



Winter Gas Usage Webinar

Wednesday 12th October



Agenda

Introduction – Ian Swaine, TEC

Gas & Power Market Update– Duncan Wyatt, TEC

Winter Gas Usage Presentation – George Catto - kWIQly

Q&A Session

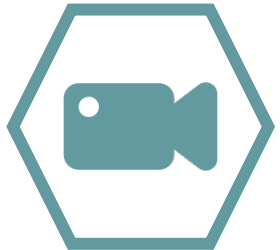
Housekeeping



To help keep background noise to a minimum, we have muted your microphones for this session



Please direct all questions via the chat function so we can ensure all are collated and answered in the Q&A session at the end of the webinar



The webinar will be recorded and made available post event



WINTER GAS USAGE WEBINAR

12TH OCTOBER 2022



GAS & POWER MARKET UPDATE:

Simultaneous Crises in Gas and Power

Gas

- ◆ Nord Stream 1 and 2. Both pipes were off, but are now seriously damaged in any case. NS 2 "B" may be able to flow...
- ◆ EU gas storage. Inventories had been growing. Targets have now broadly been met, giving comfort to the market.
- ◆ Europe has been importing a lot of LNG, and will need to keep doing so. Global supplies exist, but our market price needs to attract cargoes.
- ◆ Right now, LNG demand is weak in Asia on mild weather, reducing competition for spot cargoes.
- ◆ Really need normal weather or better.

Power

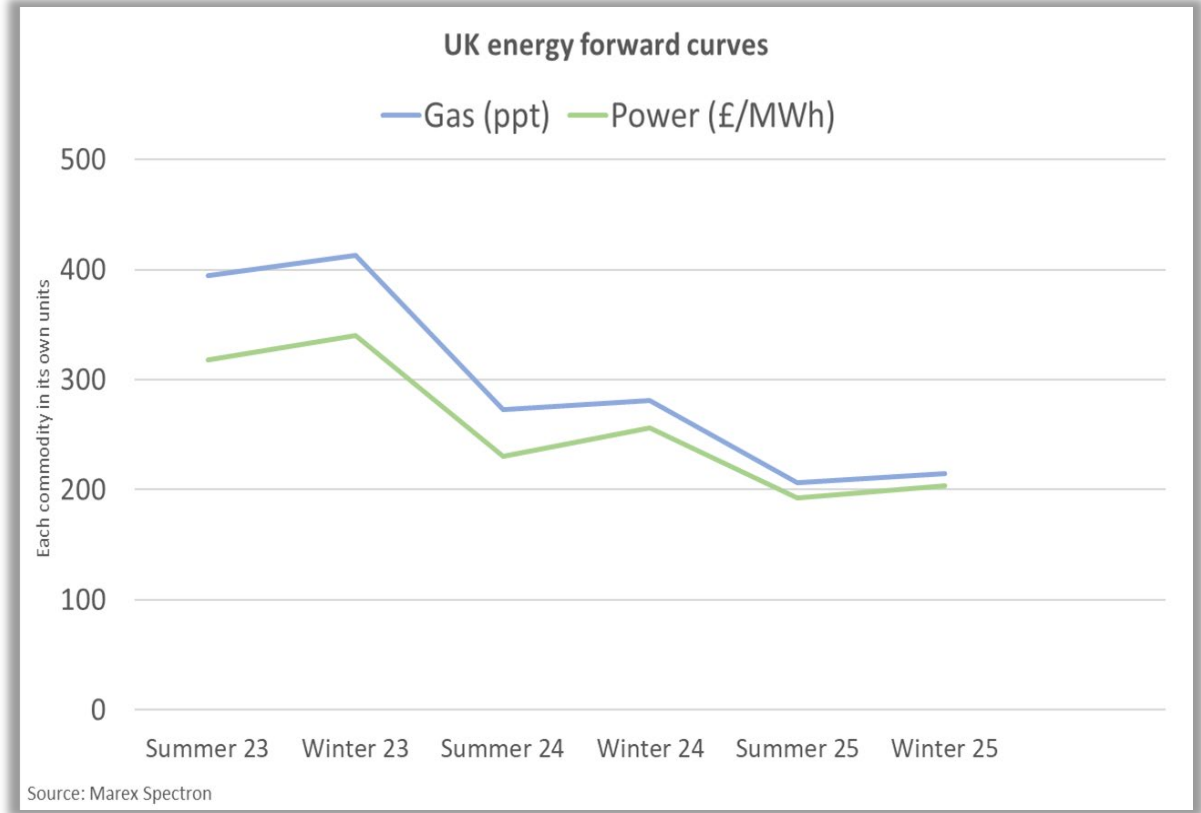
- ◆ French government encouraging EdF to accelerate nuclear returns through increasing acceptable dosing levels. Situation ongoing.
- ◆ UK power system potentially vulnerable to cold, combined with low wind. National Grid stated blackouts are unlikely, and not present in most scenarios.
- ◆ More gas burn in power generation expected to offset demand destruction in UK (National Grid). Overall, demand destruction in Europe is expected to be more meaningful.
- ◆ Some policy disagreements across the EU
 - Capping wholesale gas prices... the debate continues
 - Mandated targets for demand reduction
 - Policy uncertainty could be affecting liquidity

