on in the year, and the savings from them are due to come later.
- PGE's pipeline is robust at ninety-three percent of stretch. Outreach has generated an above average number of projects for the year, with significant savings coming from an Industrial Energy Improvement (IEI) engagement at a particularly large site and phase 2 of the megaproject.

PAC

- To date, savings in PAC are 3 percent toward stretch goal. This is slightly behind historical trends, which would expect 4 percent by the end of Q1.
- Spending so far is 5 percent of the budget. It is typical for spending to outpace savings at this point in the year because budget is spent on technical studies which will show savings later.
- Pacific Power’s pipeline is 54 percent towards stretch. The slow economic recovery in the territory may be affecting the pipeline’s performance. The program will address the potential shortfall by focusing program delivery resources on several near-term activities. PDC staff will visit customers with previously identified projects and ask about moving those projects forward. In addition, PDC staff will work with customers to identify “quick turn” projects, like lighting and operations and maintenance that can be easily implemented over the next eight months.

NWN

- At 12 percent, completions are tracking well above historical trends.
- Spending is outpacing savings, but due to the nature of studies and technical services being completed earlier in the year, this is not yet a concern.
- Northwest Natural's pipeline is at 106 percent toward the stretch goal. The pipeline is strong with only a small number of projects without signed offers which augurs a high realization rate. The pipeline is bolstered by two large projects that carried over from 2012.

CNG

- To date, savings in CNG are 2 percent toward stretch. This is actually in line with historical trends, since the territory has always been a slow starter, relying on few projects with a lot of savings.
- Spending is in line with budget, with only one percent spent to date.
- CNG's pipeline appears robust, with current projections just hitting the 2013 stretch goal. As in previous years, staff is relatively cautious about the CNG savings pipeline due to this utility’s historically small number of projects. Finally closing the gap to stretch in CNG territory will be reliant on new projects entering the pipeline.

Key Highlights:

- Refrigeration Operator Coaching launched in Oregon in March. This is the third year of the offering and the largest class ever, with seven sites enrolled. ROC cohorts traditionally achieve savings in excess of projections (160% in 2012).
- Scientific Irrigation Scheduling (SIS) was launched for the second year. The offering reaches customers in rural areas, and so far, customers in multiple parts of the state have enrolled. The goal is to reach more than the 14 sites that participated in 2012.
- The CORE Improvement Pilot continued to show progress offering SEM services to medium to small industrial customers. Customers are taking ownership of their energy models and planning engagement activities. The addition of this size of customer brought the total number of industrial customers enrolled in SEM services with Energy Trust in Q1 to 30.
- The program is seeing significant progress in the High Tech sector including first ever custom projects with three new customers.
- A Big Check Presentation was made to the Clean Water Services Board (Washington County Commissioners) in the amount of \$446,000 for efficiency projects at their Rock Creek wastewater treatment plant.

Outreach:

- The Agricultural team worked with the Ochoco Irrigation District to mail brochures on the irrigation offerings to District members.
- The Agricultural team presented irrigation offerings at the Women in Agriculture Annual meeting in Gleneden Beach.
- Production Efficiency presented on irrigation and greenhouse offerings at the Harvesting Clean Energy Conference.
- Production Efficiency was highlighted during a panel on Strategic Energy Management at the Future of Energy Conference.
- In response to feedback from recent market research, the Program is opening up a new delivery channel. Custom Track Program Delivery Contractors now have the opportunity to deliver incentive checks to customers for all PE projects. This change will allow for better customer service and more face-to-face contact between customers and contractors in the field.

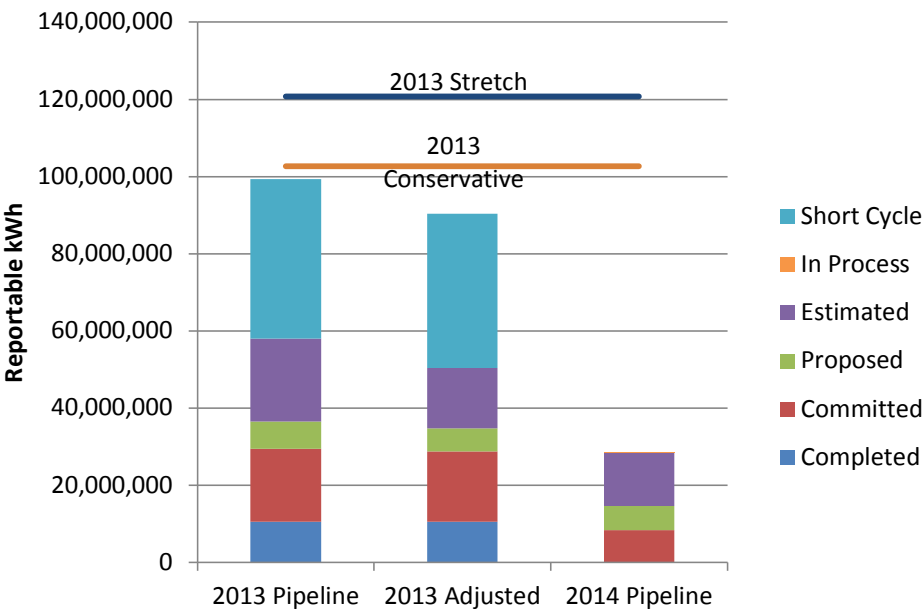
Commercial Programs Summary

April 1, 2013

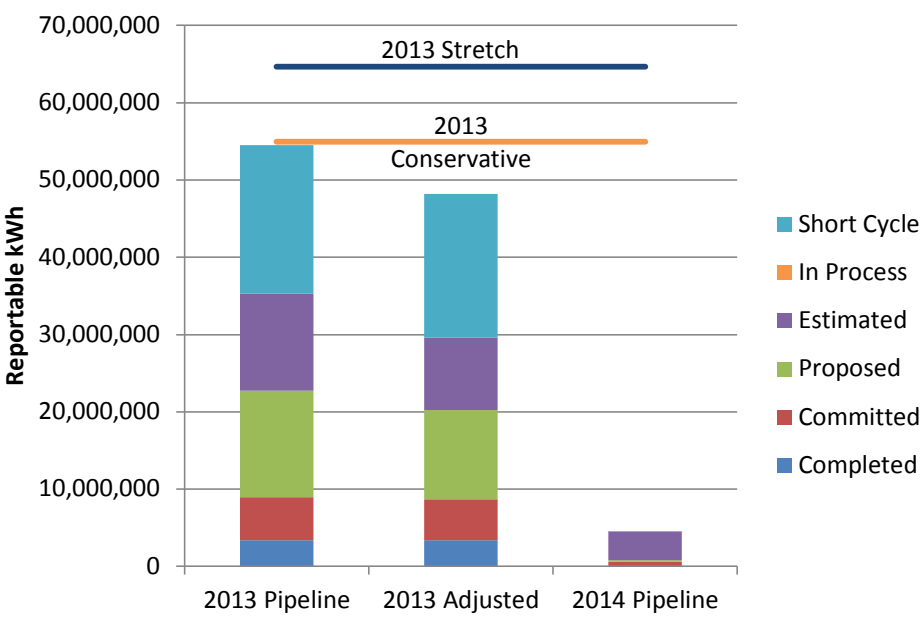
Commercial Sector		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	10,593,131	3,372,669	76,331	10,544
	To date % of Conservative goal	10%	6%	5%	6%
	To date % of stretch goal	9%	5%	4%	5%
Context	Historical % of actual accomplishment	6%	10%	9%	6%

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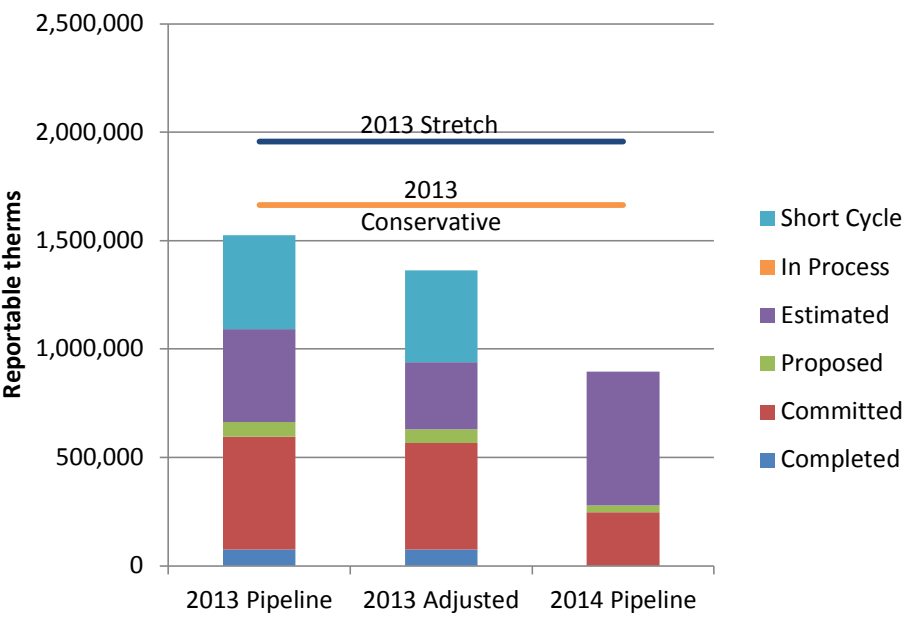
PGE Savings Pipeline 2013-2014



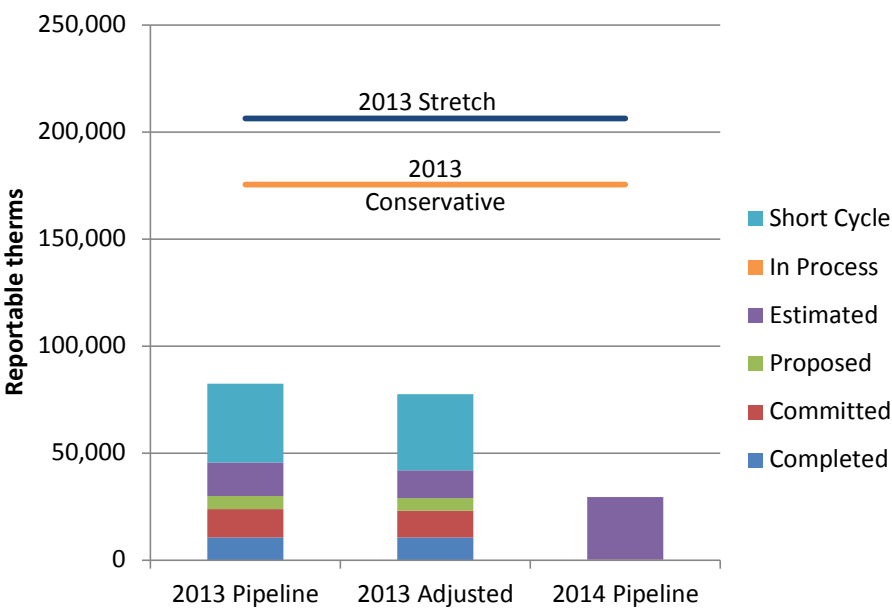
PAC Savings Pipeline 2013-2014



NWN Savings Pipeline 2013-2014



CNG Savings Pipeline 2013-2014



2013 Adjusted Pipeline percent of Stretch Goal	
PGE: 75%	PAC: 74%
NWN: 70%	CNG: 38%

Special Considerations:

Overall

- Sector savings are slightly lagging historical Q1 accomplishments in Pacific Power, Cascade, and Northwest Natural territory. This lag is primarily due to the Existing Buildings PMC transition. These transition activities are substantially complete and staff expects that the sector will bring savings back into alignment with historical accomplishments as the year progresses.

Existing Buildings

- The Existing Buildings PMC Transition has been relatively smooth and new outreach staff are in place and actively engaging with customers.
- The pipeline of completed and forecasted projects for 2013 is similar to previous years for PGE, PAC and NWN. CNG savings are behind last year because there are few large custom projects in the pipeline. Staff believes that conservative goals are in reach for all utilities. Meeting stretch goals is achievable if short-cycle savings come in as expected and a typical number of large custom projects are completed.
- Strategic Energy Management, SEM, is on target to reach stretch savings goals. The second cohort launched in January and is expected to generate approximately half of the overall SEM savings, providing 5.6 Million kWh and 112,000 therms. Additional savings will come from the second year of the first cohort and recruitment of an additional (third) SEM cohort later this year.
- The program rolled out an updated Roof-top Tune-up offering with a slightly reduced incentive offering and with enough budget to target 1,500 units 5 tons and larger.
- Existing Buildings staff worked with ODOE through the Cool Schools partnership to identify 35 schools in 11 districts for project scoping assistance and targeted audits for projects in the Summers of 2013 or 2014.

New Buildings

- The New Buildings pipeline is strong across all four utilities. A few notable, large-savings projects are generating a majority of electric savings in 2013, though a majority of total projects will be small commercial buildings. Gas savings are ahead compared to 2012. We expect to close-in on savings projections in Q2 and Q3 as project timelines progress.
- At the end of Q1, there are 517 active projects in the pipeline. Over 93 percent of these projects are permitted under the 2010 code which is 11 percent increase from 2012.
- New Buildings enrolled 115 projects during this first quarter which is the highest total since 2009 and good indication of a strong pipeline for 2013 and beyond.
- Data centers are expected to be a big factor that could push savings up or down for both electric utilities in 2013.
- The Market Solutions offerings – small commercial packages targeting retail, office, restaurant, grocery, multifamily and schools – launched in April with a heavy marketing campaign. Market response has been positive among allies and owners, an early indication that simple packages with tiered incentives will be a good pathway to increase program reach and savings.
- New Buildings was recognized by as an Exemplary Program in 2013 American Council for an Energy-Efficient Economy, and is one of two programs to receive recognition.

Multifamily

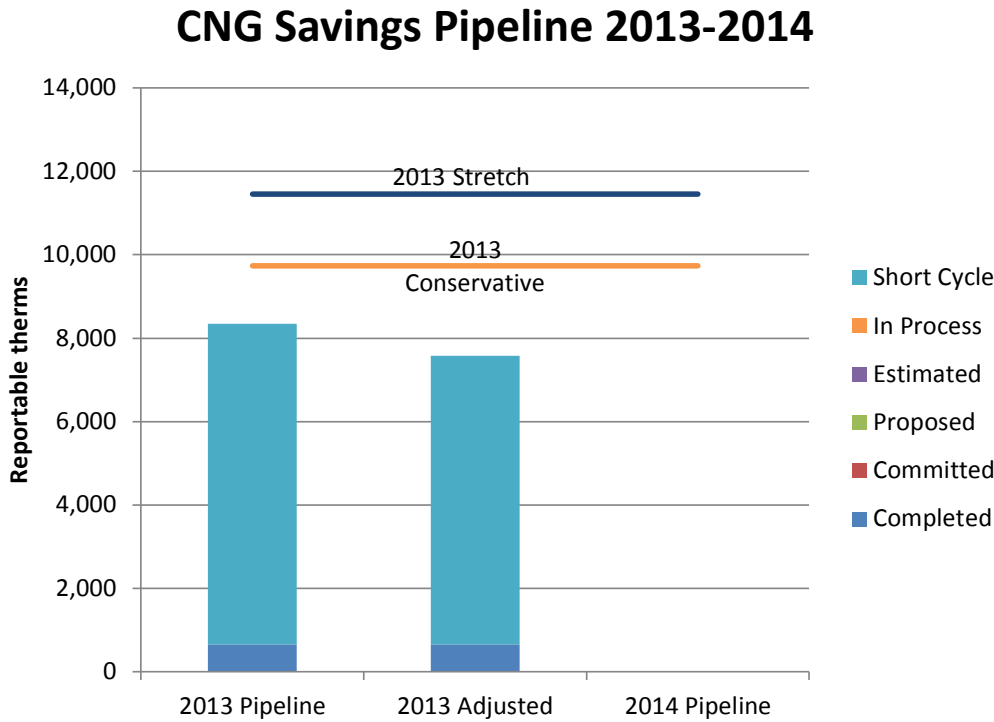
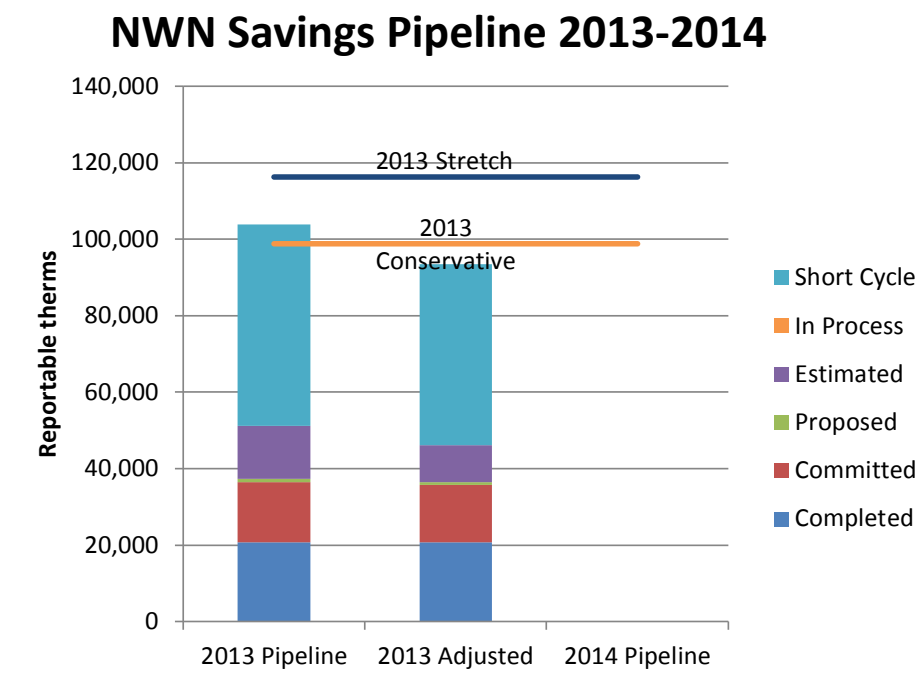
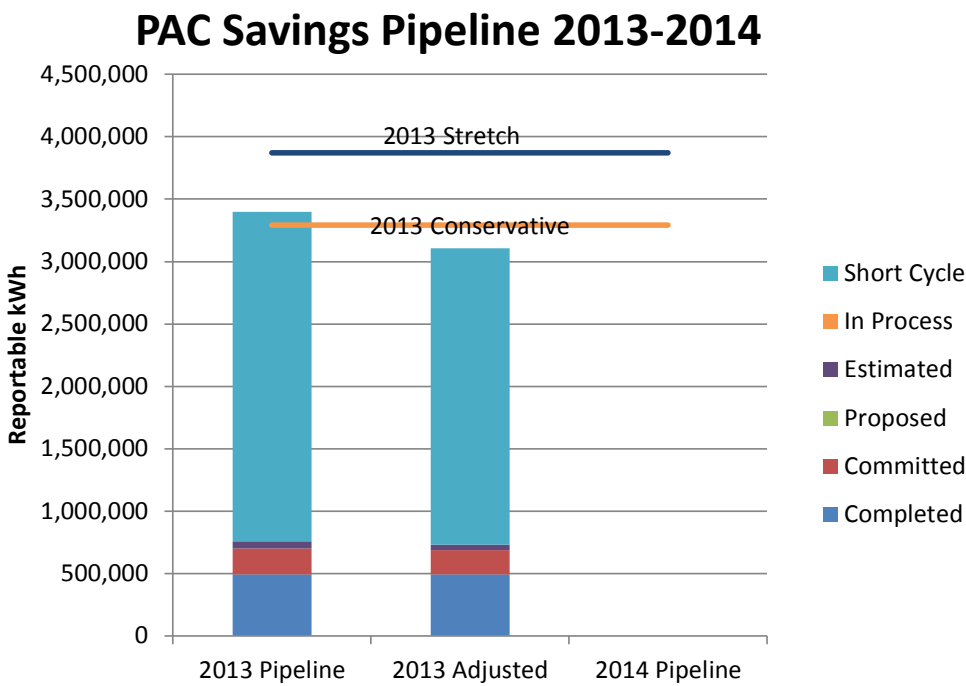
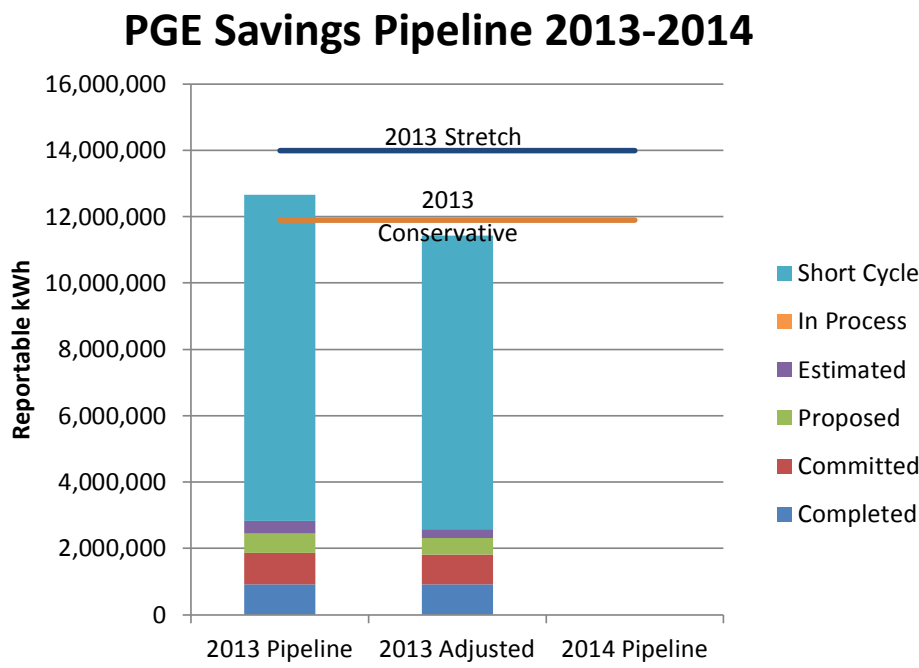
- Multifamily is tracking substantially ahead of historical accomplishments for gas utilities and is slightly behind for electric utilities.
- A mid-stream buy-down promotion with two regional appliance distributors was re-launched in Q1 to influence the market to purchase energy-efficient clothes washers. Bringing in additional distributors is expected to boost the number of units incented through the rest of 2013. Commercial washers for common area installations are included for the first time in this promotion.
- Building on the success of previous midstream buy-down promotions an RFP targeted at key regional equipment distributors to owners and property managers has been developed and will be released in Q2 to influence owners and property managers to purchase high efficiency hot water heaters.
- Work continued with local, regional and national organizations to develop and deploy an on-bill repayment pilot called MPower Oregon throughout Q1 with a focus on a streamlined audit process and pipeline development for master metered buildings to be served in Phase I of the pilot.
- A comprehensive lighting pilot targeted at memory care facilities enrolled the necessary three buildings in PGE territory, developed the evaluation plan and is expected to begin projects in Q2 of 2013.
- Existing Multifamily received an exception from the OPUC to maintain the full suite of gas weatherization measures available to multifamily buildings under UM 551.

Existing Multifamily Summary

April 1, 2013

Program: Existing Multifamily		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	912,173	491,134	20,658	658
	To date % of Conservative goal	8%	15%	21%	7%
	To date % of stretch goal	7%	13%	18%	6%
Context	Historical % of actual accomplishment	9%	17%	3%	1%
Budget	To Date % of Incentive Budget Spent	6%	11%	16%	4%

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Special Considerations:

General

- Instant Savings Measures (ISMs) and direct install continue to make up the majority of the electric savings for Existing Multifamily and are projected to make up 60 percent of the overall electric stretch goal for 2013. This targeted level of contribution is down from previous years.
 - Savings from custom and prescriptive measures are continuing to grow compared to previous years and are expected to contribute more robust and varied savings as the year progresses.
 - During Q1 Existing Multifamily has added small multifamily (2-4 attached units) and campus living projects into our normal program focus. These customers were previously served by Existing Homes and Existing Buildings, respectively, but were transitioned to Existing Multifamily to focus on the vast opportunities that are more residential in nature.
 - Outreach efforts have deepened the focus on cultivating existing relationships with owners and decision makers at top property management and affordable housing agencies to access the savings opportunities identified through past projects and building assessments.
 - In Q1 the Existing Multifamily team expanded its footprint with additional business development and program development staff. These new team members will support the continued focus on the breadth and depth of market opportunities and are expected to help accelerate savings performance across both fuels.
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- The multifamily weatherization market continues to be negatively impacted by the increased technical requirements for the State's Energy Incentive Program, which is creating a perceived barrier for projects to apply. When the Oregon Business Energy Tax Credit was available, weatherization projects typically relied on both state tax credits and Energy Trust incentives to make projects float.
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- During Q1 Existing Multifamily installed instant savings measures in 3,639 dwelling units, completed 16 lighting projects, performed 84 walkthrough surveys, and supported the sale of 218 ENERGY STAR® refrigerators and 36 HE clothes washers through midstream buy-down promotions.
 - Non-owner occupied dwellings continue to have some of the lowest vacancy rates on record, due to the continuing crunch for credit on home ownership. The surplus of renters to available apartments means property managers do not need to differentiate or significantly improve their properties to attract or retain renters.
 - Uncertainty of funding and support related to the federal budget sequester could lead to delays or changes in scope on planned projects with affordable housing providers.
 - A large regional appliance and equipment distributor, who participated in both midstream promotions in 2012, recently closed its divisions that served multifamily property owners and managers after 60 years of business citing the sluggish recovery in the homes market. While the loss of the distributor is expected to reduce the amount of appliances through the midstream promotion in the near term, we anticipate that other participating distributors will begin to serve affected properties as the year progresses.

Q1 Accomplishments

- A mid-stream buy-down promotion with two regional appliance distributors was re-launched in Q1 to influence the market to purchase energy-efficient clothes washers. Bringing in additional distributors should boost the number of units incented through the rest of 2013, as should the inclusion of commercial washers for common area installations for the first time in this promotion.
- Work continued with local, regional and national organizations to develop and deploy an on-bill repayment pilot called MPower Oregon throughout Q1 with a focus on a streamlined audit process and pipeline development for master metered buildings to be served in Phase I of the pilot.
- A comprehensive lighting pilot targeted at memory care facilities enrolled the necessary three buildings in PGE territory, developed the evaluation plan and is expected to begin projects in Q2 of 2013.

How we are positioning the program to achieve savings.

Overall:

- Building on the success of previous midstream buy-down promotions Existing Multifamily developed and will release an RFP in Q2 targeted at key regional equipment distributors serving owners and property managers. This is expected to drive market uptake of high efficiency water heaters.
- During Q1 the program kicked off a comprehensive redesign of the custom study and incentive track process. The goal of the redesign is matching the technical service provided to multifamily owners and managers to their own project goals, budgets and timelines. Planning will continue throughout the year with a soft launch expected in Q4 and full implementation in Q1 2014.

PGE

- PGE results through Q1 show completed projects at 7 percent of stretch goal. Historically, achievement at the end of Q1 is 9 percent. During the past three years Existing Multifamily has achieved its PGE stretch goal.
- When year-to-date achievement is combined with forecast and short-cycle prescriptive and ISM savings, the program is on track to reach and exceed its conservative goal. As custom and prescriptive projects continue to be processed or added to the pipeline program staff will be able to actively manage the schedule for the direct install of ISMs to keep within the 2013 budget as we push towards achievement of stretch goal.
- Existing Multifamily has continued to take steps to conduct studies with affordable housing agencies served primarily by PGE to develop long-term savings strategies for this underserved market through MPower Oregon. The first capital projects from this initiative are expected to complete in Q3 2013.
- Existing Multifamily has selected three facilities served by PGE to participate in the Memory Care Lighting Pilot, with implementation starting in Q2.

