



# 2020 State Energy Efficient Design Biennial Report

## 2021 REPORT TO THE OREGON LEGISLATURE

### EXECUTIVE SUMMARY

#### BACKGROUND

In 1991, the Oregon Department of Energy established the State Energy Efficient Design (SEED) program as a result of ORS 276.900-915.

Adopted legislation states: “It is the policy of the State of Oregon that facilities to be constructed or purchased by authorized state agencies be designed, constructed, renovated and operated so as to minimize the use of energy resources and to serve as models of energy conservation.”

In January 2001, the Energy Conservation Initiative was added to the statute, requiring all state agency facilities newly constructed or substantially remodeled to perform better than the energy conservation provisions of the Oregon state building code by a minimum of 20 percent. The SEED program divides new construction and renovation projects into two classes, depending upon their size. Class 1 buildings are 10,000 or more square feet, and Class 2 buildings are less than 10,000 square feet. Regardless of building class, state agencies must incorporate cost-effective energy conservation measures into building projects.

Requirements for state agencies to reduce energy consumption in existing state-owned buildings was added to ORS 276.900-915 in 2001 and Governor Brown’s Executive Order 17-20. Agencies are required to report energy use to ODOE. ODOE collaborates with state agencies to support uploading facility energy use reporting, establishing performance benchmarks for their buildings, tracking progress, and providing technical guidance to achieve those goals. The result of these efforts includes more detailed energy consumption reporting and the establishment of facility-specific energy performance targets based on national standards.

#### SEED PROGRAM RESULTS

Completed SEED Construction Projects:

- **189** state building projects completed since 2003
- **Two** SEED renovation projects completed construction in 2019-2020

State of Oregon SEED Program Investment since 2003:

- **\$1.9 billion** is the total cost for completed SEED construction projects
- **\$30.2 million** invested in the incremental costs of SEED energy conservation improvements
- **\$5.7 million** in estimated annual energy costs saved
- **\$54 million** in program lifetime savings

2019- 2020 SEED Program completed construction projects:

- **\$22.6 million** is the total construction cost of the two completed SEED projects in 2019-2020

- **98,370** total square footage of facilities
- **\$56,141** incremental cost of SEED energy conservation
- **\$25,443** annual estimated savings

Existing Building SEED Program Energy Use Tracking:

- **21** participating state agencies
- **328** state owned buildings participating in 2019
- **143** state owned buildings met performance targets in 2019
- **18.3** million square feet of state-owned facilities participating
- **1,541,498** million Btu of total energy used by participating facilities

Oregon State agencies focus on improving the performance and comfort of their buildings. Annually, agencies share with ODOE cost effective building improvements invested in during the previous year, demonstrating progress to performance goals. Energy use across Oregon's state-owned facility portfolio has fluctuated year to year as the state adds and sells facilities or the use of facilities changes.

## ABOUT THE REPORT

The first section of this report covers the two Class 1 buildings that completed renovation construction during calendar years 2019 and 2020.

The second part of the report describes state agency energy use benchmarking, the platform selected for reporting energy use data and collected results from 2015-2019. Tracking energy use by buildings helps agencies identify tangible opportunities for energy savings and set reasonable benchmarking goals for each facility based on the assets of the facility and how it is used. ODOE actively supports reduced agency energy consumption by analyzing facility energy use data and identifying opportunities for energy and cost savings. Tables and graphs included in the report show energy use intensity for each agency's buildings over time and how they perform in comparison to performance target values.

This project is successful due to the diligent reporting of energy use and investment in efficiency by Oregon state agencies.

The full 2020 State Energy Efficient Design (SEED) report is available online:

<https://www.oregon.gov/energy/Data-and-Reports/Documents/2021-SEED-Report.pdf>