

# Neopor Insulation



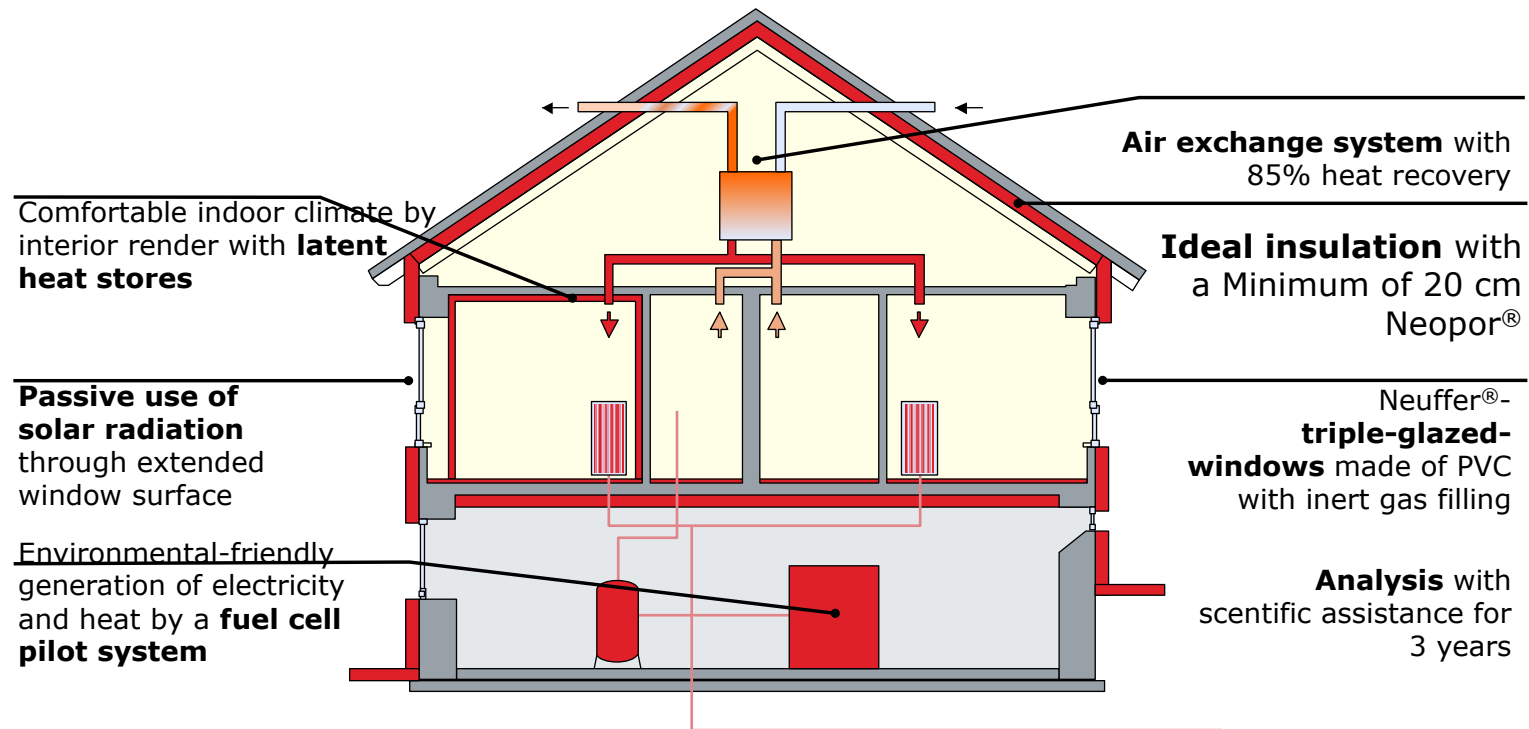
1 tonne  
Neopor® saves  
1,260 litres of  
heating oil

# Ready-to-use Micronal® PCM SmartBoard™ 23/26

<b>Length</b>	<b>2,00 m</b>
<b>Width</b>	<b>1,25 m</b>
<b>Thickness</b>	<b>15 mm</b>
<b>Weight</b>	<b>11,5 kg/m<sup>2</sup></b>
<b>PCM content</b>	<b>ca. 3 kg dry/m<sup>2</sup></b>
<b>Heat capacity (latent)</b>	<b>ca. 330 kJ/m<sup>2</sup></b>