Most analysts expect Europe to get through this winter... concerned about next

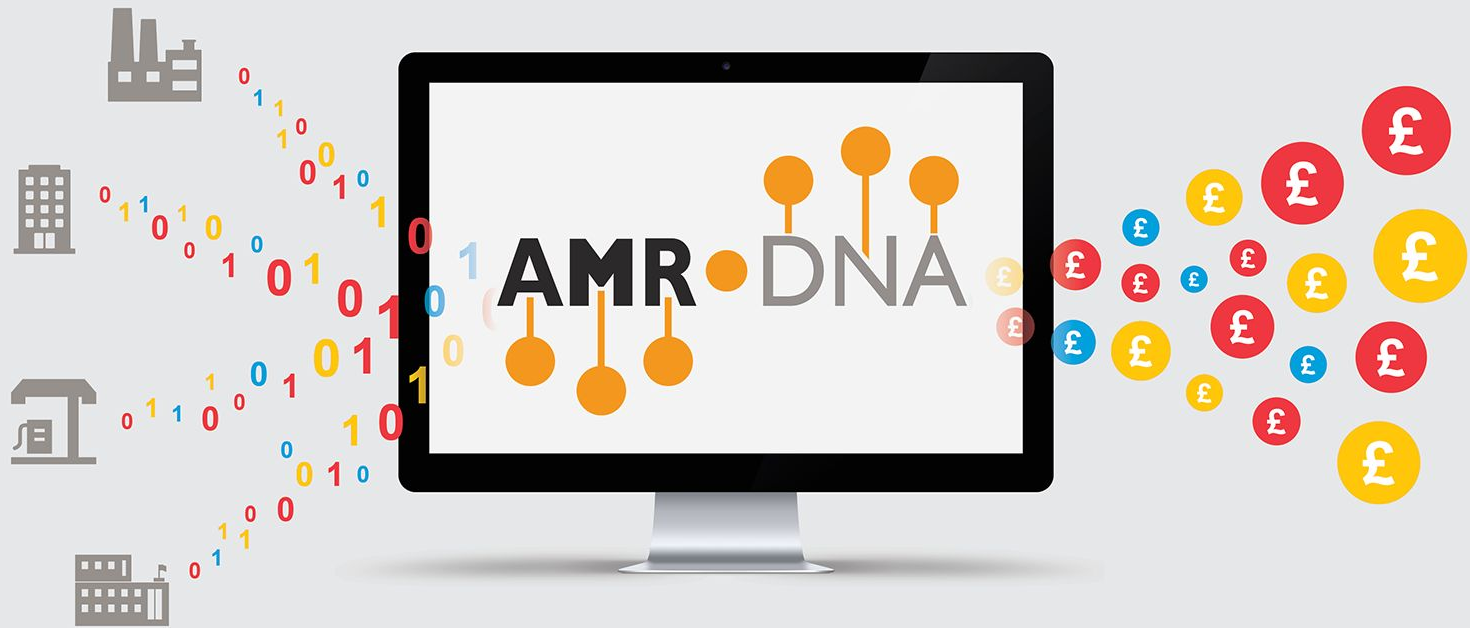


GAS & POWER MARKET UPDATE:

