

ENERGYCAP®

# Own Your Energy Data: The Foundation for Smarter Cost, Carbon & Compliance Management



**Jared Toll**

Account Executive, EMEA



**Thomas Diliberti**

CEM, CMVP, CIAQP, CLEP  
Sr. Manager, Energy & Sustainability





# Agenda

- State of the energy/water market - utility rate forecast
- Philosophical approach Energy Pyramid - Estates Management
- Utility bill UoM and line items
- Common utility bill savings opportunities
- Benefits of owning your data

# Market Volatility Across EMEA = A Core Utility Risk



## The cost of utilities are rising, but so is the cost of not knowing where it's going.

Across EMEA, utility pricing is no longer stable—it's volatile, fragmented, and increasingly unpredictable.

Businesses face surging energy and water costs, fueled by:

- **Aging infrastructure**
- **Climate pressure**
- **Inflation-linked contracts**
- **Geopolitical tensions**



## If You Can Track It, You Can Control It

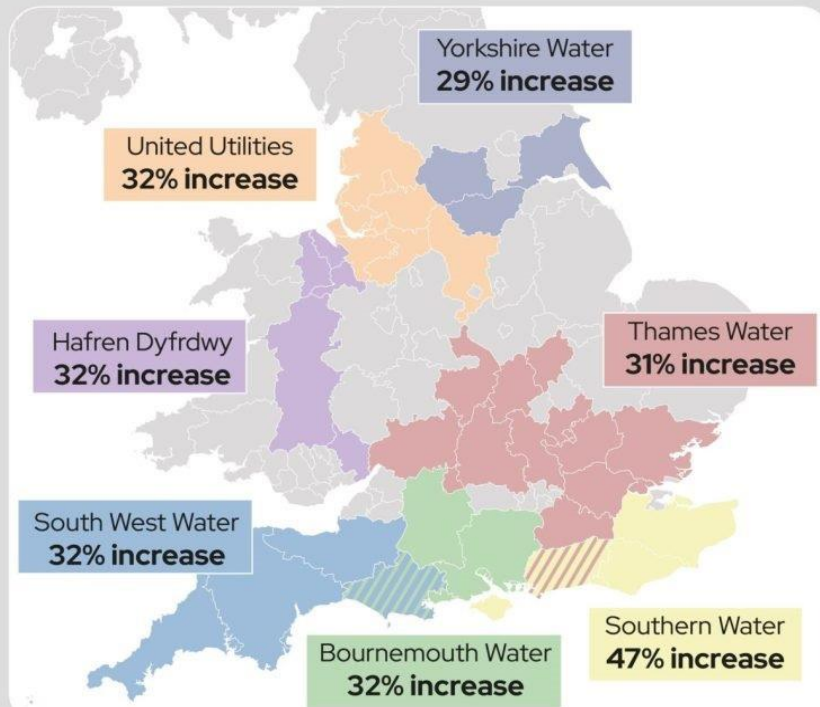
Without granular visibility—by *meter*, *site*, and *trendline*—you're budgeting blind.

In a volatile utility market, data is your competitive edge.

**Data + Proactive Review = Control & Resilience**

# Case Study: UK Water Market - Rising Volatility and Strategic Risk

## Water bill price rises



Source: Ofwat

<https://i.news.co.uk/news/mapped-where-water-bills-will-rise-the-most-in-2025-3509806>

Water is now the **fastest-escalating utility** in the U.K. Bills rose **26%** in **April 2025** with some areas are seeing **40-47% increases**.

Rates differ by supplier & geography, making multi-site budgeting unpredictable. Inflation-linked pricing models are introducing new cost uncertainty.

Most organisations are still reactive, relying on delayed invoices and spreadsheets

Water is becoming a strategic resource, not just a utility line item. Water costs projected to **rise another 36% by 2030**.

It is tied directly to carbon reporting, ESG goals, and operational accountability.

# Case Study: South Africa's Spiraling Utility Costs and Financial Strains

From 2014 to 2024, electricity tariffs rose by **190%**. With a further **12.74% hike approved for 2025**, that same bill will nearly triple in just 10 years.

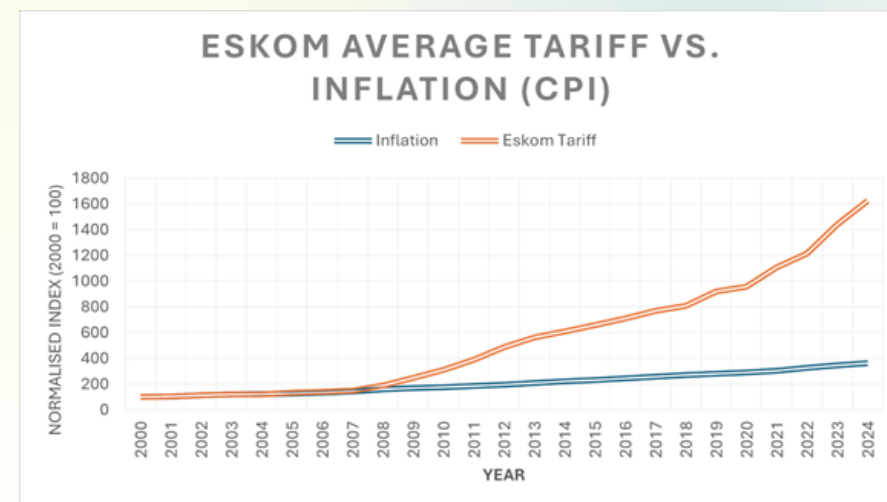
Since 2008, electricity costs have ballooned **over 600%**, against a CPI increase of just **139%**.

Water fares even worse - with tariffs climbing **2,100%** since 1996.

Frequent load shedding, outdated infrastructure, and municipal mismanagement exacerbate the crisis.

Municipalities continue raising rates, even as service reliability declines.

**The impact is profound.**



From 2022 to 2024, Eskom's tariffs surged by 45%, while inflation rose 18%. And the gap is growing.

How Eskom monthly electricity bills increase: 2022 to 2027					
1 April 2022	1 April 2023	1 April 2024	1 April 2025	1 April 2026	1 April 2027
	18.65% Increase	12.74% Increase	12.74% + 0.5% VAT Increase	5.36% + 0.5% VAT Increase	6.19% Increase
R1 000	R1 187	R1 338	R1 515	R1 672	R1 775
R2 000	R2 373	R2 675	R3 030	R3 343	R3 550
R3 000	R3 560	R4 013	R4 544	R5 015	R5 326
R4 000	R4 746	R5 351	R6 059	R6 687	R7 101
R5 000	R5 933	R6 688	R7 574	R8 358	R8 876

# Control Your Data to Drive Efficiency and Steer Your Strategy

Don't get stuck in a reactive cycle, responding to rising costs only after the damage is done.

