Industry & Agriculture Budget Concepts 2015

Sector: *Industry & Agriculture*

Lead: *Kim Crossman*

Sector Overview

Energy Trust's Industry and Agriculture Sector provides energy efficiency services and incentives to industrial and agricultural customers through a single program. Production Efficiency provides a diverse set of custom and streamlined offerings that have been designed to help these energy intensive and complex organizations achieve cost-effective savings on an ongoing basis.

Launched in 2003, the program is designed and managed in-house, by Sector staff, since 2008, and is delivered with the support of a large number of contractors. PE is brought to market by six teams of Program Delivery Contractors (PDCs) with deep technical and program expertise, who make it easy for customers and trade allies to participate. Allied Technical Assistance Contractors (ATACs) provide high quality technical studies to enable investment decision making. Industrial Technical Service Providers (ITSPs) support the development of customer capacity to manage their own energy use and reduce energy waste in their operations, using energy information, Strategic Energy Management, and other comprehensive O&M approaches.

2015 Sector Themes and Key Directions

- **Broaden Participation by Underserved Customers**
    - Increase PDC outreach and provide custom services to small industries in all areas of Energy Trust service territory.
    - Expand the Trade Ally and vendor network for effective delivery of irrigation, compressed air and other streamlined industrial measures, especially in rural areas.
- **Develop new measures and approaches to save energy**
    - Promote and support Trade Ally and vendor deployment of newer streamlined measures/ technologies including LEDs, Performance Plus Lighting, and direct install of small compressed air leak reduction.
    - Bring Industrial Strategic Energy Management (SEM) to scale in the market. Optimize and standardize offerings for all sizes of industries, expand the number of participants enrolled in SEM offerings, and develop approaches to help participants harvest even more savings from their SEM program, long term.

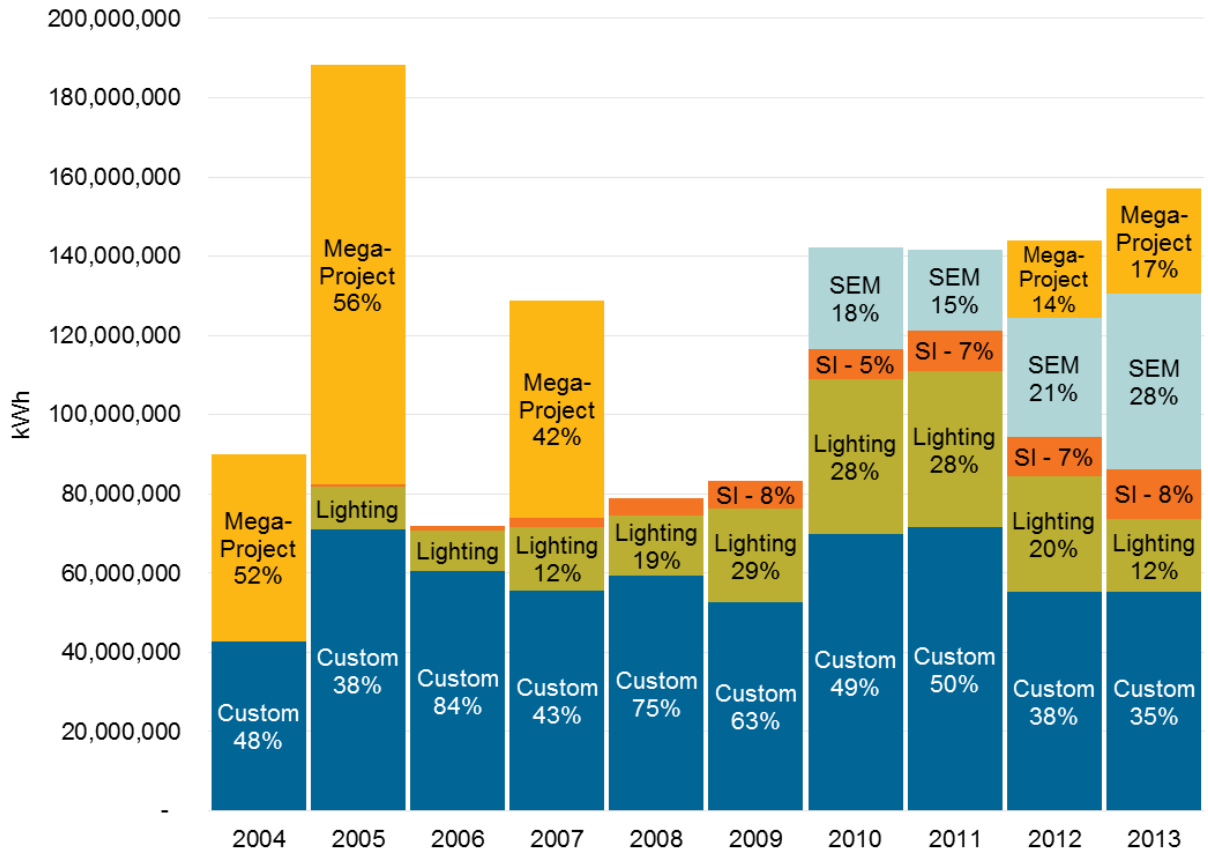
- **Continuously improve program design and services**
    - Leverage and cross-promote within all Production Efficiency delivery channels to increase savings, provide additional value to Trade Allies and create seamless customer experience.
    - Reinforce persistence and repeat participation by providing information about historical participation. Use peer to peer influence, spread best practices by promoting successful strategies and projects.
    - Work with PDCs to develop tools and approaches that reduce the cost of providing Custom services to small industries around the state.
    - Track spending on Large Customers for compliance with 838 funding restrictions and be prepared to implement changes in incentives or other interventions if needed