PAC

- Existing Multifamily results through Q1 exceed 13 percent of stretch goal. This compares to the historic savings-to-goal results of 17 percent.
- When year-to-date achievement is combined with forecast and short-cycle prescriptive and ISM savings the program is on track to exceed conservative goal, with prescriptive savings expected to push it past stretch savings goals.
- The run rate of incentive dollars needed to achieve each kWh of savings has been significantly less than budgeted to date, giving the program leverage to absorb several custom and lighting projects that are engaged with the program, but not yet able to be included in the pipeline.

NWN

- Results through Q1 for NW Natural show completed projects at 21 percent of stretch goal. This compares to the historic savings to goal results of only 3 percent. The strong performance through the first quarter is primarily driven by ISM installations in properties that with natural gas space and water heating.
- Existing Multifamily expects to see a majority of therm savings occur during Q2 and Q3 as a result of strong pipeline development in 2012 coinciding with the warmer quarters of the year when large HVAC projects are typically completed.
- When year-to-date achievement is combined with forecast and short-cycle ISM and prescriptive savings the program is on track to exceed conservative savings goals.
- Existing Multifamily received an exception from the OPUC to maintain the full suite of gas weatherization measures available to multifamily buildings under UM 551.

CNG

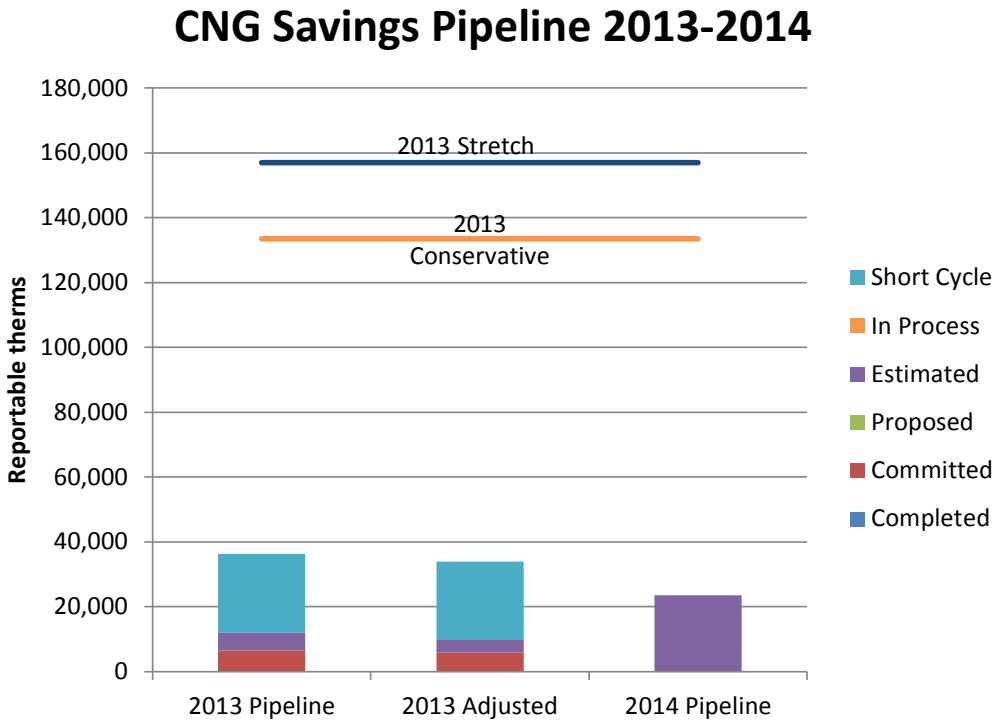
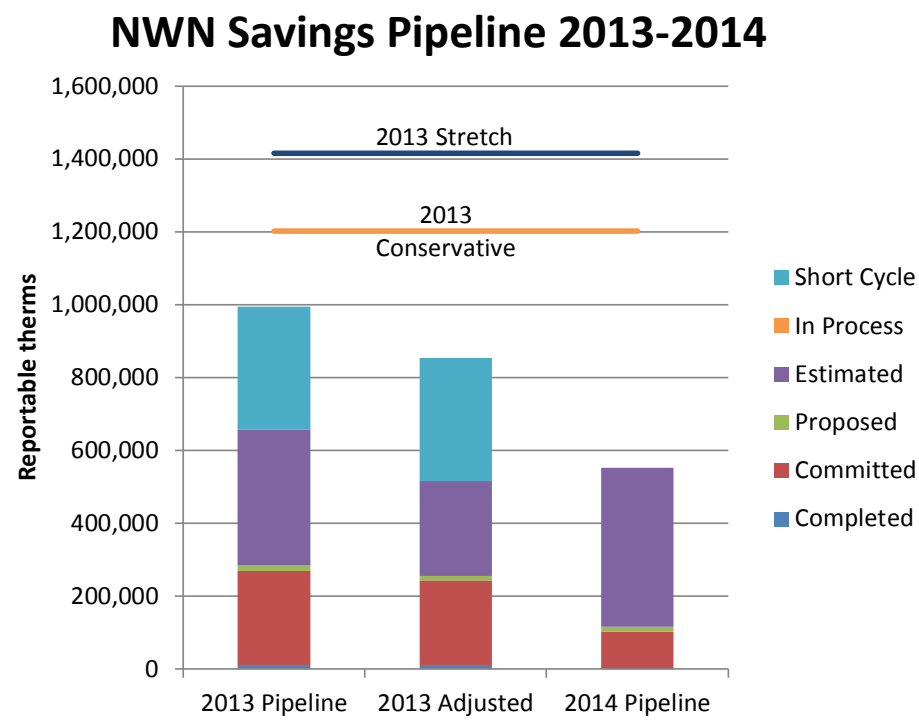
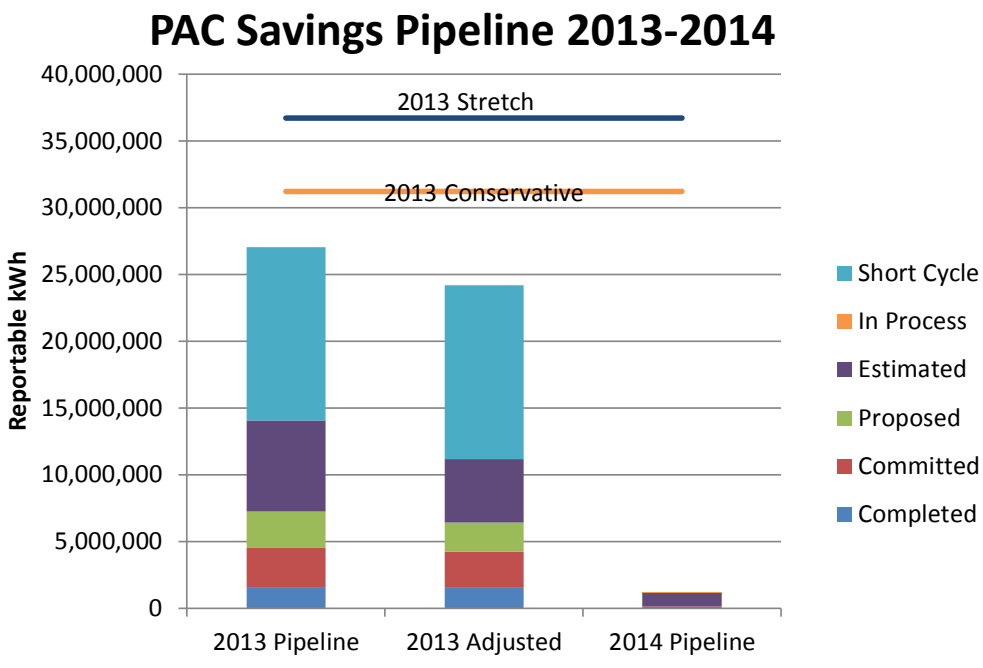
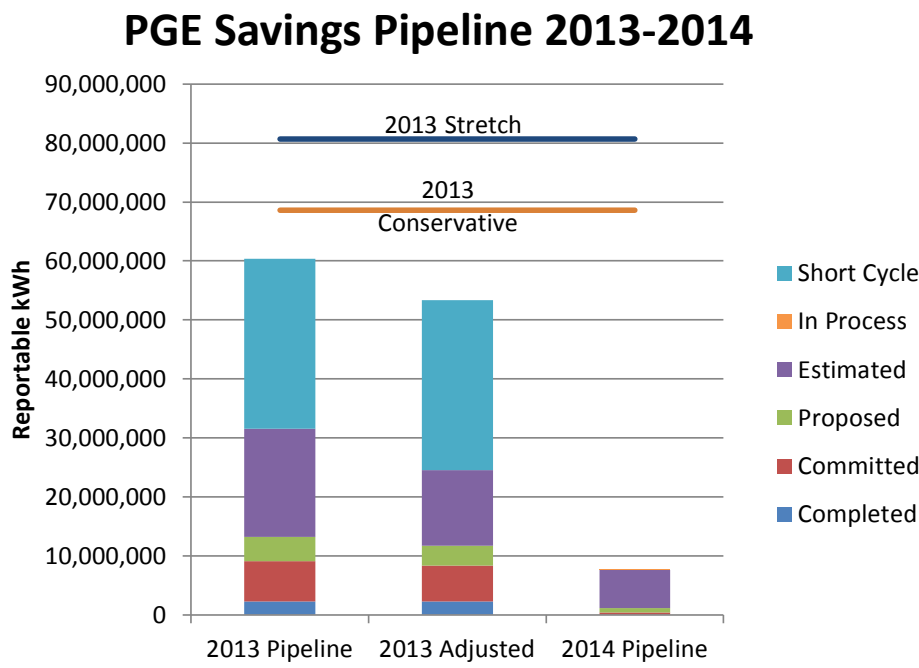
- Existing Multifamily achieved results through Q1 exceed 6 percent of stretch goal. 2013 is the first year that the program has associated savings goals or incentive budget for Cascade Natural Gas.
- When year-to-date achievement is combined with forecast and short-cycle ISM and prescriptive savings the program is forecast to be below conservative goal. The program expects to see the savings pipeline grow as business development efforts in this service territory ramp up to yield results in the later quarters of 2013.

Existing Buildings Summary

April 1, 2013

Program: Existing Buildings		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	2,205,856	1,591,580	8,243	-
	To date % of Conservative goal	3%	5%	1%	0%
	To date % of stretch goal	3%	4%	1%	0%
Context	Historical % of actual accomplishment	6%	13%	8%	7%
Budget	To Date % of Incentive Budget Spent	3%	4%	1%	0%

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Special Considerations:

Overall:

- Existing Buildings achieved savings to date are behind historic averages. The delay in closing projects is a result of PMC transition activities in first quarter. Staff expects to be able to bring achieved savings back into alignment over the remainder of 2013.
 - PMC outreach staff became familiar with projects in the pipeline and has reached out to key customers and trade allies and is continuing to maintain and build on customer connections.
 - PMC operations staff and Energy Trust IT staff have developed IT system integration to track project and customer information and pay incentives in a timely manner.
- Incentive expenditures are proportional to the savings that have been achieved.
- The pipeline of completed and forecasted projects for 2013 is similar to previous years for PGE, PAC and NWN. CNG savings are behind last year because few large custom projects have been identified. Staff believes that conservative goals are in reach for all utilities. Meeting stretch goals is achievable if short-cycle savings come in as expected and a typical number of large custom projects are completed.
- Strategic Energy Management, SEM, is on target to reach stretch savings goals. The second cohort launched in January and is expected to generate approximately half of the overall SEM savings, providing 5.6 Million kWh and 112,000 therms. Additional savings will come from the second year of the first cohort and recruitment of an additional (third) SEM cohort later this year.
- The economy has continued to improve and more businesses are reconsidering projects that had been deferred when customers were more wary of economic conditions.

Q1 Highlights

- Existing Buildings staff worked with ODOE through the Cool Schools partnership to identify 35 schools in 11 districts for project scoping assistance and targeted audits for projects in the summers of 2013 or 2014.
- The program rolled out an updated Roof-top Tune-up offering with a slightly reduced incentive offering and budget to target 1,500 units of 5 tons and larger.
- The program is working with lighting manufacturers to provide marketing for special pricing for High Performance T8 Lens retrofit kits in the first part of 2013. Manufacturer feedback is positive and staff expects to see significant savings results this year.
- The program worked with municipalities to scope LED streetlight projects to demonstrate the viability of the technology and to create interest in LED technology across Energy Trust territory.
- SEM launched a new cohort including 6 participants.
- The new PMC, ICF International, brings relationships with national chains to their work with Energy Trust and these will be leveraged to achieve program savings.
- ICF set up a new commercial customer call center that has already handled hundreds of customer calls. Energy Trust is pleased with the level of service that the call center provides. Program staff will continue to educate call center representatives on program details to maintain and further enhance customer service for customers.
- The program coordinated with the City of Portland to help facilitate the City's "Bucks for Buildings" rebate program which paid rebates to small commercial facilities for energy efficiency upgrades. The funding for "Bucks for Buildings" was a grant through ARRA funding.

PGE

- The program has achieved 3 percent of the stretch goal in PGE territory compared to 6 percent historical accomplishments. The program will continue to push hard to recruit large commercial custom projects and will work with lighting and non-lighting trade allies to identify solutions to recruit and close more prescriptive projects. In addition, the program will continue to push savings through Operations and Maintenance projects. Staff expects to bring achieved savings back into closer alignment with historical accomplishments in the future quarters of 2013.
- Savings to date have primarily come from the lighting track with additional savings coming from prescriptive and Roof-Top Tune-up measures.
- The program completed Q1 with 53.3 Million annual kWh booked and in the pipeline in PGE territory; the 2013 Stretch Goal is 80.7 Million kWh.
- Staff believes that the program is on-track to exceed the conservative goal in PGE territory and the stretch goal is within reach. In addition to steady state program activity, the program will need to recruit several large custom projects and enroll additional LED Streetlight projects in order to achieve the Stretch savings goal.
- Existing Buildings will continue to coordinate with PGE 838 Outreach Representatives to provide service to small customers.
- In January the program hosted a lighting Trade Ally training in Wilsonville which was attended by 214, who were trained on lighting technologies and program offerings.

PAC

- The program has achieved 4 percent of the stretch goal in Pacific Power territory to date compared to 13 percent historical accomplishments. Savings in Q1 2012 were unusually high due to some large custom projects that had carried from 2011.
- The program completed Q1 2013 with 24.2 Million annual kWh booked and in the pipeline in Pacific Power territory; the 2013 Stretch Goal is 36.7 Million kWh.
- Enrolling large Custom Projects in Pacific Power territory is a priority for the program because of the economies of scale that they provide. Moreover, the volume of lighting projects has been high in in Pacific Power territory and staff expects this to continue in 2013.
- The program will continue to coordinate with Pacific Power 838 Outreach Representatives to provide service to small customers.
- In January the program hosted a series of lighting Trade Ally trainings in Pacific Power territory to inform contractors about lighting technologies and program offerings. Trainings were hosted in the following cities with the respective number of contractor staff participating: Wilsonville – 214, Bend – 56, Medford – 51, and Roseburg – 29.
- The program continues to maintain a presence in Pacific Power service territory and there is a program staff member, William Gatchel, now providing service in the Northeastern part of the state.

NWN

- The program has achieved 1 percent of the stretch goal in NW Natural territory to date compared to 8 percent historical accomplishments.
- NW Natural incentive spending is tracking proportional to savings accomplishments.
- The program completed Q1 2013 with 855,000 annual therms booked and in the pipeline in NWN territory; the 2013 Stretch Goal is 1.41 Million annual therms.
- To ensure that the program meets the stretch goal, Existing Buildings will need to recruit several large custom projects and develop more Trade Ally relationships to promote prescriptive projects.
- Existing Buildings has incentives for roof-top tune-ups for units greater than 5 tons, up to 1,500 units or through Q2-2013. In 2012, roof-top tune-ups were a significant portion of the overall savings achieved in NW Natural territory.
- Energy Trust collaborates regularly with NW Natural on marketing activities and expects to complete a direct mailing later this year to customers to reintroduce gas efficiency projects eligible for Energy Trust incentives. Last year, this tactic was effective in drawing customer interest, particularly in gas-only territories.

CNG

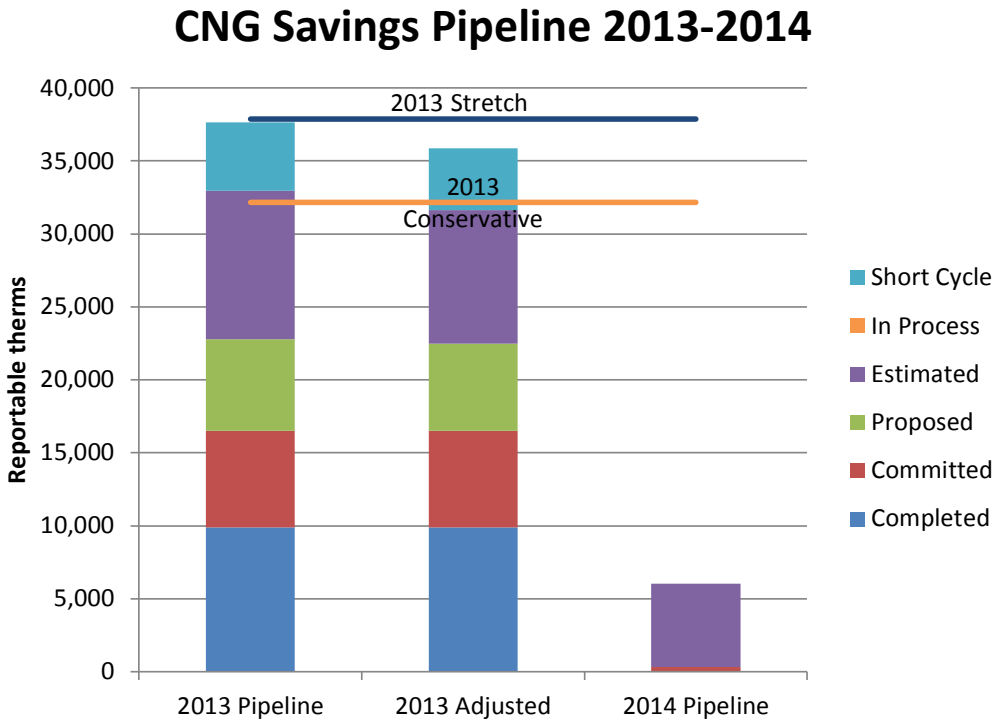
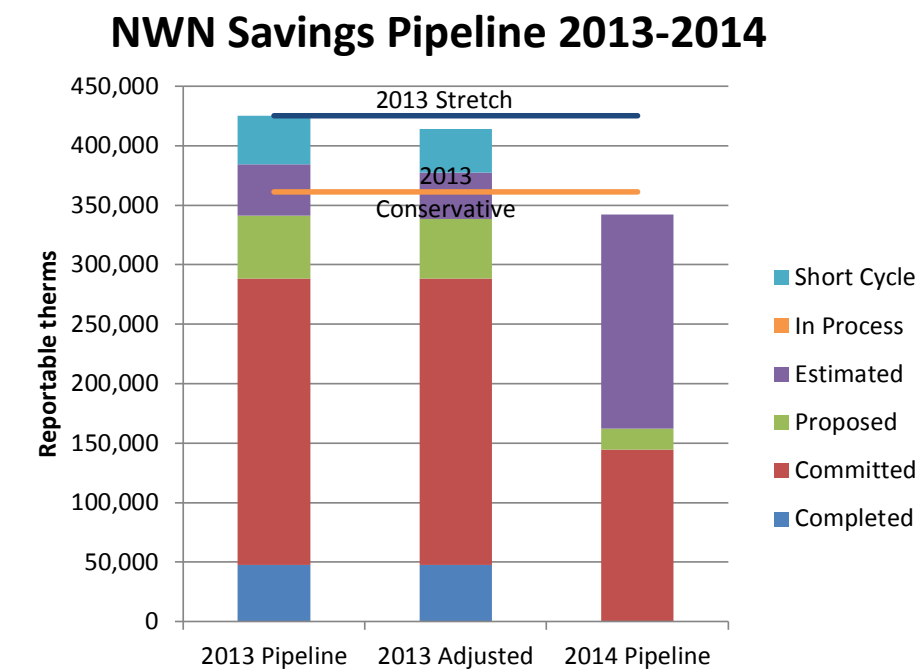
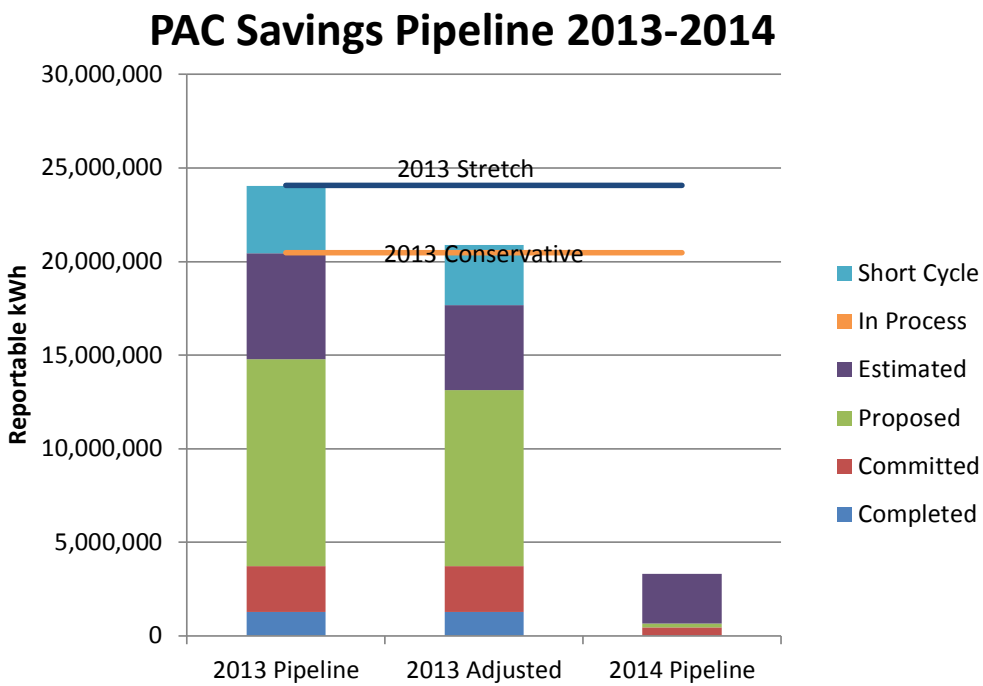
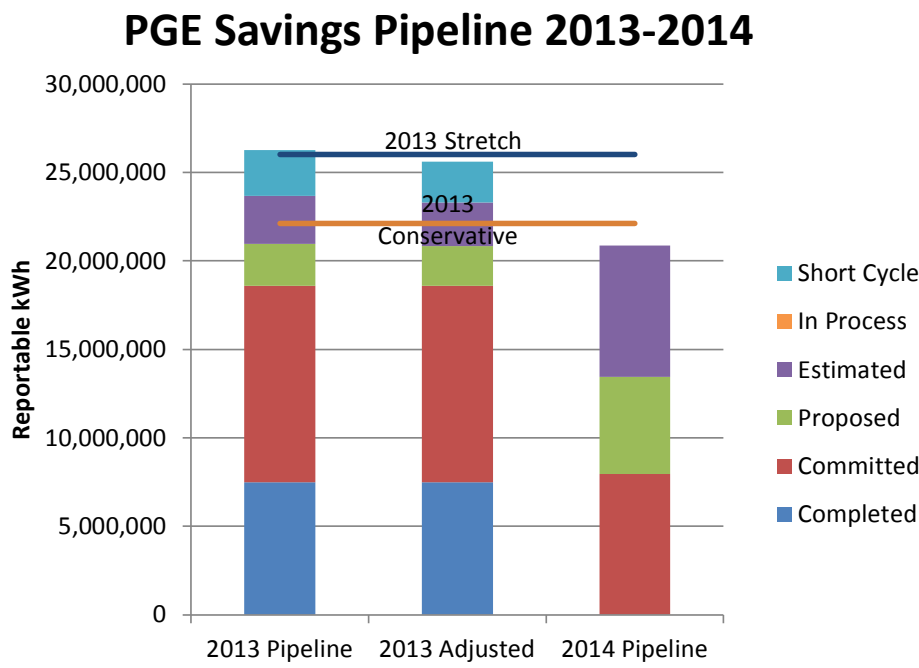
- The program has not booked savings in CNG territory to date compared to 7 percent historical accomplishments. In 2012 the program closed some large custom projects that carried forward from Q4 of 2011 in to 2012. We did not have such projects this time.
- The program completed Q1 2013 with 34,000 therms booked and in the pipeline in CNG territory; the 2013 Stretch Goal is 157,000 therms.
- Staff believes that the program can exceed the Conservative Goal but reaching the Stretch Goal will require significant outreach efforts in CNG territory to identify and recruit large custom projects and work with Trade Allies to recruit and enroll small and medium-size projects.
- The program continues to send outreach staff to central Oregon to engage customers directly and attend events. In addition, there is a program staff member, William Gatchel, now providing service in the Northeastern part of the state.

New Buildings Summary

April 1, 2013

Program: New Buildings		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	7,475,102	1,289,955	47,430	9,886
	To date % of Conservative goal	34%	6%	13%	31%
	To date % of stretch goal	29%	5%	11%	26%
Context	Historical % of actual accomplishment	5%	7%	11%	5%
Budget	To Date % of Incentive Budget Spent	20%	5%	7%	15%

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Special Considerations:

Overall:

- The New Buildings pipeline is strong across all four utilities. A few notable, large-savings projects are generating a majority of electric savings in 2013, though a majority of total projects will be small commercial buildings. Gas savings are ahead compared to 2012. Modest confidence factors of 90-95 percent were applied to PGE, NWN and CNG; program staff is confident in savings projections because of efforts to identify quick-turn projects early in the year. A conservative confidence factor of 80-85 percent was applied to Pacific Power due to high variability in savings from several large-savings projects. We expect to close-in on savings projections in Q2 and Q3 as project timelines progress. Data centers are expected to be a big factor that could push savings up or down for both utilities in 2013.
- The Market Solutions offerings – small commercial packages targeting retail, office, restaurant, grocery, multifamily and schools – launched in April with a heavy marketing campaign. A few packages were released early in Q4-2012 with new easy-to-use workbooks that have become a program standard. Market response has been positive among allies and owners, an early indication that simple packages with tiered incentives will be a good pathway to increase program reach and savings. At the end of Q1, eleven projects have enrolled.
- Staff also completed a web design re-launch that is part of a strategy to drive customers to the web, deliver information effectively and further leverage program delivery costs as project volume picks up.
- Outreach staff engaged with 50 design and engineering firms in Q1 to introduce Market Solutions and continue to strengthen the New Buildings ally network that is over 70 strong and growing as the economy picks up.
- New Buildings and the Commercial Solar Program have teamed up to deliver comprehensive services to the market. Program staff retooled offers to streamline delivery and fully leverage outreach and market engagement through New Buildings. This means enhanced and targeted delivery of solar projects through New Buildings. Also set for launch in Q2 is SolarReady – a new offer that helps motivated owners take advantage of strategies to design solar into their buildings from the start.
- New Buildings was recognized as an Exemplary Program in 2013 by the American Council for an Energy-Efficient Economy, and is one of two national programs to receive recognition.
- At the end of Q1, there are 517 active projects in the pipeline. Over 93 percent of these projects are permitted under the 2010 code which is an 11 percent increase from 2012.
- New Buildings enrolled 115 projects during this first quarter which is the highest total since 2009 and good indication of a strong pipeline for 2013 and beyond.

