

WEBER STATE UNIVERSITY CLIMATE ACTION PLAN

PROGRESS REPORT FOR FY 2022

The intent of this report is to clarify and communicate Weber State University's efforts to become carbon neutral and more sustainable. As a signatory to the Carbon Commitment (originally known as the American College and University President's Climate Commitment), Weber State has committed to achieve carbon neutrality by the year 2040. This is an ambitious goal, but given adequate resources for investment in sustainability and energy reduction, coupled with behavioral and attitudinal changes among students, staff and faculty, it is achievable. This report details progress towards that ultimate strategic goal of carbon neutrality by 2040 and provides an update on progress towards making the campus more sustainable.

LEADERSHIP STATEMENT

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LEADERSHIP STATEMENT

Leadership Statement

Weber State is committed to improving the learning environment in every way. One of those ways is by careful investment in long-term sustainability programs that represent both sound business practices and decisions, but also sensitivity to and actions to support an improved natural environment. We feel that long term sustainability, improving our natural environment, and sound business decisions are not mutually exclusive, but are instead synergistic in making our university more attractive to students, more cost effective overall, and provide the greatest value overall for our financial and human resource investments. We are in this for the long term.

Mark Halverson

Associate Vice President for Facilities & Campus Planning

AWARDS AND ACCOMPLISHMENTS

Awards and Accomplishments

- For the 11th year in a row, Princeton Review selected WSU as one of 420 schools in the U.S. “that demonstrate notable commitments to sustainability in their academic offerings, campus infrastructure, activities and career preparation.” To view WSU’s profile in “The Princeton Review’s Guide to 420 Green Colleges: 2022 Edition” please visit: <https://www.princetonreview.com/college-rankings/green-guide>
- For the 9th year in a row, Weber State University was officially listed as one of the “cool schools” in the USA, according to Sierra Club Magazine. Hundreds of institutions of higher education were surveyed and ranked according to their measurable sustainability goals and accomplishments. All aspects of the campus dynamic, from academic programs to food services, from landscaping to energy-reduction devices, from administrative commitments to collaborations with public agencies and non-profit organizations, were taken into account. Sierra Club’s final rankings can be viewed at: <https://www.sierraclub.org/sierra/cool-schools-2021/cool-schools-2021-full-ranking>
- The Arbor Day Foundation again named Weber State University a Tree Campus USA in 2022 for its commitment to effective community forestry management. This is WSU’s 11th year receiving this honor. WSU achieved the designation by meeting the required five core standards for sustainable campus forestry: a tree advisory committee, a campus tree-care plan, dedicated annual expenditures for its campus tree program, an Arbor Day observance and the sponsorship of student service-learning projects. A full listing of recognized schools can be found at: <https://www.arborday.org/programs/tree-campus-higher-education/#recognizedSection>
- Additional sustainability-related accomplishments and news for the fiscal year can be found in the Weber Green newsletter available here: <http://www.weber.edu/sustainability/newsletters.html>

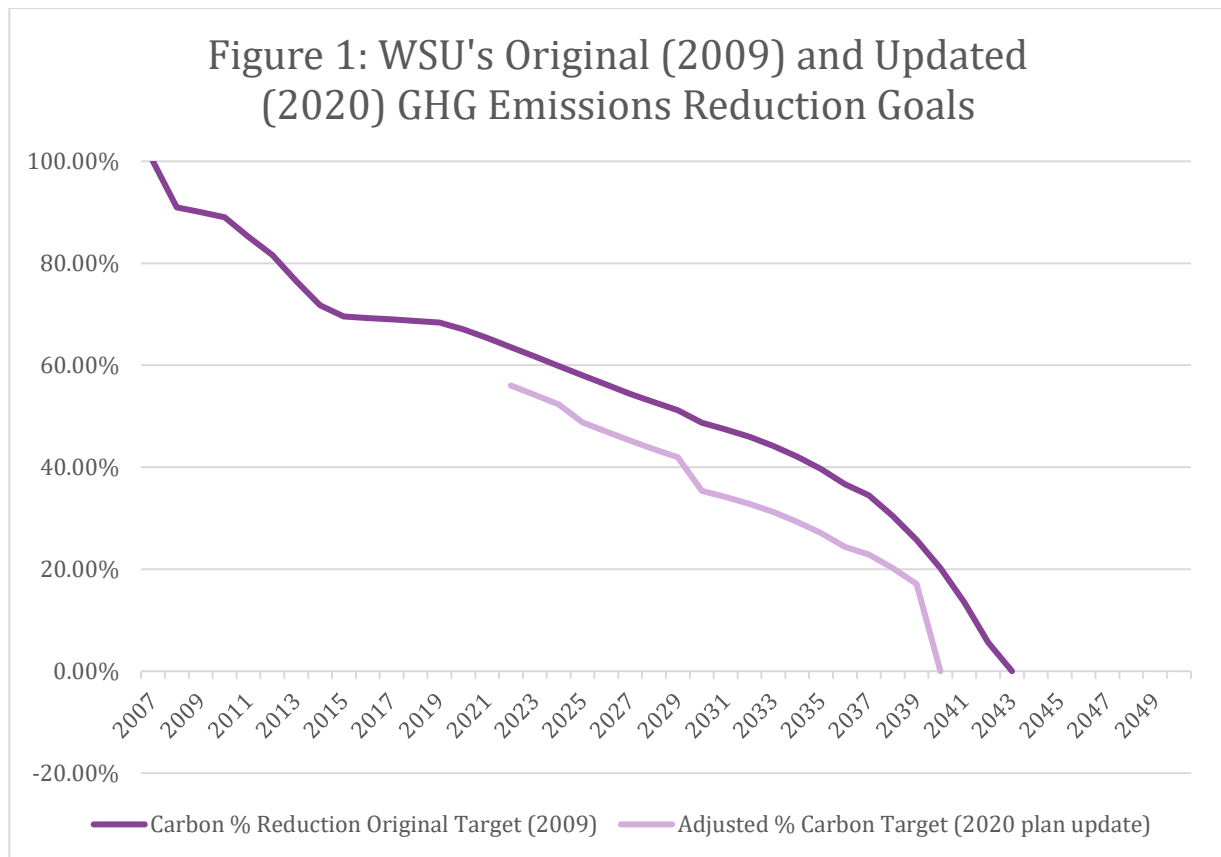
GREENHOUSE GAS (GHG) EMISSIONS

Greenhouse Gas (GHG) Emissions

The greenhouse gas emissions inventory is generated, each fiscal year, using the Sustainability Indicator Management & Analysis Platform (SIMAP). WSU calculates its GHG footprint utilizing an operational control approach and the AR5 100-year global warming potential version. SIMAP, which is hosted and managed by the Sustainability Institute at the University of New Hampshire, makes all greenhouse gas inventories publicly available at <https://unhsimap.org/public>.

CARBON REDUCTION GOALS

In 2020, WSU updated its Climate Action Plan (originally adopted in 2009) and changed the carbon neutral goal from the year 2050 to 2040. The plan also updated WSU's intermediate emissions reduction targets with goals to reduce emissions from the 2007 baseline by 51% by 2025, 64% by 2030, and 73% by 2035. Figure 1 below compares WSU's original greenhouse gas (GHG) emissions reduction goals to the 2020 updated plan goals.

