



# 2022-2023 ANNUAL ENERGY REPORT

## Buildings & Grounds

# Factors Affecting Energy Usage



Weather



Facility Use



Building Envelope



Age of Equipment



Changes in Square  
Footage



Changes in Building  
Occupancy



Consumer Energy  
Habits



Appliances and  
Electronics



# WEATHER DATA

## Heating & Cooling Degree Day Comparisons

Year	2018-2019			2019-2020			2020-2021			2021-2022			2022-2023		
Month	Heating	Cooling	Total	Heating	Cooling	Total	Heating	Cooling	Total	Heating	Cooling	Total	Heating	Cooling	Total
July	0	285	285	0	319	319	0	370	370	3	274	277	0	285	285
August	1	281	282	2	211	213	3	270	273	0	332	332	0	260	260
September	74	108	182	22	67	89	100	19	119	15	51	66	89	78	167
October	437	20	457	467	9	476	498	1	499	203	27	230	379	7	386
November	918	0	918	918	0	918	550	5	555	742	0	742	656	0	656
December	1007	0	1007	970	0	970	1021	0	1021	910	0	910	1080	0	1080
January	1353	0	1353	1072	0	1072	1141	0	1141	1372	0	1372	1019	0	1019
February	1139	0	1139	1071	0	1071	1258	0	1258	1082	0	1082	926	0	926
March	991	0	991	782	0	782	721	0	721	861	0	861	888	0	888
April	550	0	550	622	0	622	477	5	482	584	0	584	477	18	495
May	334	9	343	337	35	372	258	64	322	222	71	293	237	18	255
June	89	67	156	36	188	224	3	234	237	34	188	222	44	122	166
<b>Totals</b>	<b>6893</b>	<b>770</b>	<b>7663</b>	<b>6299</b>	<b>829</b>	<b>7128</b>	<b>6030</b>	<b>968</b>	<b>6998</b>	<b>6028</b>	<b>943</b>	<b>6971</b>	<b>5795</b>	<b>788</b>	<b>6583</b>

Degree days are based on the assumption that when the outside temperature is 65°F, we don't need heating or cooling to be comfortable. Degree days are the difference between the daily temperature mean, (high temperature plus low temperature divided by two) and 65°F. If the temperature mean is above 65°F, we subtract 65 from the mean and the result is **Cooling Degree Days**. If the temperature mean is below 65°F, we subtract the mean from 65 and the result is **Heating Degree Days**.



# FACILITY REQUESTS (IN HOURS)

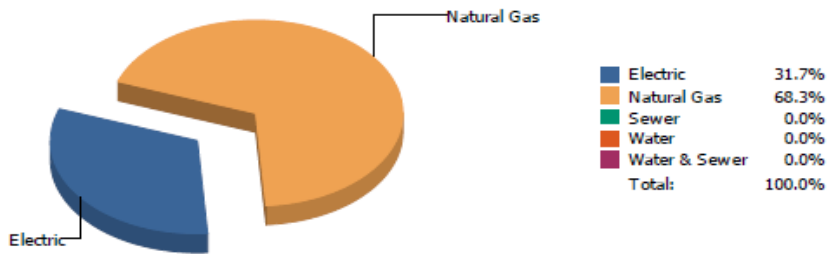
Site	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Oconomowoc High School Main Campus	14,890	17,269	17,269	11,139	16,698	18,616	13,838
Oconomowoc High School East Campus	N/A	N/A	287	211	229	130	440
Nature Hill Intermediate School	4,065	4,407	4,498	3,950	4,557	5,034	4,626
Silver Lake Intermediate School	4,433	4,586	4,613	2,184	3,260	2,637	2,997
Meadow View Elementary School	1,731	2,924	3,008	2,670	4,188	3,339	2,585
Ixonia Elementary School	250	922	957	846	800	636	1,092
Summit Elementary School	2,220	1,971	2,164	1,566	2,254	2,407	2,484
Greenland Elementary School	1,364	1,512	1,474	1,390	1,188	1,066	2,077
Park Lawn Elementary School	1,848	1,611	1,657	1,071	1,436	1,546	1,595
<b>OASD Total</b>	<b>30,801</b>	<b>35,202</b>	<b>35,927</b>	<b>25,027</b>	<b>34,610</b>	<b>35,411</b>	<b>31,734</b>

*\*Disclaimer – There are many variables that have an effect on facility scheduling requests and reports. This makes it difficult to get an accurate comparison from year to year or even school to school. These reports have been gone through and edited by the B&G Dept. to make them as accurate as possible.*

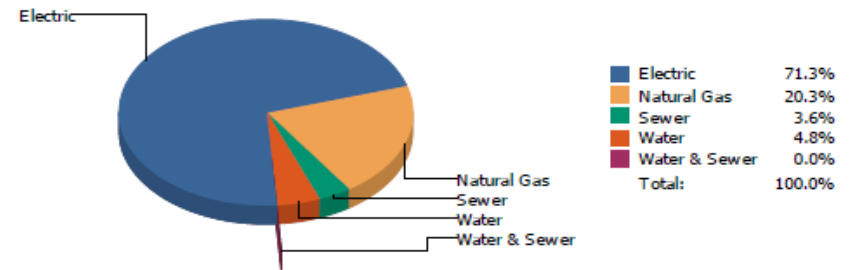
# 2022-2023 DISTRICT OVERVIEW

Place Summary AN - 07

Energy



Cost

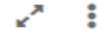


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
<b>Place Summary Report</b>						
Area: 1,134,792 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	6,100,796.00 kWh	20,815,916 KBtu	18.343 KBtu/SqFt	\$867,515.56	\$0.142 /kWh	\$0.764 /SqFt
NATURALGAS	447,542.93 THERM	44,754,293 KBtu	39.438 KBtu/SqFt	\$246,997.07	\$0.552 /THERM	\$0.218 /SqFt
SEWER	6,911.21 Kgal			\$43,608.40	\$6.310 /Kgal	\$0.038 /SqFt
WATER	7,751.21 Kgal			\$58,322.00	\$7.524 /Kgal	\$0.051 /SqFt
WATERSEWER	10.37 Kgal			\$460.00	\$44.372 /Kgal	\$0.000 /SqFt
<b>Totals:</b>		<b>65,570,209 KBtu</b>	<b>57.782 KBtu/SqFt</b>	<b>\$1,216,903.03</b>		



# 2022-2023 Cost Comparisons

Total Cost Per Building: 1 Year ⓘ



<b>Oconomowoc High School</b> \$357,168	<b>Nature Hill Intermediate School</b> \$129,331	<b>New Meadow View Elementary</b> \$116,428		<b>Summit Elementary School</b> \$77,748	
	<b>Silver Lake Intermediate School</b> \$126,870	<b>Park Lawn Elementary School</b> \$55,437	<b>OCONOMOWOC HIGH SCHOOL EAST CAMPUS</b> \$53,225		<b>Ixonia Elementary School</b> \$44,584
		<b>Greenland Elementary School</b> \$54,619	<b>Old Meadow View Elementary School</b> \$27,323	<b>Athletic Fields</b> \$24,608	



# FIVE YEAR COMPARISON ELECTRIC USE

Oconomowoc Area School District

Five Year Use Comparison - YY12

Place	Current Floor Area	2019	2020	2021	2022	2023	Change vs. Last Year	Change % vs. Last Year
<b>Usage in: KWH</b>								
Athletic Fields	5,000 SqFt	103,510	91,960	100,241	57,646	66,663	9,017	15.6
Greenland Elementary School	63,242 SqFt	352,410	286,420	299,819	288,092	259,075	-29,017	-10.1
Grounds Facility	5,000 SqFt	15,021	12,371	13,467	12,601	13,293	692	5.5
Ixonia Elementary School	49,839 SqFt	245,520	209,280	245,660	280,730	236,448	-44,282	-15.8
Nature Hill Intermediate School	123,017 SqFt	859,416	720,944	876,419	791,977	718,735	-73,242	-9.2
New Meadow View Elementary	117,000 SqFt		447,864	672,033	712,647	640,147	-72,500	-10.2
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt	373,122	378,041	399,933	458,708	452,371	-6,337	-1.4
Oconomowoc High School	352,881 SqFt	2,522,359	2,230,035	2,474,197	2,527,782	2,171,594	-356,188	-14.1
Old Meadow View Elementary School	89,618 SqFt	332,760	159,600	164,711	119,307	86,191	-33,116	-27.8
Park Lawn Elementary School	74,409 SqFt	354,424	272,601	339,076	319,605	270,295	-49,310	-15.4
Physical Development Center	5,000 SqFt	104,572	110,645	92,961	95,460	62,013	-33,447	-35.0
Silver Lake Intermediate School	123,017 SqFt	790,938	666,046	886,685	816,900	664,961	-151,939	-18.6
Summit Elementary School	78,069 SqFt	481,899	404,454	550,660	493,231	459,010	-34,221	-6.9
	<b>1,134,092 SqFt</b>	<b>6,535,951</b>	<b>5,990,261</b>	<b>7,115,862</b>	<b>6,974,686</b>	<b>6,100,796</b>	<b>-873,890</b>	<b>-12.5</b>