PGE

- New Buildings had a strong start in Q1 lending confidence early in the year that the program will achieve stretch goal this year. The program enrolled 57 new projects in the quarter and has a current pipeline of 300 total projects in PGE.
- Compared to 2012, savings are up by 24 percent, with large grocery and data centers bringing in a majority of the savings to date.
- Looking ahead, we have a robust pipeline – half of the anticipated short-cycle projects (quickly implemented projects we can expect based on historic trends but which are not enrolled at the beginning of the year) have been identified. These projects have been restaurants, warehouse, multi-family or tenant improvement projects. The program also expects additional savings especially from light industrial projects due to an increase in 2012 which has continued into 2013. These projects move quickly because they often complete HVAC and lighting system before process equipment is up and running. Portland Business Journal lists 125,000 square feet of light industrial leases completed in early April which further supports the opportunity with this sector.

PAC

- New Buildings is expected to exceed conservative goal and may meet stretch goals though Q1 savings are modest. The program enrolled 41 new projects in the quarter and has a current pipeline of 178 total projects in Pacific Power.
- Compared to Q1 2012, savings are under by two percent. If savings from a few large projects, now under preliminary engineering review, prove out, New Buildings may meet stretch goals and deliver significant results in Q3.
- Initial results for data centers appear to lag early expectations. Program Outreach Managers are working closely with customers and allies to drive savings results, targeting data centers. The construction timelines for these projects has also shifted quarters but are still forecasted to close within the year.

NWN

- New Buildings expects to meet the conservative goal and is driving to meet the stretch goal, overall expecting results similar to last year. The program enrolled 62 new projects in the quarter and has a current pipeline of 350 total projects in NWN.
- Quarterly savings are on pace with Q1 2012. Results to date are primarily from multifamily, retail, office and restaurant projects.
- New Buildings is targeting restaurants and warehouses with quick-turn savings projects that will bring the program to stretch goal.
- Continued savings are expected to come through small businesses through for Market Solutions.

CNG

- New Buildings expects to meet the conservative goal as a result of a strong showing in Q1, which brought a 21 percent increase in savings over 2012.
- The program enrolled 8 new projects in the quarter and has a current pipeline of 33 total projects in CNG.
- New construction starts are increasing. Two projects in Central Oregon resulted in a total of approximately 10,000 therms.
- To meet stretch goal, staff has implemented an outreach and engagement strategy for Eastern Oregon, including working directly with CNG's district offices. Ten new projects are already enrolled.
- A very happy customer in Central Oregon recently sent the following message after completing a project: "We are very appreciative of the support we received from the Trust and for your individual efforts."

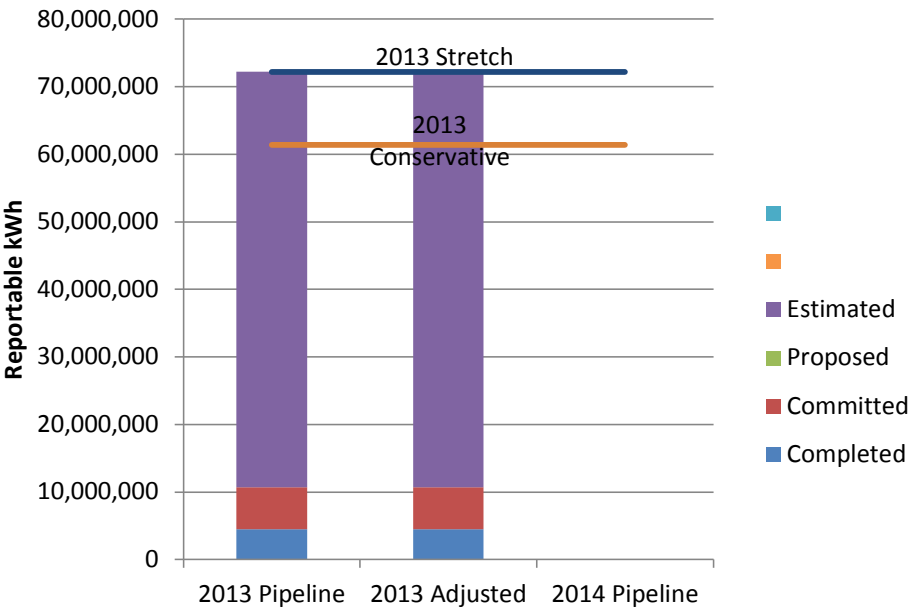
Residential Programs Summary

April 1, 2013

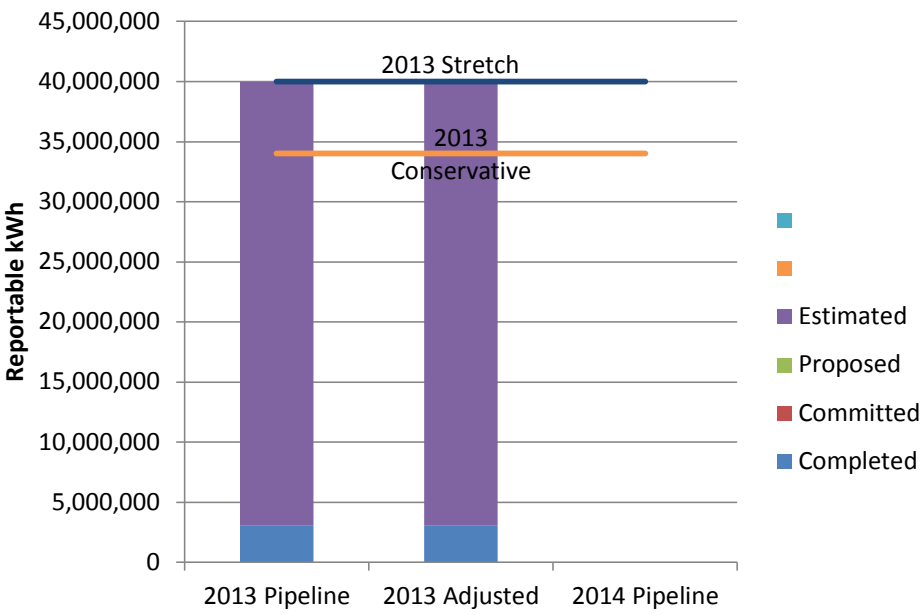
Residential Sector		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	4,490,087	3,070,470	181,241	14,989
	To date % of Conservative goal	7%	9%	11%	13%
	To date % of stretch goal	6%	8%	9%	11%
Context	Historical % of actual accomplishment	13%	16%	13%	18%

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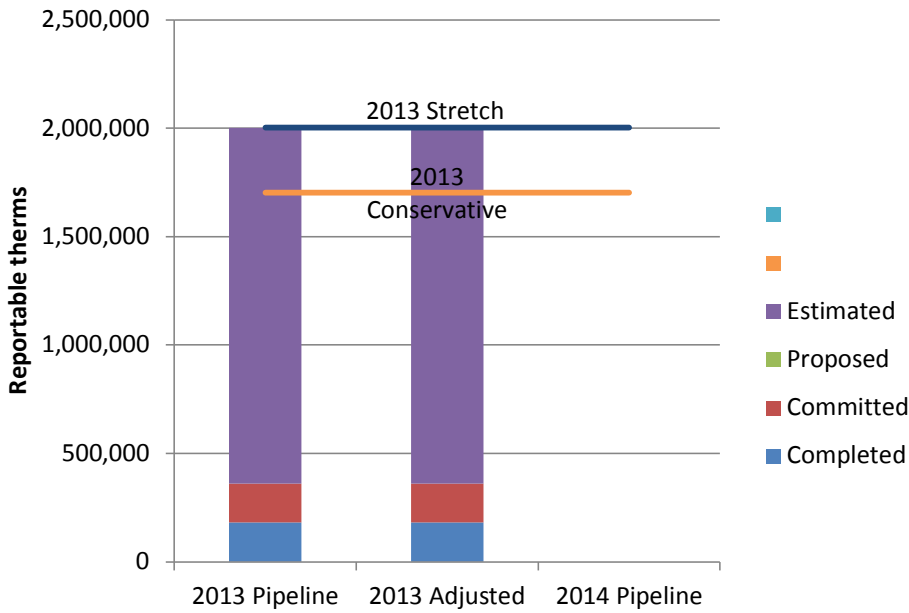
PGE Savings Pipeline 2013-2014



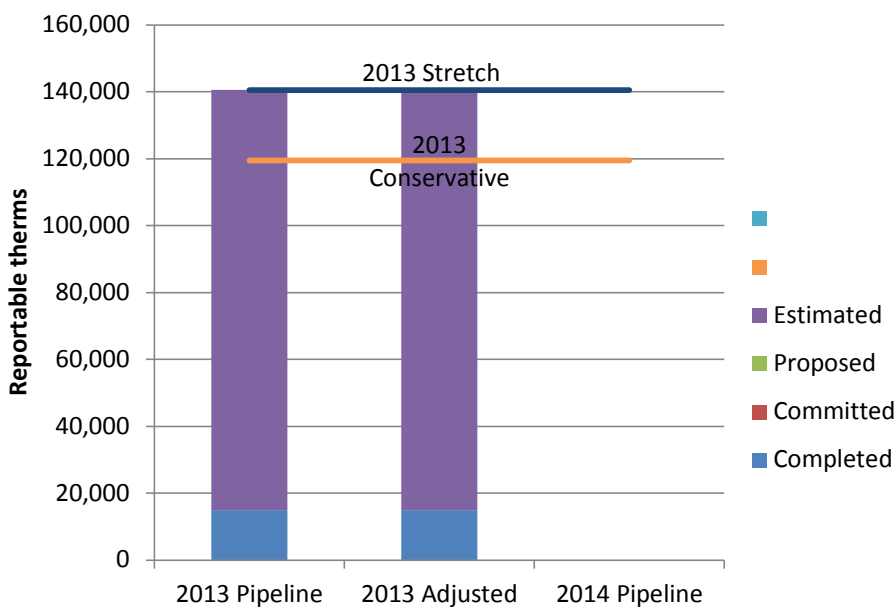
PAC Savings Pipeline 2013-2014



NWN Savings Pipeline 2013-2014



CNG Savings Pipeline 2013-2014



2013 Adjusted Pipeline percent of Stretch Goal	
PGE: 100%	PAC: 100%
NWN: 100%	CNG: 100%

Special Considerations:

Overall

- The delivery of an Existing Home EPS launched in Q1 of 2013, these are available through a Home Performance with ENERGY STAR contractor.
- The Products Program is coordinating with the Oregon Food Bank, OFB, for the spring fridge recycling campaign that will give customers the option of donating their \$40 incentive to the food bank. The campaign is slated to launch on May 1st.
- Savings acquisitions in the Existing Home program overall are below historical levels due delays in incentive processing associated with changes in incentive processing procedures and a slower than expected transition to the new Program Management Contractor (PMC).
- The CFL market lift launched at select Kmart locations in March with six participating stores and four comparison stores. Kmart will receive incentives for increasing the market share of qualifying bulbs.
- Approximately 400 Clean Energy Work Oregon (CEWO) projects which completed in Q1, will not be fully processed until early in Q2. If the savings from these projects were recognized in Q1, savings levels for NW Natural, PGE, and PAC would be closer to historical averages. CEWO project submission procedures have been adjusted based on the transition from the previous PMC, which required the use of a modeling tool for capturing project data, and the need to amend associated CEWO project incentive processing audit procedures.
- Electric savings are down in the Products program because retail appliance and specialty CFL redemptions remain lower than in past years. In Q1 several new initiatives were developed that will launch in Q2 to boost savings.
- 270 EPS™ on new construction homes were submitted and processed in Q1 putting the program right on track to achieve the 1,100 new home goal for the year.

PGE

- Existing Home Savings are approximately 2% lower in Q1 2013, compared to Q1 2012. This is primarily related to processing delays and unrecognized completed CEWO projects. The current savings gap is expected to be reduced in Q2.
- A collaboration protocol with PGE has been established to support an integrated approach to leverage PGE staff and qualify control efforts to support quality reviews of program installed heat pumps. Future plans also include alignment between PGE and Energy Trust heat pump installation specifications.
- Weatherization projects represented a high percentage of Existing Home savings, with 76 insulation and 99 window projects.
- PGE Community Office product-of-the-month promotion launched in March distributing specialty lighting products and CFLs to PGE customers.

PAC

- Savings are approximately 4% lower in Q1 2013, compared to Q1 2012. This is primarily related to fewer mobile home duct sealing projects recognized in this period, as well as delays in processing of prescriptive track and CEWO projects; an increase in mobile home activity is forecast for Q2 and the incentive processing backlog is expected to neutralize this savings variance.
- Collaboration with the South Central Oregon Economic Development District (SCOEDD) and ODOE in Klamath and Lake Counties was established to leverage regional interest in increasing training more contractors on ductless heat pump installations and encouraging customers to choose efficient heating options, as opposed to heating with wood.
- Included as committed in the bar chart are 5.6 million kWh related to OPOWER efforts.
- Home Energy Review activity was greater than anticipated in Q1, causing an uptick in savings from installation of ISMs. Overall kits and direct install measures contributed to just over 50% of savings in Q1.

NWN

- Savings for Existing Homes are approximately 5% lower in Q1 2013, compared to Q1 2012. This is primarily related to processing delays and unrecognized completed CEWO projects. Processing the backlog of approximately 350 CEWO projects in NW Natural territory will result in a significant increase in savings in Q2.
- Included as committed in the bar chart are 180,000 therms related to OPOWER efforts.
- Ultimate Open House, a home tour featuring new homes built by the top builders in the Portland area, coordination happened throughout Q1 in preparation for the tour in early May. There are 20 EPS homes out of 23 homes total, marking the highest percentage of any Ultimate Open House tour.
- For Existing Homes, weatherization and equipment measures represent the bulk of savings, with 191 gas hearths, 238 window projects and 228 insulation measures making up the majority of activity.

CNG

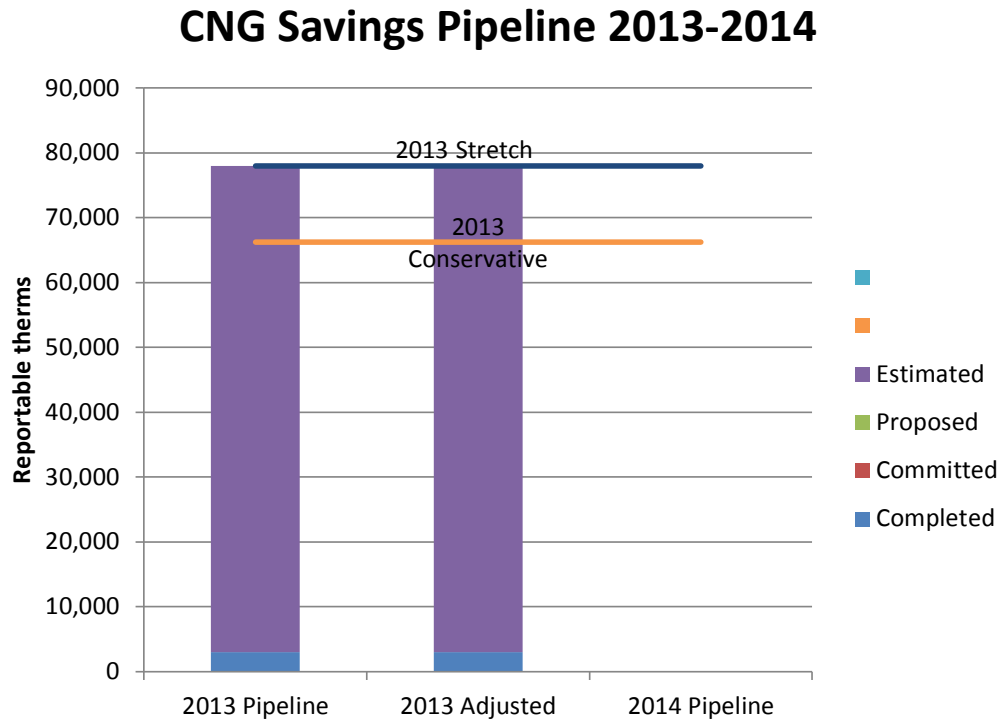
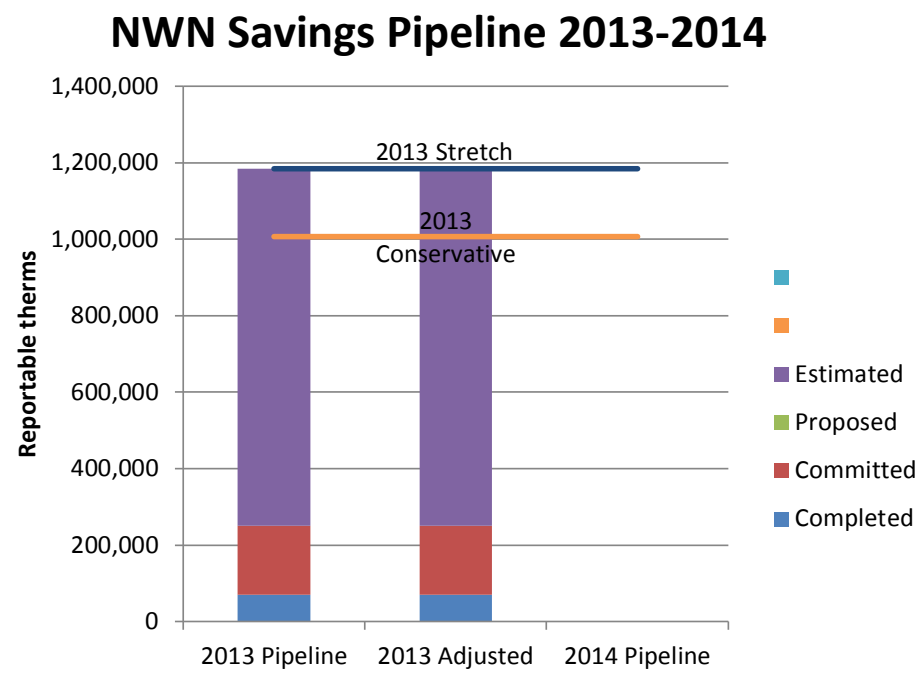
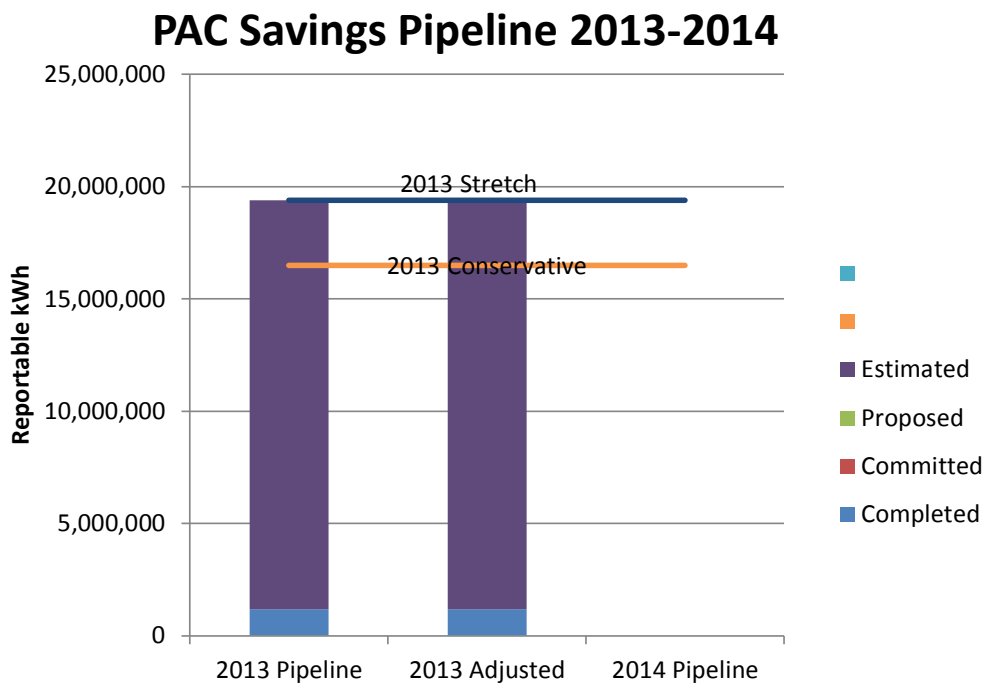
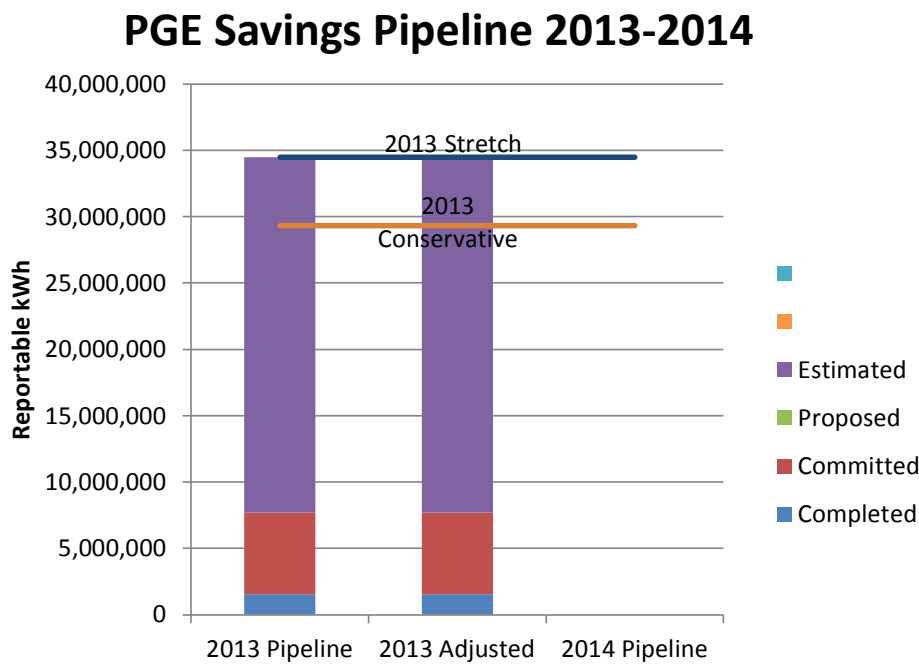
- Program enrolled its first ever Eastern Oregon verifier out of Boise, Idaho and performing work in eastern Oregon, mainly Ontario right now. He has experience verifying ENERGY STAR homes in Idaho and already has some active projects in Ontario that will receive an EPS.
- In Q1, program outreach staff met with CNG field staff in Pendleton and Ontario to establish relationships and identify outreach synergies.
- In Q1, the Existing Homes Program collaborated with the Sunriver Resort Community and ODOE to support development of a savings assessment to verify tax credit eligibility for series of weatherization improvements.
- To reach the Eastern Oregon market, the Existing Homes program ran two full-page and two half-page print ads in the East Oregonian and Hermiston Herald, with a focus on increasing awareness about Home Energy Reviews.

Existing Homes Summary

April 1, 2013

Program: Existing Homes		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	1,522,931	1,181,868	70,179	2,991
	To date % of Conservative goal	5%	7%	7%	5%
	To date % of stretch goal	4% *	6%	6% *	4%
Context	Historical % of actual accomplishment	6%	10%	11%	9%
Budget	To Date % of Incentive Budget Spent	5%	7%	5%	3%

* OPOWER Pilot Savings achievement is committed and not yet recognized.
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Special Considerations:

Overall:

- Savings acquisitions are below historical levels due to delays in incentive processing associated with changes in incentive processing procedures and a slower than expected transition to the new Program Management Contractor (PMC) .
- Increased processing Q2 and a fully transitioned PMC will bring savings back on track. Consequently, the dashboard forecasts achieving the stretch savings targets. For this program the first quarter provides limited information. A better sense of the year-end results will be known at the end of the second quarter.
- Existing Homes implemented field efficiencies by collecting Home Energy Review data using iPads in customer homes and delivering Custom Home Energy Reports to customers through emails out of Energy Trust’s new CRM. This approach, which was associated with the new PMC’s proposal, required significant resources in Q1, but is expected to lead to an annual program delivery savings of about .75 FTE.
- The Custom Home Energy Report savings levels are now based upon Energy Trust deemed savings levels, derived by program evaluation results as opposed to the historical approach which relied on an energy model. As a result, customers receive measure-level recommendations and a display of savings estimates consistent with the average realized savings of past participants who installed the same measure(s).
- Approximately 400 Clean Energy Work Oregon (CEWO) projects which completed in Q1, will not be fully processed until early in Q2. If the savings from these projects were recognized in Q1, savings levels for NW Natural, PGE, and PAC would be closer to historical averages. CEWO project submission procedures have been adjusted based on the transition from the previous PMC, which required the use of a modeling tool for capturing project data, and the need to amend associated CEWO project incentive processing audit procedures. CEWO is working closely with Fluid on new incentive processing protocols, focused on continued scalability at the program level and minimizing costs at the contractor level.
- The Massachusetts Institute of Technology (MIT) Customer Engagement pilot, which was designed to test various customer follow up approaches, concluded in Q1 with evaluation results expected to be available by the end of Q3.
- The PMC participated in numerous local and regional events in Q1, including:
 - Trade Ally trainings and roundtables in Pendleton, Portland, Bend, and Medford
 - HBA PRO Tour of Remodeled Homes
 - Corvallis Sustainability Fair
 - Better Living Show

PGE

- Savings are approximately 2% lower in Q1 2013, compared to Q1 2012. This is primarily related to processing delays and unrecognized completed CEWO projects. The current savings gap is expected to be reduced in Q2.
- Included as committed in the bar chart are 6.2 million kWh related to OPOWER efforts.
- A collaboration protocol with PGE has been established to support an integrated approach to leverage PGE staff and qualify control efforts to support quality reviews of program installed heat pumps. Future plans also include alignment between PGE and Energy Trust heat pump installation specifications.
- In Q1, 18 ductless heat pumps were installed and 61 heat pump projects were recognized.
- Weatherization projects represented a high percentage of savings, with 76 insulation and 99 window projects.
- Savings from Energy Saver Kits were the greatest driver of savings in Q1, with 1662 kits ordered by PGE customers contributing to over 60% of savings.

PAC

- Savings are approximately 4% lower in Q1 2013, compared to Q1 2012. This is primarily related to fewer mobile home duct sealing projects recognized in this period, as well as delays in processing of prescriptive track and CEWO projects; an increase in mobile home activity is forecast for Q2 and the incentive processing backlog is expected to neutralize this savings variance.
- Efforts were initiated to develop a ductless heat pump lead generation project in the Corvallis region, in alliance with Energize Corvallis and the NW Ductless Heat Pump Project; the project is expected to launch in Q2.
- Collaboration with the South Central Oregon Economic Development District (SCOED) and ODOE in Klamath and Lake Counties was established to leverage regional interest in increasing training more contractors on ductless heat pump installations and encouraging customers to choose efficient heating options, as opposed to heating with wood.
- Home Energy Review activity was greater than anticipated in Q1, causing an uptick in savings from installation of ISMs. Overall kits and direct install measures contributed to just over 50% of savings in Q1.

NWN

- Savings are approximately 5% lower in Q1 2013, compared to Q1 2012. This is primarily related to processing delays and unrecognized completed CEWO projects. Processing the backlog of approximately 350 CEWO projects in NW Natural territory will result in a significant increase in savings in Q2.
- Included as committed in the bar chart are 180,000 therms related to OPOWER efforts.
- Savings from prescriptive measures were the greatest savings driver, contributing just over 45% of therm savings. Energy Saver Kit savings were a close second savings driver, with 1,187 kits ordered by NW Natural customers contributing to 43% of savings.
- Weatherization and equipment measures represent of the largest single measure driver of savings, with 191 gas hearths, 238 window projects and 228 insulation measures.