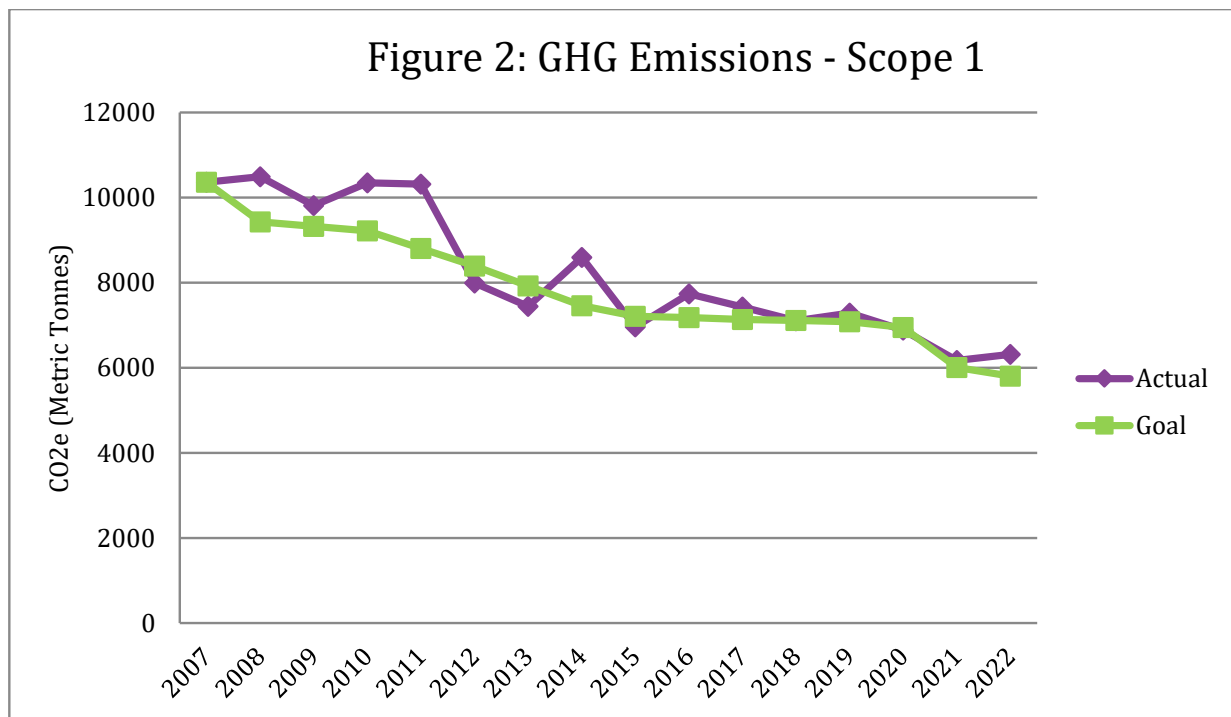


GREENHOUSE GAS (GHG) EMISSIONS

SCOPE 1 EMISSIONS

Carbon emissions are typically reported in three categories: Scope 1, Scope 2 and Scope 3 emissions. Scope 1 emissions are defined as those emissions occurring from sources that are owned or controlled by the institution, including: on-campus stationary combustion of fossil fuels; mobile combustion of fossil fuels by institution owned/controlled vehicles, and “fugitive” emissions. For Weber State University, Scope 1 emissions are primarily derived from the central heat plant which runs on natural gas (diesel during emergencies) and the University fleet which runs on traditional gasoline, diesel, compressed natural gas (CNG), and electricity. Emissions associated with fertilizer application and refrigerant leaks are also included.

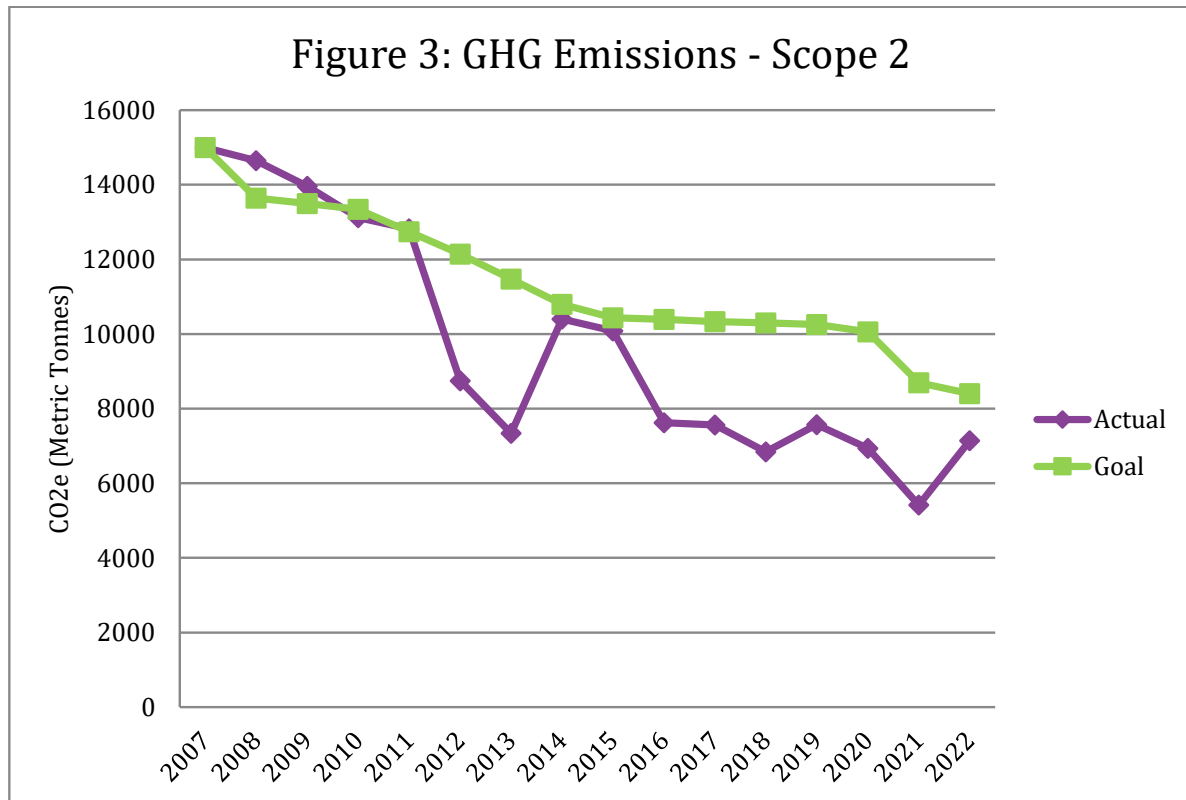
As can be seen from Figure 2 below, WSU has reduced its Scope 1 emissions by 39%, which is very close to meeting the updated FY 2022 44% reduction goal. The slight increase in emissions this fiscal year is due to all students, faculty, and staff being back on campus and pre-pandemic operations resuming.



GREENHOUSE GAS (GHG) EMISSIONS

SCOPE 2 EMISSIONS

Scope 2 emissions are defined as indirect emissions generated in the production of electricity consumed by the institution. WSU emissions have been reduced by 52%, surpassing the reduction goal of 44%.



SCOPE 3 EMISSIONS

Scope 3 emissions are defined as other indirect emissions that are a consequence of the activities of the institution, but occur from sources not owned or controlled by the institution. Scope 3 emissions include University-related air travel, student, faculty, and staff commuters, and solid waste generation.

Commuting emissions data are typically derived from a survey conducted every few years by the Energy & Sustainability Office. The most recent survey was conducted in the spring of 2022. In all cases, surveys were sent to a random sample of students, faculty and staff. Survey participants were asked to report on the mode(s) of transportation used to travel to campus, the distance from their home to campus, and the average number of days per week traveled to campus. If

GREENHOUSE GAS (GHG) EMISSIONS

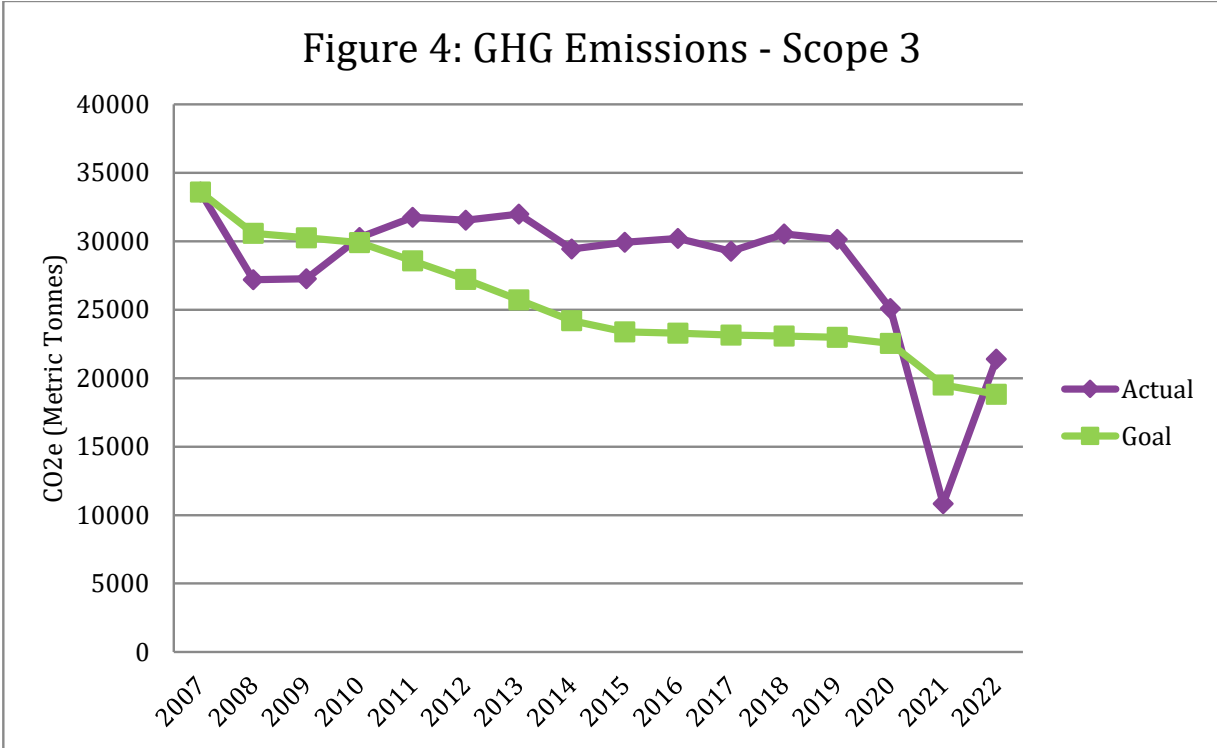
respondents indicated that they traveled to both the Ogden and Davis Campuses, then data for travel to both campuses was collected. Using the survey data, the commuting emissions for students, staff and faculty were calculated. See Table 1 below.