2013 Recap[1]

Working Savings, Electric 2004-2013

80 percent of electric savings in 2013 came from the Custom track (custom projects, SEM, mega-project) while 20 percent of savings came from streamlined tracks (lighting & small industrial).

The diversification of offerings has helped the program round out its portfolio as the contribution of savings fluctuates between offerings year to year. In 2013, the savings from a megaproject and increased savings from Strategic Energy Management compensated for an ongoing trend of decreased savings from industrial lighting projects. Market conditions, in particular the phasing out of the BETC tax credit, have changed the value proposition for lighting projects. To help reverse this trend, custom lighting incentives were increased as of January 2014.

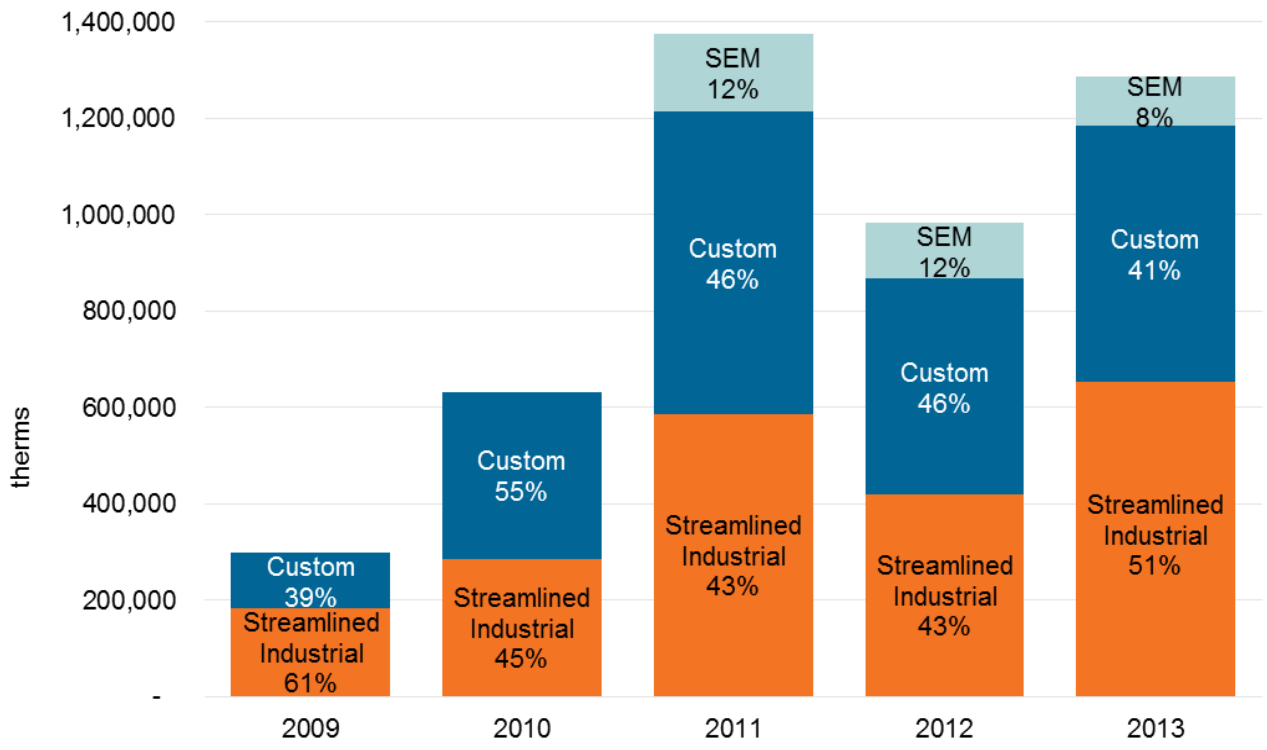


[1] This section excerpted from "2013 Production Efficiency Trends: Measures, Markets and Sources of Savings", published in April, 2014, posted at http://energytrust.org/library/meetings/cac/140423_CAC_Package.pdf

Working Savings, Gas 2009-2013

2013 Gas savings are split roughly 50/50 between the Custom and Streamlined tracks. Total savings from streamlined projects increased by more than 50% compared to 2012, largely driven by greenhouse projects.

Annual gas savings by track varies from year to year, as the majority of savings in both tracks come from a fairly small number of large projects. There was a 25% increase in gas savings from 2012 to 2013. Further, industrial natural gas outcomes are heavily influenced by the shifting completion dates of a small number of large projects. In 2011, the program saw the completion of a few big projects that affected the savings. Late in 2012, a couple of large projects pushed to an expected completion in 2013. In 2013, the savings were back up as the pushed 2012 projects completed and combined with the rest of the program activity for the year.