Simultaneous Crises in Gas and Power



High prices are built in for some time to come



Winter Gas Usage



The Problem Energy Managers face

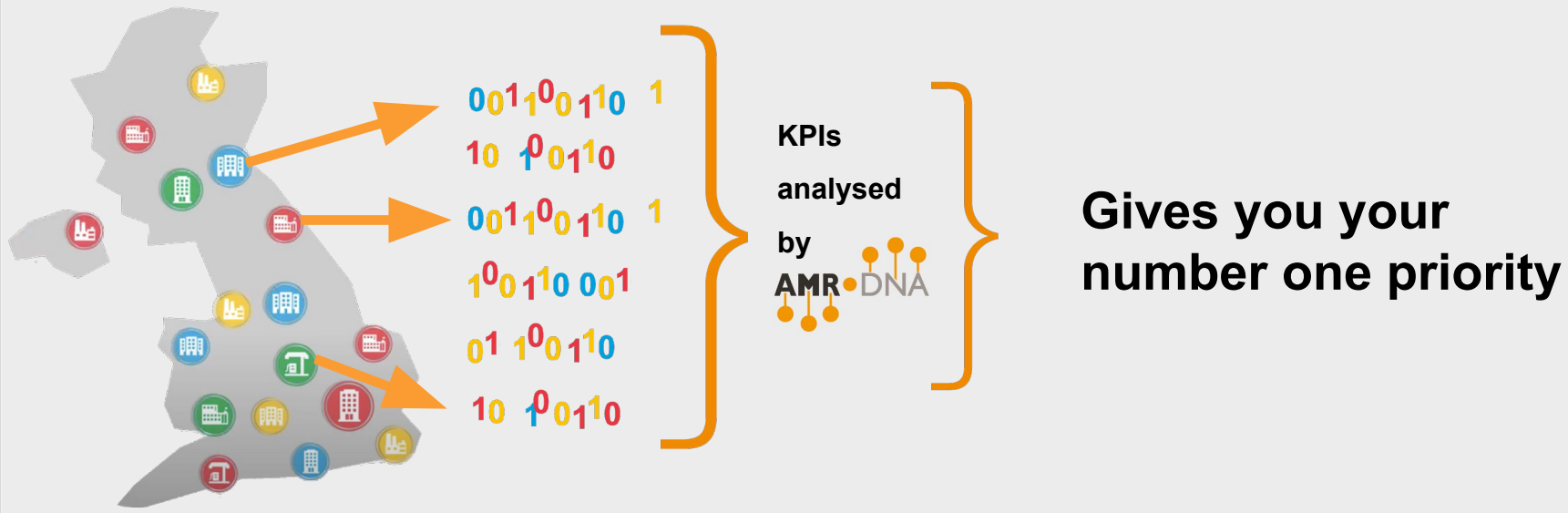


- Big data cannot be interpreted by humans.
- Weather services are expensive.
- Manual interpretation is time consuming and expensive.

