

CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Policy Session Worksheet

Presentation Date: 12/8/15 **Approx Start Time:** 1:30 PM **Approx Length:** 60 min

Presentation Title: Recommendation for a County Energy Policy

Department: Transportation and Development - Resource Conservation & Solid Waste;
Finance - Facilities Management

Presenters: Laurel Butman, Jeff Jorgensen, Eben Polk, Eli Seely

Other Invitees: Marc Gonzales, Barbara Cartmill, Cory Johnson

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

- 1) Review and comment on a draft County Energy Policy containing goals to reduce energy costs, guiding principles for managing energy use, and establishing an Energy Team.
- 2) Approve the text of a resolution to adopt the County Energy Policy at a Business Meeting.

EXECUTIVE SUMMARY:

Last October, the Board approved the County's participation in the Energy Trust of Oregon's (ETO) Strategic Energy Management (SEM) program, a framework that helps large organizations more proactively manage and reduce energy use and costs. Since then, County staff has taken several steps to establish key elements of the framework and improve our energy efficiency. These include acquiring a Hatfield Fellow to support the effort, creating an Energy Team representing nine County departments, and implementing operations and maintenance changes that have cut projected energy use this year by 1%, resulting in ongoing avoided costs of \$22,000 annually and one-time ETO incentives of \$5,500. Continued implementation of the framework is expected to further increase annual savings as described below.

Establishing an energy policy is another key element of SEM, and an important next step. There are several reasons to consider a policy. Adopting a policy would:

- establish an energy savings goal and guiding principles for decisions that affect energy costs;
- demonstrate responsible use of tax dollars;
- encourage conservation through employee engagement, operations and maintenance, and, where possible, capital upgrades with an attractive ROI;
- align with Performance Clackamas measures and values; and
- provide Facilities Management and County Administration with a tool to address energy waste in our facilities.

An important part of the energy policy is a goal to reduce energy use. The Energy Team considered three options for a goal to reduce energy use by 2020: 2.5%, 5%, and 7.5%. Staff and the multi-departmental Energy Team recommend a 5% reduction goal, reflecting an estimate of what could be accomplished through operations and maintenance changes and employee engagement. This would require staff time and alignment as well as continued Administration support, but not necessarily capital investments. If capital funding for energy retrofits were a certainty, additional savings

could be achieved. Even if a goal is set that does not rely on capital for building retrofits, the proposed framework empowers the Energy Team and Facilities Management to identify potential capital projects that would have a positive return on investment through reduced energy costs (for example, LED lighting).

FINANCIAL IMPLICATIONS (current year and ongoing):

Is this item in your current budget? YES NO

For current FY only; a FY 16-17 policy level proposal will request ongoing funding.

Energy Policy Cost: There is no direct cost to adopt the policy. It is part of a framework intended to achieve savings in energy costs. Meeting the 5% policy goal would avoid \$83,000 in energy costs in 2020 alone, and more each year after that as energy prices continue to rise.

Implementation Cost: Implementing a strategic energy management framework will eventually require some support, though it should help create savings several times above the cost. In FY 15-16, a 0.8 FTE Hatfield Fellow has helped establish and implement energy management. In coming years, we estimate approximately 0.5 FTE could continue to support the program (approximately \$51,000 at an analyst-level classification).

What is the funding source?

Staff and the Energy Team are currently exploring ongoing funding options.

The County has avoided hundreds of thousands of dollars in annual energy costs through constructing energy-efficient buildings and taking advantage of stimulus grants to retrofit older buildings. For example, if our buildings used the same energy per square foot now that they used in 2007, the County would be spending \$500,000 more a year on electricity and natural gas, for a cumulative of almost \$3 million over 2008-2015 that would otherwise not be available to provide services to the public. Strategic energy management creates an opportunity to maintain and increase these savings.

STRATEGIC PLAN ALIGNMENT:

How does this item align with your Department's Strategic Business Plan goals?

This policy aligns with the Facilities Management performance target of reducing energy use in 10% of buildings each fiscal year. If energy management is supported in the coming budget, then the Resource Conservation & Solid Waste program in DTD could also adopt relevant performance measures in its strategic plan.

