CATALYST

Maximize Your Utility Bill and Energy Data

John Heinz
VP of Strategic Relationships
EnergyCAP

Agenda

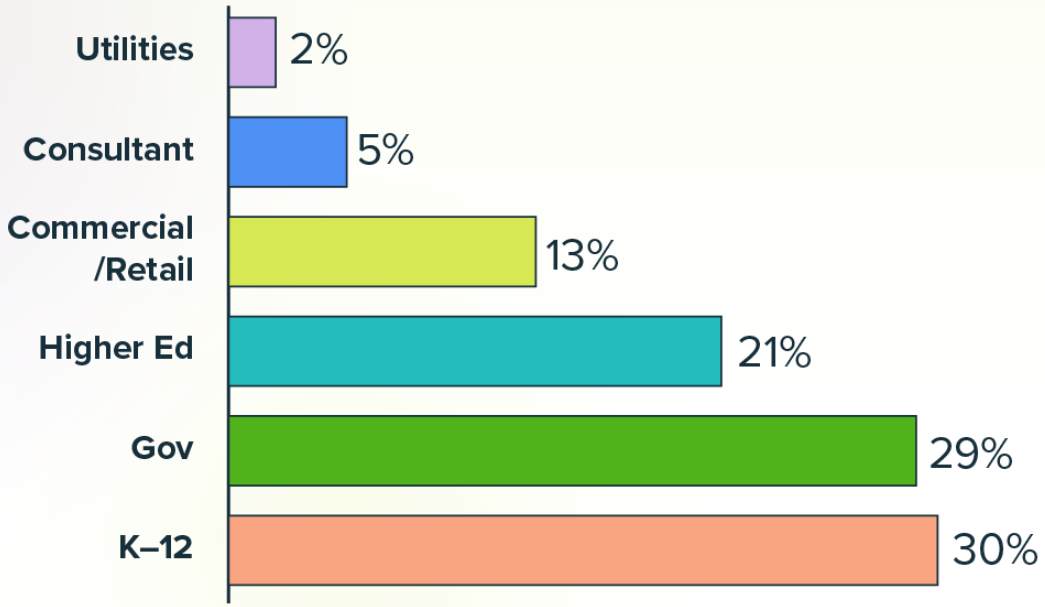
- Customer poll
- Features to help maximize data
- Energy data journey
- Bringing utility bills and real-time interval data together
- Maximizing savings model

Survey of Customers

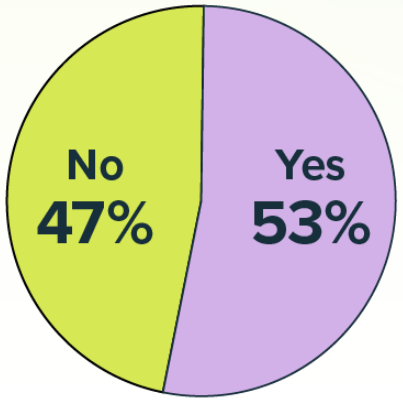
Methodology

- Polled customers in 2024
- Went to hundreds of different types of organizations
- Those responding included:

Participant industries



Bill CAPture subscriber?



Key Takeaways

EnergyCAP implementation comes with:

- An ROI in 2.6 years, 1 in 4 see that **ROI in 1 year or less**.
- **10%** or more YoY savings on total utility spend.
- 4.7% of utility bills flagged every month with **actionable issues** you can resolve to save cost.
- More than **20 hours** of employee time saved per month.
- Fewer manual processes.

Add Bill CAPture Services and:

- Save up to **5x** the amount of employee time every month.
- See **4x** the number of bills flagged every month with actionable issues you can resolve to save cost.

Features with most savings' potential

Reports and dashboards

- Skip manual data entry and reporting – focus on insights.
- Easy to customize and share.
- No more creating graphs, no more writing reports.

Cost avoidance

- Measurement & Verification of energy and cost savings.
- Direct, accurate estimate using IPMVP methodology.

Bill flags

- 98% of customers take action on flagged bills every single month.
- Powerful tool automatically audits utility bills as they come in.

Features with most savings' potential

Workbook exports

- Download the data behind your favorite charts and graphs with a single click.
- Connect directly to your BI tools with EnergyCAP Report Designer BI.

Project tracking

- See the before, during, and after results of your energy saving projects reflected visually in EnergyCAP.
- Energy Use Intensity graph with project overlay.

Benchmarking

- Compare buildings apples-to-apples to flag issues and save cost.
- Compare against itself, against peers, against industry standards.

The bottom line

Every single feature in EnergyCAP is designed to save cost, save time, reduce energy usage, eliminate errors, or build insights.

Stakeholder impact

EnergyCAP brings teams together to capture, allocate, analyze, and report the data the way they want it.

Facilities/operations teams

EnergyCAP works with tools like building automation systems (BAS) and utility accounting platforms, ensuring minimal disruption during rollout and easy implementation.

Sustainability offices

EnergyCAP automates Scope 1, 2, and 3 greenhouse gas tracking, facilitating compliance with climate mandates, meeting carbon neutrality goals and simplifying complex reporting.

Finance teams

EnergyCAP offers measurable ROI, with institutions typically seeing payback within 2–3 years due to reduced energy waste, streamlined processes, and avoided penalties.

IT departments

IT teams value security and scalability. EnergyCAP's cloud-based infrastructure ensures robust data protection while scaling easily as institutional needs grow.

EnergyCAP – Flexible options and modules

Utility Management

the core of your energy management platform

Trusted, centralized data
Rely on accurate, validated data housed in a single intuitive platform.

Save time and cost
Eliminate errors, drive cost avoidance, and reinvest time and dollars back into your organization.

Conserve resources
Turn quick wins into lasting impact with measurable results that showcase your company's value and energy project success.

Carbon Hub

Financial-grade carbon accounting
Seamlessly manage Scope 1, 2, and 3 carbon accounting from the same single source of truth.

Smart Analytics

Granular, actionable insights
Leverage predictive analytics and interval data to address issues early before costs escalate.

Advanced utility data management

Accounting, Chargebacks, and BI reporting
Unparalleled financial clarity and control with bespoke functionality for finance teams.

CAPture Services

Bill CAPture, Audit and Vendor management, and EnergyCAP Bill Pay

Energy Data Journey

EnergyCAP data journey

Inputs
(can be automated)

Bills and documents

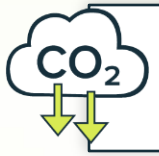
APIs and external sources

Meters and sensors

EnergyCAP Platform

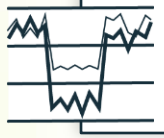
Single source of truth with secure data storage

Automated data validation and cleaning



Per source and scope carbon accounting

Easy to use analytics tools



Realtime monitoring of carbon, energy, water, and waste

Outputs

Carbon, energy, financial management and reports

Sustainability strategy, targets and tracking

Improved energy efficiency and cost savings

Stakeholder and staff engagement supports

Track all operational information

Energy Sources

Bio Diesel
Biomass
Butane
Coal
Cogeneration
Compressed Natural Gas
Diesel Fuel
Gasoline
Kerosene
Liquified Natural Gases
Petroleum Gases
Methane
Natural Gas
Oil, Oil #2, Oil #4, Oil #6
Other Gaseous, Liquid, & Solid Fuels
Propane
Renewable Electricity
Renewable Natural Gas
Solar PV
Solar Thermal
Steam
Wind
Wood

Water and Wastewater Management

Irrigation
Reclaimed Irrigation
Reclaimed Water
Sewer
Storm Drainage
Water
Well Water

Transportation and Infrastructure

Air Travel
Cable
Electric
Ground Transportation
Internet
Telecom
Transit
Water Transportation

Solid Waste and Recycling

Ash
Compost
Recycle
Refuse
Trash

Operations and Costs

Impact Fee
Maintenance
Money
Miscellaneous
Occupancy

Natural and Environmental Factors

Chemical
Ice
Weather

Lighting and Utilities

Energy
Electric
Lighting
Sewer
Water

Emissions

Carbon Offset
Emissions by Cost
Emissions by Count
Emissions by Weight
GHG Emissions
Renewable Energy Credit (REC)

Core Data // Bill Data & Interval Data

Utility Bill Data

- Monthly and yearly
- Detailed bill analysis and bill workflow
- Portfolio-level and aggregate rollups, common and global UOM
- Looking at the rear view, take action to correct for the future
- Focus on reporting, quick summaries, getting answers quickly

Smart Meter Interval Data

- Minutely, hourly, daily, monthly, yearly
- Advanced views of interval and time series data
- Point and meter tracking, equipment or zone areas
- Actionable now so don’t have surprises in the future
- Focus on analytics, simulations, what ifs, verifying performance

Bill Data // Flexible options for utility bill entry

Capture

Gain timely access to accurate and reliable energy and sustainability information from monthly utility bills for financial grade energy and sustainability reporting.

- Utility bill entry and import
- Capture, map, and import via **EnergyCAP Bill CAPture℠**
- API integrations
- Data formats: paper, PDF, XLS, CSV, TXT, XML, EDI, and more

Interval Data // Flexible options for real-time energy data

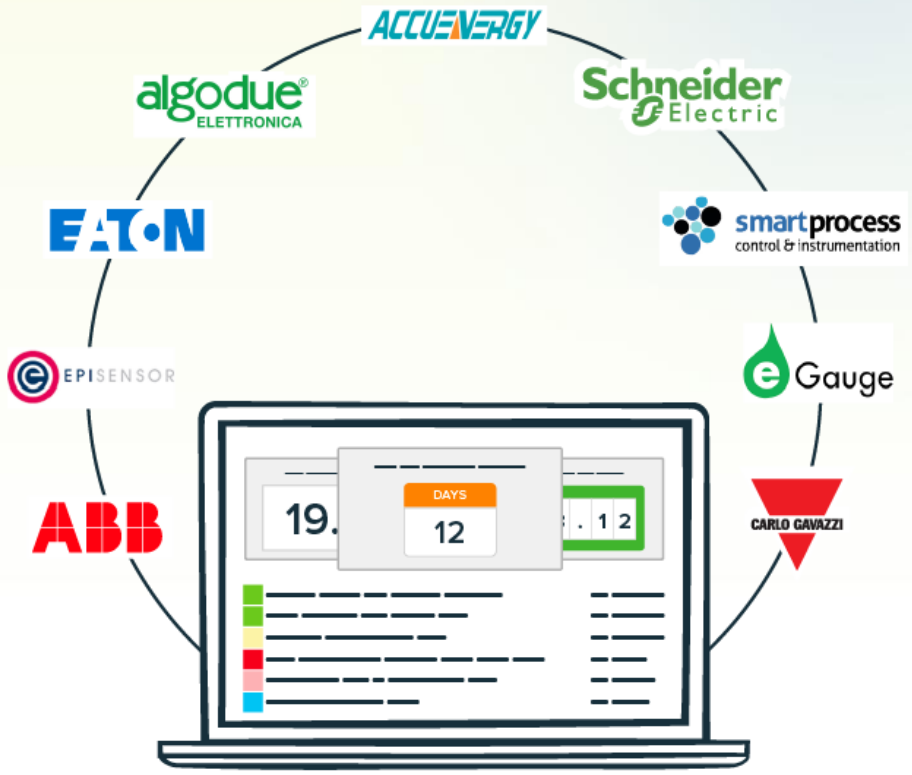
Data Integration Formats

- API
- Data systems
- Files
- Gateways
- Meters
- Sensors
- Solar and PV
- Third-Party Integrations

Connected devices and systems

Connectivity // Partnerships with hardware and installation vendors

- EnergyCAP is hardware agnostic
- Remove the guesswork of formatting and connectivity
- Many options available to meet your monitoring needs
- “Plug and Play” ready
- Options for meters, sensors, and gateways for communication
- Options for communication protocols (BACnet, Modbus, etc.)
- Partnerships with onsite meter installers



