



THE OHIO STATE UNIVERSITY

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**Comprehensive Energy Management  
Concession Agreement Annual Report  
Fiscal Year 2022**



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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 2022 marks the fifth full fiscal year of the concession agreement with OSEP.

### **Fiscal year 2022 highlights**

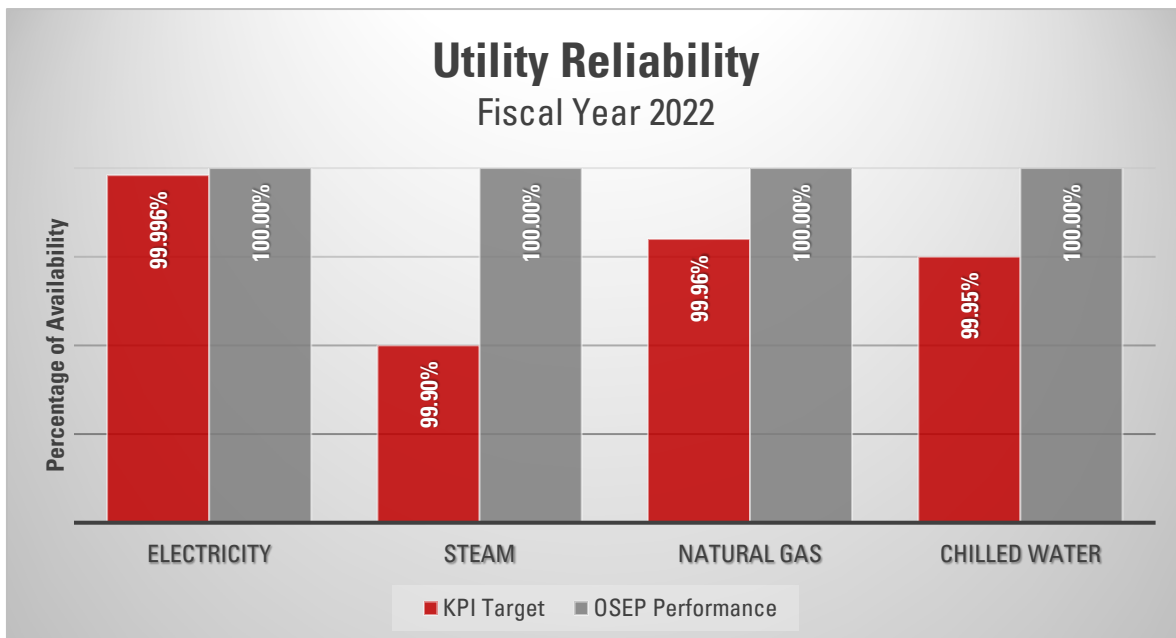
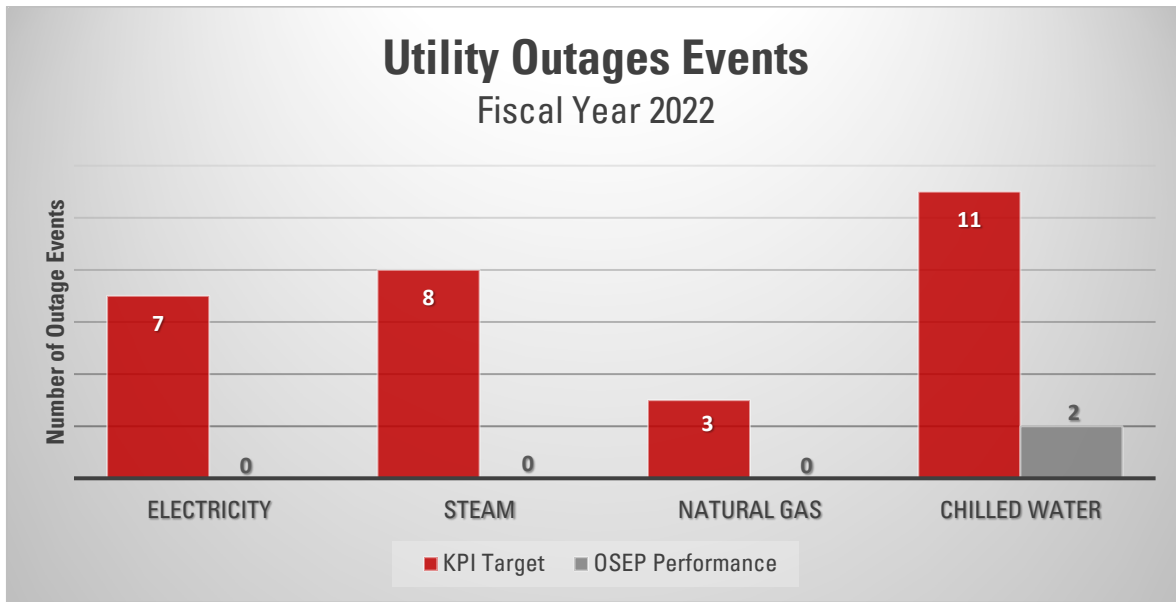
- All Key Performance Indicators (“KPI”) targets met or exceeded
- Commenced 13 new Utility System capital improvement projects
- Fifth consecutive year of Columbus Campus energy efficiency improvement
- Academic collaboration commitments met

