

Estimated fuel bill savings from heating control upgrades



The savings are based on the average price for gas of 10p per kWh under the Energy Price Guarantee from 1 October 2022. (Source: Ofgem¹.) It is assumed that this price of gas remains the same over the lifetime of these measures. The lifetime is assumed to be 15 years.

The calculation of the annual gas used for heating can be found on the BEAMA website².

Potential energy savings for TRVs, load and weather compensation are based on tests, the details of which can be found on the BEAMA website³.

Savings from smart control are based on a study by the Behavioural Insights Team⁴. A description of the reference temperature control classes (I, IV, V and VI) can be found on the BEAMA website⁵.

All savings are compared to a house with a baseline of a basic timeclock, a Class 1 on/off room thermostat, and manual radiator valves.

		Estimated annual savings					
		Typical cost of heating with a gas boiler	Upgrade radiator valves to TRVs	Room thermostat upgrade			Adding all ticked heating controls
				Load compensation (Class IV)	Load/weather compensation (Class V/VI)	Smart control	
DETACHED	£1, ') +	£\$* &	£1' *	£189	£95		
		✓	✓	✓	✓	£484	
END-TERRACE/ SEMI-DETACHED HOUSE	£+) #	£#)'	£+)	£116	£58		
		✓	✓	✓	✓	£297	
MID TERRACE	£)' #	£1%	£)'	£90	£45		
		✓	✓	✓	✓	£230	
FLAT	£&) +	£* (£&*	£57	£29		
		✓	✓	✓	✓	£147	
		Estimated savings over 15-year lifetime of the controls					
DETACHED	£2%#6*'	£&,\$(%	£2,%(*	£2,842	£1,421		
		✓	✓	✓	✓	£7,253	
END-TERRACE/ SEMI-DETACHED HOUSE	£1&#' ('	£\$!(\$#	£1,&' (£1,747	£874		
		✓	✓	✓	✓	£4,459	
MID TERRACE	£1#,\$('	£2," \$)	£1,#\$(£1,351	£676		
		✓	✓	✓	✓	£3,448	
FLAT	£) .#*'	£1,\$+%	£) #8	£862	£431		
		✓	✓	✓	✓	£2,200	
				✓	✓	£2,310	

1 <https://www.ofgem.gov.uk/information-consumers/energy-advice-households/check-if-energy-price-cap-affects-you>
 2 <https://www.beama.org.uk/resourceLibrary/uk-homes---analysis-of-kwh-gas-consumption-for-heating.html>
 3 <https://www.beama.org.uk/portfolios/heating-controls/energy-savings.html>
 4 <https://www.bi.team/publications/evaluating-the-nest-learning-thermostat/>
 5 <https://www.beama.org.uk/resourceLibrary/temperature-control-classes-from-eu-energy-labelling-regulation-for-space-heaters.html>