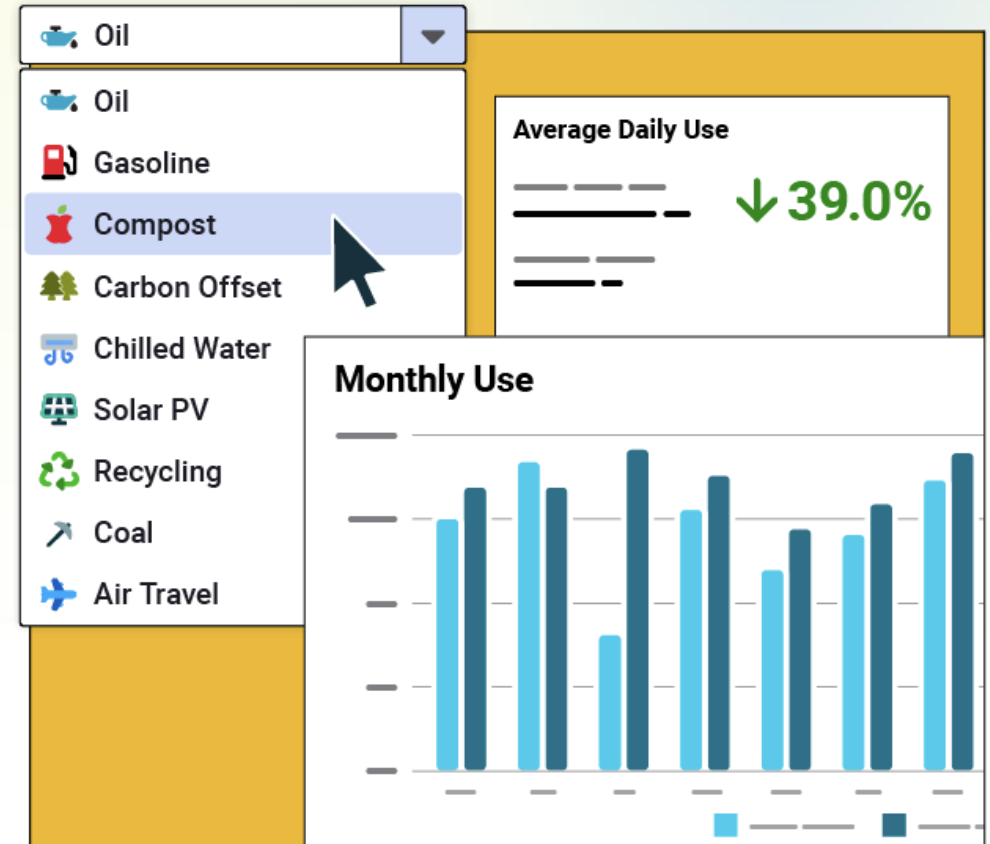
Budgets are built on outdated invoices, insights arrive too late, and opportunities to reduce waste are missed entirely.

Proactive utility management starts with control: validating bills, identifying errors, and holding suppliers accountable.

With centralised, reliable data, you can benchmark performance across sites and spot inefficiencies with confidence.

Stop reacting to costs after the fact; start managing them with intention.

**The result is not just cost savings. It's confidence, clarity, and control.**



# **What is energy management?**



# What is energy management?

Energy management is the proactive and systematic monitoring, control, and optimisation of energy consumption to conserve use, reduce costs, and minimize environmental impact.



Monitoring energy bills



Implementing energy-efficient technologies



Optimising energy usage patterns



# Why is energy management important?



## **Saves money!**

- ▶ Energy is typically the second most expensive line item in the budget - after personnel costs
- ▶ Utility prices are volatile, gives building owner more control over costs

