



Utility Data Benchmarking Analysis

2025 Calendar Year

(Energy, Water & Waste)

Prepared for:

APEI

(APUS, RAS, HCN, APT(GSUS))

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1. Introduction

Based on available utility bill/consumption data received from the client American Public Education Inc. (APEI) for the 2025 calendar year, Sundowner Sustainability Consulting conducted an analysis of the energy use intensity (EUI), water use intensity (WUI), and landfill disposal per square foot rates for properties within APEI's building portfolio across the four campuses: APUS, Hondros, Rasumussen, and GSUSA.

Although 51 property addresses were provided by the client as potential sites for analysis, 27 of those properties were eliminated from the scope of this analysis for the following reasons:

- 10 properties where actual utility consumption/data was not provided or available. This included many properties where the landlord included the cost of utilities in the rent and/or payments do not clearly correlate to actual usage of that utility.
- 16 property addresses that closed operations entirely within or prior to the calendar year. This meant that the building had less than one year of utility data in which to provide a benchmarking analysis/comparison.
- 1 property address that represented an outside lease and was requested to be removed from the analysis.

This resulted in 24 property addresses that had sufficient data to undergo a benchmarking analysis for at least one of the three utilities being examined in this analysis. The three utilities that were addressed: energy (which includes natural gas and electricity), water, and waste (includes recycling when applicable).

Properties are included in each of the specific utility analysis sub-sections below if they had a complete year of 2025 calendar year consumption for that utility. All buildings (with sufficient data) across all four national campuses were compared together and ranked by greatest intensity to provide the client with the ability to focus on efficiency for the worst performing buildings in the portfolio for that utility.



1.1 Energy Utility Bills: Benchmarking Parameters

For properties where the client was able to provide actual consumption data, energy use intensity was calculated by converting electricity kilowatt hour (kWh) usage and natural gas (therms) usage into thousand British thermal units (kBtu) to reach an equivalent energy unit. This was then divided by gross square footage of the property to determine an energy use intensity (EUI) value of kBtu/square foot.

1.2 Water Utility Bills: Benchmarking Parameters

For the properties where annual water consumption data was provided, water data was converted to gallons (if provided originally in hundred cubic feet (CCF)) where applicable and divided by the square footage of the building to develop a water use intensity (WUI) value.

Any properties that did not have actual consumption values for water (i.e. water was landlord-provided) were excluded from the analysis.

1.3 Waste Utility Bills: Benchmarking Parameters

A combination of direct waste weights and original waste hauler bills were provided by the client to provide reporting on waste generation at the client's properties. The pounds of landfill-bound waste generated at each building were then divided by the square footage of that building to provide an approximate per square foot generation rate for landfill-bound waste.

Though it was not used as a tool for comparison, diversion rate of recycling vs. landfill streams was also included in the analysis for further identification of potential waste management approaches to increase efficiency.





2. Energy Benchmarking Analysis

Energy performance has a direct correlation to the building's greenhouse gas impact, and contribution to the client's overall greenhouse gas inventory. Based on the energy consumption analytics on the utility bills for the 21 properties with sufficient data identified by the client, these are the overall measures Sundowner Sustainability Consulting proposes that APEI prioritize in this area:

Goal Setting:

- Evaluate which buildings have the greatest EUI within the building portfolio and focus facility improvements and change management efforts to goal-set around reductions in this EUI value over time.
 - Focus efforts on properties that exceed the national median source EUI for commercial office buildings as a basis of comparison. For commercial office buildings (the majority of APEI's portfolio), the latest national median source EUI is **116.4** kBtu/sq ft.¹
- Continue to monitor EUI improvement from year to year to determine whether buildings are improving in efficiency and measures are effective.

