



THE OHIO STATE UNIVERSITY

**Comprehensive Energy Management
Concession Agreement Annual Report**

Fiscal Year 2023



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Executive Summary

The Long-Term Lease and Concession Agreement for Utility Systems at The Ohio State University was executed on April 12, 2017. The concessionaire, Ohio State Energy Partners (“OSEP”), assumed operations responsibility on July 7, 2017. ENGIE Buckeye Operations, LLC. (“ENGIE”) is the Operator of the campus Utility Systems leased to OSEP.

Fiscal year 2023 marks the sixth full fiscal year of the concession agreement with OSEP.

Fiscal year 2023 highlights

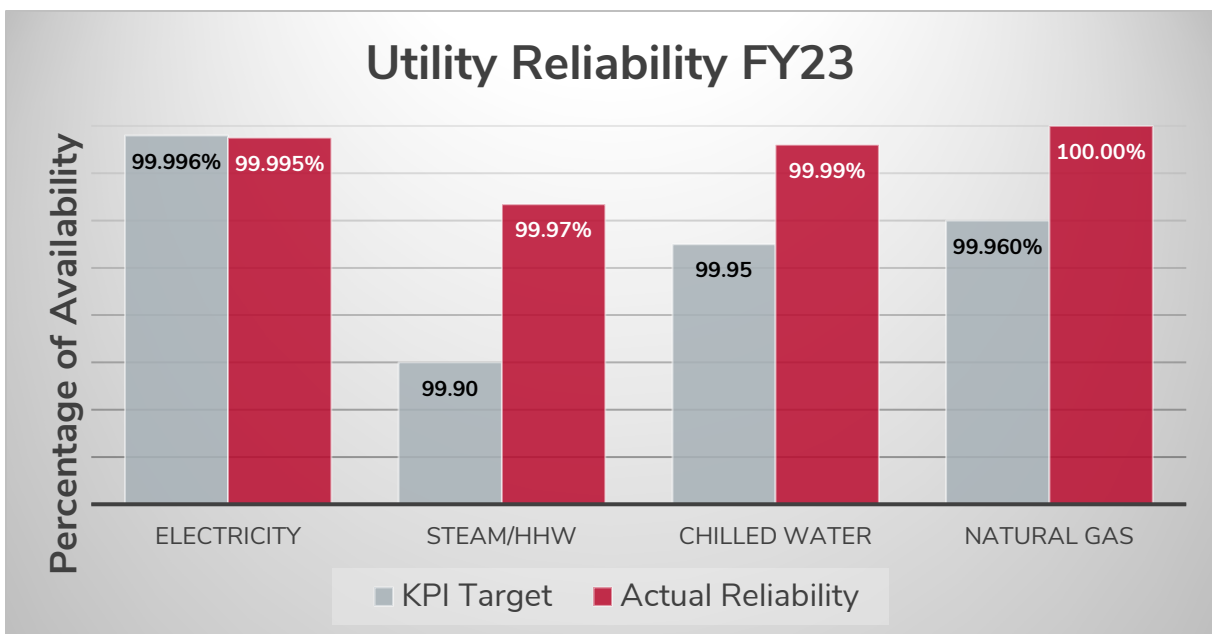
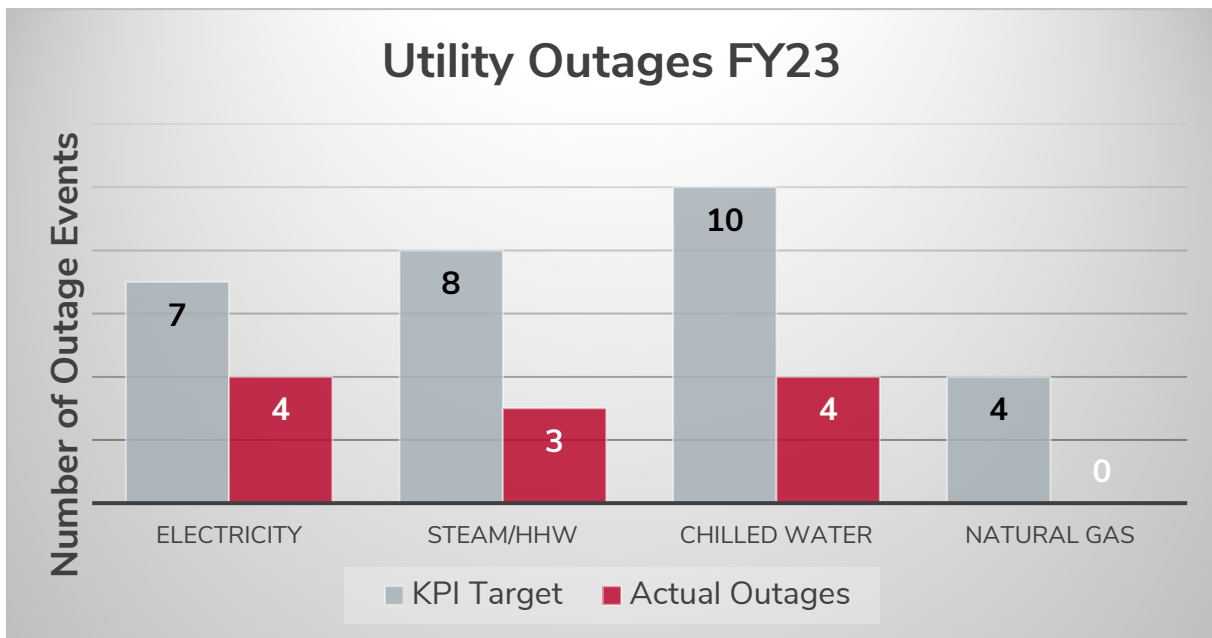
- All but one Key Performance Indicators (“KPI”) was met or exceeded
 - This is OSEP’s first KPI miss of the agreement, and it was a minor miss
- Commenced 13 new Utility System capital improvement projects
- Sixth consecutive year of Columbus Campus energy efficiency improvement
- Academic collaboration commitments met