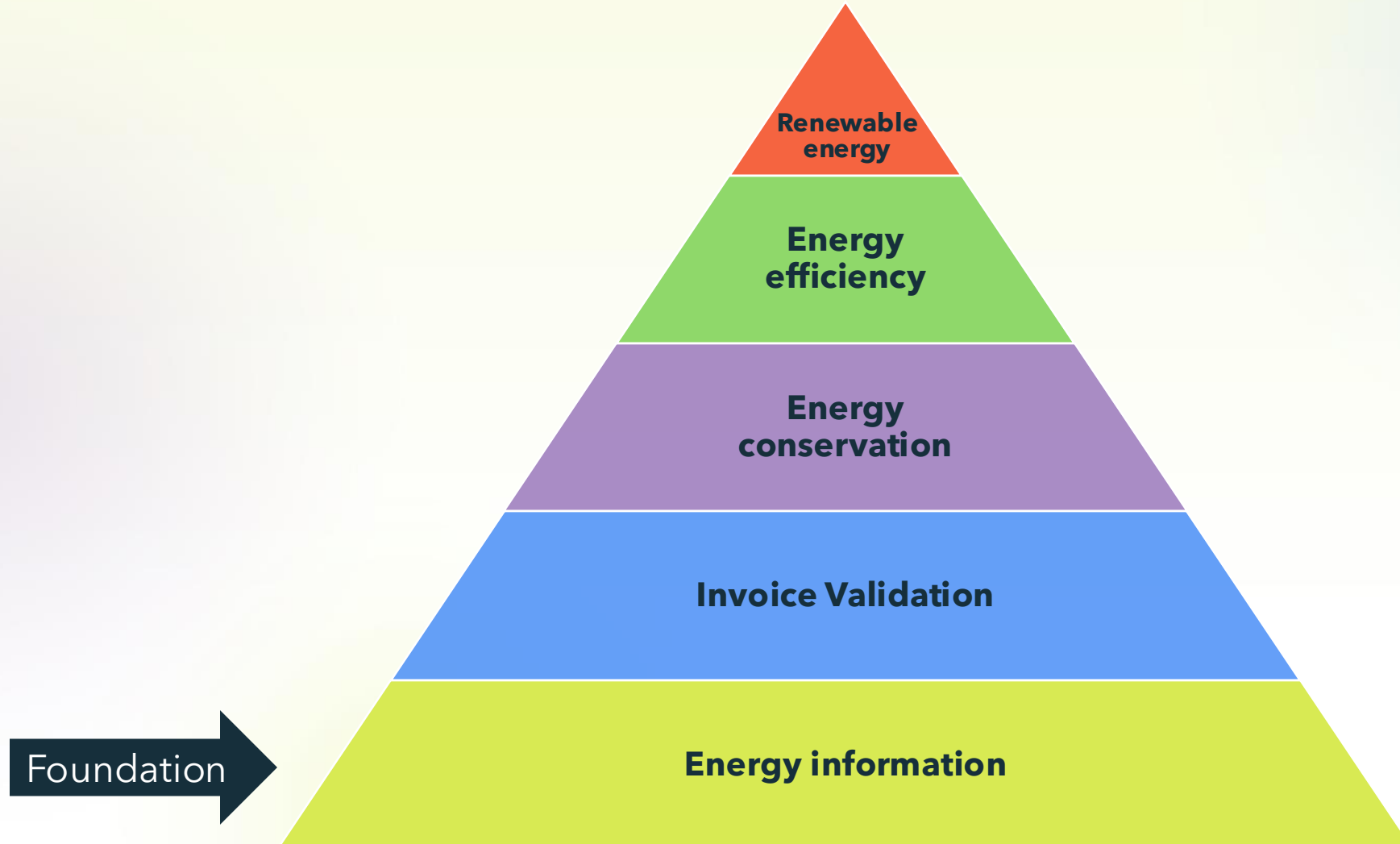
Good for the environment

Improves occupant comfort - increased productivity

Better decision-making

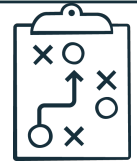
Hard to argue against improving efficiency

# Energy Pyramid / Estates Management



# The building blocks of **energy efficiency**

**Make a plan**



**Gather information**



**Build strong relationships**



**Learn your facilities**



**Take action**



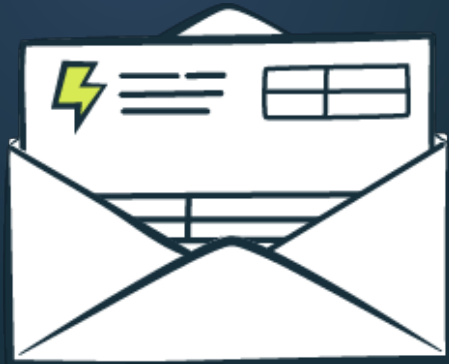
# Utility Invoices –

## How many and which ones?



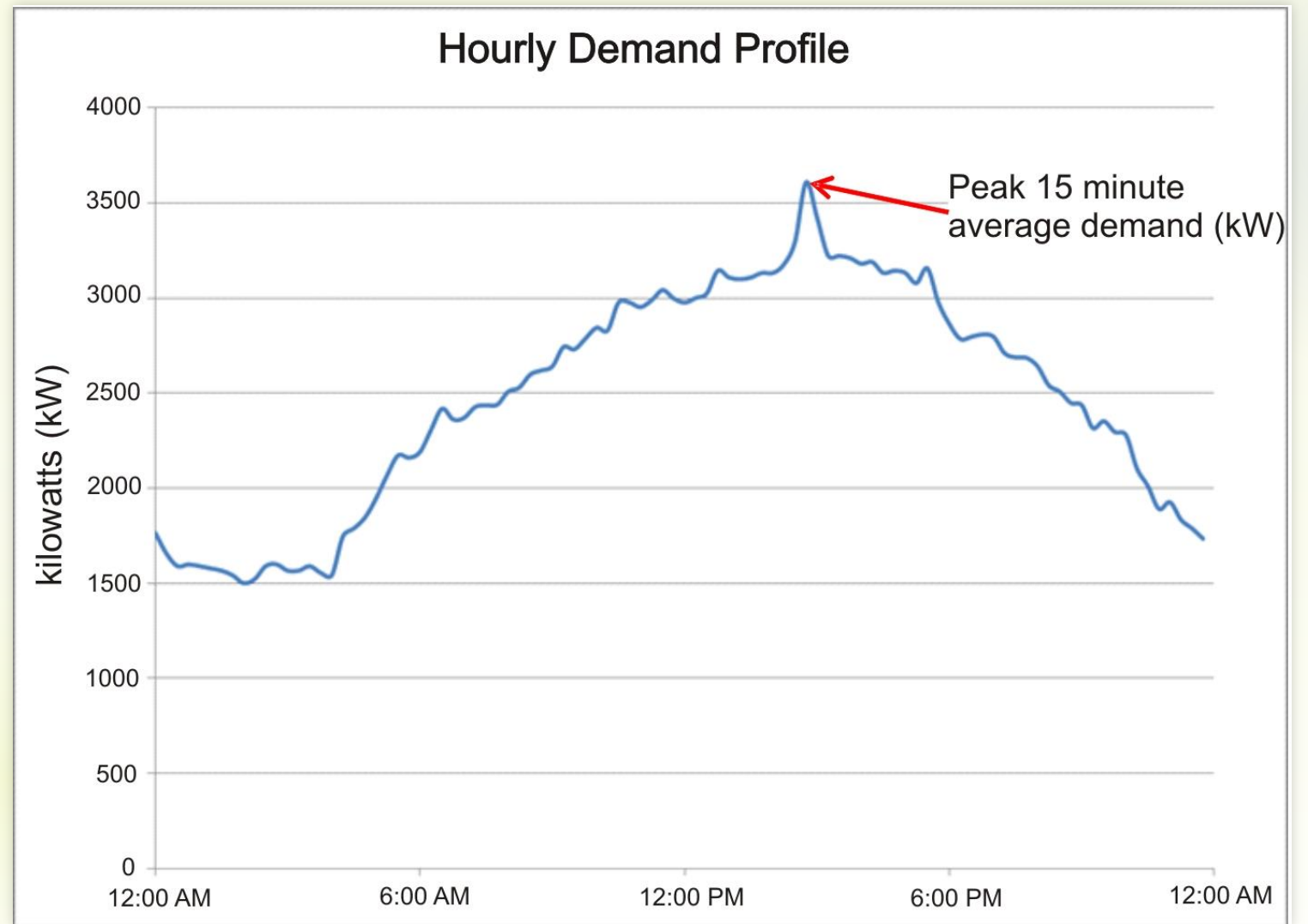
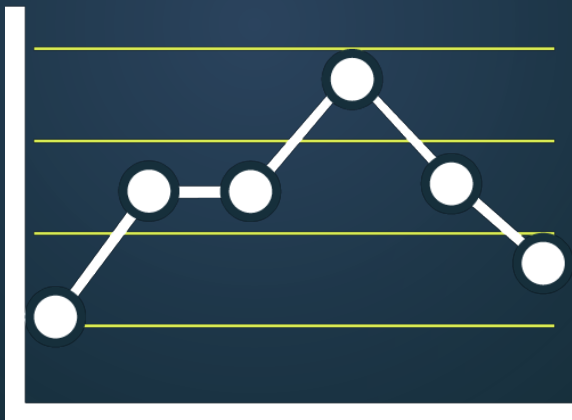
- ✓ Collect all the utility invoice you can get your hands on
- ✓ Start with the Accounting Department
- ✓ Understand how invoices are currently being processed and stored
- ✓ Acquire 3 years of historical data – ask for help from vendors
- ✓ If possible, set up online access to invoices
- ✓ Quantify the number of vendors, accounts, and meters
- ✓ Prioritize Electric (60%), Gas (30%), and Water (10%)
- ✓ Pursue smart meters for more visibility into usage