Table 1: Commuting Emissions (CO₂e metric tonnes)

Year	Students	Staff/Faculty
2007	19,577	5,859
2008	18,408	5,515
2009	18,630	5,523
2010	19,844	5,318
2011	20,899	5,346
2012	21,237	5,797
2013	21,303	5,640
2014	19,786	4,445
2015	19,739	4,587
2016	19,610	4,920
2017	20,647	4,006
2018	20,726	4,029
2019	20,741	3,983
2020	18,108	2,968
2021	6,118	3,316
2022	14,673	3,133

Total scope 3 emissions are depicted in Figure 4. As can be seen from the graph below, Scope 3 emissions have decreased by 36% compared to the baseline but Scope 3 emissions did increase significantly from FY 2021 to FY 2022 largely because most students, faculty, and staff resumed pre-pandemic operations. While WSU is not meeting its 44% reduction goal, progress reducing Scope 3 emissions is still being made. This can be attributed to more staff, faculty, and students being permitted (or choosing to) work from home or take classes online.

GREENHOUSE GAS (GHG) EMISSIONS



TOTAL GHG EMISSIONS

Figure 5 compares the primary sources of Scope 1, Scope 2, and Scope 3 emissions sources side by side. In a typical year, student commuting represents the largest source of emissions and this year is the same.

GREENHOUSE GAS (GHG) EMISSIONS

Figure 5: GHG Emissions by Category
(Metric Tonnes CO₂e)

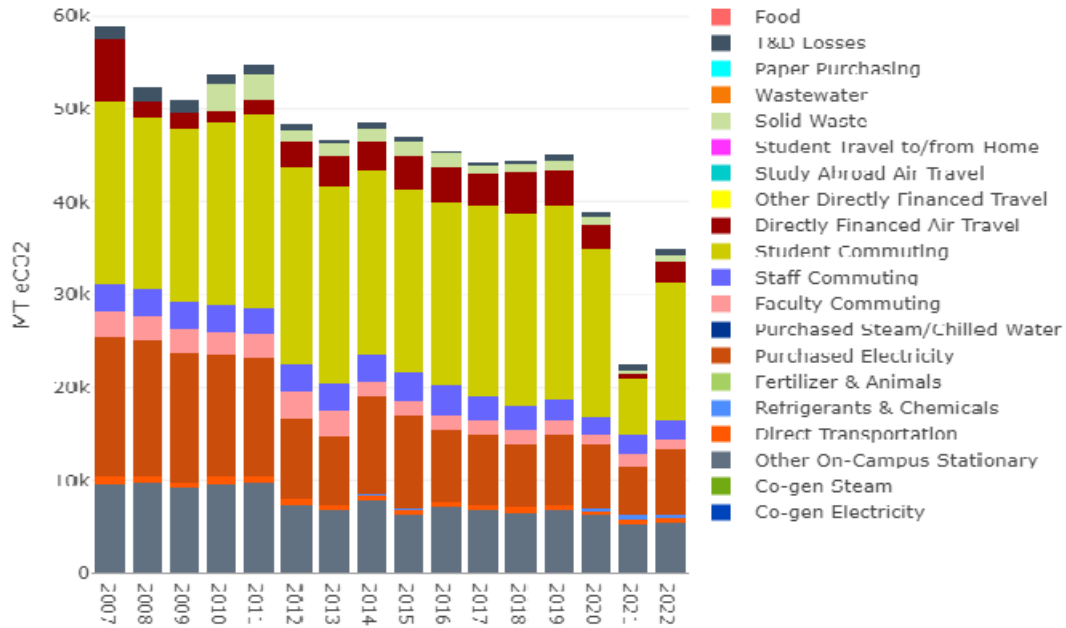
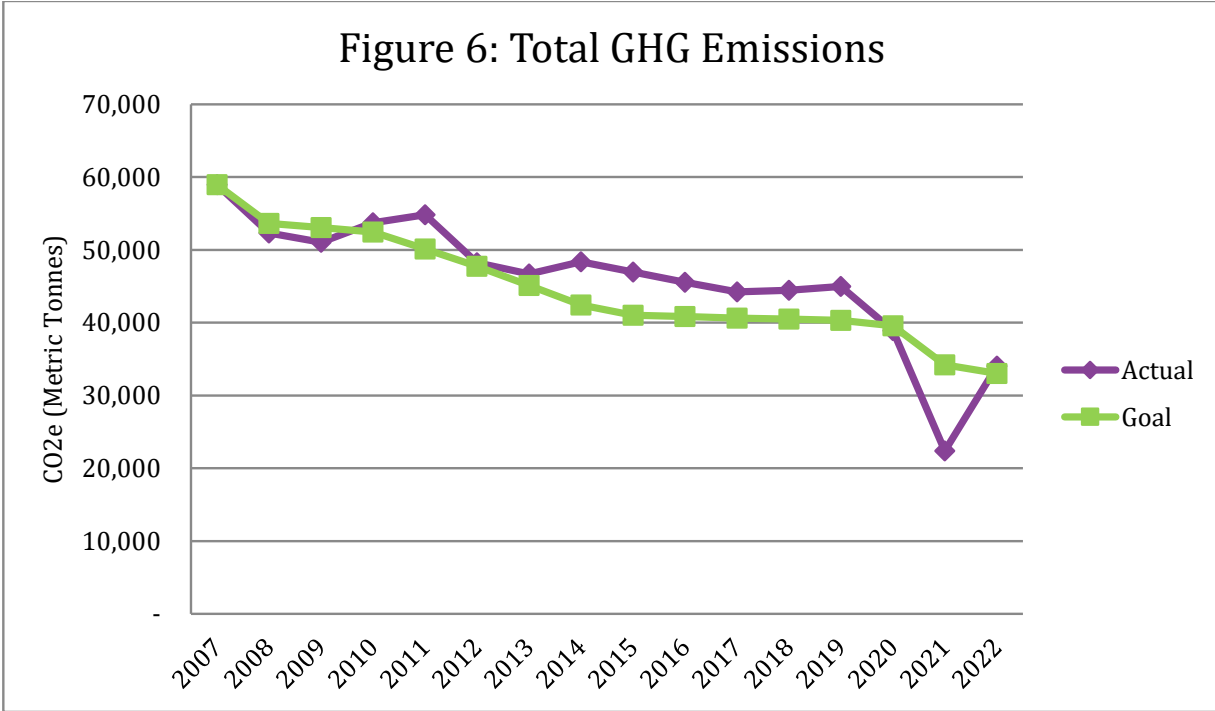


Figure 6 shows WSU's total emissions reduction progress. Total emissions have been reduced by 42% from the baseline year, which is very close to WSU's FY 2022 44% reduction target.

GREENHOUSE GAS (GHG) EMISSIONS



GHG EMISSIONS PER BUILDING SQUARE FOOT AND FULL TIME EQUIVALENT (FTE)

As can be seen in Table 2 below, WSU increased square footage in FY 2022 and Figure 7 depicts emissions per square foot and shows a decrease over time. As discussed previously, the one exception is the large decrease in FY 2021 due to campus being closed and then the uptick in emissions corresponding with the return to campus following the pandemic.

Table 2: WSU Gross Building Square Footage by Year

Fiscal Year	Gross Building Square Footage
2007	2,469,079
2008	2,480,723
2009	2,642,600
2010	2,619,259
2011	2,350,587
2012	2,599,201
2013	2,599,573
2014	2,823,731
2015	2,844,289
2016	2,883,180
2017	3,072,262