# Innovation on the 3-litre-house

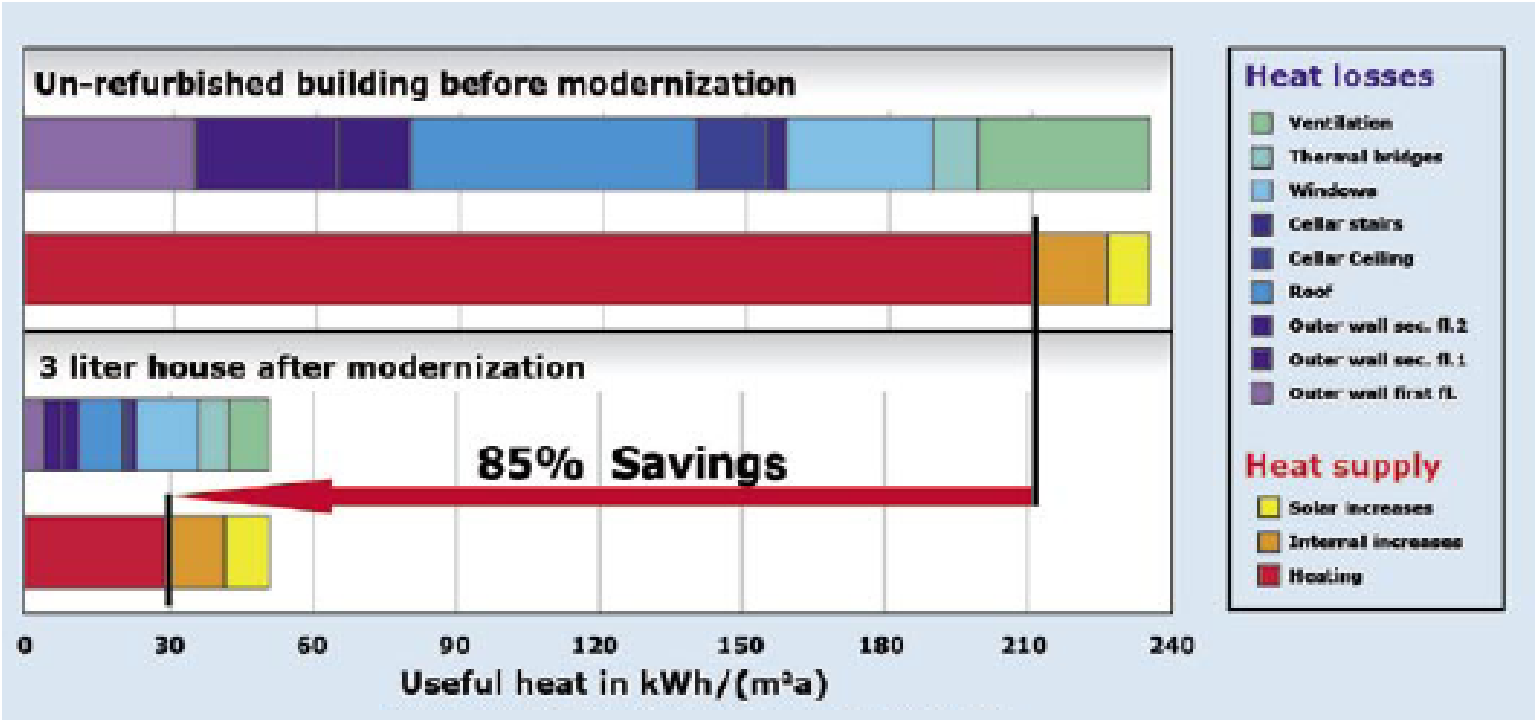


# 3 Litre house



2002: not even 3 litres of fuel oil needed!

