

Arts Council England Spotlight programme July 2020

Lucy Latham (JB) & Catherine Bottrill (Pilio)
Special guest: Simon Davis (Lyric Hammersmith)

Julie's Bicycle

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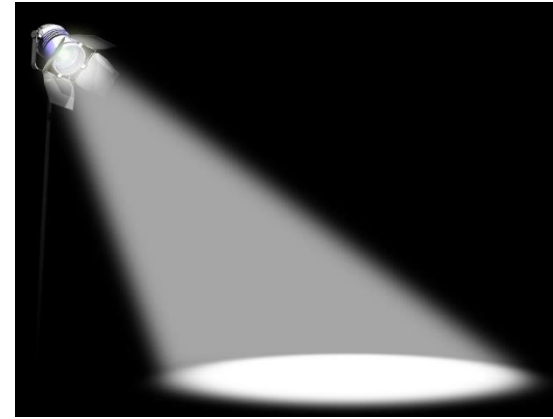
Welcome Spotlight-ers, Creative Green-ers, and fellow energy enthusiasts...



A decorative background on the left side of the slide, consisting of overlapping translucent red polygons of various shapes and sizes, creating a geometric pattern.

Agenda:

1. Welcome
2. Energy management in lockdown: presentation by Catherine Bottrill
3. Learnings from the sector: Simon Davis
4. Discussion groups
5. Feedback
6. Close



Introduction to Spotlight

- The Spotlight programme was introduced by Arts Council England, in partnership with Julie's Bicycle in 2018. It is focused on energy management and carbon reduction for some of the portfolio's largest buildings and energy users.
- The Spotlight group covers 30 organisations, across 80 sites – 33% of all reporting National Portfolio Organisations (NPOs).
- Spotlight is following the Science-Based Target (SBT) approach for reducing greenhouse gas emissions. This means: setting targets so that global temperature rise does not exceed 2 °C – and better yet 1.5° C – above pre-industrial levels

Key steps on the road to decarbonisation:

- improve operational practice – energy monitoring, settings, controls, BMS, maintenance
- staff awareness-raising and behaviour change
- reduce energy use via e.g. energy efficient technology and systems, improving fabric and passive methods
- use green electricity (on-site, local, procured)
- phase out gas for heating via electrification (heat pumps)
- invest in what you have (vs. new builds)

+ grid decarbonisation

Coronavirus and carbon emissions

Nothing has had such a dramatic impact on carbon emissions over the past century as Covid-19 has in just a few short months. The International Energy Agency (IEA) [says that the world will use 6% less energy this year](#) - equivalent to losing the entire energy demand of India. [Analysis from Carbon Brief](#) shows that emissions this year are projected to fall by ~5.5%.

There are two essential points: firstly, **a pandemic is not the way to achieve a long-term and socially-just transition to sustainability**, and secondly, even 5.5% is still short of the [7.6% decline](#) we should be willingly achieving, each year over the next decade, to stop global temperatures from rising above 1.5 degrees.

The current drop is not due to any structural changes within the energy system - studies are already showing a rebound in emissions as countries seek to reboot their economies, rolling back safeguarding initiatives to spur economic growth. Cutting pollution rapidly and efficiently and investing in alternative, cleaner sources of energy will be key in reaching our climate goals - and taking a science-based approach to target setting will ensure organisations, cities and states can model and monitor their ongoing performance.