# FIVE YEAR COMPARISON ELECTRIC COST

Oconomowoc Area School District

Five Year Cost Comparison - YY10

Place	Current Floor Area	2019	2020	2021	2022	2023	Change vs. Last Year	Change % vs. Last Year
Athletic Fields	5,000 SqFt	\$17,004	\$17,872	\$20,312	\$18,946	\$21,428	2,482	13.1
Greenland Elementary School	63,242 SqFt	\$44,740	\$37,891	\$37,212	\$39,776	\$38,123	(1,654)	(4.2)
Grounds Facility	5,000 SqFt	\$1,734	\$1,605	\$1,595	\$1,596	\$1,741	145	9.1
Ixonia Elementary School	49,839 SqFt	\$33,485	\$28,956	\$35,325	\$42,402	\$38,131	(4,271)	(10.1)
Nature Hill Intermediate School	123,017 SqFt	\$107,435	\$95,106	\$111,902	\$112,894	\$113,075	181	0.2
New Meadow View Elementary	117,000 SqFt		\$57,692	\$95,391	\$105,807	\$102,205	(3,602)	(3.4)
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt	\$37,814	\$37,912	\$39,593	\$47,849	\$48,479	630	1.3
Oconomowoc High School	352,881 SqFt	\$261,748	\$237,644	\$255,882	\$285,863	\$276,345	(9,518)	(3.3)
Old Meadow View Elementary School	89,618 SqFt	\$41,630	\$18,265	\$19,166	\$16,061	\$12,034	(4,027)	(25.1)
Park Lawn Elementary School	74,409 SqFt	\$45,444	\$37,549	\$42,528	\$42,646	\$39,291	(3,354)	(7.9)
Physical Development Center	5,000 SqFt	\$19,103	\$19,319	\$17,483	\$15,603	\$12,185	(3,418)	(21.9)
Silver Lake Intermediate School	123,017 SqFt	\$96,314	\$84,333	\$103,431	\$106,901	\$99,233	(7,667)	(7.2)
Summit Elementary School	78,069 SqFt	\$62,912	\$54,336	\$70,289	\$65,809	\$65,244	(565)	(0.9)
	<b>1,134,092 SqFt</b>	<b>\$769,364</b>	<b>\$728,480</b>	<b>\$850,108</b>	<b>\$902,153</b>	<b>\$867,516</b>	<b>(34,637)</b>	<b>(3.8)</b>





# FIVE YEAR COMPARISON NATURAL GAS USE

Oconomowoc Area School District

Five Year Use Comparison - YY12

Place	Current Floor Area	2019	2020	2021	2022	2023	Change vs. Last Year	Change % vs. Last Year
<b>Usage in: THERM</b>								
Greenland Elementary School	63,242 SqFt	25,437	20,209	25,203	25,421	21,599	-3,822	-15.0
Grounds Facility	5,000 SqFt	3,261	3,112	2,946	3,108	2,219	-889	-28.6
Ixonia Elementary School	49,839 SqFt	21,166	16,548	21,911	25,026	17,739	-7,287	-29.1
Nature Hill Intermediate School	123,017 SqFt	61,876	52,639	68,957	57,543	45,596	-11,947	-20.8
New Meadow View Elementary	117,000 SqFt		50,076	52,815	52,965	44,700	-8,265	-15.6
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt	9,611	8,798	10,244	10,484	9,961	-523	-5.0
Oconomowoc High School	352,881 SqFt	206,315	178,396	219,840	193,463	172,972	-20,491	-10.6
Old Meadow View Elementary School	89,618 SqFt	43,553	37,509	41,917	38,669	28,264	-10,405	-26.9
Park Lawn Elementary School	74,409 SqFt	29,037	22,990	26,283	26,207	21,947	-4,260	-16.3
Physical Development Center	5,000 SqFt	5,009	3,277	2,483	3,317	1,962	-1,355	-40.8
Silver Lake Intermediate School	123,017 SqFt	68,140	59,674	74,376	75,162	53,181	-21,981	-29.2
Summit Elementary School	78,069 SqFt	27,461	22,851	32,159	32,081	27,404	-4,677	-14.6
	<b>1,129,092 SqFt</b>	<b>500,866</b>	<b>476,079</b>	<b>579,134</b>	<b>543,446</b>	<b>447,543</b>	<b>-95,903</b>	<b>-17.6</b>



# FIVE YEAR COMPARISON NATURAL GAS COST

Oconomowoc Area School District

Five Year Cost Comparison - YY10

Place	Current Floor Area	2019	2020	2021	2022	2023	Change vs. Last Year	Change % vs. Last Year
Greenland Elementary School	63,242 SqFt	\$12,488	\$10,650	\$14,458	\$13,784	\$12,393	(1,391)	(10.1)
Grounds Facility	5,000 SqFt	\$1,915	\$1,667	\$2,001	\$2,426	\$2,090	(336)	(13.8)
Ixonia Elementary School	49,839 SqFt	\$10,294	\$8,844	\$12,760	\$13,623	\$10,354	(3,269)	(24.0)
Nature Hill Intermediate School	123,017 SqFt	\$27,483	\$25,788	\$36,375	\$29,404	\$24,672	(4,732)	(16.1)
New Meadow View Elementary	117,000 SqFt		\$23,557	\$27,309	\$27,503	\$24,956	(2,547)	(9.3)
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt	\$5,309	\$5,226	\$6,724	\$6,308	\$6,161	(148)	(2.3)
Oconomowoc High School	352,881 SqFt	\$91,116	\$81,761	\$110,421	\$99,091	\$90,594	(8,496)	(8.6)
Old Meadow View Elementary School	89,618 SqFt	\$21,080	\$19,338	\$23,247	\$20,489	\$15,849	(4,640)	(22.6)
Park Lawn Elementary School	74,409 SqFt	\$14,068	\$11,950	\$14,945	\$14,424	\$12,953	(1,471)	(10.2)
Physical Development Center	5,000 SqFt	\$2,983	\$1,870	\$1,730	\$2,748	\$1,899	(849)	(30.9)
Silver Lake Intermediate School	123,017 SqFt	\$32,479	\$28,908	\$40,364	\$37,438	\$29,742	(7,696)	(20.6)
Summit Elementary School	78,069 SqFt	\$13,379	\$11,992	\$17,726	\$17,104	\$15,332	(1,772)	(10.4)
	<b>1,129,092 SqFt</b>	<b>\$232,593</b>	<b>\$231,551</b>	<b>\$308,059</b>	<b>\$284,343</b>	<b>\$246,997</b>	<b>(37,346)</b>	<b>(13.1)</b>



# FIVE YEAR COMPARISON WATER USE

Oconomowoc Area School District

Five Year Use Comparison - YY12

Place	Current Floor Area	2019	2020	2021	2022	2023	Change vs. Last Year	Change % vs. Last Year
<b>Usage in: KGAL</b>								
Athletic Fields	5,000 SqFt	1,115	114	138	505	841	336	66.5
Greenland Elementary School	63,242 SqFt	699	528	553	494	413	-81	-16.4
Nature Hill Intermediate School	123,017 SqFt	715	544	556	678	680	2	0.2
New Meadow View Elementary	117,000 SqFt		370	520	464	495	31	6.7
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt	179	136	138	188	186	-2	-1.2
Oconomowoc High School	352,881 SqFt	3,098	2,658	2,649	3,308	3,570	262	7.9
Park Lawn Elementary School	74,409 SqFt	709	519	620	598	565	-33	-5.5
Physical Development Center	5,000 SqFt	21	9	13	56	24	-32	-57.1
Silver Lake Intermediate School	123,017 SqFt	557	396	450	586	543	-43	-7.4
Summit Elementary School	78,069 SqFt	421	289	418	434	435	1	0.3
	<b>989,635 SqFt</b>	<b>7,514</b>	<b>5,563</b>	<b>6,055</b>	<b>7,311</b>	<b>7,751</b>	<b>440</b>	<b>6.0</b>