Partner spotlight // Episensor

Gateways

Demand Response Controllers

Electricity Monitor

Wireless Signal Sensor

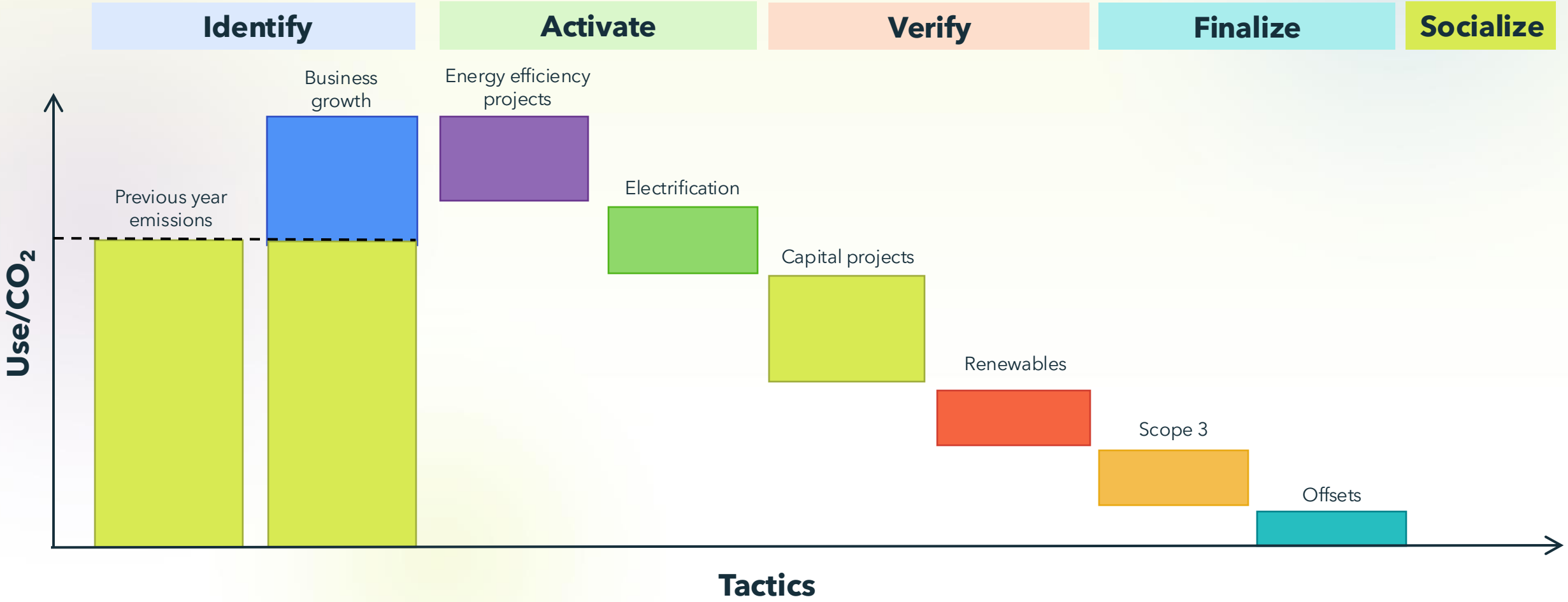
Wireless Temperature Sensor

http://www.Episensor.com

Maximizing Data

5 stages to maximize savings using data

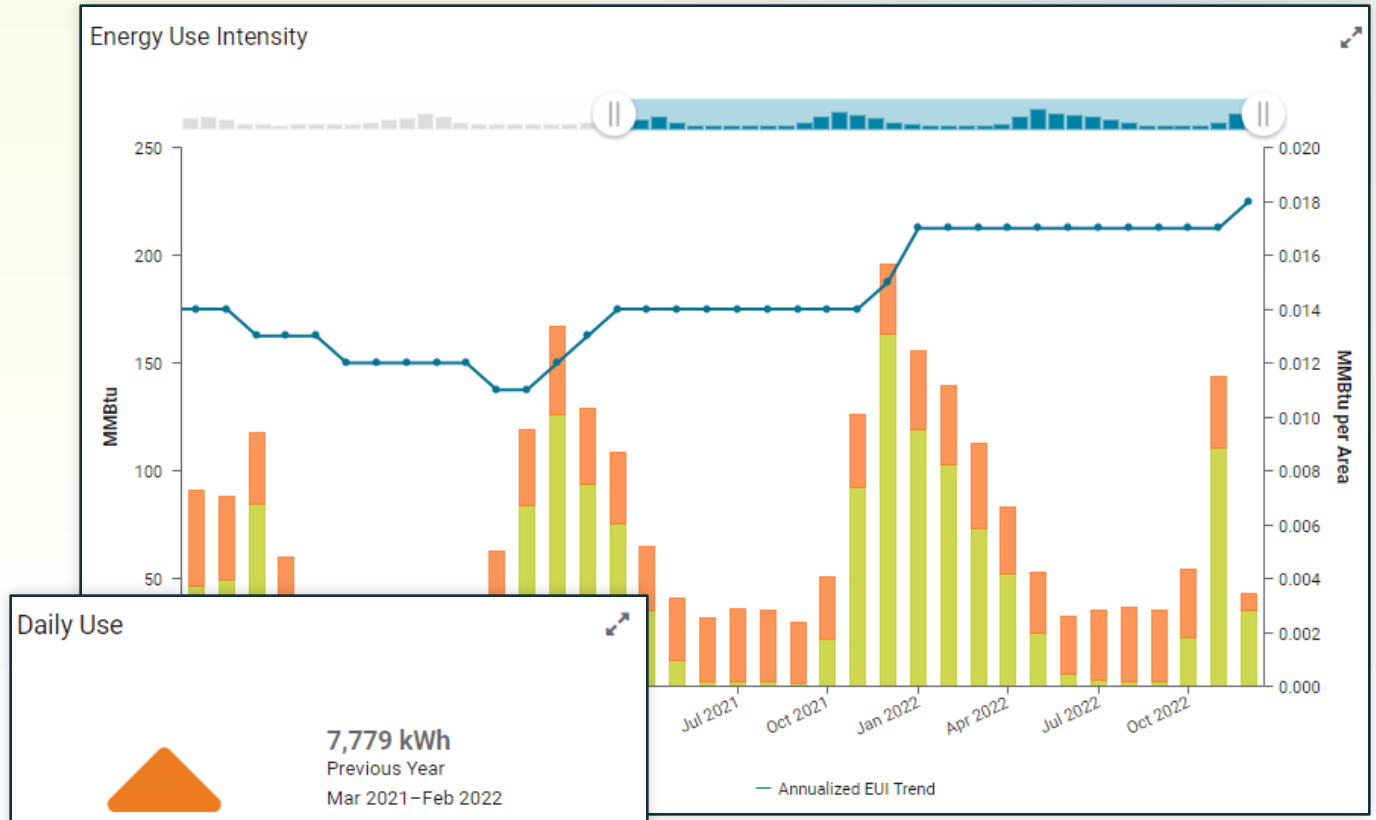
There are a multitude of tactics to reduce use, cost, and to decarbonize operations to maximize your data. Order matters...



Identify

Identify buildings needing special attention

- Establish KPIs and Metrics
- Analyze to find outliers and targets for savings
- Increases in EUI which considers weather
- Consumption spikes
- Increases in costs
- Higher demand



Identify using benchmarking

Building Name	Building Code	Calendarized Total Emissions ($t CO_2e$)	Aug 2022 - Jul 2023	Aug 2023 - Jul 2024	% Difference
Highland Creek Treatment Plant	005649-P01		17,114	14,409	-15.8 %
Main Treatment Plant	001052-P01		16,006	15,926	-0.5 %
Humber Treatment Plant	000579-P01		6,524	4,075	-37.5 %
Toronto-York Spadina Subway	005388-P01		6,455	5,207	-19.3 %
Malvern Garage & Shop	005354-B01		5,230	4,627	-11.5 %
Mt. Dennis Bus Garage	006204-B05		4,074	3,906	-4.1 %
Hillcrest, Gunn, Bathurst Garage	005088-P01		4,058	4,985	22.8 %
Union Station	001007-B01		3,717	3,976	6.9 %
Zoo Main Meter	000576-P02		3,568	3,097	-13.2 %
Bermondsey Yard CNG	OEYCNG		3,176	3,448	8.6 %
Ellesmere Yard CNG	EYCNG		3,040	3,036	-0.1 %
Old City Hall	004094-B01		2,907	1,396	-52.0 %
Oakvale Substation	001815-P01		2,872	3,001	4.5 %
Birchmount Bus Garage	005828-B01		2,504	7,199	187.6 %
700 Arrow Rd	005400-P01		2,464	2,292	-7.0 %
McNicoll Bus Garage	MBG		2,319	1,818	-21.6 %
Metro Hall	005181-B02		2,309	2,345	1.6 %
City Hall	000541-B04		2,230	2,107	-5.6 %
R.L. Clark Water Treatment Plant	005630-P01		2,189	2,341	6.9 %
F.J. Horgan Water Treatment Plant	005315-P01		2,055	1,971	-4.1 %
John Street Pumping Station	004084-B01		1,965	1,508	-23.3 %
Queensway Garage & Shop	005853-B01		1,964	2,593	32.0 %

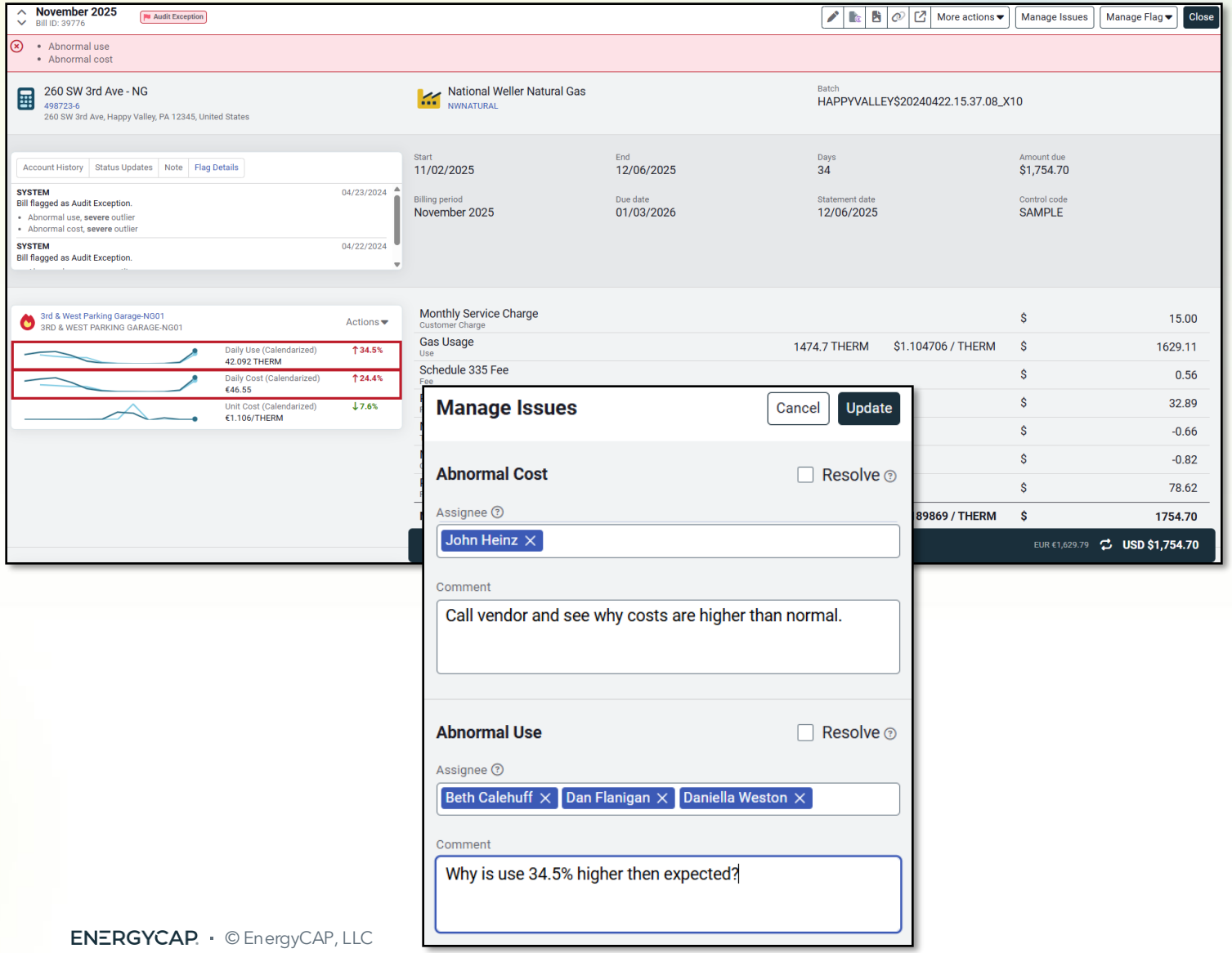
Three ways to benchmark:

1. Against itself monthly or yearly. Important to calendarize and normalize.
2. Against peers within portfolio.
3. Against industry standards like ENERGY STAR, CBECS, and other benchmarking standards.

