



# Low Carbon Workplace

## *Energy efficiency performance summary*

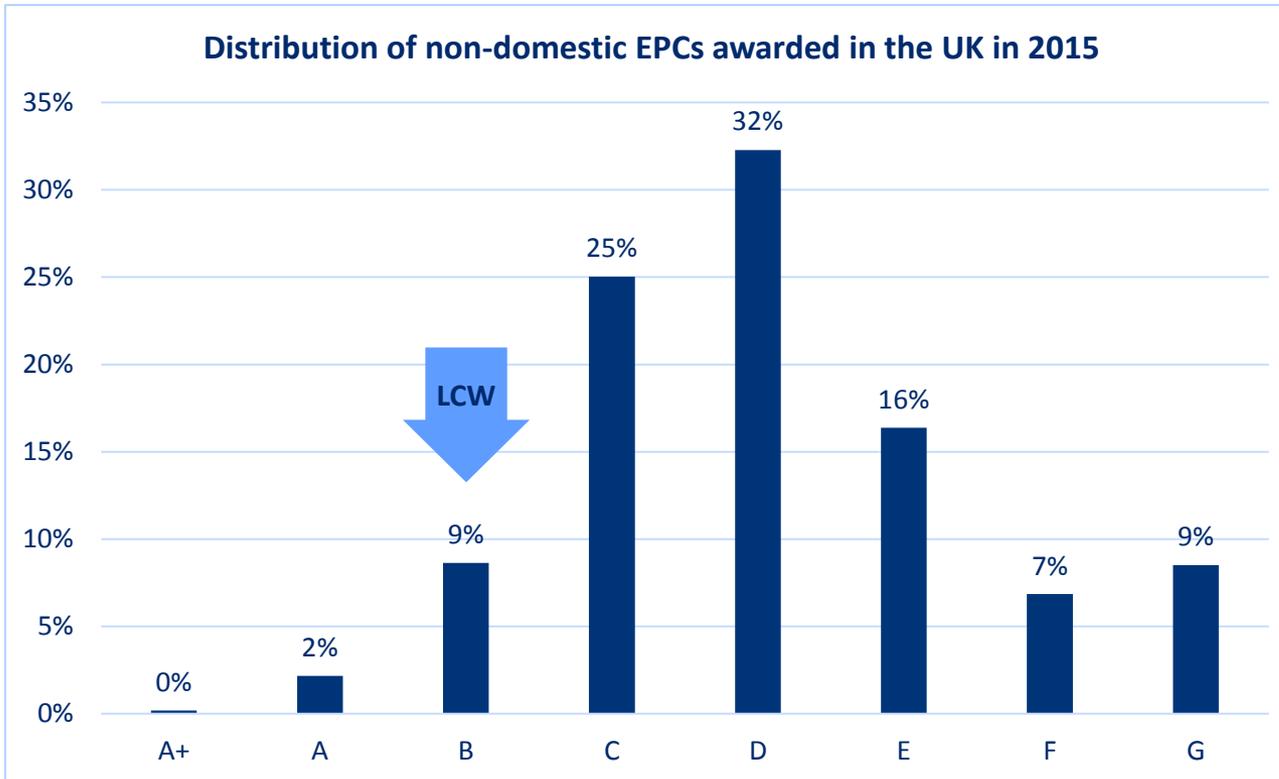
**April 2016**

# In a nutshell: outstanding performance

	What we set out to achieve	What we have achieved
<b>Better buildings</b>	Minimum EPC rating of 'C' with a target of 'B'	Average EPC rating of 'B'
	Minimum BREEAM rating of 'Very Good' with a target of 'Excellent'	BREEAM 'Excellent' rating on all buildings
<b>Used better</b>	Emissions per m <sup>2</sup> of 84 kgCO <sub>2</sub> /m <sup>2</sup> /year*	Emissions per m <sup>2</sup> of 68 kgCO <sub>2</sub> /m <sup>2</sup> /year in 2015
	Emissions per person of 1.5 tCO <sub>2</sub> /person/year	Emissions per person of 1.4 tCO <sub>2</sub> /person/year in 2015

\* Note that the emissions per m<sup>2</sup> target is now based on the Better Buildings Partnership Real Estate Environmental Benchmark, which updates annually. Therefore the target in future years is likely to be lower than 84kgCO<sub>2</sub>/m<sup>2</sup>/year.