CNG

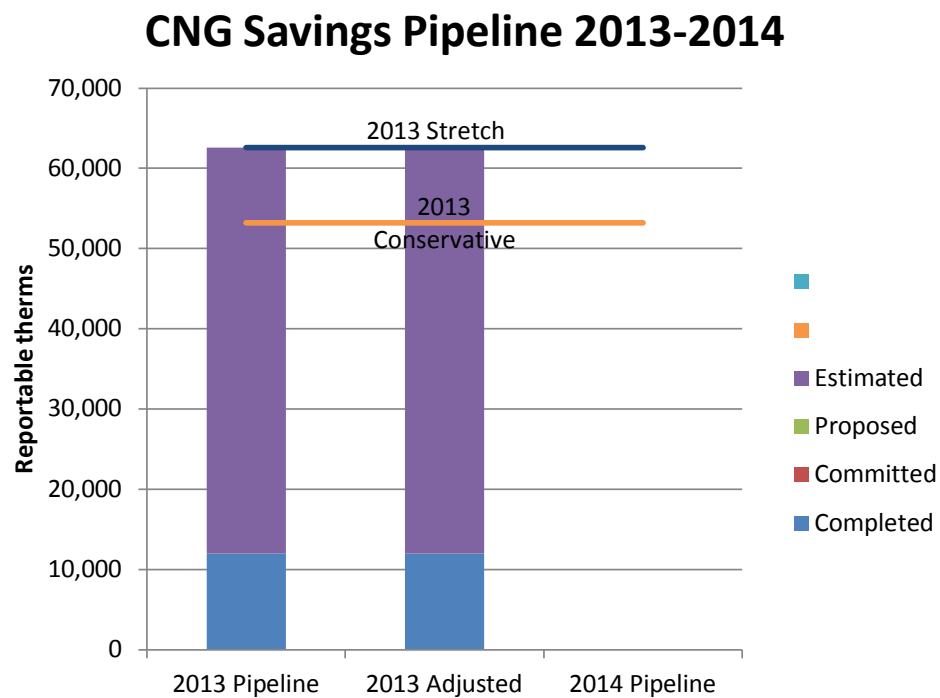
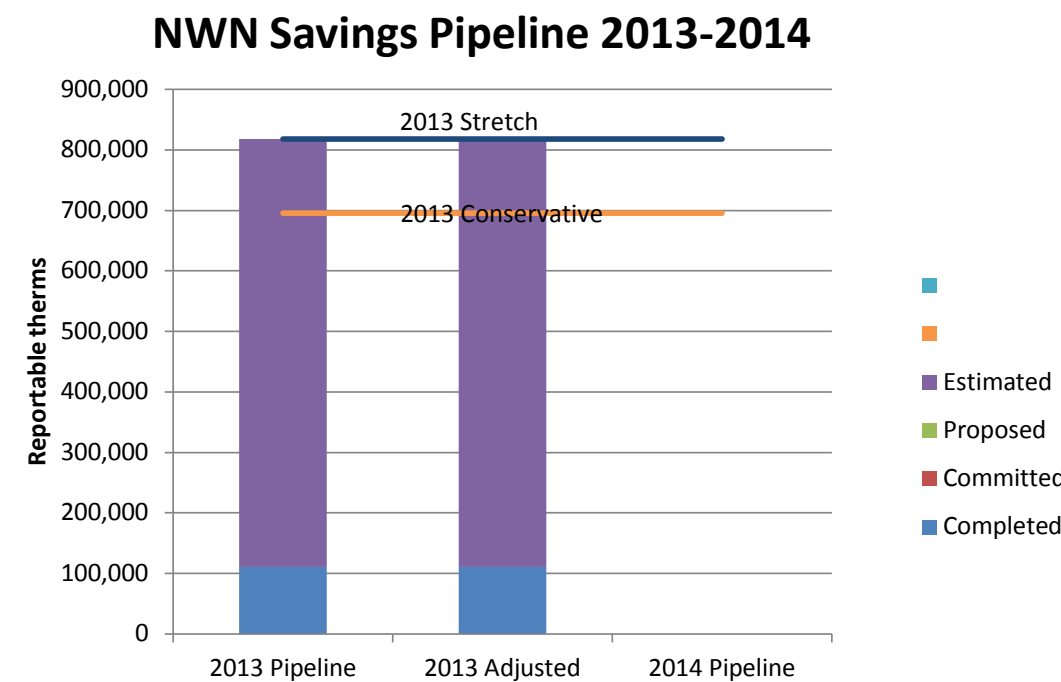
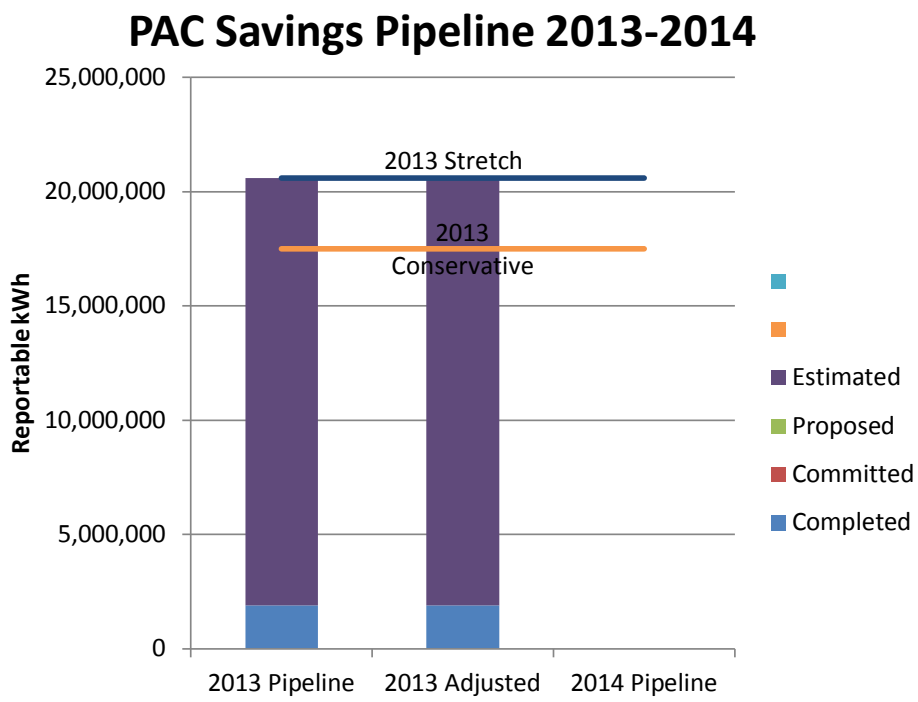
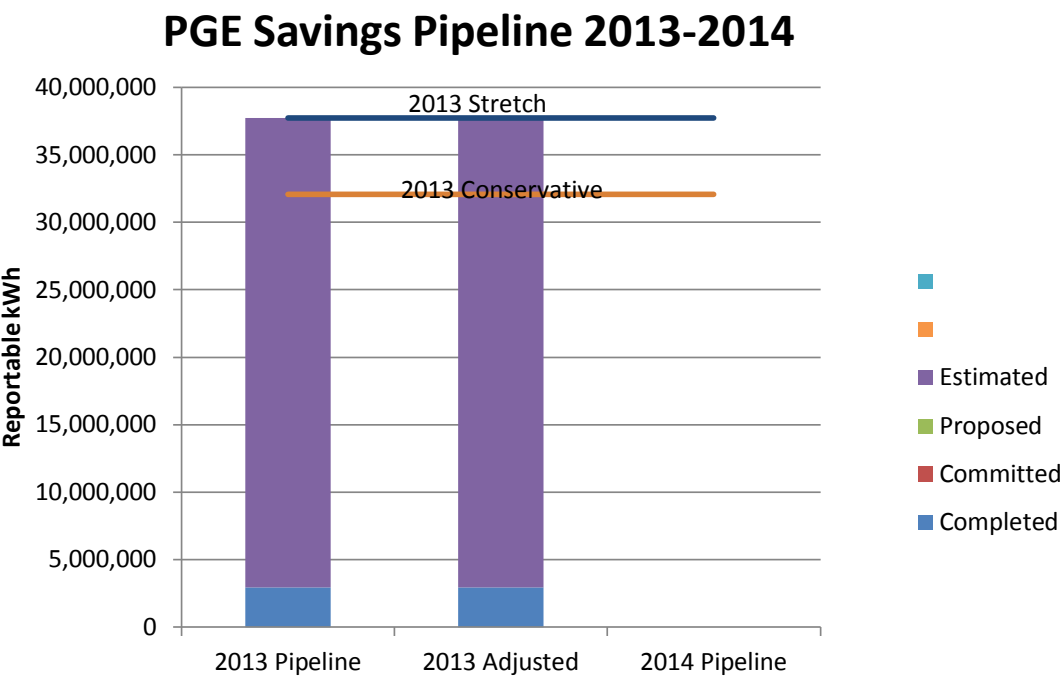
- Savings are approximately 5% lower in Q1 2013, compared to Q1 2012. Spending is trending lower than historical, as well; however, the smaller size of CNG goals tends to reveal greater variances from savings achievement and spending and it is too early in the year to glean trends.
- This dashboard forecasts the stretch budget savings achievement, as it is too early in the year to determine a more accurate year end savings forecast.
- In Q1, the program collaborated with the Sunriver Resort Community and ODOE to support development of a savings assessment to verify tax credit eligibility for series of weatherization improvements.
- Planning for implementation of a Revised CNG program delivery approach, including targeted approaches for increased outreach and engagement of the Northeast segment of the service territory, particularly the area from Pendleton to Ontario.
- In Q1, program outreach staff met with CNG field staff in Pendleton and Ontario to establish relationships and identify outreach synergies.
- To reach the Eastern Oregon market, the program ran two full-page and two half-page print ads in the East Oregonian and Hermiston Herald, with a focus on increasing awareness about HERs.

New Homes And Products Summary

April 1, 2013

Program: New Homes And Products		PGE	PAC	NWN	CNG
Achievement	2013 Achievement to Date (Rpt kWh or therm)	2,967,156	1,888,602	111,063	11,997
	To date % of Conservative goal	9%	11%	16%	23%
	To date % of Stretch goal	8%	9%	14%	19%
Context	Historical % of actual accomplishment	21%	22%	18%	27%
Budget	To Date % of Incentive Budget Spent	10%	11%	17%	0%

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Special Considerations

Overall

The program is currently forecasting to hit conservative savings goals for PGE and Pacific Power and stretch savings goals for NW Natural Gas and Cascade Natural Gas.

Electric savings are down because retail appliance and specialty CFL redemptions remain lower than in past years. Increases in baselines have caused the program to lower incentives and increase high efficient specifications for major appliances leading to lower redemptions. In regards to lighting, a number of major retailers are switching specialty lighting products from CFLs to LEDs. This impacts program savings because the program only supports a limited selection of LEDs.

In order to address the electric savings shortfall the program will implement a number of new initiatives in Q2 which may include: expanded LED offerings, including potential addition of A-lamps and new online distribution channels, new homes and manufactured homes stand alone measures, clothes washer recycling, work with Sears to test a consumer electronics initiative, leveraging Existing Homes activities to promote appliances. Initial savings are artificially low as, the program was unable to process the February retail lighting invoice through FastTrack to record the savings in Q1. The necessary measures have been created and the savings were recorded in April. 270 EPS™ homes were submitted and processed in Q1 putting the program right on track to achieve the 1,100 new home goal for the year.

Despite the shortfall of electric savings, there was still significant activity across most aspects of the program.

Table 1: Summary of New Homes and Products Q1 Activity

Measure	Q1	2013 Goal	% Goal
EPS™ Electric	73	1,100	24%
EPS Gas	197		
Solar Ready	14		
Stand Alone Air Sealing	109	500	22%
Retail Lighting (includes LED Fixtures)	91,028	1,185,411	8%
LED Lamps	5,859	61,737	10%
Lighting Promotions	1,500	30,000	5%
Retail Showerheads	1,121	26,884	4%
New E* Clothes Washers	2,983	25,723	12%
New E* Fridge/Freezers	722	21,633	3%
Refrigerator Recycling	2,648	19,359	14%
New E* MFG Homes	16	120	13%

Key Highlights

- Program is coordinating with the Oregon Food Bank, OFB, for the spring fridge recycling campaign - giving customers the option of donating their \$40 incentive to the food bank.
- The CFL market lift launched at select Kmart locations in March with six participating stores and four comparison stores. Kmart will receive incentives for increasing the market share of qualifying bulbs.
- Select LED products launched in Q4 2012 continued to generate savings in Q1 2013 with 5,859 LED bulbs sold at retail during January. LED lighting sales increased from January to February by 72 percent.
- In coordination with NEEA the program developed a strategy to implement a digital platform for Home Energy Rater to submit EPS projects which will be rolled out over the remainder of the year.
- An evaluation of the air sealing pilot concluded in Q1, finding that the measure is cost effective and viable. The program will now move forward with it as a regular offering.
- A short dynamic graphic video based on the EPS infographic was created for the Better Living Show to explain the steps and benefits of using EPS in a new home search.
- 14 solar -ready homes were completed to date. While this a small amount of homes, it is a significant increase over last year and it appears that the prior outreach efforts are having an impact.
- Ultimate Open House, a home tour featuring new homes built by the top builders in the Portland area, coordination happened throughout Q1 in preparation for the tour in early May. There are 20 EPS homes out of 23 homes total, marking the highest percentage of any Ultimate Open House tour.

PGE

- Acquired electric savings for PGE in Q1 were low due to a number of factors described at the beginning of this section.
- PGE Community Office product-of-the-month promotion launched in March distributing specialty lighting products and CFLs to PGE customers.
- CFL market lift initiative launched at select Kmart stores in March.

PAC

- Acquired electric savings for PAC in Q1 were low due to a number of factors described at the beginning of this section.
- Carry Home the Savings kits were delivered to three different Community Action Agencies in Pacific Power territory.
- Program team collaborated with Oregon Home Builders Association (OHBA) ENERGY STAR and local Hood River contractors to hold an EPS and ENERGY STAR training session with 12 interested builders.
- Due to the success of the Hood River EPS presentation in March, the program is sending the verifier outreach coordinator to present on EPS at the Hermiston HBA in April. It will be a full-day education event, with an hour slotted for EPS.

NWN

- NWN savings for Q1 2013 tracked closely to the performance during the same time period in 2012 and the program is on pace to hit 100% of the stretch goal.
- Team members met with EWEB staff to discuss 2013 activities and collaboration opportunities around EPS.

CNG

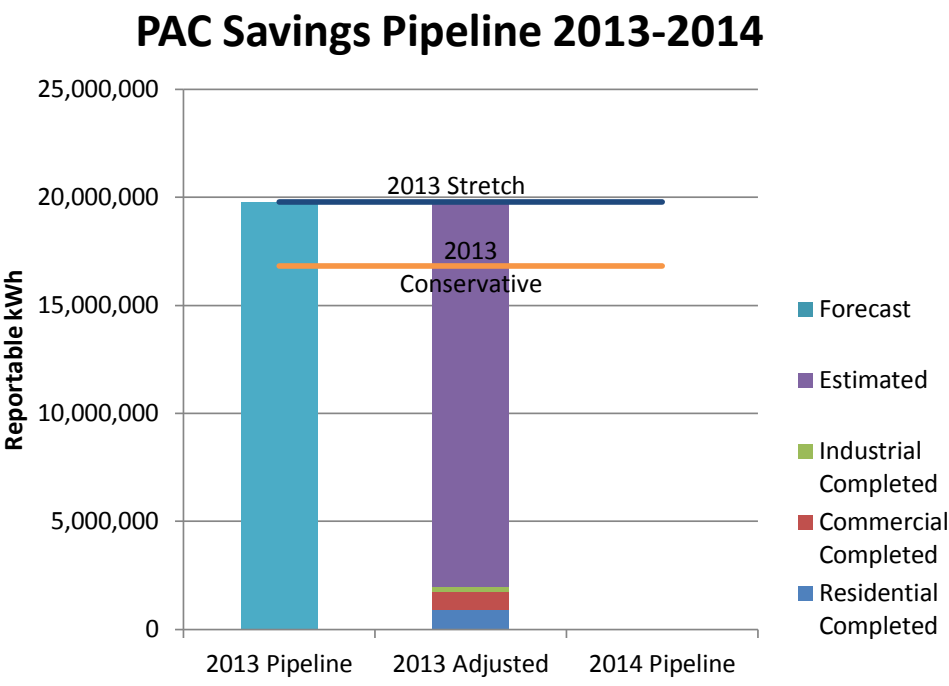
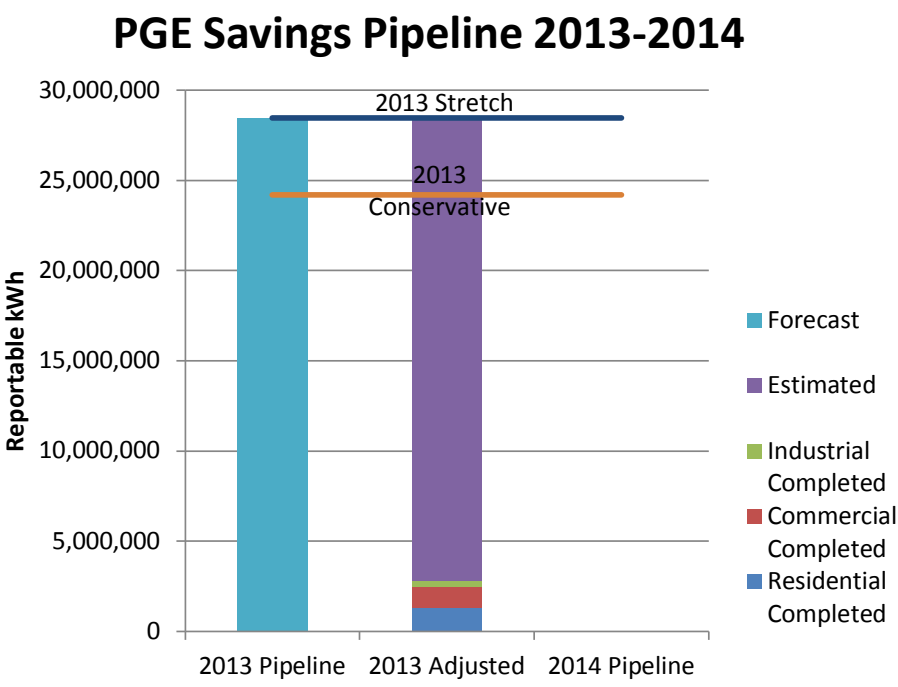
- CNG saw an approximate 50 percent increase in therms acquired in Q1 2013 over the same time period in 2012 and is on pace to hit 100% of the stretch goal.
- Program enrolled its first ever Eastern Oregon verifier out of Boise, Idaho and performing work in eastern Oregon, mainly Ontario right now. He has experience verifying ENERGY STAR homes in Idaho and already has some active projects in Ontario that will receive an EPS.
- Program is sending the verifier outreach coordinator to present on EPS at the Hermiston HBA in April. It will be a full-day education event, with an hour slotted for EPS.

NEEA Summary

April 1, 2013

Program: NEEA		PGE	PAC		
Achievement	2013 Achievement to Date (Rpt kWh or therm)	2,846,845	1,978,317		
	To date % of Conservative goal	12%	12%		
	To date % of stretch goal	10%	10%		
Context	Historical % of actual accomplishment	32%	32%		
Budget	To Date % of Incentive Budget Spent	N/A	N/A		

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NEEA

- Fewer savings are being claimed at the beginning of this year than in previous years. This is a change in practice that better aligns the amount of NEEA savings claimed each quarter with the increasing accuracy of NEEA's forecast as evaluations and market assessments are completed throughout the year.
- An updated savings forecast is expected from NEEA in Q3.
- NEEA's initiatives on efficient televisions, residential codes, and ductless heat pumps are expected to be the primary drivers of savings in the residential sector.
- Commercial sector savings are expected primarily from the commercial building codes, business IT, and Builder Operator Certification initiatives.
- The industrial initiatives of working with Food Processors to establish strategic energy management practices and motor rewind and motor efficiency standards work are the expected primary sources of savings in the industrial sector.

Conservation Advisory Council
Operating Principles
May 1, 2013

The Conservation Advisory Council (CAC) is one of several standing committees formed by the board of directors to provide advice in support of the Energy Trust efficiency programs.

From the CAC Charter:

The purpose of the Conservation [and Renewable] Advisory Councils is to advise the board and staff of Energy Trust of Oregon, Inc., regarding issues associated with Energy Trust energy efficiency and renewable energy policies and programs.

The Councils will:

- (a) Review and discuss selected energy efficiency and renewable energy issues prior to Energy Trust decision-making to ensure that the Board and staff have the best available information on such issues;
- (b) Help the Board and staff to identify alternative resolutions of such issues; and
- (c) Help staff identify matters for board consideration.

The CAC provides direct advice and input on budgets, program designs and strategies and the implications and programmatic response to policy or market changes. Final resolution of issues and all decision authority remains with the board of directors.

The following operating principles are a distillation of Conservation Advisory Council meeting discussions concerning the CAC role and meeting process. CAC Operating Principles were initially developed in 2004 to improve and enhance the CAC process. The Operating Principles were reviewed by the CAC in February of 2013 and updates were discussed in February, March and April. The following items were generally agreed to be the way that CAC should operate.

Energy Trust staff has endeavored to incorporate these principles into the CAC meeting process as a way to enhance the effectiveness of advisory council meetings.

1. Meet at least 8 times per year.
2. Draft an annual CAC schedule to set expectations for the year and prioritize known issues/ topics for the year to inform annual schedule and meeting agenda development.
3. Whenever possible, distribute meeting agendas, related materials and notes from the previous meeting one week in advance so that CAC members can review and be prepared to engage on topics.
4. Identify agenda items as discussion, information, or recommendation needed.
5. Make presentations short and succinct; provide ample time for discussion. Structure the meetings to maximize dialogue between staff, CAC members and other interested parties who attend.
6. Assure sufficient CAC member input and discussion on warranted topics before polling members for opinions. Document minority viewpoints as well as prevailing opinions.
7. Provide summaries of CAC input in board briefing materials or decision documents where applicable. Summaries should reflect the degree of CAC unanimity.
8. Encourage board member attendance at CAC meetings. Include board members on CAC distribution list to allow board to review CAC minutes and to choose to attend meetings of interest.
9. Include time on agendas for open discussion and suggestions for future agenda items.
10. Brief new, incoming CAC members on their duties.

Conservation Advisory Council

Operating Principles

~~September 15, 2004~~ May 1, 2013

The Conservation Advisory Council (CAC) is one of several standing committees formed by the board of directors to provide advice in support of the Energy Trust efficiency programs.

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- (a) Review and discuss selected energy efficiency and renewable energy issues prior to Energy Trust decision-making to ensure that the Board and staff have the best available information on such issues;
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- (c) Help staff identify matters for board consideration.

The CAC provides direct advice and input on budgets, program designs and strategies and the implications and programmatic response to policy or market changes. Final resolution of issues and all decision authority remains with the board of directors.

The following operating principles are a distillation of Conservation Advisory Council meeting discussions concerning the CAC role and meeting process. ~~The CAC Operating Principles were initially developed in 2004 to improve and enhance the CAC process. The process started with a CAC subgroup ad hoc meeting held in April that identified a number of process issues and enhancement suggestions. The Operating Principles topic was aired in were reviewed by the CAC in February of 2013 and updates were discussed in February, March and April. June, July and September and the following items were generally agreed to be the way that CAC should operate, incorporated in the CAC meeting process:~~

Energy Trust staff has endeavored to incorporate these principles into the CAC meeting process as a way to enhance the effectiveness of advisory council meetings.

1. Meet ~~monthly~~ at least 8 times per year.
2. Draft an annual CAC schedule to set expectations for the year and prioritize known issues/ topics for the year to inform annual schedule and meeting agenda development.
23. Whenever possible, distribute meeting agendas, related ~~discussion papers~~ materials and notes from the previous meeting ~~at least~~ one week in advance so that CAC members can review and be prepared to engage on topics.
34. Identify agenda items as discussion, information, or recommendation needed.
45. Make presentations short and succinct; provide ample time for discussion. Structure the meetings to maximize dialogue between staff, CAC members and other interested parties who attend. Strive to invite guest presenters.
56. ~~Provide at least two rounds of discussion~~ Assure sufficient CAC member input and discussion on warranted topics before asking for a recommendation ~~polling members for opinions on recommendation topics. Document minority viewpoints as well as prevailing opinions.~~
67. ~~Solicit council technical expertise on discussion topics as appropriate, to inform discussions before final recommendations.~~
78. ~~Poll members for opinions on recommendation topics. Document minority viewpoints as well as prevailing opinions.~~
89. ~~Provide program information updates quarterly.~~

Comment [kc1]: This seems redundant with #5 and #6

Comment [kc2]: Rolled into #6

Comment [kc3]: Part of figuring out the priority of CAC topics, addressed in #3.

- ~~9.10.~~ Provide ~~more complete~~ summaries of CAC ~~recommendations~~ ~~input, including split recommendations,~~ in board ~~decision documents~~ briefing materials or decision documents where applicable. Summaries should reflect the degree of CAC unanimity.
- ~~+0.11.~~ Encourage board member attendance at CAC meetings. Include board members on CAC distribution list to allow board to review CAC minutes and to choose to attend meetings of interest.
- ~~+1.12.~~ Include time on agendas for open discussion and suggestions for future agenda items.
13. Brief new, incoming CAC members on their duties.



Industry and Agriculture Sector **2012 Production Efficiency** **Trends: Measures, Markets and** **Sources of Savings**

Prepared by Steven Jonas, Industry & Ag Operations Analyst and
Kim Crossman, Industry & Ag Sector Lead

April 2013

I. Analysis of trends in the Industry and Ag Sector

Source of data

Data contained in this report comes from Energy Trust's FastTrack project database and Business Intelligence reports.

Trend analysis: Working savings vs. reportable numbers

These analyses are based on working savings numbers, i.e., savings before evaluation factors and T&D losses or credits are applied. Therefore the totals will not be equal to the reportable savings total provided to the Board, PUC and utilities, which do include evaluation factors.

There are good reasons to run trend analysis with working numbers. Evaluation factors change year to year and these changes can mask underlying market response to program offerings. We acknowledge that tracking and addressing changes in free ridership and technical realization is important in terms of tuning program outcomes, but these changes are not the primary driver of outcomes.

The primary driver of program outcomes is the market's response to opportunities, incentives, etc. The second most powerful driver of outcomes appears to be major market forces such as the recent recession. This trend analysis focuses on the primary driver of basic program design and delivery.

II. Sources of Savings

Production Efficiency is organized around and achieves savings through two primary pathways to market: custom and streamlined. Each is targeted to specific industry needs and/or market segments with differing complexity, delivery channels and development timelines.

The custom track is delivered by Program Delivery Contractors (PDCs) acting as energy efficiency account managers. The Custom track includes custom capital and O&M projects and strategic energy management (SEM) offerings. By performing custom analysis and verification of savings for each project, the program has the flexibility to work with large industrial retrofits, unique process improvement projects and emerging technologies and practices. The Custom track works with medium to large industries, which are provided energy efficiency services and incentives to drive deep and persistent process efficiencies. Custom capital and O&M projects are supported by assigned PDCs and a pool of technically specialized Allied Technical Assistance Contractors (ATACs), who provide detailed technical studies. SEM opportunities are identified by PDCs and delivered by a separate pool of Industrial Technical Service Providers (ITSPs). All in all, approximately 30 Oregon firms participate as contractors in some role in the Custom track.

The streamlined track includes Industrial Lighting and the Small Industrial and Agricultural Initiative. Streamlined projects are delivered through trade ally networks, developed and organized by a different set of PDCs. Trade allies are recruited and provided with calculated savings tools and a simplified incentive process. This is effective for standard measures where savings are easily calculated by common formulas with a small number of inputs. It streamlines program participation and reduces the cost of delivery, enabling a cost-effective approach to smaller projects.

A unique source of savings is the so-called “megaproject.” Megaprojects are rare and represent opportunities to achieve a great amount of savings but with total incentives above the \$500,000 threshold that requires prior board approval. The current megaproject has multiple phases, with savings to be booked over the course of multiple years. The first such booking for the current megaproject occurred in 2012. Although these projects are technically categorized as custom capital projects, they are called out in this analysis because of the massive impact had on total savings for a year as clearly seen in 2005 and 2009.

