
Silverton Civic Center

1.5% FOR GREEN ENERGY TECHNOLOGY IN PUBLIC BUILDINGS

Projects Reported Calendar Year 2024

Submitted to the

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by the

OREGON DEPARTMENT OF ENERGY

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EXECUTIVE SUMMARY

Pursuant to ORS 279C.527 and 279C.528, the Oregon Department of Energy must deliver an annual report to the Legislative Assembly on or before the first date of the session that summarizes the compliance of contracting agencies required to incorporate green energy technology or an eligible alternative energy technology in public improvement projects.

Green energy technology, or GET, is defined as energy systems that employ:

- Solar technologies, which include photovoltaic, solar hot water, passive solar, and daylighting.
- Geothermal systems that use geothermal source temperatures of 140° F or higher to provide heating or make electricity, with the exception for K-12 school projects, which are allowed to use minimum geothermal source temperatures of 128° F. Ground source heat pumps do not comply.
- Battery storage equipment and technology paired with on-site solar or geothermal systems that generate electricity.

Eligible alternative energy technology includes:

- Woody biomass energy technology: A space or water heating system or a combined heat and power system that uses fuel material from trees and woody plants that are a by-product of forest management, agriculture, ecosystem restoration, or fire prevention or related activities. The system boiler must have a lower heating value combustion efficiency of at least 80 percent. Wood pieces that have been treated with certain chemicals, municipal solid waste, construction and demolition waste, or other industrial wood waste cannot be used as fuel.
- Energy use efficiency: Certain on-site energy efficiency improvements that reduce or offset energy consumption by a required percent beyond baseline code (20 percent for public buildings; 30 percent for state buildings). This alternative is only available where Total Solar Resource Fraction, a measure of solar availability, onsite is 75 percent or less.

The GET requirement applies to any new public building with a total contract price exceeding $5 million. It also applies to buildings being renovated when the total contract price exceeds $5 million and 50 percent of the insured value of the building. To be subject to the requirements, a public body must own or control the building and use it for conducting public business or as space for its employees.

ODOE Outreach Efforts to Public Bodies

The Oregon Department of Energy performs outreach to public bodies, architects, and engineers to increase familiarity with the GET requirement. ODOE conducts annual outreach via email to remind public bodies of the requirements. ODOE also maintains a program guide and resources on our webpage and has developed an informational brochure to summarize program requirements. ODOE frequently fields calls to answer questions about the program requirements.

ODOE collaborates with other state agencies to benefit from program crossovers. Examples include working with the Oregon Building Codes Division to include a reference to the 1.5% GET program in the statewide energy code since 2019, and this collaboration continues in the recently adopted 2024 energy code. This helps make architects, engineers, and the design community more aware of GET requirements. Additionally, ODOE has collaborated with the Oregon Bureau of Labor and Industries to utilize a public project database to identify and conduct targeted outreach for projects that may also be subject to 1.5% GET requirements.

Reported Green Energy Technology Projects

215 projects have been reported since the requirement came into effect, and of those, eight projects were reported for calendar year 2024. The projects reported in 2024 are summarized below, and additional details can be found in the annual report and at the following site: GET Maps 2024

Public Body or Contracting Agency	Project Name	Estimated Annual Energy Generation (kWh electric)	GET Type	Array Size (kW)
Bethel School District #52	Cascade Middle School	305,769	Active Solar (photovoltaics)	247
City of Salem	Salem Public Works Operations Building	166,659	Active Solar (photovoltaics)	124
Salem Keizer School District	Adam Stephens Middle School	924,500	Active Solar (photovoltaics)	741
Willamette Water Supply System Commission	Willamette Water Supply System Water Treatment Plant (WTP_1.0)	73,388	Active Solar (photovoltaics)	75
West Linn Wilsonville School District	New Athey Creek Middle School	118,300	Active Solar (photovoltaics)	125
Clackamas County	Oak Lodge Library	83,000	Active Solar (photovoltaics)	72
Clackamas County	Gladstone Public Library	27,200	Active Solar (photovoltaics)	25
City of Silverton	Silverton Civic Center	65,700	Active Solar (photovoltaics)	68
Totals		**1,764,516**		**1,477**