GREENHOUSE GAS (GHG) EMISSIONS

2018	3,109,721
2019	3,005,194
2020	3,035,830
2021	3,148,879
2022	3,273,915

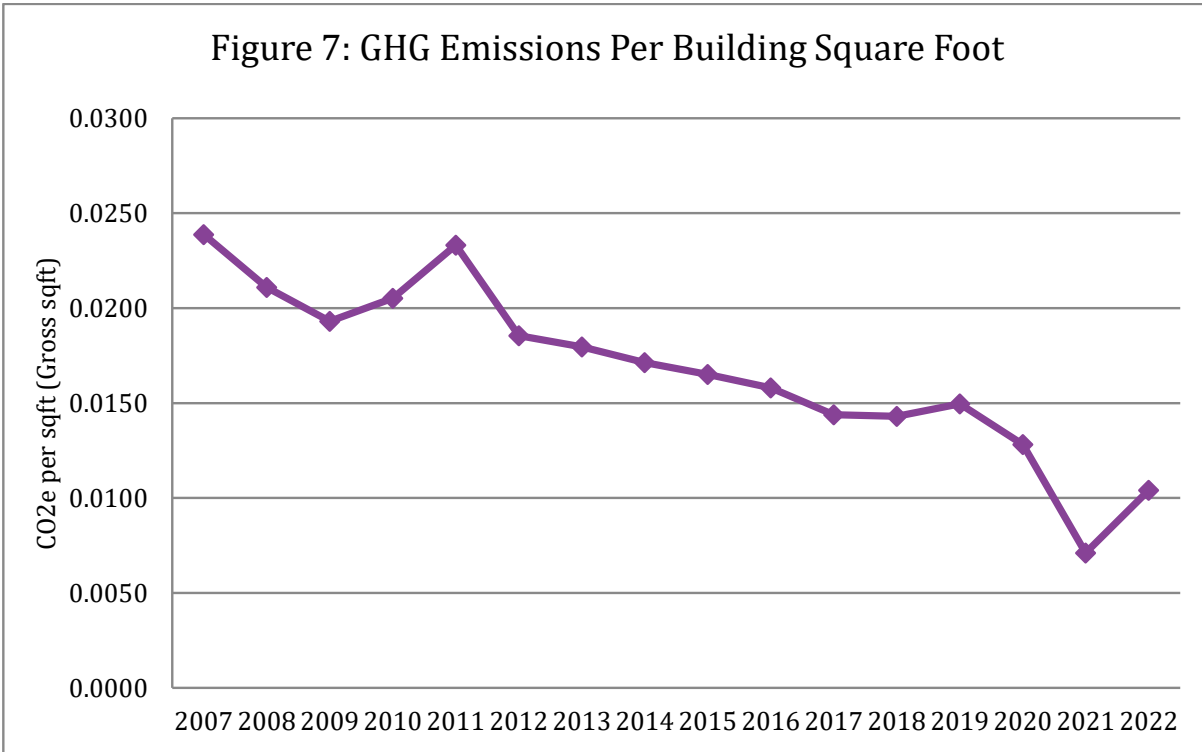


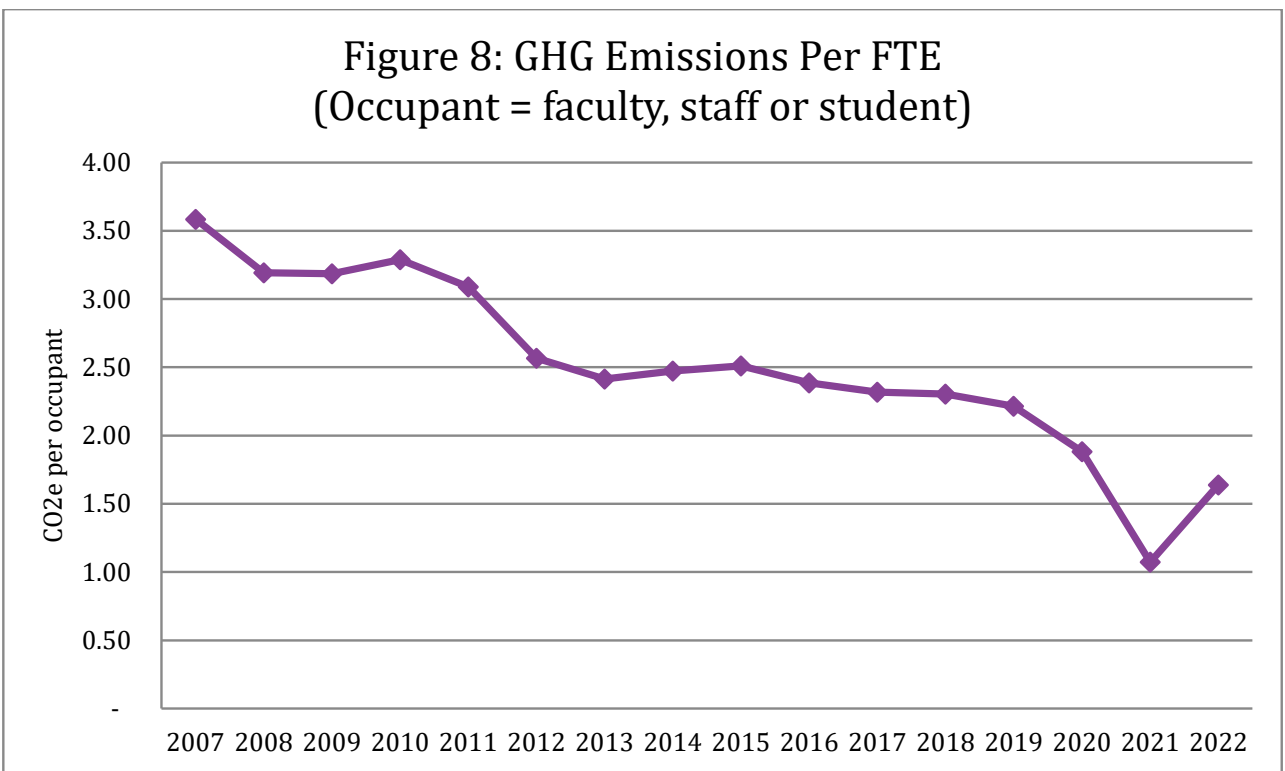
Table 3 and Figure 8 show that WSU’s population decreased this fiscal year and emissions per FTE is still trending down compared to the baseline.

Table 3: WSU Population by Year (in FTE)

Fiscal Year	FTE Students, Faculty, and Staff
2007	16,444
2008	16,398
2009	16,020
2010	16,340
2011	17,745
2012	18,793
2013	19,343

GREENHOUSE GAS (GHG) EMISSIONS

2014	19,565
2015	18,692
2016	19,085
2017	19,074
2018	19,302
2019	20,307
2020	20,672
2021	20,874
2022	20,782



ENERGY CONSUMPTION AND CONSERVATION

Energy Consumption and Conservation

Energy consumption (electricity and natural gas) represents a considerable portion of the University's GHG emissions. Energy conservation also represents an opportunity for the University to save significant amounts of money. For these two reasons most of the initial sustainability effort is being expended towards making the University as energy efficient as possible.

UNIVERSITY ENERGY CONSUMPTION

Table 4 depicts WSU's electricity and natural gas consumption figures. From the baseline year of 2007, WSU has reduced its electricity consumption by 35% and its natural gas consumption by 43% thanks to the completion of several energy efficiency and renewable energy projects.

Table 4: WSU Building Energy Consumption

Fiscal Year	Electricity (kwh)	Natural Gas (MMBTU)
2007	39,811,520	179,904
2008	38,927,520	181,878
2009	38,905,072	170,782
2010	38,082,772	180,215
2011	37,717,473	181,921
2012	33,131,629	139,214
2013	28,478,606	128,673
2014	29,384,002	147,638
2015	28,310,113	119,700
2016	29,601,049	134,719
2017	29,589,090	127,973
2018	27,550,779	122,772
2019	27,240,201	127,001
2020	25,457,158	117,820
2021	25,284,838	92,798
2022	26,037,795	102,341

Since fiscal year 2007 WSU has reduced its total building energy consumption by 39% (see Figure 9). WSU's energy consumption per square foot dropped by 54% and WSU's energy consumption per occupant was reduced by about 52% since fiscal year 2007 (see Figures 10 & 11).

ENERGY CONSUMPTION AND CONSERVATION

Figure 9: Total Building Energy Consumption (MMBTU)