OPERATIONS

KPIs/Service Reliability

OSEP must maintain utility service availability at a level of reliability that meets or exceeds Ohio State’s historical levels prior to the concession agreement. The annual “KPI Calculation” determines the KPI scores for the most recent fiscal year.

The charts below are summaries of OSEP’s utility service reliability performance based on the number of unplanned utility outage events and the total number of unplanned outage hours.



Energy Use Intensity

OSEP is required to maintain or improve the energy efficiency of the Columbus Campus annually as well as meet or exceed a total energy efficiency improvement of 25% by the end of fiscal year 2028.

Energy efficiency is measured by the Energy Use Intensity (“EUI”) – a calculation of the energy used per square foot of indoor building area. As Table 1 shows, the Energy Conservation Measures (“ECM”) installed over the past three years are measurably improving campus energy efficiency.

Table 1 – Energy Use Intensity Summary

Fiscal Year	Total Area (square feet)	Total Area Variance	EUI Score (Btu/sq. ft.)	EUI Score Variance
Baseline 2017	24,118,154	N/A	201,706	N/A
2023	25,551,866	5.94%	177,215	- 12.14 %

OSEP PROJECTS, PLANNING, AND APPROVALS

Energy Advisory Committee and Capital Planning

OSEP must obtain prior annual approval before any projects may commence in a given fiscal year. OSEP projects are proposed to the university through the Energy Advisory Committee (“EAC”). The EAC members include representatives from OSEP; the offices of Academic Affairs, Administration and Planning, Athletics, Business and Finance, and Student Life; the Wexner Medical Center; faculty; and the student body.

After the EAC reviewed and provided feedback on project proposals, OSEP submitted the proposed fiscal year 2023 Five-Year Plan to the University. The proposed plan was subsequently reviewed through the university’s capital approval process, including review and consideration by the Integrated Physical Planning Liaison Group, the Integrated Capital Planning Group, and the Capital – Executive Sponsor Group. The final version of the fiscal year 2023 OSEP plan was presented to the Board of Trustees in August 2022.

OSEP has four categorizations for utility capital improvements.

1. “LFC” – Lifecycle projects to maintain existing campus utility operations
2. “EXP” – Expansion projects for the changing campus needs, including new buildings
3. “ECM” – Energy Conservation Measures to improve the energy efficiency of campus
4. “SPC” – Utility projects that do not fit well into other categories and/or are subject to special conditions

Appendix A is a complete list of OSEP fiscal year 2023 Approved Capital Improvement Projects.

FINANCIALS

Project Summary

Table 2 shows the total approved capital budgets for each of the categories. The approved budgets represent the total project budget. Many of the projects have budget expenditures over multiple years.