How does this item align with the County's Performance Clackamas goals?

Adopting an energy policy supports the strategic priority to build public trust through good government, by demonstrating that the County is committed to maximizing taxpayer funds for results that matter and minimizing future energy use.

LEGAL/POLICY REQUIREMENTS:

Oregon state law requires that 1.5% of the total project cost of public capital construction or renovations with a total cost greater than \$1 million be spent on green energy technology.

PUBLIC/GOVERNMENTAL PARTICIPATION:

This policy pertains to internal County operations only and will not require public or other government participation. However, both the Energy Team and Executive Management Team have reviewed and approved the proposed energy policy.

OPTIONS:

1. Place the policy as written on an upcoming business meeting agenda; this will accelerate energy savings but require continued resource commitments
2. Forward the policy to a business meeting with revisions
3. Return the policy to the Energy Team for further study; this would allow further refinement, but slow achievement of energy savings
4. Reject the policy; this would halt focused efforts to cut county energy use and costs

RECOMMENDATION:

Staff recommends option 1.

ATTACHMENTS:

Proposed Resolution to Adopt a County Energy Policy and Goals

Proposed Energy Policy

Powerpoint Presentation

SUBMITTED BY: Eli Seely, Resource Conservation & Solid Waste (DTD)

Division Director/Head Approval JJ / SC

Department Director/Head Approval BC / MG

County Administrator Approval LSB

For information on this issue or copies of attachments, please contact Eli Seely @ 503-742-4460
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WHEREAS, Clackamas County is committed to good governance and the judicious use of taxpayer funds; and

WHEREAS, the County has pursued a variety of energy efficiency projects in recent years, helping reduce County energy use by 5.7% since 2007, avoiding over \$500,000 in additional energy costs in 2014; and

WHEREAS the County intends to deliberately and systematically pursue further energy savings;

NOW, THEREFORE, the Clackamas County Board of Commissioners do hereby resolve:

1. To adopt the energy policy and goals contained in the attachment
2. To direct County staff to undertake the activities described in the attachment in order to accomplish said goals

Dated this ____ day of _____, 2015

CLACKAMAS COUNTY BOARD OF COMMISSIONERS

Chair

Recording Secretary

Clackamas County Energy Policy and Goals

Purpose

Clackamas County's energy policy is intended to promote and sustain the fiscally and environmentally responsible use of energy in accomplishing the County's mission to serve the public. It adopts strategic energy management to incorporate the goal of improved energy efficiency into the County's planning and operational decisions. Efficient use of electricity, natural gas, and fuel throughout County operations will minimize costs and increase resources available for serving the public, helping to build public trust, maintain strong infrastructure, and reduce wasted natural resources.

Energy Goals

- Reduce energy consumption in County facilities by 5% from 2014 baseline by 2020.
- By 2017, establish a benchmark that ensures that new construction and major renovations result in buildings that exceed code-required energy performance by a minimum percentage to be determined.
- By 2019, set a goal for increasing use of renewable energy, through purchasing or on-site generation.

Guiding Principles

The County will:

- Take a whole-organization approach to improving energy efficiency.
- Maintain and use buildings efficiently, integrating energy efficiency into decision-making for operations, maintenance, and occupancy, including facilities and other long-term plans.
- Build and purchase high-performance buildings and equipment by including energy use as a criterion during design and acquisition decisions, considering total cost to own and operate.
- Engage County employees at all levels to create a culture of energy conservation.
- Invest in energy management projects and programs that yield a positive return, and reinvest a portion of those returns in further savings.
- Identify and draw on outside financial incentives, rebates, grants, and technical expertise.
- Establish energy use goals and adopt and maintain an action plan to achieve continuous improvement.
- Monitor and report progress using standardized performance indicators.