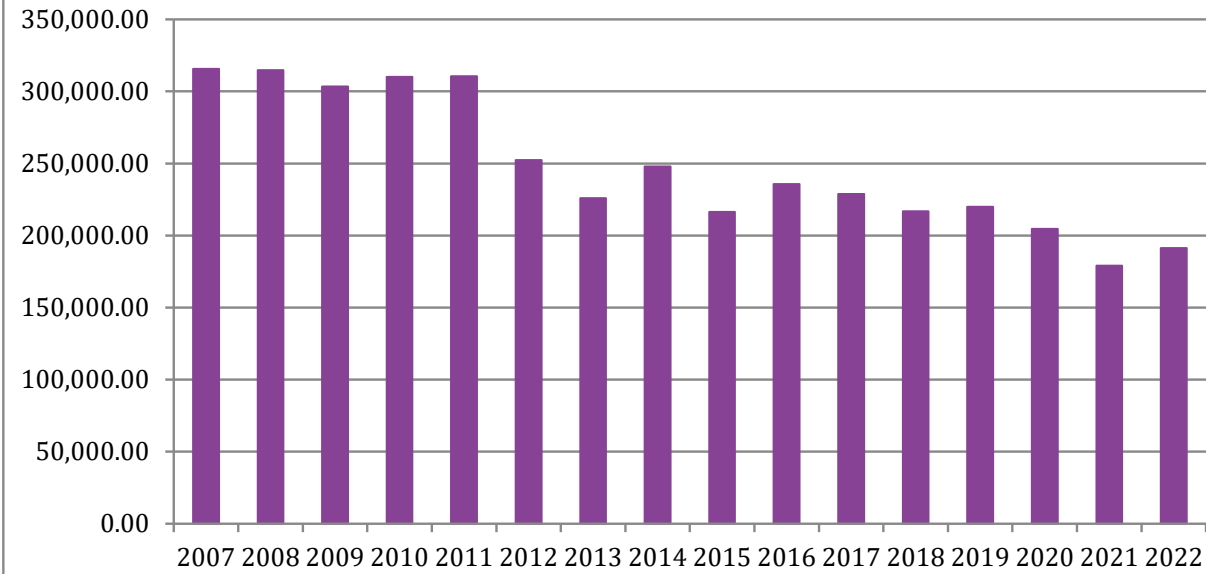
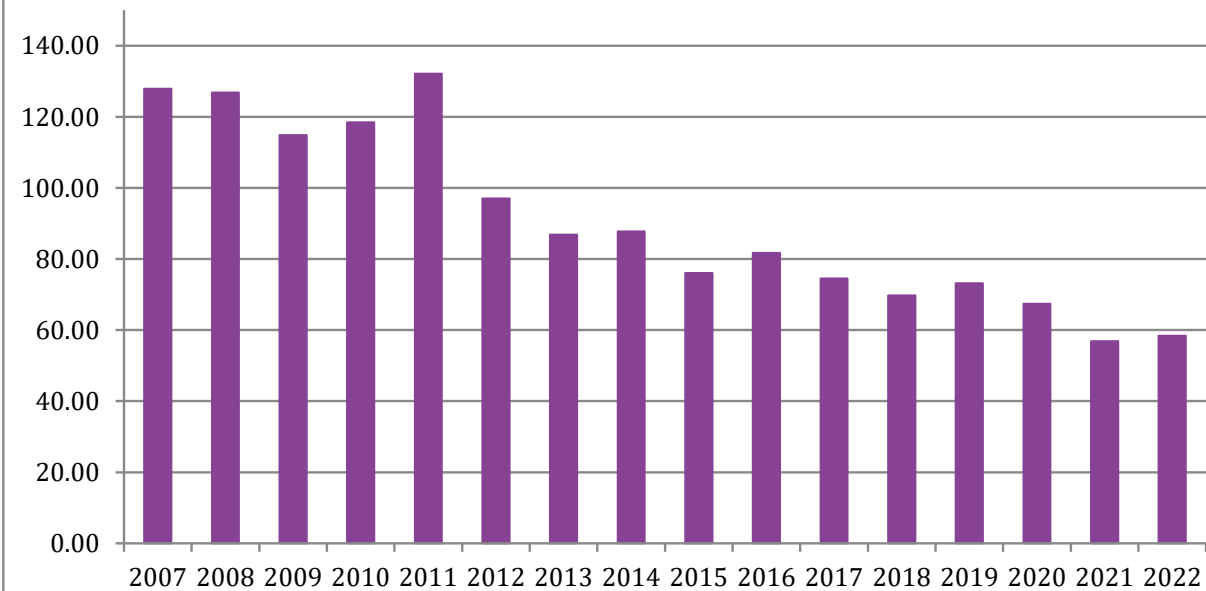
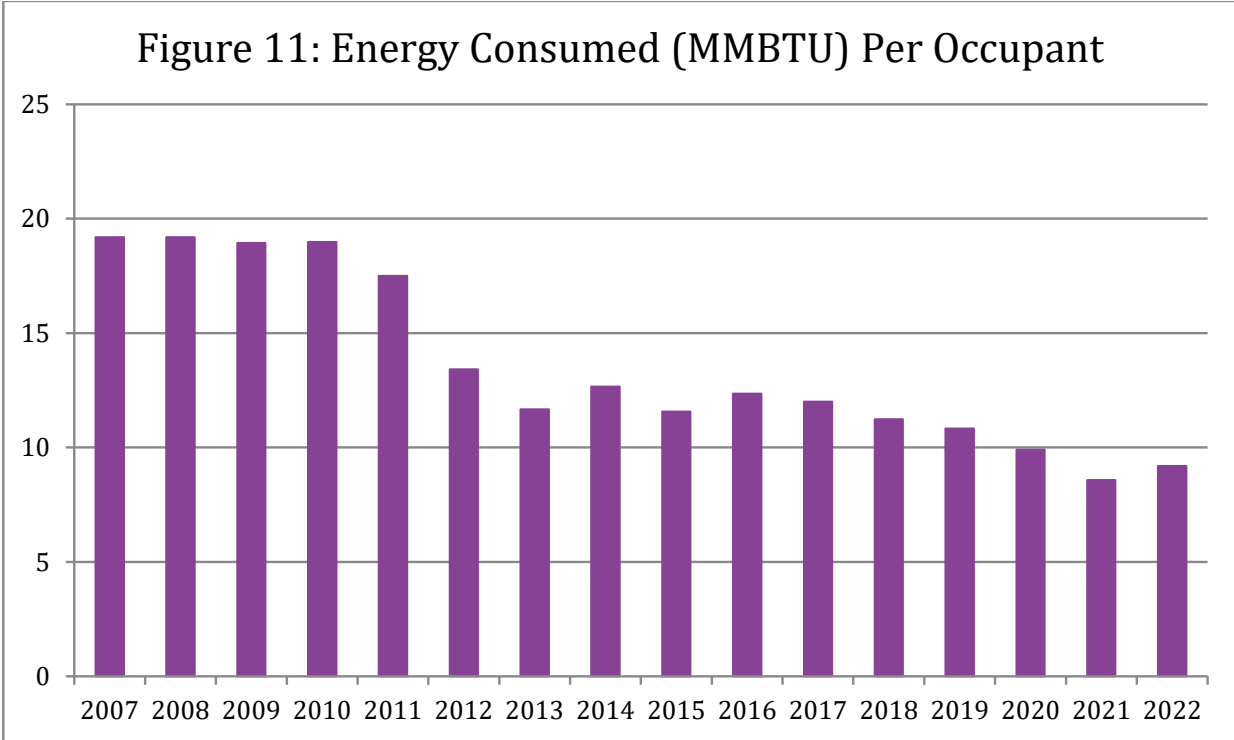


Figure 10: Energy Consumed Per Square Foot (kBTU/square foot or EUI)



ENERGY CONSUMPTION AND CONSERVATION



ENERGY EFFICIENCY PROJECT STATUS

In 2009, AMERESCO (an energy services company) completed an investment grade audit for WSU that identified a number of projects that, once completed, would reduce energy consumption, improve efficiency, or otherwise save natural resources. Construction on these projects began in July 2010. Table 5 below provides a list of the projects and their status.

Table 5: Energy Conservation/Efficiency Project Status (January, 2023)

Interior Lighting Upgrade - Campus Wide	Construction - 80% complete
DEC Chiller Replacement	Complete
Replace DHW Tanks with HX	Complete
Steam powered condensate pumps	Complete
Steam Energy Upgrades Phase 1	Complete
Steam Tunnel Support Repair	Complete
Replace Piping Insulation on AHUs	Complete
Boiler 2 Economizer	Complete
VFDs for Central Plant Cooling Towers	Complete

ENERGY CONSUMPTION AND CONSERVATION

Davis 2 VAV Upgrade and IDEC	Complete
Recomission Sky Suites, ED, SS,	Complete
Domestic Water Conservation	Tied to MEP upgrade schedule
Solar Water Heating – GYM	Complete
Solar PV Davis – Phase I	Complete
Solar PV Davis – Phase II	Complete
Solar PV Union	Complete
Solar PV Facilities Management	Complete
Solar PV Public Safety	Complete
Solar PV Davis 2 Megawatt	Complete
Solar covered parking – W10	Complete
Solar covered parking – A2 and Paid Lot	On Hold
Computer Controls	Complete
Weatherproofing - SS, LI, SL	Complete
Swimming Pool Cover	Complete
Electric Meters	Complete
Steam Meters	Complete
Chilled Water Meters	Complete
Irrigation Water Meters	Complete
High Efficiency Transformers	30% Complete
Street light LED upgrade	Complete
HV Switches	Complete
Exterior Lighting	Complete
Walkway light LED	Complete
DEC Power Factor Correction	Complete
Ground source Field (Phase I)	Complete
Ground source Field (Phase II)	Complete
Ground source Field (Phase III)	Complete
Building scheduling and commissioning	Ongoing
Recomission Union Building	In Progress
FM Building upgrade	Complete
Campus Services VRF	Complete
Center for Continuing Education VRF	Complete
D13 VRF	Complete
Academic Athletic Center VRF	Complete
Allied Health Phase I VRF	Complete
Heat plant VRF	50% complete

ENERGY CONSUMPTION AND CONSERVATION

Steam system improvements	Ongoing
Building scheduling	Ongoing

RENEWABLE ENERGY

WSU has completed a number of renewable energy projects. (see Table 5 above). 40 KW of solar PV have been installed on the Davis D2 building in two phases. At the Ogden Campus, a solar thermal array on the gym heats the pool and another solar thermal array on a residence hall provides domestic hot water for the building. The Shepherd Union has a 35 KW array, the Facilities Management building has a 71 KW array, and the Public Safety building has an array of just over 20 KW.

The largest solar array on the Ogden campus was completed during the summer of 2020. A 534 KW solar array provides covered parking for the W10 lot and supplies the vast majority of the energy needed by Lindquist Hall.

WSU's largest solar array, a 1.8 megawatt system, was installed on the Davis Campus during the summer of 2016. At its construction, the array was the largest public array in the State. This array has significantly reduced the University's carbon footprint by supplying the Davis Campus with all of its electricity renewably.

In addition to on-campus production, over the past several years Weber State University has subscribed to the Rocky Mountain Power Blue Sky program, which, supports renewable energy power production, and RMP's Subscriber Solar program. past fiscal year, WSU purchased approximately 20% of the University's electrical power from renewable energy resources (wind and solar power) through these programs in fiscal year 2022.

GREEN BUILDINGS

Green Buildings

To meet WSU's carbon neutral goal, Facilities Management has committed to ensuring that all major building renovations and new construction projects utilize all-electric heat pump-based mechanical systems to ensure that they are carbon neutral capable. WSU also has the goal that all new buildings are to be designed and constructed using either the USGBC Leadership in Energy & Environmental Design (LEED) certification program or the Utah High Performance Building Standard to ensure that new buildings are as sustainable as possible.

Figure 12 below depicts the total percentage of buildings built to each sustainable standard from the years 2017 - 2022. Figure 13 below shows the percentage of WSU's total square footage that is currently carbon neutral capable.