Table 2 – Approved Capital Project Budgets Summary

Projects Approved ¹	FY 2021	FY 2022	FY 2023	FY 2018-2023
Lifecycle Projects	\$ 5,300,000	\$ 6,100,000	\$ 17,200,000	\$ 57,100,000
Expansion Projects	\$ 3,600,000	\$ 28,200,000	\$ 22,700,000	\$ 412,200,000
ECM Projects	\$ 59,800,000	\$ 51,100,000	\$ 19,400,000	\$ 213,100,000
Total	\$ 68,700,000	\$ 85,400,000	\$ 59,300,000	\$ 682,400,000

Utility Fee

The Utility Fee is the fee that OSEP charges to the university for the operation of the Utility Systems and the recovery of OSEP's approved capital improvement investments.

The three components of the Utility Fee are (i) the Fixed Fee, (ii) the Operations and Maintenance Fee, and (iii) the Variable Fee.

- i. The Fixed Fee escalates for inflation each year at a rate of 1.5%.
- ii. The Operations and Maintenance (O&M) Fee are the allowable costs for operations and general maintenance including employee salaries, general business supplies, and expenses.
- iii. The Variable Fee is for the recovery of OSEP's approved capital improvement investments. OSEP earns a Return on Equity on 50% of its approved capital improvement investments. The remaining 50% is subject to only a cost of debt recovery. The Utility Fee for Fiscal Year 2023 was \$112.28 million. Table 3 shows the breakdown.

¹ Amounts in Table 2 are rounded to the nearest \$100,000.

Table 3 – Utility Fee Payments Summary

Utility Fee Payments ¹	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Fixed Fee	\$ 45,700,000	\$ 46,360,000	\$ 47,060,000	\$ 47,760,000	\$ 48,480,000
O&M Fee	\$ 9,700,000	\$ 10,610,000	\$ 10,380,000	\$ 11,940,000	\$ 12,000,000
Variable Fee	\$ 1,100,000	\$ 5,270,000	\$ 18,630,000	\$ 30,530,000	\$ 51,800,000
Total	\$ 56,500,000	\$ 62,240,000	\$ 76,070,000	\$ 90,230,000	\$ 112,280,000

ENDOWMENTS

Ohio State devoted approximately \$800 million of the upfront proceeds, including \$54.5 million from the academic collaboration package, to create 11 endowments that were placed in the Long-Term Investment Pool and allocated to the following quasi-endowment categories:

1. Student aid
2. Faculty
3. Strategic initiatives
4. Other
5. Energy stabilization

Detailed distributions and uses from each of the endowments can be found in Appendix B.

ACADEMIC COLLABORATION

OSEP met or exceeded all academic collaboration commitments for fiscal year 2023. OSEP provided \$810,000 toward a wide range of interests including student programs, the arts, health, STEM leadership for traditionally underrepresented groups, digital workforce development, sustainability initiatives, and many others. Appendix C is a complete list of new projects/programs that received funding in fiscal year 2023.

¹ Amounts in Table 3 are rounded to the nearest \$10,000.

APPENDIX A – FISCAL YEAR 2023 APPROVED OSEP CAPITAL PROJECTS BUDGETS

Project Code	Project Title	FY 2023 ¹	Total Project ²
42-23-LFC	Midwest Campus Gas Line Replacements	\$ 1,797,000	\$ 1,797,000
43-22-LFC	Utility Systems Replacements & Upgrades – Bohannon Tunnel	\$ 2,360,000	\$ 2,534,000
100-22-LFC	Campus Gas – Building system upgrade FY22	\$ 1,709,000	\$ 2,484,000
122-22-LFC	Utility Replacements/Upgrades – Cockins Hall Vault and Tunnel	\$ 1,190,000	\$ 1,450,000
123-22-LFC	Utility Systems Replacements & Upgrades – 19th Avenue Tunnel	\$ 603,000	\$ 738,000
124-23-LFC	Ohio State Student Life North District Cooling	\$ 841,000	\$ 841,000
127-23-LFC	Electrical Maintenance at Building Interfaces	\$ 911,000	\$ 911,000
130-23-LFC	McCracken/Water Treatment Systems and Building Improvement	\$ 1,273,000	\$ 5,872,000
133-23-LFC	Steam Vaults Repair and Replacement	\$ 697,000	Pending
134-23-LFC	Ohio State Substation Upgrades – Phase 1	\$ 192,000	Pending
144-23-LFC	West Steam and Condensate System Infrastructure	\$ 4,630,000	\$ 4,630,000
148-23-LFC	Buckeye Village Natural Gas Demolition and Refeed	\$ 739,000	\$ 739,000
150-23-LFC	Campbell Hall Renovation Utility Service	\$ 246,000	\$ 246,000
LFC Budget Subtotal		\$ 17,188,000	\$ 22,242,000
78-23-EXP	South Chiller Plant Partial Buildout	\$ 16,943,000	\$ 16,943,000
79-22-EXP	Midwest Heating and Cooling Building Conversion	\$ 4,503,000	\$ 5,611,000
142-23-EXP	Doan Hall Loading Zone Gas Line Relocation	\$ 249,000	\$ 249,000
145-23-EXP	Martha Morehouse Electrical Expansion – Phase 2	\$ 993,000	\$ 993,000
EXP Budget Subtotal		\$ 22,688,000	\$ 23,796,000
61-23-ECM	Building Energy Systems Optimization – Phase V	\$ 19,385,000	\$ 19,385,000
ECM Budget Subtotal		\$ 19,385,000	\$ 19,385,000
Total Budget Approved in Fiscal Year 2023		\$ 59,261,000	\$ 65,423,000