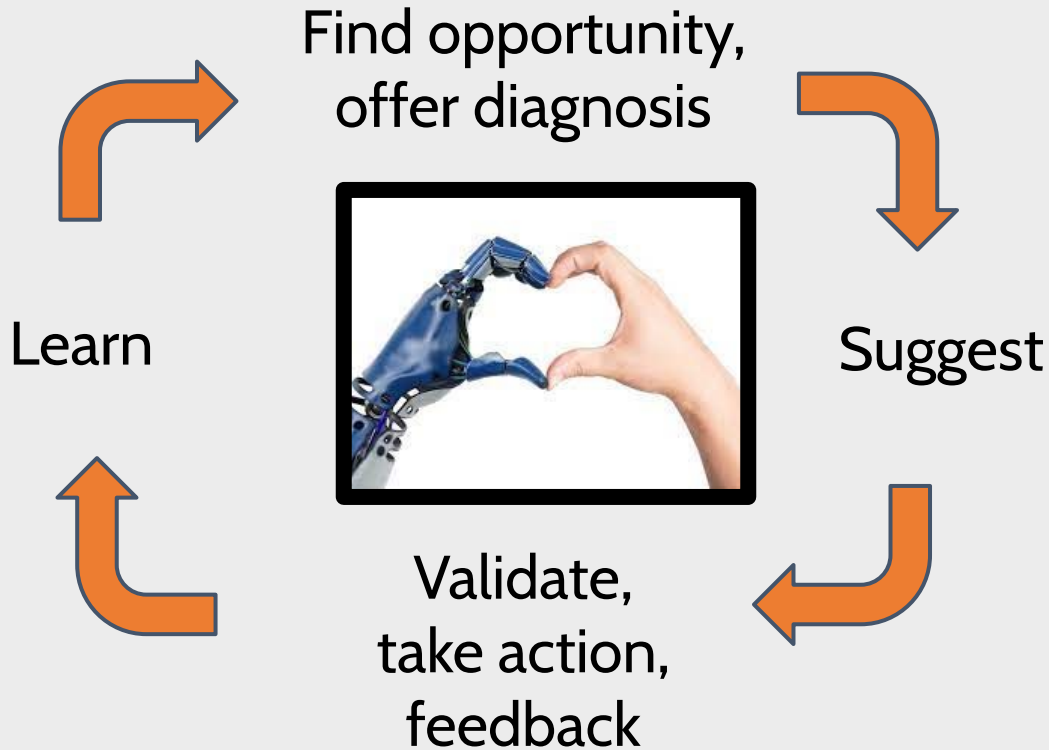




How the AI Solution works



The Artificial Intelligence solution



POLL 1

0 1 0 1 £ 0 1 0 £ 0 0 1 1 0 £ 1 0 1 0 1 0 0 1 1 0 £ £ 0 0 1 1 0 0 1



Three ways we analyse

Past performance

We look how the building has performed in the past and see if it is deviating from its usual performance

Peer performance

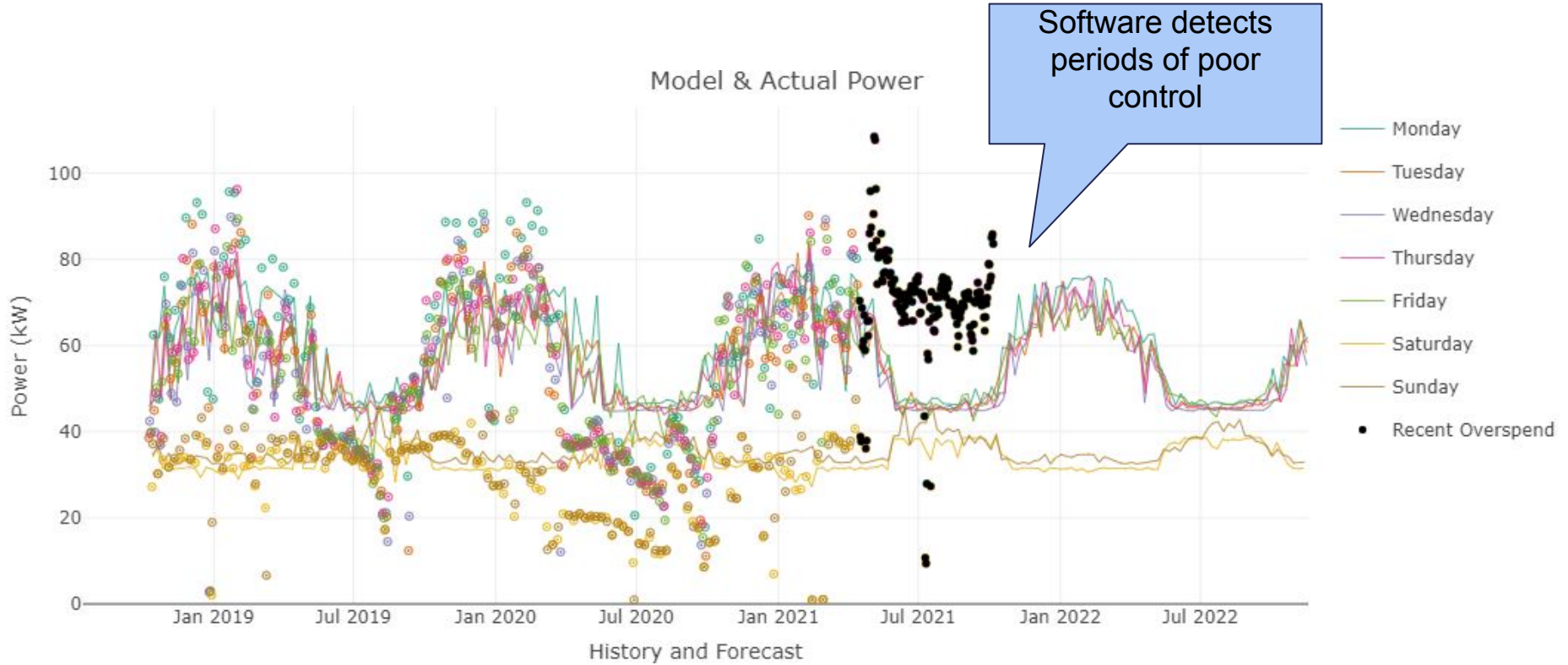
Is the building doing as well as other similar buildings

