

Maximising Energy Savings For Shared Offices



Gain full control over your energy spending



Improve your energy efficiency



Save costs



"The OAK Network solution is a game changer for energy management."

Richard
Crystal Doors



"OAK Network has helped us identify wastage and compare our sites together."

James
LCC



*based on our existing customers

Ready to Supercharge Your Savings?



+44 7727 878588



31 London Wall, London



+44 772787 8588



oak-network.com

Office Benefits



Specific Area Monitoring

Track and monitor usage in specific areas to identify potential energy wastage or mismanagement, allowing you to analyse trends over time and optimise energy usage.



Improved Operation Procedure

Businesses are able to implement, track and improve behaviours over time. The findings can then be integrated as part of venue specific operational procedure



Energy Efficiency Reporting

Data extracted from your venue allows for Monthly, Quarterly and Yearly reporting. The perfect tool for benchmarking and self-assessment.



Improve Staff Training

Regular staff training on energy management practices can lead to a better understanding of how their actions impact energy consumption, allowing for long term savings

3 Easy Steps to Savings

Connect

We can connect to any electrical cables to securely collate consumption data



Analyse

We provide easy real-time analysis, insights and alerts via our unique platform



Save

We provide cost saving advice to reduce your energy bills

The Platform



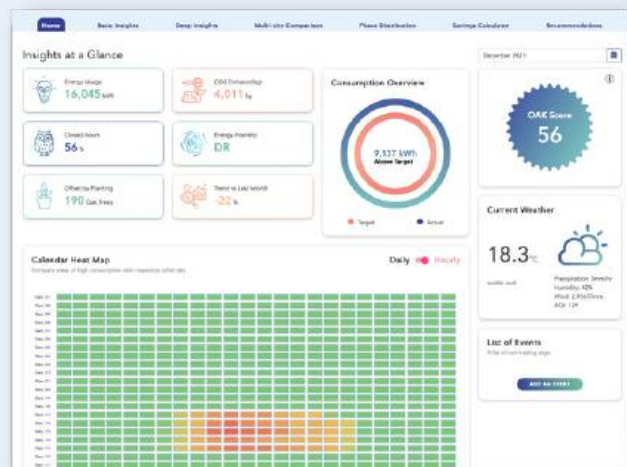
The OAK Network uses your energy consumption to provide live visual data with operational improvement recommendations



Our platform allows you to have a complete overview of your organisation's real-time energy data

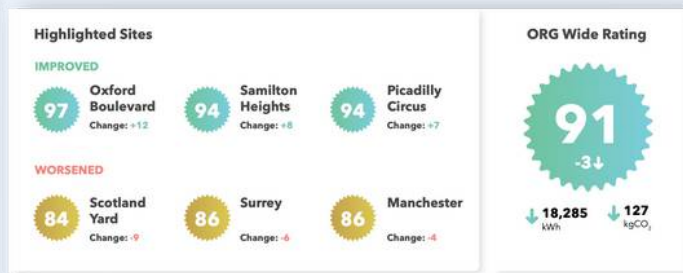
Web Dashboard

Deep dive into your data from 5-minute intervals to month-by-month comparisons



Multi-Site Management

Manage the energy consumption of your entire network in real-time, broken down for site-to-site comparison