# FIVE YEAR COMPARISON WATER COST

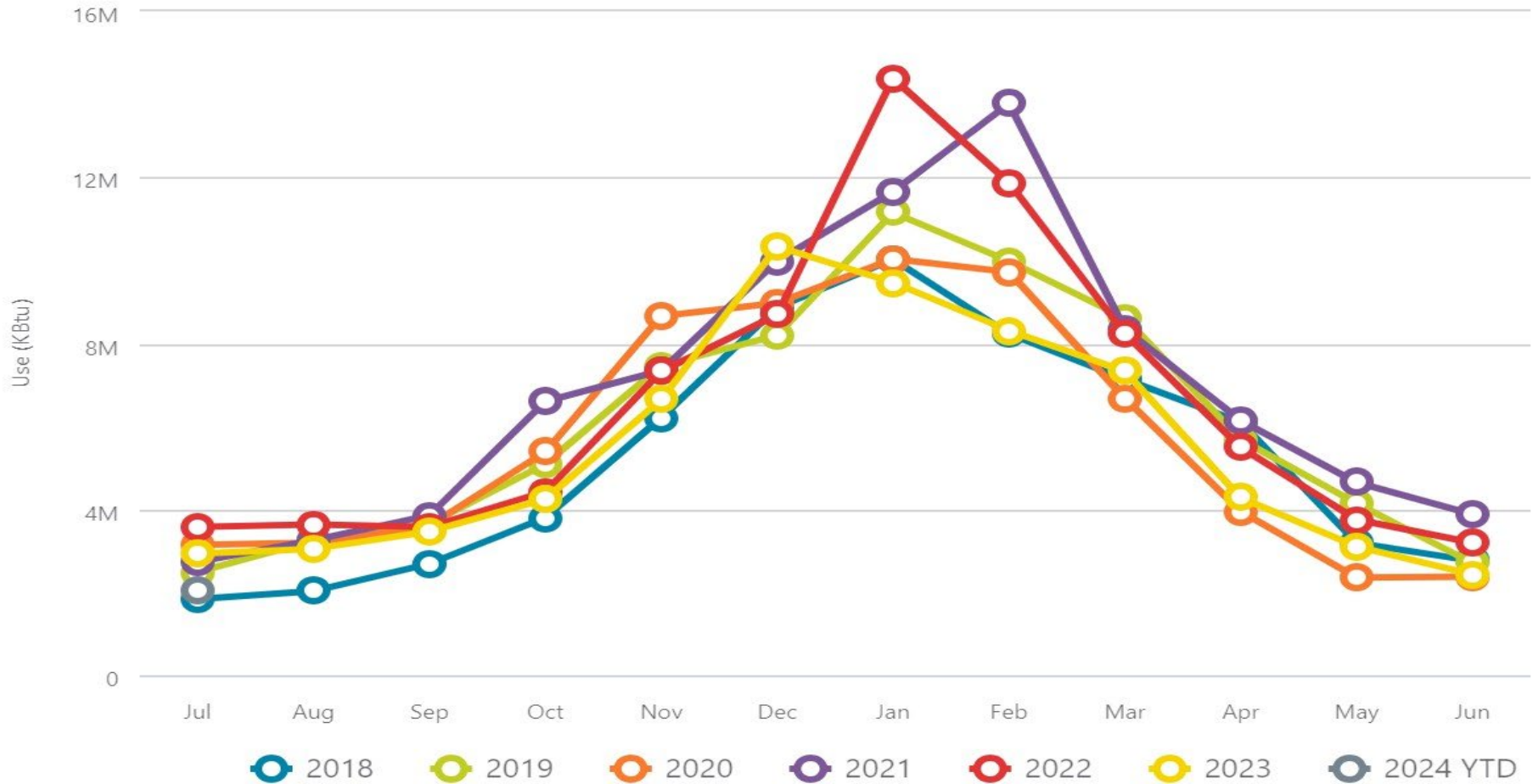
Oconomowoc Area School District

Five Year Cost Comparison - YY10

Place	Current Floor Area	2019	2020	2021	2022	2023	Change vs. Last Year	Change % vs. Last Year
Athletic Fields	5,000 SqFt	\$5,877	\$2,609	\$2,474	\$4,712	\$5,957	1,244	26.4
Greenland Elementary School	63,242 SqFt	\$3,047	\$2,518	\$2,815	\$3,927	\$4,029	102	2.6
Nature Hill Intermediate School	123,017 SqFt	\$4,081	\$3,535	\$3,594	\$5,585	\$6,090	505	9.0
New Meadow View Elementary	117,000 SqFt		\$2,583	\$3,097	\$4,374	\$5,000	626	14.3
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt	\$1,475	\$1,521	\$1,537	\$2,482	\$2,641	159	6.4
Oconomowoc High School	352,881 SqFt	\$11,982	\$10,481	\$10,553	\$18,004	\$20,399	2,394	13.3
Park Lawn Elementary School	74,409 SqFt	\$3,096	\$2,491	\$2,830	\$4,353	\$4,665	312	7.2
Physical Development Center	5,000 SqFt	\$162	\$119	\$130	\$376	\$324	(52)	(13.8)
Silver Lake Intermediate School	123,017 SqFt	\$3,501	\$3,045	\$3,227	\$5,223	\$5,528	305	5.8
Summit Elementary School	78,069 SqFt	\$2,456	\$2,020	\$2,455	\$3,386	\$3,690	304	9.0
	<b>989,635 SqFt</b>	<b>\$35,676</b>	<b>\$30,923</b>	<b>\$32,712</b>	<b>\$52,423</b>	<b>\$58,322</b>	<b>5,899</b>	<b>11.3</b>