# Average EPC rating of 'B'



- > Of the six completed refurbishments to date, five have achieved an EPC B rating and one achieved a C rating
- > The average rating improvement has been from E to B
- > By comparison, the average EPC for non-domestic buildings assessed in the UK in 2015 was D, with only 11% of buildings rated as B or better

# BREEAM Excellent rating on all refurbishments

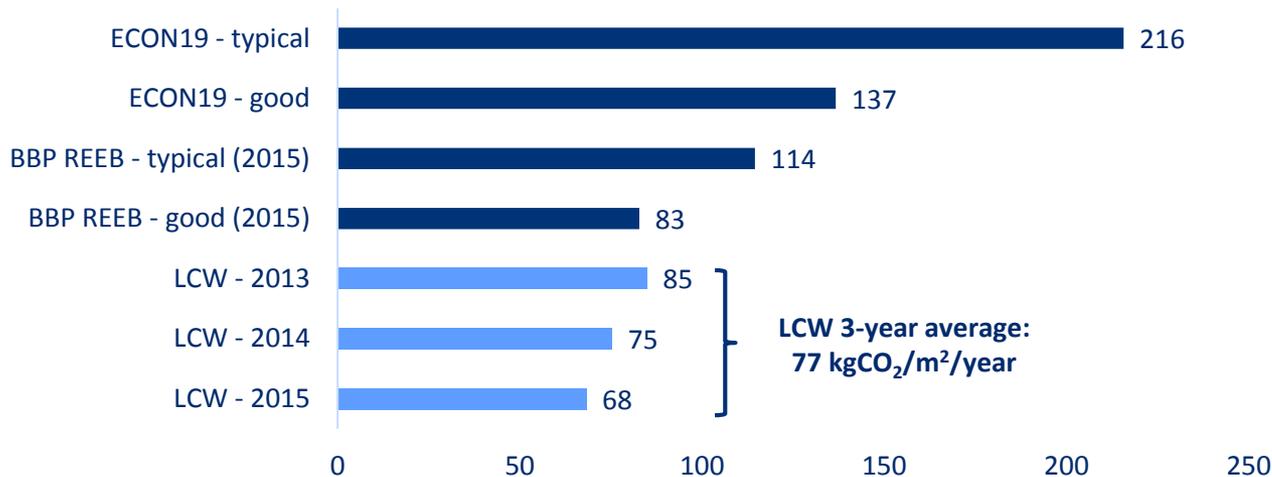
Distribution of BREEAM ratings in new construction non-domestic offices, 2012



- > All LCW developments have been awarded a BREEAM Excellent rating
- > This puts LCW buildings in the top 40% of BREEAM-rated offices
- > Only 2% of BREEAM-rated buildings achieve an Outstanding rating; these are highly unlikely to be commercial developments

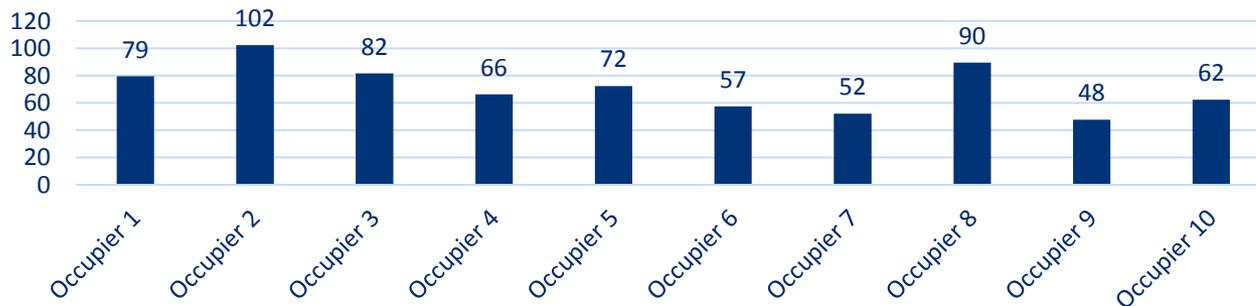
# Emissions per m<sup>2</sup> of 68 kgCO<sub>2</sub>/m<sup>2</sup>/year