2014 Current Situation / Market Conditions

In most ways, the market is acting as expected and the program as a portfolio is being implemented and performing as planned in the 2014 Action Plan. The savings associated with the pipeline of 2014 projects are more than 20% higher in both gas and electric than they were in 2013 at midyear, indicating a strong market for industry in general and for investment in energy efficiency in industry. However the gains are not equal across all sectors of the economy and regions of Oregon.

- Growth in savings is largely occurring in PGE and Northwest Natural Gas territory, which are exceeding goals. Savings in Pacific Power and Cascade Natural Gas territories have been decreasing or held flat over the last few years. Some industries in Southern, Central and Eastern Oregon, especially wood products, have not recovered fully from the recession after five years. Others are new, stable or growing, and although it is harder to reach goals, there is a significant amount of activity occurring and uptake of the program in these areas.
- The program is running a bonus in Cascade Natural Gas (CNG) territory, which is currently furthest from goal. We see the trend of lower industrial savings potential in CNG territory continuing in 2015. The situation in Pacific Power territory is not as extreme, as the 2014 pipeline of projects is fairly robust, especially compared to 2013 at this time. However, the Pacific Power pipeline is also sensitive to a few large projects, and seems less secure relative to PGE and NWN. In addition to pushes to bring in new projects before the end of the year, extra delivery efforts will be applied to influence and improve completion rates for projects already in the pipeline.