A summary table of APEI's energy portfolio, ranked by EUI (most energy intense to least energy intense) and listing key metrics is available below:

Campus Info	Unique ID	Facility Name	Property Address	State	Square Footage (Bldg)	CY 2025 EUI (kBtu/sq ft)	Previous Year EUI (CY 2024)	Percent Delta
RAS	RAS017	Mankato, MN	1400 Madison Avenue, Mankato, MN 56001	MN	16,321	165.94	103.85	59.79%
RAS	RAS028	St Cloud, MN	226 Park Avenue South, St Cloud, MN 56301	MN	22,488	128.99	107.72	19.75%
RAS	RAS033	Wausau, WI	1101 Westwood Drive,	WI	20,650	100.80	103.04	-2.17%

¹ p.4 EnergyStar Portfolio Manager Technical Reference: U.S. Energy Use Intensity by Property Type (<https://portfoliomanager.energystar.gov/pdf/reference/US%20National%20Median%20Table.pdf>)





			Wausau, WI 54401					
RAS	RAS010	Fargo, ND	4012 19th Avenue South, Fargo, ND 58103	ND	18,000	81.70	79.65	2.58%
APUS	APU303	APUS Main	303 West third Avenue Ranson	WV	38,200	77.60	70.79	9.62%
RAS	RAS027	Romeoville/Joliet, IL	1400 Normanto wn Road, Romeovill e, IL 60446	IL	25,000	66.65	63.74	4.58%
RAS	RAS012	Green Bay, WI	904 South Taylor Street, Suite 100, Green Bay, WI 54303	WI	20,000	65.60	67.70	-3.10%
RAS	RAS013	Hennepin Anoka - MN	5555 96th Avenue North, Brooklyn Park, MN 55443	MN	39,895	61.12	56.40	8.38%
RAS	RAS024	Orlando, FL	8541 Southpark Circle, Orlando, FL 32819	FL	18,329	57.25	52.27	9.52%
RAS	RAS001	Aurora, IL	2363 Sequoia Dr, Aurora, IL 60506	IL	20,910	49.60	42.61	16.41%





APUS	APU216	Security/Overnight guests	216 South George Street	WV	5,400	48.04	46.94	2.34%
RAS	RAS023	Ocala Nursing, FL	1227 SW 17th Avenue, Ocala, FL 34471	FL	41,204	41.81	57.61	-27.42%
APUS	APU111	Corporate Office	111 West Congress Street	WV	10,432	37.29	46.27	-19.40%
RAS	RAS029	Tampa-Brandon, FL	330 Brandon Town Center Drive, Brandon, FL 33511	FL	44,900	36.75	36.33	1.16%
RAS	RAS030	Topeka, KS (effective 4/3/23)	3722 SW Burlingame Road, Topeka, KS 66611	KS	16,096	36.32	n/a	n/a
RAS	RAS019	Moorhead, MN	1250 29th Avenue South, Moorhead, MN 56560	MN	12,600	34.02	117.39	-71.02%
RAS	RAS018	Mokena-Tinley Park, IL	8650 Springlake Drive, Mokena, IL 60448	IL	25,000	32.88	78.75	-58.25%
RAS	RAS005	Central Pasco, FL	16418 State Road 54, Odessa, FL 33556	FL	45,555	31.34	31.22	0.36%





APUS	APU406	Facilities Storage	406 South Buchanan Ranson	WV	6,300	26.60	19.42	36.98%
HCN	HCN001	Akron	755 White Pond Drive, Akron, OH 44320	OH	17,510	23.97	23.59	1.61%
RAS	RAS003	Bloomington, MN	4400 W 78th St, Suite 600, Bloomington, MN 55435	MN	30,384	15.11	19.08	-20.82%

****Bold** indicates high priority properties recommended for targeting by client.*

○ 2.1 Building Portfolio Analytics

Based on the source EUI of APEI's building portfolio, there are only 2 properties (Rasmussen) that exceeded the national median value of 116.4 kBtu/sq ft for commercial office buildings.

- **RAS 017 Mankato- 11400 Madison Avenue, Mankato, MN 56001**
- **RAS 028 St Cloud- 226 Park Avenue South, St Cloud, MN 56301**

These same two properties also had significant increases in their EUI in comparison to the 2024 CY as noted below which further supports the case for focusing energy efficiency efforts on these buildings.