## 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**

<b>Fiscal Year</b>	<b>Total Area (square feet)</b>	<b>Total Area Variance</b>	<b>EUI Score (Btu/sq. ft.)</b>	<b>EUI Score Variance</b>
Baseline 2017	24,118,154	N/A	199,583	N/A
2022	25,428,503	5.43%	178,173	- 10.73 %

## **OSEP PROJECTS, PLANNING, AND APPROVALS**

### Energy Advisory Committee and Capital Planning

OSEP must obtain prior annual approval of any projects to be commenced 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, Student Life, the Wexner Medical Center, faculty, and the student body.

After the EAC review and comment, OSEP submitted the proposed fiscal year 2022 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, Integrated Capital Planning Group, and Capital – Executive Sponsor Group. The final version of the fiscal year 2022 OSEP plan was presented to the Board of Trustees in August 2021.

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 2022 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 <sup>1</sup>	FY 2020	FY 2021	FY 2022	FY 2018-2022
Lifecycle Projects	\$ 4,900,000	\$ 5,300,000	\$ 6,100,000	\$ 39,900,000
Expansion Projects	\$ 339,300,000	\$ 3,600,000	\$ 28,200,000	\$ 389,500,000
ECM Projects	\$ 39,700,000	\$ 59,800,000	\$ 51,100,000	\$ 193,700,000
<b>Total</b>	\$ 83,900,000	\$ 68,700,000	\$ 85,400,000	\$ 623,100,000

### 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 2022 was \$90.23 million. Table 3 shows the breakdown.

**Table 3 – Utility Fee Payments Summary**

Utility Fee Payments <sup>2</sup>	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Fixed Fee	\$ 44,300,000	\$ 45,700,000	\$ 46,360,000	\$ 47,060,000	\$ 47,760,000
O&M Fee	\$ 9,200,000	\$ 9,700,000	\$ 10,610,000	\$ 10,380,000	\$ 11,940,000
Variable Fee	\$ 0	\$ 1,100,000	\$ 5,270,000	\$ 18,630,000	\$ 30,530,000
<b>Total</b>	\$ 53,500,000	\$ 56,500,000	\$ 62,240,000	\$ 76,070,000	\$ 90,230,000

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

<sup>2</sup> Amounts in Table 3 are rounded to the nearest \$10,000.

## **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 2022. 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 2022.