Housekeeping

- Raising hands
- Asking questions
- Recording content

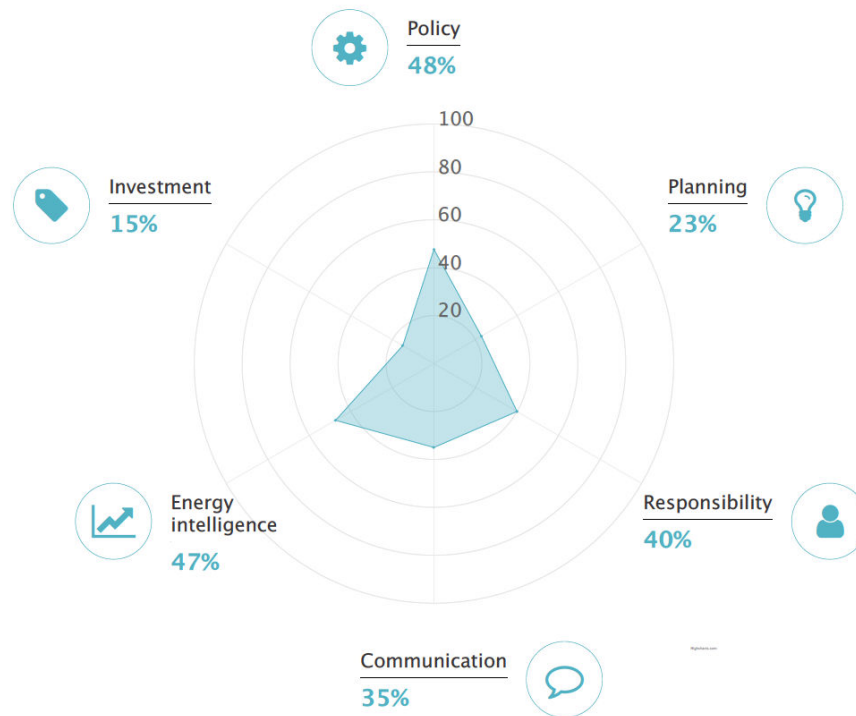
Catherine Bottrill



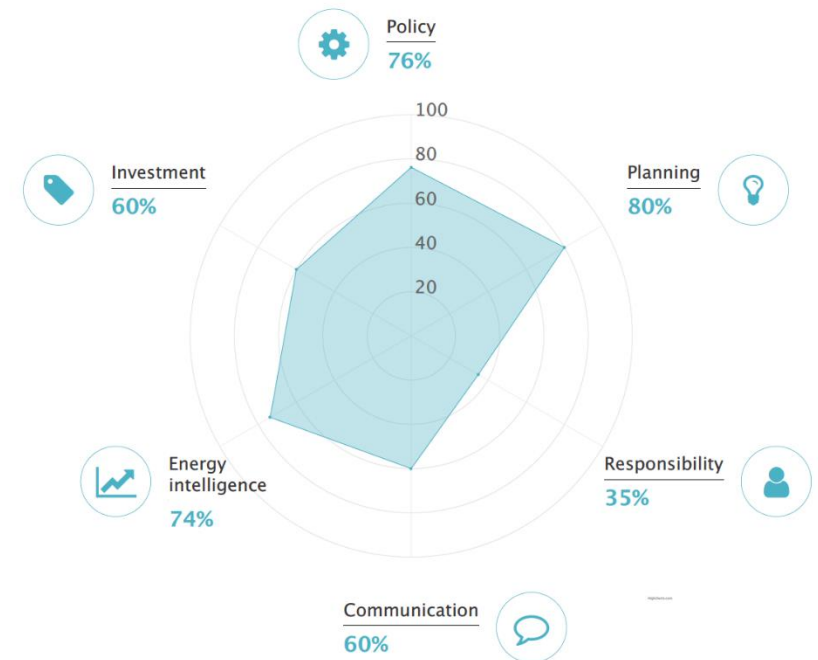
Image: Student of the Foundation and BA Tons Degree in Circus Arts at the National Centre for Circus Arts (Photo by Bertil Nilsson)

Energy Saving Scorecard – progress Org 1

Year 1 – 35%



Year 2 – 59%





Greenhouse gas emissions reporting

For government reporting organisations should report the grid average (called location based) electricity emissions but can report the zero-carbon renewable electricity (if backed by REGOs) alongside, plus some optional narrative about whether its really green or not (i.e. additional or whether the supplier just buys credits).

For your own and public facing reports, they can report zero for their renewable green tariff electricity (and have a caveat that for govt reporting they have included the location-based grid average).

A similar “dual reporting” approach should be taken for biogas and biomethane (including “green gas”).



Streamlined Energy and Carbon Reporting

The UK government's **Streamlined Energy and Carbon Reporting (SECR)** policy was implemented on 1 April 2019, when the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018 came into force. Businesses in scope need to comply for financial years starting on or after 1 April 2019 and therefore need to understand their requirements under SECR.

While explicit reporting on renewable energy and associated emissions is not a mandatory requirement under the SECR legislation, organisations are encouraged to use dual reporting if they wish to reflect their consumption of renewable energy.



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Covid-19 – Implications for EIROs

- Will calculate the total energy reduction of the Covid-19 closure period in 2020
- 2019-20 carbon reporting probably won't be too impacted by Covid-19 lockdown as most Spotlight orgs closed the second half of March.
- Impact will be most pronounced for 2020-21 reporting. We will be looking at what is the most appropriate methodology to assessing EIROs.

Carbon budget 2020-21

Carbon budget

Set a budget for this year for carbon emitted by fuel.

Choose a baseline option - use CIBSE annual average by building type, set your own or use past Pilio data.

To set your budget for this year by fuel type use the slider below. Eg to reduce by 5%, select 95% on slider.