# Understanding your electrical terminology

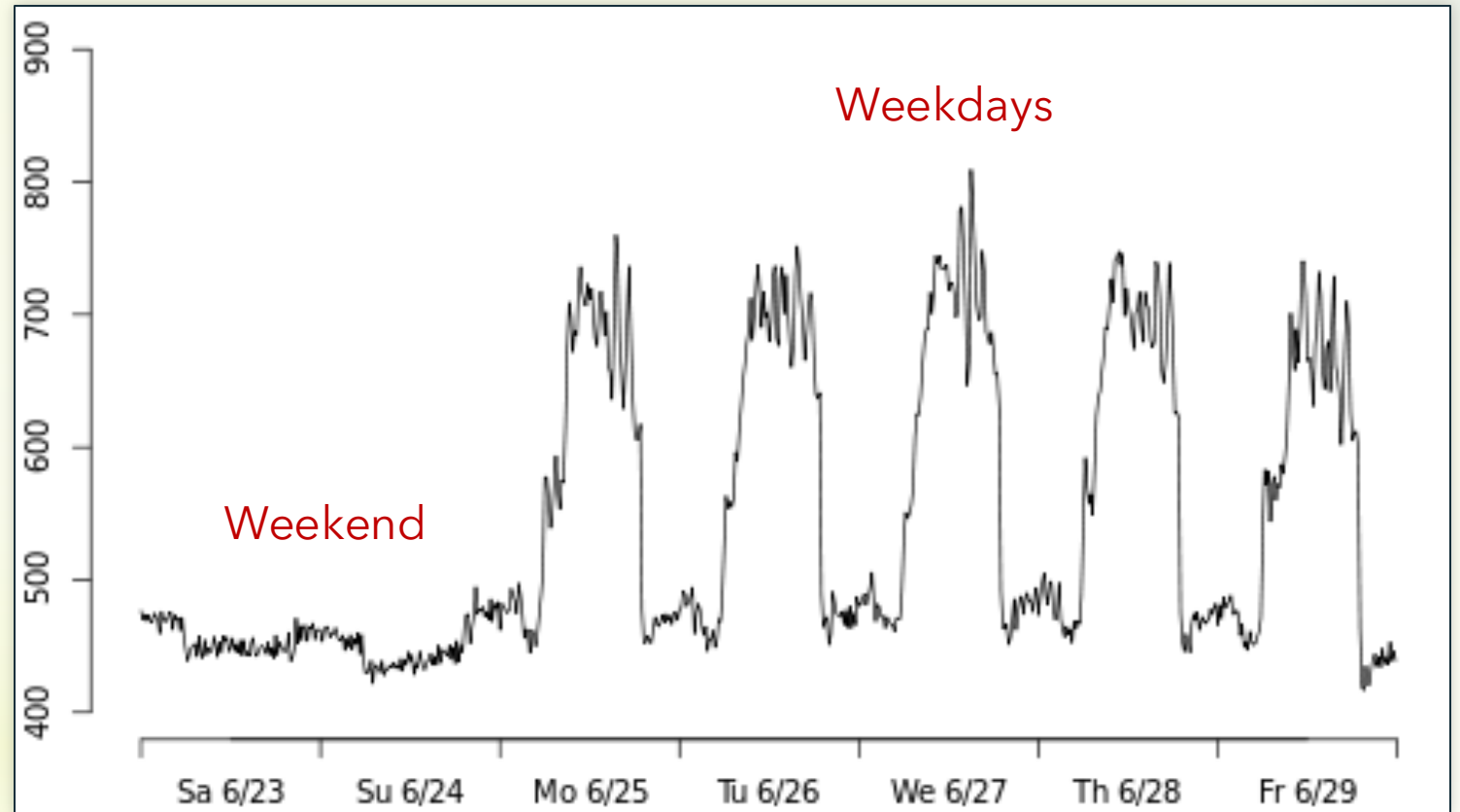
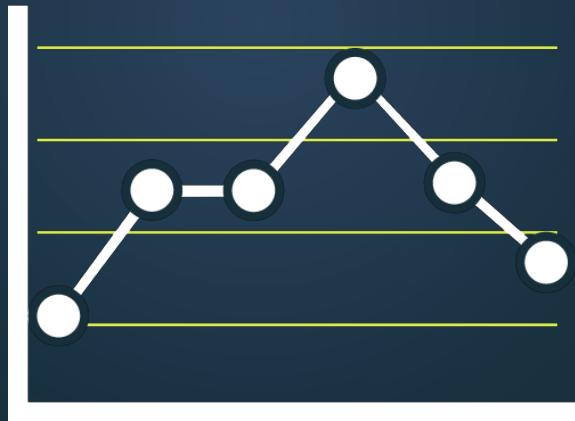


- ✓ Units of Measure (kW & kWh)
- ✓ (kW) – A unit of power (Load), indicating how much energy is being used or produced at that given moment.  $1 \text{ kW} = 1,000 \text{ Watts}$
- ✓ (kWh) – A unit of energy, measuring the total amount of energy used or produced over a period to time. 1 kWh represents 1 kilowatt of power used continuously for one hour

