

**Strategic Energy  
Management  
2021 Impact Report  
Washington County**

# WASHINGTON COUNTY

December 31, 2021

## 1. Executive Summary



*Washington County, 154 N. First Ave, Hillsboro, OR 97124. Year 10.*

*Despite the challenges of staff turnover, COVID-19, and wildfire response, 2021 has been a tremendous year for Washington County's energy team. The energy team was able to continue its positive momentum that began last year to complete projects, deliver savings, and increase collaboration.*

*Employee engagement activities included "Energy and Our Climate," that included an interactive "game" for participants to increase awareness of how energy savings directly effects climate change and a presentation during the Earth Day proclamation that provided a summary of SEM activities and energy savings due to the SEM program during the presentation to the County Board on Earth Day. The Monthly Energy Minutes, an email to all staff to provide ways everyone can save energy at home and at work is a continuous reminder of Washington County's commitment to energy savings.*

*The team also completed an Energy Management assessment this year. The score increased from 53% to 67% and improvements were measured in 8 out of 12 areas.*

### SEM Program Incentives

	Milestone Incentive Amount	Intern Incentive Amount	Energy Savings Incentive Amount	Total
Year 1 (2012)	\$0	\$0	\$15,737.18	<b>\$15,737.18</b>
Year 2 (2013)	\$0	\$0	\$12,329.88	<b>\$12,329.88</b>
Year 3 (2014)	\$0	\$0	\$5,626.82	<b>\$5,626.82</b>
Year 4 (2015)	\$0	\$0	\$6,167.34	<b>\$6,167.34</b>
Year 5 (2016)	\$4,000	\$0	\$1,759.03	<b>\$5,759.03</b>
Year 6 (2017)	\$0	\$0	\$4,229.12	<b>\$4,229.12</b>
Year 7 (2018)	\$0	\$0	\$666.20	<b>\$666.20</b>
Year 8 (2019)	\$1,500	\$0	\$1,762.90	<b>\$3,262.90</b>
Year 9 (2020)	\$7,000	\$0	\$4,115.34	<b>\$11,115.34</b>
Year 10 (2021)	\$5,000	\$3,415.32	\$9,797.00	<b>\$18,212.32</b>

<b>Total</b>	<b>\$17,500</b>	<b>\$3,415</b>	<b>\$62,191</b>	<b>\$83,106.00</b>
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## 2. Energy Savings Summary



*This methodology uses engagement and program historical savings rates to determine savings for each site, which is the current basis for paying incentives. Engagement is assessed through Performance Tracking Tool (PTT) updates, workshop attendance, monthly call attendance, and the number of projects completed. To calculate energy savings, historical savings rates are determined by building type, model age, and fuel type which is applied to each enrolled site.*

*Normally savings are calculated with meter-level energy models in participant PTTs. The extraordinary circumstances of 2020 and 2021 have required that Energy Trust adapt commercial SEM savings methodologies and program offerings. Energy Trust is only permitted to account for savings and pay incentives for efforts that are directly attributed to participation in Energy Trust programs and will result in savings over future years. As a result, a new way to calculate savings and incentives for the full year has been developed. In 2021, SEM Savings were recognized and incentivized if you:*

- *Implemented at least five opportunities that were identified on your Annual Energy Plan*
- **And** *you completed at least two of the following:*
  - *Attended 50% of operations calls*
  - *Attended 50% of core SEM workshops*
  - *Updated all PTTs at least four times*

*Following are tables showing Program Year 2021 engagement criteria and savings, and below the tables are notes describing what each column represents.*

<b>Engagement Metrics for Program Savings Based Incentives</b>	
<b>Number of Workshops Attended</b>	5/6
<b>Number of Operations Calls Attended</b>	12/12
<b>Number of times Performance Tracking Tools Were Updated</b>	10/12
<b>Number of Completed Qualifying SEM Projects for Incentive</b>	14