SEM implementation is on track and participation is strong, with 43 enrolled sites currently and 36 expected to book savings in 2014. Market interest is growing, and to meet this demand, a new SEM cohort is being recruited in the Portland metro area, and two new SEM cohorts are being recruited in Central and Southern Oregon, the first in those areas. All of these will begin in 2014 and complete in 2015. The development of new SEM curriculum, tools and materials is underway to support expansion of SEM participation in 2015 and beyond.

The custom lighting incentive increase implemented in January has been successful, and the effect of that combined with rapidly growing LED savings has brought Industrial lighting back up significantly.

2015 Key Actions and Initiatives

The core direction of the program will continue from 2014 through 2015, with the continuation or addition of the following activities and emphases:

- **Over-arching Efforts**
  - Leverage and cross-promote within all delivery channels to increase savings.
    - Continue and expand cross-promotion of Custom and Streamlined tracks begun in 2014. Custom PDCs to promote opportunities for Trade Ally-delivered projects at customer sites, scope opportunities, provide leads and encourage customer action. Streamlined track PDCs to provide information and feedback on results of streamlined projects and provide leads for Custom projects back to Custom PDCs.
  - Reinforce persistence and repeat participation by building customer capacity for energy efficiency.
    - Provide customers with accurate and accessible information on project and energy savings history to reinforce commitment to maintaining energy savings and confidence in the business case for energy efficiency**.**
    - Peer to peer engagement is a core strategy. It is used successfully as the organizing principle and key driver of change in cohort-based offerings such as SEM and ROC. Other program activities incorporate peer to peer influence, and these will continue to be developed and implemented in 2015, including the Champion newsletter, the Bi-annual Breakfast for Champions, the annual NW Industrial Efficiency Summit, case studies, and the industrial EE speakers bureau, where leading participants are tapped to host tours and speak at conferences and meetings.
    - Co-fund energy interns at industrial sites to support Champions and site Energy Teams in data collection, project management or other efforts to implement efficiency.
  - Track spending on Large Customers for compliance with 838 funding restrictions, analyze and communicate savings and cost impacts of potential interventions to reduce spending. Be prepared to implement changes in incentives or other interventions if needed. (See Risks section).
  - Targeted and more strategic marketing and outreach, based on enhanced access to utility data, will occur within the program. Initial efforts will be designed to target eligible gas customers for outreach. Additional applications for the data may include the initial outreach needed to extend custom services to small customers, especially those in rural areas.

- Better utilize and leverage Energy Trust IT systems and data to streamline resource utilization and more cost-effectively deliver and administer services to customers.
- Seamlessly coordinate services with New Buildings program to avoid lost opportunities and improve all aspects of the energy efficiency of greenfield industrial sites.
- Continue offering customer-facing outreach events promoting all program tracks in underserved parts of the state. Prior events focused mainly on Pacific Power territory have been successful.

- **Custom Projects**
  - Maintain current Custom PDC territories and hold steady on primary program offerings, strategies and base incentive levels at medium-large customer sites. PDC territories are designed to provide comprehensive coverage, with an objective to provide equivalent levels of service to customers across all rural and urban areas served by Energy Trust. Program and technical services provided by PDCs and other custom offerings provide a high level of customer satisfaction, technical realization, low free ridership and low levelized costs.
  - Increase outreach and custom services to small industries in all areas of Energy Trust service territory.
    - The same strategies that have worked for medium to large industries are beginning to be employed to better serve smaller industries. Historically, Custom PDCs have been assigned to serve medium to large industries. Starting in 2014, Custom PDCs began serving all sizes of industry within a geographic territory. This will continue, with more proactive outreach and growing participation by small industries in 2015.
    - Learning how to scale custom services to most cost-effectively serve smaller sites will be a key development focus of the program over the next few years. In 2015, begin development of tablet application scoping tool for Custom PDCs to enable cost-effective analysis and reporting of energy savings opportunities at small-medium industrial sites.
- **Strategic Energy Management**
  - Continue design and implementation to bring SEM to scale
    - Optimize and Standardize: Complete development of first year introductory SEM curriculum, tools and program management guidelines,

begun in 2014. Train ITSP contractors and integrate use of these materials into SEM implementation.