# Single day load profile



# Weekly load profile





# Understanding your invoices

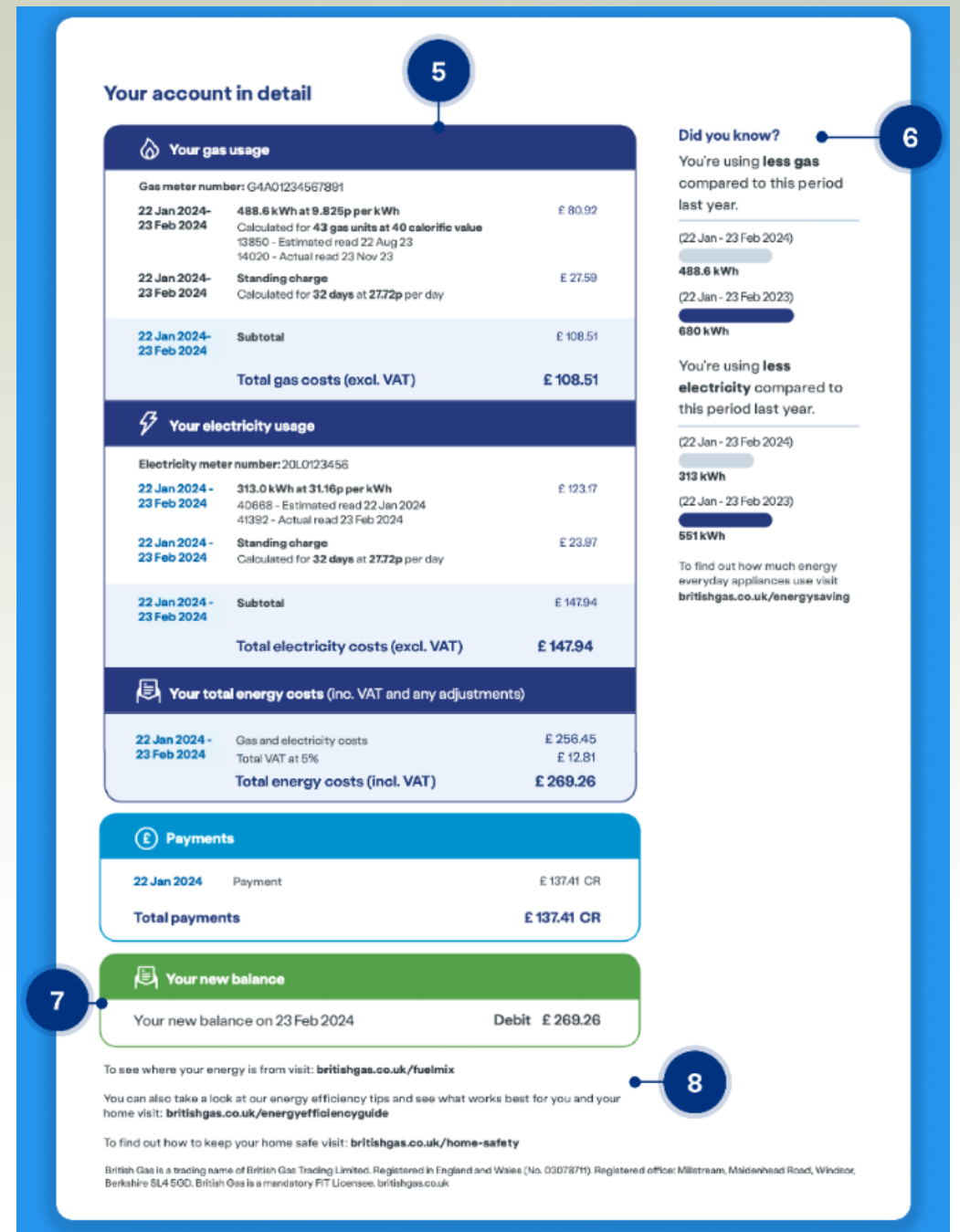
Common Lingo

Rate Tariffs

- Fixed Energy
- Standard Variable
- Low Carbon
- Electric Vehicle
- Smart Export Guarantee

Join PeakSave

Actual vs. Estimated invoices



# Eskom electrical rate table - example

		Active energy charge [c/kWh]										Legacy charge [c/kWh]		Generation capacity charge [R/kVA/m]		Transmission network charges [R/kVA/m]			
Transmission zone	Voltage	High demand season [Jun - Aug]					Low demand season [Sep - May]												
		Peak	VAT incl	Standard	VAT incl	Off Peak	VAT incl	Peak	VAT incl	Standard	VAT incl	Off Peak	VAT incl						
≤ 300km	< 500V	684.59	787.28	171.15	196.82	114.09	131.20	284.12	326.74	159.74	183.70	114.09	131.20	22.78	26.20	R 3.49	R 4.01	R 10.63	R 12.22
	≥ 500V & < 66kV	666.92	766.96	166.73	191.74	111.15	127.82	276.78	318.30	155.62	178.96	111.15	127.82	22.20	25.53	R 8.09	R 9.30	R 10.25	R 11.79
	≥ 66kV & ≤ 132kV	618.91	711.75	154.72	177.93	103.15	118.62	256.86	295.39	144.42	166.08	103.15	118.62	20.60	23.69	R 6.12	R 7.04	R 9.35	R 10.75
	> 132kV*	577.13	663.70	144.28	165.92	96.19	110.62	239.52	275.45	134.67	154.87	96.19	110.62	19.21	22.09	R 7.02	R 8.07	R 16.34	R 18.79
> 300km and ≤ 600km	< 500V	691.43	795.14	172.86	198.79	115.23	132.51	286.96	330.00	161.34	185.54	115.23	132.51	22.78	26.20	R 3.49	R 4.01	R 10.74	R 12.35
	≥ 500V & < 66kV	673.60	774.64	168.40	193.66	112.27	129.11	279.55	321.48	157.17	180.75	112.27	129.11	22.20	25.53	R 8.09	R 9.30	R 10.35	R 11.90
	≥ 66kV & ≤ 132kV	625.10	718.87	156.28	179.72	104.18	119.81	259.43	298.34	145.86	167.74	104.18	119.81	20.60	23.69	R 6.12	R 7.04	R 9.45	R 10.87
	> 132kV*	582.90	670.34	145.73	167.59	97.15	111.72	241.91	278.20	136.01	156.41	97.15	111.72	19.21	22.09	R 7.02	R 8.07	R 16.51	R 18.99
> 600km and ≤ 900km	< 500V	698.28	803.02	174.57	200.76	116.37	133.83	289.80	333.27	162.93	187.37	116.37	133.83	22.78	26.20	R 3.49	R 4.01	R 10.85	R 12.48
	≥ 500V & < 66kV	680.27	782.31	170.07	195.58	113.37	130.38	282.32	324.67	158.73	182.54	113.37	130.38	22.20	25.53	R 8.09	R 9.30	R 10.45	R 12.02
	≥ 66kV & ≤ 132kV	631.29	725.98	157.82	181.49	105.21	120.99	262.00	301.30	147.31	169.41	105.21	120.99	20.60	23.69	R 6.12	R 7.04	R 9.54	R 10.97
	> 132kV*	588.67	676.97	147.17	169.25	98.11	112.83	244.31	280.96	137.36	157.96	98.11	112.83	19.21	22.09	R 7.02	R 8.07	R 16.66	R 19.16
> 900km	< 500V	705.13	810.90	176.28	202.72	117.52	135.15	292.64	336.54	164.53	189.21	117.52	135.15	22.78	26.20	R 3.49	R 4.01	R 10.96	R 12.60
	≥ 500V & < 66kV	686.94	789.98	171.74	197.50	114.49	131.66	285.09	327.85	160.28	184.32	114.49	131.66	22.20	25.53	R 8.09	R 9.30	R 10.55	R 12.13
	≥ 66kV & ≤ 132kV	637.48	733.10	159.37	183.28	106.25	122.19	264.56	304.24	148.75	171.06	106.25	122.19	20.60	23.69	R 6.12	R 7.04	R 9.63	R 11.07
	> 132kV*	594.44	683.61	148.61	170.90	99.06	113.92	246.70	283.71	138.70	159.51	99.06	113.92	19.21	22.09	R 7.02	R 8.07	R 16.83	R 19.35