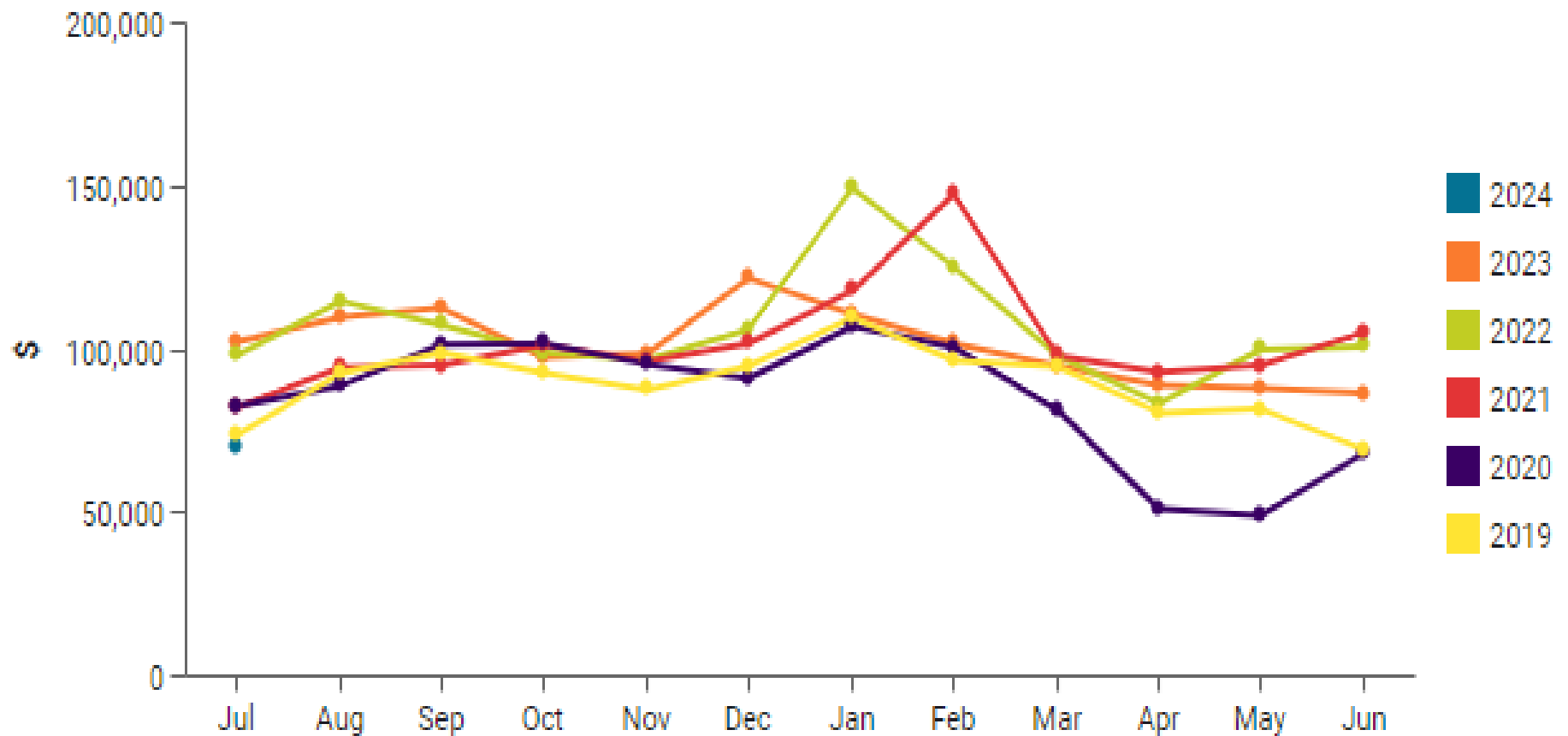
# Five Year Energy Use Trend

5 Year Monthly Use Trend



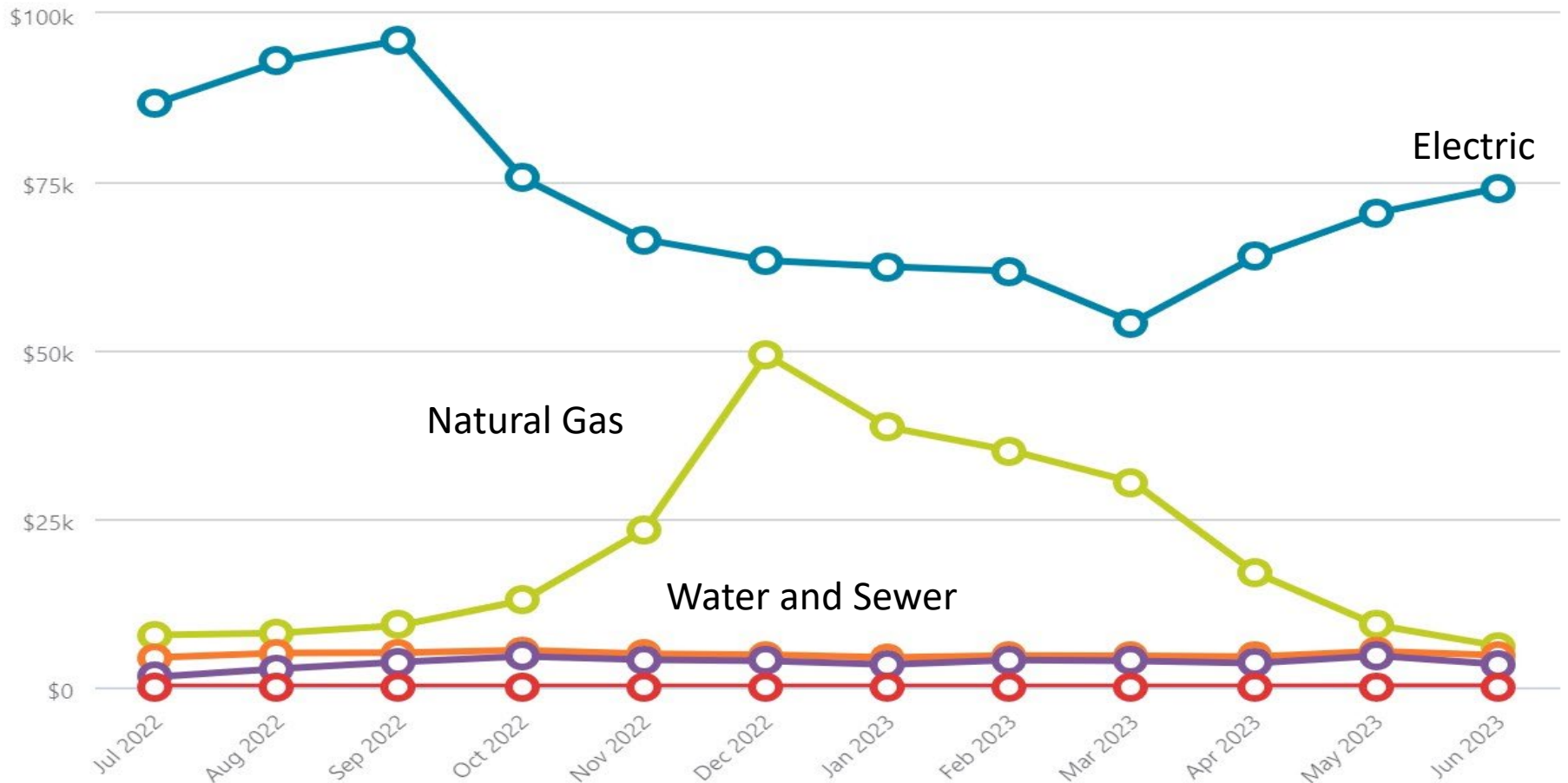
# Five Year Energy Cost Trend

5 Year Monthly Cost Trend ?



# Commodity Spending Trend

Commodity Spending Trend





# TEN YEAR SKYWARD UTILITIES COMPARISON (ACTUAL)

2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
\$1,164,209	\$1,129,218	\$1,041,728	\$1,069,991	\$1,010,991

2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
\$1,145,893	\$1,025,611	\$1,201,430	\$1,314,732	\$1,285,059

\*TOTALS INCLUDE DISTRICT-WIDE NATURAL GAS, ELECTRICITY, WATER, SEWER AND GARBAGE DISPOSAL COSTS FOR THE FISCAL YEAR

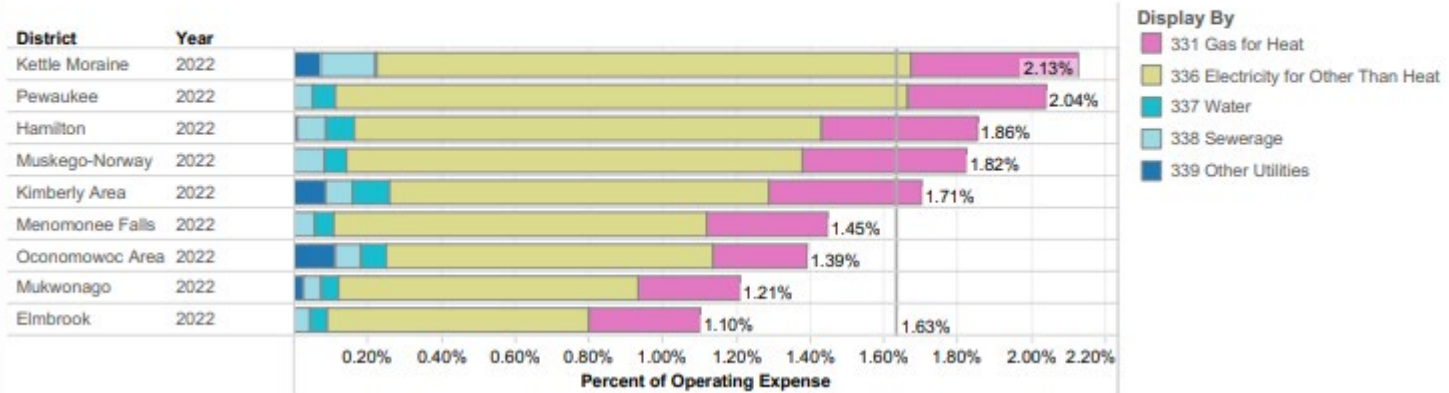


# 2022-2023 PEER DISTRICTS UTILITY COMPARISONS

## Line Item Spending Comparison

Note: "Total Operating Expense" is all expenses from funds 10 & 27

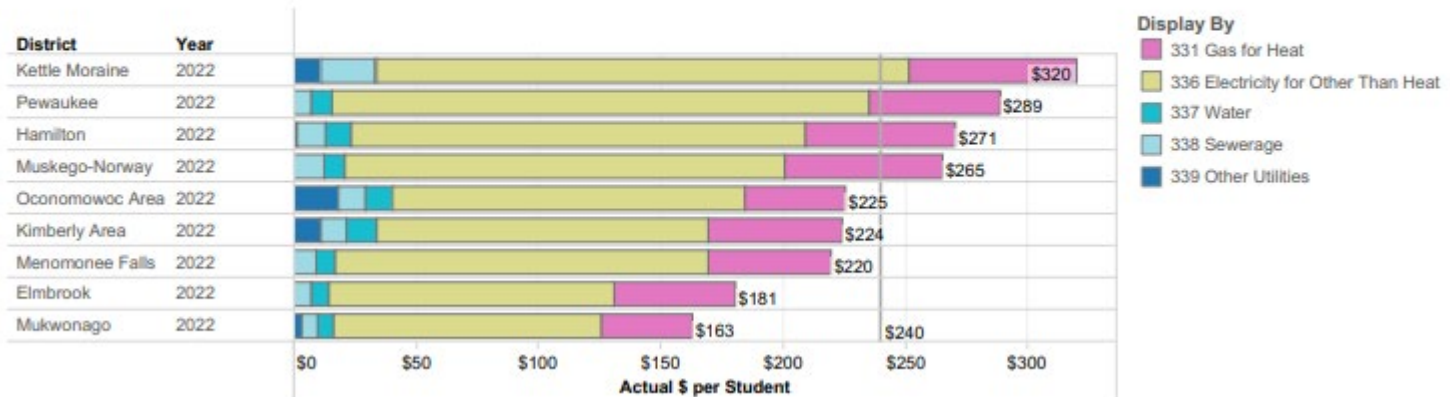
Source: Budget and Annual Reports per DPI



## Line Item Spending Comparison

Note: "Total Operating Expense" is all expenses from funds 10 & 27

Source: Budget and Annual Reports per DPI





## 2022-2023 Energy Efficiency Projects

- Tune-ups and preventative maintenance on district boilers
- Tune-ups and preventative maintenance on district chillers
- Preventative maintenance on other district equipment
- Cleaning of air handling unit coils
- Incorporated energy efficiency into projects as applicable



**Kelly Holtzman, Greg Maroo and students from the OHS AP Environment Science class presented at the 102<sup>nd</sup> State Education Convention. They spoke about the success of winning their first Renew our Schools energy savings competition.**

**Kelly Holtzman and the AP Environmental Science students won \$2,500 winning the Renew Our Schools competition for the second year in a row! The students reduced energy usage by 8.25% at OHS during the competition period. The prize money will be used for another energy reduction project at OHS.**



Wisconsin K-12 Energy Education Program (KEEP)  
College of Natural Resources  
University of Wisconsin-Stevens Point

## Renewing Our Schools: Engaging Students in Energy Conservation

WASB Annual conference  
January 19, 2023





# THE FUTURE OF OUR ENERGY PROGRAM



Proud to be a  
**Sugar  
Maple  
School**

- Increase visibility of our program
- Continue to identify efficiencies in operations
- Focus on shutdowns to achieve greater savings
- Continue developing an “energy conservation culture”
- Continue to support and collaborate with the OHS Green Team started in 2019-20 by Kelly Holtzman.
- Energy efficiencies in future facility planning, capital projects and site specific projects.
- Continue to investigate future energy savings opportunities and funding options.
- Utilize ClocWorks dataWrangler software for Fund 50 & Fund 80 utility allocations.