Identify

Identify problems with bill audits

- Automated utility bill auditing
- Library of audits to check accuracy of bills and highlight issues
- Workflow to assign issues, store notes, resolve issues, and report cost recoveries
- Additional audit reports can be automatically sent to stakeholders for review and follow ups



Identify

Identify discrepancies between billed vs metered values

Find variances of billed vs metered use and demand

Aurora Public Schools

Report-35 - Bill Use Reconciliation Report

Electric

Meter Code	Place	Billing Period	Start Date	End Date	Billed Use	Metered Use	Unit	Variance	Variance %	Actual Demand on Bill	Billed Demand on Bill	Max Demand on Bill	Max Metered Demand	Unit	Variance	Variance %
300980468EL	Altura ES	201707	7/19/2017	8/17/2017	32,000.00	31,083.58	kWh	(916.42)	-2.86%	229.28	229.00	229.28	224.72	kW	(4.56)	-1.99%
300980468EL	Altura ES	201708	8/17/2017	9/18/2017	44,480.00	43,348.20	kWh	(1,131.80)	-2.54%	251.36	251.00	251.36	245.61	kW	(5.75)	-2.29%
300980468EL	Altura ES	201709	9/18/2017	10/17/2017	33,280.00	30,660.00	kWh	(2,620.00)	-7.87%	234.08	234.00	234.08	230.77	kW	(3.31)	-1.41%
300980468EL	Altura ES	201710	10/17/2017	11/15/2017	30,560.00	29,177.85	kWh	(1,382.15)	-4.52%	209.00	209.00	209.00	202.32	kW	(6.68)	-3.19%
300980468EL	Altura ES	201711	11/15/2017	12/18/2017	36,480.00	13,638.24	kWh	(22,841.76)	-62.61%	162.40	162.00	162.40	157.86	kW	(4.54)	-2.79%
300980468EL	Altura ES	201801	1/19/2018	2/20/2018	40,320.00	14,849.67	kWh	(25,470.33)	-63.17%	183.00	183.00	183.00	173.61	kW	(9.39)	-5.13%
300980468EL	Altura ES	201803	2/20/2018	3/21/2018	37,600.00	35,844.33	kWh	(1,755.67)	-4.67%	176.00	176.00	176.00	169.43	kW	(6.57)	-3.73%
300980468EL	Altura ES	201804	3/21/2018	4/19/2018	30,240.00	29,560.76	kWh	(679.24)	-2.25%	172.16	172.00	172.16	168.32	kW	(3.84)	-2.23%
300980468EL	Altura ES	201805	4/19/2018	5/18/2018	34,560.00	33,670.15	kWh	(889.85)	-2.57%	208.00	208.00	208.00	199.49	kW	(8.51)	-4.09%
300980468EL	Altura ES	201806	5/18/2018	6/19/2018	21,120.00	20,702.95	kWh	(417.05)	-1.97%	205.00	205.00	205.00	198.23	kW	(6.77)	-3.30%
300980468EL	Altura ES	201807	6/19/2018	7/19/2018	18,080.00	17,684.46	kWh	(395.54)	-2.19%	159.00	159.00	159.00	152.89	kW	(6.11)	-3.84%
300980468EL	Altura ES	201808	7/19/2018	8/17/2018	36,320.00	35,531.49	kWh	(788.51)	-2.17%	234.00	234.00	234.00	224.94	kW	(9.06)	-3.87%
300980468EL	Altura ES	201809	8/17/2018	9/18/2018	43,840.00	42,682.23	kWh	(1,157.77)	-2.64%	260.00	260.00	260.00	252.47	kW	(7.53)	-2.90%
300980468EL	Altura ES	201810	9/18/2018	10/17/2018	36,640.00	35,258.89	kWh	(1,381.11)	-3.77%	254.08	254.00	254.08	246.02	kW	(8.06)	-3.17%
300980468EL	Altura ES	201811	10/17/2018	11/15/2018	33,120.00	28,899.03	kWh	(4,220.97)	-12.74%	184.16	184.00	184.16	175.34	kW	(8.82)	-4.79%
300980468EL	Altura ES	201812	11/15/2018	12/18/2018	42,240.00	40,322.30	kWh	(1,917.70)	-4.54%	172.32	172.00	172.32	168.08	kW	(4.24)	-2.46%
300980468EL	Altura ES	201901	12/18/2018	1/21/2019	39,840.00	39,315.45	kWh	(524.55)	-1.32%	164.48	164.00	164.48	163.47	kW	(1.01)	-0.62%
300980468EL	Altura ES	201902	1/21/2019	2/20/2019	39,360.00	39,075.85	kWh	(284.15)	-0.72%	174.00	174.00	174.00	172.18	kW	(1.82)	-1.05%
300980468EL	Altura ES	201903	2/20/2019	3/21/2019	38,080.00	37,519.37	kWh	(560.63)	-1.47%	180.00	180.00	180.00	176.04	kW	(3.96)	-2.20%
300980468EL	Altura ES	201904	3/21/2019	4/19/2019	28,640.00	28,399.36	kWh	(240.64)	-0.84%	182.24	182.00	182.24	177.76	kW	(4.48)	-2.46%
300980468EL	Altura ES	201905	4/19/2019	5/20/2019	33,760.00	33,441.48	kWh	(318.52)	-0.94%	195.20	195.00	195.20	193.09	kW	(2.11)	-1.08%
300980468EL	Altura ES	201906	5/20/2019	6/19/2019	16,160.00	15,929.72	kWh	(230.28)	-1.43%	136.16	136.00	136.16	138.42	kW	2.26	1.66%
300980468EL	Altura ES	201907	6/19/2019	7/19/2019	14,720.00	14,483.25	kWh	(236.75)	-1.61%	197.12	197.00	197.12	186.85	kW	(10.27)	-5.21%

Identify

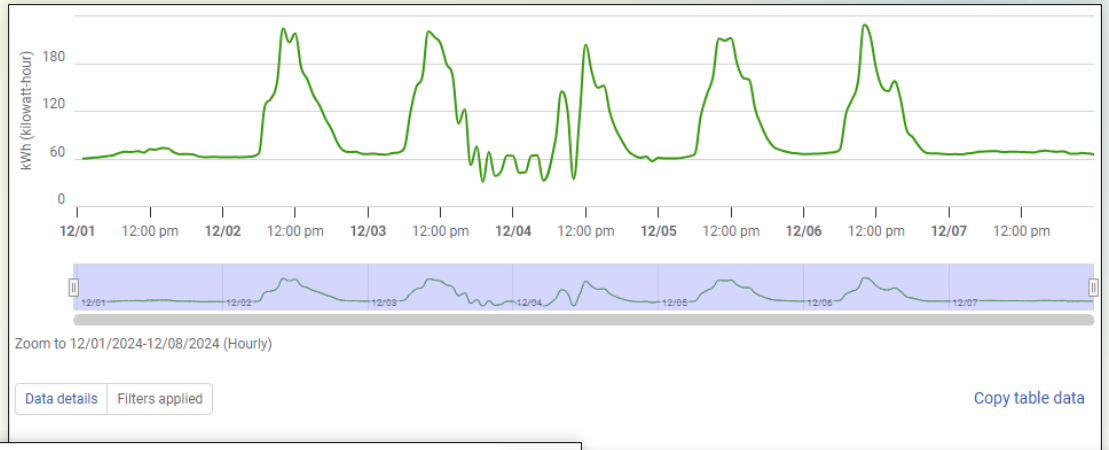
Identify anomalies in use patterns

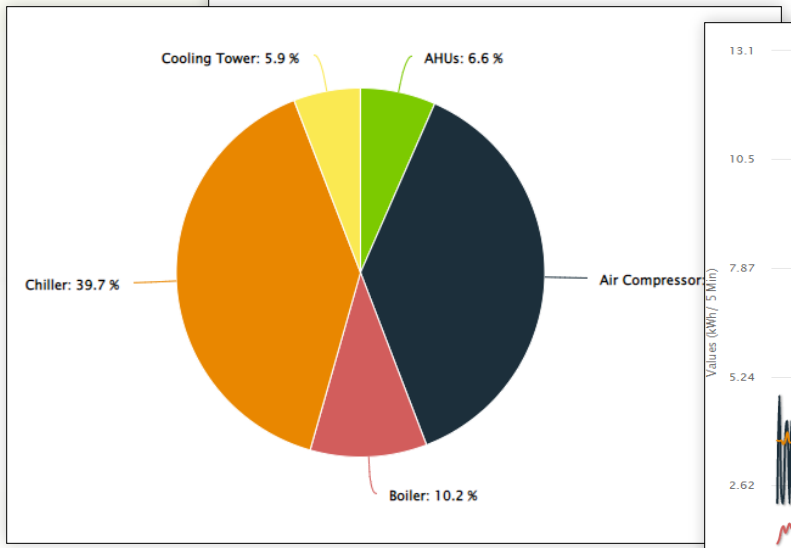
- Go deeper than monthly snapshots
- Heatmaps to see usage patterns and trends
- Identify times when usage seems to be problematic, or schedules aren't being followed
- Understand intensive periods and how that impacts your utility bill based on time of use rates

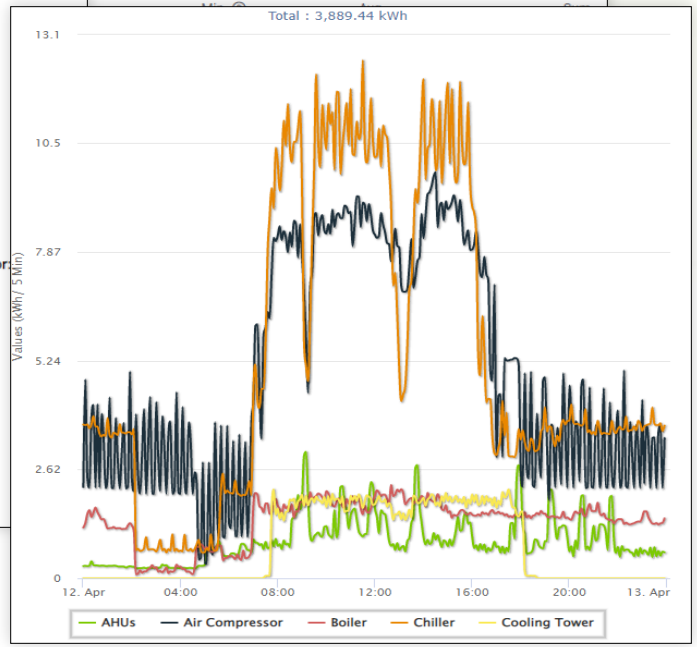
Identify

Isolate to understand use, cost, and carbon drivers

- Determine what zone, equipment, time of day, day of week is causing the spikes
- Overlay multiple points to compare, helpful when monitoring equipment (HVAC, Chillers, Refrigeration, etc.)
- Aggregate, compare, isolate
- Depends on level of metering







Identify

Identify baselines for Scope 1 and Scope 2 carbon emission reporting

- Already have use values needed for Scope 1 & 2 reporting
- Apply location and/or market-based emission factors
- Library of factors, or customize factors for more accuracy
- Report all GHG emission gases

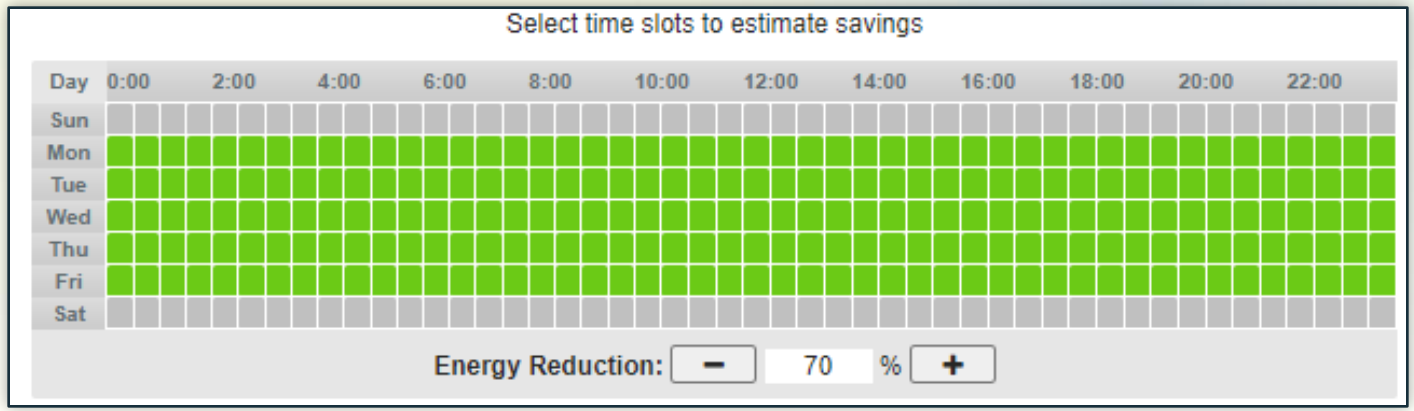
Year	Emissions (t CO_2e)	CH_4 (Methane) (t CO_2e)	CO_2 (Carbon dioxide) (t CO_2e)	N_2O (Nitrous oxide) (t CO_2e)
2021	220.76	0.32	219.95	0.49
2022	275.27	0.47	274.10	0.70
2023	268.06	0.45	266.91	0.71
2024	236.02	0.38	235.02	0.63
2025 YTD	197.83	0.30	197.06	0.48

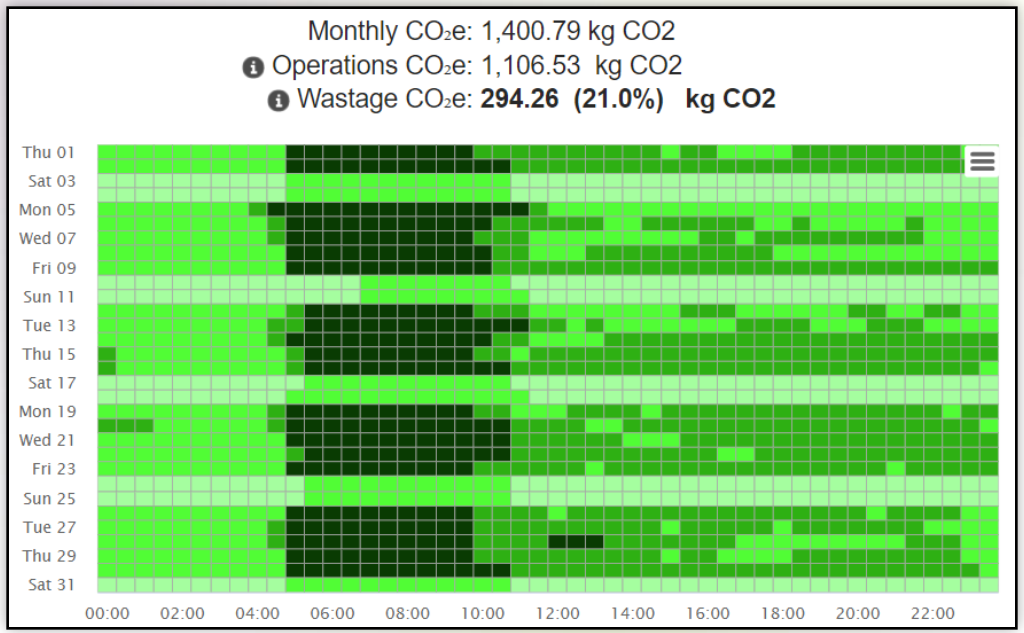
Total t CO_2e has been calculated using Fourth Assessment Report (AR4) values for Global Warming Potential. Apply a different AR version by contacting support.

