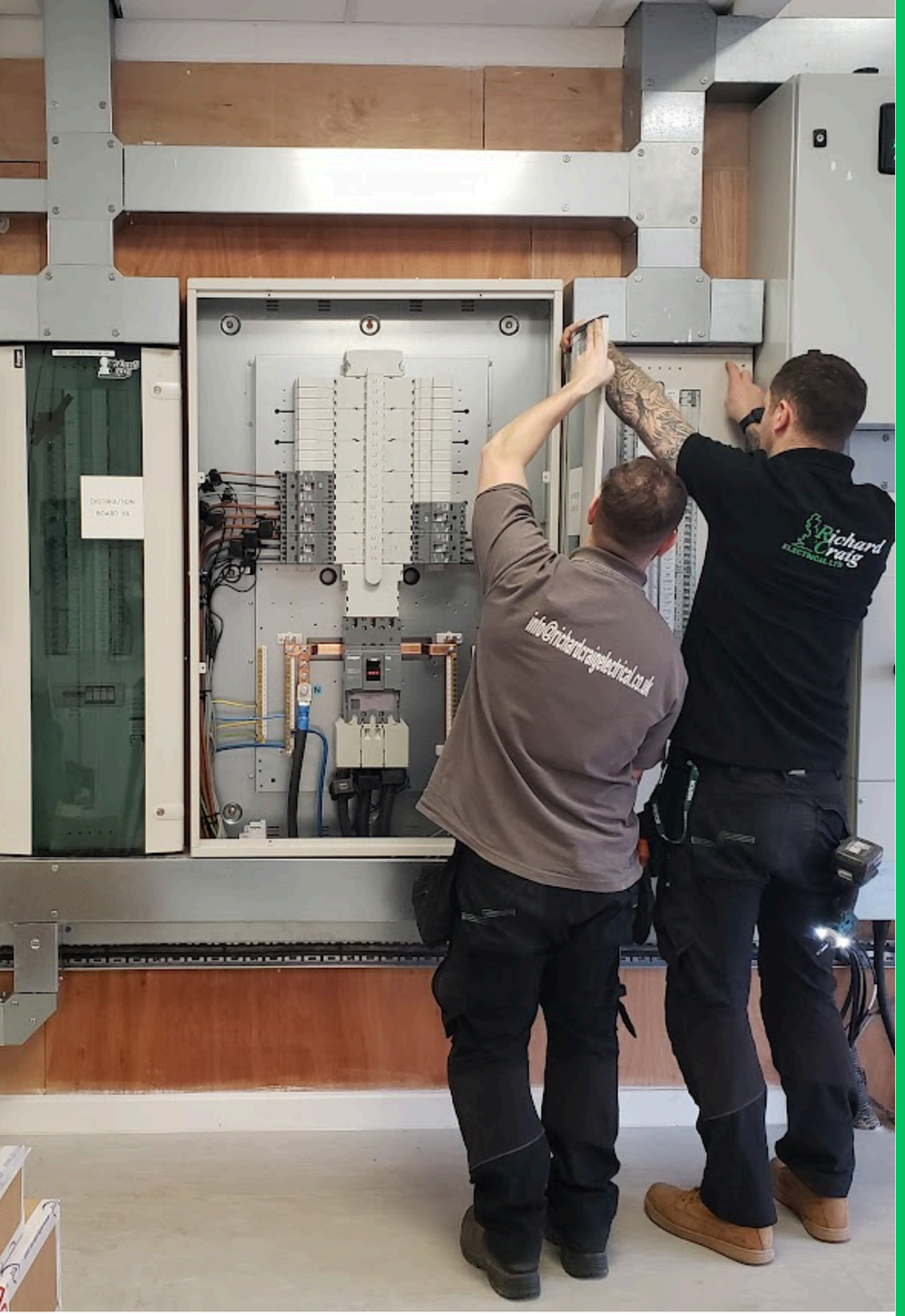
Energy Saving Report

FY2024

Report Highlights



Visible energy monitoring

In January 2024 we installed a Visible Energy Monitoring System to capture overall electricity consumption and a breakdown of key equipment consumption (including air conditioning and plant facilities).