Charts and graphs in the sections below contain results of electric and gas savings analysis showing the sources of Production Efficiency’s 2012 and historical savings.

A. Electric Sources of Savings

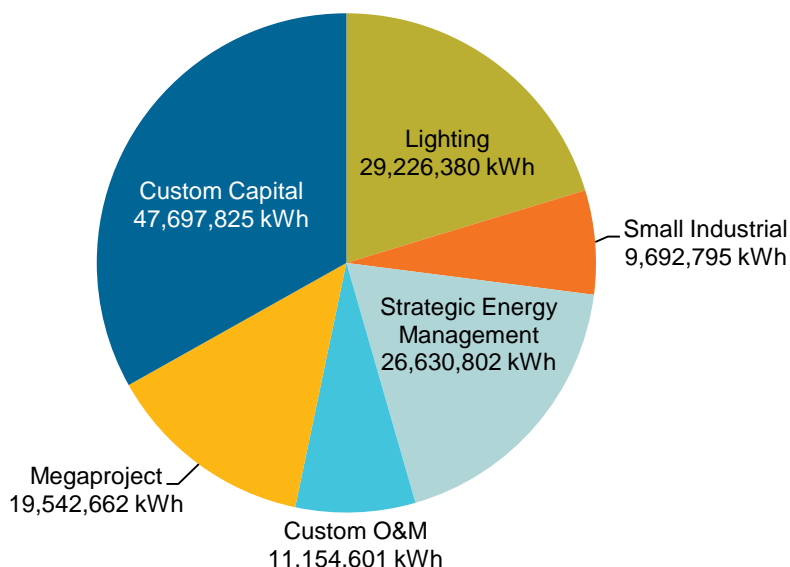


Figure 1: 2012 electric sources of savings (working kWh)

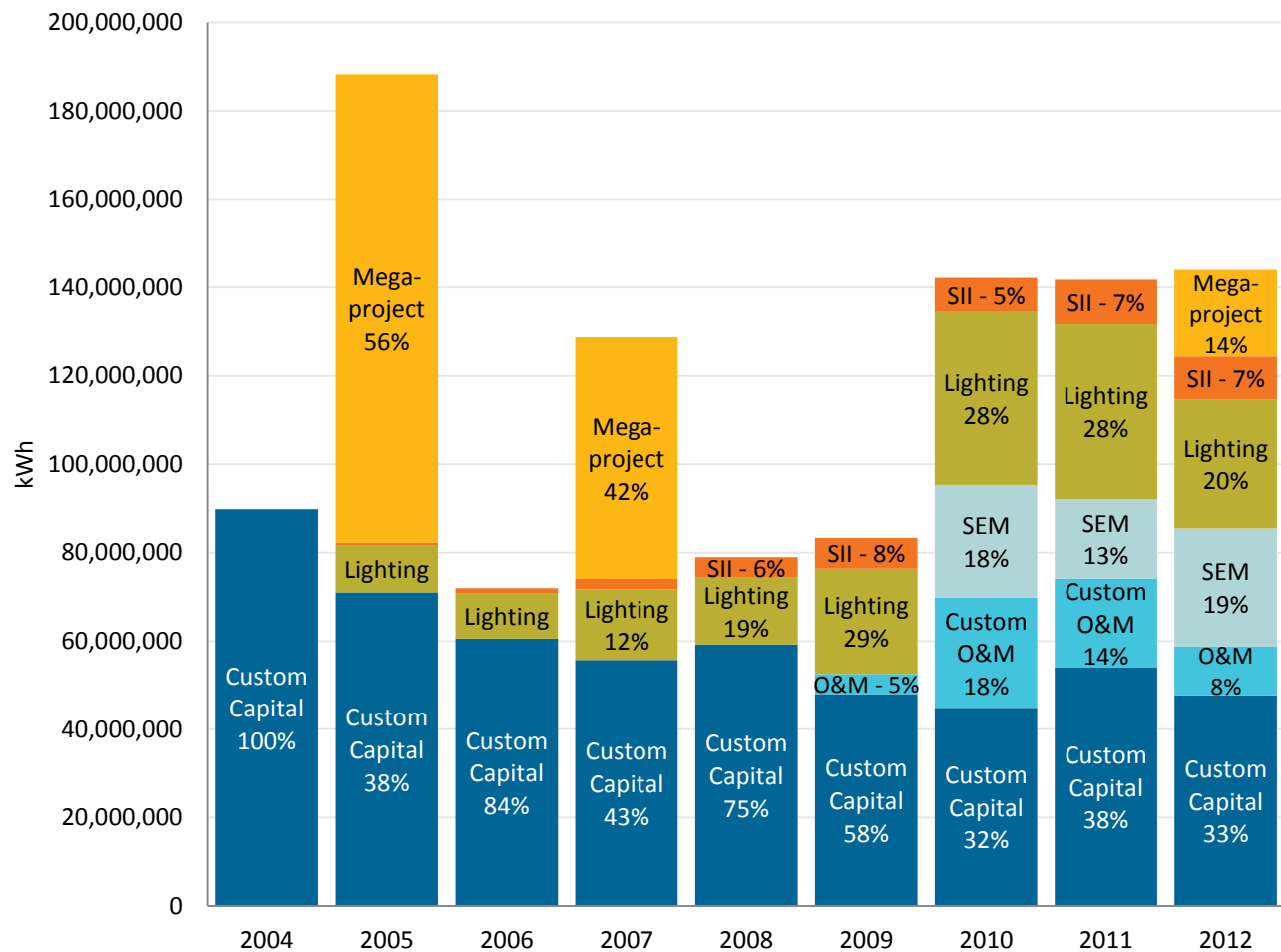


Figure 2: Electric sources of savings from 2004 – 2012 (working kWh)

- 73 percent of electric savings in 2012 came from the Custom track (capital, O&M, SEM) while 27 percent of savings came from streamlined tracks (lighting & small industrial).
- In 2008, Production Efficiency began an intentional strategy to diversify the program's offerings. The boost from this approach was most pronounced between 2009 and 2010, with new O&M and SEM offerings delivering a substantial increase in savings in 2010. This increase has been maintained for the past three years.
- The diversification of offerings has helped the program round out its portfolio as the contribution of savings fluctuates between offerings. In 2012, the savings from a megaproject and increased savings from SEM compensated for decreased savings from custom capital, custom O&M and industrial lighting projects.
- The savings from strategic energy management engagements increased by nearly 50 percent in 2012 with another successful industrial energy improvement (IEI) cohort as well as the first booking of savings from IEI maintenance and corporate SEM offerings.
- Industrial lighting savings almost doubled between 2009 and 2010, and the level of lighting savings was maintained in 2011 through deployment of the 2011 Fall Bonus. Although a greater majority of lighting projects took advantage of a bonus in 2012, a lower project volume and decreased savings per project resulted in a 26 percent drop in savings from 2011. Program staff attribute this drop to the 2011 Fall Bonus which pulled projects that otherwise would have completed in 2012 into 2011.

B. Gas Sources of Savings

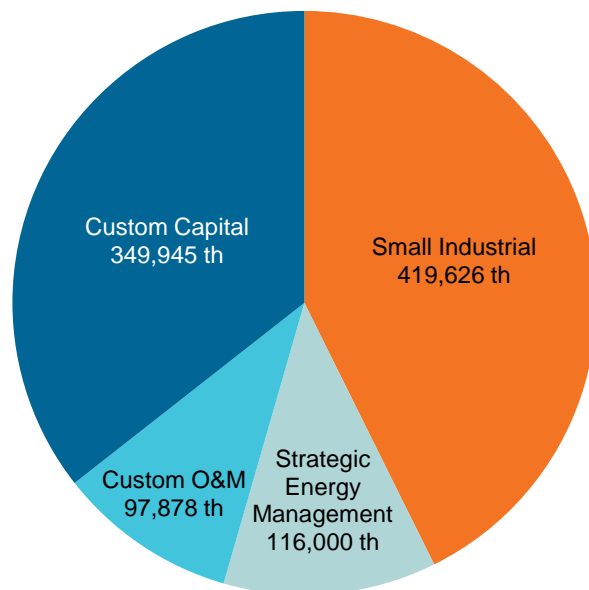


Figure 3: 2012 Gas sources of savings (working therms)

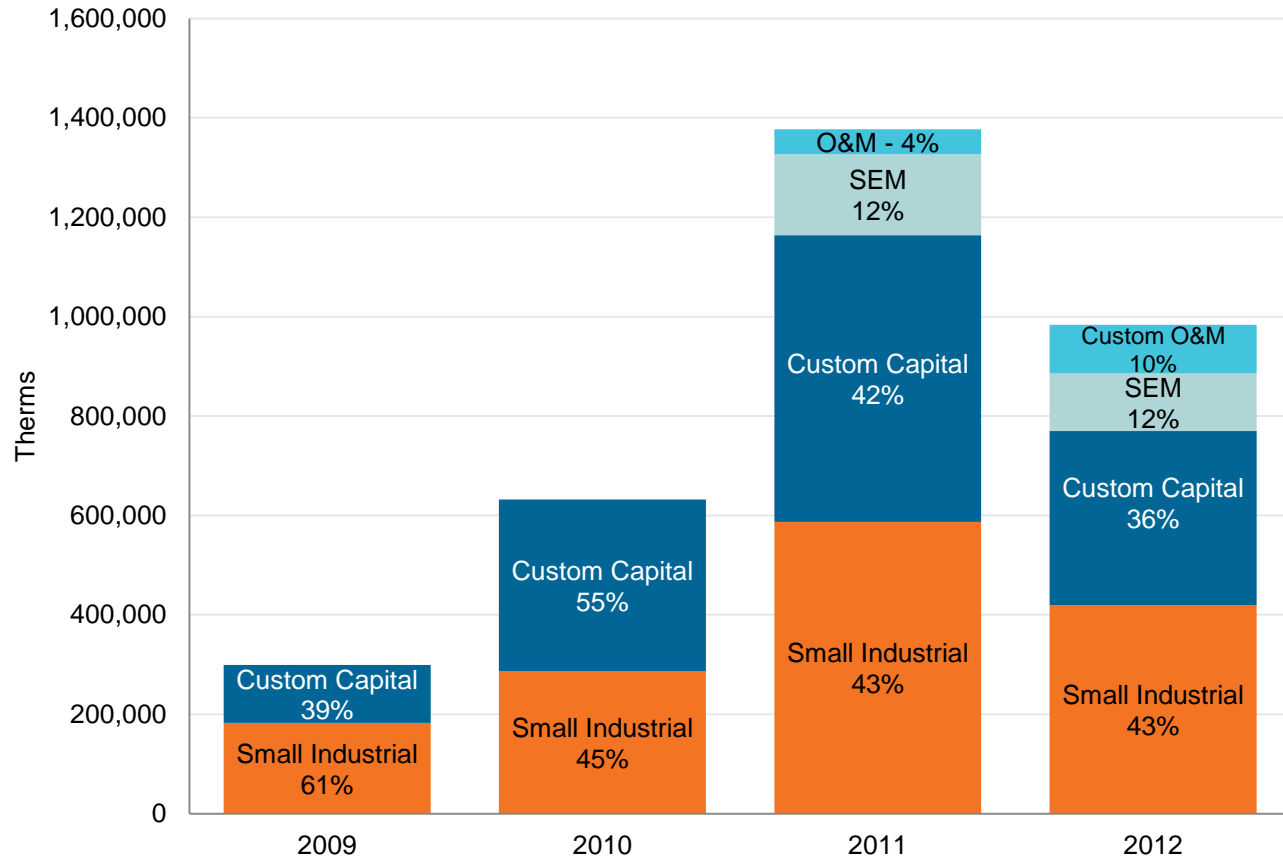


Figure 4: Gas sources of savings from 2009 – 2012 (working therms)

- 57 percent of gas savings in 2012 came from the Custom track (capital, O&M, SEM) while 43 percent of savings came from streamlined small industrial projects. This ratio has been consistent since 2010.
- SEM continued to garner gas savings in 2012. Two 2011 Industrial Energy Improvement (IEI) participants were eligible for gas and their SEM implementation efforts brought in 9 percent of total gas savings in 2012 which is roughly the same percentage as 2011.
- There was a 31 percent decrease in gas savings from 2011 to 2012. It is the nature of natural gas outcomes to be heavily influenced by the shifting completion dates of a small number of big projects. In 2011, the program saw the completion of a few big projects that affected the savings. In 2012, a couple of large projects pushed at the last second from 2012 to an expected completion in 2013. Small industrial, custom capital and SEM offerings saw 30-40 percent decreases from 2011 while custom O&M savings doubled.

C. Program Volume

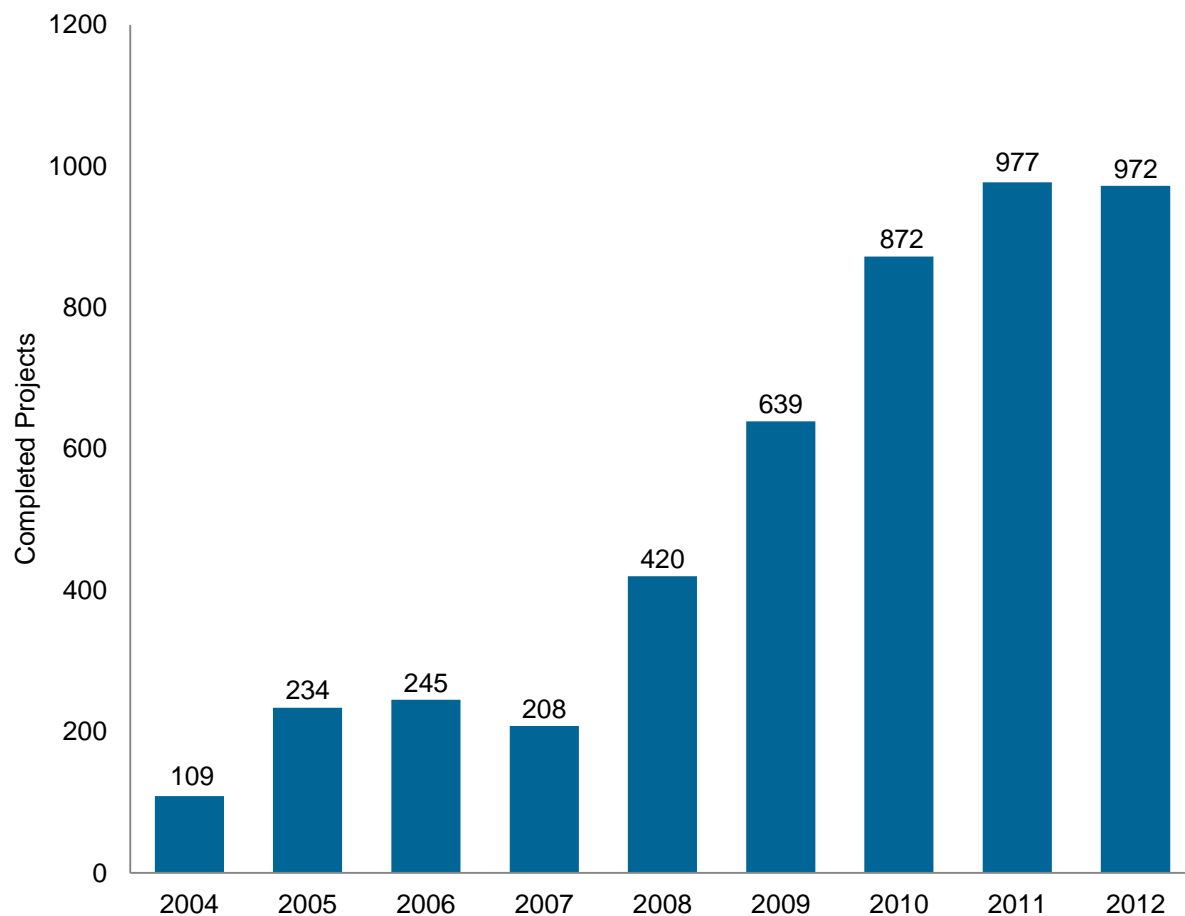


Figure 5: Count of Production Efficiency projects 2004 - 2012

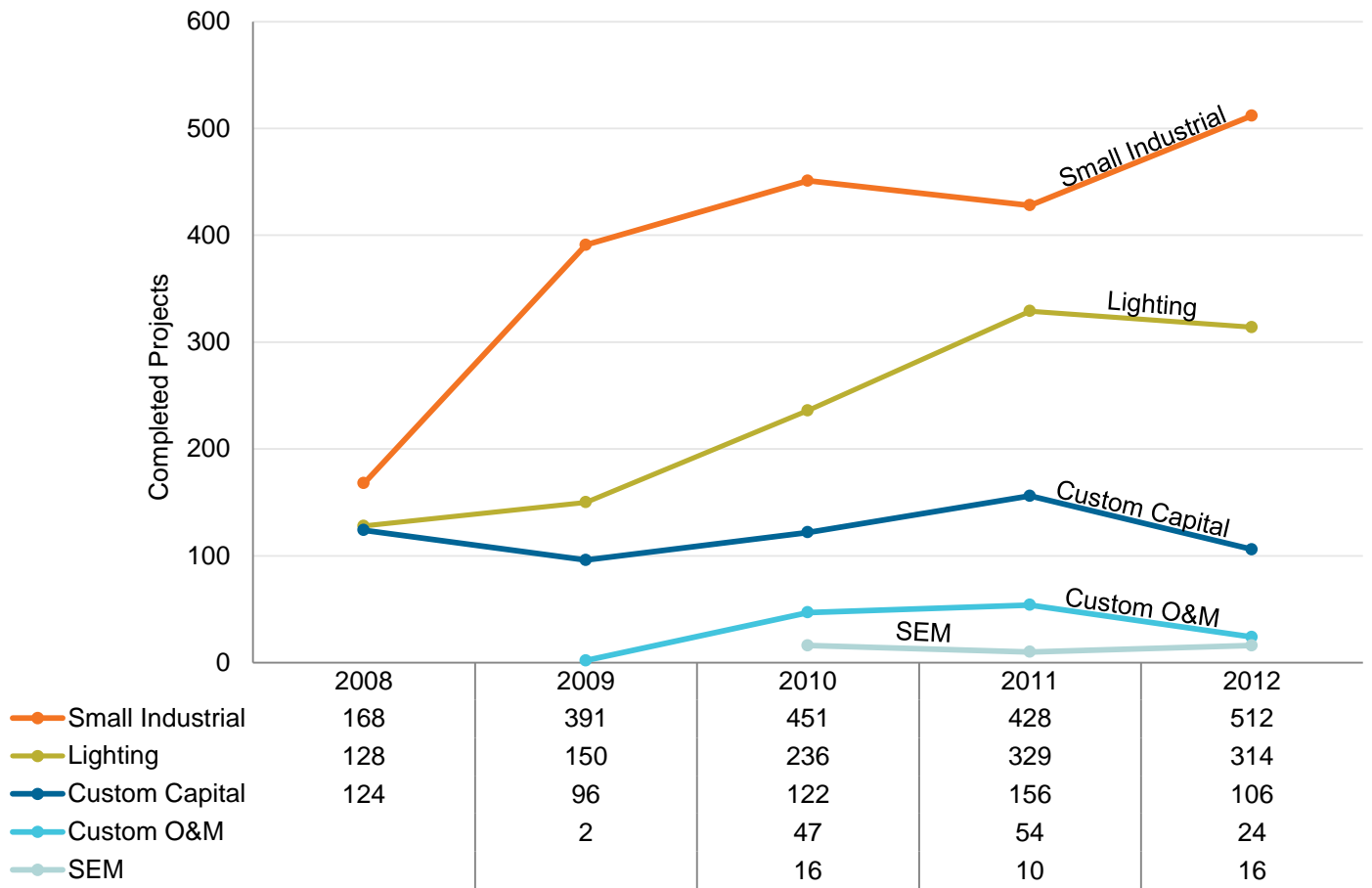


Figure 6: Project counts by sources of savings, 2008 – 2012

- Production Efficiency’s project volume increased steadily and substantially from 2008 to 2011. This ramp in volume came from increases in industrial lighting and the Small Industrial projects. In 2012, total project volume was the same as the year prior.
- There was a 20 percent increase in small industrial projects in 2012 as well as a 60 percent increase in SEM-engaged sites claiming savings. The small industrial increase was largely due to a 54 percent increase in irrigation projects, concomitant with a 44 percent increase in electric savings and a 74 percent increase in gas savings. Custom capital projects dropped in volume by about 30 percent, though increased savings per project meant that the savings drop was only 12 percent.
- Lighting had a steady increase in project volume starting in 2008 but dropped 5 percent in 2012. The average amount of savings per lighting project decreased 31 percent in 2012, resulting in the 26 percent decrease in savings referenced earlier.

III. Systems and Measures

Prescriptive measures for industrial energy uses, such as wall insulation, nozzle replacements for irrigation or thermal curtains for greenhouses, are relatively few. While many industrial systems are common, the application of these systems, including their configuration, settings and potential for savings are unique from plant to plant. Custom and calculated approaches to analysis allow the program to work with the diverse array of measures possible at manufacturing plants.

Looking at individual measures is therefore not a very useful way to view trends, but looking at the industrial systems we are addressing tells us more.

Note that “Multi-System” is a measure category referring to a comprehensive and strategic approach to tuning operations, focused on low and no cost operational changes that affect multiple systems.

The following charts show the industrial systems that had the most savings in 2012.

A. Electric

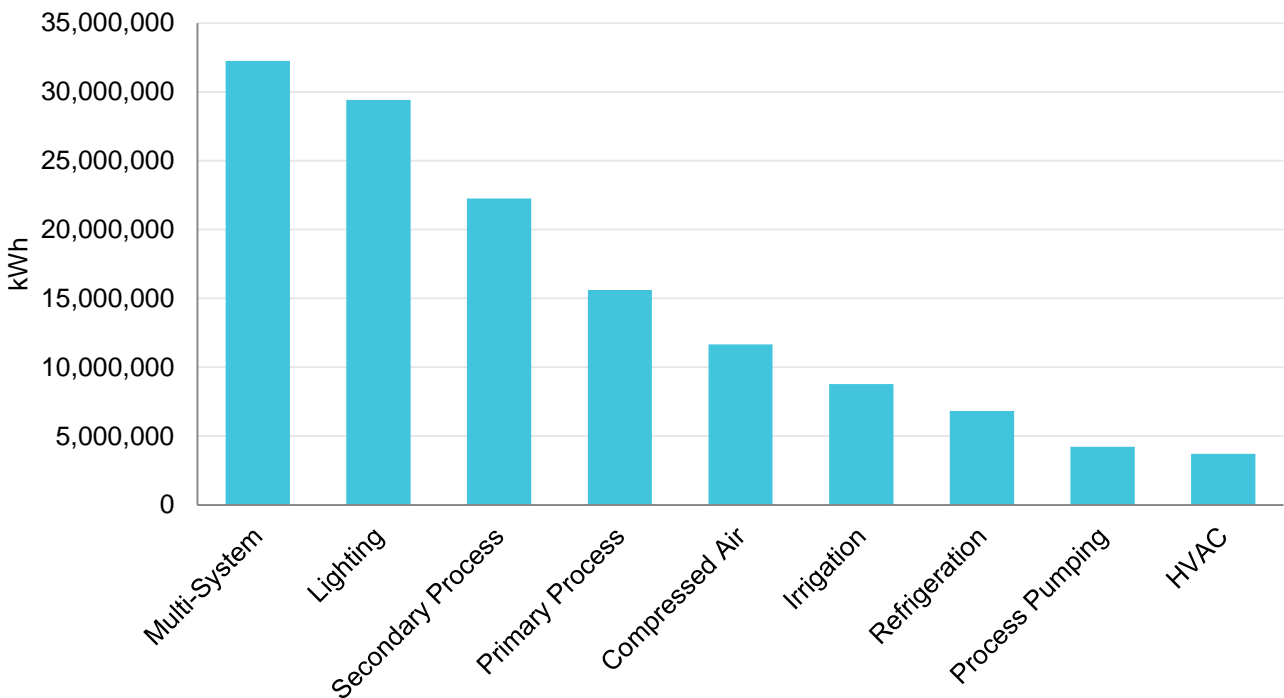


Figure 7: Electric savings from measures associated with top 10 industrial systems in 2012 (working kWh)

- Multi-system efforts from SEM engagement represented 22 percent of electric savings in 2012. Multi-system engagement has represented at least 18 percent of electric savings for the past three years.
- With lighting being a system common to all manufacturing sites, it is no wonder that it is a well-represented system type. Lighting represented 20% of savings in 2012. Despite the decreased savings in 2012, lighting has represented 25 percent of electric savings since the program began delivering lighting efficiency in 2008. (Prior to 2008 all lighting for industrial sites was handled in the Commercial program).

B. Gas

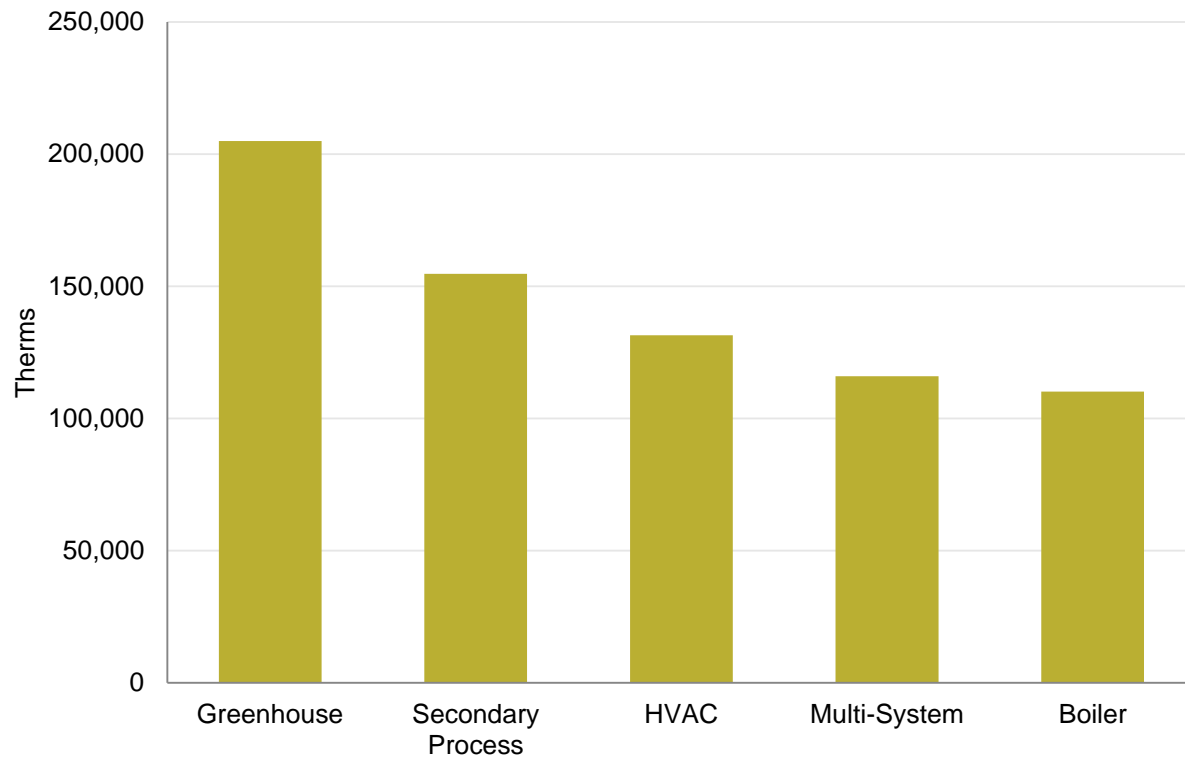


Figure 8: Gas savings from measures associated with top 5 industrial systems in 2012 (working therms)

- Greenhouse systems have been the biggest source of gas savings since the program started claiming therms in 2008. Twenty percent of therm savings in 2012 came from greenhouses. When looking at small industrial projects specifically, 50 percent of savings are from greenhouses.
- Secondary process system types are those that occur at a site but aren't directly involved with the assembly line or main process for manufacture. Gas-related examples include: water heaters, tanks, and piping.