- Expand participation: Continue to ramp up recruitment of new SEM participants of all sizes. Implement cohorts in Southern and Central Oregon, Willamette Valley. Introduce SEM concepts and assess organizational readiness for SEM in Eastern OR and on the coast.
- Harvest more savings: Support persistence and continuous improvement through ongoing engagement with ~100 sites who have participated in SEM over past 5 years. Begin program design and development for Continuous SEM offering, to be launched in 2016.

- Refrigerator Operator Coaching (ROC) provides elements of SEM and other technical training to operators within targeted industry types to drive O&M savings. ROC is running a 4th cohort in 2014 and has very high customer satisfaction. Expect to run another cohort in 2015.

- **Streamlined Tracks**
  - Streamlined Industrial
    - Expand the Trade Ally and vendor network for effective delivery of irrigation, compressed air and other streamlined industrial measures, especially targeting underserved rural areas or under-supported measures.
    - Deploy new small compressed air leak reduction measure more broadly. Direct install incentive design combined with delivery by a robust set of Trade Allies may be a foot in the door for sites that have not previously participated.
    - The agriculture sector is primarily served through Trade Allies and vendors, supported by the Streamlined Industrial PDC. Along with some specialized measures for greenhouses and wineries, the Ag Initiative brings irrigation efficiency to farms through streamlined measures and tools. Development and support of Ag Trade Allies and vendors is ongoing, as is coordination with regional and local Ag stakeholders. Program is planning to formally partner with a local Ag stakeholder as a means of engaging farmers in the Klamath Basin not easily reached through the standard trade ally delivery channel.

- Industrial Lighting
  - Maintain custom lighting incentive at current level, which was increased in early 2014. The current incentive has been successful at reversing a multi-year trend of declining industrial lighting savings.
  - Expect considerable savings from LEDs and continued rapid deployment in industry in 2015. Engage to track market and technology changes and nimbly respond to maximize savings that will be gained from this major lighting technology shift over the next few years.
  - Train more Trade Allies to develop Performance Plus comprehensive lighting projects to achieve deeper savings from better design practices in lighting retrofits.

2015 Anticipated Challenges or Risk Factors

Large customer funding constraints: Although 2013 spending did not trigger the limitation for spending on customers not paying 838 funding (> 1 aMW), results from 2013 left us within a few tenths of a percentage point under compliance. While the base 2015 budget and goals will not assume curtailments in spending on large customers, there remains a strong likelihood of needing to act in mid or late 2015, in particular in PGE territory. Establish tracking system for spending on these customers across all programs serving them, and invest program development effort in offerings for smaller industries. There are ongoing questions regarding ability to commit future mega-project funds due to funding limitations.

Delivery cost increase for Custom PDCs to further extend services to small industries: Less savings per site potential will likely increase average delivery cost/kWh. We need to learn how to scale these services appropriately to get the most cost-effective outcomes, and will through trial and error over the next few years. Probably will not affect gas delivery, as more small customers are eligible, have greater potential, so we expect to get more gas over time from this strategy. Currently, PE has lowest portion of budget going to delivery compared to other Energy Trust programs and is well under PUC performance for levelized cost, so increase in the short term should be manageable.

Other incentive budget risks: The incentive budget is built on assumptions of percentage of different sources of savings we will achieve, based on historical experience and market trends. Although custom capital projects have the best levelized cost due to long measure life and are the best value to the customer, SEM savings cost significantly less in terms of incentives. As we try each year to dial in our annual incentive budgets, to minimize carryover, we run the risk of exceeding incentive budgets if there is significant, unexpected uptick in capital projects or under-spending incentive budgets if we achieve significantly higher SEM savings than planned.