\* 132 kV or Transmission connected

Distribution network charges					
Voltage	Network capacity charge [R/kVA/m]		Network demand charge [R/kVA/m]		Urban low voltage subsidy charge [R/kVA/m]
	VAT incl	VAT incl	VAT incl	VAT incl	VAT incl
< 500V	R 39.22	R 45.10	R 48.41	R 55.67	R 0.00 R 0.00
≥ 500V & < 66kV	R 35.98	R 41.38	R 24.17	R 27.80	R 0.00 R 0.00
≥ 66kV & ≤ 132kV	R 13.02	R 14.97	R 9.53	R 10.96	R 10.20 R 11.73
> 132kV*	R 0.00	R 0.00	R 0.00	R 0.00	R 10.20 R 11.73

\* 132 kV or Transmission connected

Customer categories	Service charge [R/POD/day]		Administration charge [R/POD/day]	
	VAT incl	VAT incl	VAT incl	VAT incl
≤ 100 kVA	R 13.74	R 15.80	R 0.73	R 0.84
> 100 kVA & ≤ 500 kVA	R 64.28	R 73.92	R 12.40	R 14.26
> 500 kVA & ≤ 1 MVA	R 198.52	R 228.30	R 19.37	R 22.28
> 1 MVA	R 198.52	R 228.30	R 19.37	R 22.28
Key customers	R 1,118.46	R 1,286.23	R 19.37	R 22.28

Voltage	Ancillary service charge [c/kWh]	
	VAT incl	VAT incl
< 500V	0.41	0.47
≥ 500V & < 66kV	0.39	0.45
≥ 66kV & ≤ 132kV	0.36	0.41
> 132kV*	0.34	0.39

\* 132 kV or Transmission connected

Reactive energy charge [c/kVarh]			
High season		Low season	
VAT incl	VAT incl	VAT incl	VAT incl
31.71	36.47	0.00	0.00

## Additional electrical bill terminology

### Power Factor

The ratio of real power (kW) to apparent power (kVA). **It essentially measures how effectively electrical power is used and converted into useful work.** A power factor of 1.0 indicates perfect efficiency, while a value less than 1.0 indicates that extra power is required to achieve the desired task.

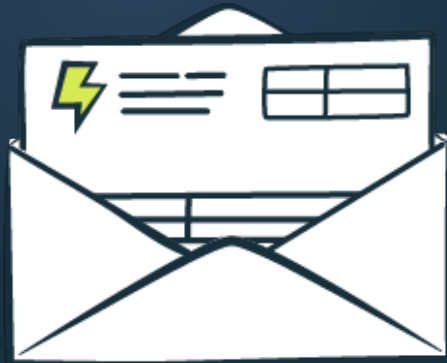
### Load Factor

A measure of how consistently electrical power is used over a period, comparing average demand to peak demand. It's a ratio, typically expressed as a percentage, of total energy consumed to the potential energy that could have been used at peak demand. A higher load factor indicates more consistent usage and generally translates to lower overall energy costs.

# Electric meter billing multiplier



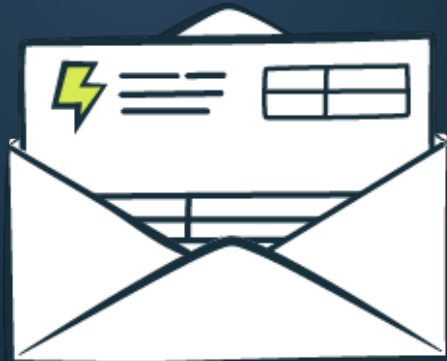
# Understanding your water/ sewer invoice



- ✓ There are no sewer meters for water exiting the building only a water meter for incoming water
- ✓ Are you being charged for unnecessary sewer services?
- ✓ Usually, sewer costs represent approximately 50% of total bill



# Understanding your water/ sewer invoice



## Your new charges

18 December 2021 - 31 March 2022  
Standard tariff

### Water

**Usage charge** 33.00m<sup>3</sup> 160.15p per m<sup>3</sup> **£52.84**

The water you've used for washing, drinking and flushing the toilet.

**Daily charge** 104 days 8.21p per day **£8.54**

A fixed charge for water, not affected by how much water you use. It covers the operating and customer service costs of providing the service to you.

### Sewerage

This covers used water, highway drainage, and surface water (rainwater that falls on your property and goes into public drains). If you have a soakaway, you might be able to reduce this charge - visit, [anglianwater.co.uk/swdrainage](http://anglianwater.co.uk/swdrainage).