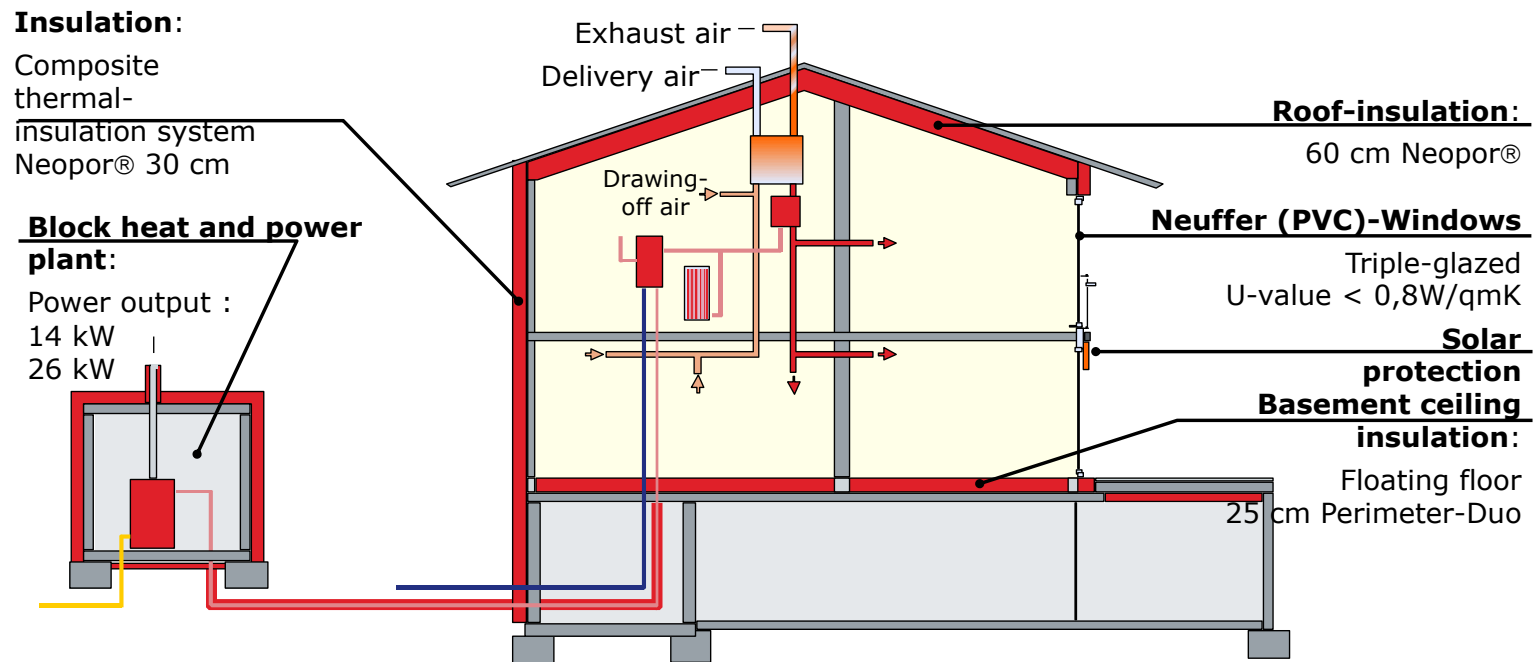
# Modernisation 3 litre house



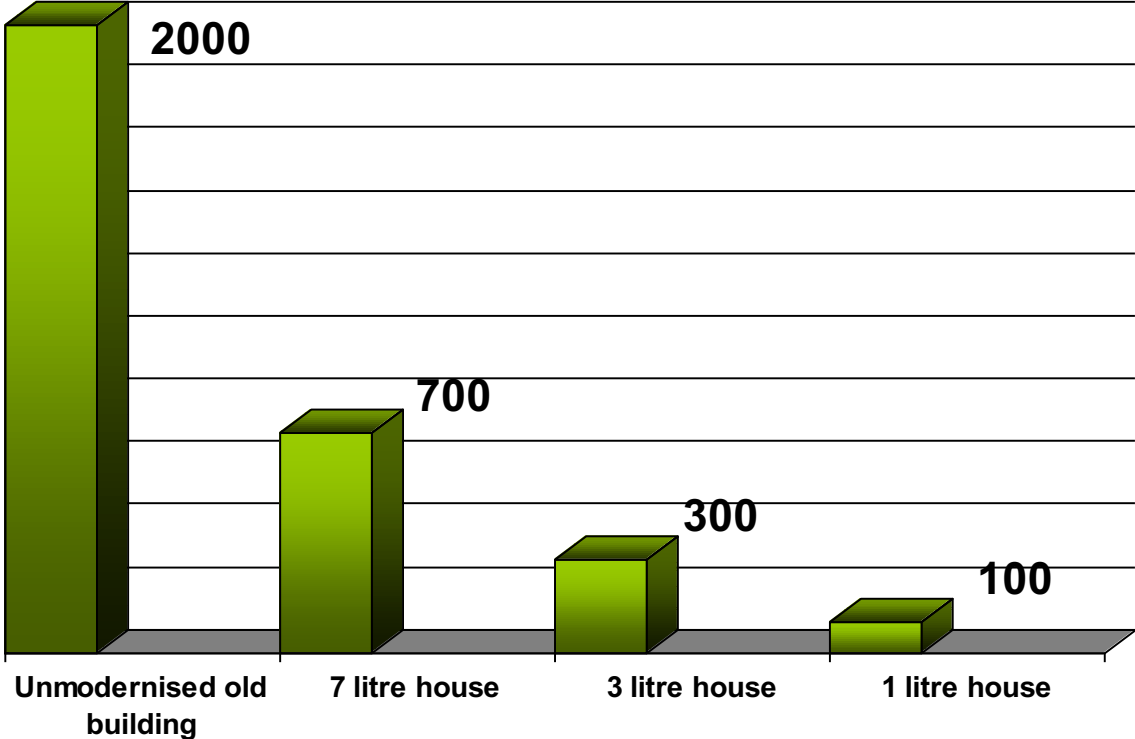
# New building 1-litre-house



# 1-litre-town-house: technology



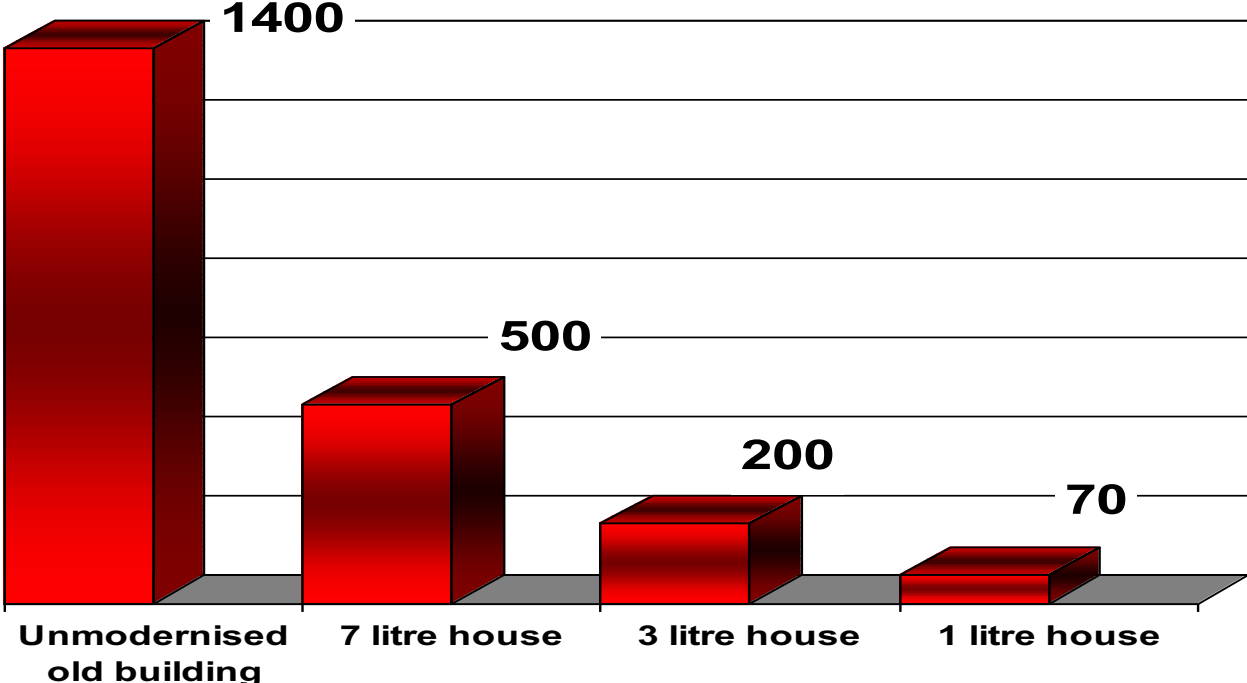
# Heating fuel consumption litres



Apartment measuring 100 m<sup>2</sup> - yearly values

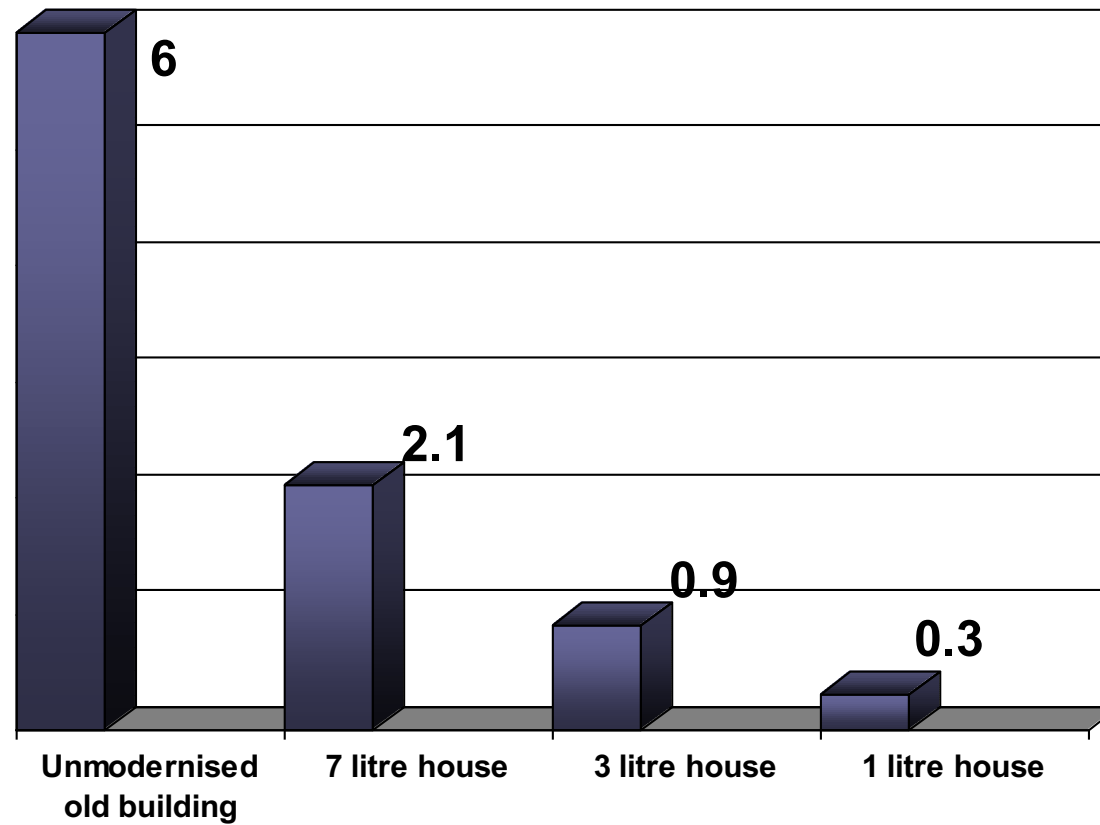


# Heating fuel costs in £



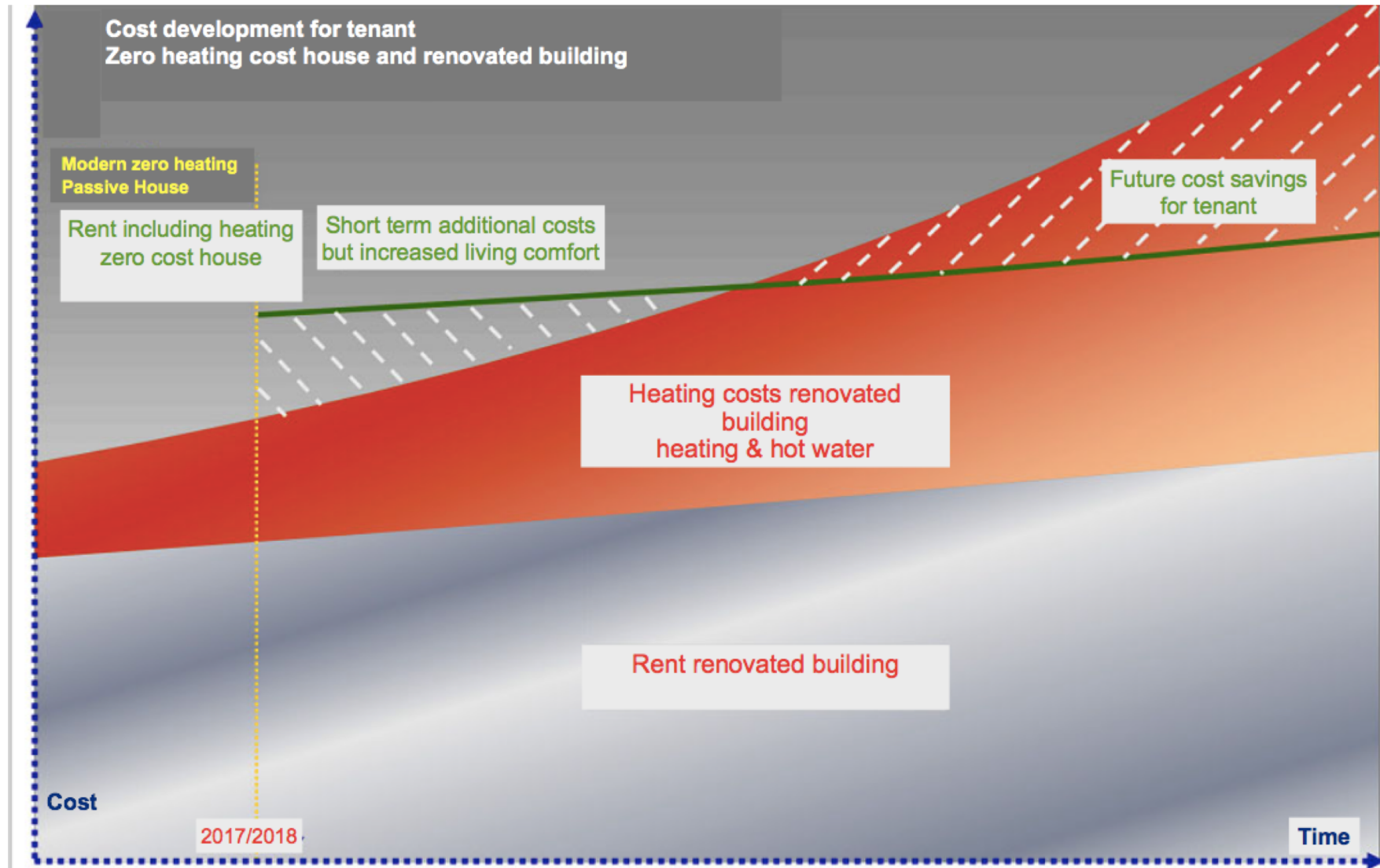