Improved performance

Can the buildings control technique be improved



Tracks and forecasts



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Picks up on the smallest details



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POLL 2

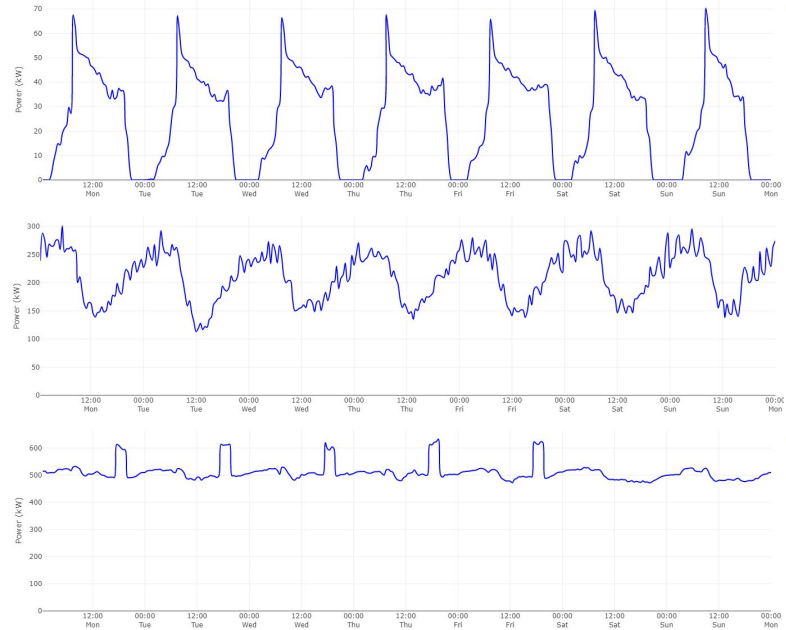
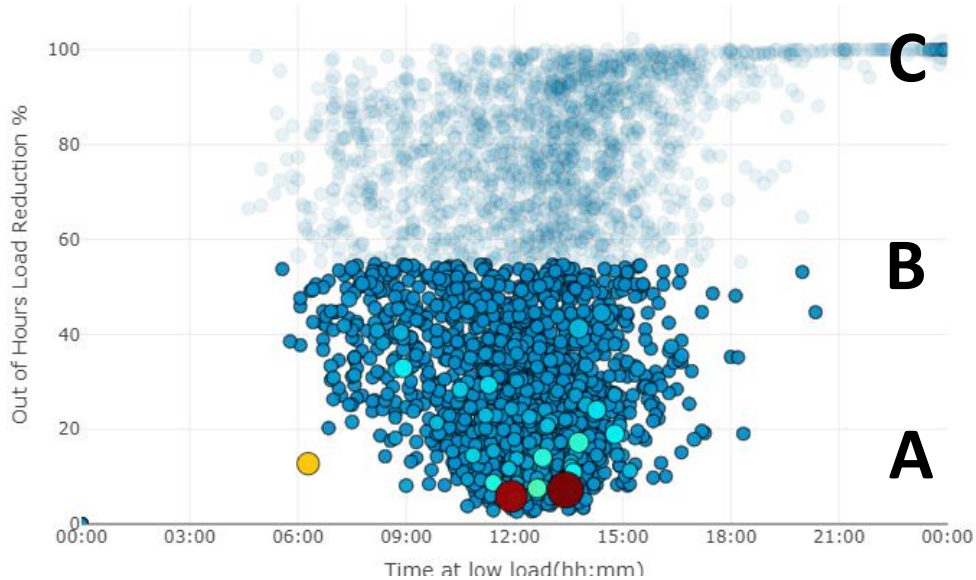
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TEC Turndown

Saving potential of £6,000,000 pa could be achieved (3p per kWh) if all buildings that do not turn consumption down to 50% overnight were to do so.