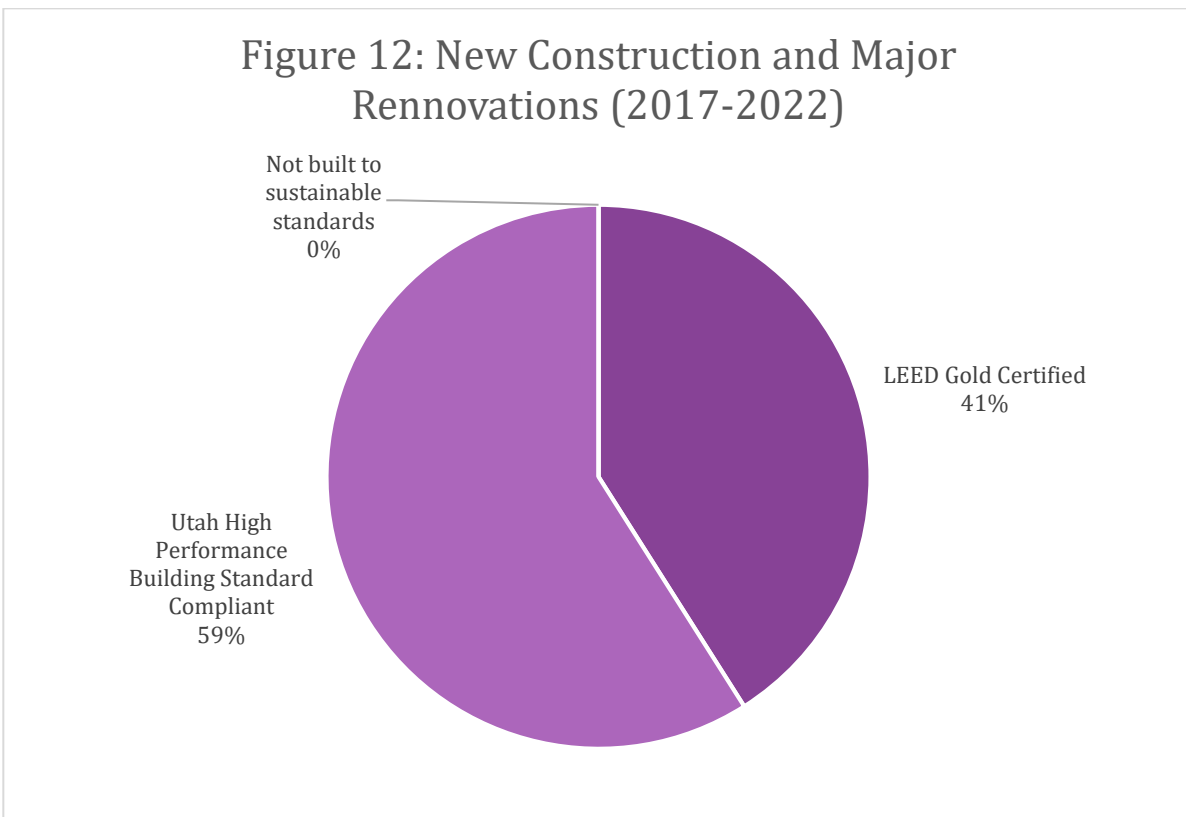
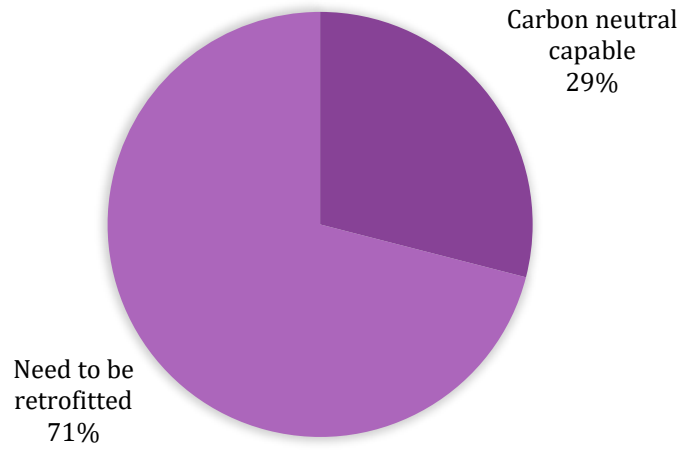


FIGURE 13: PERCENTAGE OF WSU'S BUILDINGS THAT ARE CARBON NEUTRAL CAPABLE



SUSTAINABLE TRANSPORTATION

Sustainable Transportation

WSU has three broad goals around sustainable transportation. The first goal is to reduce university-owned mobile source emissions by the greatest extent practicable by transitioning vehicles and equipment over to alternatively fueled versions. Table 6 below provides breakdown of the type of vehicles within WSU's fleet. Approximately 9% are currently plug-in hybrid electric or 100% electric. By the year 2025, WSU has a goal to only purchase plug-in hybrid electric or 100% electric vehicles moving forward.

Table 6: WSU Fleet Vehicle Type

Type	Number
Gasoline-only	149
Diesel-only	2
Plug-in hybrid	8
100% electric	7
CNG	3
Total WSU Fleet	169

The second goal is to reduce faculty, staff, and student commuting-related greenhouse gas emissions by 50% (from the 2007 baseline) by the year 2030. This fiscal year, WSU saw a 30% reduction in commuting-related emissions.

The third goal is to support sustainable university-related travel. Currently WSU only collects airline emissions data but the Energy & Sustainability Office has plans to work with offices across campus to obtain ground-transportation travel data and then develop strategies for reducing travel emissions. Airline emissions were back up this fiscal year to pre-pandemic levels with the resumption of travel.

WATER ACTION PLAN PROGRESS

Water Action Plan Progress

WATER CONSERVATION GOALS AND PROGRESS

The Weber State University Water Action Plan identifies measures the University can implement to conserve water resources, reduce water costs, improve water quality through proper stormwater management, and optimize sustainable management of campus facilities. The plan was completed with the input from the water advisory council, which was comprised of experts (both on and off campus) and student, faculty, and staff representatives. A copy of the completed plan can be found on the [WSU Sustainability website](#).

WSU's Water Action Plan goals were derived from two sources: the Utah Division of Water Resources' 2019 plan, *Utah's Regional M&I Water Conservation Goals*, and the Sustainability Tracking Assessment and Rating System (STARS) Version 2.2 technical manual created by the Association for the Advancement of Sustainability in Higher Education (AASHE). STARS Version 2.2 outlines three water conservation goals for reporting institutions: reduce culinary water use by 30% per Weighted Campus User (WCU) compared to WSU's baseline, reduce culinary water use by 30% per gross square foot of floor area compared to WSU's baseline, and reduce total water use by 30% per acre of vegetated grounds compared to WSU's baseline.

STARS provides a formula to calculate Weighted Campus User (WCU) and defines it as a measurement of an institution's population that is adjusted to accommodate how intensively certain community members use the campus. WSU is currently working to achieve the points associated with all three water goals by the year 2025.

The Utah DWR 2019 plan divides the State into nine conservation regions and sets a different municipal and industrial (M&I) water conservation goal per region. All of WSU's campuses fall within the Weber River conservation region, which has a goal to reduce M&I gallons per capita per day consumption by 20% by 2030 as compared to 2015 baseline consumption. Reliable secondary consumption data was not available until 2016 and therefore WSU is utilizing an average of FY 2016 – FY 2018 as the baseline.

Table 7 below provides the baseline and goal water consumption data. Table 8 below reports how well WSU is doing in achieving those goals this fiscal year. WSU is very close to reaching its first two water conservation goals and has exceeded the last two consumption reduction goals.

WATER ACTION PLAN PROGRESS

Table 7: WSU Water Action Plan Baseline Consumption and Goals

Goal	Baseline Consumption (gallons)	Goal Year	Goal Consumption (gallons)
STARS 1: Reduce <u>culinary</u> consumption by 30% per Weighted Campus User (WCU)	70,410,300	2025	50,678,044
STARS 2: Reduce <u>culinary</u> consumption by 30% per square foot	70,410,300	2025	50,676,766
STARS 3: Reduce <u>total</u> water consumption by 30% per vegetated acre	159,861,838	2025	111,408,128
Utah DWR: Reduce <u>total</u> M&I consumption by 20% gallons per capita	159,861,838	2030	136,580,661

Table 8: Fiscal Year 2022 Water Conservation Progress

Goal	Goal Year	2022 Consumption (gallons)	% Reduction from Baseline
STARS 1: Reduce <u>culinary</u> consumption by 30% per <u>Weighted Campus User (WCU)</u>	2025	62,683,06	10%
STARS 2: Reduce <u>culinary</u> consumption by 30% per <u>square foot</u>	2025	62,683,506	18%
STARS 3: Reduce <u>total</u> water consumption by 30% per <u>vegetated acre</u>	2025	96,687,593	40%
Utah DWR: Reduce <u>total</u> M&I consumption by 20% <u>gallons per capita</u>	2030	96,687,593	39%

WATER ACTION PLAN PROGRESS

WATER PROJECT/PROGRAM IMPLEMENTATION PROGRESS

Two years ago WSU started the design process to replace culinary water lines on campus to reduce the number of line breaks and leaks on campus. This work continued this year, along with creating designs for upgrading all of the secondary water lines as well.

Work also started on transitioning WSU's Ogden campus cooling towers over to secondary water to reduce culinary water consumption. This project is expected to be completed in 2022.

Xeriscaping campus continues to be an important water conservation strategy. This past year, Facilities Management completed three new xeriscape projects on its campuses.