Activate

Activate by planning initiatives to drive savings

- Perform schedule optimization to target reduction strategies and most effective time periods



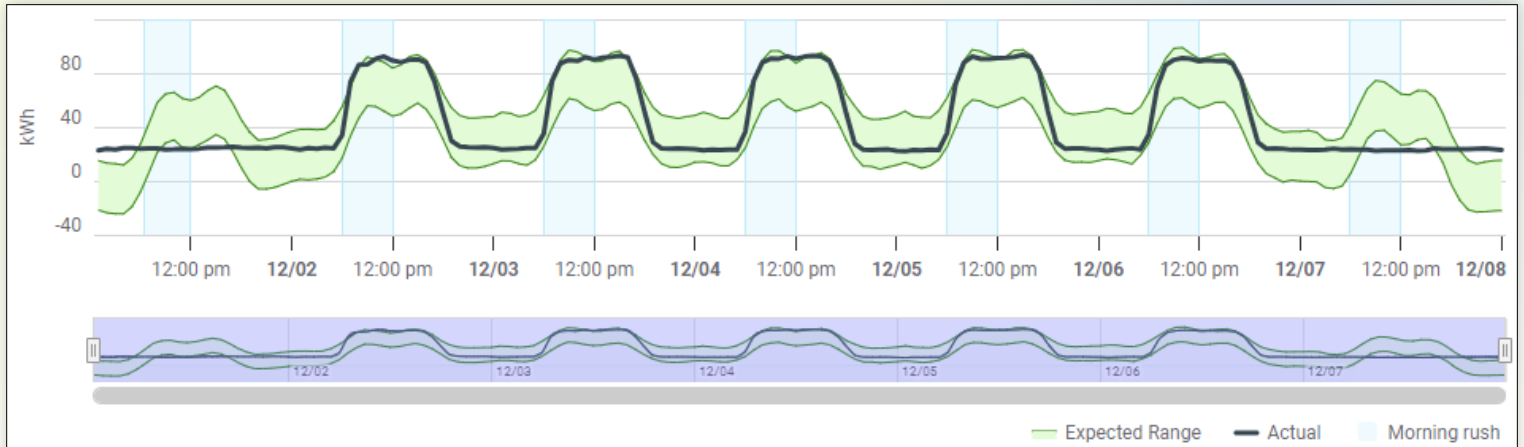


- Heatmaps to simulate and visualize time periods of intensive usage/emissions and what the new schedule would look like
- Calculate projected use, cost, and carbon savings by making reduction changes

Activate

Trend Insights - Machine Learning Predictions

- Forecasts your range based on historical data and becomes more accurate over time as more data becomes available.
- Set and receive alerts for data out of range.
- Actual demand or use values are overlaid with a model of the forecasted range.
- Overlay schedules.



Zoom to 12/01/2024-12/07/2024 (15-minute)

Data details | Filters applied

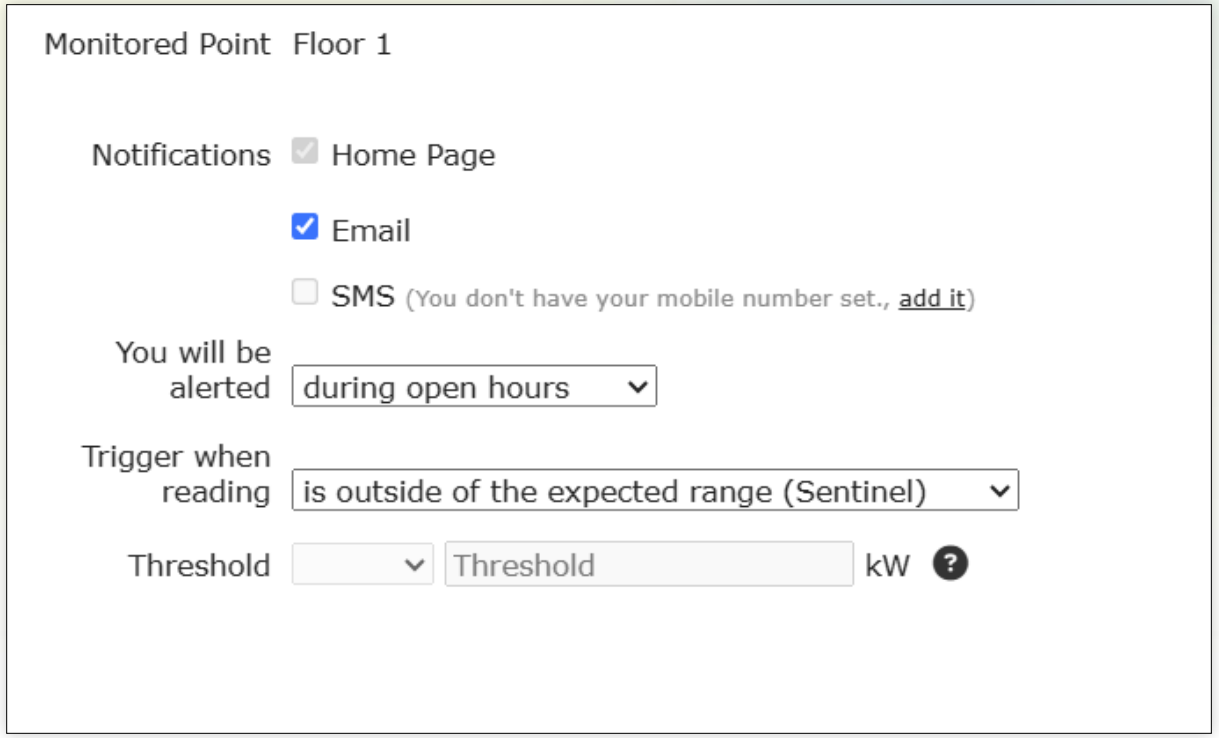
Copy table data

Outlier Timestamp	Expected Range (kWh)	Actual (kWh)	Outside of Expected Range (kWh)	Percent Above/Below Expected Range
12/01/2024 1:00 am	-21.69–15.00	22.58	7.57	50.5%
12/01/2024 2:00 am	-23.68–13.24	23.71	10.47	79.1%
12/01/2024 3:00 am	-24.38–12.73	23.18	10.45	82.1%
12/01/2024 4:00 am	-24.47–11.78	24.46	12.69	107.7%
12/01/2024 5:00 am	-19.15–16.94	24.51	7.57	44.7%

Activate

Activate alarms on interval data

- React to problems in real-time
- On active power (kW) to keep demand under control
- On currents (A) to prevent overheatings
- On voltages (V) to ensure power quality
- On consumption (kwh) over a certain time period
- Smart Sentinel alerts
- Alarms for offline meters and failed import processes



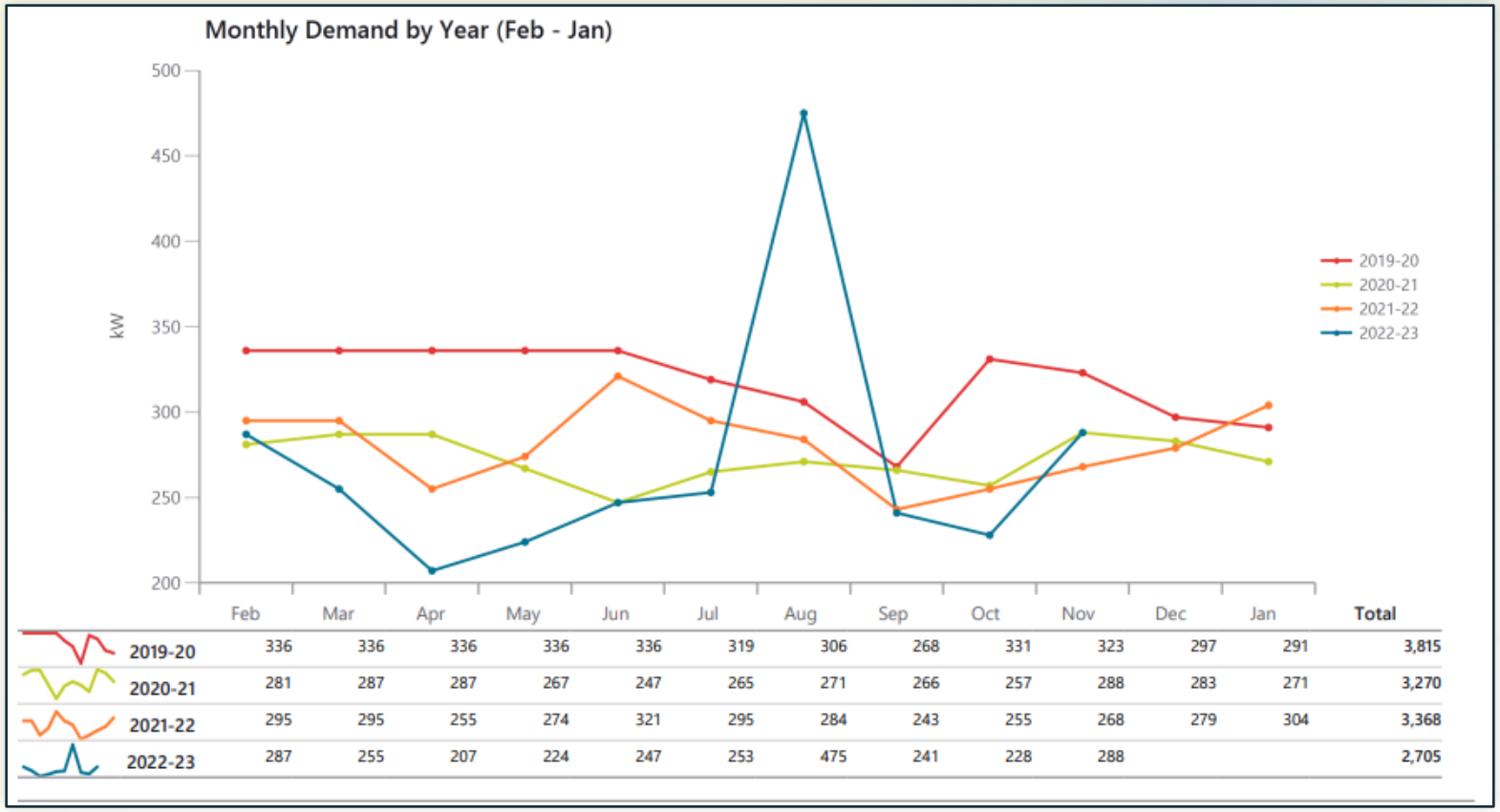
Activate demand management

- Limiting demand can be greatest potential for savings opportunities on bills
- Some rates use highest demand for any point during a timeframe
- Limiting demand spikes make for more predictable and lower cost bills
- Setup alarms to monitor peak periods

Activate

Activate demand management

- Demand shows up on bills
- The 30-day snapshot provides no explanation of when or what was causing it
- Helpful to see reports of values
- Demand can be a substantial cost driver of utility bill costs