## APPENDIX A – FISCAL YEAR 2022 APPROVED OSEP CAPITAL PROJECTS BUDGETS

Project Code	Project Title	FY 2022 <sup>1</sup>	Total Project <sup>2</sup>
31-20-LFC	Electrical Distribution Equipment Assessment and Replacements	\$ 1,484,000	\$ 1,823,000
35-21-LFC	Plant Electrical Equipment Upgrade - Phase I	\$ 2,035,000	\$ 2,225,000
40-22-LFC	OSU Substation Equipment Replacements	\$ 439,000	\$ 439,000
43-22-LFC	Utility Systems Replacements & Upgrades – Bohannon Tunnel	\$ 174,000	Pending
100-22-LFC	Campus Gas - Building system upgrade FY22	\$ 775,000	Pending
109-22-LFC	McCracken Inventory and Infrastructure	\$ 883,000	\$ 883,000
122-22-LFC	Utility Replacements/Upgrades – Cockins Hall Vault and Tunnel	\$ 260,000	Pending
123-22-LFC	Utility Systems Replacements & Upgrades – 19th Avenue Tunnel	\$ 135,000	Pending
LFC Budget Subtotal		\$ 6,185,000	\$ 5,370,000
16-19-EXP	CHP & MW Campus DHC (Smart CampusE - Phase I)	\$ 12,170,000	\$ 289,900,000
27-19-EXP	Ambulatory SF (Power Only)	\$ 1,462,000	\$ 3,576,000
49-20-EXP	New Hospital - Hospital Tower	\$ 8,996,000	\$ 11,096,000
79-22-EXP	Midwest Heating and Cooling Building Conversion	\$ 1,108,000	Pending
80-20-EXP	CEFPR Complex Infrastructure (Gas & Power)	\$ 420,000	\$ 740,000
85-22-EXP	Equine Performance Evaluation Arena	\$ 1,774,000	\$ 1,774,000
88-21-EXP	West Campus Gas Infrastructure	\$ 1,118,000	\$ 1,308,000
117-22-EXP	Martha Morehouse Electrical Expansion	\$ 624,000	\$ 624,000
120-22-EXP	Relocated Hoop House Gas Service	\$ 90,000	\$ 90,000
121-22-EXP	Biomed and Materials Engineering Complex Phase 2 - Utilities	\$ 204,000	Pending
141-22-EXP	Lacrosse Stadium Construction	\$ 228,000	\$ 228,000
EXP Budget Subtotal		\$ 28,194,000	\$ 309,336,000
60-22-ECM	Building Energy Systems Optimization - Phase IV	\$ 44,384,000	\$ 44,384,000
96-21-ECM	SCCCP HRC #1 – Part 2: New hospital tower connection	\$ 6,715,000	\$ 7,360,000
ECM Budget Subtotal		\$ 51,099,000	\$ 51,744,000
<b>Total Budget Approved in Fiscal Year 2022</b>		<b>\$ 85,478,000</b>	<b>\$ 366,450,000</b>

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

<sup>2</sup> 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, 2022

### Energy – Upfront Consideration Funds Distributions and Expenditures

Upfront Consideration Funds	Principal 12/31/2022	Market Value 12/31/2022
Strategic Initiatives Endowment	\$ 713,326,873	\$ 800,323,673
Energy Stabilization Endowment <sup>1</sup>	\$ 76,413,056	\$ 85,586,131
<b>Total Funds</b>	\$ 789,739,929	\$ 885,909,804

Distributions	FY 2020	FY 2021	FY 2022	2018 - 2022
Strategic Initiatives Endowment	\$ 30,088,240	\$ 30,785,083	\$ 31,190,656	\$ 143,634,988
Energy Stabilization Endowment <sup>1</sup>	\$ 3,217,618	\$ 3,292,138	\$ 3,335,510	\$ 15,220,987
<b>Total Funds</b>	\$ 33,305,858	\$ 34,077,221	\$ 34,526,166	\$ 158,855,975

Expenditures	FY 2020	FY 2021	FY 2022	2018 - 2022
Teaching Excellence (Salary, Benefits)	\$ 4,167,596	\$ 3,935,086	\$ 3,955,636	\$ 13,514,712
Student Aid (Buckeye Opportunity Program)	\$ 13,630,739	\$ 11,746,006	\$ 11,425,042	\$ 49,473,525
Strategic Investments Endowment	\$ 0	\$ 0	\$ 0	\$ 4,242,000
Energy Stabilization Fund <sup>1</sup>	\$ 3,212,333	\$ 3,292,138	\$ 2,363,679	\$ 8,868,150
Initiatives and Legal Fees	\$ 20,706,633	\$ 26,515,306	\$ 25,066,451	\$ 72,288,390
Innovation District	\$ 0	\$ 0	\$ 147,000	\$ 147,000
COVID Legal Fees	\$ 0	\$ 0	\$ 1,170,855	\$ 1,170,855
<b>Total Expenditures</b>	\$ 41,717,301	\$ 45,488,536	\$ 44,128,663	\$ 166,073,396

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

## Energy – Academic Collaboration Funds

<b>Academic Collaboration Funds</b>	<b>Principal 12/31/2022</b>	<b>Market Value 12/31/2022</b>
Sustainability Projects Endowment	\$ 15,289,395	\$ 17,180,794
Undergraduate Endowed Scholarship	\$ 12,741,161	\$ 14,317,327
Graduate/Prof. Endowed Scholarship	\$ 12,741,161	\$ 14,317,327
Sustainability Curriculum & Development	\$ 5,096,465	\$ 5,726,931
Endowed Dean's Chair	\$ 3,567,525	\$ 4,008,852
Endowed Chairs (2)	\$ 4,077,172	\$ 4,581,546
Endowed Professorships (2)	\$ 2,038,586	\$ 2,290,772
<b>Total Funds</b>	<b>\$ 55,551,465</b>	<b>\$ 62,423,549</b>

