

# Energy Services Innovation Lab - 24/08/2015

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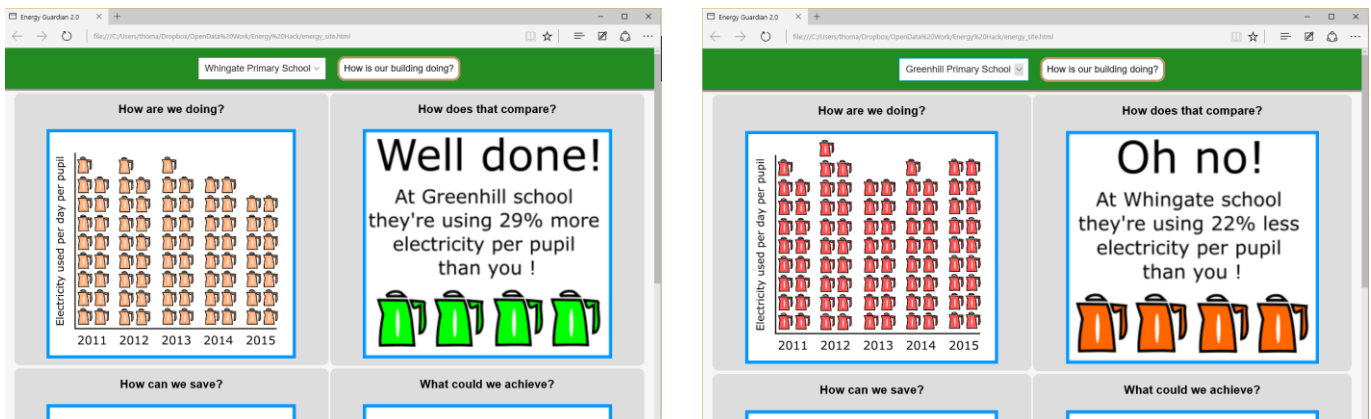
Leeds City Council's energy bill is around £17m per year. Its commitment to a low carbon future, its desire to cut waste before staff, and its role in influencing behaviour all over the city make this an attractive target for savings.

Our group considered updating the factsheets that were historically sent out to Energy Guardians at each council building. I built a prototype to compare two schools because open data on pupil numbers by school is available in Leeds.

We wanted to provide clear information that would help the Energy Guardian answer four questions at a glance,

1. How are we doing?
2. How does that compare?
3. How can we save?
4. What could we achieve?

Within the time available I chose to focus on the first two questions and produced a mobile-ready web page driven by real data. Example output for both schools is included below.



In the first panel I created a more human-centred unit of “kettles boiled per pupil per schooldays” to replace kWh. This makes the amount of electricity used more relatable to everyday experience which our group felt was important. This choice of unit also makes comparisons against previous years and across different sized schools more reasonable.

The second panel allows comparison against a similar school and adds an element of competition and reward to energy saving. The way we present this would need a lot of refinement but I think that there's value in linking recommendations to save energy in panels 3 and 4 with this comparative data.

## Issues

The data contained no readings for Gas use at each school in the first two years available (ending 2010 and 2011) and the data for the year ending 2012 seemed abnormally low. It is possible that both schools transitioned from a different heating system at around this time and that the previous fuel source was not contained within the data.

If these kinds of discrepancies are common in the data it would make the development of an automated tool to track use over time difficult.