EUI Benchmarking- Historical Trends

Based on a comparison of the previous year's EUI, these same two properties were noteworthy for the significant changes in their energy efficiency performance:

- **RAS 017 Mankato- 11400 Madison Avenue, Mankato, MN 56001:** increased its EUI intensity by 59.79%, as well as having the highest overall EUI of any property in the entire portfolio (165.94 kBtu/sq ft). This property should be investigated for an increase in usage, but also evaluated for longer-term energy efficiency measures. A deeper analysis of its month-month consumption indicates extremely high electricity (kWh) usage during the summer months, indicative of strong demand for air conditioning. Improvements to the HVAC equipment to increase the efficiency of cooling should yield significant savings.





- **RAS 028 St Cloud- 226 Park Avenue South, St Cloud, MN 56301:** increased their EUI intensity by an additional 19.75% from previous year (2024 CY). A deeper analysis of its month-month consumption indicates extremely high electricity (kWh) usage during the summer months, indicative of strong demand for air conditioning (similar to the Mankato property above). Similarly, improvements to the HVAC equipment to increase the efficiency of cooling should yield significant savings for this building.

All other properties in the portfolio had EUI's significantly below the average, indicating that these properties either see less usage or are performing more efficiently than the national average.

Overall, the number of properties and square footage in APEI's portfolio has continued to decrease, resulting in a lower overall consumption of kWh and therms. However, the average EUI of those remaining buildings has continued to increase slightly over time. This makes addressing outliers (as noted above) even more imperative to address overall energy efficiency gains for the portfolio as a whole.

Metric	2022 CY	2023 CY	2024 CY	2025 CY
Energy kWh (All Reported)	6,402,544	7,606,089	7,908,424	5,941,428
Therms (All Reported)	106,587	100,348	78,343	76,842
kBTU (Total)	32,506,795	35,990,445	34,822,302	27,959,233
Square Footage (Energy)	602,618	707,415	676,088	495,174
Properties Reported	24	28	23	20
Overall EUI	53.94	50.88	51.51	56.46



3. Water Utility Bill Analysis

Water conservation is a critical area to examine when considering sustainability measures. Based on the water use intensity (WUI) values for the 12 properties that had sufficient water data for analysis (as supplied by the client), these are the overall measures Sundowner Sustainability Consulting proposes that APEI prioritize in this area:

Goal Setting:

- Identify and sort which buildings have outdoor water usage (irrigation) in addition to indoor water usage included in their water usage and recommend the appropriate applicable measures and approaches set forth in the Analytics section.
- Continue to evaluate year after year which buildings see increases in WUI from the previous year, and target those buildings for water infrastructure upgrades (e.g. irrigation, leak detection) and/or water efficiency and conservation measures that are targeted towards building occupants.
 - o Continue to encourage properties to work to reduce their WUI score on an annual basis.

A summary of APEI's water portfolio listing key metrics is available below:

Campus Info	Unique ID	Facility Name	Property Address	State	Square Footage (Bldg)	WUI (Gallons per square foot/year)	Previous Year (CY 2024) WUI	Percent Delta
RAS029	Tampa-Brandon, FL	330 Brandon Town Center Drive, Brandon, FL 33511	FL	44,900	RAS029	108.76	79.92	36.08%
RAS027	Romeoville/Joliet, IL	1400 Normantown Road, Romeoville, IL 60446	IL	25,000	RAS027	82.82	8.79	842.25%
RAS018	Mokena-Tinley Park, IL	8650 Springlake Drive, Mokena, IL 60448	IL	25,000	RAS018	47.52	23.24	104.48%
RAS024	Orlando, FL	8541 Southpark Circle,	FL	18,329	RAS024	46.67	44.99	3.74%