The most effective water conservation program implemented to date is the Water Warrior Challenge. The Water Warrior Challenge is a competitive and incentive-based program for the landscape area managers, managed by the water conservation specialist. The program is designed to get distribution uniformity (DU) data from WSU's irrigation zones to provide a way to improve the DU in each area. Distribution uniformity measures how evenly water is applied to a landscape area. The lower the DU, the more water is needed to maintain the landscaping. Each of the twelve landscape area managers work with the water conservation specialist to choose an area that needs improvement. After an area is chosen, a water audit is performed to determine the DU of the zone. A plan is then created and executed to improve the DU. After the plan has been implemented, a second water audit is performed to compare the DU between the two audits. The landscaper that has the most improvement in their DU percentage wins the Water Warrior Challenge and a large trophy.

This program has been successful in not only replacing over two hundred outdated and inefficient spray heads with high efficiency rotator sprinkler heads a year, but also looking at each irrigation zone individually to implement a custom plan to perform the best improvements possible for that area. The program also provides friendly competition and an avenue for the landscapers to be excited about improving the DU of their areas.

ZERO WASTE

Zero Waste

ZERO WASTE PLAN GOALS AND PROGRESS

In 2020, the Energy & Sustainability Office convened a Zero Waste Committee to develop a plan to achieve zero waste at WSU. The Zero Waste International Alliance defines zero waste as “The conservation of all resources by means of responsible production, consumption, reuse, and recovery or products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.”

WSU’s Zero Waste Committee set a goal to divert 50% of our waste from the landfill by 2025. By 2025, the Committee also set a goal to reduce waste production to 0.05 tons (100 lbs) per weighted campus user (WCU) per year. WSU’s ultimate goal is to achieve zero waste status by the year 2050. WSU’s zero waste goals and strategies are located within WSU’s Sustainability Plan which can be viewed here: <https://weber.edu/sustainability/reports.html> Table 9 below provides data on WSU’s waste and recycling weights since 2007.

Table 9: WSU’s Waste and Recycling Weights (reported in short tons)

Year	Waste	Co-Mingled Recycling	Misc. Special Recycling ¹	Glass	Metal	Green Waste	Food ³	Reuse ⁴	Total
2007	845	0	0	0	0	0	0	0	845
2008	834	0	0	0	0	0	0	0	834
2009	833	0	0	0	0	0	0	0	833
2010	807	138	0	0	0	0	0	0	945
2011	799	196	0	0	0	160	3	0	1158
2012	769	191	0	0	0	122	3	0	1085
2013	901	194	0	0	0	122	3	0	1220
2014 ²	901	194	0	0	0	122	3	0	1220
2015	1,009	262	0	0	0	122	3	0	1396
2016	1,009	262	0	8.93	0	122	3	0	1404.93
2017	649	271	0	8.84	0	85	3	0	1016.84
2018	693	220	0	18.13	5.6	77	3	0	1016.73
2019	709	213	0	22.27	17	107	3	0	1071.27
2020	686	199	0	13.81	10	76.14	3	0	987.95
2021	320	93	0.73	24.31	19.672	100.66	3	12.3	573.672
2022	514	109	7.3	28.75	15.97	148.65	6.68	7.4	837.88

¹This category includes battery, printer cartridge, and electronics recycling. Data collection began in 2021.

²WSU’s waste hauler did not provide data for FY 2014 and therefore FY 2013 was used for a second year.

ZERO WASTE

³Includes food waste composted and food recovered and donated.

⁴Includes weight of all items sold by Property Control to the public or distributed to other departments for reuse.

Figure 14 below shows that WSU is making progress towards meeting its 2025 50% waste diversion goal. This fiscal year, over 38% of WSU's waste was recycled, composted, reused, or recovered rather than sent to the landfill.

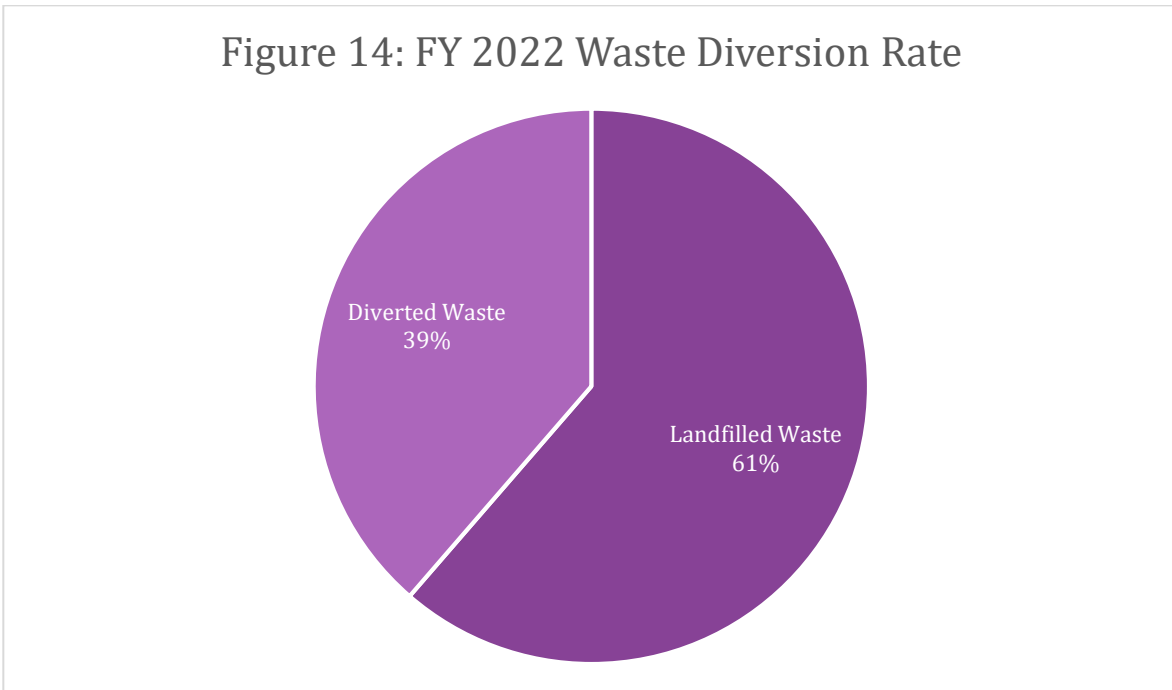
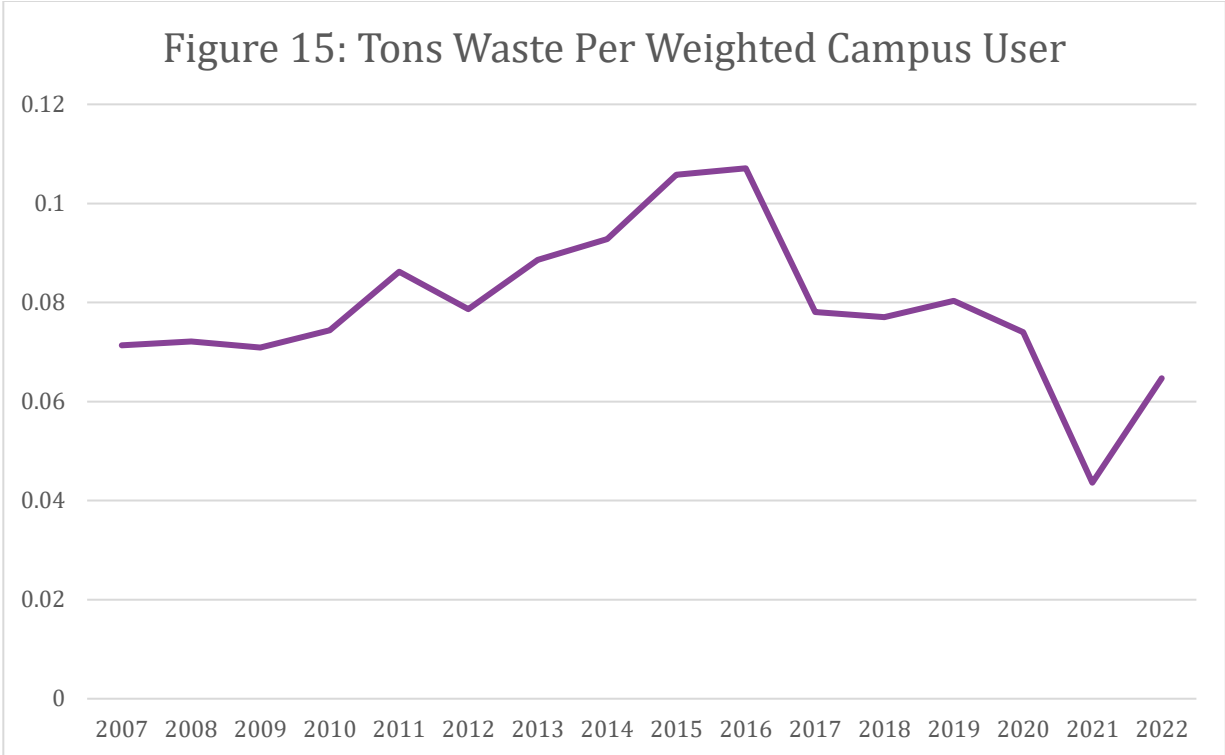


Figure 15 below shows that WSU is close to meeting its goal to generate less than 0.05 tons of waste per Weighted Campus User (WCU). Waste generated per WCU increased from FY 21 to FY 22 with the resumption of regular campus operations.