The complete report is available online: https://www.oregon.gov/energy/Data-and-Reports/Pages/Reports-to-the-Legislature.aspx

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1.5% FOR GET IN PUBLIC BUILDINGS – 2025 REPORT (FOR CALENDAR YEAR 2024)

INTRODUCTION

Pursuant to ORS 279C.527 and 279C.528, the Oregon Department of Energy must deliver an annual report to the Legislative Assembly on or before the first date of the legislative session that summarizes the compliance of contracting agencies required to incorporate green energy technology (GET) or eligible alternative energy technology in public improvement projects.

HISTORY OF THE STATUTE

The 1.5% for Green Energy Technology program began with legislation in 2007 that provided new solar requirements in ORS 279C.527 – ORS 279C.528. Following initial adoption, the legislature has amended this statute several times:

- House Bill 2620 (2007) - established the requirement for a public body to spend 1.5 percent of the total contract price of a building on solar technology.
- Senate Bill 1533 (2012) - amended ORS 279C.527-528 to 1.5 percent for green energy technology, allowing geothermal technology to also meet the requirement.
- House Bill 3169 (2013) - further amended the law and updated the reporting requirements by the department to the legislature, making the reports due annually before the start of the session.
- House Bill 2987 (2015) - removed the requirement that public bodies identify an account where deferred funds were to be held but maintained the requirement to spend the equivalent funds on a future appropriate building project.
- Senate Bill 3329 (2015) - lowered the minimum water source temperature from 140°F to 128°F for geothermal technologies in K-12 school projects.
- Senate Bill 634 (2017) - added woody biomass energy technology as an alternative for meeting the GET requirement.
- House Bill 2496 (2019) - made a number of updates to the program, including the following: added battery storage as an eligible green energy technology, made certain energy use efficiency improvements eligible alternatives to GET, increased minimum total contract price threshold for buildings subject to the requirement to $5 million, clarified the “total contract price” definition, excluded seismic costs from total contract price, and lowered passive solar and daylight systems energy use reduction from 20 percent to 10 percent.

GREEN ENERGY TECHNOLOGY REQUIREMENTS

The GET requirement applies to any new public building with a total contract price exceeding $5 million. It also applies to buildings being renovated when the total contract price exceeds $5 million and 50 percent of the insured value of the building. Prior to January 1, 2020, this threshold was $1 million. To be subject to the requirements, a public body must own or control the building and use it for conducting public business or as space for its employees.

Public bodies include state agencies, cities, counties, local service districts, special government bodies, school districts, education service districts, community college districts, and public corporations created by state statute, among others. Oregon's seven public universities, as listed in ORS 352.002, are exempt from the requirement. Also, after January 1, 2020, airports are exempt from the requirement as a result of House Bill 2496 (2019).

Public bodies must spend **1.5 percent** of a building's contract price on green energy technology, including solar PV, passive solar, or geothermal technologies.

GET is defined as energy systems that employ:

- Solar technologies, which include photovoltaic, solar hot water, passive solar, and day lighting.
- Battery storage technology that is paired with solar or geothermal systems that generate electricity.
- Geothermal systems that use geothermal source temperatures of 140° F or higher to provide heating or make electricity, with an exception for K-12 school projects, which are allowed to use minimum geothermal source temperatures of 128°F. Ground-source heat pumps do not comply with the definition.

Woody biomass energy technology is an allowable alternative to GET and is defined as a system that for space or water heating, or as a combined heat and power system:

- Uses a boiler with a lower heating value combustion efficiency of at least 80 percent.
- Uses, as fuel, material from trees and woody plants that is a by-product of forest management, agriculture, ecosystem restoration, or fire prevention or related activities.

Woody biomass does not include wood pieces that have been treated with specified chemicals, municipal solid waste, construction and demolition waste, or other industrial wood waste.