IV. Industry Sectors

Oregon's manufacturing base is diverse, and the program has made terrific inroads over the past 4 years to broaden beyond the wood products and pulp & paper industry that represented the majority of program savings from 2003 – 2007.

We advise caution in considering industry sectors too heavily in program design or reporting. Although it is helpful to understand who our active customers are and to target outreach to industries with the highest technical potential for savings, the program has learned a lot about how these sectors self-identify or don't. With the exception of food processors and nurseries, both of which have strong professional associations, industrial businesses are more affiliated with other industrial businesses that share their culture, rather than those that manufacture the same product. An example of this is the Lean manufacturing movement, where leaders in any type of industry come together to share best practices. These diverse Lean manufacturers have more in common with each other and influence each other much more than they affiliate with less progressive competitors in their own sector. This understanding has been used to great effect in recruiting for cohort based SEM offerings, where we have focused on bringing together companies that share culture more than they share industry type.

The following charts show the sectors that had the most savings in 2012.

A. Electric

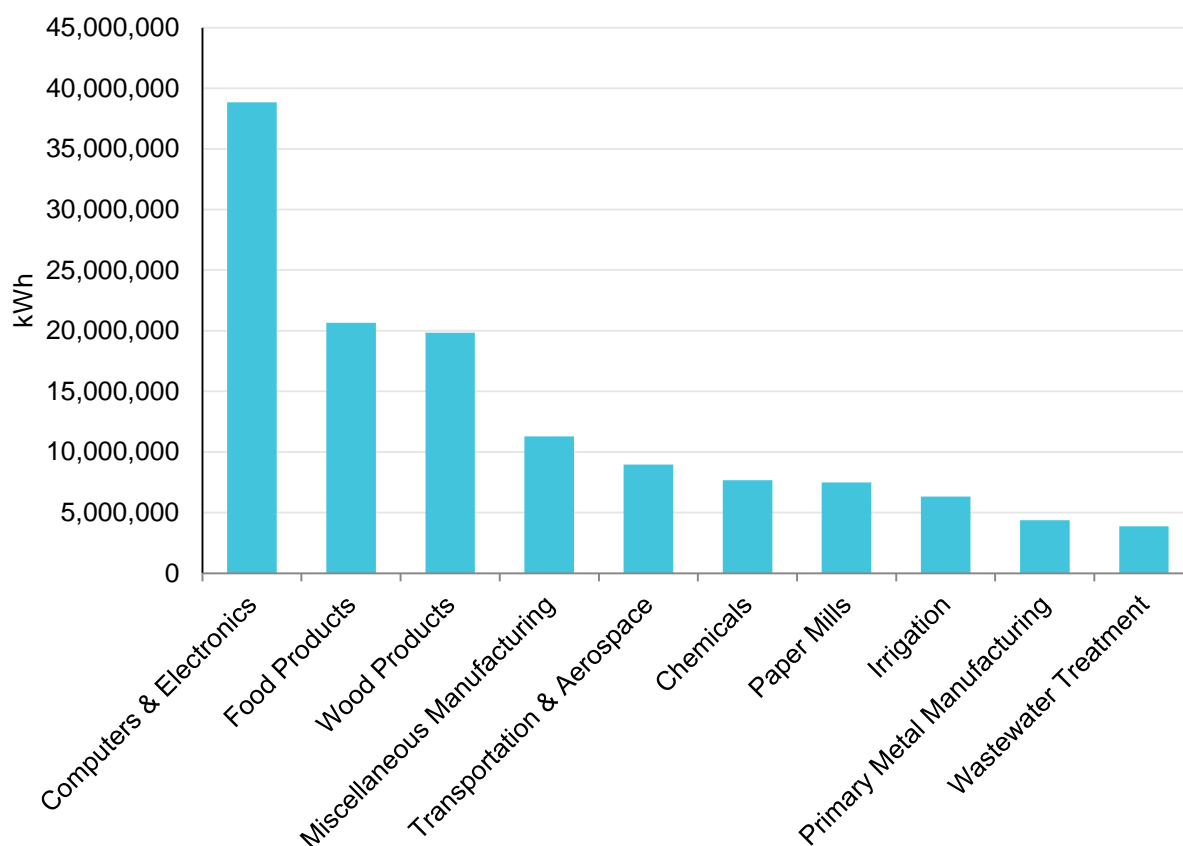


Figure 9: Electric savings from top 10 industry types that participated in 2012 (working kWh)

- The high tech industry has long been recognized as the industry with the greatest electric savings potential, yet the program had difficulty making inroads in years past. Over the past four years actions taken have begun to turn this around. Assigning a dedicated PDC to 10 of the high potential under-participating sites in 2009, as well as a megaproject in a new semi-conductor manufacturing

plant are bringing the program closer to realizing that sector's potential. Without the savings from the megaproject, the electric savings from the sector in 2012 would be at the same level as food products and wood products.

- Food products and wood products each contributed 14 percent to electric savings in 2012. For food products, this represents a 19 percent increase, while for wood products it was a 23 percent decrease from the year prior.

B. Gas

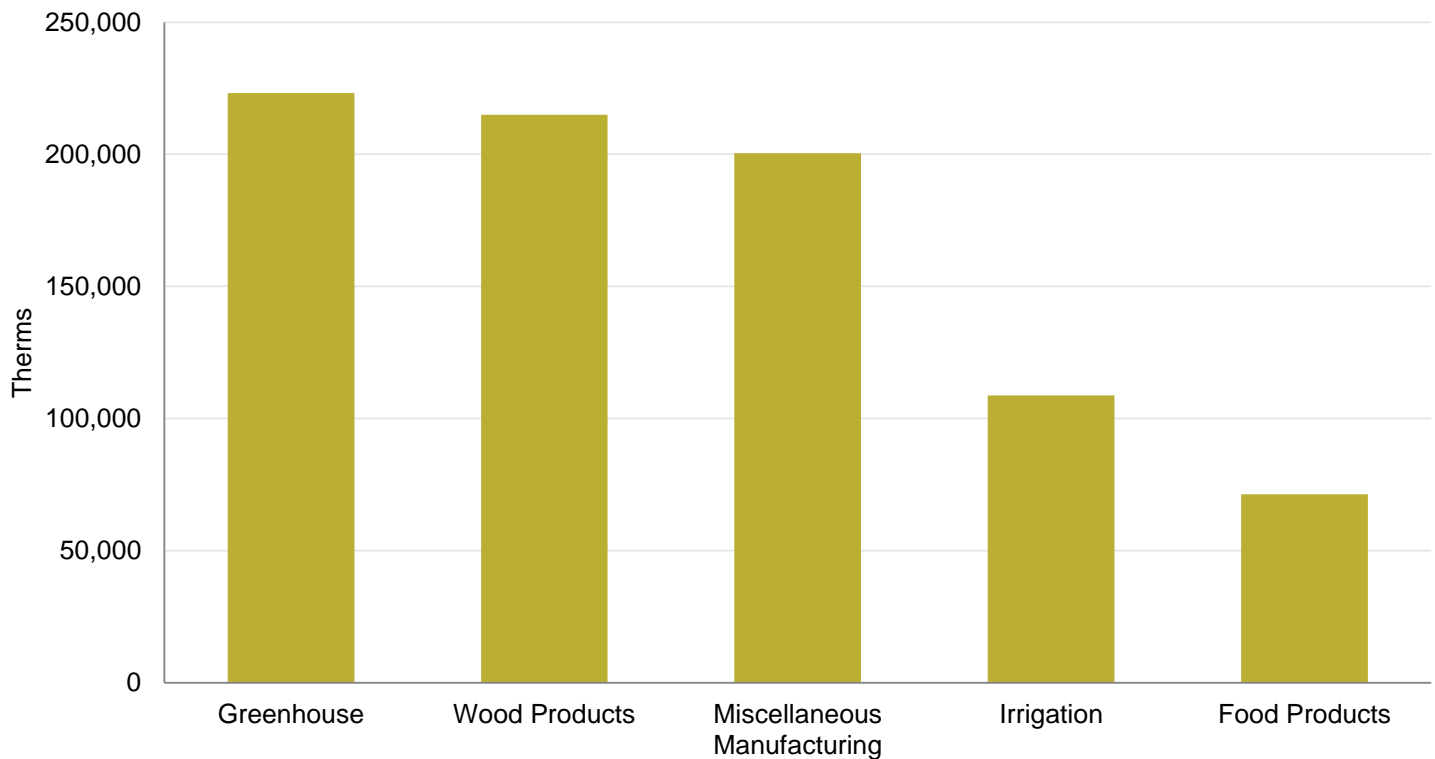


Figure 10: Gas savings from top 5 industry types that participated in 2012 (working therms)

- Greenhouses, seen both as an industry sector and system type, garnered 23 percent of gas savings in 2012. .
- The fact that irrigation made the top list in terms of electric savings is also a surprise, given the small loads associated with agriculture (~ 1 percent of the industrial technical potential). The Small Industrial Initiative is delivering these projects with high volume and low transaction costs, achieving a 44 percent savings increase in 2012.

V. Incentive Costs

An area that shows the program's changing landscape is the average incentive cost per unit of savings, be it a kilowatt-hour or a therm. In some tracks, incentive costs have risen as projects with the largest yield are completed throughout the state. However, efforts that focus on low-cost to no-cost improvements with big potential have garnered savings relatively cheaply.

This analysis focuses on the average cash incentive paid per first-year kWh or therm of energy savings. This information is most useful to budget for incentives needed to meet annual goals and for seeing trends that inform or tune incentive design.

It does not analyze levelized costs, which spreads the first year investment over the life of the measure, and is the basis of Energy Trust's performance metrics to the OPUC. For purposes of simple comparison, custom capital projects have a 15 year measure life, while custom O&M projects and SEM have a 3 year measure life. When comparing these sources of savings for program design and planning, it is important to look at both incentive costs and levelized costs.

The following charts show Production Efficiency's historical trends for incentive costs expressed as cents per unit (kWh/therm) of first-year savings. Note that dollar values are nominal. Inflation is not accounted for.

A. Electric

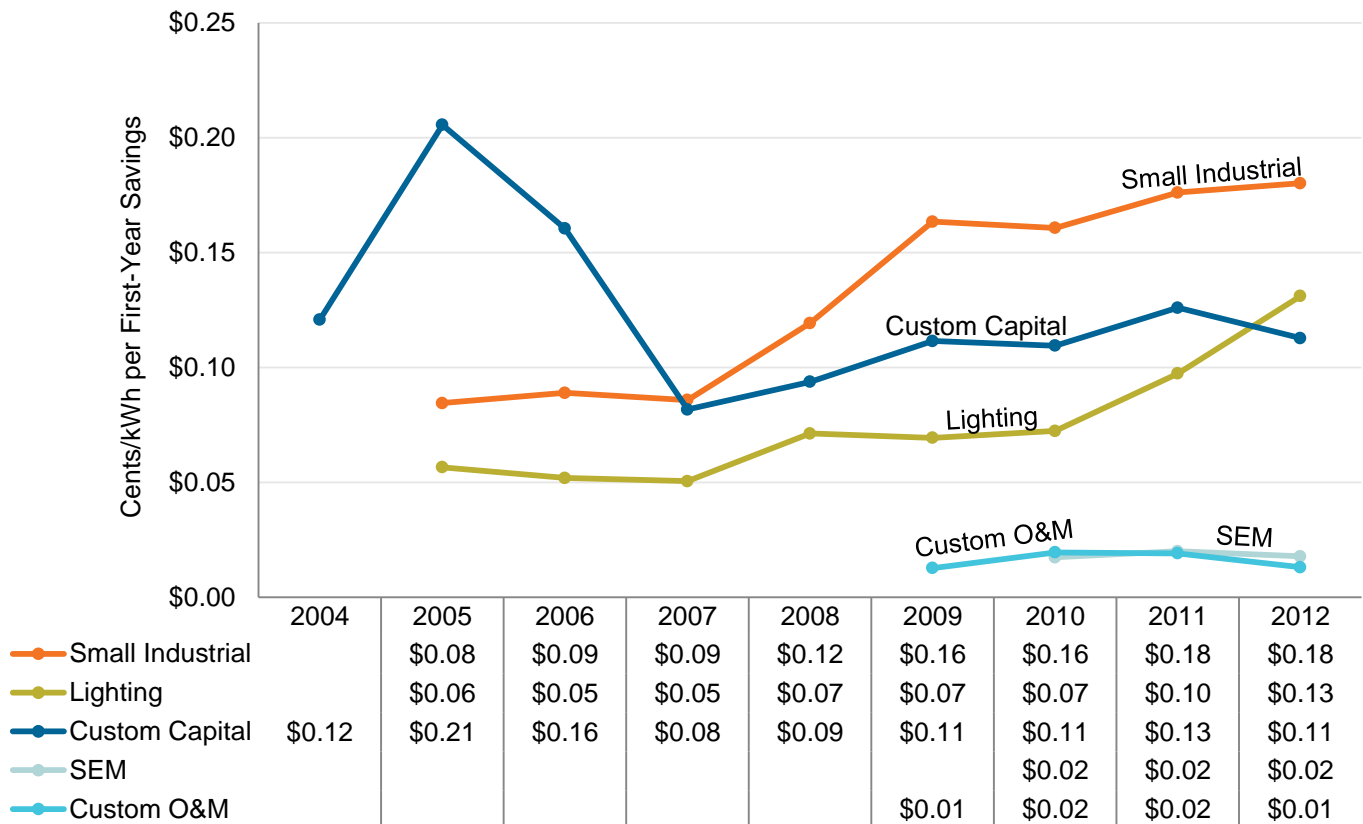


Figure 11: Cents per kWh paid by sources of savings from 2004 to 2012 (working electric)

- Overall, the average incentive per kWh of first-year savings in 2012 remained consistent with 2011 at 11 cents per kWh.

- The streamlined tracks' incentive costs increased during the past two years. Lighting's dramatic cost increase is due to fewer savings per project, as well as the 2011 Fall and Kick-Start bonuses which drove savings but also increased incentive costs. Since 2010, lighting incentive costs increased 81 percent. If the impact of bonuses is removed, this increase is still 56 percent. Small industrial's increase is due entirely to the bonuses, which once accounted for, holds steady from 2009 through 2012.
- Custom capital incentive costs fell in 2012 despite the availability of the Kick-Start bonus. Since these are longer term projects, the costs of the Kick-Start bonus will not be felt until 2013 or later (the bonus was designed to get participants to *commit* by a certain date rather than *complete*, which is how the Fall 2011 bonus was designed).
- SEM and custom O&M offerings were designed to garner lower-cost savings for the program. Taken together, these sources of savings have provided a quarter of the program's savings since 2009 for only 2 cents per kWh.

B. Gas

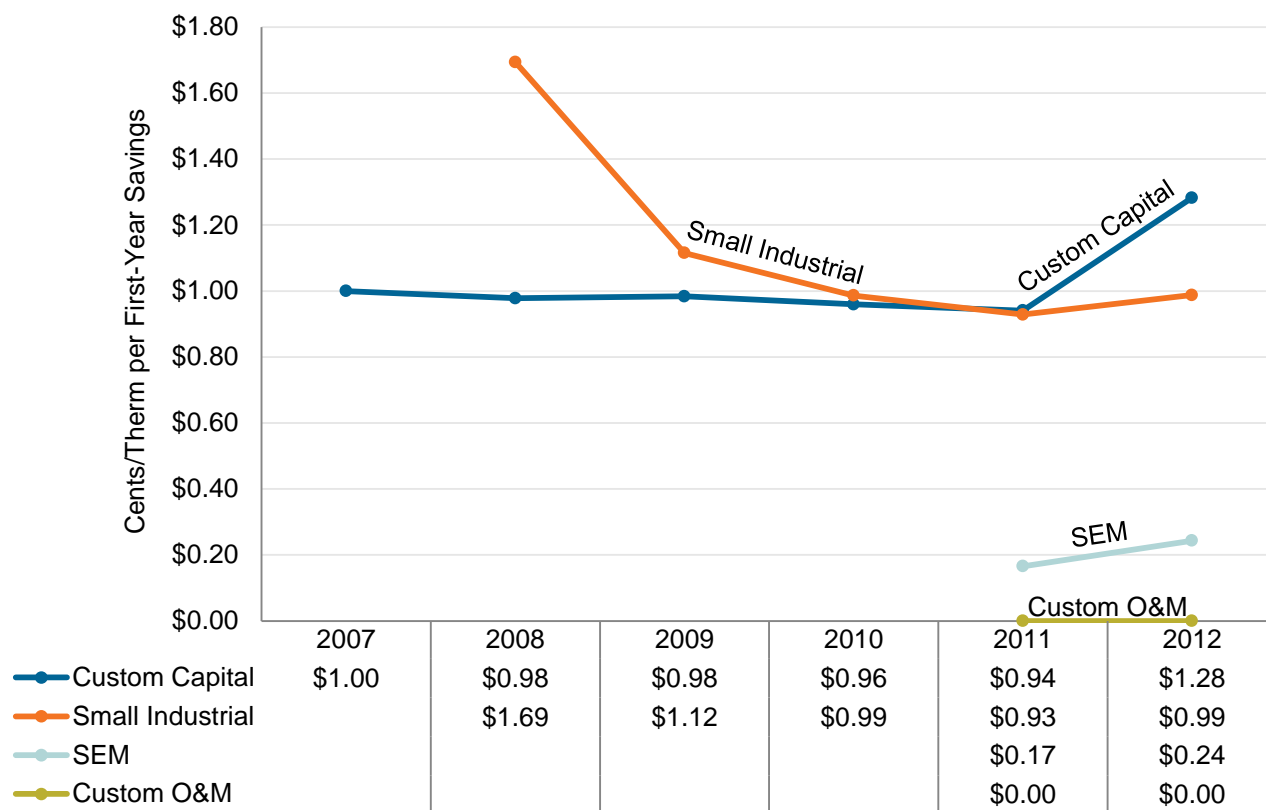


Figure 12: Cents per therm paid by sources of savings from 2007 to 2012 (working gas)

- As a program, average incentive per therm of first-year savings increased by 10 cents to \$0.91 in 2012. Once bonuses are accounted for, there is no change from 2011. In general, average incentive costs for therms have been down in the past two years due to extremely low-cost savings from O&M and SEM sources of savings.
- Custom capital projects saw a 34 cent increase in average incentive cost per therm of savings. Fifteen cents of that increase was due to projects completing with the Kick-Start bonus in 2012, in conjunction with an unusually large and cost-effective project in 2011 that closed with an incentive cost of 56 cents per therm.



Industry & Ag 2012 Trends: Measures, Markets, and Sources of Savings

Energy Trust's Production Efficiency Team

PE

Production Efficiency program, developed & managed in house by **Energy Trust Industry and Ag Sector staff**

PDC

Program Delivery Contractors are industrial efficiency experts (6 PDCs in 2009 – 2013)

- bring the program to market in assigned territories, meet savings goals
- work directly with industrial energy users or through **Trade Allies**

Custom Technical Services

ATAC

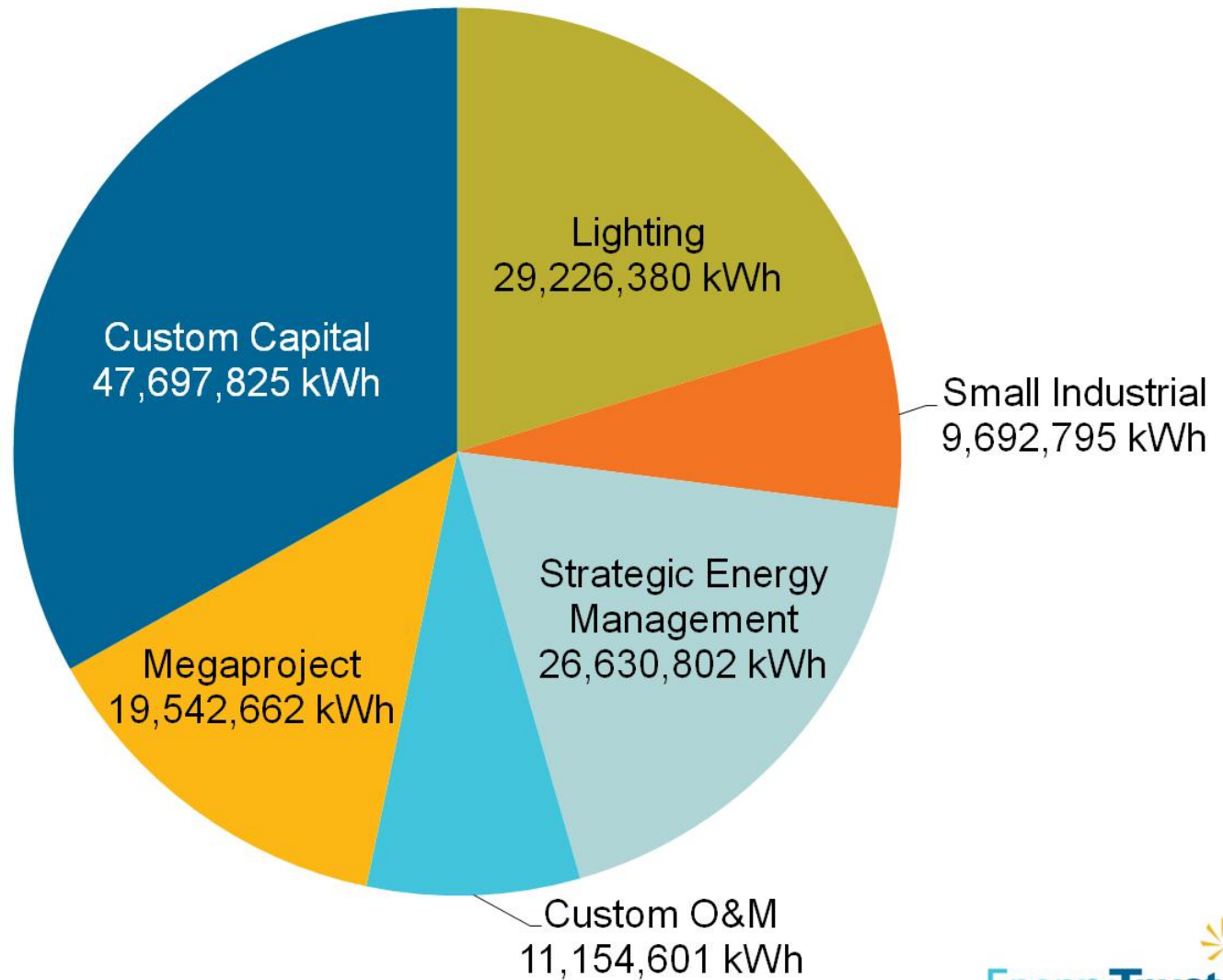
Allied Technical Assistance Contractors are engineering consultants, perform technical studies, savings verification

ITSP

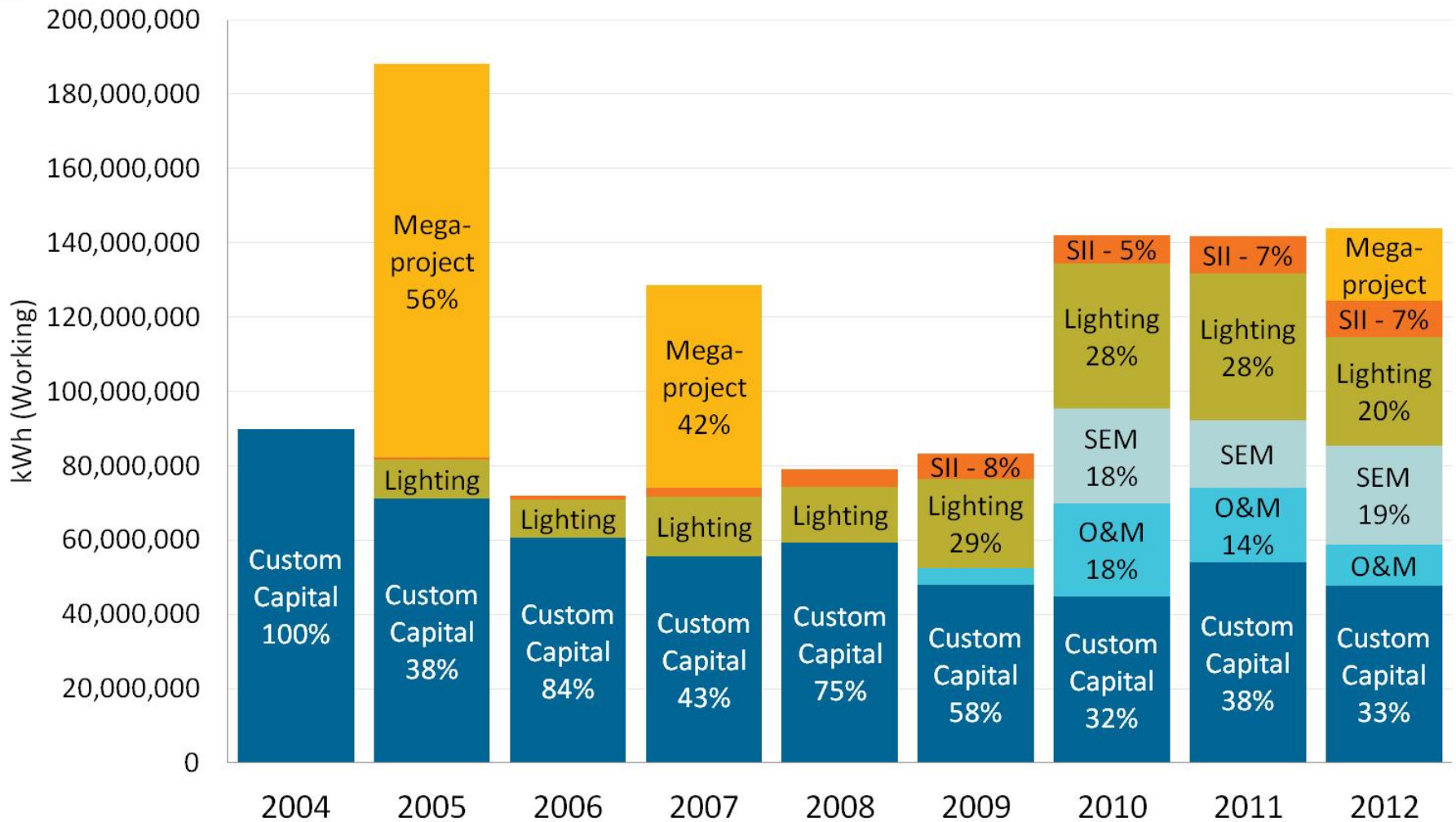
Industrial Technical Service Providers are consultants who provide Strategic Energy Management services or other similar direct technical services

