

HOME BUILDING IN WALES: ENERGY SAVINGS IN NEW BUILDS

New build homebuyers in Wales are saving over £16 million in energy bills, as well as collectively reducing carbon emissions by over 20 million tonnes.

The average new build homebuyer saves £163 a month on energy bills, amounting to more than £1,900 a year, compared with purchasers of equivalent older properties. This saving rises to over £195 per month for purchasers of houses, rather than flats or bungalows, totalling £2,340 a year.

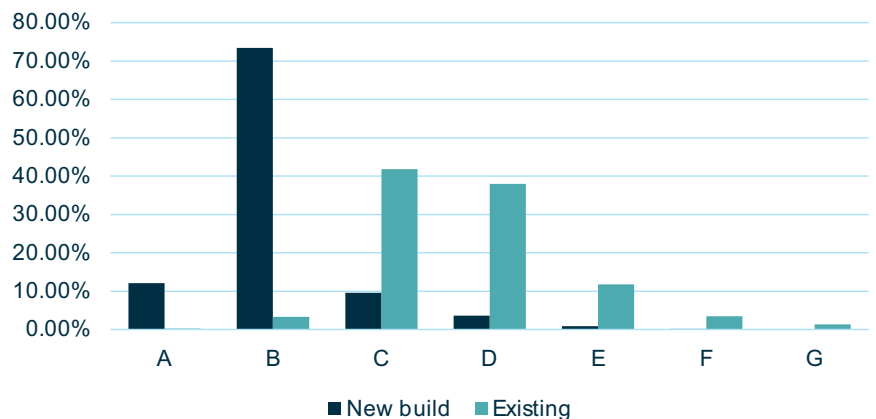
EPCS

In the year to March 2023, 86% of new build homes were rated A or B for energy performance, while less than 4% of existing properties reached the same standards. In contrast, over 55% of existing properties were given an EPC of D or below, while less than 5% of new build homes were of the same standard.

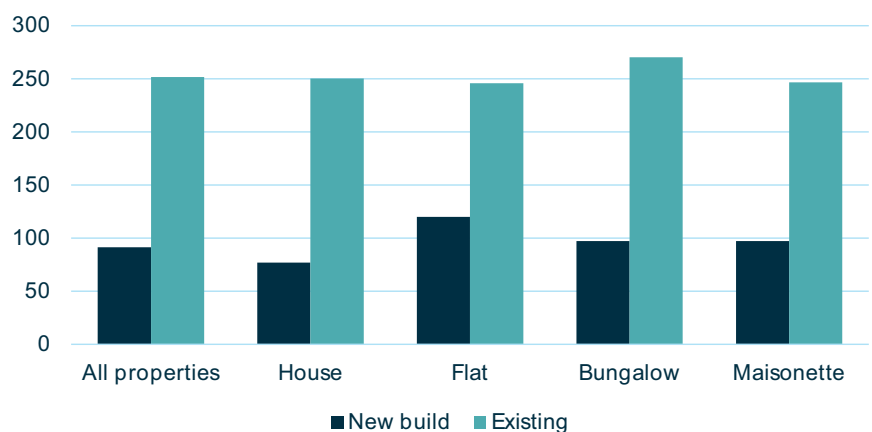
The improved energy efficiency of new build homes means that they require much less energy for the day to day running of a household. The average new build property uses approximately 8,454 kWh a year, as compared to older properties which use an annual average of 22,465 kWh meaning that the average new build uses over 62% less energy a year.

The average new build used 91.5 per m² per year, while the average existing property used 251.76kWh per m². As the graph below shows, across all property types, new builds used significantly less energy per m².

EPCs of new build and existing dwellings, year to March 2023



Energy use per m² (kWh/PA)



BILLS

Due to new build properties requiring much less energy, buyers of these properties will see significantly lower bills.

	NEW BUILD	EXISTING	SAVINGS	% SAVING
All properties	£1,183.70	£3,145.24	£1,961.54	62%
Houses	£1,186.22	£3,528.73	£2,342.51	66%
Flats	£936.88	£1,921.79	£984.91	51%
Bungalows	£1,192.04	£3,083.29	£1,891.25	61%
Maisonettes	£1,192.04	£2,575.40	£1,383.36	54%

CARBON EMISSIONS

While the financial benefits are reason enough to buy a new build home, not only do they reduce bills for purchasers, but they also significantly reduce the amount of carbon emitted each year.

Due to the decreased energy usage as outlined earlier in this report as well as new technologies, improved industry knowledge and low carbon heating, in the year to March 2023, the average new build emitted 1.38 tonnes of carbon, just 66% of the 4.03 tonnes emitted by an older property, a saving of 2.65 tonnes per year. This saving rises to 3.05 tonnes per year for houses.

Annual carbon emissions of new build vs existing properties (tonnes)