After passage of House Bill 2496 (2019) and subsequent agency administrative rulemaking, energy use efficiency is also an allowable alternative to GET if the site's Total Solar Resource Fraction (the fraction of usable solar energy that the panels should collect, based on shading and the tilt and orientation of the panels) is 75 percent or less, effective January 1, 2020. To be eligible, energy use efficiency requires measures that reduce energy consumption by 20 percent or greater when compared to an energy code baseline.

To accommodate geothermal technologies, SB 1533 (2012) allowed for off-site installation of green energy technologies if certain requirements are met. These include cost-effectiveness, proximity of location, and the provision of new generating capacity. As a result, the public body has the option to place a technology off-site if it considers the technology inappropriate at the building site. The energy produced at either location must be used at the building site. The same off-site allowances and requirements apply to woody biomass energy technology.

If the public body plans to install GET, Woody Biomass, or Energy Use Efficiency at an alternate site, it must have its plan reviewed by a technical review panel. The technical review panel includes a professional engineer or architect, a representative of a public body, a representative of a green energy technology industry, and a representative of the woody biomass technology industry. The technical

review panel is chaired by ODOE staff. When submitting for review, the public body must provide information to the panel about the site and the cost of the GET/Woody Biomass/Energy Use Efficiency system at each location.

If the public body considers GET or an alternative to be inappropriate both on and off site, the public body must also submit its reasoning to the technical review panel. The panel reviews the analysis and provides its written recommendation to the public body. The public body makes a final determination whether the GET or an alternative is appropriate for the project. A summary of both the public body's decision and the review panel's recommendation must be reported to ODOE's GET database.

If the public body determines GET or an alternative is inappropriate for the project, and any amount of state funds are included in the construction/renovation funding, the public body must spend an equivalent amount in a future project that it builds. This amount is in *addition* to any 1.5 percent of the future project cost that might be required for GET or an alternative. However, if no state funds are used (either directly or indirectly) for the construction/ renovation of the public building, there is no requirement to defer funds for a future project.

Reasons submitted for determining GET as inappropriate for a site include insufficient infrastructure, prohibitively costly upgrades for existing buildings, and poor solar access compared to other public agency upcoming projects. Net metering thresholds (25 kW in consumer-owned utility territories) that limit the capacity of solar PV that can be installed and interconnected to a utility grid can also be a barrier and can reduce the utility cost offsets from onsite solar.

The law requires that all public bodies with a building project subject to the GET requirement report the project information to the Oregon Department of Energy. After a public body makes a final determination whether GET or an alternative is appropriate — when all the project information is known and generally before construction of the system begins — it is required to report the project electronically using a form located on the ODOE website. ODOE summarizes all reported projects and provides this report to the legislative assembly prior to the start of the session.

OUTREACH EFFORTS BY ODOE TO PUBLIC BODIES

To increase familiarity with the GET requirement, including the requirement to report GET projects to ODOE, the Oregon Department of Energy conducts outreach efforts to public bodies by providing information about the requirements stipulated in ORS 279C.527 through ORS 279C.528. ODOE conducts annual outreach via email to remind public bodies of the requirements. This outreach email is sent to the Association of Counties, League of Oregon Cities, community colleges, state agencies, counties, cities, and K-12 school districts, among others, and was most recently distributed in December 2024. ODOE has also developed an informational brochure for online posting and distribution at public body conferences and gatherings.

ODOE continues to **increase awareness and track projects** that may be subject to 1.5% get requirements through public body outreach efforts and coordination with other state agencies.

Beginning with the 2019 Oregon energy code (known as the *2019 Oregon Zero Energy Ready Commercial Code*), ODOE has worked with the Building Codes Division to include a reference to 1.5% GET requirements directly in the code document. The purpose of this is to help make architects, engineers, and others in the design community more aware of GET requirements, so that GET can be incorporated early in public project design. This 1.5% GET reference continues in the *2024 Oregon Energy Efficiency Specialty Code* that became effective on January 1, 2024. ODOE appreciates the collaboration and efforts of the Building Codes Division to include this reference in the energy code, as it has been beneficial in supporting awareness of and compliance with the requirements. An excerpt from the current 2024 Oregon commercial energy code is included below.