ZERO WASTE



WASTE REDUCTION PROJECTS AND PROGRAMS

A culture of waste reduction is promoted by our student Environmental Ambassadors and through the campus Green Department Certification Program that targets faculty and staff. The student Environmental Ambassadors run free swap, fix-it workshops, and green move-in and move-out events to help reduce waste on campus. The Green Department Certification Program awards points towards certification for the implementation of a variety of waste reduction efforts, including paper consumption reduction and the use of tiny office trash cans that help minimize waste.

For years, WSU has composted its landscaping waste and pre-consumer food waste. WSU's student Food Recovery Network Chapter also recovers food from events and Sodexo Dining Services and transports the food to the Lantern House which is a shelter located in downtown Ogden.

The campus Property Control department ensures that used office furniture, electronics, and other goods are reused by other departments on campus or are sold to the public rather than sent to the trash.

ZERO WASTE

WSU continues to provide co-mingled recycling services that collect paper, cardboard, cans, and plastics #1 and #2. WSU also maintains specialty recycling services for glass, metal from construction and renovation projects, electronics, printer cartridges, and batteries.

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Engagement

The Energy & Sustainability Office is committed to implementing programs and events that increase the number of students, faculty, and staff engaging with sustainability. The ESO engages faculty and staff primarily through the Green Department Certification Program and students through the sustainable clubs discussed below. The Green Badge Program was created to engage students, faculty, and staff. The ESO also assists WSU's Sustainable Practices and Research Center (SPARC) with the implementation of off-campus community engagement programs like the Intermountain Sustainability Summit and the Empower Northern Utah Program.

GREEN DEPARTMENT CERTIFICATION PROGRAM

The Energy and Sustainability Office launched the Green Department Certification Program in the fall of 2014. Green Departments help create a core group of leaders across campus with the common goal of implementing sustainability practices and helping the University meet its Climate Action Plan goals. Each participating department is considered a "Green Team" and has the opportunity to earn points and achieve different levels of certification; bronze, silver, gold, and green. The Energy and Sustainability Office works directly with the department Green Teams to help set sustainable goals and provide tools to help reach those goals. Version 3 of program was launched in Fall 2021, transitioning the program to primarily function via Google Drive to allow Green Teams to access and track their progress. The checklist used to track progress and associated points was also updated with the launch of Version 3.

There are currently 90 Departments actively participating in the program. Out of those 90 departments, 86 are certified with 33 being green certified, 17 gold certified, 23 silver certified, and 13 bronze certified. More information on the Green Department Program including green resources and the department checklist can be found at <https://www.weber.edu/sustainability/GreenDept.html>

GREEN BADGE PROGRAM

During the 2021-2022 academic year, the Energy and Sustainability Office piloted the Green Badge Program to prepare for its official launch in Fall 2022. This new program incentivizes students, faculty, and staff to make their lives more sustainable and increase their knowledge of 8 different aspects of sustainability by earning monthly badges. Each month focuses on a different aspect of sustainability and participants earn badges by completing a prerequisite and 2 chosen actions related to that theme. The themes for each month are September - Energy & Climate, October - Social Sustainability, November - Food Sustainability, December - Health & Wellness, January - Zero Waste & Sustainable Purchasing, February - Transportation, March - Education & Outreach, April - Water Sustainability. There were 5 student volunteers and 11 staff volunteers who completed a number of badges and provided feedback through monthly surveys and two

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focus groups. More information on the Green Badge Program and associated badges can be found at <https://www.weber.edu/sustainability/green-badge-program.html>

SUSTAINABLE CLUBS

Weber State University has four sustainability-related clubs to engage students; the Environmental Ambassadors, Food Recovery Network, Garden Club, and a student chapter of the national non-partisan Citizens' Climate Lobby. The Environmental Ambassadors is responsible for hosting events and conducting outreach and education. The Food Recovery Network utilizes student volunteers to recover uneaten food across campus and transport it to either the campus food pantry or the Lantern House in downtown Ogden. The Garden Club manages the Community Garden on the Ogden campus and supplies student volunteers and the campus food pantry with fresh produce. The Citizens' Climate Lobby lobbies for a carbon fee and dividend solution to climate change. The Sustainable Clubs hosted a variety of events during the 2021-2022 academic year to engage students and provide hands-on sustainability experiences.

In Fall 2021, the clubs reestablished a Zero Waste Athletics initiative, also known as "Wildcats Go Zero Waste". They worked with the Athletic Department to coordinate a number of basketball and football games where student volunteers could reduce recycling contamination and provide education to those attending the games. Volunteers were stationed at recycling bins at the games to direct fans to the correct bins to properly dispose of their waste and enjoy the games at the same time. Many items like food products and packaging provided at games are not recyclable, making these events were critical to reduce recycling contamination and ensure recyclable items like plastic bottles are recovered. From September 2021 to March 2022, Wildcats Go Zero Waste attended 3 football games and 13 basketball games where 152 pounds, the equivalent to 3,800 plastic bottles, were collected to be recycled.

In November 2021, for the Food Sustainability themed month, the WSU Food Recovery Network Chapter hosted a Kitchenware Drive to gather donations for the Weber Cares Food Pantry to help those who need kitchen necessities needed to cook meals at home. The event also helped bring awareness about the on-campus food pantry. There was a drop-off location designated at the Library dock where people could easily drop off their donations. 475 pounds of kitchenware was donated at this event.

In January 2022, EA hosted the Free Swap event designed to be a spring-cleaning opportunity for students, faculty, staff, and WSU community members to donate items they no longer needed to the event and to take items from the event that they may need. The purpose was to help reduce the large amount of waste expected to enter the landfills and provided an opportunity to help the campus community get needed items for free. All leftover items were donated to Savers. This had a total of 138 participants and tracked 541 pounds of donated items.

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In addition, the Food Recovery Network has a lot of impact on not only waste, but also food insecurity within campus and the community. Over the course of the 2022 academic year, the Food Recovery Network recovered 1,810 lbs. of food, the equivalent of 1,500 meals, from the campus dining services that was donated to the Lantern House.

In February 2022, for the Transportation & Air Quality themed month, Weber State University participated in the annual Clear the Air Challenge with a few changes. The statewide challenge moved the challenge to take place in July. Weber State University wanted to continue to host this event in February, so it hosted its first fully internal Clear the Air Challenge between students, colleges, and the six university divisions. As a whole, “Team Weber” traveled over 17,100 miles, burned 35,896 calories, saved over \$6,500 in fuels costs, and saved over 4.5 metric tons of CO₂ from entering our air. The winning Division, for the 2nd year in a row, was WSU Academic Affairs with 1.6 metric tons of CO₂ savings. The college winner, for the 2nd year in a row (and currently undefeated), was WSU College of Social & Behavioral Sciences with 1.3 metric tons of CO₂ savings.

To connect the Zero Waste theme and Transportation Air Quality, the Sustainable Clubs visited the Ogden Bicycle Collective. The 6 participants learned about the basics such as how to change tires and brake pads, aligning the wheels of a bicycle, fitting a slipped chain, and adjusting the bike seat for a proper fit.

The clubs also hosted a Self-love & Sustainable Candle workshop in February to teach members about indoor air quality. Jars for the soy candles were thrifted and the wax was heated using an instant pot.

EMPOWER NORTHERN UTAH PROGRAM

Empower Northern Utah is offered by Weber State Sustainability in partnership withUCAIR (Utah Clean Air Partnership), the HEAT Program, the Dee Foundation, and others to provide ways for the residents of Weber and Davis Counties to increase energy efficiency in their homes. The 2020 Empower Northern Utah program provided the community with 300 Nest E thermostats and 1,104 LED lightbulbs to improve efficiency, reduce emissions, and reduce utility bill costs. As a result, the community as a whole will have an annual savings of \$29,727, 175,500 kwh of electricity, 16,800 therms of natural gas, and will reduce 25,047 pounds or 11.36 metric tons of greenhouse gas emissions annually. *Calculated for the 300 households that received thermostats funded byUCAIR. Calculations were done by using the average Utah natural gas and electricity rates provided by the Energy Information Administration and emission factors associated with residential natural gas consumption were provided by the Utah Department of Air Quality.

Program participants were permitted to sign up for thermostats starting on September 28, 2021 at 6:00 p.m. via <http://www.weber.edu/empower>. A total of 200 thermostats were provided to

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program participants on a first-come-first served basis for the reduced cost of \$50 (plus taxes and credit card fees), while 100 thermostats were distributed, free, to HEAT program participants. Program participants were able to pick up their thermostats at an event held at the Weber County Main Library on October 9, 2021 or by visiting the WSU Ogden campus information booth after October 9.

LED bulbs were free to program participants in exchange for old CFL and incandescent bulbs. Exchange events were held at the Weber County Main Library on September 25th, October 2nd, and October 9th.

CONTACT INFORMATION

Contact Information

Please feel free to contact us with any questions you might have! Additional information can be found at: www.weber.edu/sustainability

JENNIFER BODINE
SUSTAINABILITY MANAGER

PHONE: 801-626-6421
JENNIFERBODINE@WEBER.EDU

DREW HODGE
WATER CONSERVATION &
STORMWATER COORDINATOR

PHONE: 801-549-7544
DREWHODGE@WEBER.EDU

JUSTIN OWEN
ENERGY MANAGER

PHONE: 801-626-6683
JUSTINOWEN@WEBER.EDU

ANALEAH VAUGHN
SUSTAINABILITY ENGAGEMENT
COORDINATOR

PHONE: 801-626-6539
ANALEAHVAUGHN@WEBER.EDU