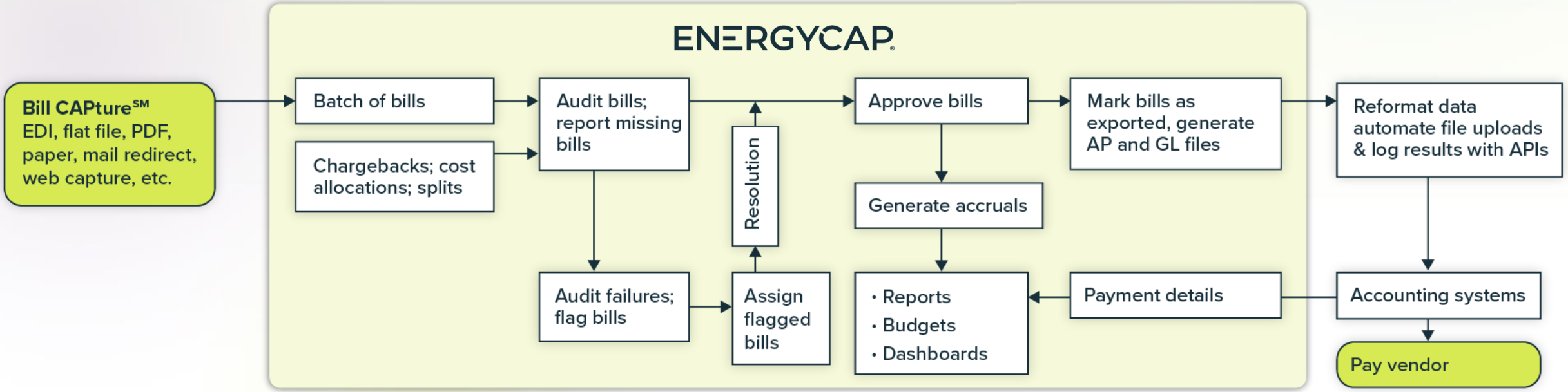


	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Total
2019-20	336	336	336	336	336	319	306	268	331	323	297	291	3,815
2020-21	281	287	287	267	247	265	271	266	257	288	283	271	3,270
2021-22	295	295	255	274	321	295	284	243	255	268	279	304	3,368
2022-23	287	255	207	224	247	253	475	241	228	288			2,705

Activate

Activate streamlined accounting workflow

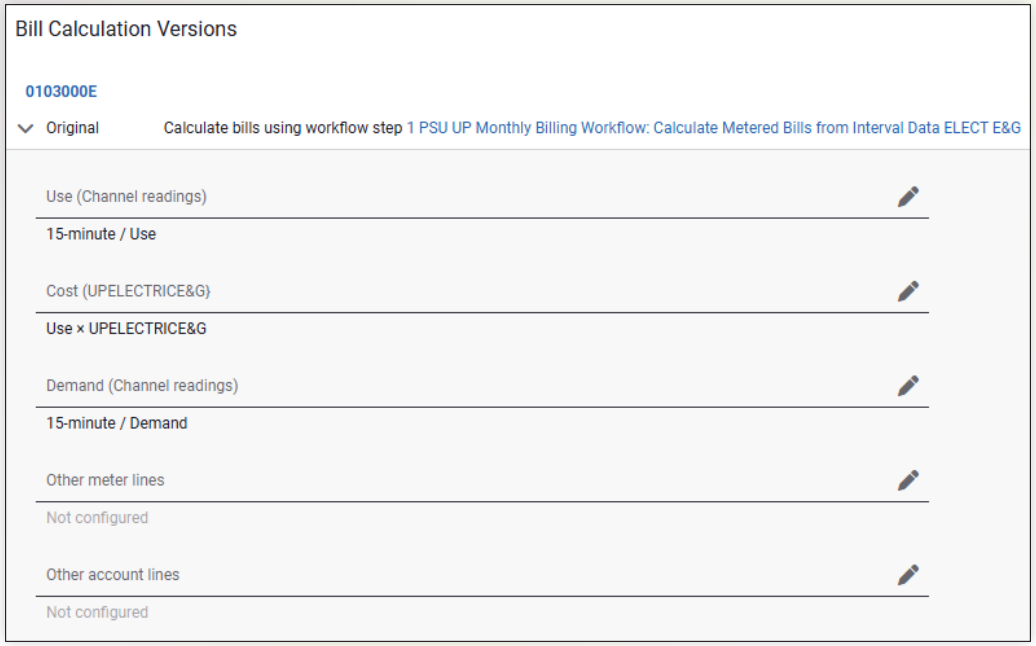
- Auto-bill entry and auditing
- Workflow for bill approvals, escalations, routing, and export
- Create budgets and accruals

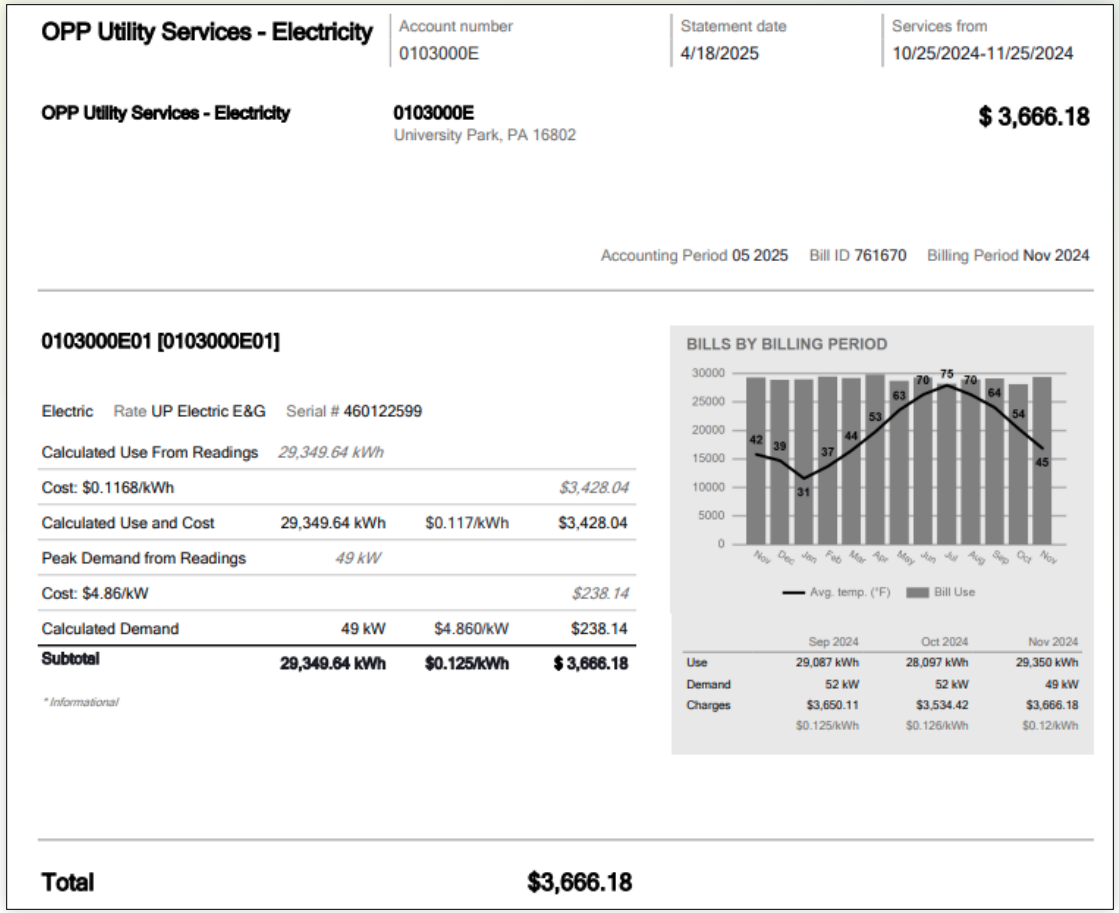


Activate

Allocate use, cost, and carbon

- Target and track usage, cost, and carbon from measurable or calculated points.
- Recoup costs from tenants or departments by allocating costs using submeter data, formulas, and splits.

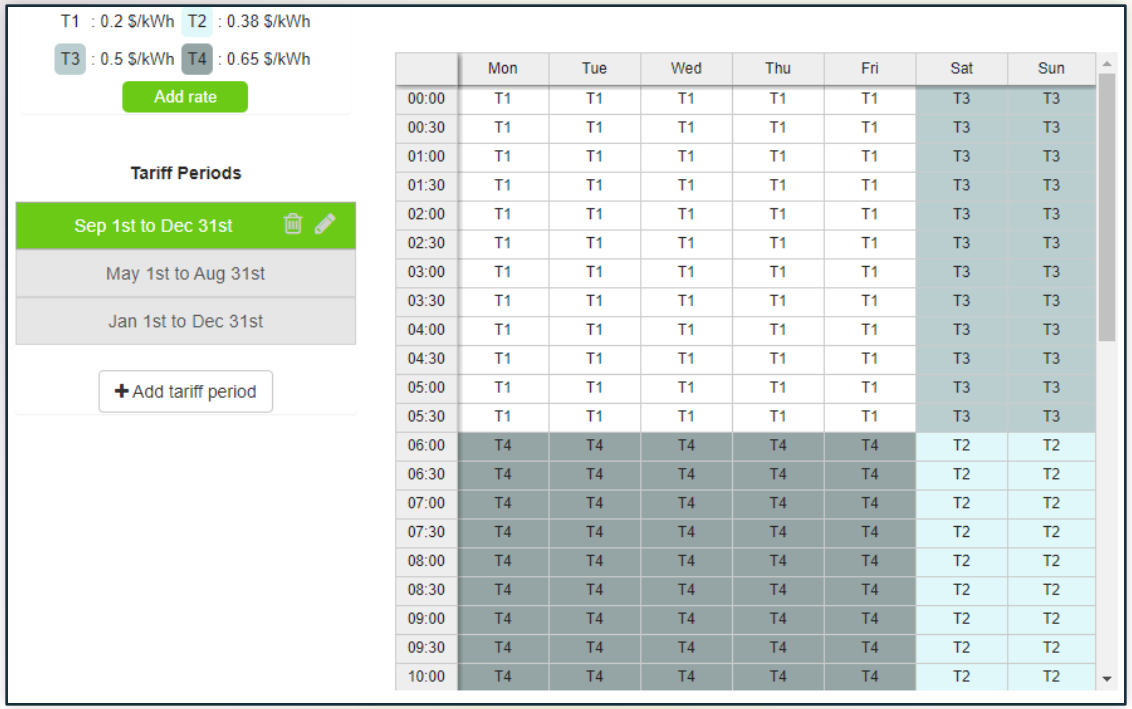




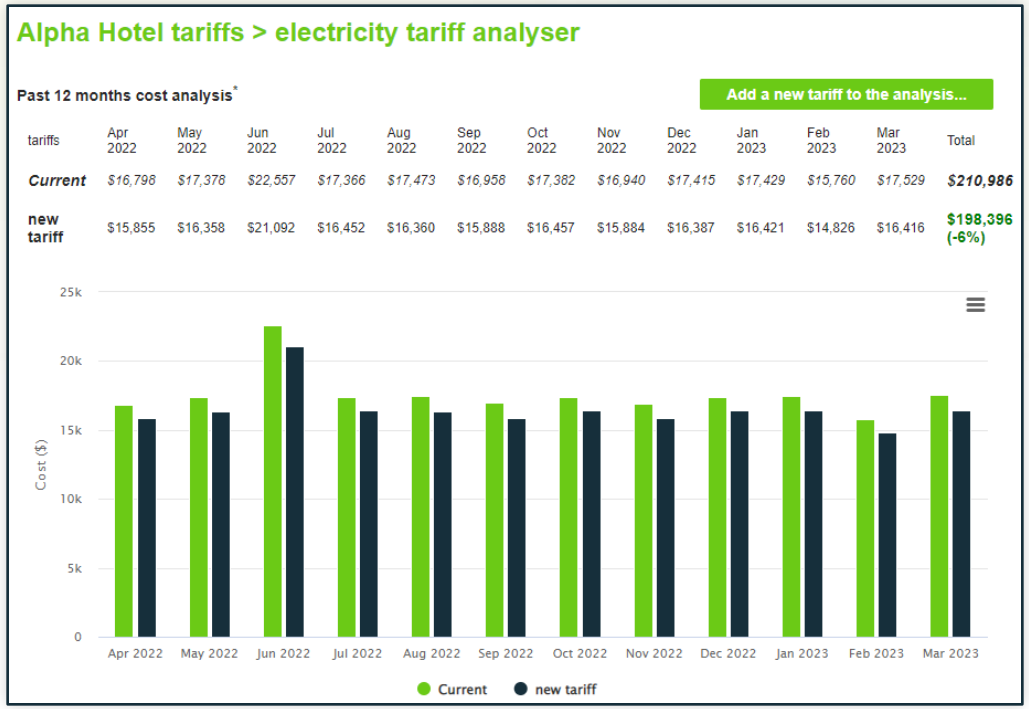
Activate

Activate tariff savings

- Calculate ‘what if’ scenarios
- Time of use charges
- Seasonal rate structures
- Better visibility into times of day causing cost spikes