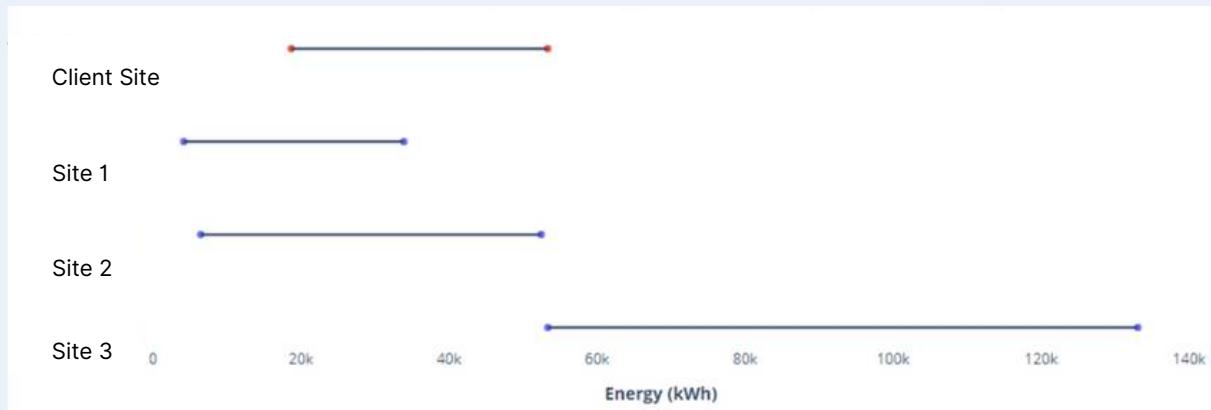


Ready to Supercharge Your Savings?

+4477 2787 8588

Case Study: Benchmarking

Monthly Energy Consumption Range



We benchmark sites against other clients in our network, comparing within industries or similar consumption profiles.

The operating range for this client is limited which is a good sign of energy management. Also, the **maximum consumption is less than other companies in the network.**

We can further monitor this for any changes in consumption for this site as well as for your other sites. Also, we can provide multisite comparison which can help you in your sustainability journey.

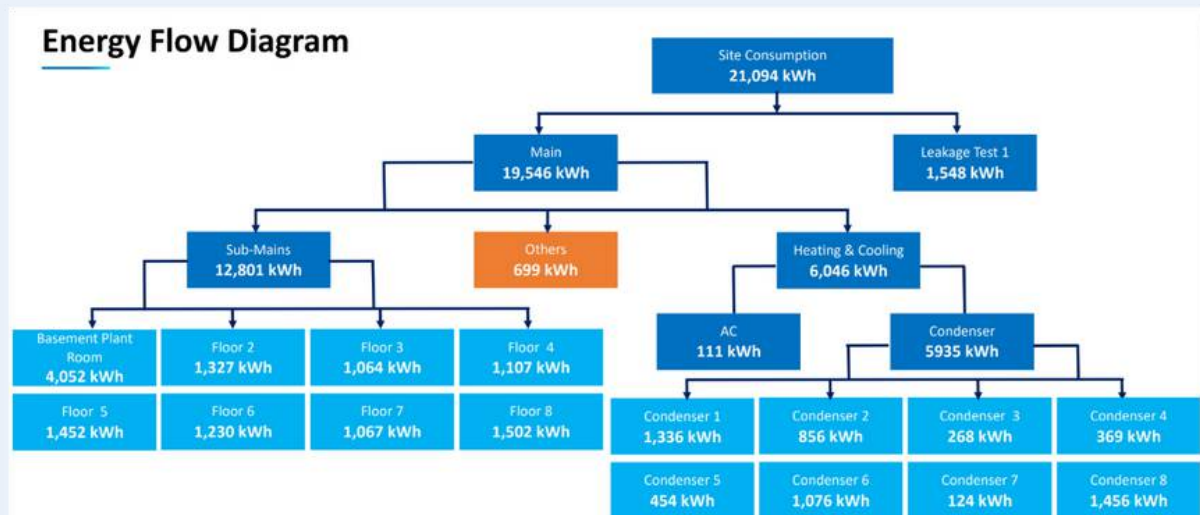
Energy Intensity Benchmarking



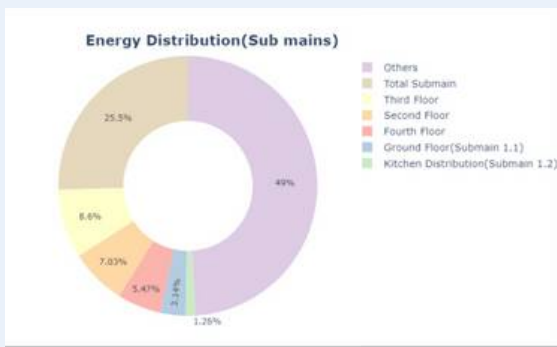
This client is a High Energy Intensity Site, especially when compared to other shared offices in our Network. This means there is a **potential to optimise the consumption** for the site.