¹ Many projects are executed over multiple years. The budget shown represents the total approved budget for the project.

² Some projects are approved in multiple parts, for example a project may be approved for design only. The “Total Project” budget is the total of all approvals for that project. “Pending” indicates that the total project has not yet received approval.

APPENDIX B – ENERGY ENDOWMENT FUNDS AS OF JUNE 30, 2023

Energy – Upfront Consideration Funds Distributions and Expenditures

Upfront Consideration Funds	Original Principal	Market Value 6/30/2023	Cumulative Growth
Strategic Initiatives Endowment	\$ 700,000,000	\$ 829,610,391	18.52%
Energy Stabilization Endowment ¹	\$ 75,000,000	\$ 88,718,035	18.29%
Total Funds	\$ 775,000,000	\$ 918,328,426	18.49%

Distributions	FY 2020	FY 2021	FY 2022	FY 2023	FY2018 - FY2023
Strategic Initiatives Endowment	\$ 30,088,240	\$ 30,785,083	\$ 31,190,656	\$ 32,954,640	\$ 176,589,628
Energy Stabilization Endowment ¹	\$ 3,217,618	\$ 3,292,138	\$ 3,335,510	\$ 3,524,149	\$ 18,745,136
Total Funds	\$ 33,305,858	\$ 34,077,221	\$ 34,526,166	\$ 36,478,790	\$ 195,334,764

Expenditures	FY 2020	FY 2021	FY 2022	FY 2023	FY2018 - FY2023
Teaching Excellence (Salary, Benefits)	\$ 4,167,596	\$ 3,935,086	\$ 3,955,636	\$ 3,955,636	\$ 17,470,348
Student Aid (Buckeye Opportunity Program)	\$ 3,630,739	\$ 11,746,006	\$ 11,425,042	\$ 14,600,000	\$ 64,073,525
Strategic Investments Endowment	\$ 0	\$ 0	\$ 0	\$ 2,500,000	\$ 6,742,000
Energy Stabilization Fund ¹	\$ 3,212,333	\$ 3,292,138	\$ 2,363,679	\$ 2,612,704	\$ 11,480,854
Initiatives and Legal Fees	\$ 20,706,633	\$ 26,515,306	\$ 25,066,451	\$ 3,241,370	\$ 75,529,760
Innovation District	\$ 0	\$ 0	\$ 147,000	\$ 353,000	\$ 500,000
COVID Legal Fees	\$ 0	\$ 0	\$ 1,170,855	\$ 325,845	\$ 1,496,700
Total Expenditures	\$ 41,717,301	\$ 45,488,536	\$ 44,128,663	\$ 27,588,555	\$ 177,293,187

¹ Energy Stabilization Endowment distribution used to reduce campus utility rates for 10 years, starting in FY20.

Energy – Academic Collaboration Funds

Academic Collaboration Funds	Original Principal	Market Value 6/30/2023	Market Value + Distributions
Sustainability Projects Endowment	\$ 15,000,000	\$ 17,809,501	\$ 21,636,949
Undergraduate Endowed Scholarship	\$ 12,500,000	\$ 14,841,250	\$ 18,030,789
Graduate/Prof. Endowed Scholarship	\$ 12,500,000	\$ 14,841,250	\$ 18,030,789
Sustainability Curriculum & Development	\$ 5,000,000	\$ 5,936,500	\$ 7,212,316
Endowed Dean's Chair	\$ 3,500,000	\$ 4,115,550	\$ 5,008,621
Endowed Chairs (2)	\$ 4,000,000	\$ 4,749,200	\$ 5,769,853
Endowed Professorships (2)	\$ 2,000,000	\$ 2,374,600	\$ 2,884,926
Total Funds	\$ 54,500,000	\$ 64,707,851	\$ 78,574,243