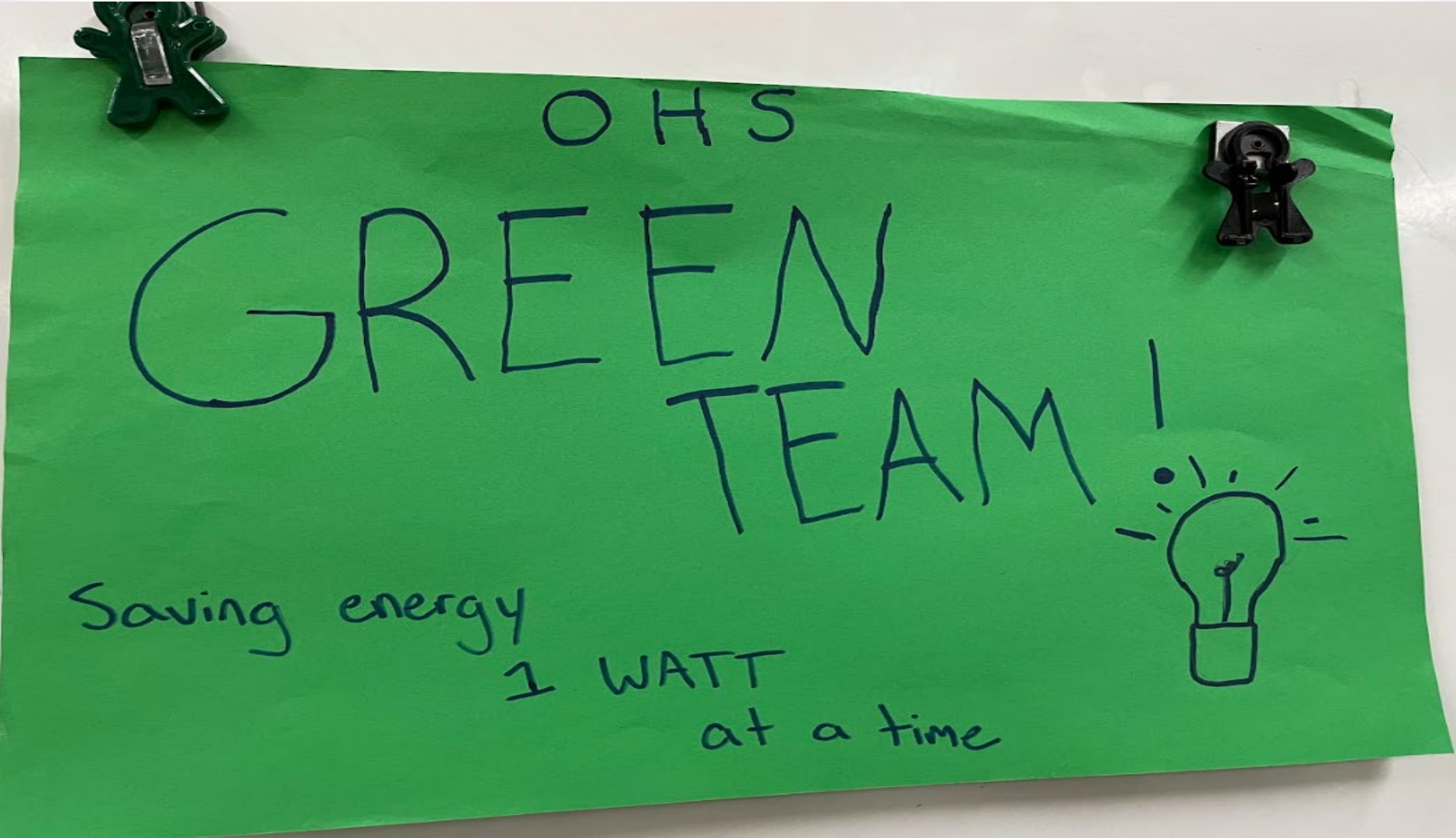
# TEAM WORK

The success of the program depends on everyone!

## Special thanks go to:

- **School Board** for proactively implementing and supporting our program
- **Community** for supporting our energy program
- **Buildings and Grounds Staff** for executing changes in the heating and cooling systems and monitoring our energy use
- **Teachers** for continuing to assist in our efforts for energy conservation
- **Principals and Staff** for coordinating efforts in their schools

# Questions?





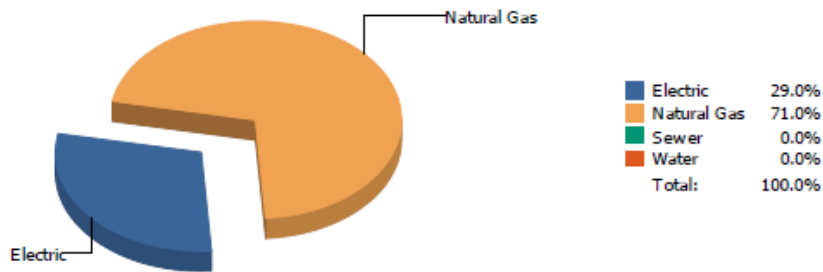
# OASD HISTORICAL COST PER SQUARE FOOT

Historical Cost/Sq. Ft (Electric & Gas)	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Oconomowoc High School Main Campus	\$1.09	\$1.04	\$0.91	\$1.00	\$0.90	\$1.03	\$1.08	\$1.04
Oconomowoc High School East Campus	N/A	N/A	N/A	\$0.90	\$0.91	\$0.96	\$1.06	\$1.14
Nature Hill Intermediate School	\$0.98	\$0.94	\$1.00	\$1.09	\$0.98	\$1.21	\$1.15	\$1.12
Silver Lake Intermediate School	\$0.96	\$0.94	\$1.03	\$1.04	\$0.92	\$1.17	\$1.16	\$1.05
Meadow View Elementary School (New)	N/A	N/A	N/A	N/A	\$0.69	\$1.05	\$1.03	\$1.09
Meadow View Elementary School (Old)	\$0.79	\$0.75	\$0.71	\$0.70	\$0.42	\$0.47	\$0.40	\$0.31
Ixonia Elementary School	\$1.03	\$1.01	\$1.09	\$0.87	\$0.76	\$0.97	\$1.06	\$0.97
Summit Elementary School	\$1.12	\$1.05	\$1.02	\$0.98	\$0.84	\$1.13	\$1.04	\$1.03
Greenland Elementary School	\$0.79	\$0.79	\$0.88	\$0.90	\$0.77	\$0.82	\$0.84	\$0.80
Park Lawn Elementary School	\$0.69	\$0.66	\$0.68	\$0.80	\$0.66	\$0.77	\$0.84	\$0.70
OASD	\$1.00	\$0.98	\$0.94	\$0.98	\$0.85	\$1.02	\$1.02	\$0.98
OASD Square Footage	955,477	955,477	955,477	1,017,788	1,134,788	1,134,788	1,134,788	1,134,788

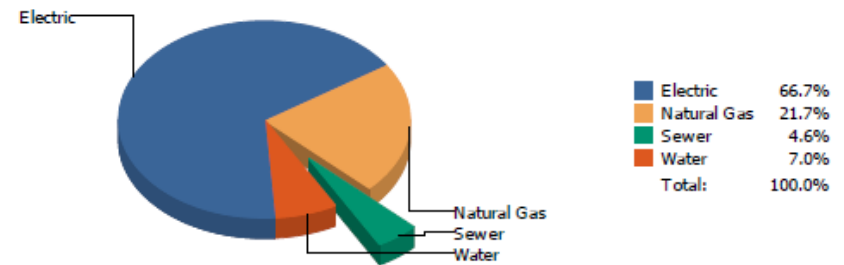
# 2022-2023 GREENLAND ELEMENTARY

Place Summary AN - 07

Energy



Cost



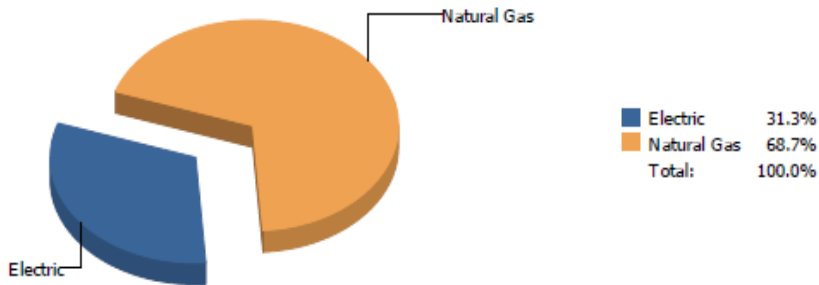
Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
<b>Place: [GRN] Greenland Elementary School [BUILDING]</b>						
<b>Area: 63,242 SqFt</b>						
<b>Billing Period between Jul 2022 and Jun 2023</b>						
ELECTRIC	259,075.00 kWh	883,964 KBtu	13.977 KBtu/SqFt	\$38,122.55	\$0.147 /kWh	\$0.602 /SqFt
NATURALGAS	21,598.70 THERM	2,159,870 KBtu	34.152 KBtu/SqFt	\$12,393.13	\$0.574 /THERM	\$0.195 /SqFt
SEWER	413.00 Kgal			\$2,649.87	\$6.416 /Kgal	\$0.041 /SqFt
WATER	413.00 Kgal			\$4,028.63	\$9.755 /Kgal	\$0.063 /SqFt
<b>Totals:</b>		<b>3,043,834 KBtu</b>	<b>48.130 KBtu/SqFt</b>	<b>\$57,194.18</b>		