	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	T1	T1	T1	T1	T1	T3	T3
00:30	T1	T1	T1	T1	T1	T3	T3
01:00	T1	T1	T1	T1	T1	T3	T3
01:30	T1	T1	T1	T1	T1	T3	T3
02:00	T1	T1	T1	T1	T1	T3	T3
02:30	T1	T1	T1	T1	T1	T3	T3
03:00	T1	T1	T1	T1	T1	T3	T3
03:30	T1	T1	T1	T1	T1	T3	T3
04:00	T1	T1	T1	T1	T1	T3	T3
04:30	T1	T1	T1	T1	T1	T3	T3
05:00	T1	T1	T1	T1	T1	T3	T3
05:30	T1	T1	T1	T1	T1	T3	T3
06:00	T4	T4	T4	T4	T4	T2	T2
06:30	T4	T4	T4	T4	T4	T2	T2
07:00	T4	T4	T4	T4	T4	T2	T2
07:30	T4	T4	T4	T4	T4	T2	T2
08:00	T4	T4	T4	T4	T4	T2	T2
08:30	T4	T4	T4	T4	T4	T2	T2
09:00	T4	T4	T4	T4	T4	T2	T2
09:30	T4	T4	T4	T4	T4	T2	T2
10:00	T4	T4	T4	T4	T4	T2	T2



Activate

Create project plans

Zero-Cost Energy/Carbon Conservation Opportunities

- ✓ System schedules
- ✓ Turn off lights
- ✓ Turn off computers and monitors
- ✓ Seasonal water temperature adjustments
- ✓ Economizers
- ✓ Take advantage of natural light

Low-Cost Energy/Carbon Conservation Opportunities

- ✓ Programmable thermostats
- ✓ Repair broken valves
- ✓ Occupancy sensors for lighting, HVAC
- ✓ Reduce lamps in over-lighted areas
- ✓ Use rebated programs for lighting upgrades
- ✓ Calibrate sensors

High-Cost Energy/Carbon Conservation Opportunities

- ✓ Construction
- ✓ Asset upgrades
- ✓ Energy transition
- ✓ District energy
- ✓ Electrification of fleet vehicles

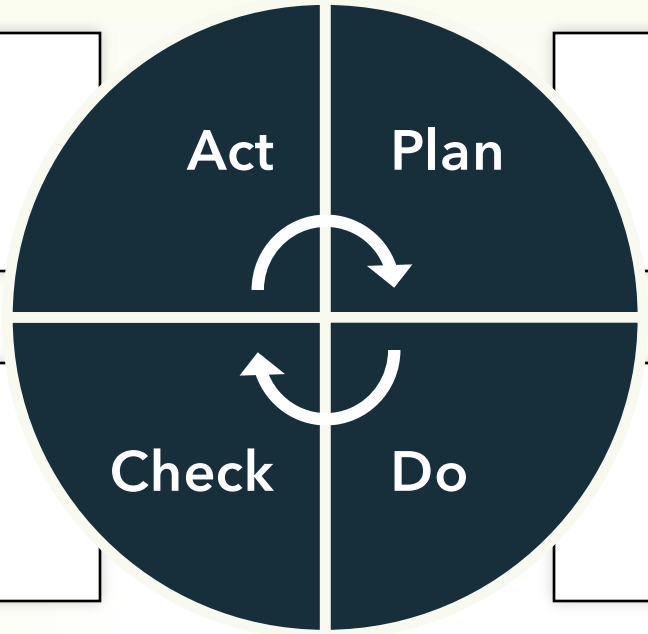
Verify

Measure and Verify Savings

Implement a reduction and savings tracking plan

Identify aspects and impacts by implementing goals and objectives

Implement; including training and operational control measures.

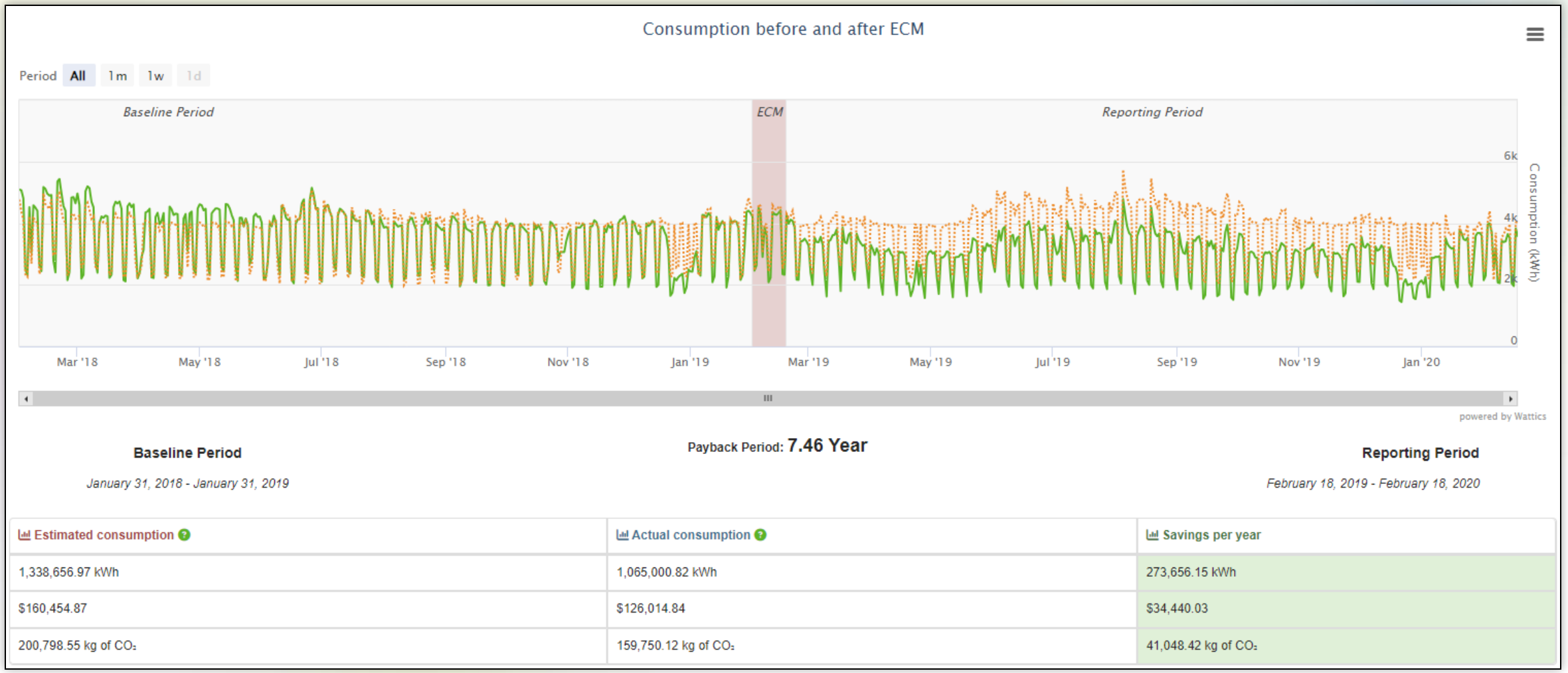


Assess the measurements and report results to decision makers.

Decide on changes needed to improve process.

Verify

Verify savings on interval data – Option B



Baseline Period

January 31, 2018 - January 31, 2019

Payback Period: **7.46 Year**

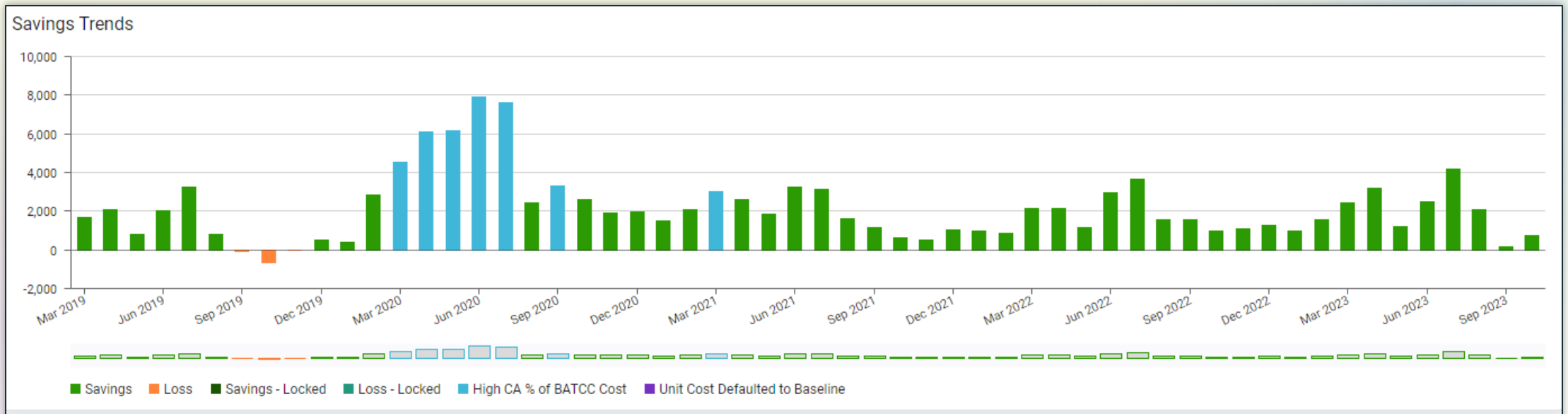
Reporting Period

February 18, 2019 - February 18, 2020

Estimated consumption	Actual consumption	Savings per year
1,338,656.97 kWh	1,065,000.82 kWh	273,656.15 kWh
$160,454.87	$126,014.84	$34,440.03
200,798.55 kg of CO_2	159,750.12 kg of CO_2	41,048.42 kg of CO_2