> ***Note:*** *For reference only. Not adopted by the State of Oregon, Building Codes Division, as part of the state building code.*
>
> ***Green Energy Technology***
>
> *The Oregon Department of Energy administers the 1.5% for Green Energy Technology program for public buildings. New construction and major renovation projects for public buildings are required to evaluate and install Green Energy Technology and report to the Oregon Department of Energy in accordance with Oregon Revised Statute (ORS) Chapter 279C, Section 279C.527-528 and Oregon Administrative Rule (OAR) Chapter 330, Division 135.*
> *See Oregon.gov/energy.*

https://www.oregon.gov/bcd/codes-stand/Documents/24oeesc.pdf

ODOE collaborates with the Oregon Bureau of Labor and Industries to leverage BOLI's data collection and reporting requirements. Separate from any 1.5% GET requirements, there are other prevailing wage requirements for public agencies and public works projects that are required to be reported to BOLI. These requirements apply to a much broader list of public projects than do the 1.5% GET requirements, but in general encompass all or most of the projects that would also be subject to GET. Since 2019, BOLI has annually provided a compilation of construction projects by public agencies and works with ODOE to filter the dataset and identify projects for which the 1.5% GET requirements could potentially be applicable. ODOE then conducts targeted outreach to these public agencies regarding 1.5% GET applicability. Public projects that are subject to the requirements can occur across a wide array of public agencies (counties, cities, school districts, etc.), and ODOE is otherwise only aware of projects that report to the agency or contact the agency with questions. By working with BOLI and utilizing its database to identify other 1.5% GET subject projects, ODOE has made progress toward proactively identifying and communicating with more of the 1.5% GET subject projects and public agencies. ODOE continues to collaborate with BOLI to increase public agency awareness and improve agency outreach efforts.

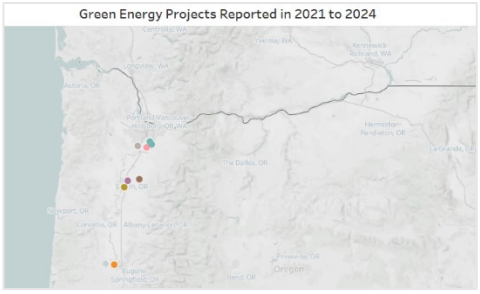
Since the GET requirement came into effect, a total of 215 projects have been reported — including eight projects for calendar year 2024.[i]

[i] Historic project counts may differ from previous program reports due to data review, organization, and clean up.

PROJECTS REPORTED TO ODOE

Eight GET projects were reported to ODOE in 2024. Of those, all eight were deemed appropriate by the public agency for GET.

An interactive map of reported projects is available on the Oregon Department of Energy website: GET Maps 2024



This online summary includes projects as reported by public bodies. Key fields from the information that public bodies are required to report include:

GET Category	The category of Green Energy Technology (GET) installed for a particular project. The options include active solar (photovoltaics), passive solar, solar thermal (water heating), geothermal, and battery storage.
GET Description	A brief description of the GET system as entered by the contracting agency.
Total Contract Price	This term has the definition given in Oregon Revised Statute 279C.527. Total Contract Price generally means all of the costs a contracting agency anticipates incurring in all contracts and subcontracts involved in constructing, reconstructing or performing a major renovation of a public building, with certain exemptions as detailed in the statutory definition.
Minimum GET Budget	This is the minimum spending obligation that the contracting agency must dedicate towards Green Energy Technology. This is a simple calculation of the Total Contract Price multiplied by 1.5 percent.
Total GET Expenditures	This value represents the total amount actually spent on Green Energy Technology, as reported by the contracting agency.
Est. Annual Production	Estimated annual energy production (or savings) of a Green Energy Technology system. This is reported in units of kilowatt-hours for electricity production or savings, and in units of Million Btu for thermal production or savings. For all projects reported in 2022 calendar year, the units are kilowatt-hours.
Est. Annual Value	This is the estimated monetary value of the energy produced or saved from the Green Energy Technology.
Solar Array Capacity	This is the size, in kW, of the installed solar array (if applicable)