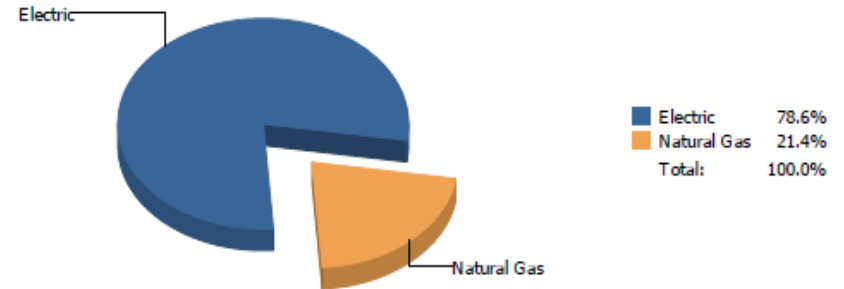
# 2022-2023 IXONIA ELEMENTARY

Place Summary AN - 07

Energy



Cost

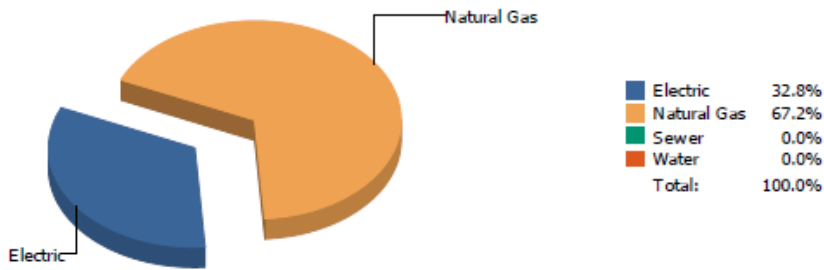


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [IXO] Ixonia Elementary School [BUILDING]						
Area: 49,839 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	236,448.00 kWh	806,761 KBtu	16.187 KBtu/SqFt	\$38,130.94	\$0.161 /kWh	\$0.765 /SqFt
NATURALGAS	17,739.40 THERM	1,773,940 KBtu	35.593 KBtu/SqFt	\$10,354.46	\$0.584 /THERM	\$0.207 /SqFt
<b>Totals:</b>		<b>2,580,701 KBtu</b>	<b>51.781 KBtu/SqFt</b>	<b>\$48,485.40</b>		

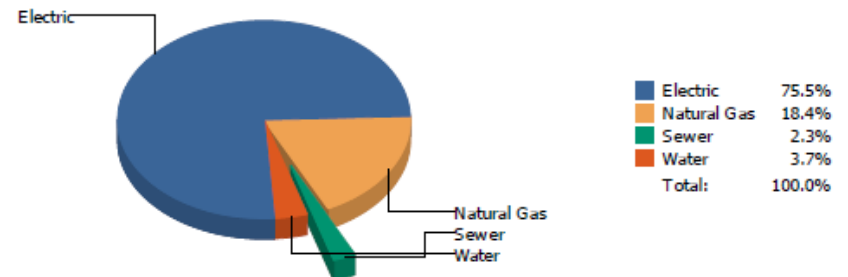
# 2022-2023 NEW MEADOW VIEW ELEMENTARY

Place Summary AN - 07

Energy



Cost

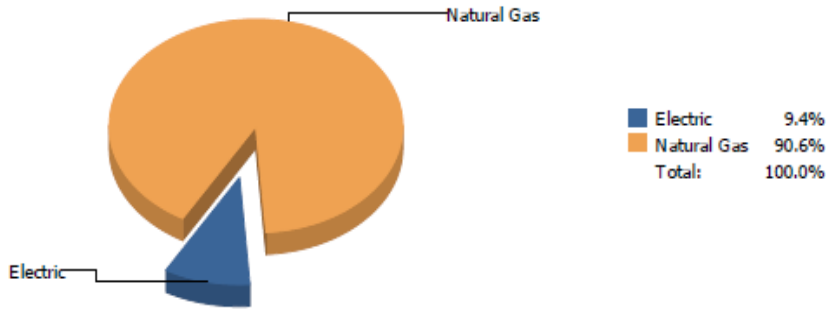


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [MDV_NEW] New Meadow View Elementary [BUILDING]						
Area: 117,000 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	640,147.00 kWh	2,184,182 KBtu	18.668 KBtu/SqFt	\$102,204.97	\$0.160 /kWh	\$0.873 /SqFt
NATURALGAS	44,699.70 THERM	4,469,970 KBtu	38.205 KBtu/SqFt	\$24,956.03	\$0.558 /THERM	\$0.213 /SqFt
SEWER	496.31 Kgal			\$3,161.55	\$6.370 /Kgal	\$0.027 /SqFt
WATER	495.31 Kgal			\$4,999.82	\$10.094 /Kgal	\$0.042 /SqFt
<b>Totals:</b>		<b>6,654,152 KBtu</b>	<b>56.873 KBtu/SqFt</b>	<b>\$135,322.37</b>		

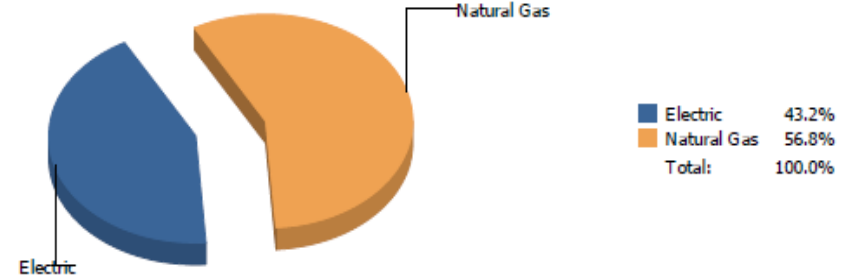
# 2022-2023 OLD MEADOW VIEW ELEMENTARY

Place Summary AN - 07

Energy



Cost

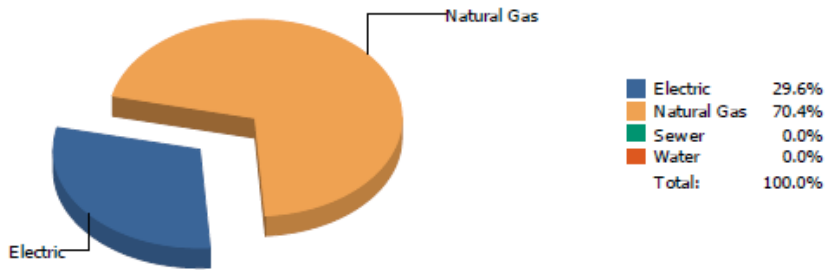


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [MDV_OLD] Old Meadow View Elementary School [BUILDING]						
Area: 89,618 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	86,191.00 kWh	294,084 KBtu	3.282 KBtu/SqFt	\$12,034.12	\$0.140 /kWh	\$0.134 /SqFt
NATURALGAS	28,263.60 THERM	2,826,360 KBtu	31.538 KBtu/SqFt	\$15,849.21	\$0.561 /THERM	\$0.176 /SqFt
<b>Totals:</b>		<b>3,120,444 KBtu</b>	<b>34.819 KBtu/SqFt</b>	<b>\$27,883.33</b>		

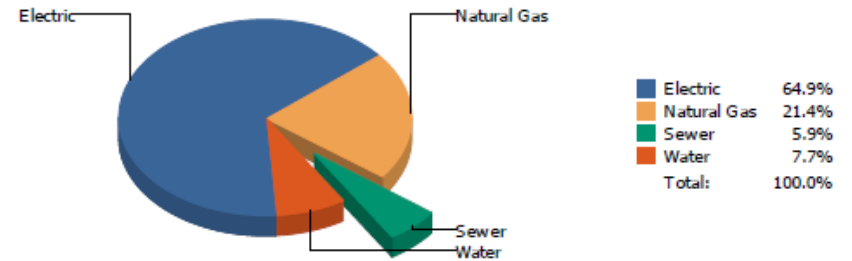
# 2022-2023 PARK LAWN ELEMENTARY

Place Summary AN - 07

Energy



Cost

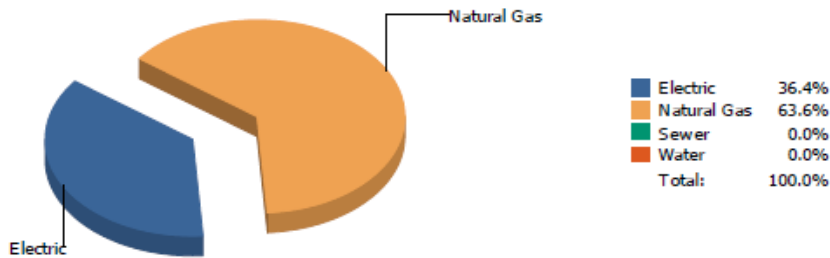


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [PKL] Park Lawn Elementary School [BUILDING]						
Area: 74,409 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	270,295.00 kWh	922,247 KBtu	12.394 KBtu/SqFt	\$39,291.34	\$0.145 /kWh	\$0.527 /SqFt
NATURALGAS	21,946.80 THERM	2,194,680 KBtu	29.495 KBtu/SqFt	\$12,953.44	\$0.590 /THERM	\$0.174 /SqFt
SEWER	565.00 Kgal			\$3,588.32	\$6.351 /Kgal	\$0.048 /SqFt
WATER	565.00 Kgal			\$4,665.19	\$8.257 /Kgal	\$0.062 /SqFt
<b>Totals:</b>		<b>3,116,927 KBtu</b>	<b>41.889 KBtu/SqFt</b>	<b>\$60,498.29</b>		