Verify

Verify savings on utility bills – Option C

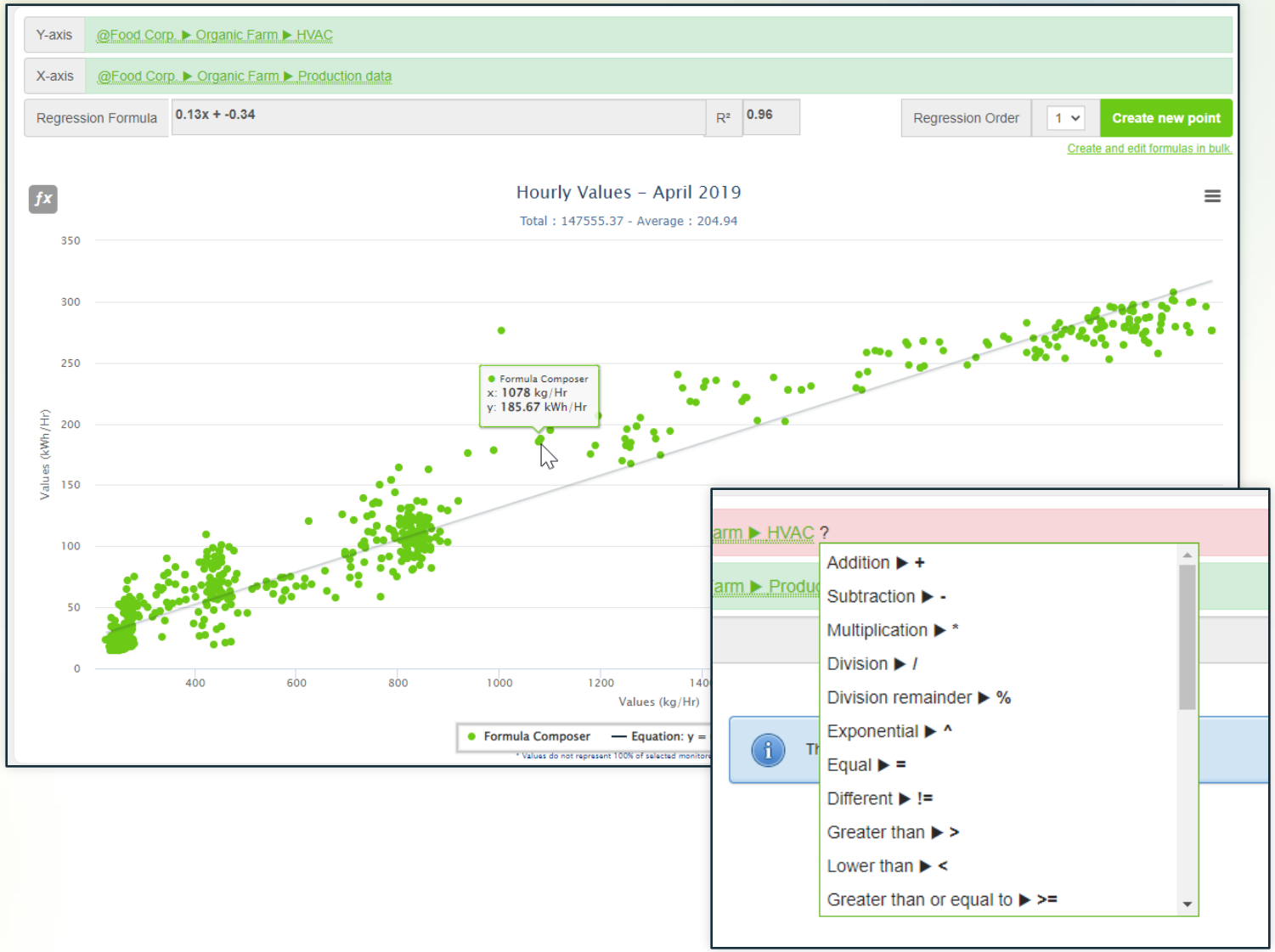


Billing Period	Cost			Cost Avoidance		Cooling		Heating		Use			Use Avoidance	
	Baseline	BATCC	Actual	Amount	%	DD	Adj.	DD	Adj.	Baseline	BATCC	Actual	Amount	%
Nov 2023	$ 4,500	$ 6,720	$ 5,942	$ 778	11.6%	38	✓	134		50,312	51,110	45,193	5,917	11.6%
Sep 2023	$ 6,076	$ 8,972	$ 8,783	$ 189	2.1%	470	✓	0		65,626	68,056	66,624	1,432	2.1%
Aug 2023	$ 4,815	$ 7,297	$ 5,216	$ 2,082	28.5%	485	✓	0		51,611	54,040	38,625	15,415	28.5%
Jul 2023	$ 6,393	$ 8,793	$ 4,607	$ 4,185	47.6%	489	✓	0		68,942	66,295	34,738	31,557	47.6%
Jun 2023	$ 6,928	$ 8,675	$ 6,161	$ 2,513	29.0%	231	✓	0		73,040	68,616	48,735	19,881	29.0%
May 2023	$ 4,388	$ 5,876	$ 4,679	$ 1,197	20.4%	55	✓	29		48,308	47,836	38,091	9,745	20.4%
Apr 2023	$ 5,868	$ 8,078	$ 4,893	$ 3,185	39.4%	121	✓	73		64,979	66,248	40,124	26,124	39.4%

Verify

Formulas and comparisons

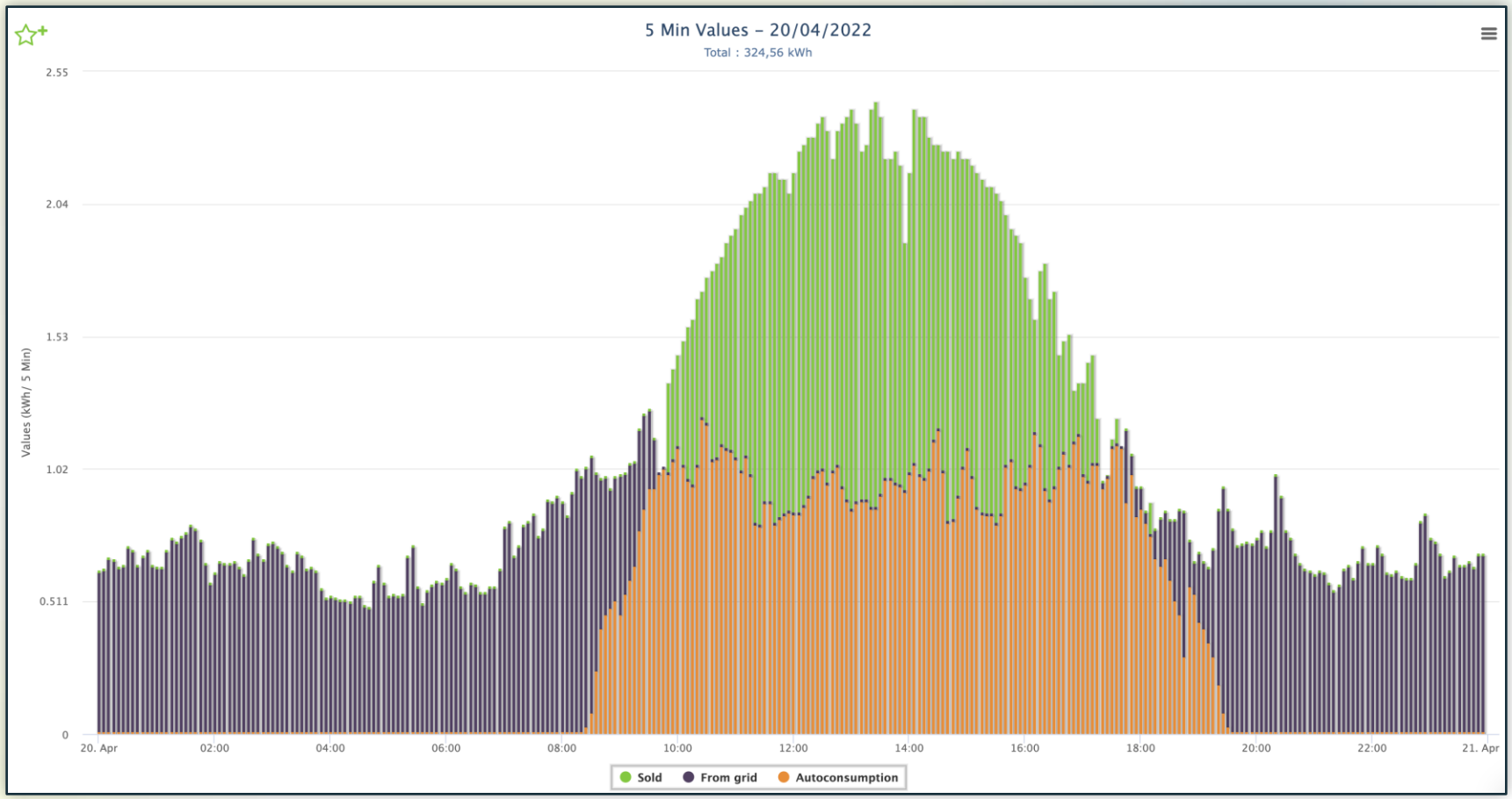
- Formulas to compare, aggregate, reduce, create targets, and more
- Ensure that consumption is in line with working hours
- Assess trends of EUI metrics like consumption per m^2, occupancy or production output
- Ensure that energy consumption is in correlation with production data
- Create models to predict future energy usage



Finalize

Understand consumption sources

- Report on sources in real-time
- Track generation and selling activities
- Apply CO2 in real-time to generation and consumption
- Track renewables



Finalize

Scope 3 by use, volume, distance, weight-based, and cost-based

SCOPE 3

- 01. Purchased Goods and Services
- 02. Capital Goods
- 03. Fuel and Energy Related Activities
- 04. Upstream Transportation & Distribution
- 05. Waste Generated in Operations
- 06. Business Travel
- 07. Employee Commuting
- 08. Upstream Leased Assets
- 09. Downstream Transportation & Distribution
- 10. Processing of Sold Products

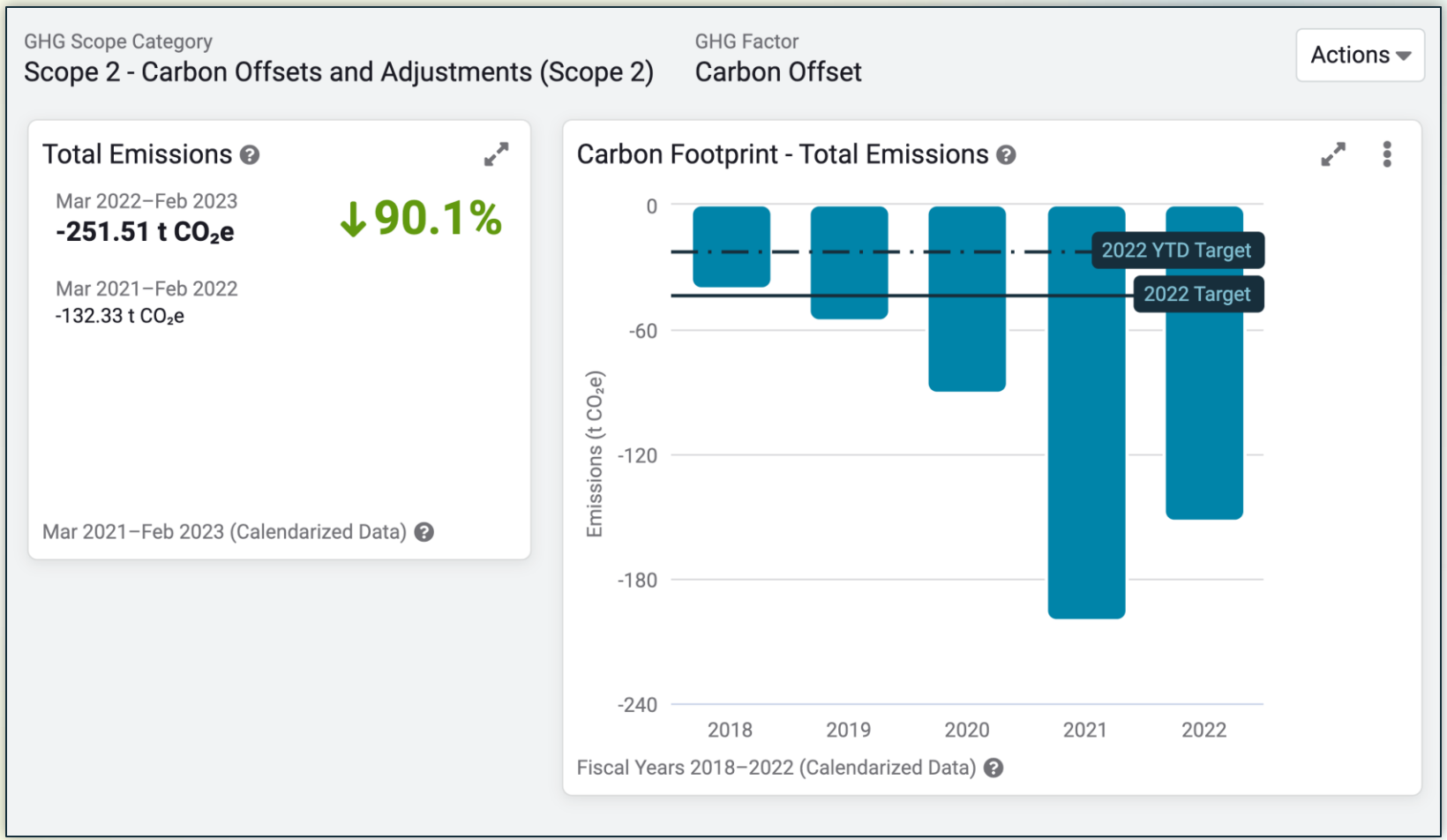
- 06. Business Travel
  - Long Haul Flights
  - Medium Haul Flights
  - Rental Cars
  - Short Haul Flights
- 07. Employee Commuting
  - Bus
  - Commuter Rail
  - Passenger Vehicles

- ENC Purchased Goods and Services
  - Accounting Fees
  - Advertising and Marketing Expense
  - Financial Service Fees
  - Hardware
  - Hosting
  - Legal Fees
  - Printing Expense
  - Software
  - Stationary

Finalize

Track offsets and renewable energy credits (RECs)

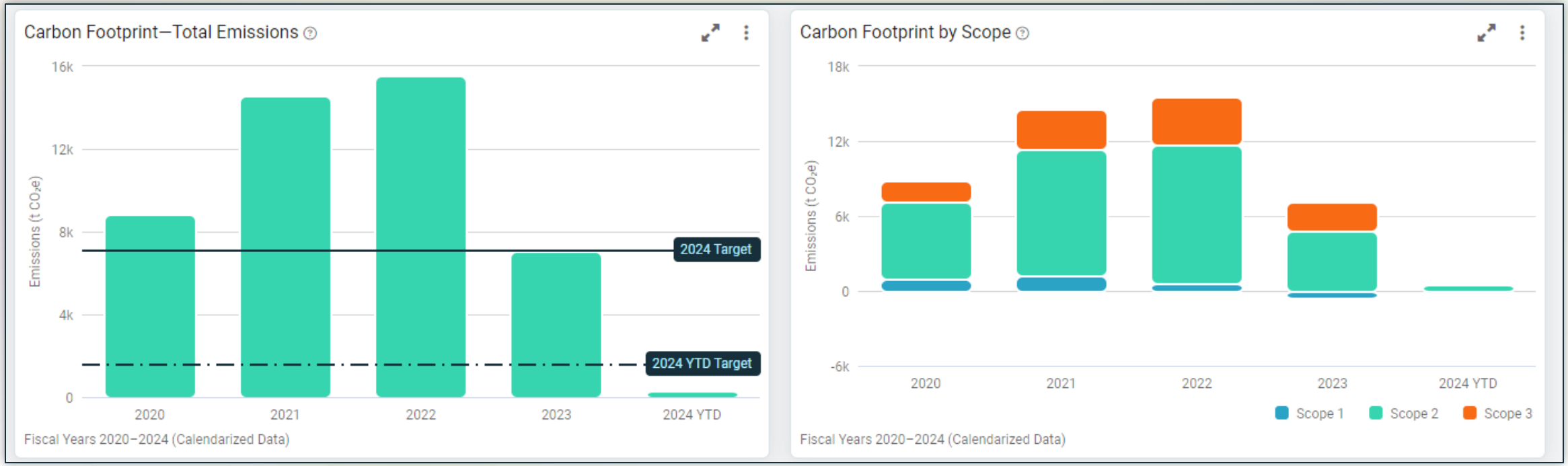
- Carbon Offsets and RECs
  - Carbon Offsets: Scope 1
  - Carbon Offsets: Scope 2
  - Carbon Offsets: Scope 3
  - Electric RECs (non-solar)
  - Solar RECs (SRECs)