	SEM		SEM		Total Incentive
	Electric Baseline (kWh)	Incremental Electric Savings (kWh)	Gas Baseline (therms)	Incremental Gas Savings (therms)	
Adams Crossing	186,800	1,854	7,979	159	\$69
Community Corrections Center	796,333	52,643	23,203	1,519	\$1,357
Juvenile Services	489,920	6,908	9,249	69	\$152
Public Services Building	1,130,200	74,714	19,214	1,258	\$1,746
Walnut Street Center – Main Building	1,422,634	77,672	27,312	2,442	\$2,042
Washington County Courthouse	2,088,404	63,253	79,770	6,265	\$2,518
Washington County Jail Complex	5,506,439	77,646	243,062	1,802	\$1,913
<b>Grand Total</b>	<b>11,620,730</b>	<b>354,690</b>	<b>409,788</b>	<b>13,514</b>	<b>\$9,797</b>

**Electric/Gas Baseline** is the annual energy use during the period prior to the program/model start date.

**SEM Incremental Savings** includes savings specific to SEM activities that occurred in the current engagement year (does not include capital savings). For continuation participants, this is your incremental incentivized savings that exceed SEM savings from previous years.

**Total Incentive** is the SEM Incremental Savings (kWh) x \$0.02 plus SEM Incremental Savings (therms) x \$0.20.

### 3. Program Highlights



*The Washington County energy team has been able to accomplish most items from the technical opportunity register despite the disruptions of this year. They have also been successful in maintaining employee energy awareness through monthly Energy Minutes and several virtual presentations. See details below.*

Key Performance Indicators	
<b>Milestones Achieved:</b>	
<input checked="" type="checkbox"/> Annual Energy Plan	<input checked="" type="checkbox"/> Energy O&M Projects <i>10 /10 complete</i>
<input checked="" type="checkbox"/> Standard Operating Procedure	<input checked="" type="checkbox"/> Executive Sponsor Engagement
<input checked="" type="checkbox"/> Energy Team	
<b>Treasure Hunts Conducted</b>	0
<b>EMA Total Score / Previous Score</b>	67% (2021) / 53% (2019)

- Organizational Activities
  - Successes:



- *Staffing and funding limited the progress that can be made in SEM. We expect once staffing levels return to normal, more technical opportunities will be implemented*
  - *Progress:*
    - *Facilities staff are actively pursuing training opportunities for BAS and efficient building operation. Mychael Havens continues to pursue energy saving projects and upgrades and has been instrumental in the success of the energy team*

#### 4. Participant Energy Team



*Energy Champion: John Williams, Superintendent.*

*Executive Sponsor (Nov. 2021 – Sep. 2021) : Martin Granum, Manager, Facilities and Park Services.*

*Executive Sponsor (Oct. 2021 – Present): Robin Straughan, Sustainability Manager.*

*Data Champion: Carolina Martins, Sustainability Program Specialist.*

*Team Member: Mychael Havens, Facilities Operations Supervisor.*

*Team Member: Mark Epling, Supervising Electrician.*

*Team Member: Eric LoPrete, Sustainability Education Coordinator.*

*Intern: Rakib Chowdhury.*

*Washington County’s energy team has performed exceptionally well this year. Sustainability and Facilities have been working together to implement organizational and technical opportunities for savings including several employee engagement activities like their Energy Minute and presentation on climate change and energy savings.*

*Phases reference Tuckman’s stages of growth development. Forming-storming-norming-performing model of group development proposes that each phase is necessary and inevitable for the team to grow, face challenges, tackle problems, find solutions, plan work, and deliver results. Washington County aligns with the “Performing” stage of growth development, as their energy team works effectively, consistently, and efficiently to deliver both technical and organizational energy savings changes and projects.*

#### Energy Team Phase

<input type="checkbox"/> Forming	<input type="checkbox"/> Storming	<input type="checkbox"/> Norming	<input checked="" type="checkbox"/> Performing	<input type="checkbox"/> Reforming
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## 5. Plans for Future Success



*Prior to the December SEM 2022 Planning workshop, energy coaches reviewed SEM documents to provide Washington County with a variety of organizational and technical energy related items to consider pursuing in 2022; these items were placed on a “Progress Poster” in the online collaboration tool Mural and this Mural Progress Poster was used by participants during the workshop. Below are a few of the actions that Washington County intends to implement in 2022.*

- *Enroll Public Services Building in 50001 Ready program*
- *E- newsletter changed to “Sustainability Minute” and will continue to include energy savings tips*
- *Conduct night walks*
- *Participate in EcoChallenge 2022*
- *Perform BAS audit*
- *Conduct economizer damper checks*

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