		Orlando, FL 32819						
RAS019	Moorhead, MN	1250 29th Avenue South, Moorhead, MN 56560	MN	12,600	RAS019	3.20	4.22	-24.21%
HCN001	Akron	755 White Pond Drive, Akron, OH 44320	OH	17,510	HCN001	2.14	4.00	-46.60%
RAS030	Topeka, KS	3722 SW Burlingame Road, Topeka, KS 66611	KS	16,096	RAS030	1.66	5.57	-70.13%
RAS023	Ocala Nursing, FL	1227 SW 17th Avenue, Ocala, FL 34471	FL	41,204	RAS023	0.98	0.88	10.87%
RAS017	Mankato, MN	1400 Madison Avenue, Mankato, MN 56001	MN	16,321	RAS017	0.53	0.51	3.96%
RAS012	Green Bay, WI	904 South Taylor Street, Suite 100, Green Bay, WI 54303	WI	20,000	RAS012	0.08	1.67	-95.18%
RAS013	Hennepin Anoka - MN	5555 96th Avenue North, Brooklyn Park, MN 55443	MN	39,895	RAS013	0.01	3.80	-99.61%
RAS033	Wausau, WI	1101 Westwood	WI	20,650	RAS033	0.01	12.46	-99.91%





		Drive, Wausau, WI 54401						
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****Bold** indicates high priority properties recommended for targeting by client.*

○ 3.1 Building Specific Analytics

Examining the highest WUI properties in APEI's portfolio, there are 2 buildings (all Rasmussen) that significantly exceed the average WUI of the overall portfolio. (After these 2 properties, the rest average a little more than half those values per square foot for their WUI).

- **RAS 029- Tampa-Brandon, 330 Brandon Town Center Drive, Brandon, FL 33511**
- **RAS 027- Romeoville/Joliet, 1400 Normantown Road, Romeoville, IL 60446**

In general, the three largest uses of water in commercial office buildings comes from restrooms, heating/cooling, and landscape.² As mentioned previously, determining which of these buildings also incorporate irrigation/landscape watering into their water consumption will be useful in providing applicable recommendations.

Based on monthly consumption analytics, the Romeoville/Joliet demonstrates extremely large seasonal swings in water consumption (100x higher in peak summer and early fall) which appear consistent with seasonal irrigation patterns. This indicates the majority of their water use is being driven by outdoor irrigation/landscape, so would benefit most from those recommendations.

The Tampa-Brandon property also demonstrates some similar seasonal swings as the Romeoville/Joliet property, but not as significantly (closer to 2x higher at peak). This indicates a greater proportion of the water consumption is driven by ongoing demand which would make focusing on indoor applications beneficial as well.

For properties that include outdoor irrigation/landscape:

- Encourage regionally-adapted landscaping that thrives under existing rainfall conditions (e.g. native plants) as opposed to high water-using turf.
- Hire irrigation specialists/auditors to install high efficiency sprinklers and/or drip irrigation where appropriate to provide water to landscaping and regularly check for leaks.
- Install sub-meters to landscape specifically for large properties and monitor for any ongoing leaks.
- Invest in weather-sensors for irrigation controllers to ensure irrigation is shut off automatically during rainfall events.

² p.1 "Saving Water in Office Buildings," EPA Portfolio Manager WaterSense Fact Sheet:
<https://www.epa.gov/sites/default/files/2017-01/documents/ws-commercial-factsheet-offices.pdf>





- Have grounds management teams develop an appropriate landscape water budget and irrigation schedule based on local rainfall and plant hydrozones.

For all properties to identify water efficiency opportunities in indoor applications:

- **Heating/Cooling**- Invest in WaterSense rated and/or highly efficient evaporative coolers if used. For properties that use evaporative cooling for major HVAC delivery, adopt the energy efficiency approaches identified for HVAC in the previous energy analysis section of this report.
- **Restrooms**- Consider retrofitting old and inefficient bathrooms fixtures (toilets, urinals, sinks) to low-flow WaterSense rated equivalents. Have a regular maintenance schedule to address leaks and broken fixtures.

Based on the regions in which these four most water-intensive properties are based, these approaches should prove particularly effective. However, all properties within the portfolio could benefit from these management strategies as an opportunity for continued improvement.

- In particular, the RAS 029 property in Tampa-Brandon, FL had both the highest WUI score as well as the highest overall water consumption in the entire property portfolio at 4,883,100 gallons consumed in the 2024 CY.