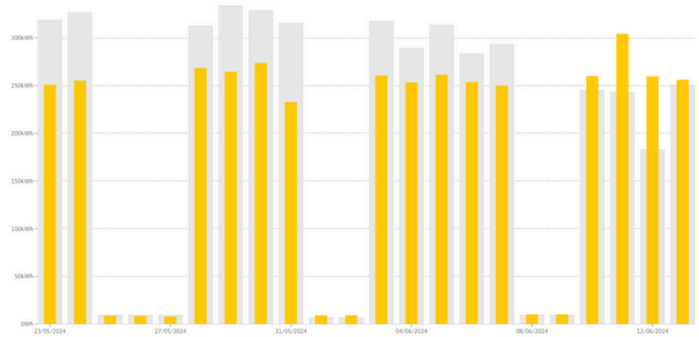
This is helping us to accurately see when and where we are using energy and to identify where we can save energy.

Energy consumed by production distribution board

Action: Changing reflow oven start up settings

36% reduction
between 6 AM and 8 AM (on a day before and after change)

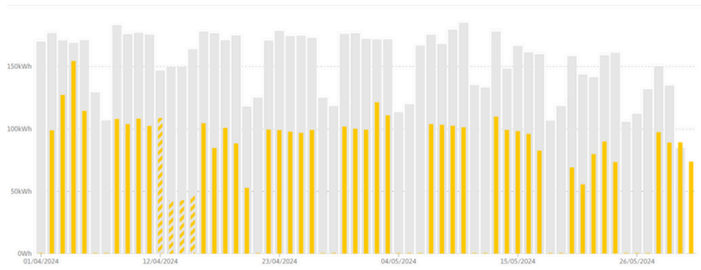
10% reduction
on consumption over 21 days before and after change



Energy consumed by compressor

Action: Powering off compressor when not needed along with other key items of equipment

54% reduction
in energy consumed by the compressor from 01 April to 31 May compared with 29 January to 29 March (61 day comparison)



