



McKenzie House

Cardiff University

Cardiff University Estate



google map picture



bird view bing map picture

Cardiff, United Kingdom

Weather Analysis

| November | | | | | | | Monthly average T _{out} |
|----------|------|------|------|------|------|------|----------------------------------|
| MON | TUE | WED | THU | FRI | SAT | SUN | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 16°C | 16°C | 14°C | 15°C | 14°C | 14°C | 13°C | |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| 13°C | 12°C | 13°C | 16°C | 13°C | 12°C | 13°C | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| 13°C | 14°C | 16°C | 15°C | 16°C | 15°C | 14°C | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | |
| 13°C | 14°C | 14°C | 13°C | 8°C | 9°C | 11°C | |
| 29 | 30 | 31 | | | | | |
| 13°C | 10°C | 12°C | | | | | |

www.iservcmb.eu

Monthly Overview

Monthly kWh Consumption

October 2012

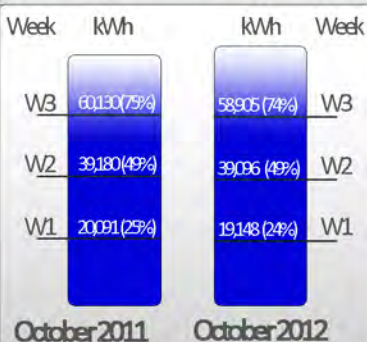


+5.2%
since last year

-33%
since iSERVcmb
participation

90,462 kWh

Monthly kWh Comparison



Monthly CO₂ Emissions

October 2012



+5.2%
since last year

-33%
since iSERVcmb
participation

55,480 kgCO₂e

Cost Analysis



Comparison with peer buildings around Europe

* From September 2011 to September 2012

McKenzie House predicted best case

260,242 kWh/year*
37,735 £/year

McKenzie House at current peak

1,028,482 kWh/year*
149,130 £/year

McKenzie House at 25% peak prediction

1,278,139 kWh/year*
185,330 £/year

McKenzie House at 75% peak prediction

3,362,107 kWh/year*
487,506 £/year

McKenzie House predicted worst case

4,411,816 kWh/year*
639,713 £/year

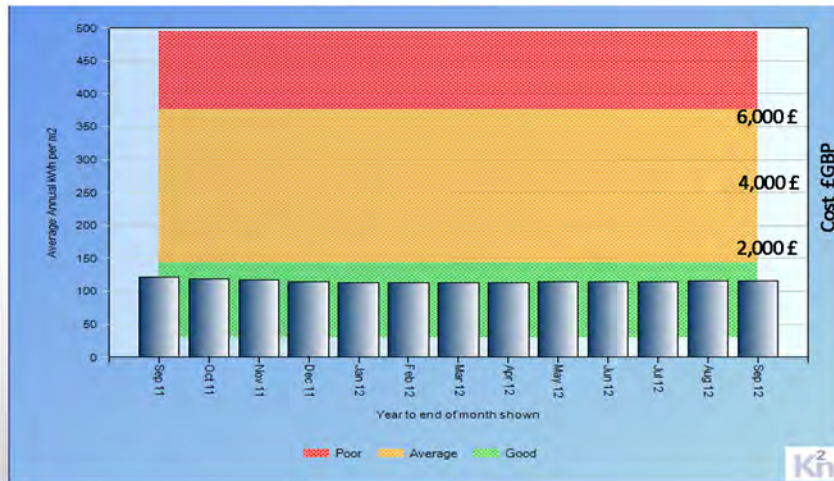
iSERVcmb Ranking

Compared to all buildings in the database for the period 30th Sept. 2011 to 30th Sept. 2012, McKenzie House ranks based on performance its to bespoke benchmark.