WUI Benchmarking- Historical Trends

Based on a comparison of the previous year's WUI, there are 2 properties with significant increase in WUI intensity, 1 of which was identified above for its high water consumption overall:

- 2 Rasmussen properties exhibited significantly large increases in WUI:
 - **RAS 027- Romeoville/Joliet, 1400 Normantown Road, Romeoville, IL 60446 (increase of 842.25%, total 2025 CY usage of 2,070,600 gallons)**
 - **RAS 018- Mokena-Tinley Park, 8650 Springlake Drive, Mokena, IL 60448 (increase of 104.48%, total 2025 CY usage of 1,188,000 gallons)**

The increases in WUI for these two properties warrant additional review to determine whether the changes reflect actual consumption patterns or potential data collection, monitoring, or metering anomalies.

More broadly, WUI has increased across portions of the APEI property portfolio over the past three years. This trend may be influenced in part by portfolio consolidation, increased campus utilization, enrollment growth, and changing occupancy patterns at remaining locations. Continued monitoring and benchmarking of water usage should help identify opportunities for efficiency improvements and support informed resource management decisions.

If none of these trends has occurred, the client is advised to review whether there has been a significant



increase in occupancy in either of these two properties. If occupancy has not increased significantly, the measures listed in the indoor applications recommendations section above should be pursued.

Overall, WUI has been increasing steadily over the past three years across all of the APEI property portfolio with significant increases in the 2025 CY. This is likely due to more efficient water-using properties exiting the portfolio while water consumption rises at the ones that remain.

The client is advised to remain diligent in metering and monitoring water consumption at its high water-using properties as identified above to help lower the average WUI of the portfolio as a whole.

Utility	2022 CY	2023 CY	2024 CY	2025 CY
Water Consumption (Total)- Gallons	4,524,651	4,387,148	6,387,167	9,152,891
Square Footage (Water)	456,728	428,865	507,006	297,505
Properties Reported	17	15	18	12
WUI	9.91	10.23	12.60	30.77



4. Waste Utility Bill Analysis

Reduction of waste is a crucial component of sustainability, both as a measure to conserve natural resources as well as reduce greenhouse gas impacts from disposal. Waste can be reduced in a variety of ways, including recycling, reuse, and reduction in consumption to eliminate unnecessary excess (i.e. through efficient purchasing). Waste data is also highly influenced by hauling practices, and significant reductions and cost savings can be identified through “right-sizing” hauling levels to waste generation streams.

Based on analysis of current waste data and per square footage lbs sent to landfill streams for the 8 properties with sufficient client-provided data, these are the overall goals Sundowner Sustainability Consulting proposes that APEI prioritize in this area:

Goal Setting:

- Right-size waste bins and frequency of services for high landfill disposal (lbs/sq ft) properties to ensure properties are not being charged for hauls on empty air, especially for those properties that have infrequent/small on-campus populations.
- Aim for a greater balance between recycling and trash services- most commercial properties generate mostly recyclables which could reduce the trash hauling bill if these materials are properly sorted into recycling streams (which are generally less expensive) instead.
 - o Incorporate mixed use commingled recycling services and bins to capture recyclable materials beyond just shredded paper (which is the only recycling stream for many properties).
- Begin identifying common materials that may be eligible for recycling instead of trash and target high tonnage buildings for source reduction techniques and recycling education.

A summary of APEI's waste performance listing key metrics is available below:

Unique ID	Facility Name	Property Address	State	Square Footage (Bldg)	Property Type	Annual Trash (Tons/Yr)	Annual Recycling (Tons/Yr)	Landfill Disposal Per Sq. Ft.	% Diversion for Facility
RAS005	Central Pasco, FL	16418 State Road 54, Odessa, FL 33556	FL	45,555	Multi-tenant building	29.44	1.8	1.42	5.76%
RAS010	Fargo, ND	4012 19th Avenue South, Fargo, ND	ND	18,000	Commercial Office Building	6.62	0.66	0.81	9.07%