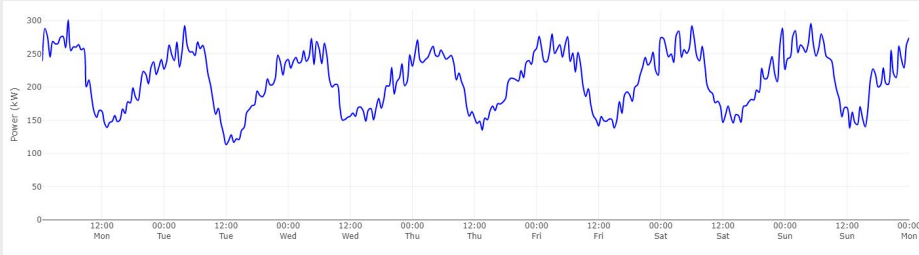
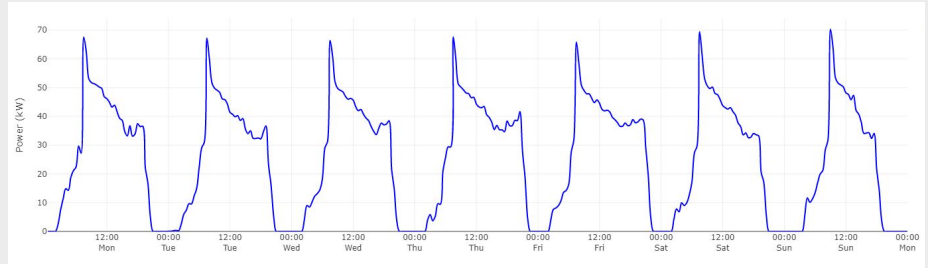
Out of Hours Load Reduction % with respect to time at low load