Set your annual baseline

Option

2018 - 2019



Applied to

2020 - 2021



Gas

kg CO₂e

Electricity

kg CO₂e

Set your carbon budget

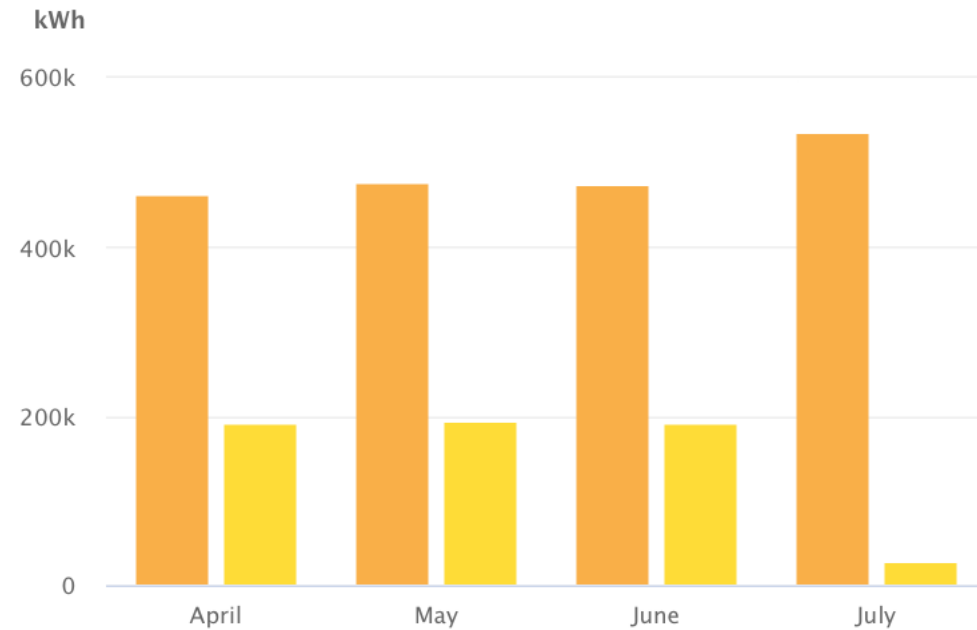
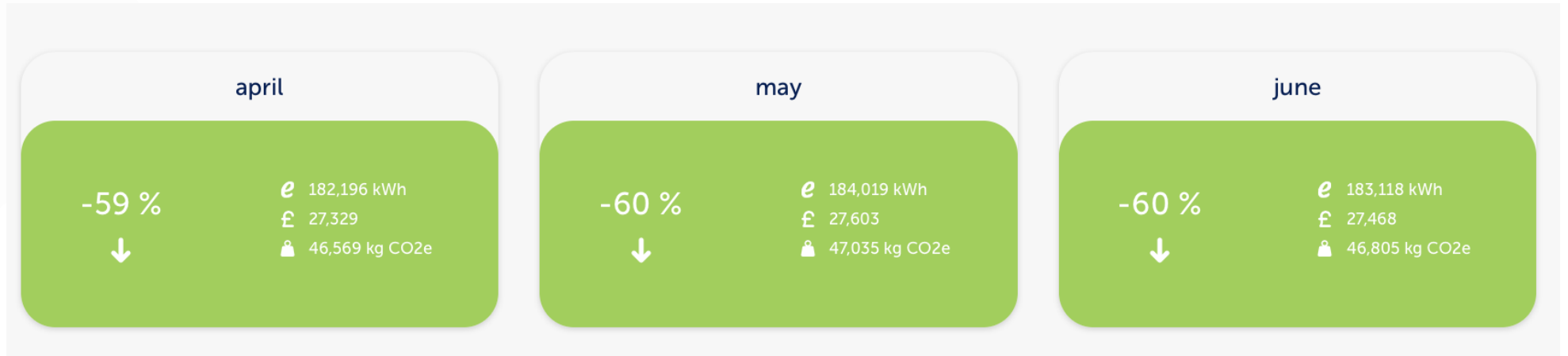
Gas