Sources of Savings

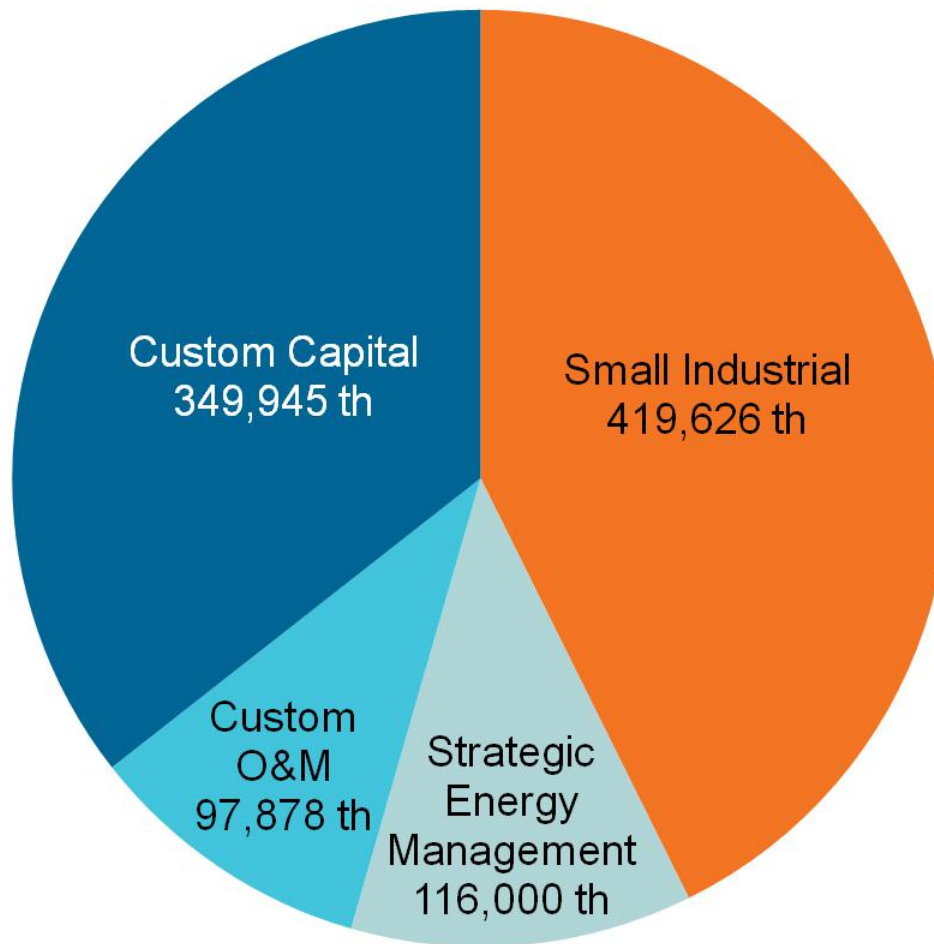
Electric - Sources of Savings - 2012



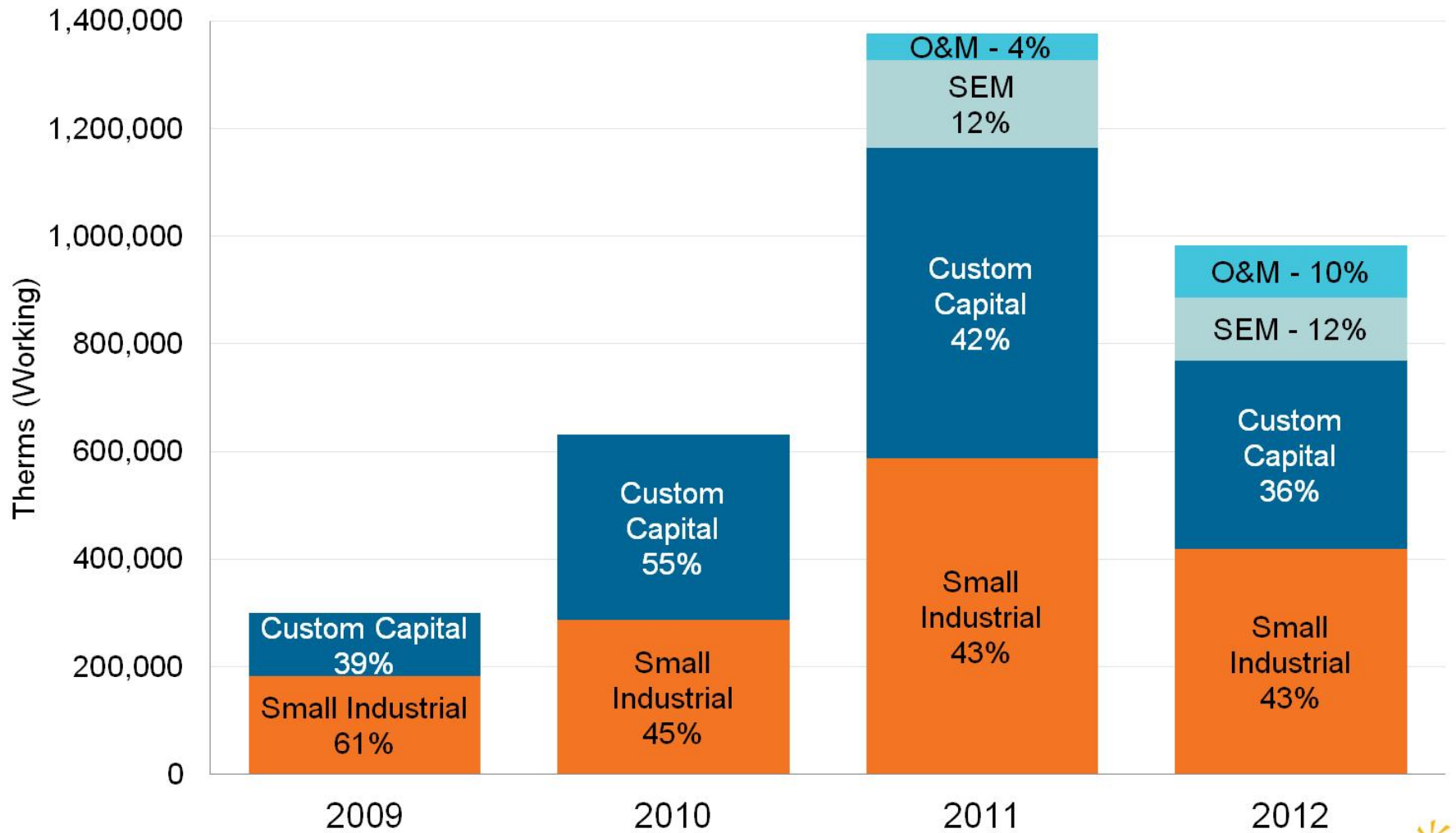
Electric – Sources of Savings – 2004 to 2012



Gas - Sources of Savings - 2011

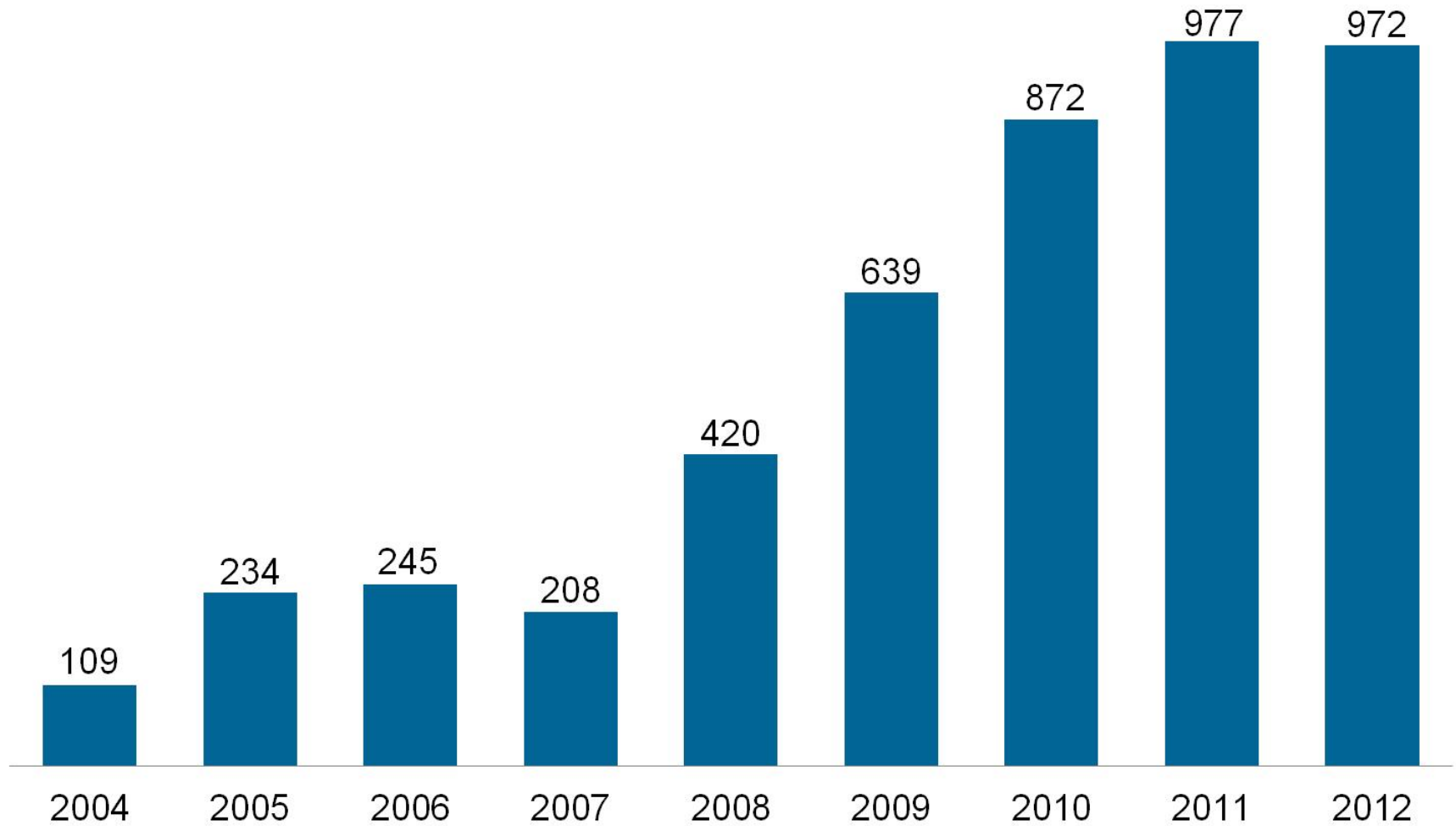


Gas - Sources of Savings – 2009 to 2012

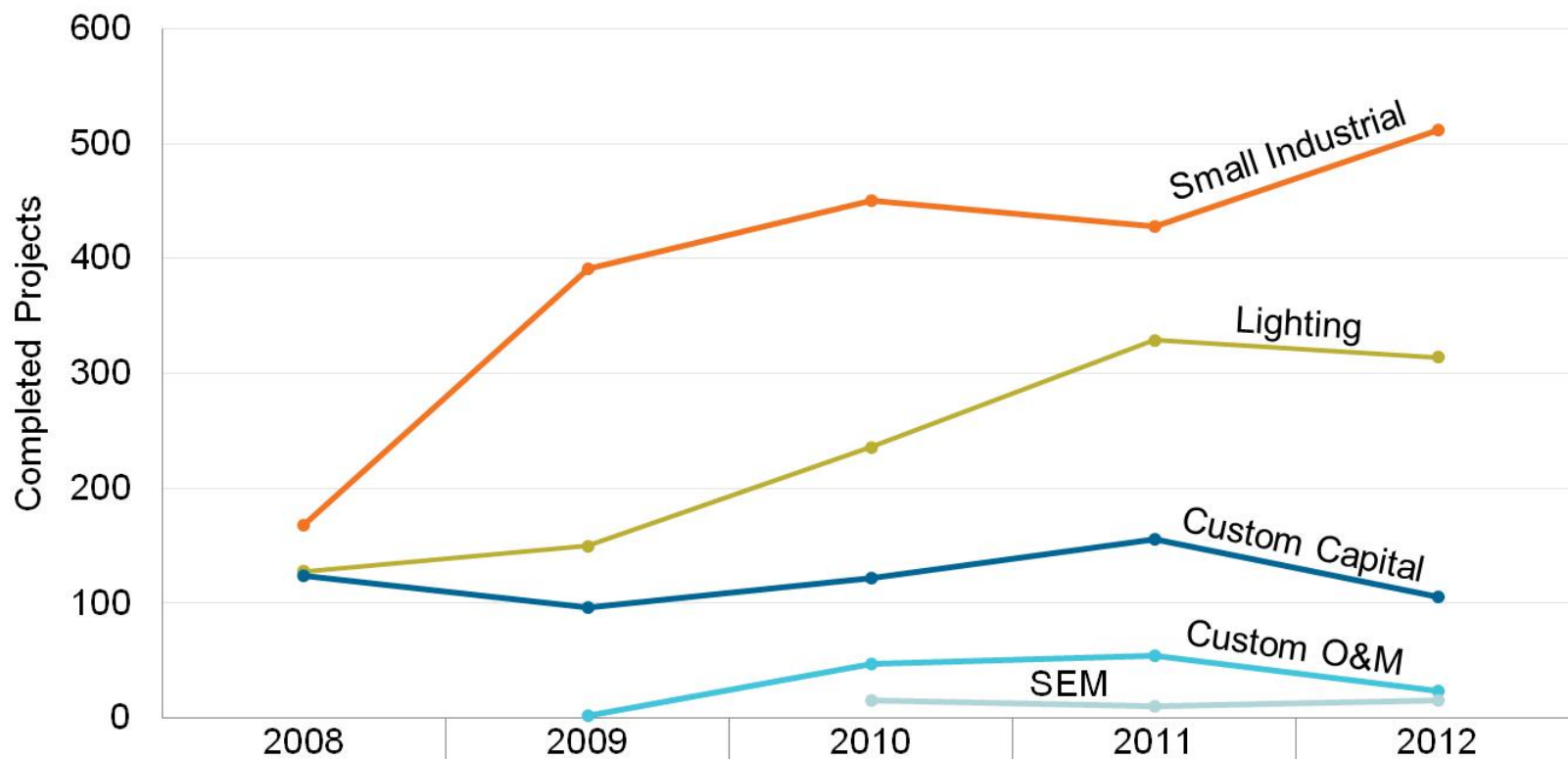


Volume of Projects

Completed Projects – 2004 to 2012



Completed Projects – Sources of Savings – 2008 to 2012

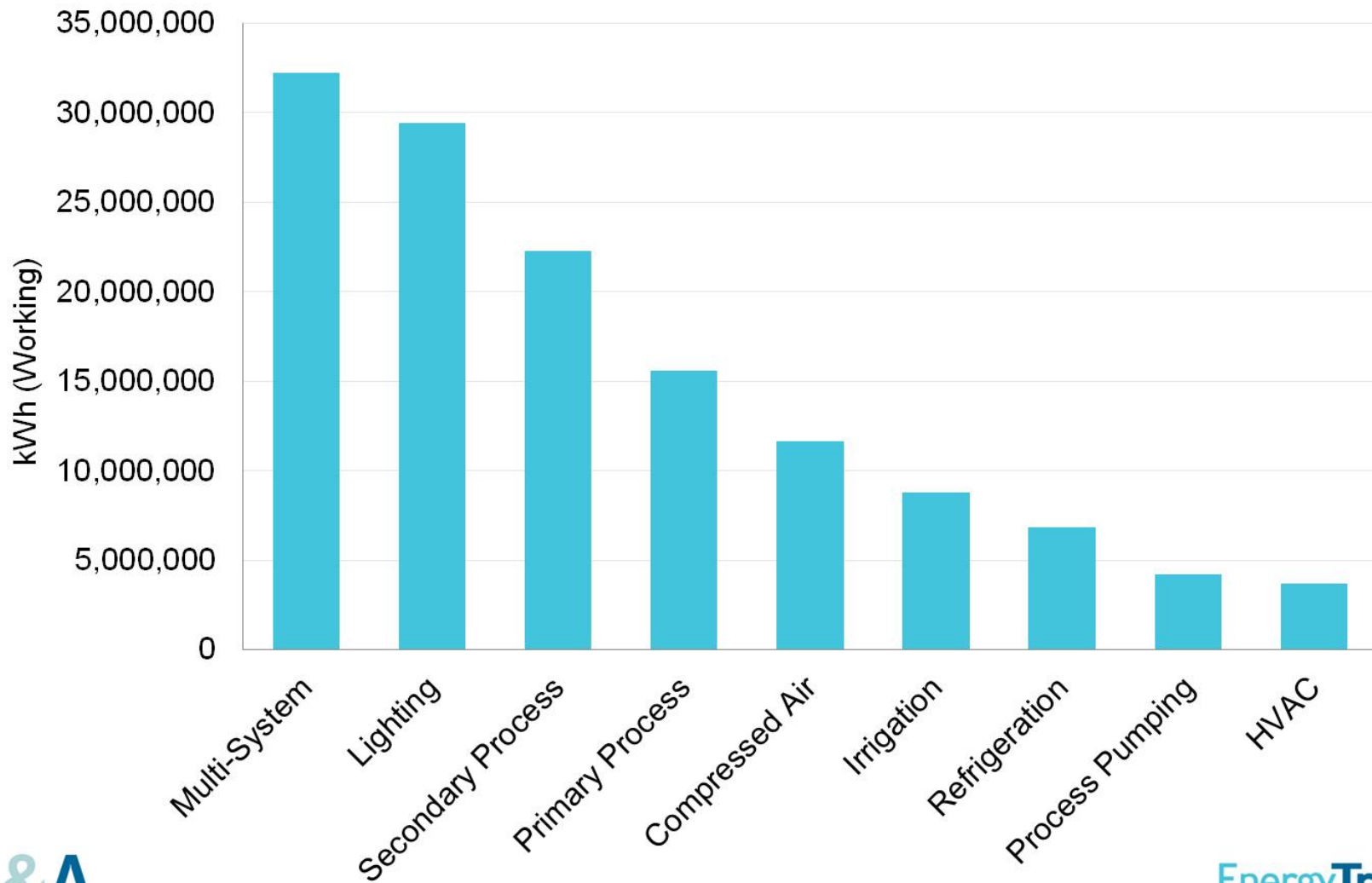


- Small Industrial
- Lighting
- Custom Capital
- Custom O&M
- SEM

Measures: Savings by System Type

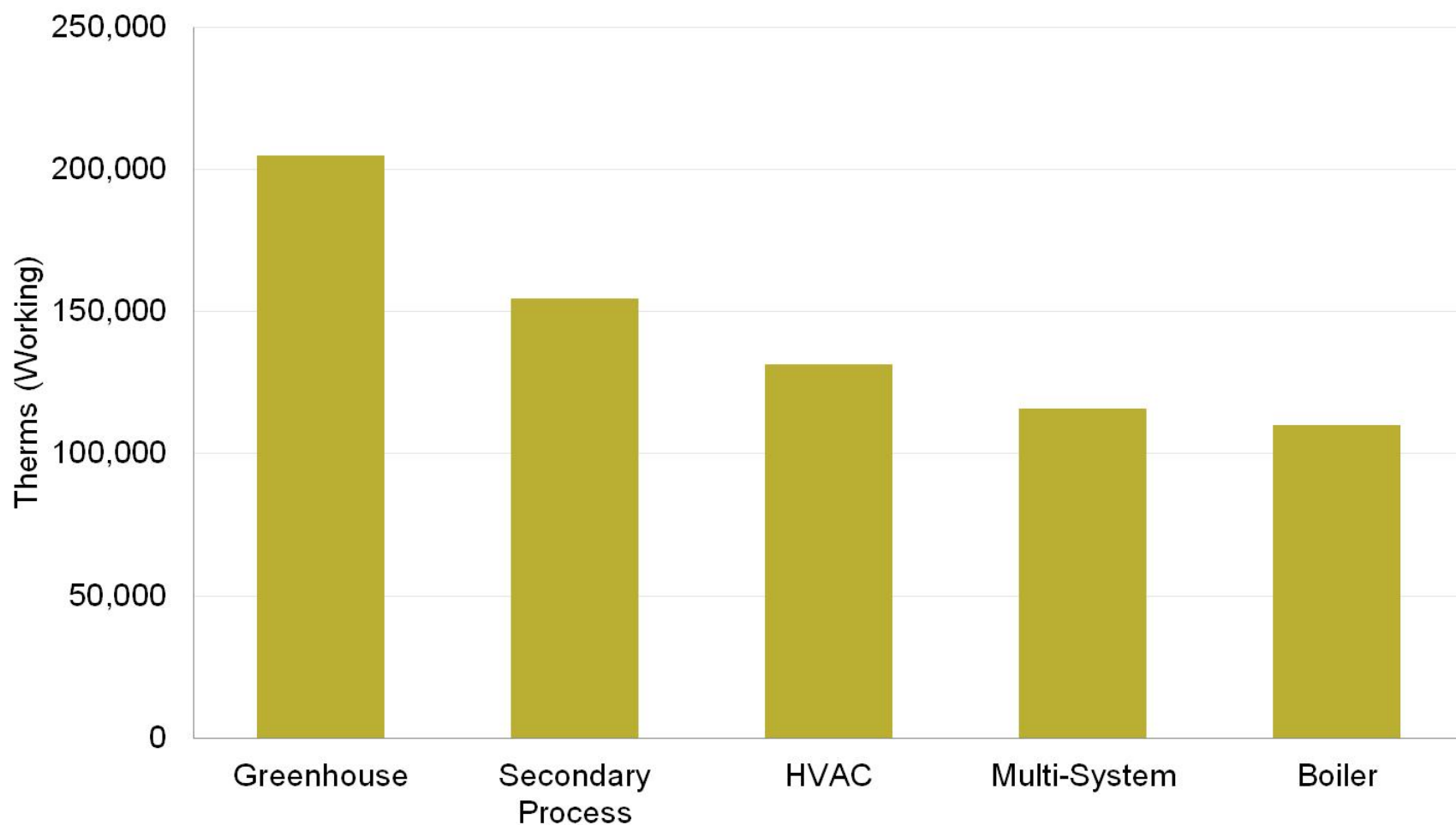


Electric – System Type (Top 10) - 2012



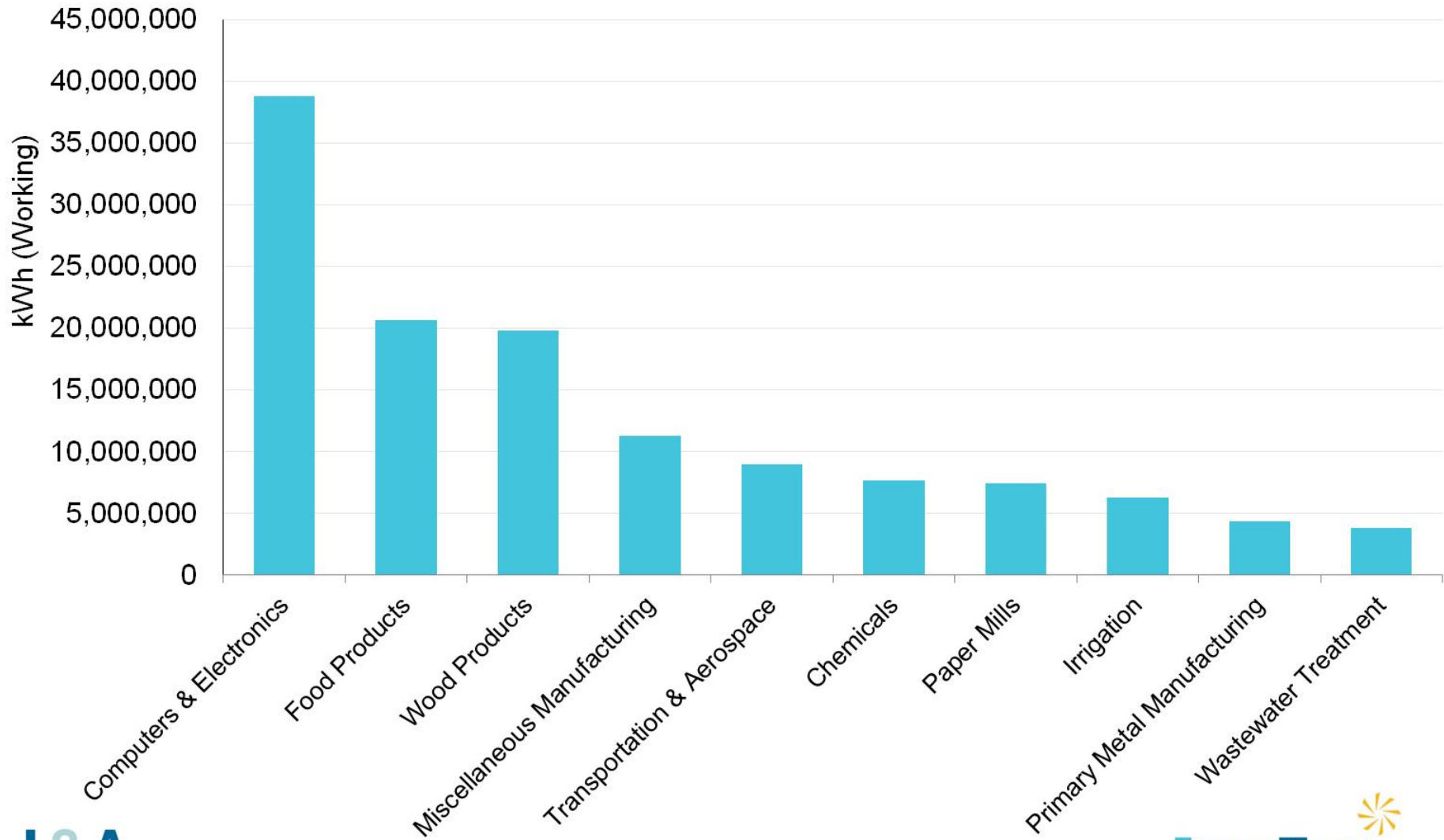


Gas – System Type (Top 5) - 2012

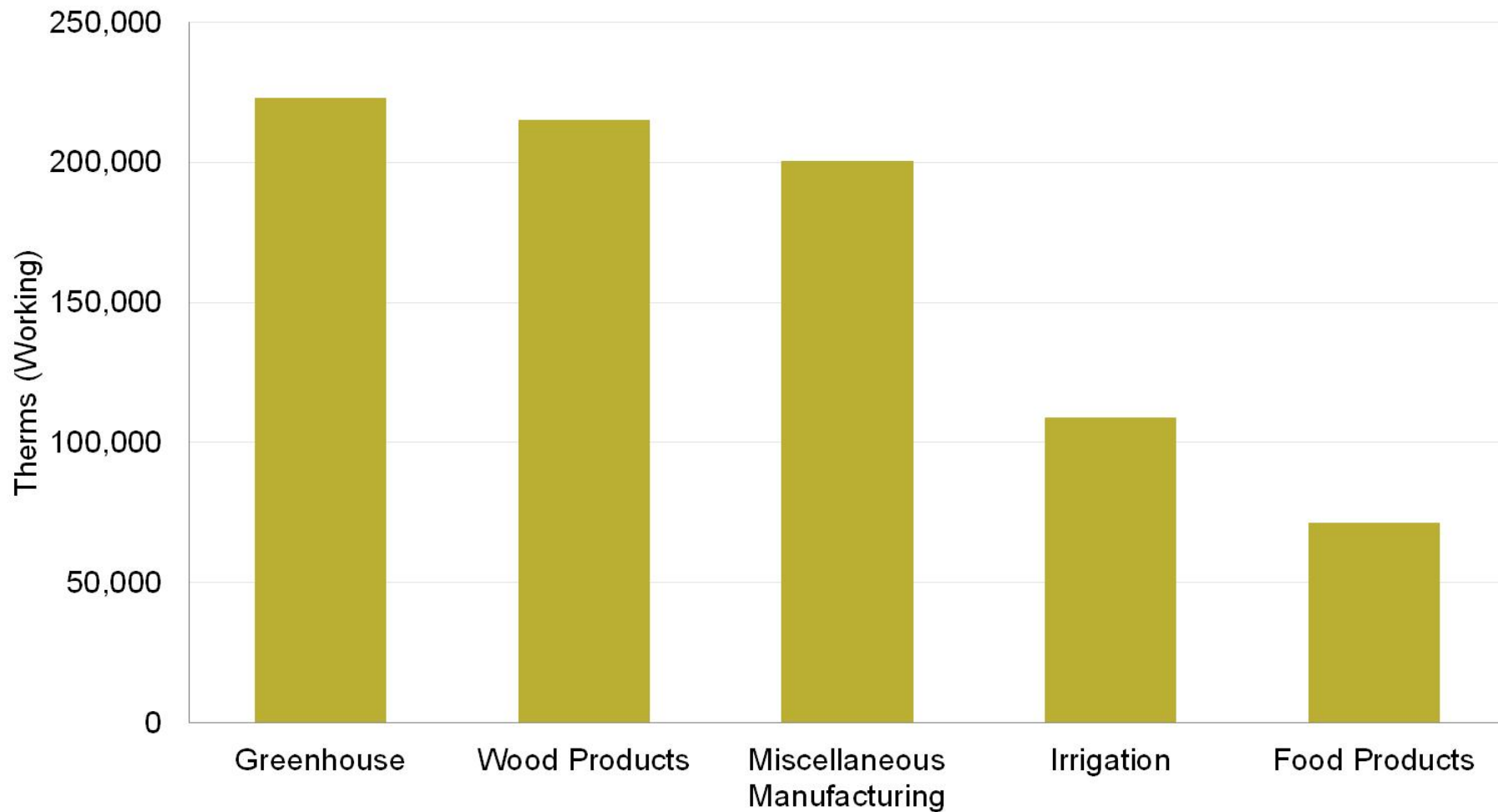


Markets: Savings by Industry Type

Electric – Industry (Top 10) - 2012



Gas – Industry (top 5) - 2012





Overcoming barriers to lasting, energy-efficient customer relationships

Susan Jowaiszas, Sr. Marketing Manager
Commercial + Industrial
Conservation Advisory Council/May 2013





Energy Trust had some questions ...