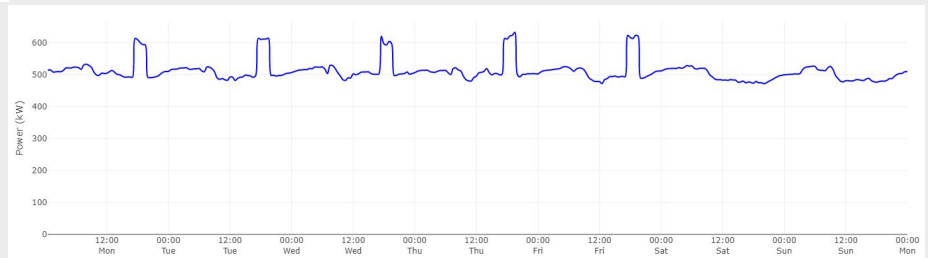


TEC Turndown

40 % turndown more than 33%



26% turndown 33% - 66%



33% turndown less than 66%





Examples from other Industries

Retail achieves 90 %_{turndown}

Councils achieve 64%_{turndown}

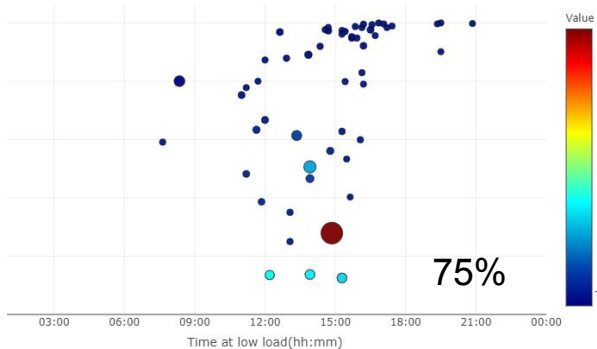
Pubs and Inns achieve 61%



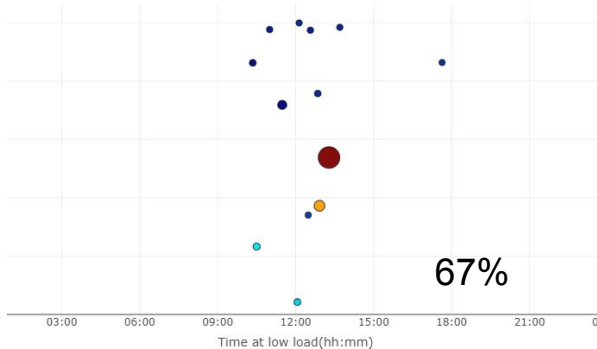


Your Universities

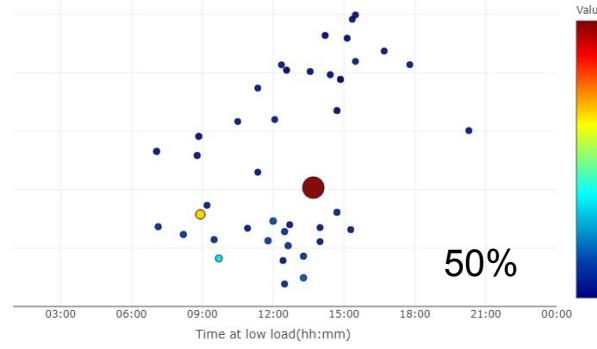
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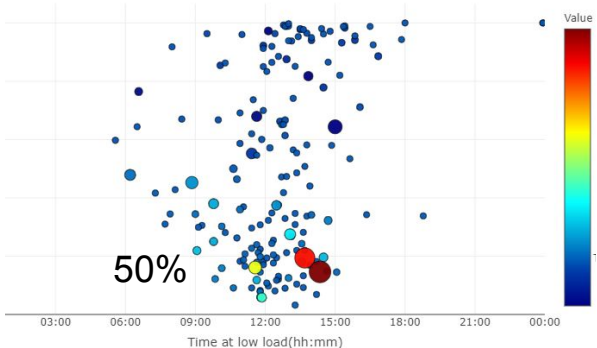
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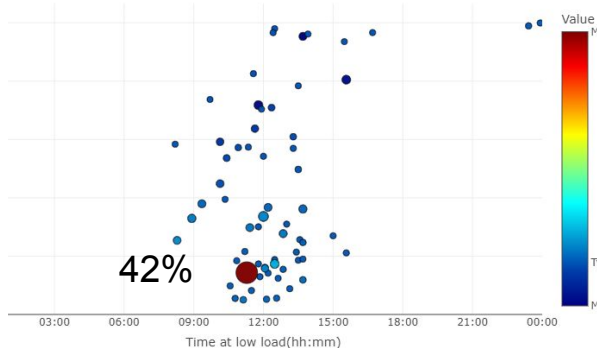
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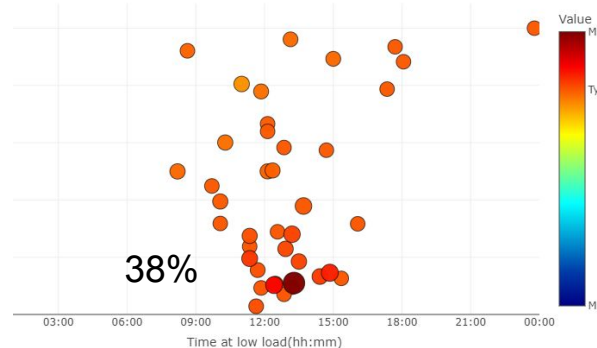
Out of Hours Load Reduction % with respect to time at low load



Turndown



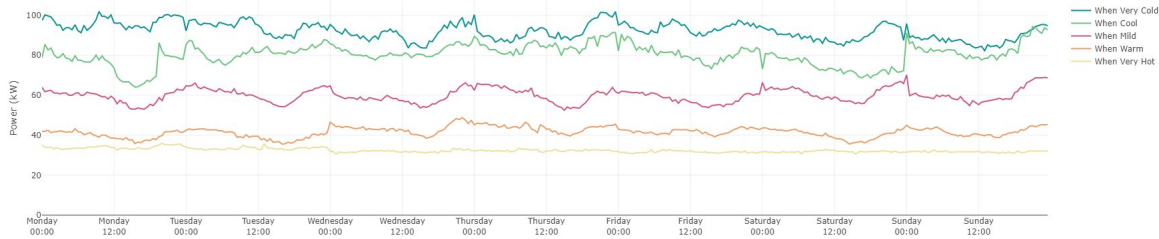
Turndown



Halls of residence

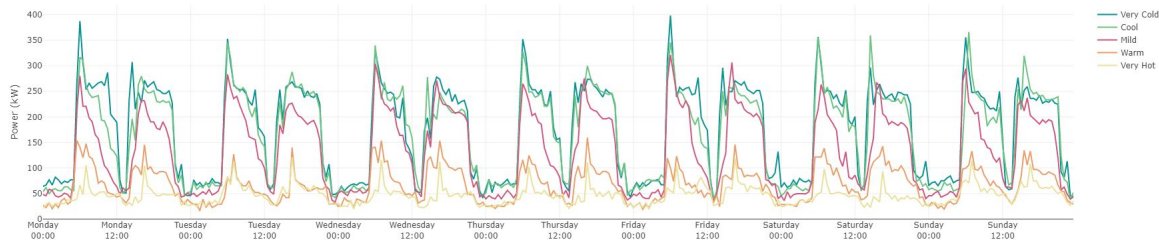
Bad Example

- 5.9% Turndown
- £5,000 saving if it was to reach the softwares target of 50.2%



Good Example

- 63% Turndown



Facts and Figures

105 issues created

£1.1 M waste identified

£300K in the last batch



The Process

- Software finds issues
- Email Notifications sent to selected email accounts
 - Collaborate with your own team or kWIQly staff
 - Add comments, images and files
- Once software detects fix you will receive a notification