Apartment measuring 100 m<sup>2</sup> - yearly values

# CO<sub>2</sub> emissions - tonnes



Apartment measuring 100 m<sup>2</sup> - yearly values

# Zero Cost / Passive House



# Value Enhancement

	No action	refurbishment	modernisation 7-Liter house	modernisation Passive house ventilation	Zero heating costs house
	safeguard	Conservation of value	Value enhancement	Value enhancement	Value enhancement
Energy consumption	12 Litre	12 Litre	7 Litre	<b>2 Litre</b>	2 Litre
Heat cost object	tenant	tenant	tenant	<b>- 0 -</b>	- 0 -
Heating technology	conventional	conventional	conventional	<b>- 0 -</b>	- 0 -
Debit	240.000 £	648.000 £	972.000 £*	<b>370.000 £*</b>	300.000 £*
Loan	0 £	0 £	0 £	<b>1.200.000 £** 400.000 £</b>	1.200.000 £** 350.000 £
Rent	4,10 £/m <sup>2</sup>	4,10 £/m <sup>2</sup>	5,25 £/m <sup>2</sup>	<b>6,50 £/m<sup>2</sup></b>	6,75 £/m <sup>2</sup>
Maintenance	1,67 £/m <sup>2</sup>	1,33 £/m <sup>2</sup>	1,00 £/m <sup>2</sup>	<b>0,70 £/m<sup>2</sup></b>	0,50 £/m <sup>2</sup>
Vacancy risk	25-35%	12,5-25%	5 – 10%	<b>3,5-5%</b>	3,5-5%
<b>Return on investment</b>	<b>4 %</b>	<b>3,85%</b>	<b>6,50 %</b>	<b>6,3 %</b>	<b>8,00 %</b>
Degree of innovation	- 0 -	- 0 -	standard	<b>high</b>	maximum

\*Activation \*\* KfW (German Government development fund)