100 %

Electricity

100 %

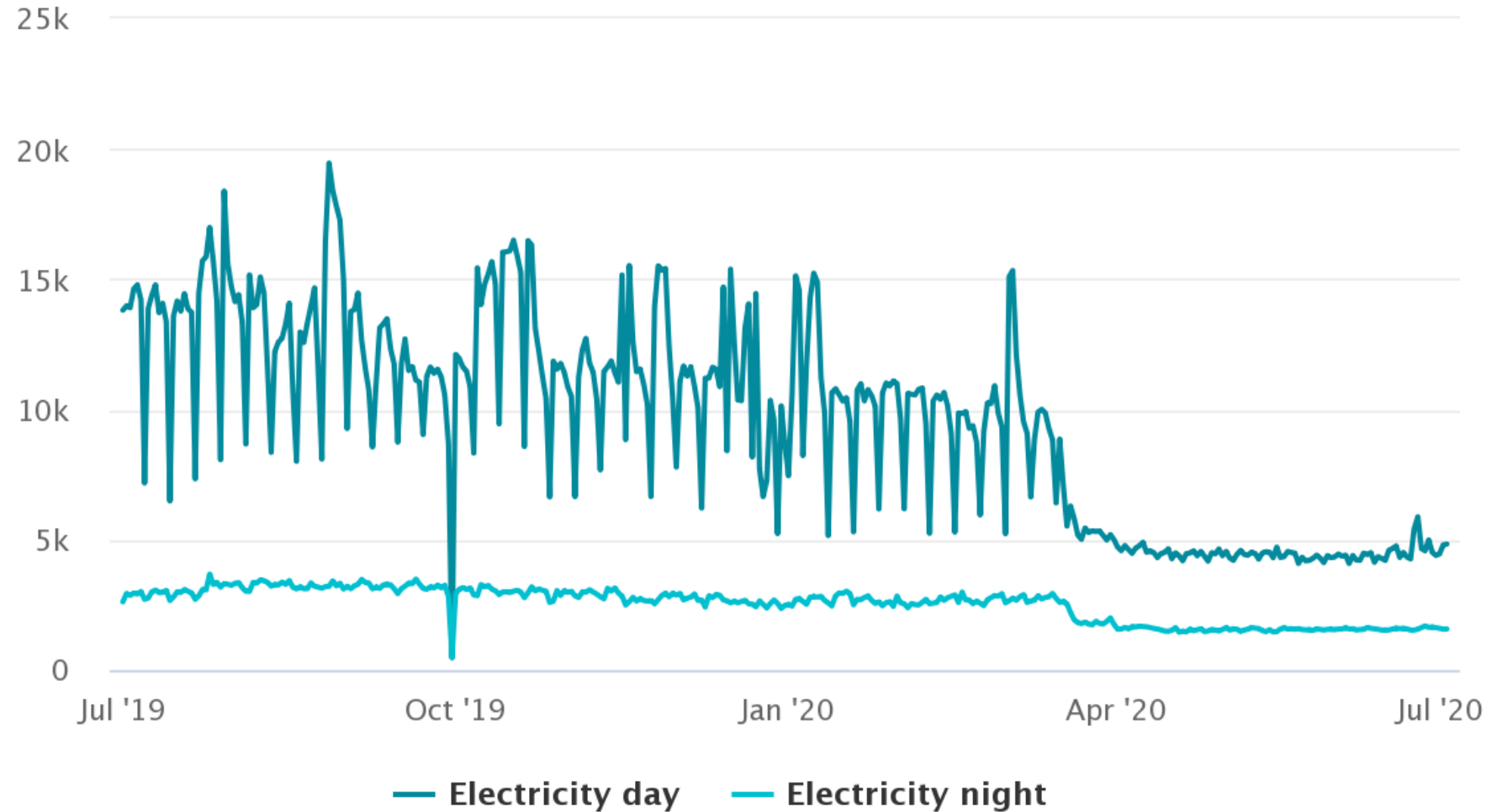
Electricity comparison: 2019 v 2020



Night-time consumption (12AM – 06AM) compared to day-time consumption (06AM – 12AM)