Case Study: Floor by Floor Analysis

Energy Flow Diagram



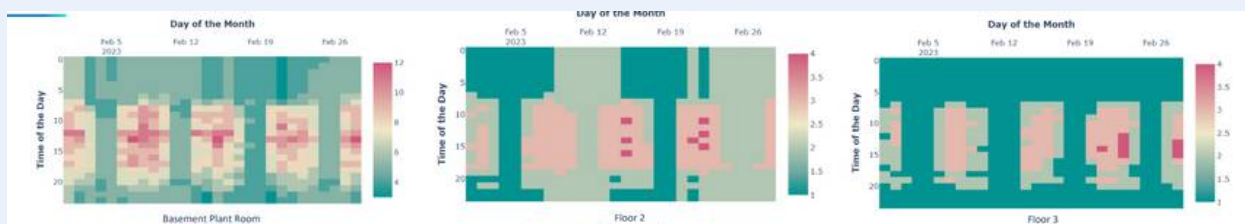
Energy Distribution by Floor



Basement Plant Room was the **highest-consuming room accounting for almost 32% of total energy** usage by floor.

The Third Floor stood out as the highest energy consumer among the other sub-mains, recording a total energy usage of 14,145 kWh, equating to 11.5% of the entire energy consumption for the site during the 4 month period.

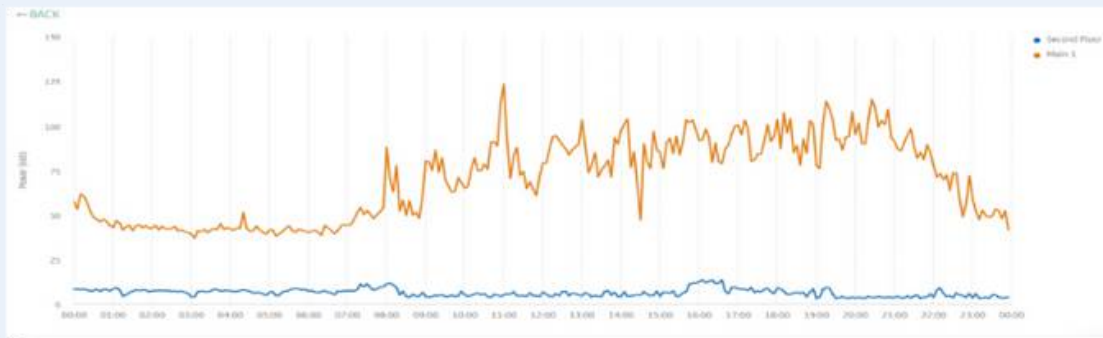
Heat Map Analysis



- The Basement Plant Room saw highest consumption between 12:00 - 13:00 during main operating hours, although it did also register instances of high consumption when out of main operating hours

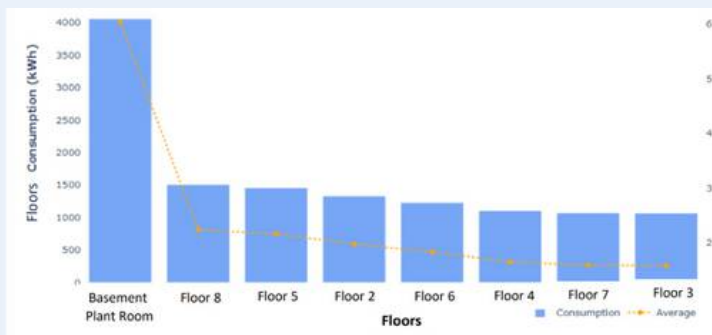
Case Study: Floor by Floor Analysis

Base Load Shift



For the mains, the base load increased from 30 kW to 45 kW. **Sub Main Second Floor is a contributor to this**, as the load increased from 2 kW (13% contribution) to 8 kW (53% contribution) from 7 AM.