Reported Projects in 2024 for Which GET (or an Eligible Alternative) was Determined Appropriate

Public Body or Contracting Agency	Project Name	City	Estimated Annual Energy Generation (kWh electric)	GET Type	Array Size (kW)
Bethel School District #52	Cascade Middle School	Eugene	305,769	Active Solar (photovoltaics)	247
City of Salem	Salem Public Works Operations Building	Salem	166,659	Active Solar (photovoltaics)	124
Salem Keizer School District	Adam Stephens Middle School	Salem	924,500	Active Solar (photovoltaics)	741
Willamette Water Supply System Commission	Willamette Water Supply System Water Treatment Plant (WTP_1.0)	Sherwood	73,388	Active Solar (photovoltaics)	75
West Linn Wilsonville School District	New Athey Creek Middle School	West Linn	118,300	Active Solar (photovoltaics)	125
Clackamas County	Oak Lodge Library	Milwaukie	83,000	Active Solar (photovoltaics)	72
Clackamas County	Gladstone Public Library	Gladstone	27,200	Active Solar (photovoltaics)	25
City of Silverton	Silverton Civic Center	Silverton	65,700	Active Solar (photovoltaics)	68
Totals			**1,764,516**		**1,477**

Reported Projects for Which GET Was Determined to be Inappropriate

There were no projects reported into the 1.5% GET database in 2024 for which GET was determined to be inappropriate by the contracting agency.

COMPLIANCE WITH THE STATUTE

The Oregon Department of Energy's role includes writing program rules, conducting outreach to public bodies, and summarizing the public bodies' reporting efforts in the annual report to the legislature. The determination as to whether GET is appropriate or inappropriate remains with the public body. Public bodies that determine GET or an alternative to be inappropriate are directed to submit their reasoning for a Technical Panel Review. ODOE continues to inform public bodies that they must request a review when making a determination that GET is inappropriate and that regardless of which determination they make, all subject projects must be reported to the 1.5 percent GET/alternative reporting form.

APPENDIX A: TECHNICAL REVIEW PANEL DOCUMENTATION

One project was submitted for technical review for a recommendation in 2024.

A summary of review panel correspondence and determination is included in this appendix.

DESCHUTES COUNTY COURTHOUSE EXPANSION
TECHNICAL REVIEW PANEL COMMUNICATIONS

Deschutes County
Courthouse Expansion

Note: this project was submitted for technical review in 2024 but will be reported into the 1.5% Green Energy Technology database at a later date.

Public Body Submittal:

CUMMING GROUP

2838 NW Crossing Drive
Suite 7
Bend, OR 97703

T 458 600 1284

cumming-group.com

MEMO

DATE	Friday, August 16, 20244
BY	Wayne Powderly
PROJECT	Deschutes County Courthouse Expansion
PROJECT #	
COMMENTS	Request to ODOE to defer G.E.T requirement to another site

To Robert Delmar,

This memo shall serve as a request to ODOE to defer the GET requirement to another Deschutes County facility as the logistics of this project, The Courthouse Expansion, is not suitable for a new solar system on the roof. As you can see in the attached roof plan, there is not enough open space to install a solar system big enough to achieve the 1.5% GET requirement, approx. 200 kWDC system, valued at approx. $640K. Please let me know if you have any other questions or requirements.