kWh

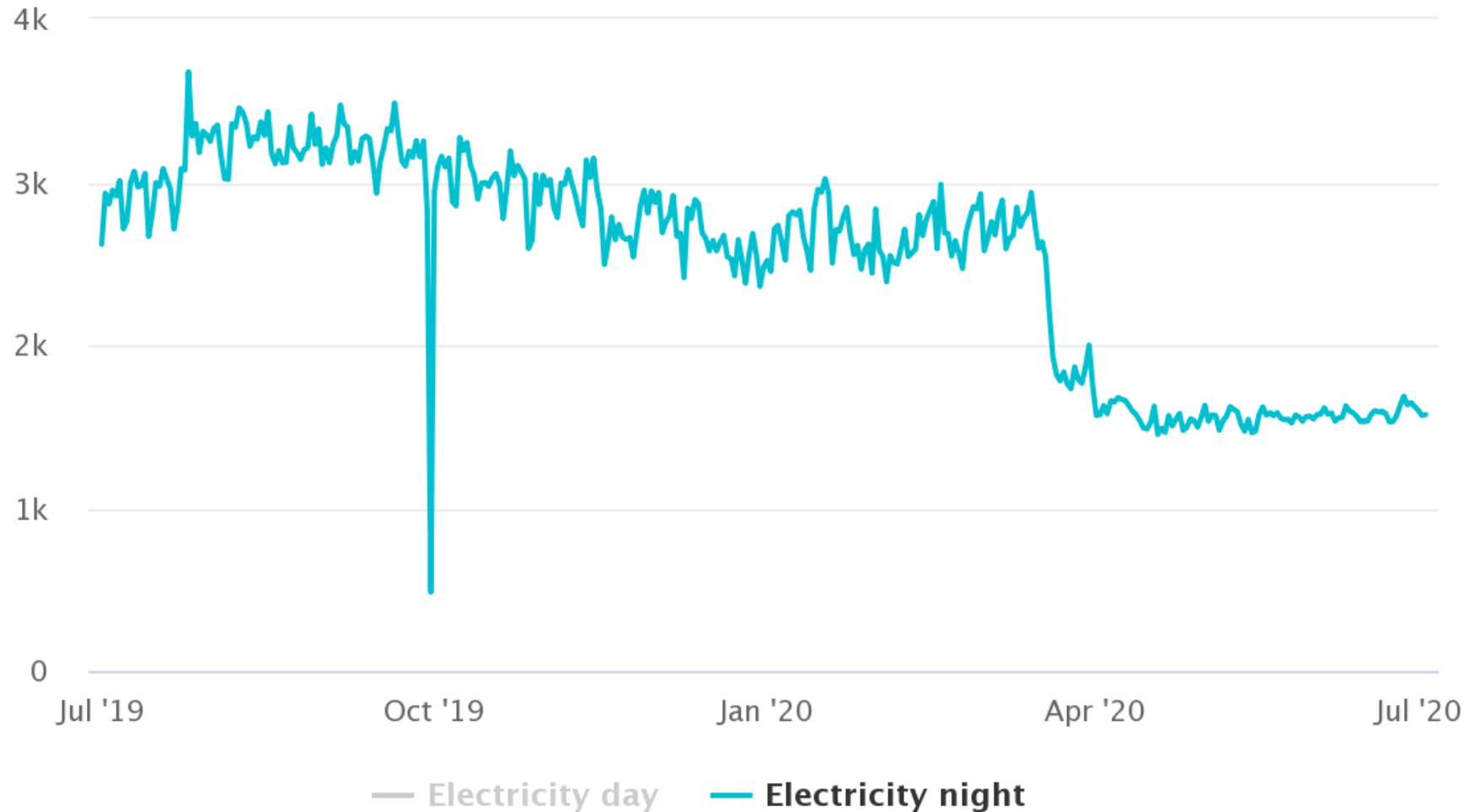
Click and drag to zoom in



Night-time consumption (12AM – 06AM) compared to day-time consumption (06AM – 12AM)