Performance Metrics

Energy consumption will be tracked with the following metrics, which the energy team may modify as necessary:

- Total energy consumption by building and countywide
- Energy consumption per square foot
- Total cost of energy and annual savings
- Building energy use benchmarked against similar buildings

Energy Team

At the discretion of County Administration, department leaders or their direct reporting representatives shall participate on a County energy team. This team shall meet no less than quarterly in order to manage and implement the energy action plan, identify and prioritize opportunities for action, monitor and report on energy use, and suggest revisions to this policy. Members of the team will lead efforts to identify and evaluate the feasibility and operational implications of energy-saving opportunities in their respective areas of expertise.

The team may recommend projects and programs in four areas: Behavior change, operations and maintenance practices, procurement policies and standards, and capital projects. They may also recommend administrative policies for the consideration of the County Administrator. When evaluating which projects and programs to pursue and/or recommend, the team shall consider:

- Total impact on energy consumption
- Return on investment/payback time
- Feasibility
- Impact on employee comfort, safety, and wellness
- Minimizing disruption to operations and maintaining high quality service
- Alignment with long-term plans



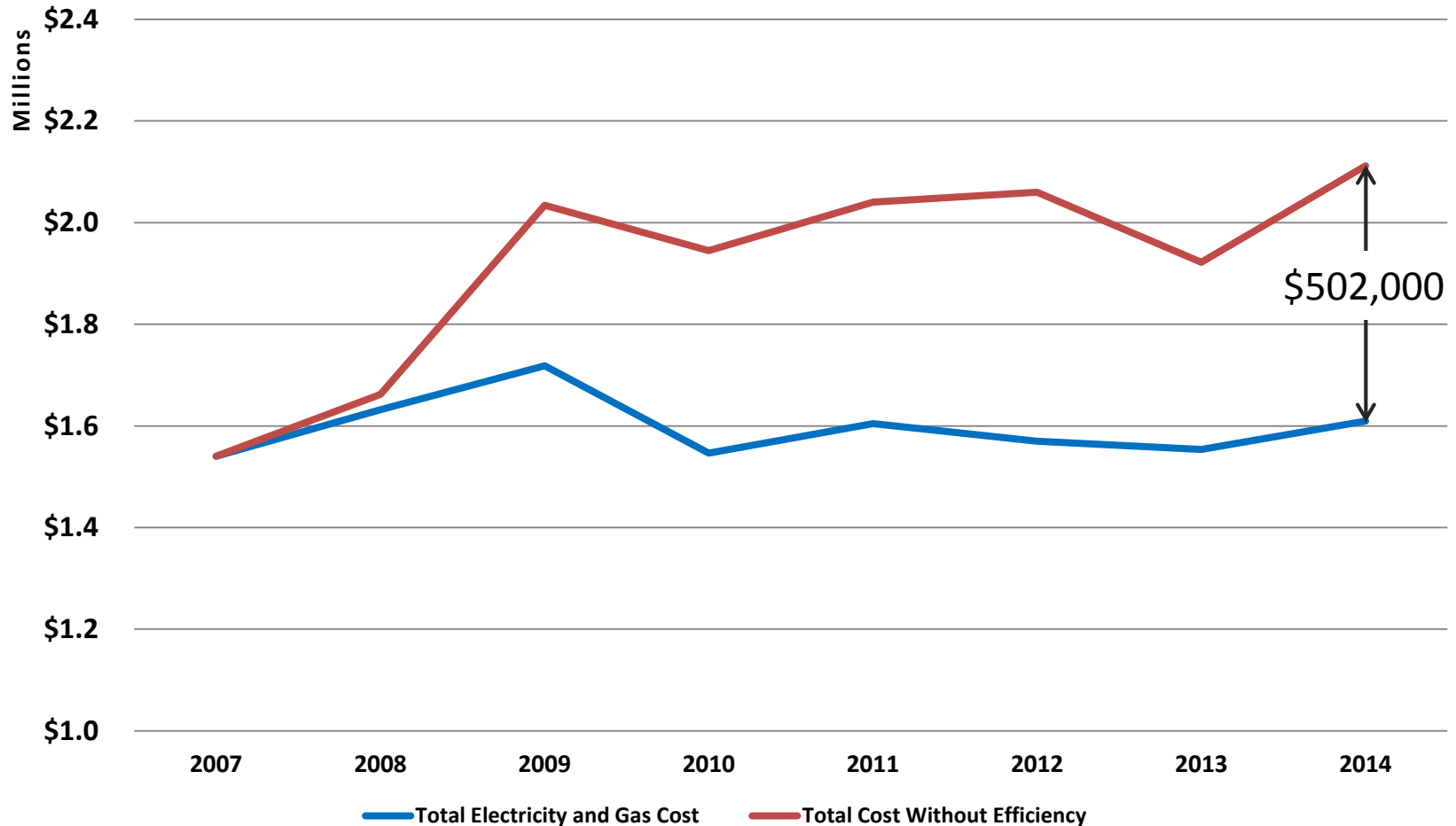
12/8/15 BCC Policy Session:

Clackamas County Energy Policy

Supporting Slides

County Energy Use Trends

Clackamas County Efficiency Savings

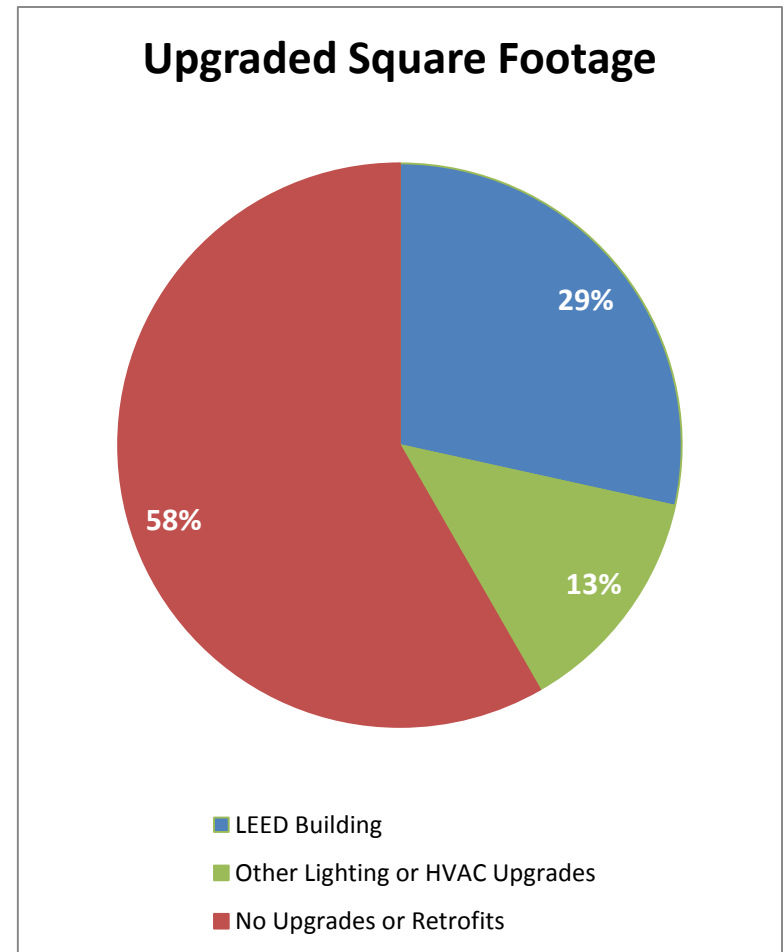


\$502,000

This graph compares the County's actual energy costs to what the costs would have been if we had not invested in building efficiency