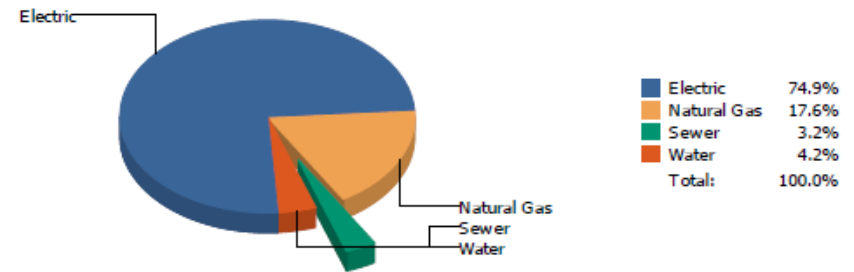
# 2022-2023 SUMMIT ELEMENTARY

Place Summary AN - 07

Energy



Cost

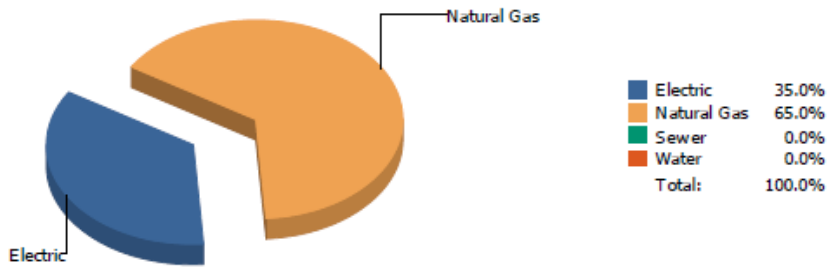


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [SUM] Summit Elementary School [BUILDING]						
Area: 78,069 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	459,010.00 kWh	1,566,142 KBtu	20.061 KBtu/SqFt	\$65,243.71	\$0.142 /kWh	\$0.835 /SqFt
NATURALGAS	27,403.70 THERM	2,740,370 KBtu	35.102 KBtu/SqFt	\$15,332.46	\$0.560 /THERM	\$0.196 /SqFt
SEWER	435.20 Kgal			\$2,785.55	\$6.401 /Kgal	\$0.035 /SqFt
WATER	435.20 Kgal			\$3,690.20	\$8.479 /Kgal	\$0.047 /SqFt
<b>Totals:</b>		<b>4,306,512 KBtu</b>	<b>55.163 KBtu/SqFt</b>	<b>\$87,051.92</b>		

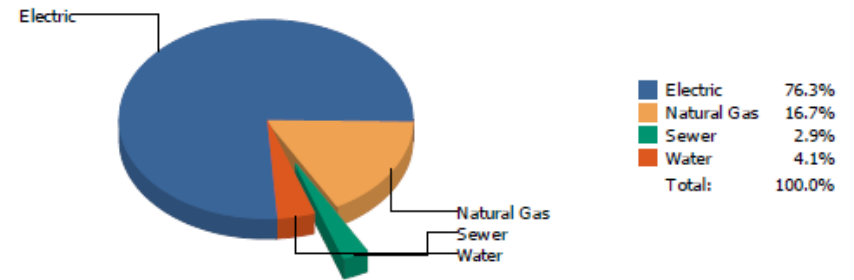
# 2022-2023 NATURE HILL INTERMEDIATE

Place Summary AN - 07

Energy



Cost

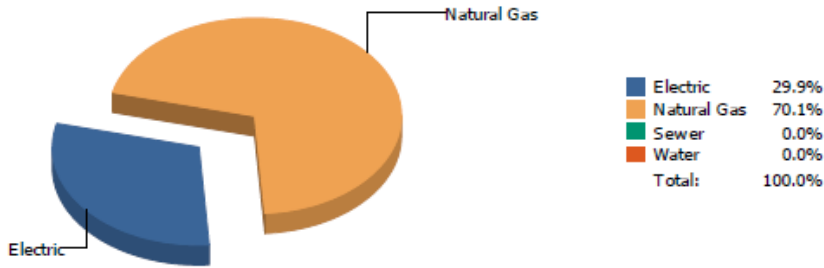


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [NHI] Nature Hill Intermediate School [BUILDING]						
Area: 123,017 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	718,735.00 kWh	2,452,324 KBtu	19.935 KBtu/SqFt	\$113,075.43	\$0.157 /kWh	\$0.919 /SqFt
NATURALGAS	45,596.10 THERM	4,559,610 KBtu	37.065 KBtu/SqFt	\$24,671.81	\$0.541 /THERM	\$0.200 /SqFt
SEWER	679.60 Kgal			\$4,308.31	\$6.339 /Kgal	\$0.034 /SqFt
WATER	679.60 Kgal			\$6,089.53	\$8.960 /Kgal	\$0.049 /SqFt
<b>Totals:</b>		<b>7,011,934 KBtu</b>	<b>57.000 KBtu/SqFt</b>	<b>\$148,145.08</b>		

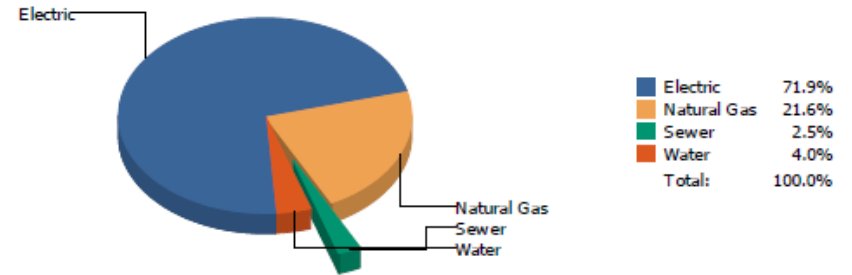
# 2022-2023 SILVER LAKE INTERMEDIATE

Place Summary AN - 07

Energy



Cost

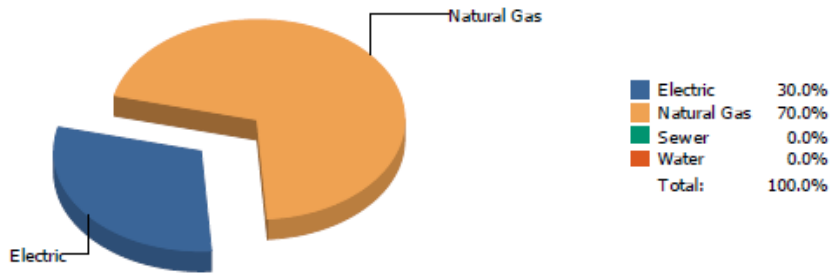


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
<b>Place: [SLI] Silver Lake Intermediate School [BUILDING]</b>						
<b>Area: 123,017 SqFt</b>						
<b>Billing Period between Jul 2022 and Jun 2023</b>						
ELECTRIC	664,961.00 kWh	2,268,847 KBtu	18.443 KBtu/SqFt	\$99,233.41	\$0.149 /kWh	\$0.806 /SqFt
NATURALGAS	53,181.13 THERM	5,318,113 KBtu	43.231 KBtu/SqFt	\$29,742.02	\$0.559 /THERM	\$0.241 /SqFt
SEWER	542.80 Kgal			\$3,459.51	\$6.373 /Kgal	\$0.028 /SqFt
WATER	542.80 Kgal			\$5,528.24	\$10.185 /Kgal	\$0.044 /SqFt
<b>Totals:</b>		<b>7,586,960 KBtu</b>	<b>61.674 KBtu/SqFt</b>	<b>\$137,963.18</b>		

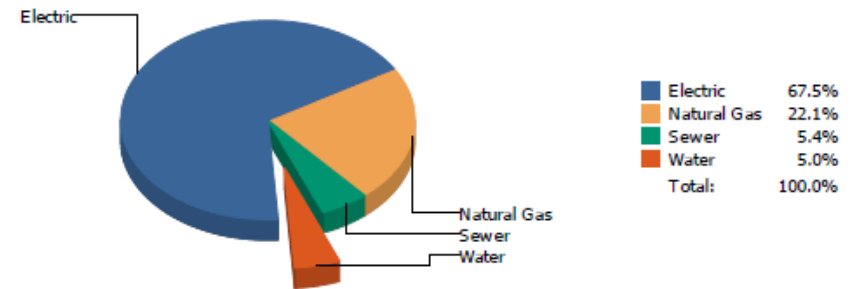
# 2022-2023 OCONOMOWOC HIGH SCHOOL

Place Summary AN - 07

Energy



Cost



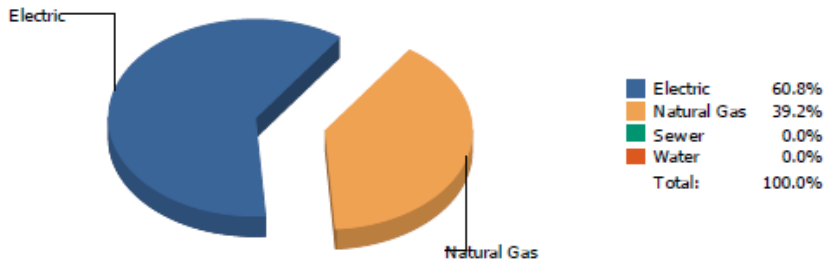
Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [OHS_1] Oconomowoc High School [BUILDING]						
Area: 352,881 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	2,171,594.00 kWh	7,409,479 KBtu	20.997 KBtu/SqFt	\$276,345.03	\$0.127 /kWh	\$0.783 /SqFt
NATURALGAS	172,971.80 THERM	17,297,180 KBtu	49.017 KBtu/SqFt	\$90,594.30	\$0.524 /THERM	\$0.256 /SqFt
SEWER	3,569.50 Kgal			\$22,174.74	\$6.212 /Kgal	\$0.062 /SqFt
WATER	3,569.50 Kgal			\$20,398.52	\$5.715 /Kgal	\$0.057 /SqFt
<b>Totals:</b>		<b>24,706,659 KBtu</b>	<b>70.014 KBtu/SqFt</b>	<b>\$409,512.59</b>		