**Usage charge** 29.70m<sup>3</sup> 156.55p per m<sup>3</sup> **£46.49**

90% of your water usage charge (the amount of water we estimate goes down your drain). If this is less than 90%, you might be able to reduce this charge.

**Daily charge** 104 days 23.84p per day **£24.78**

A fixed charge for sewerage, not affected by how much water you use. It covers the operating and customer service costs of providing the service to you.

We changed our rates on 1 April 2022.

1 April 2022 - 13 December 2022

Standard tariff

### Water

**Usage charge** 82.00m<sup>3</sup> 168.53p per m<sup>3</sup> **£138.19**

**Daily charge** 257 days 8.35p per day **£21.47**

### Sewerage

**Usage charge** 73.80m<sup>3</sup> 171.00p per m<sup>3</sup> **£126.19**

**Daily charge** 257 days 25.41p per day **£65.30**

**Total new charges** **£483.80**

2

## Your usage

# **Meter number:** 12M345678X

**Meter size:** 15mm

**Actual read by us**  
18 December 2021 603

**Actual read by us**  
13 December 2022 718

**Total used** **115m<sup>3</sup>**

## Compare usage

This period you've used 115m<sup>3</sup>

**1m<sup>3</sup>** is equivalent to 1,000 litres which is the same as:

- 20 showers each taking 5 minutes
- Or around 13 full baths
- Or up to 20 full washing loads

## How do you compare?

N° of people	Typical usage per year (m <sup>3</sup> )
1	34 - 74
2	81 - 121
3	119 - 159
4	136 - 176
5	159 - 199
6	174 - 224

# What happens next?



The top three types of billing errors haven't changed:

- ✓ **Account Ownership** – the building changed ownership, but the utility account wasn't updated to the new owner. You might be paying for someone else's energy!
- ✓ **Meter Multiplier** – the wrong multiplier or unit is being used by the utility's billing computer, so you are getting overcharged every month, perhaps for years.
- ✓ **Taxes and Fees** – you have an exempt account (non-profit, government, etc.) but the utility provider may be assessing taxes and fees in error.

Finally, field verify the meters, identify the building/space served by the meter, and start learning about the buildings with high consumption.



# Establish relationship with vendors



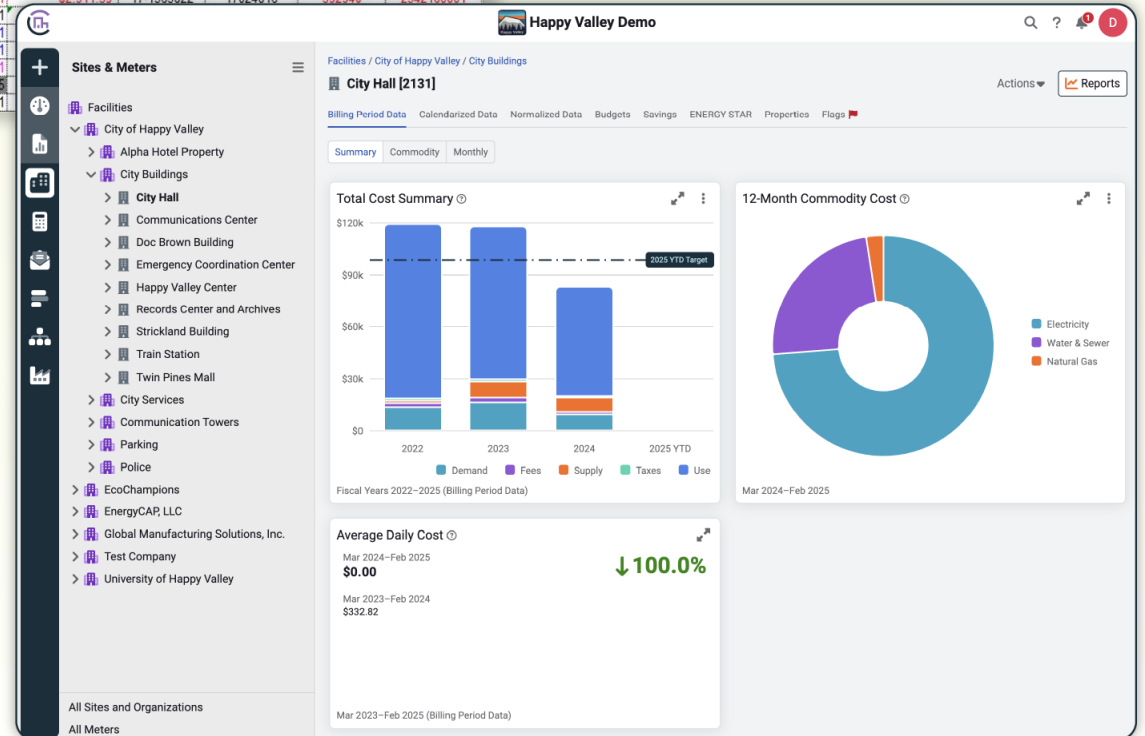
- ✓ Invite them to your office
- ✓ Ask questions about the things you don't understand about the bills
- ✓ Ask about rebate and incentive programs - learn the annual financial cycle
- ✓ Complete a rate tariff analysis
- ✓ If you're receiving a lot of estimated bills or re-billings try to learn about why