**LCW portfolio emissions per unit area vs. industry benchmarks, kgCO<sub>2</sub>e/m<sup>2</sup>/year**

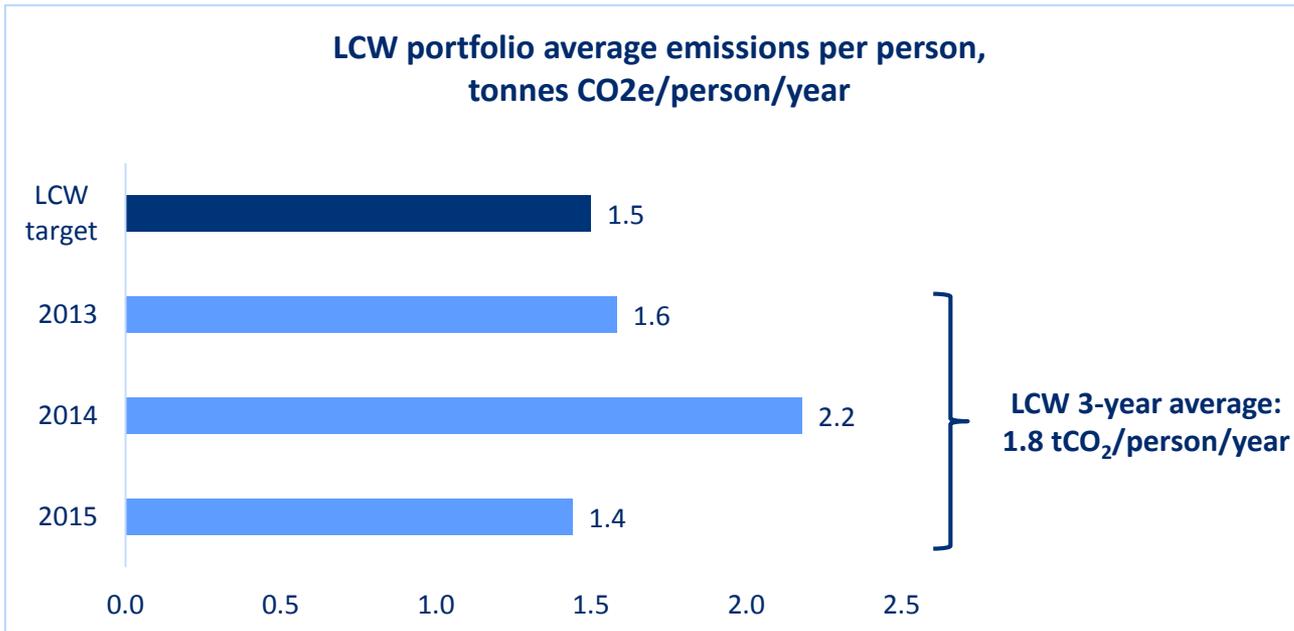


- Emissions per m<sup>2</sup> have been steadily improving from 85kgCO<sub>2</sub>/m<sup>2</sup> in 2013 to 68kgCO<sub>2</sub>/m<sup>2</sup> in 2015, with a 3-year average of 77kgCO<sub>2</sub>/m<sup>2</sup>
- This performance puts LCW significantly ahead of industry benchmarks (40% better than REEB-typical and 68% better than ECON19-typical in 2015)
- There has been significant variability across occupiers, driven by a combination of underlying building characteristics and occupier densities

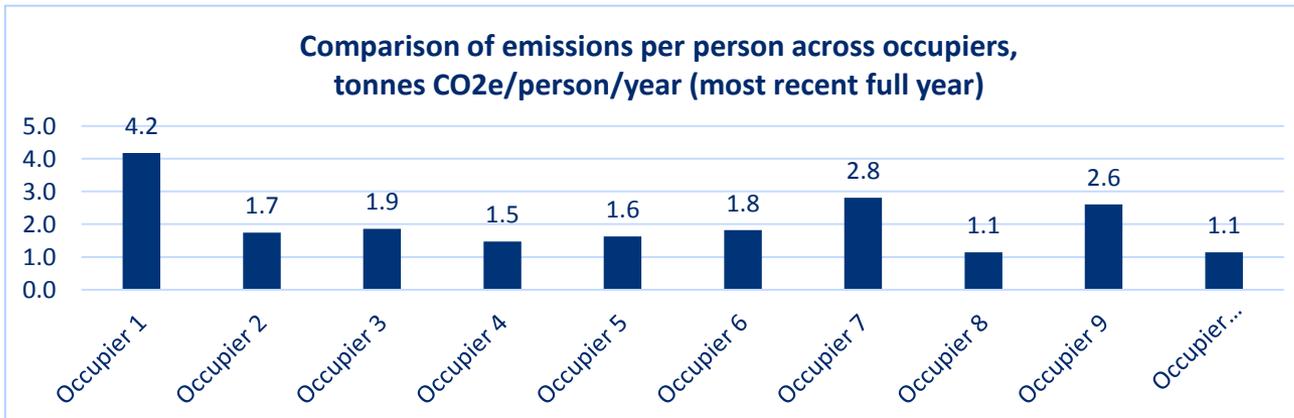
**Comparison of emissions per unit area across occupiers, kgCO<sub>2</sub>e/m<sup>2</sup>/year (most recent full year)**



# Emissions per person of 1.4 tCO<sub>2</sub>/person/year



- Emissions per person in 2015 were 1.4 tCO<sub>2</sub>/person/year, although they have fluctuated considerably year-to-year
- The high number in 2014 reflects the letting of a new property that was initially occupied relatively sparsely
- The significant improvement in 2015 reflects increased occupancy levels across the portfolio
- There has been significant variability across occupiers, largely driven by differing occupancy densities





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