Asset Importance Analysis

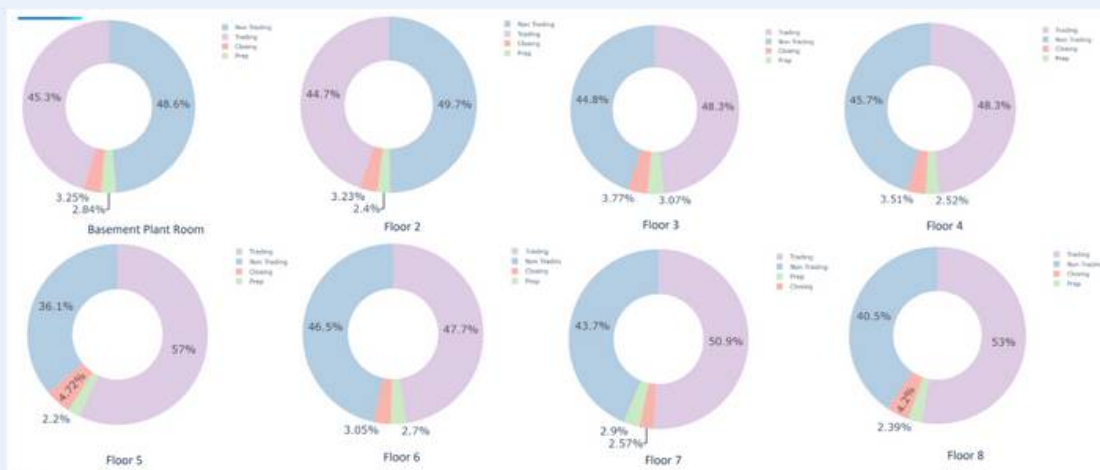


Basement Plant Room was the highest-consuming room accounting for almost 32% of total energy usage by floor.

The lowest consuming floor was Floor 3, followed by Floor 7.

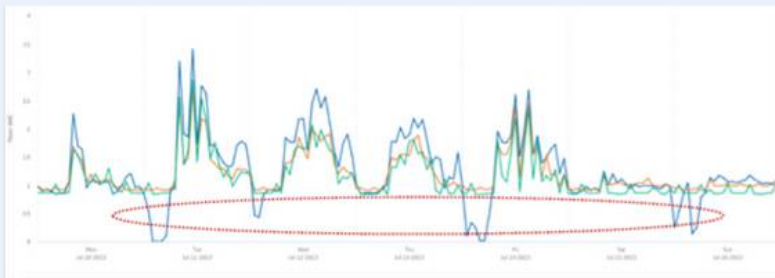
Floor 8 & 5 have the highest consumption after the Plant room.

Energy Distribution



Case Study: Floor Phase Issues

Phase Dips



The Phase Dips in submain Fourth Floor L1 were mostly observed in closed hours on Tuesdays in June, July, and August at around 3 AM.

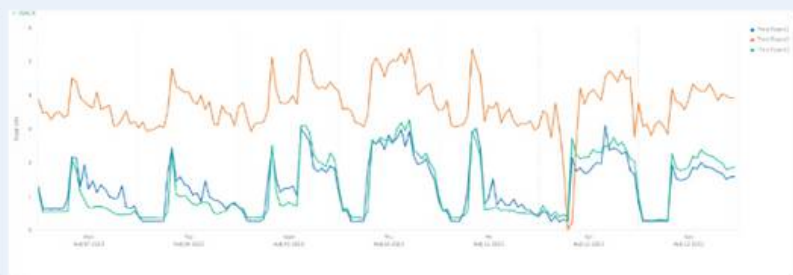
It is possible that there is scheduled maintenance or

activity that occurs regularly on Tuesdays at around 3 AM, leading to phase dips. If not, this requires investigation, which we flagged to the client.

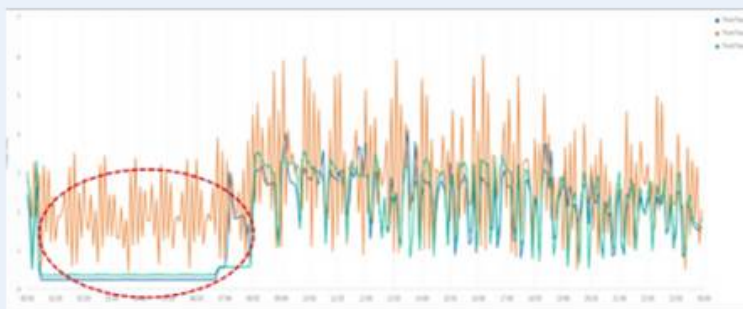
Phase Imbalances

Phase Third Floor L2 consumption is much higher than the other 2, indicating an unbalanced load. The effects of Load Imbalance include overheating; one or more phases can become overloaded if there is an imbalance, leading to

excessive heat. This heat can degrade insulation in motors, transformers, and other equipment, which can reduce the equipment's life and increase the risk of failure.