		58103							
RAS013	Hennepin Anoka - MN	5555 96th Avenue North, Brooklyn Park, MN 55443	MN	39,895	Commercial Office Building	9.94	1.93	0.55	16.26%
RAS030	Topeka, KS (effective 4/3/23)	3722 SW Burlingame Road, Topeka, KS 66611	KS	16,096		4.05	1.9	0.55	31.93%
RAS028	St Cloud, MN	226 Park Avenue South, St Cloud, MN 56301	MN	22,488	Commercial Office Building	2.94	1.67	0.29	36.23%
RAS027	Romeoville/Joliet, IL	1400 Normantown Road, Romeoville, IL 60446	IL	25,000	Commercial Office Building	2.94	1.69	0.26	36.50%
RAS018	Mokena-Tinley Park, IL	8650 Springlake Drive, Mokena, IL 60448	IL	25,000	Commercial Office Building	2.94	2.12	0.26	41.90%
RAS012	Green Bay, WI	904 South Taylor Street, Suite 100, Green Bay, WI 54303	WI	20,000	Commercial Office Building	2.94	3.01	0.32	50.59%

****Bold** indicates high priority properties recommended for targeting by client.*





○ 4.1 Building Specific Analytics

Examining the highest landfill generating per capita properties in APEI's portfolio, there is 1 building (APUS) that has a landfill generation rate twice as high as the average waste generation rates of the rest of the portfolio. This may be contributed to a larger or growing on-site building population versus the other sites:

- **RAS 005- Central Pasco, 16418 State Road 54, Odessa, FL 33556 (1.42 lbs landfill disposal/sq ft)**

The rest of the reported properties in the portfolio are all commercial office buildings which would benefit from the following measures:

Reducing frequency of waste hauling service: Especially for buildings with low contact hour exposure, reducing bin pick-up to "as-needed" may be especially effective in driving down unnecessary landfill pick-ups, especially if the volume generated does not match up to the hauling and bin capacity.

- If waste generation in the building is inconsistent, these properties may actually benefit from an investment in compactors to reduce volume between pick-ups as opposed to consistent pick-ups on a weekly basis. This has the added benefit of reducing charges from tipping fees from the hauler in addition to reducing demand for additional trash containers.

Have building managers conduct a waste audit of the landfill stream: Determine top materials currently being sent out for disposal, and identify if there are any reduce/reuse or recycle options for common materials.

Add commingled mixed recycling bins to divert materials from landfill-bound streams. Currently 20 properties recycle shredded paper, but do not appear to have bins that accept many of the other high-volume materials such as non-shredded office paper, magazines, etc. as well as plastics, cans, etc. potentially being brought in by residential students and office occupants.

Provide user-education and guidance on recycling options. By providing services and on-boarding occupants and custodial staff, the client has an opportunity to divert further tonnage from landfill streams into recycling, reducing negative impact on the environment.

Also of note were 13 properties that were excluded due to only having shredded recycled paper reports for their facilities and no data on actual trash generation, making them ineligible for further analysis.

Overall, landfill generation rates have remained low over the past several years. However, this is mostly due to the lack of data and insight into trash generation rates from properties reported rather than an actual decline.

Utility	2022 CY	2023 CY	2024 CY	2025 CY
Trash (Tons)	289	208	200	62
Recycle (Tons)	72	77	64	18





Square Footage (Waste)	552,446	340,335	385,768	287,863
Properties Reported	20	10	11	10
Landfill Waste Intensity (lbs/sq ft)	1.05	1.22	1.04	0.43

5. Conclusion

Overall, the analysis indicates that many properties within APEI's portfolio continue to perform at or below national benchmark averages for energy and resource intensity, while the company's overall operational footprint has continued to evolve and decrease over time. The benchmarking process also identified several specific properties with elevated energy, water, or waste intensity metrics that present targeted opportunities for further operational efficiencies and resource management improvements. In certain cases, elevated utility metrics may also reflect increased campus utilization, enrollment growth, or changes in occupancy patterns, which should be considered alongside efficiency evaluations.

Continued monitoring of utility performance, combined with focused attention on identified outlier properties and ongoing sharing of best practices across campuses, should help support incremental improvements in resource efficiency and utility management over time.

This annual utility bill analysis serves as an ongoing tool to this effect, supporting the company's broader operational efficiency and campus optimization initiatives by helping inform resource management and continuous improvement efforts.