Socialize

Necessary to measure progress

Track baselines, set targets, measure and report progress towards organizational goals



Socialize

Customizable, shareable reports

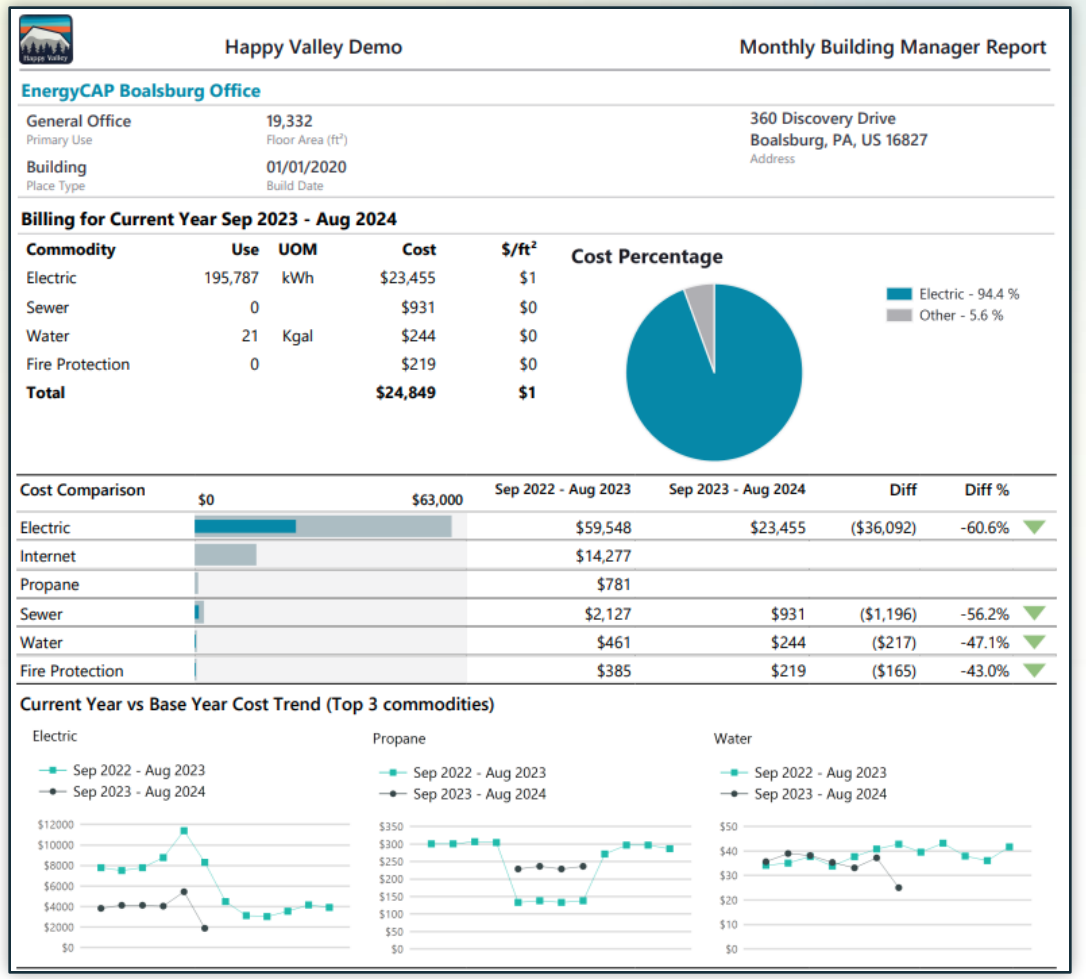
Happy Valley Demo

Report-44 | **Emissions Summary Report**
Jan 2023 - Dec 2023

Sustainability Reporting

Emissions Performance History

Date Range	Total Emissions	Target Performance
2018	100,148.67 t CO_2e	
2019	93,888.02 t CO_2e	
2020	6,621,044.95 t CO_2e	
2021	7,016,775.51 t CO_2e	* Base Year
2022	7,626,300.41 t CO_2e	20.76%
2023	7,527,189.97 t CO_2e	19.19%



Happy Valley Demo

Monthly Building Manager Report

EnergyCAP Boalsburg Office

General Office Primary Use	19,332 Floor Area (ft^2)	360 Discovery Drive Boalsburg, PA, US 16827 Address
Building Place Type	01/01/2020 Build Date	

Billing for Current Year Sep 2023 - Aug 2024

Commodity	Use	UOM	Cost	$/$ft^2$
Electric	195,787	kWh	$23,455	$1
Sewer	0		$931	$0
Water	21	Kgal	$244	$0
Fire Protection	0		$219	$0
Total			**$24,849**	**$1**

Cost Percentage

Cost Comparison	$0 — $63,000	Sep 2022 - Aug 2023	Sep 2023 - Aug 2024	Diff	Diff %
Electric		$59,548	$23,455	($36,092)	-60.6%
Internet		$14,277			
Propane		$781			
Sewer		$2,127	$931	($1,196)	-56.2%
Water		$461	$244	($217)	-47.1%
Fire Protection		$385	$219	($165)	-43.0%

Current Year vs Base Year Cost Trend (Top 3 commodities)

Socialize

Customize and share dashboards

City of Philadelphia's Municipal Energy Use Dashboard

City of

This dashboard

Learn more abo

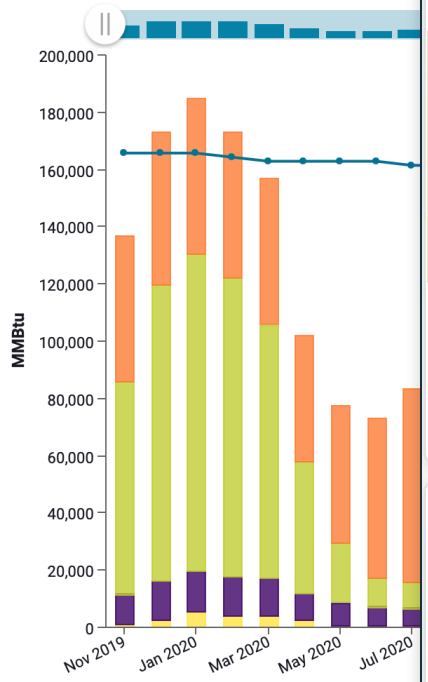
- Function
- How the

Learn more abo

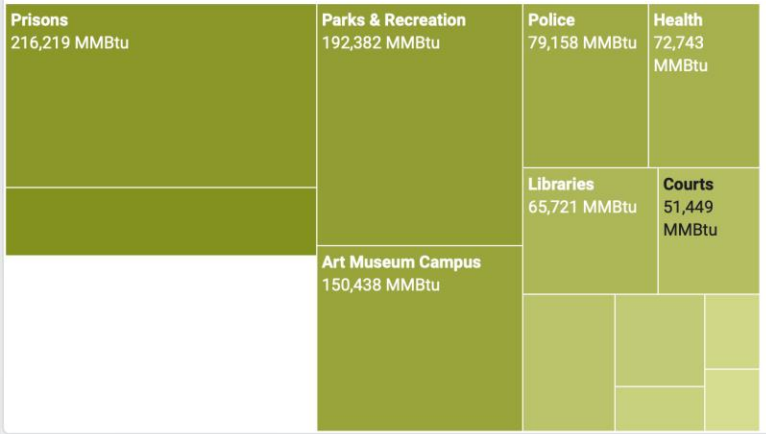
Reduc
the City

Have questions

EUI & Monthly MMBTU Usage



Highest Energy Users - By Department



Highest Energy Users - By Individual Building

Art Museum Main Bldg & Perelman Bldg	134,125 MMBtu
Curran Fromhold Correctional Facility	74,497 MMBtu
City Hall	48,253 MMBtu
Public Services Building (PPSB)	47,710 MMBtu
Criminal Justice Center (CJC)	45,706 MMBtu
Service Center - Flt Shp 357- Sanit Area 2&3 - CNG	37,831 MMBtu
Family Court (Arch St)	35,255 MMBtu
House of Corrections Complex (HOC)	33,882 MMBtu
One Parkway Building	33,454 MMBtu
Municipal Services Building (MSB)	30,122 MMBtu

EUI & Monthly MMBTU Usage - Description

Highest Energy Users - Description

The charts on the left display the highest energy consumers first broken down by Department and then by building.

The building chart displays the top 10 energy users.

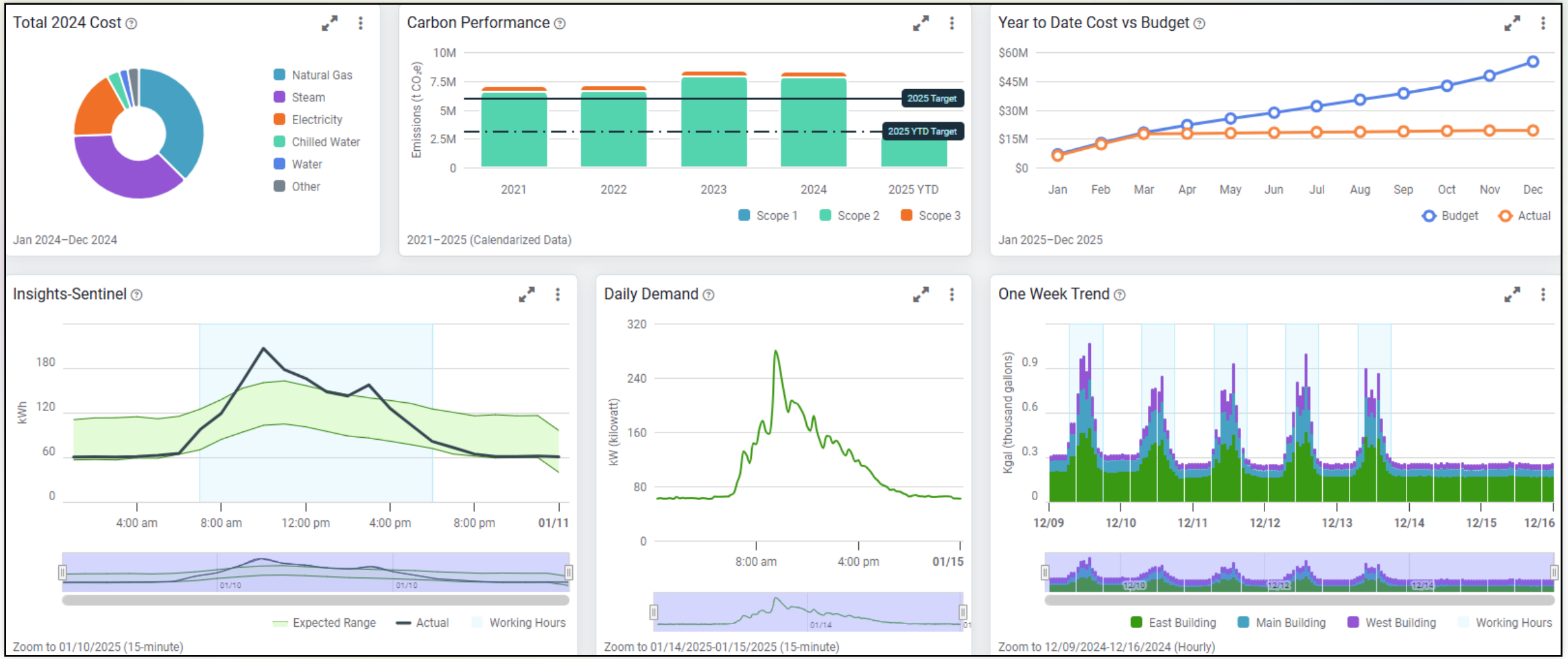
Disclaimer: *This data is live and shows usage as utility bills are received. It may take 3 months to accurately reflect use.*

Through a unique private/public partnership, the Philadelphia Museum of Art (PMA) Energy Project brings Philadelphia closer to its energy and climate goals. The deep energy retrofit at the Philadelphia Museum of Art was completed in late 2020. The retrofit reduced the energy use of the PMA through major investments in the building's air conditioning, heating, and lighting systems. The combined $11.3 million investment will reduce the overall energy use of the PMA by 23 percent. In addition, it will generate $750,000 in annual savings and reduce carbon emissions by 2,400 MT of CO2e.

Socialize

Maximize your bill, carbon, and interval data!

Combine bill, carbon, and interval data



Questions?