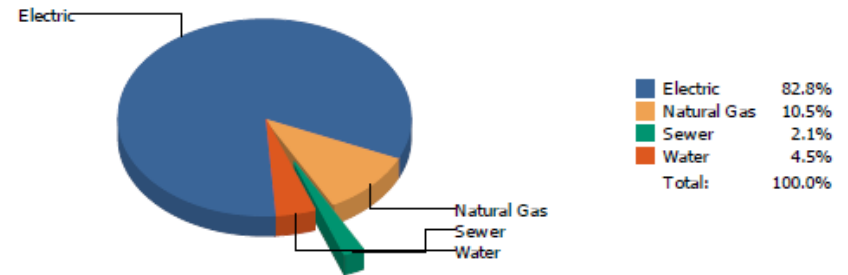
# 2022-2023 OHS East Campus

Place Summary AN - 07

Energy



Cost

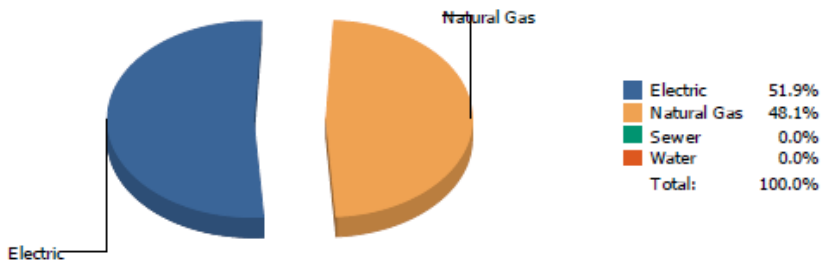


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [OHS_EC] OCONOMOWOC HIGH SCHOOL EAST CAMPUS [BUILDING]						
Area: 48,000 SqFt						
Billing Period between Jul 2022 and Jun 2023						
ELECTRIC	452,371.00 kWh	1,543,490 KBtu	32.156 KBtu/SqFt	\$48,479.14	\$0.107 /kWh	\$1.010 /SqFt
NATURALGAS	9,961.00 THERM	996,100 KBtu	20.752 KBtu/SqFt	\$6,160.52	\$0.618 /THERM	\$0.128 /SqFt
SEWER	185.80 Kgal			\$1,234.55	\$6.645 /Kgal	\$0.025 /SqFt
WATER	185.80 Kgal			\$2,641.30	\$14.216 /Kgal	\$0.055 /SqFt
<b>Totals:</b>		<b>2,539,590 KBtu</b>	<b>52.908 KBtu/SqFt</b>	<b>\$58,515.51</b>		

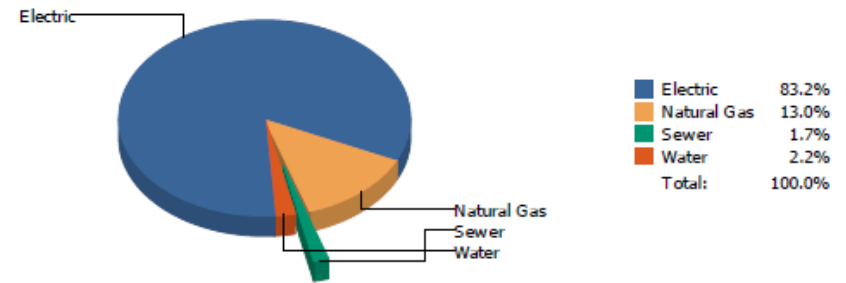
# 2022-2023 PHYSICAL DEVELOPMENT CENTER

Place Summary AN - 07

Energy



Cost



Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
<b>Place: [PDC] Physical Development Center [BUILDING]</b>						
<b>Area: 5,000 SqFt</b>						
<b>Billing Period between Jul 2022 and Jun 2023</b>						
ELECTRIC	62,013.00 kWh	211,588 KBtu	42.318 KBtu/SqFt	\$12,185.42	\$0.196 /kWh	\$2.437 /SqFt
NATURALGAS	1,962.20 THERM	196,220 KBtu	39.244 KBtu/SqFt	\$1,899.22	\$0.968 /THERM	\$0.379 /SqFt
SEWER	24.00 Kgal			\$246.00	\$10.250 /Kgal	\$0.049 /SqFt
WATER	24.00 Kgal			\$323.79	\$13.491 /Kgal	\$0.064 /SqFt
<b>Totals:</b>		<b>407,808 KBtu</b>	<b>81.562 KBtu/SqFt</b>	<b>\$14,654.43</b>		

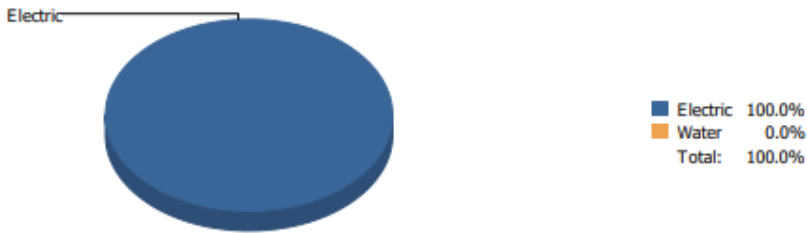


# 2022-2023 ATHLETIC FIELDS FOREVER

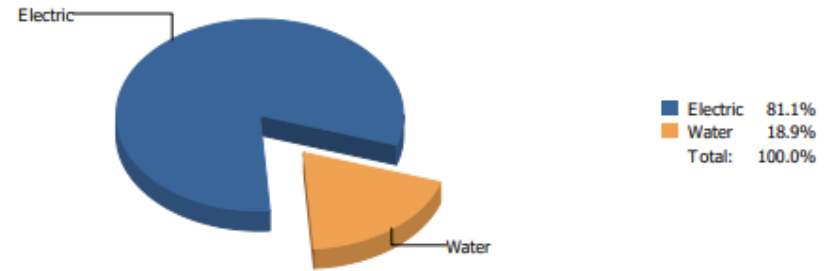
Oconomowoc Area School District

Place Summary AN - 07

Energy



Cost



Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
<b>Place: [AFF] Athletic Fields [BUILDING]</b>						
<b>Area: 5,000 SqFt</b>						
ELECTRIC	55,413.00 kWh	189,069 KBtu	37.814 KBtu/SqFt	\$18,331.60	\$0.331 /kWh	\$3.666 /SqFt
WATER	428.00 Kgal			\$4,277.85	\$9.995 /Kgal	\$0.855 /SqFt
<b>Totals:</b>		<b>189,069 KBtu</b>	<b>37.814 KBtu/SqFt</b>	<b>\$22,609.45</b>		



# POTENTIAL ENERGY REDUCTION PROJECT COST ESTIMATES

Potential Project	Site	Expected Cost	Expected Grants and/or Rebates	Net Cost	Payback Period (Years)	Notes:	Estimated Annual Savings	Life of Product	Warranty
Solar Array (433.2 kW-DC System) Option #1 (Field House & PDC Roofs)	OHS Main Campus	\$676,658.40	\$100,000.00	\$576,658.40	12.8	Installed on roof of Field House and PDC only. Age of roofing a concern. 14 years of life expectancy remain. Roof replacement costs estimated at \$325,000.	\$40,120.00	25+ years	5 years on workmanship. 10 years on modules.
Solar Array (1130.8 kW-DC System) Option #2 (Max System)	OHS Main Campus	\$1,649,837.20	\$100,000.00	\$1,549,837.20	13.6	Max system that can fit on OHS. Age of roofing a concern. Life expectancy remaining range from 2-14 years. Roof replacements estimated at \$3.0M.	\$100,885.00	25+ years	5 years on workmanship. 10 years on modules.
Solar Array (71.6 kW-DC System)	OHS East Campus	\$138,044.80	\$41,740.00	\$96,304.80	12.4	Roof life expectancy 27+ years.	\$6,986.00	25+ years	5 years on workmanship. 10 years on modules.
Solar Array (146.4 kW-DC System)	Meadow View ES	\$260,738.40	\$61,568.00	\$199,170.40	12.9	Roof life expectancy 28+ years.	\$13,787.00	25+ years	5 years on workmanship. 10 years on modules.
Retro-Door-Kit LED Lighting Replacement (Interior Lighting)	OHS Main Campus	\$398,257.69	\$54,399.00	\$343,858.69	13.2		\$26,054.41	35 years	5 years
Retro-Door-Kit LED Lighting Replacement (Interior Lighting)	Nature Hill Intermediate	\$249,894.49	\$31,706.48	\$218,188.01	7.47		\$28,305.59	35 years	5 years
Retro-Door-Kit LED Lighting Replacement (Interior Lighting)	Silver Lake Intermediate	\$249,894.49	\$31,706.48	\$218,188.01	7.47		\$28,305.59	35 years	5 years

*\*Please be aware that the budgetary numbers were provided in early March before covid caused changes to many product and material costs.*