Distributions	FY 2021	FY 2022	FY 2023	FY2018 - FY2023
Sustainability Projects Endowment	\$ 660,873	\$ 669,579	\$ 707,447	\$ 3,827,448
Undergraduate Endowed Scholarship	\$ 550,727	\$ 557,983	\$ 589,539	\$ 3,189,539
Graduate/Prof. Endowed Scholarship	\$ 550,727	\$ 557,983	\$ 589,539	\$ 3,189,539
Sustainability Curriculum & Development	\$ 220,291	\$ 223,193	\$ 235,816	\$ 1,275,816
Endowed Dean's Chair	\$ 154,204	\$ 156,235	\$ 165,071	\$ 893,071
Endowed Chairs (2)	\$ 176,233	\$ 178,555	\$ 188,653	\$ 1,020,653
Endowed Professorships (2)	\$ 88,116	\$ 89,277	\$ 94,326	\$ 510,326
Total Academic Collaboration Funds	\$ 2,401,170	\$ 2,432,805	\$ 2,570,393	\$ 13,906,392

Expenditures	FY 2021	FY 2022	FY 2023	FY2018 - FY2023
Sustainability Projects	\$ 233,280	\$ 691,301	\$ 711,000	\$ 2,603,507
Undergraduate Endowed Scholarship	\$ 323,074	\$ 158,928	\$ 560,000	\$ 2,533,208
Grad. & Professional Endowed Scholarship	\$ 647,904	\$ 913,883	\$ 826,790	\$ 2,636,491
Sustainability Curriculum & Development	\$ 346,457	\$ 427,616	\$ 309,372	\$ 1,188,215
Endowed Dean's Chair	\$ 197,857	\$ 214,431	\$ 165,017	\$ 634,305
Endowed Chair (2)	\$ 0	\$ 14,630	\$ 500	\$ 15,130
Endowed Professorship (2)	\$ 0	\$ 7,315	\$ 175,000	\$ 182,315
Total Expenditures	\$ 1,748,572	\$ 2,428,103	\$ 2,747,679	\$ 9,793,171

APPENDIX C – FISCAL YEAR 2023 – OSEP ACADEMIC COLLABORATION FUNDING

OSEP Supported Projects/Programs	Amount
Provost Arts Initiative	\$ 175,000
Expanding the Reach and Infrastructure of SciAccess	\$ 50,000
Ohio State 3rd Spaces Pilot Project: Phase 1 - Building a Foundation and Galvanizing Community-Centered DEI and Justice Efforts in Academic-Adjacent Spaces	\$ 50,000
Enhancing Ecological Services through Agroecosystem Management on the Wooster Campus	\$ 50,000
Connecting Regenerative Farming and the Classroom at the OSU Lima Campus	\$ 50,000
Reduce Scope 1 emissions through nitrous oxide leakage study	\$ 50,000
Food Scrap Compost Expansion	\$ 50,000
Solar Energy for Extension Research and Informing	\$ 50,000
NRT Continuation	\$ 50,000
Ambient Architecture	\$ 37,900
EcoCar Competition	\$ 33,500
Kawsay Ukhunchay Andean and Amazonian Indigenous Art and Cultural Artifacts Research Collection –Diversity Impact and Community Collaboration	\$ 32,800
WOSU Annual Fundraiser	\$ 25,000
Wexner Center for the Arts	\$ 25,000
Improving Health Equity in Diverse Communities through a Personal Health Literacy Course	\$ 22,325
State Science Day	\$ 20,000
Batelle Center for Science, Engineering & Public Policy	\$ 20,000
Hackathon Annual Support	\$ 15,000
WestFest Community Science Day	\$ 15,000
The VR Explanation Center	\$ 14,800
Public Engagement and Peer Mentoring in a Museum Setting	\$ 14,344
OSU’s Stone Laboratory Solar Energy Dashboard	\$ 11,000
Design Tool for Implementing Shallow Geothermal-Assisted Season Extension for Greenhouses on Campus and in Community	\$ 10,500
Solar Do-It-Yourself Phone App	\$ 8,000
“Black Health & Wellness Day”	\$ 6,000
Design Activism, Mobile Pop-Up Engagement Stations for Sustainability	\$ 3,500
Total Support¹	\$ 889,669

¹ This exceeds the \$810,000 required annual contribution due to previously unspent funds being reallocated.