Constant Load

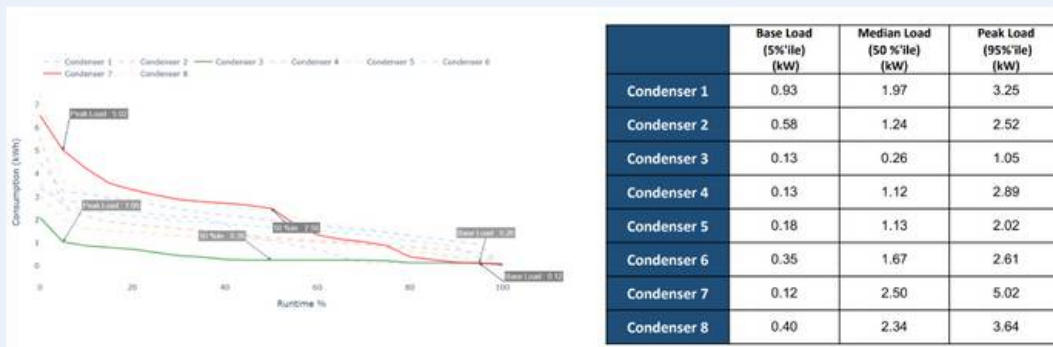


Constant load on 2 phases of Submain Third Floor:

Phase Third Floor L2 experiences significant fluctuations despite Phase Third Floor L1 and L3 maintaining a relatively stable and consistent load of approximately 360 watts during non-trading hours.

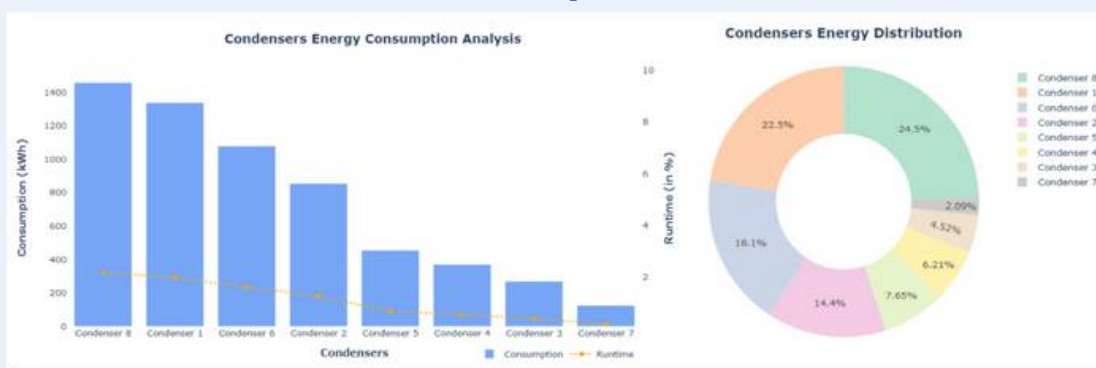
Case Study: AC's & Heating

Load Duration Curve



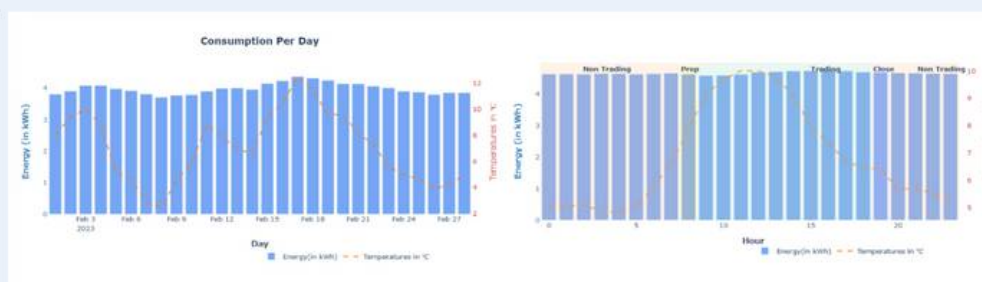
Analysing the curve and data, very low consumption was observed on Condenser 3 out of main operating hours.