Energy consumed by air conditioning in building C4

Action: changing air conditioning timing to switch off at 16.00 instead of 18.00

8% reduction
in energy consumed between 4 PM and 6 PM during weekdays

Energy saving expamples

Case Study 1

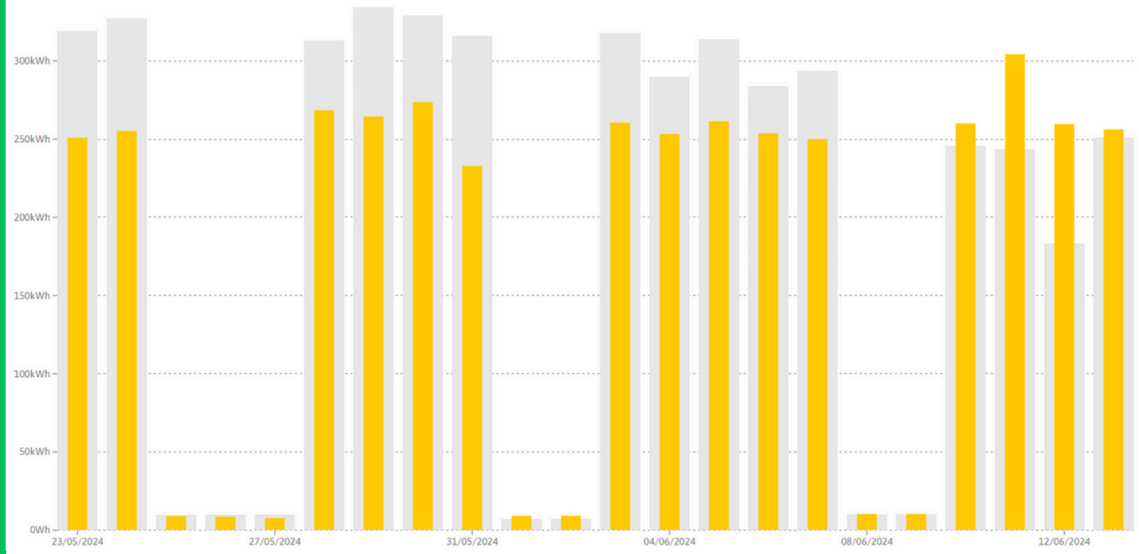
Energy Reduction

Location: *Manufacturing site in Hereford*
Action: *change to reflow oven start up settings on SMT lines 2 and 3 from 23 May 2024*

*"As of **23 May 2024** we have set the start-up of the ovens to sequential. When the oven reaches a certain temperature the second half of the zones will switch on. As there is residual heat from the first set of zones, the second set will get to temperature quicker. Overall, it will take longer for the oven to get to temperature (by about 10 to 15 mins) but the power consumption should be considerably less."*

Steve Upington (Production Engineering Manager)

C4 production board daily consumption before and after change



RESULTS

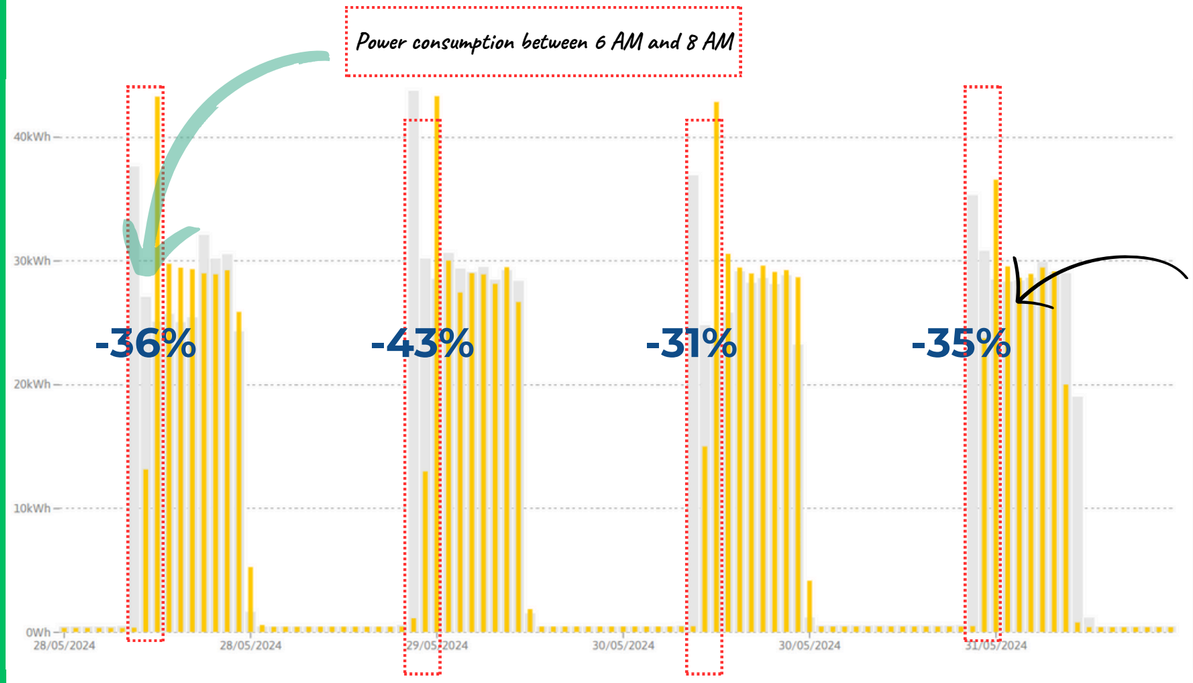
02 May - 23 May
4.41 MWh

23 May - 13 June
3.96MWh

10% reduction

in energy consumed by the production distribution board from 23 May - 13 June compared with 02 May - 23 May

C4 production board hourly consumption on 4 separate days before and after change