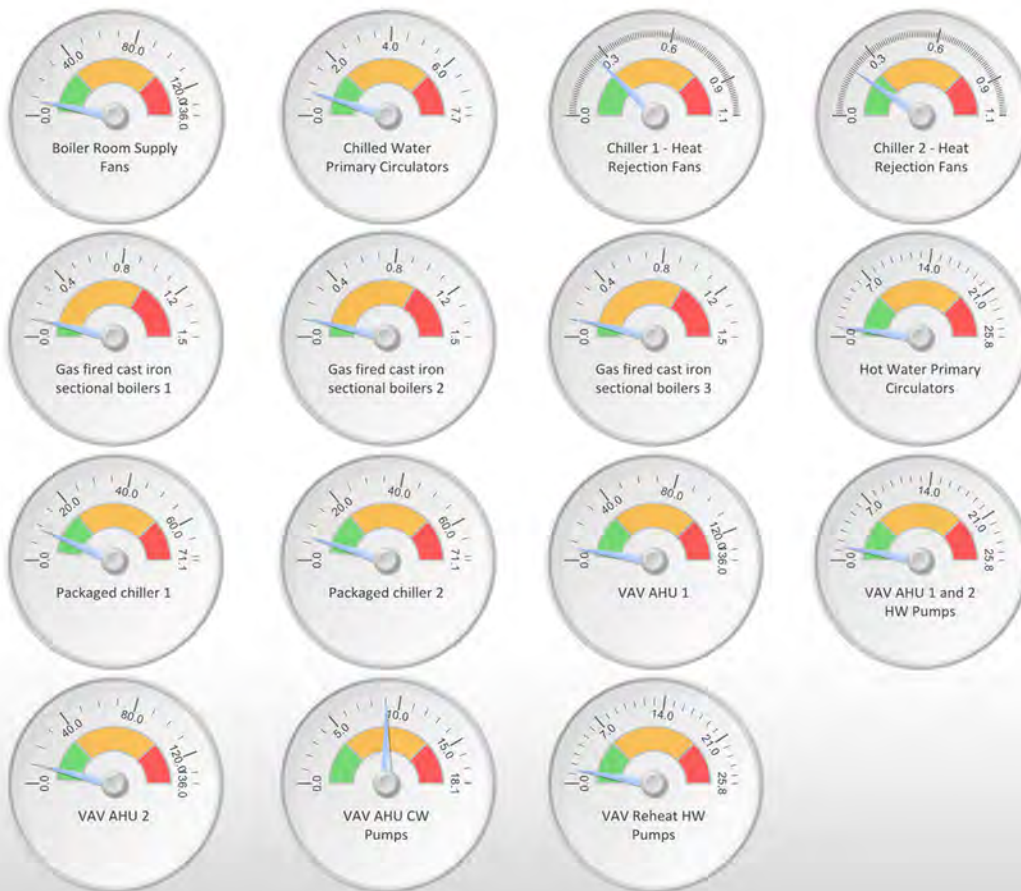
10th
most
efficient



Average Rolling Annual Electricity Consumption per m²



Component Level Electricity Consumption in kWh/m²/year against benchmark

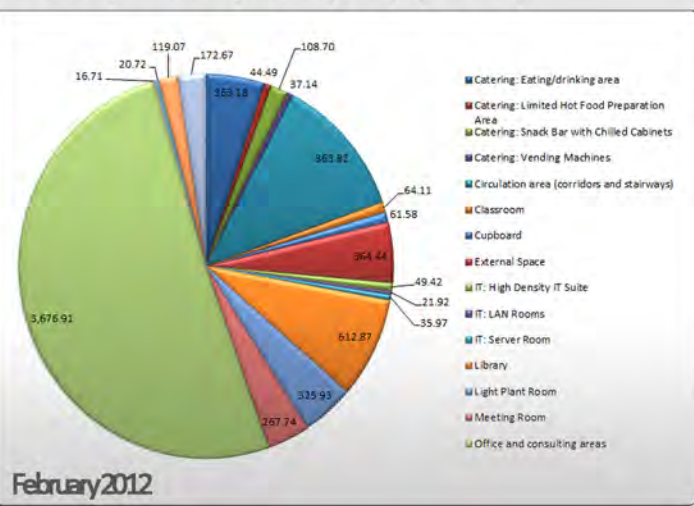




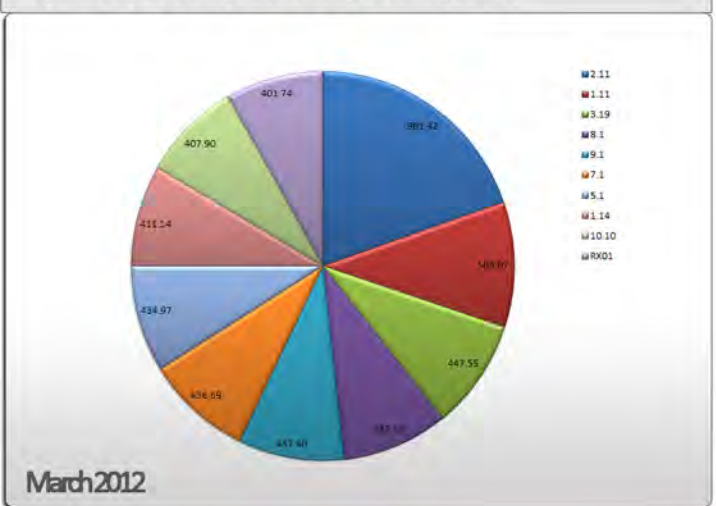
Performance Analysis

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Monthly Electricity Costs (GBP) by activity



Top 10 Spaces by Electricity Costs (GBP)



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Energy Conservation Opportunities

Cooling equipment / Free cooling : Replace or upgrade cooling equipment and heat pumps

The aim of this ECO is to reduce the energy consumption of chilled water pumps. The algorithm checks the cold water generator and its load efficiency. This is verified by examining the equipment's measured energy consumption, nominal electric power and operation hours.

Annual GBP Savings *

£2,726.00

Annual kWh Savings

18,800 kWh

Annual Energy Savings **

1.2%

Annual CO2 Savings***

11,089 KgCO₂e

Energy Conservation Opportunity Category: Energy Conservation Opportunity Name

Description and Analysis

Annual GBP Savings

£00.00

Annual kWh Savings

0 kWh

Annual Energy Savings

0%

Annual CO2 Savings

0 tons

* Calculations made based on February 2012 prices (14.5p/kWh) **Energy saving as % of building energy use ***2012 DEFRA Guidelines