Asset Importance



Condenser 8, Condenser 1 and Condenser 6 were the highest-consuming, together accounting for almost 65% of total condenser energy usage

Consumption vs Temperature



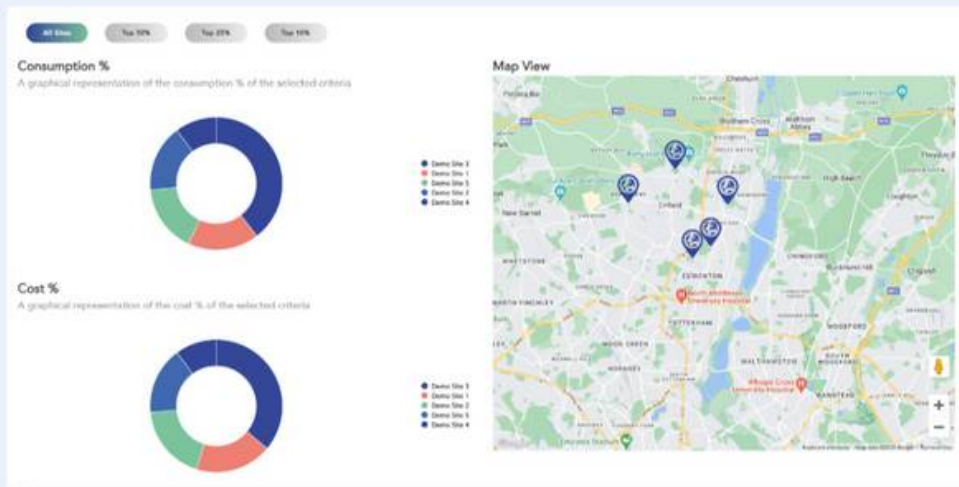
During the analysis period, the consumption of AC 1 was consistently high and did not correlate with outside temperatures. From this, we would ask the client to check the operating schedule for this device; is it not on a thermostat?

Multisite Feature

Comparison between Sites



Map View



Ranking



Recommendations & Insights

Savings Analysis



Insights & Recommendations

1. Heating & Cooling accounted for 28.7% of total energy consumption
2. Condenser 7 observed low consumption during the analysis period
3. Tuesdays, Wednesdays, and Thursdays contributed to ~49% of total average energy consumption
4. Energy leakage accounted for 10.9% of total energy consumption during the analysis period
5. For half of the time load was greater than ~27.44 kW with a base load of ~19.74 kW
6. Main 1 L1 saw highest load amongst the phases [~50%] while Main 1 L3 shows lowest load [~24%]
7. Basement Plant Room was the highest-consuming accounting for almost 32% of total energy usage between floors
8. Tuesdays, Wednesdays, and Thursdays were the highest consuming days of the week for all floors
9. Between 9th - 14th, 21st, and 23rd - 28th February 2023, Floor 2 consumed high energy out of main operating hours
10. Condenser 2, Condenser 3, and Condenser 5 registered the most efficient performances since they demonstrated high runtimes alongside low consumption
11. Condenser 7 consumed significant energy even when runtime was low. Maintenance or replacement of this unit should be prioritised
12. Typically, average energy consumption saw significant dips moving from Monday to Friday before increasing at weekends. Condenser 1 was the exception here with this increasing steadily from Tuesdays
13. Condenser 8 was observed to consume the most energy during the analysis period with both highest Maximum Power and Minimum Power

Benefits for all



Landlord

- Legal compliance with regulations
- Improve EPC rating of asset
- Cost savings opportunities to tenant
- Increase demand versus competition
- Reduce vacancies & tenant turnover
- Environmental benefits
- Tenant satisfaction
- Improved ROI and Performance warranties of green tech implementations
- Extend lifespan & value of asset
- Support tenant in their NET ZERO Journey
- Improve safety of asset
- Reduce maintenance cost overtime
- Access sustainable finance based on live data
- Increased rent as building facilitates reporting & sustainability audits



Agent

- Evaluate peak hours & base load
- Develop energy reduction strategies
- Lower utility & operational costs
- Lower business operations' carbon footprint
- Facilitate reporting & sustainability audits
- Demonstrate and communicate CO2 and financial savings to client base
- Building is 'walk-in' ready for compliance needs, i.e. peace of mind



Tenant

- Improve service offering to landlord and tenant
- Improve resource management
- Improve sustainable communications
- Support net zero strategy development
- Easier sell as legislation is heading in this direction
- Ahead of competition