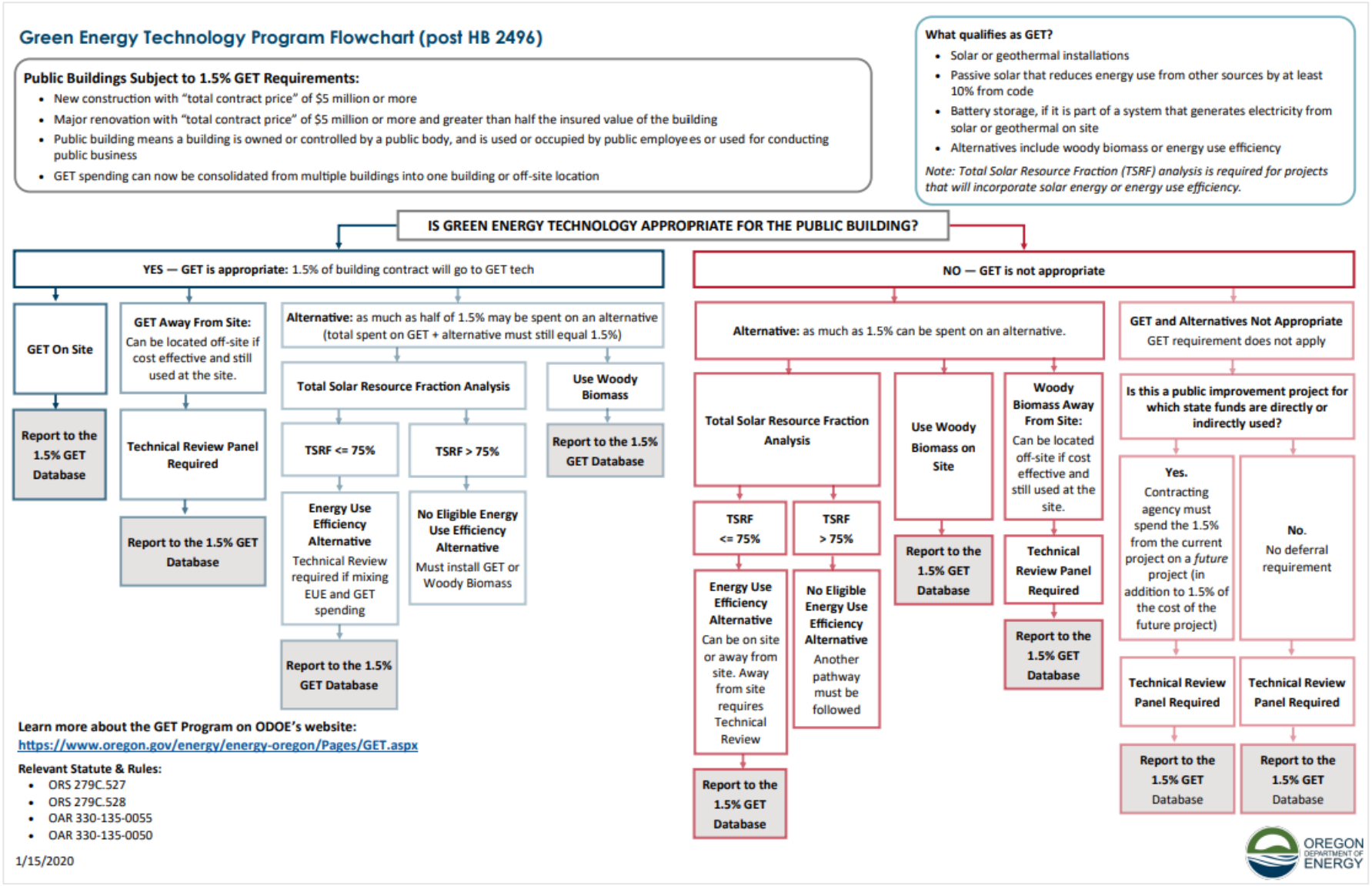
Thank you

Summary of Staff Response:

Deferring the 1.5% GET funds from the Deschutes County Courthouse project to the Fairgrounds project is acceptable in the program.

APPENDIX B: 1.5% GREEN ENERGY TECHNOLOGY PROGRAM PATH FLOWCHART

https://www.oregon.gov/energy/energy-oregon/Documents/GET-Flowchart-2020.pdf



FOR MORE INFORMATION

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