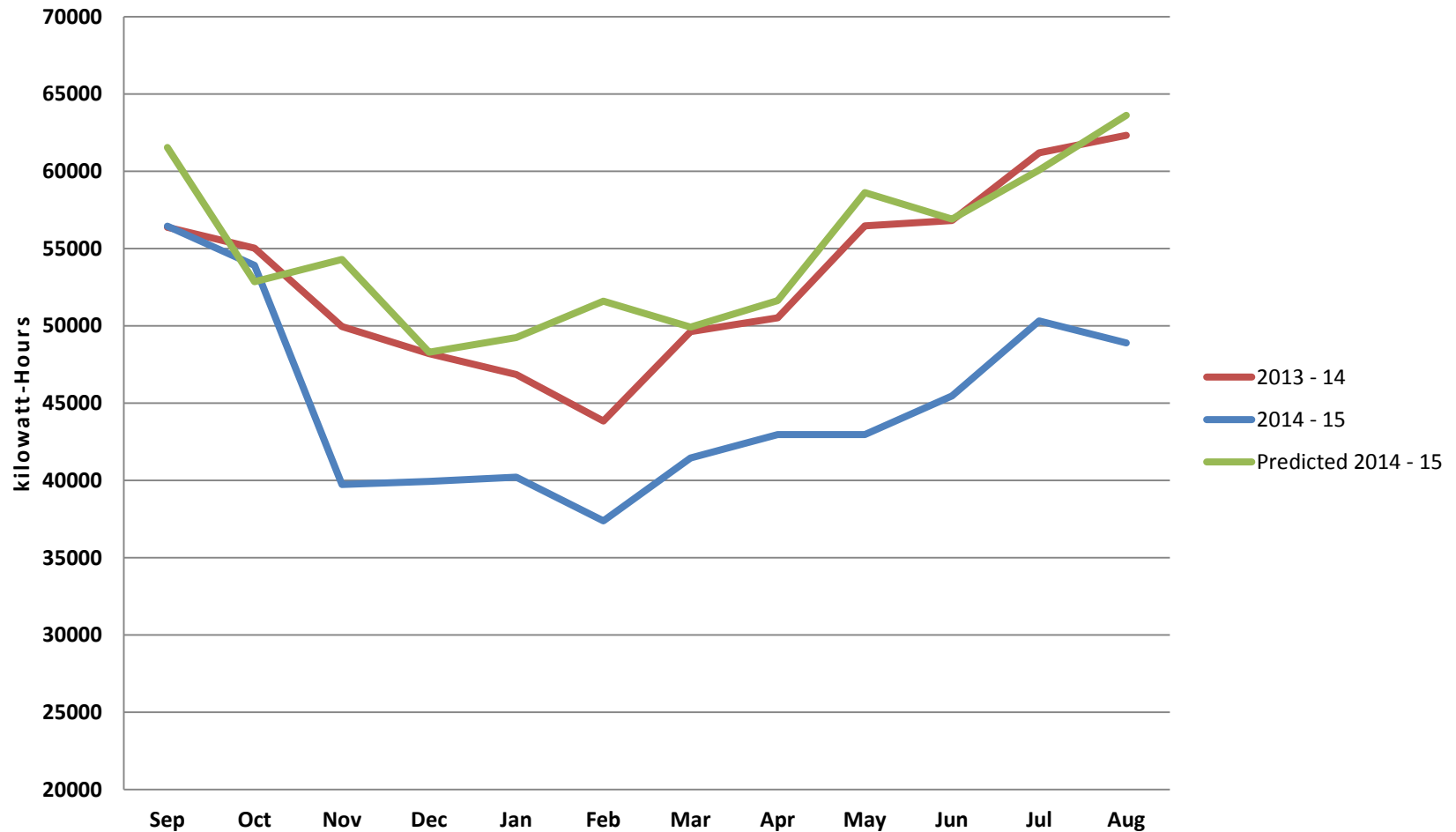
2009-11 Efficiency Upgrades

- Out of 1.3 million square feet, 750,000 (58%) has not received a significant energy efficiency retrofit
- Retrofits have included:
 - DSB/PSB: 282,000 square feet of lighting fully shut down at night
 - Insulated windows or high-efficiency boilers in 102,000 square feet
 - Lighting upgrades in 158,000 square feet