# Where do I put all the data?



K	L	M	N	O	P	Q	R	S	T
Usage	Units	Rate	Cost	Billable	Current Billing	INV #	SAP #	Credit GL	Cost Object
327.22	/1000 #s	5.3600	\$1,753.90	1	\$1,753.90	17-1365794	17024816	592940	2142150002
22493.00	/kwh	0.0660	\$1,484.54	1	\$1,484.54	17-1365795	17024816	592950	2142150002
1881.89	/ton hr	0.0540	\$101.57	1	\$101.57	17-1365796	17024816	592960	2142150002
750.92	/1000 #s	5.3600	\$4,024.93	1	\$4,024.93	17-1365797	17024816	592940	2227010001
24244.61	/ton hr	0.0540	\$1,309.21	1	\$1,309.21	17-1365798	17024816	592960	2227010001
193.69	/1000 #s	5.3600	\$1,037.96	0.5	\$518.98	17-1365799	17024816	592940	2333090003
3360.00	/kwh	0.0660	\$221.76	0.5	\$110.88	17-1365800	17024816	592950	2333090003
200.00	CCF	0.0369	\$7.38	0.5	\$3.69	17-1365801	17024816	592930	2333090003
1960.00	/kwh	0.0660	\$129.36	1	\$129.36	17-1365802	17024816	592950	2333140007
5240.00	/kwh	0.0660	\$345.84	1	\$345.84	17-1365803	17024816	592950	2333140007
15440.00	/kwh	0.0660	\$1,019.04	1	\$1,019.04	17-1365804	17024816	592950	2333140007
631.00	CCF	0.8924	\$563.08	0.5	\$281.54	17-1365805	17024816	592910	2333140007
975.00	CCF	0.8924	\$870.05	1	\$870.05	17-1365806	17024816	592910	2333140007
231.81	/1000 #s	5.3600	\$1,242.50	1	\$1,242.50	17-1365807	17024816	592940	2342120001
35200.00	/kwh	0.0660	\$2,323.20	1	\$2,323.20	17-1365808	17024816	592950	2342120001
9604.25	/ton hr	0.0540	\$464.63	1	\$464.63	17-1365809	17024816	592960	2342120001
1127.01	/1000 #s	5.3600	\$6,094.37	0.5	\$3,047.19	17-1365810	17024816	592940	2342151211
172551.00	/kwh	0.0660	\$11,388.37	0.5	\$5,694.18	17-1365811	17024816	592950	2342151211
16135.40	/ton hr	0.0540	\$871.31	0.5	\$435.66	17-1365812	17024816	592960	2342151211
9000.00	/kwh	0.0660	\$594.00	1	\$594.00	17-1365813	17024816	592950	2342151211
4190.00	/kwh	0.0660	\$276.54	1	\$276.54	17-1365814	17024816	592950	2342151211
5000.00	/kwh	0.0660	\$330.00	1	\$330.00	17-1365815	17024816	592950	2342151211
3305.00	/kwh	0.0660	\$218.13	1	\$218.13	17-1365816	17024816	592950	2342151211
954.47	/1000 #s	5.3600	\$5,115.96	0.5	\$2,557.98	17-1365817	17024816	592940	2342151411
131562.26	/kwh	0.0660	\$8,683.11	0.5	\$4,341.55	17-1365818	17024816	592950	2342151411
2583.56	/ton hr	0.0540	\$139.51	0.5	\$69.76	17-1365819	17024816	592960	2342151411
18184.88	/ton hr	0.0540	\$981.98	0.5	\$490.99	17-1365820	17024816	592960	2342151411
494.63	/1000 #s	5.3600	\$2,651.22	1	\$2,651.22	17-1365821	17024816	592940	2342160001
543.17	/1000 #s	5.3600	\$2,911.39	1	\$2,911.39	17-1365822	17024816	592940	2342160001
189915.53	/kwh	0.0660	\$12,534.42	1					
20394.66	/ton hr	0.0540	\$1,101.31	1					
22700.25	/ton hr	0.0540	\$1,225.81	1					
222.00	/kwh	0.0660	\$14.65	1					
13120.00	/kwh	0.0660	\$865.92	0.75					
3040.00	/kwh	0.0660	\$200.64	1					

## Spreadsheets or Utility Management Software?



# Expert-driven Utility Management Software

An integrated platform brings everything under one roof:

- **Invoice validation** and utility bureau services ensure billing accuracy and identify overcharges before they impact your budget.
- **Energy and interval data monitoring** empowers teams to pinpoint anomalies, optimise usage, and uncover savings.
- **Automated ESG and Net Zero reporting** simplifies compliance, aligns with regulatory frameworks, and reduces manual effort.

With one central system, your organisation benefits from:

- **Audit flags and alerts** to catch issues early
- **Shared access across teams** for aligned action and visibility
- **Reliable, systematised workflows** that reduce human error
- **Automated data gathering** that streamlines reporting, saving time
- **A unified view** of all energy and utility data to support smarter decisions

This isn't just a software solution—it's a smarter way to manage energy, stay compliant, and achieve sustainability goals across your EMEA footprint.

# Turning Utility Data into Strategic Advantage

Sustainability isn't a side initiative—it's central to operational resilience and financial leadership.

## **Ensure Compliance Across Jurisdictions**

- Automate and streamline reporting for SECR, ESOS, TCFD, and prepare for CSRD – reducing audit risk and ensuring regulatory readiness.

## **Control Utility Spend with Data**

- Centralise invoice and consumption data to identify billing errors, monitor usage, and unlock cost savings across your portfolio.

## **Support Sustainability with ROI-Driven Insights**

- Inform investment decisions in efficiency and renewables with validated performance data – aligning sustainability with financial outcomes.

## **Meet Investor & Stakeholder Expectations**

- Align with global frameworks to reinforce your ESG position and financial transparency.

# **Achieve Compliance, Cut Costs & Advance Net Zero with One Platform**

UK organisations face growing pressure to report, reduce, and realign their utility usage - not just for compliance, but to stay competitive and sustainable. EnergyCAP simplifies your journey with:

## **Compliance Reporting Made Easy**

- Supported through centralised data, automated reporting, and audit readiness.

## **Operational Efficiency Through Visibility**

- Identify inefficiencies through detailed audits and continuous utility monitoring
- Target cost-saving projects and behavioural change initiatives
- Systematic tracking of utility consumption across all sites

## **Environmental Progress You Can Prove**

- Set and track Net Zero goals with confidence
- Benchmark progress across your estate
- Share clear, defensible reports with stakeholders

From compliance to carbon - EnergyCAP gives you the insight and tools to lead with data.

# Drive Performance, Not Just Promises

Sustainability initiatives only succeed when they deliver measurable operational and financial value. EnergyCAP helps organisations align ESG goals with efficiency and cost control—without the fluff.

## **ESG & Energy Performance, Grounded in ROI**

- Ensure ESG and Net Zero reporting aligns with real-world consumption and savings
- Benchmark energy performance to support capital planning and compliance
- Track internal KPIs that reflect both environmental impact and operational efficiency

## **Extend Asset Life & Reduce Lifecycle Costs**

- Monitor and optimise building and equipment performance
- Identify underperforming sites or systems
- Support long-term efficiency planning through reliable data

Energy performance is about outcomes—lower costs, smarter operations, and future-ready infrastructure.



POLL

**Are you interested in  
learning more?**



**Book a time with Jared!** 



**Select one:**

- ☐ Yes, I'll book a time with the QR code.
- ☐ Yes, send me a meeting link!
- ☐ Not at this time, thanks.



# Questions