Collaboration tool

Channels

- Demo
- Find channel
- FAVORITES
- Off-Topic
- CHANNELS
- 3 MPRN:3
- 4 MPRN:4
- 5 MPRN:5
- 6 MPRN:6
- 12 MPRN:12
- 15 MPRN:15
- 17 MPRN:17
- 21 MPRN:21
- 22 MPRN:22
- 23 MPRN:23
- 27 MPRN:27
- 38 MPRN:38
- 39 MPRN:39
- 42 MPRN:42
- 44 MPRN:44
- 47 MPRN:47
- 50 MPRN:50**
- 53 MPRN:53
- 55 MPRN:55
- 57 MPRN:57
- 59 MPRN:59
- 62 MPRN:62
- 70 MPRN:70

50 MPRN:50

This meter is currently ranked as priority no.1

Performance vs Target

Current turnaround of 12.3% is not meeting the target of 59.5%

Impact

Available on-target performance gains are:

- 52,312 kWh Consumption
- £6,277 Annual Impact
- 9,625kg CO2 Environmental Impact

TIP

Clear scheduling strategies for non-continually occupied buildings, buildings that are occupied 24/7 should also be able to achieve night setback, because human comfort is achieved at lower room temperature overnight (when the body is prone to be less active and retains heat more effectively). For gas this shutting down services prior to end of occupancy, start-optimisation and lowering thermostat.

System 2:41 PM

@herban.mueller and @andreas added to the channel by @kwilqiyai

kwilqiyai 2:41 PM

Turnaround (out-of-hours / overnight)

The objective is to ensure loads outside peak operational time are as low as possible.

Rank

This meter is currently ranked as priority no.1

Performance vs Target

Current turnaround of 11.3% is not meeting the target of 59.9%

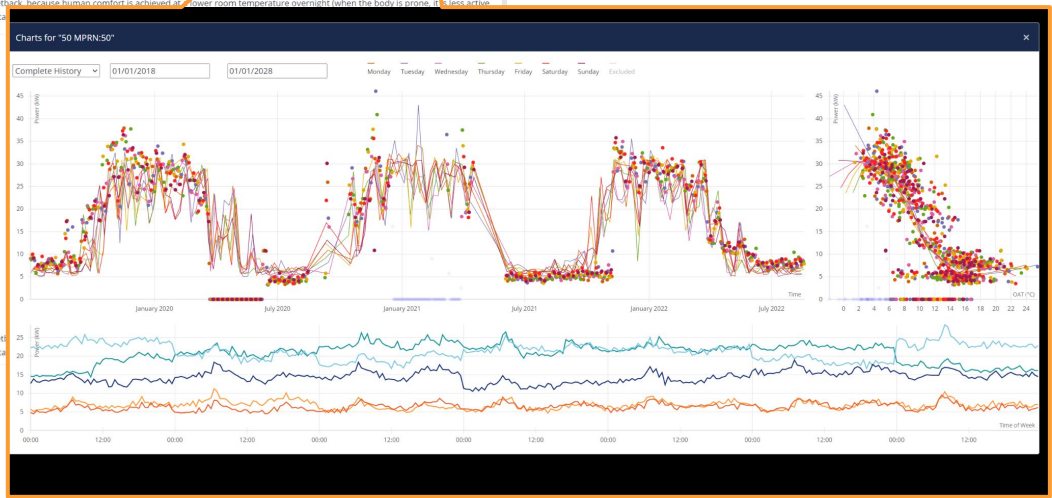
Impact

Available on-target performance gains are:

- 7,945 kWh Consumption
- £6,703 Annual Impact
- 10,662kg CO2 Environmental Impact

TIP

Clear scheduling strategies for non-continually occupied buildings, buildings that are occupied 24/7 should also be able to achieve night setback and retains heat more effectively). For gas this shutting down services prior to end of occupancy, start-optimisation and lowering thermostat.



Channels allow for communication with relevant parties



Making the most of our services

- Watch spam folder / create rules
- Reset your password using your email address to get full access
 - Would you like a run through of your portfolio?

Thank you : For further information please contact

george@kwiqly.com