kWh

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Electricity consumption

Click and drag to zoom in

kWh

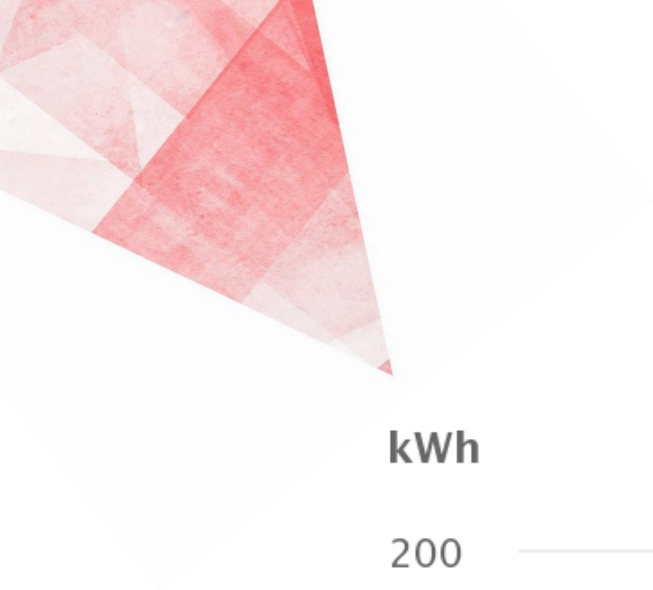
200

150

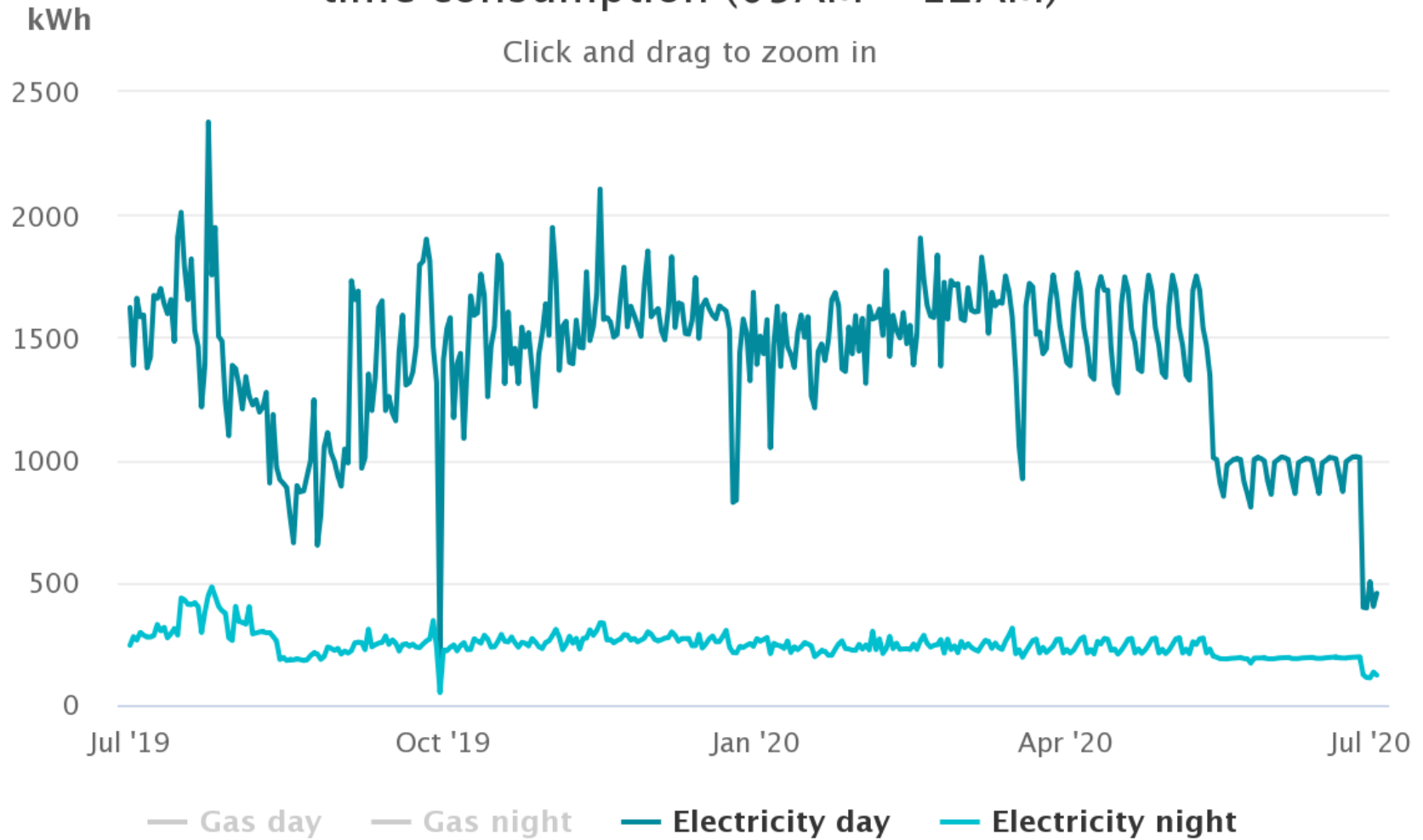
100

50

00:00 01:00 02:00 03:00 04:00 05:00 06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00



Night-time consumption (12AM – 05AM) compared to day-time consumption (05AM – 12AM)

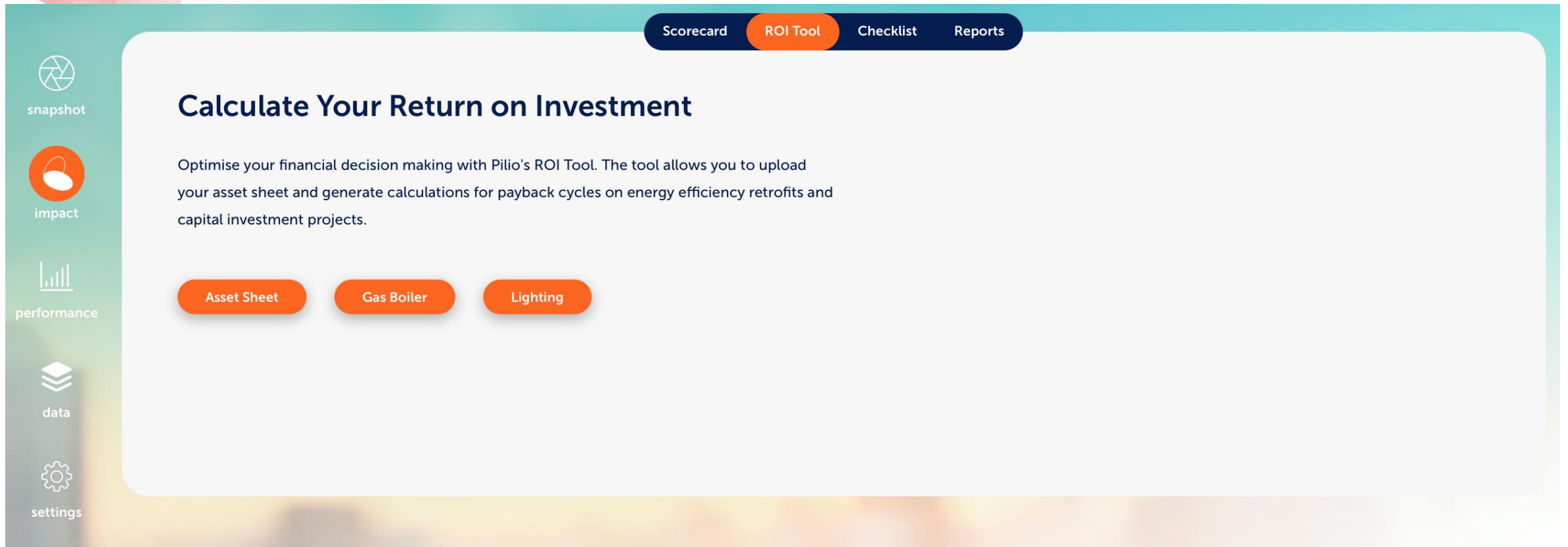




Calculate expected night use

- Calculate how much energy is used by the things that should be on, e.g.
 - Emergency lighting
 - Burglar arms
 - Fire alarms
 - Fridges
 - Servers etc.
- To calculate take the power rating (kw) by night-time hours
- Subtract from actual overnight consumption - difference is energy waste.