Energy reduction on production distribution board between 6AM and 8AM on 4 days before and after change to reflow oven start up settings

Case Study 2

Energy Reduction

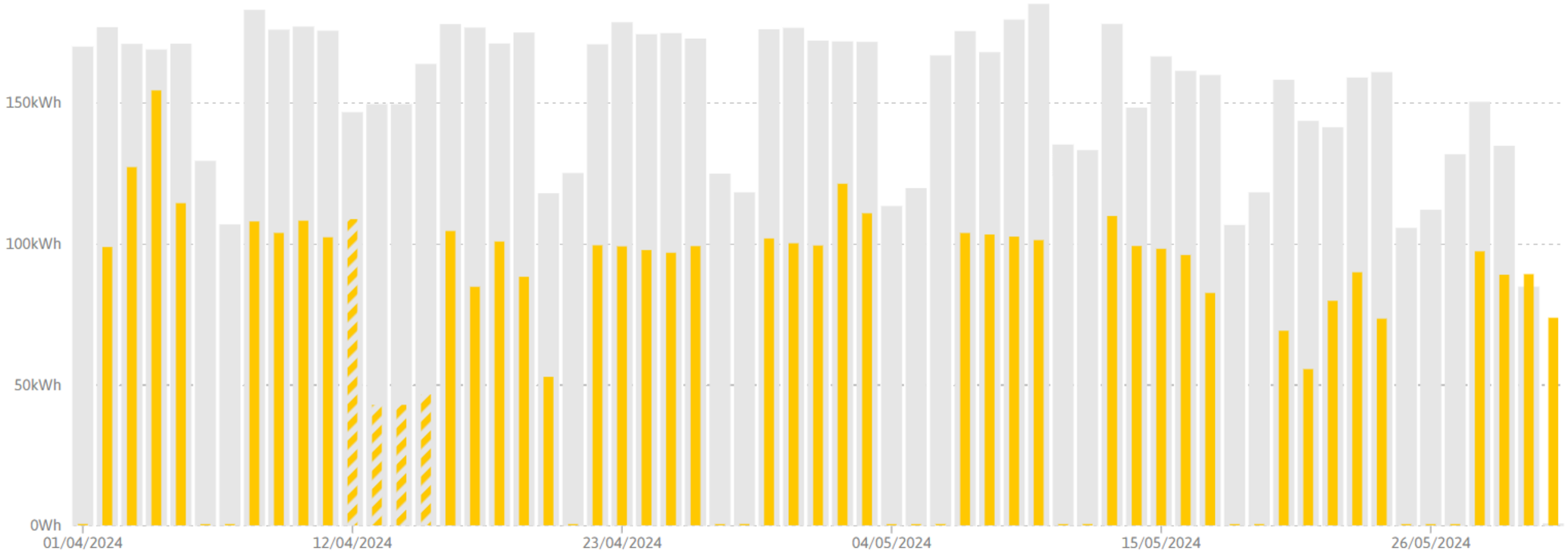
Location: *Manufacturing site in Hereford*
Action: *Powering off compressor and key items of equipment when not needed to be in operation*

We noticed that compressor 1 in building C4 was consuming significant amounts of energy over the weekend.

*Since **April 2024**, the Production Team started powering off the compressor along with other key equipment when not needed to be in operation.*

*The chart here shows a **54% reduction in energy consumed by the compressor across 61 days before and after the change.***

C4 compressor consumption before and after change (comparison over 61 days)



RESULTS

29 Jan - 29 Mar
9.21 MWh

01 Apr - 31 May
4.23 MWh

54% reduction

in energy consumed by the compressor from 01 Apr to 31 May compared with 29 Jan to 29 March (61 day comparison)

Next steps

To get the most out of our visible energy monitoring system, we encourage our staff to look out for opportunities where we can save energy.

We invite staff to share their suggestions, enabling us to assess the effects of any changes made. These changes can range from minor adjustments in equipment settings to alterations in processes, all of which we can now track through our visible energy monitoring system.