- How do our customers make decisions?
- How can we segment our markets?
- What are the barriers to action, really?



Conventional wisdom....

Customers don't invest in Energy Efficiency because.....

- No money to invest
- No expertise to implement
- No ideas on how to save
- No faith in savings
- No acceptable payback or return
- No clear decision-making path

A grey donkey is standing on a dirt path, looking towards the camera with its mouth wide open, revealing its teeth and tongue. The donkey has a light grey coat with a white patch on its belly. The background shows a dirt path with some sparse vegetation and a building in the distance.

**You know what they say
about assumptions ...**



Research areas

- Industrial
- Existing buildings
- New buildings
- Existing multifamily





Existing buildings



New buildings



Existing multifamily





Findings...

**...or, what we learned from
customers in all four sectors.**



Customers value

- **Cash**
- **ROI**
- **Assistance**





Customer motives

- 1.5 to 3-year is the simple payback sweet spot
- Cash vs. financing
- Incentives



Decision-makers

What the CFO thinks.....





Customers like.....

- **Easy**
- **Solid**
- **Visible**





The soft benefits

- Company image?
- Customer relationships?
- Workplace conditions?
- Sustainability?

Can we segment by sector?





How *can* we slice it?

- Service-provider priorities
 - Comfort
 - Sustainability
 - Image
- Size + energy use
- Leased vs. owned





Other segmentation factors

- Education level of energy champions
- Financial health of company
- Location – Metro vs. rural



Culture is the biggest factor





What's a marketer to do?

- Tune-up message about benefits
- Focus on what's in it for them
- Clear, easy path to programs



Our least compelling messages



- Energy Efficiency creates a competitive edge for business
- Customers will be impressed that you're concerned about the environment and support you more



Our most compelling messages

- Energy Trust makes it easy to save energy by providing free technical expertise that's worth thousands of \$\$\$
- Energy Trust pays you to save energy





Marketing ideas we're trying

- Create informational online resources
- Showcase customer success
- Make it look easy
- Keep in touch with customers
- Relate to customer concerns



Informational online resources



Search

Home About News Blog Events Library Find a Contractor Contact Help

RESIDENTIALCOMMERCIALINDUSTRY + AGPUBLIC + NONPROFIT

Agriculture

Industry

Case Studies


Getting Started

Newsletter & Resources

Contact Us

Home: Industry + Agriculture

Put Us On Your Energy Team



Since 2004, Energy Trust has helped hundreds of Oregon industrial and agricultural businesses improve their operations and save more on energy costs. You can see the same bottom-line benefits.

Efficiency improvements can deliver a rapid return on investment, but time, staffing and capital constraints can be barriers to developing and implementing an energy efficiency strategy.

Energy Trust of Oregon can help. We provide technical assistance from experts in your industry and cash incentives that allow you to invest in efficiency immediately. Besides reducing energy costs for years to come, efficiency upgrades often improve productivity and quality, as well.

We make it easy with support from start to finish:

- One-call simplicity to get started - 503.445.2966 or [email us](#)
- We assign an **industry expert** or **trade ally contractor** to evaluate the most effective upgrades for your operation. Some businesses can qualify for no-cost energy studies-typically valued at \$3,000 to \$20,000.
- Technical assistance to develop project specifications, evaluate contractor bids and verify project completion.
- Cash incentives to help reduce your capital investment

Energy Trust offers energy resources for operations in a wide range of industries.

Industry

Aenean placerat lorem in purus sollicitudin pellentesque. Donec eget nisi et risus pretium rhoncus, from cold storage to high technology. Etiam eleifend malesuada venenatis. Nulla faucibus gravida tellus, vel dapibus nulla dignissim in. Suspendisse bibendum elementum blandit. In commodo venenatis semper.

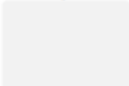
Learn more

Agriculture

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Learn more

Case Study Title



Efficiency improvements cut energy costs and boost production

Learn more

What is a POC?

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Strategic Energy Management Training

This free workshop will help you better understand Strategic Energy Management (SEM), identify which elements apply to your organization, and help you identify future trainings to meet your specific needs.

02/26/2013 7:30 AM - 12:00 PM


Learn more

Side column could include:

- Read The Champion newsletter (with latest issue photo teaser)
- Industrial training opportunities
- New product offer (fact sheet)
- New case study (with photo pull out)

Copy should mention a broad range of industry types and sizes.

25


EnergyTrust
of Oregon

Showcase customer success



© Copyright © 2010 Easystreet.

SAVINGS ARE IN THE AIR AT EASYSTREET

As a managed hosting and colocation service provider, EasyStreet Online Services has delivered secure IT infrastructure solutions since 1995. Known for its expert technical support, the company is also recognized for its environmental focus, including its use of 100 percent clean wind power purchased from its electricity utility, Portland General Electric.

In 2009, Energy Trust of Oregon conducted an energy study of EasyStreet's Beaverton, Ore., data center to establish an operational usage baseline and discover possible efficiency improvements the company could apply to its facility. The study identified airflow management strategies that made technological and financial sense for EasyStreet's facility—and qualified for Energy Trust incentives, as well.

The data center is a grid of aisles with nearly 200 cabinets containing equipment owned by colocation customers. Using thermal imaging, computational fluid dynamics modeling and expert analysis, EasyStreet was able to identify hot spots in both the older and newer areas of the data center, indicating the facility needed better airflow management.

The first step in the airflow project involved determining the least disruptive layout that would allow for hot and cold air management—keeping the area at a stable temperature is essential for reliable, uninterrupted performance.

EasyStreet thoroughly communicated with customers about upcoming changes and coordinated the necessary moves, which included aligning all the servers so the air-intake sides faced front into the "cold aisles" and the heat-exhaust sides faced back to the "hot aisles." Managing cables and blocking cabinet gaps with blanking panels also improved bypass airflow.

Success Story

PROJECT-AT-A-GLANCE

Project benefits

- Reduced energy use and costs
- Lowered average temperatures, increasing stability
- Improved conditions for servers and air conditioning equipment
- Maintained functionality of fire suppression system

Equipment installed

- Diffusers on air-handling system
- Airtight™ isolation components from Simplicor

Financial analysis

- \$151,885 project cost
- \$65,942 Energy Trust incentive
- \$95,121 estimated annual energy cost savings
- 524,187 estimated annual kilowatt hours saved



Success Story

PROJECT-AT-A-GLANCE

- 138,000-square-foot food processing and cold storage facility
- 138 employees

Project benefits

- Lower operating and energy costs
- Tighter control of refrigeration temperatures
- Improved maintenance and faster troubleshooting
- Data monitoring and recording
- Opportunity for higher foodservice safety certification
- Reduced environmental impacts

Equipment

- New refrigeration controls for 30 rooftop Pexon condensing units
- Data monitoring and recording on a web interface

Financial analysis

- \$118,395 total project cost
- \$58,451 in cash incentives from Energy Trust
- \$75,111 estimated annual energy cost savings

Estimated annual savings

- \$18,822 kWh
- 167 tons of carbon dioxide

PRODUCE WHOLESALER KEEPS IT FRESH WITH ENERGY EFFICIENCY

REFRIGERATION CONTROL UPGRADES AT UNITED SALAD DELIVER A COOL \$25,111 IN ESTIMATED ANNUAL ENERGY SAVINGS

With 136,000 square feet of cold storage, United Salad Co. is always looking for ways to trim refrigeration energy costs. When the company's refrigeration equipment supplier mentioned that new controls could cut refrigeration energy use by at least 15 percent, United Salad immediately was interested. The wholesale produce distributor turned to Energy Trust of Oregon, which had worked with the company on previous energy projects, for help determining if the product was right for them. The result is a sophisticated new system that controls 30 of the facility's rooftop-mounted Trane condensing systems, trimming refrigeration energy by 21 percent, for an estimated savings of \$18,822 kilowatt hours per year.

Using sensors and nodes located throughout the plant, the new controls cycle evaporator fans based on demand for cooling, rather than having them run continuously. The controls also regulate the frequency and length of defrosts—initiating defrost only after detecting frost buildup and terminating defrost as soon as sensors detect that frost has been removed.

“The new refrigeration controls also offer tighter temperature control, which reduces the risk of spoilage and lost revenue.”

Barry Corino, director of operations and distribution
United Salad Co.





Make it look easy



DESIGN EFFICIENCY INTO YOUR NEXT OFFICE SPACE

SIMPLE ENERGY SOLUTIONS FOR NEW OR RENOVATED OFFICE BUILDINGS

Office buildings that include energy-efficient equipment and systems boast lower energy bills and higher net operating income and asset value. Efficient features also contribute to increased tenant comfort, higher occupancy rates and lower maintenance and operating costs. If you're planning a new office space or a major renovation, Energy Trust of Oregon can help you realize these benefits today. We offer a special package of incentives for office buildings less than 70,000 square feet that provides a step-by-step, flexible way to select and purchase the best energy-efficient equipment and systems for your project.

Energy Trust's market solutions package for office buildings includes:

- Enhanced incentives for projects that achieve outstanding energy savings
- Incentives based on the square footage of your space
- A path to achieve five to 20 percent energy savings beyond code
- User-friendly workbooks to guide your decision making and help you estimate incentives



The office incentive package offers three levels of efficiency. The higher the level you pursue, the greater your incentives and energy savings. Bonus incentives are also available and dependent upon your project's efficiency goals.

	BASE INCENTIVE	BASE + 2 ELECTIVES	BASE + 4 ELECTIVES
BEST	\$0.80/sq ft	\$0.90/sq ft	\$1.00/sq ft
BETTER	\$0.35/sq ft	\$0.45/sq ft	\$0.55/sq ft
GOOD	\$0.25/sq ft	\$0.35/sq ft	\$0.45/sq ft

+
Get started today

Designing a new office space or considering a major renovation? Contact Energy Trust at **1.877.467.0930** or newbuildings@energytrust.org

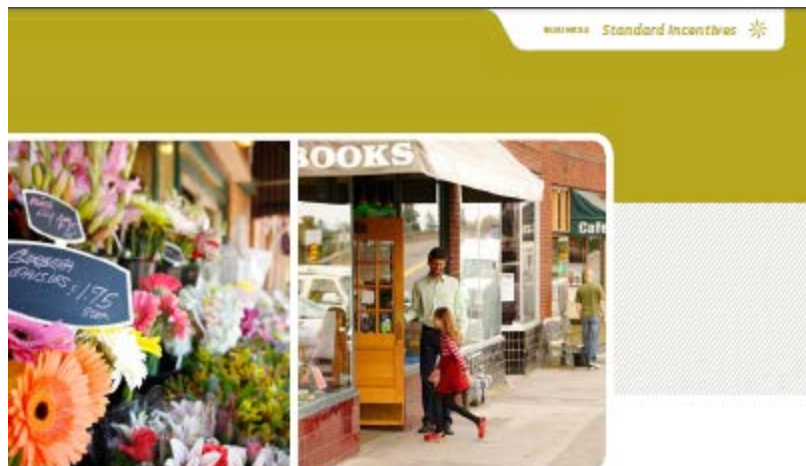
Energy Trust of Oregon 421 SW Oak St, Suite 300 Portland, OR 97204 1.866.368.7878
503.546.6862 fax energytrust.org

Energy Trust of Oregon is an independent nonprofit organization dedicated to helping utility customers benefit from saving energy and tapping renewable resources. Our services, cash incentives and energy solutions have helped participating customers of Portland General Electric, Pacific Power, NW Natural and Cascade Natural Gas save on energy costs. Our work helps keep energy costs as low as possible, create jobs and build a sustainable energy future. OR/12





Keep making it look easy...



EXISTING BUILDINGS STANDARD INCENTIVES

EFFECTIVE AUGUST 2011-INCENTIVES ARE SUBJECT TO
CHANGE AND AVAILABILITY.

Saving energy is smart business

Energy Trust of Oregon offers cash incentives on the installation of qualified energy-efficient equipment that can help you lower energy use and reduce operating costs. We also offer technical assistance and can help you find a contractor familiar with our energy efficiency requirements. With our incentives you can expect most investments to pay back their cost through energy savings in just three to five years.

Standard incentives make it easy

We offer standard incentives for lighting, heat pumps, premium heating and cooling,

natural gas equipment, insulation as well as for specialized equipment for lodging and foodservice, data centers and the grocery industries.

Custom incentives also are available

If an energy-efficiency improvement is not listed here, it still may be eligible for custom incentives. Call us for more information.





Keep in touch with customers



* Savings represent preliminary numbers.

Production Efficiency is open for business in 2013 with more than \$22 million in incentives to help make your efficiency projects pencil out. [Please connect with your PDC or contact Energy Trust of Oregon at 1.866.202.0576.](#)



Industry + Ag Events

[View all Industrial + Agricultural events, trainings and webinars »](#)

[Achieving Energy Efficiency in Data Centers March 19: 9-10 a.m. PST](#)

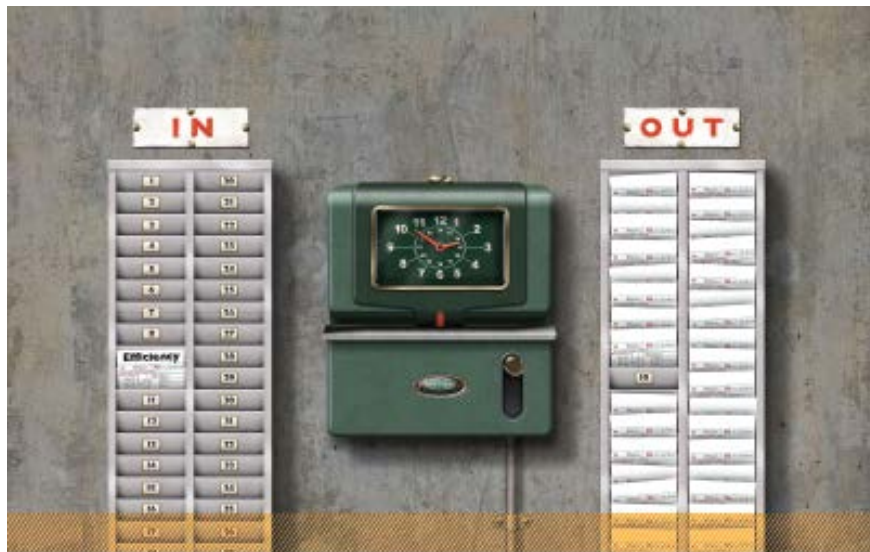
Research: Read the results of a [qualitative research study](#) conducted last year to help us continually improve Production Efficiency and enhance marketing. Thank you to respondents for your time and ideas.

Conservation Opportunity Announcement: Oregon Department of Energy is





Relate to customer concerns

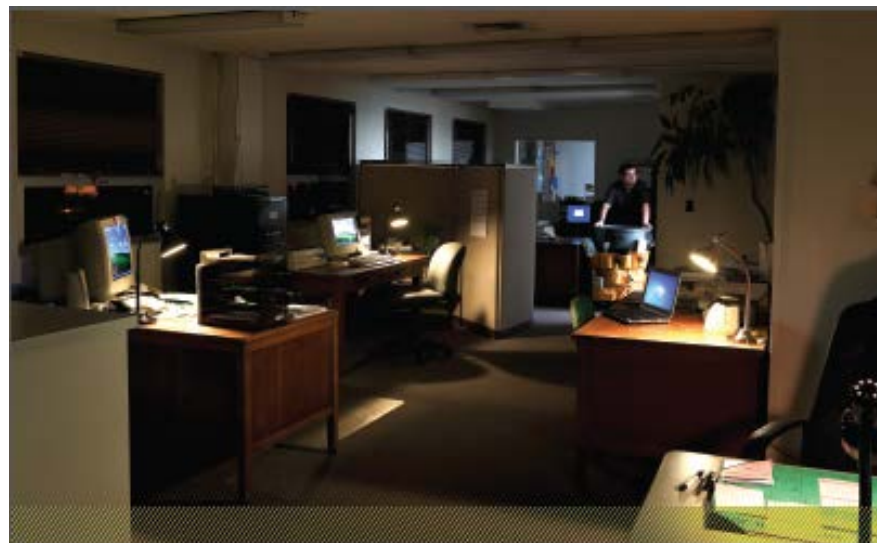


ENERGY EFFICIENCY NEVER CLOCKS OUT.

The great thing about energy efficiency is that it works 24/7. Energy Trust of Oregon helps owners, managers and operators at commercial and industrial buildings discover ways to manage energy costs just like any other business expense—around the clock. We offer cash incentives that can help you offset the cost of making energy improvements and technical expertise to help you find ways to minimize energy waste and maximize savings.

+ Take control of your energy costs. Call us at
1.866.368.7878 or visit www.energytrust.org.

Serving customers of Portland General Electric,
Pacific Power, NW Natural and Cascade Natural Gas.



WHY PAY FOR ENERGY YOU DON'T NEED?*

*AND OTHER QUESTIONS THAT LEAD TO LOWER COSTS

It's 9 p.m. But the way the company is using energy you'd think it was 9 a.m. All that could change if you take advantage of Energy Trust of Oregon services and cash incentives. We can help you offset the cost of making energy improvements and provide technical expertise to help you discover ways to minimize energy waste and maximize savings.

+ Take control of your energy costs. Call us at
1.866.368.7878 or visit www.energytrust.org.

Serving customers of Portland General Electric,
Pacific Power, NW Natural and Cascade Natural Gas.





What we know now

- It's still about the money
- Customers want our help
- We must help customers find the “yes”
- We can create a community of energy champions



Read our studies

- energytrust.org/About/policy-and-reports/Reports.aspx
- Filter by “market evaluations”

Thank you



Overcoming barriers

- No money to invest
 - Up-level incentive offers
- No expertise to implement
 - Highlight free technical assistance
- No ideas on how to save
 - Present compelling + actionable projects



Overcoming objections

- No faith in savings
 - Showcase customer success stories
- No return on investment
 - Build proposal for an easy yes
- No clear decision-maker
 - Appeal to project lead and their superiors

Putting our research
to work:

Production Efficiency
Marketing in 2013



Foundations for PE Marketing

- Strategies for PE savings goals
- Supports Industry + Ag sector plan objectives with a comprehensive communication strategy and tools
 - ✓ Bottom line: Make participation **EASY**



* Go-To-Market Themes

- Inspire and motivate
- Be a catalyst
- Recognize success





INDUSTRY & AG SECTOR ISSUES AND OPPORTUNITIES

Conservation Advisory Council
5/1/13



Maximizing: Building on Success

- Production Efficiency recognized nationally and globally.
 - 2013 ACEEE Exemplary Program award
 - In past 2 years, profiled as best practice program in research by ACEEE, E-Source, SWEEP, Institute for Industrial Productivity
 - Recent Process Evaluation and Market Research shows high customer, contractor and ally satisfaction.
- Challenge: improve but don't break anything



Program Delivery Changes Under Consideration

- Custom PDC re-compete underway now, time to tune PDC scope/ delivery design
 - Territories will be redrawn for 2014
 - Geographical vs sector based territories
 - Need for better balanced territories (resource potential)
 - Expanding Custom PDC services to small to medium industries



Who to Contact: for Medium/ Large Industrial Opportunities

The majority of industrial customers are served by PDCs, who are assigned by region/ electric utility.

Food Processing (North of Eugene, excluding Central Oregon) and Pulp and Paper customers are served by Cascade Energy Engineering across service territories.

(Pacific Power, NWN and CNG Customers)

Cascade Energy

503.287.8488

(PGE and NWN Customers)

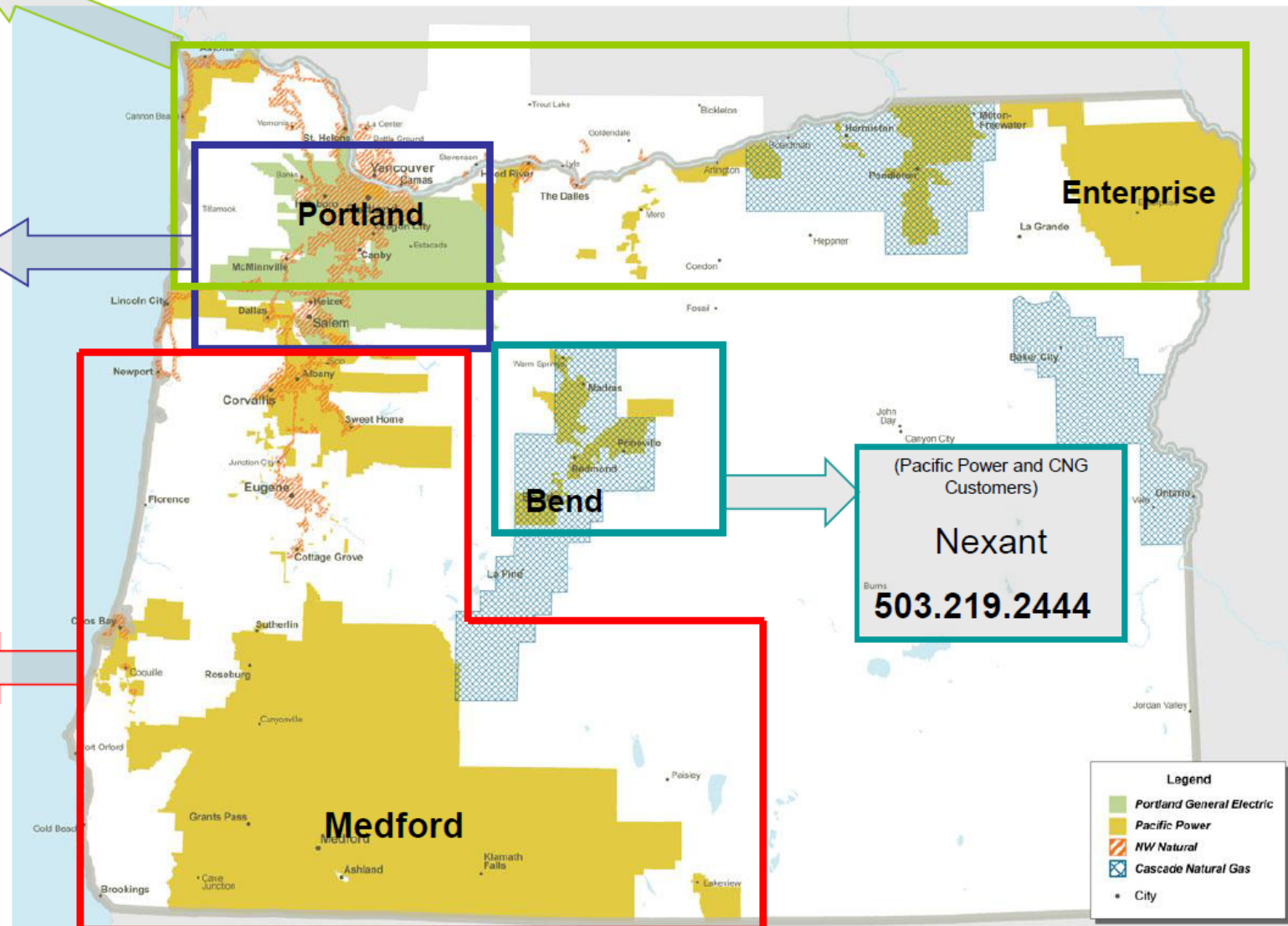
PGE Technical Services

503.464.7696

(Pacific Power and NWN Customers)

RHT Energy

541.770.5884





Design Logic of Sector-based Territories

- **Laser focus** from a single PDC will penetrate hard to tackle sector (High Tech)
- The industry's processes/ equipment are technically unique and requires **specialized technical knowledge** to serve (Pulp & Paper, Wastewater Treatment)
- There is a need for centralized **coordination with local stakeholder groups/ influencers** in this industry (Ag Sector, Food Processing, Wastewater)



Design Logic of Geographic Territories

- Simple, clear to communicate and administer.
- PDCs focus on working consultatively with individual customers and their business needs, are program experts and technical generalists. Sales model.
 - Not focused deeply on technology (ATACs do this) or larger strategic market efforts (program staff does this).
- Diverse territories provide some protection against risk of external market factors affecting individual PDC savings



CAC Discussion Question

- We are interested in making Custom PDC territories easier to communicate and maximizing outcomes.
- Based on our experience over past 10 years, we think geographic is better overall.

Are there compelling reasons to continue sector-based territories for some sectors in the future?



Expanding Services to Smaller Industries

- Evaluations and market research clearly show Custom PDC delivery works
 - Since capacity is a primary barrier to EE, PDC support/ technical services are highly valued by customers and drive savings.
 - Historically available to sites with > \$100,000/ yr in eligible energy costs.
- Evaluations and market research show that smaller industries are struggling more, still unclear about how to navigate the program, and don't know what EE to do next.



Expanding Services to Smaller Industries

- Smaller industries represent significant untapped but achievable cost-effective resource potential.
- Pay to fully participate in both gas and electric
 - More likely to be non-Transport, eligible for gas incentives
 - < 1aMW, so paying 1149 and 838 funds.



Value Proposition

- Delivery channel for untapped resource potential
- Increase streamlined savings: PDCs to more actively promote non-custom, trade ally delivered projects at all customer sites
- Equity: All sizes of industries are eligible to receive the full benefit of Energy Trust expertise and support.
- Communications: No differentiation publically, one program, one message, one custom approach that we know works.



Why Hasn't This Been Done Before?

- Common wisdom: It's too expensive to provide these services to smaller customers.
 - But have we ever tried?
- Our Expectation: Lower savings per project = budget impact. Increasing delivery \$/ energy saved than we have historically paid for delivery to large customers.
 - Program has low delivery costs as portion of budget, is currently well under PUC benchmarks for cost-effectiveness.



A Technical Challenge

- PDCs and program staff must figure out how to scale Custom services cost-effectively. This is our development path next 5 years.

Examples:

- Smallest customers could receive annual phone consultations, with tools to collect their own data in advance
- Provide next size range with annual comprehensive audits, a plan for implementation



CAC Discussion Questions

- Any concerns/ thoughts about intentionally increasing delivery spending/ scope for these customers to get more cost-effective savings from them?
- Ideas/ suggestions?



Coming Attractions (Spoiler alert!)

- Limitations to funding available for > 1 aMW customers due to exclusion from 838
 - Planning: In touch with PUC; Savings and cost impacts to be addressed in upcoming Energy Trust 5 year strategic plan for 2015-2019
 - Implementation: Not triggered yet, but demand will soon exceed portion of funds available to these customers – will need to constrain spending and backfill other sources of savings within 1 -2 years. Considering intervention strategies now.
 - Next Steps: Issue is proactively going to Board's retreat in June, potential interventions will come to CAC when action is needed.