Pilio impact area



Equipment Assets Sheet

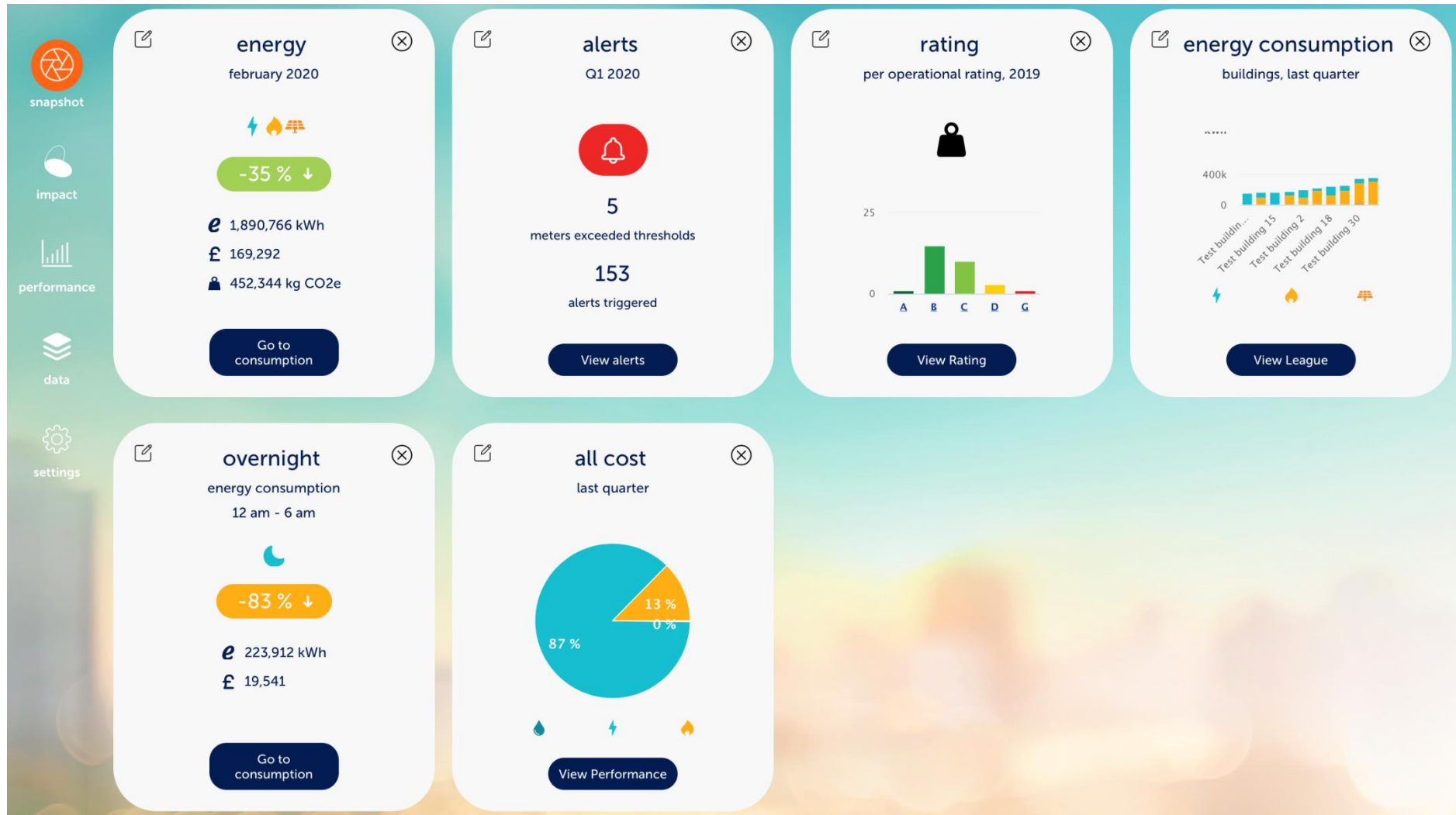


Detailed equipment list report	
Client name	Contact name
Address	Role
Date	Email

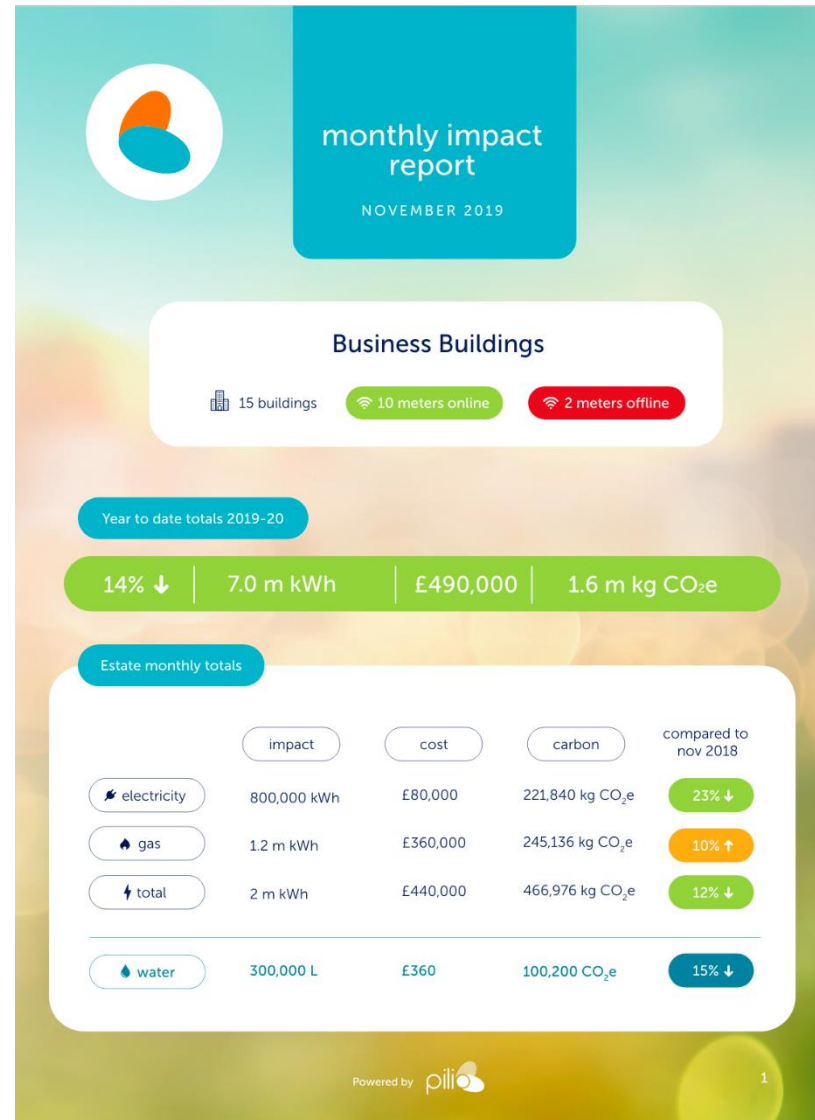
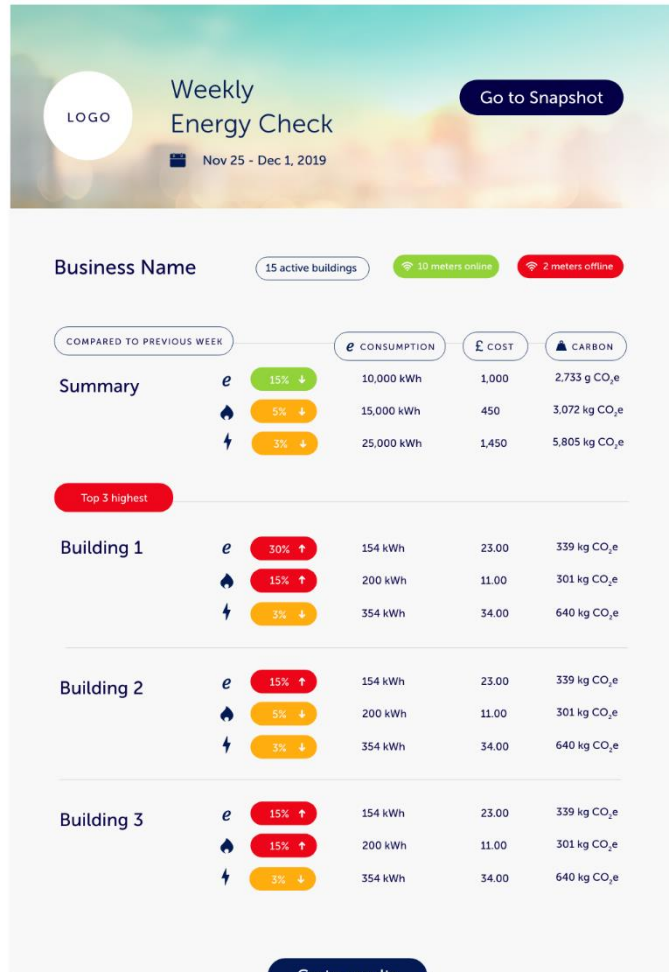
Contact name
Role
Email

#	Equipment category	Asset description				Energy Assessment details					
		name	location	description		number of units	date of manufacture	rated power (kW)	number of hours per year	kWh per year	£ per year
	heating	gas boilers								0	0
		gas direct heater								0	0
		AC units								0	0
		fridges								0	0
		cold water pumps								0	0
		hot water pumps								0	0
		chiller pumps								0	0
		chiller								0	0
		lights								0	0
#	night use									kW	£/year
		fridges								0	0
		cold water pumps								0	0
		alarm system								0	0
		emergency lights								0	0
		servers								0	0

Pilio energy monitoring



Weekly & monthly reports





Thank you!

Lucy Latham &
Catherine Bottrill

*Image: Akram Khan Company's Chotto Desh featuring dancer Dennis Alamanos
(Photo by Nicolas Ricchini / Akram Khan Company via Family Arts Campaign)*

Simon Davis



Image: Student of the Foundation and BA Tons Degree in Circus Arts at the National Centre for Circus Arts (Photo by Bertil Nilsson)

Group discussion:

- What is your top learning for reducing energy use during shutdown
- What is your top learning for improving understanding of energy use in your space during this time?
- What do you think could be achieved over the next 6 months - in the current circumstances - to improve energy efficiency/reduction? What would need to happen for this to be realised?

Julie's Bicycle

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Q&A



Image: Student of the Foundation and BA Tons Degree in Circus Arts at the National Centre for Circus Arts (Photo by Bertil Nilsson)

THANKS

Keep in touch & arrange your Spotlight support day!

For more information, email: Lucy@juliesbicycle.com

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