<b>Distributions</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>2018 - 2022</b>
Sustainability Projects Endowment	\$ 645,914	\$ 660,874	\$ 669,579	\$ 3,120,000
Undergraduate Endowed Scholarship	\$ 538,261	\$ 550,727	\$ 557,983	\$ 2,600,000
Graduate/Prof. Endowed Scholarship	\$ 538,261	\$ 550,727	\$ 557,983	\$ 2,600,000
Sustainability Curriculum & Development	\$ 215,304	\$ 220,290	\$ 223,193	\$ 1,039,999
Endowed Dean's Chair	\$ 150,713	\$ 154,203	\$ 156,235	\$ 727,999
Endowed Chairs (2)	\$ 172,244	\$ 176,233	\$ 178,555	\$ 832,002
Endowed Professorships (2)	\$ 86,122	\$ 88,116	\$ 89,277	\$ 416,001
<b>Total Academic Collaboration Funds</b>	<b>\$ 2,346,820</b>	<b>\$ 2,401,170</b>	<b>\$ 2,432,805</b>	<b>\$ 11,366,001</b>

<b>Expenditures</b>	<b>FY 2020</b>	<b>FY 2021</b>	<b>FY 2022</b>	<b>2018 - 2022</b>
Sustainability Projects	\$ 967,926	\$ 233,280	\$ 691,301	\$ 1,892,507
Undergraduate Endowed Scholarship	\$ 1,350,926	\$ 323,074	\$ 158,928	\$ 1,973,208
Grad. & Professional Endowed Scholarship	\$ 187,914	\$ 647,904	\$ 913,883	\$ 1,809,701
Sustainability Curriculum & Development	\$ 81,020	\$ 346,457	\$ 427,616	\$ 878,843
Endowed Dean's Chair	\$ 57,000	\$ 197,857	\$ 214,431	\$ 469,288
Endowed Chair (2)	\$ 0	\$ 0	\$ 14,630	\$ 14,630
Endowed Professorship (2)	\$ 0	\$ 0	\$ 7,315	\$ 7,315
<b>Total Expenditures</b>	<b>\$ 2,644,786</b>	<b>\$ 1,748,572</b>	<b>\$ 2,428,103</b>	<b>\$ 7,045,492</b>

## APPENDIX C – FISCAL YEAR 2022 – OSEP ACADEMIC COLLABORATION FUNDING

OSEP Supported Projects/Programs	Amount
Provost Targeted Arts Initiative	\$ 200,000
Hack OH/IO	\$ 15,000
EmPOWERment Program	\$ 20,000
WOSU Sustainability Programming	\$ 25,000
NRT Continuation	\$ 35,000
WestFest Community Science Day	\$ 15,000
EcoCar Competition (2 years, per year)	\$ 33,500
Evaluating a One-of-a-Kind Experiential Energy Innovation Hub: Human-Centered Innovation Spring for the Energy Advancement and Innovation Center (EAIC Spring)	\$ 44,000
Using campus as a Living Laboratory: Curbing Sediment in Stormwater to Improve Campus Sustainability	\$ 50,000
Sustainable Cities, Equitable Societies – Case Studies to Develop Student Competencies in Sustainable and Just Infrastructure Design	\$ 45,000
Engineering House Learning Community Community's Service-Learning Program with South Side Family Farms	\$ 40,000
Attacking one of the OSU campus's biggest energy sinks: laboratory exhaust fans	\$ 50,000
The Diggers Studio: Cultivating an ethic of social and ecological sustainability in landscape labor	\$ 7,000
Graves Hall Green Space	\$ 50,000
The Green Renaissance Project: Sustainable Pathways to Community Wellness and Resilience Through Art	\$ 11,410
Climate and Cognitive Science Min-Conference	\$ 10,307
Prairie Baroque	\$ 13,000
Post-Occupancy Evaluation of Building Energy & Water Use Intensities	\$ 28,000
Quietly Mowing Campus with Zero Emission Mowers	\$ 50,000
Student Video Production Project	\$ 15,000
Planning Tool for Assessing OSU Options for a Sustainable and Responsible Energy Usage	\$ 48,162
<b>Total Support</b>	<b>\$ 805,379</b>