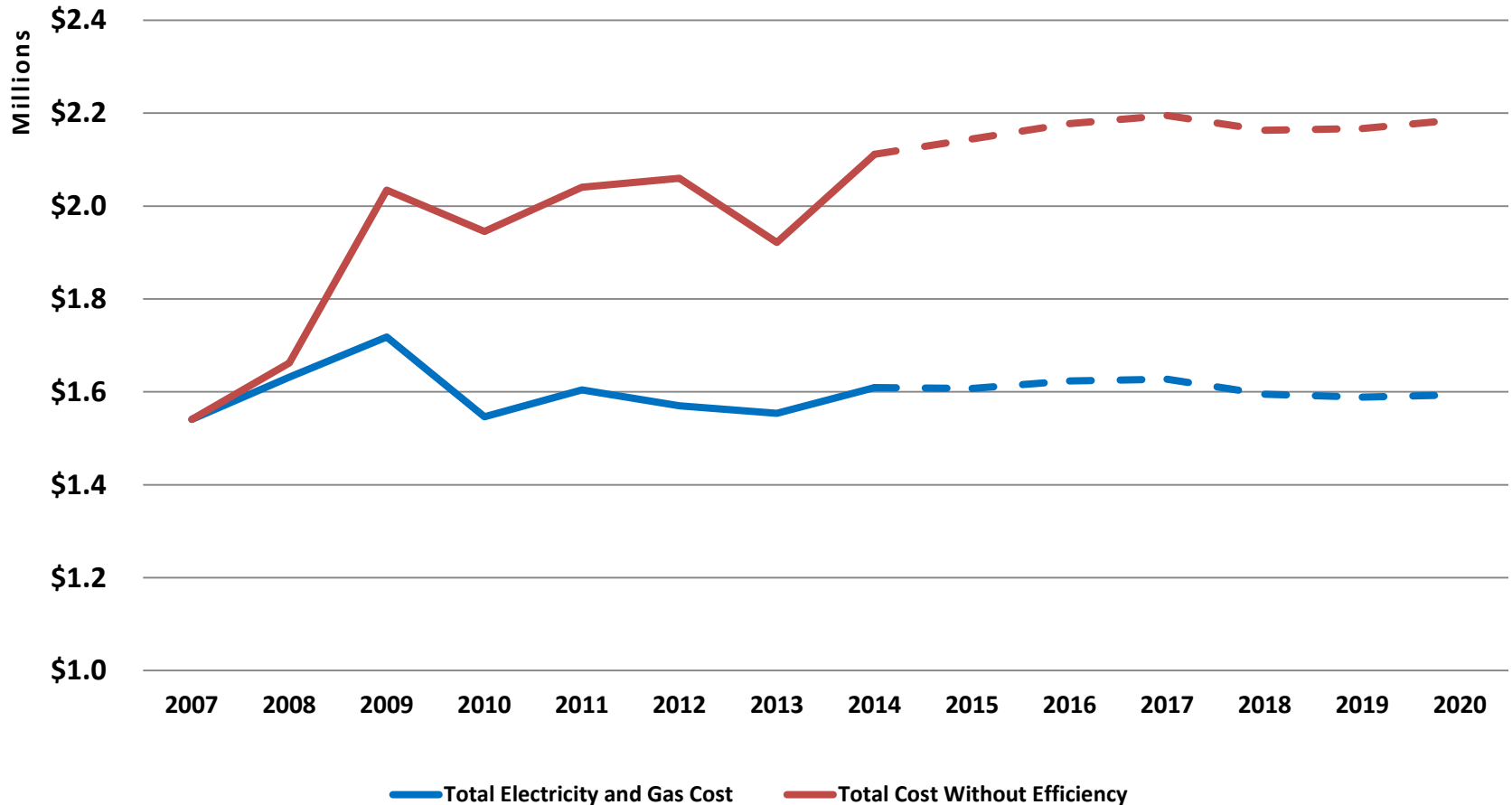
SEM Results

TS1 Electricity Use



County Energy Projections

Projected Savings from SEM



This graph extends the first graph to include projected future savings from SEM

Energy Policy Bottom Line

- Potential savings of \$83,000 a year when fully implemented
- Supports Performance Clackamas targets for Facilities Management
- High confidence that savings potential exceeds costs to support and implement SEM actions
- Staff Recommendation: Adopt the policy as written at an upcoming business meeting.