

Net zero measure	Main features	Financials
Loft insulation to 300mm	<ul style="list-style-type: none"> <li>• Top priority measure</li> <li>• Easy and cheap</li> <li>• Most commonly a 200mm top up to existing 100mm insulation laid between joists</li> <li>• May save 10-15% of heating bill</li> <li>• Simple measures available to combine with boarded loft space.</li> </ul>	3yr payback / ROI 33%. Investment £300 (DIY), Saving ~£100 pa in average house
Solar PV	<ul style="list-style-type: none"> <li>• Easy bolt on measure</li> <li>• Clear financial returns. Need to pair with smart export tariff.</li> <li>• Requires suitable roof, without too much shading</li> <li>• Extra value if paired with heat pump or electric car</li> <li>• Likely to enhance home value</li> </ul>	ROI 10-20%/ Payback 5-10 years Investment £2-£10k for 2-7kW array. (average size 4kW)
Heat pump	<ul style="list-style-type: none"> <li>• The only net zero heating tech</li> <li>• Great paired with solar PV</li> <li>• Need to get installation and operation right to make returns</li> <li>• Suitable for all houses</li> <li>• UK Government grant available (£7.5k)</li> <li>• Lasts longer than a boiler (~20 years).</li> <li>• Saves as much carbon as an EV for much less £!</li> </ul>	ROI 10%, better still if combined with solar PV. Payback ~10 Years (nb gas boiler has no return/payback)  Investment £1-4k with grant
Draught proofing	<ul style="list-style-type: none"> <li>• Low cost, instant results</li> <li>• Vital for comfort as well as energy saving</li> </ul>	A few £ to £200.
Replacement windows	<p><b>Refurb measure</b></p> <ul style="list-style-type: none"> <li>• Only for when windows need replacing anyway, full capital cost will not pay back on energy savings alone</li> <li>• Heat efficient windows (eg triple glazing) may be little/no pricier than standard windows</li> <li>• Improve comfort and reduce condensation</li> <li>• Impact on house appearance and value is the most important financial factor.</li> </ul>	Main investment factor is <i>incremental</i> cost (if any) for high efficiency windows, vs likely energy savings. See Refurb for more details  Investment £10k+, incremental cost may be +0-20%.
External Wall Insulation	<p><b>Refurb measure.</b></p> <ul style="list-style-type: none"> <li>• Only for when render replacement needed, full capital cost unlikely to pay back on energy savings alone.</li> <li>• UK VAT saving for insulated render vs plain render may mean no extra cost for insulated version</li> <li>• Impact on house appearance and value is the most important financial factor.</li> </ul>	Returns from house value > energy savings Investment 10-15k
Solid wall insulation (internal)	<p><b>Refurb measure.</b></p> <ul style="list-style-type: none"> <li>• Can be used for individual / problem cold rooms</li> <li>• Potentially disruptive</li> </ul>	Returns from comfort > energy savings
Floor insulation	<p><b>Refurb measure</b></p> <ul style="list-style-type: none"> <li>• Essential for extension but hard to retrofit.</li> <li>• Carpets with thick underlay can also work to insulate floors</li> </ul>	
Battery	<ul style="list-style-type: none"> <li>• Can generate returns through increasing self-use of solar, or import/export with smart tariffs.</li> <li>• Does not generate power, in fact some small losses (~5%).</li> <li>• Financial returns currently marginal if you have a strong export tariff for solar PV (15p/kWh+).</li> <li>• Will not normally work during power cuts, unless this capability ("islanding") is designed in, normally at extra cost.</li> <li>• Costs likely to reduce</li> </ul>	Investment £3-10k Payback (if any) depends on energy tariffs and battery management approach.
Electric car (EV)	<ul style="list-style-type: none"> <li>• Carbon savings similar to impact of heat pump: 1.5-2t pa, for average 7400 miles.</li> <li>• If you can avoid owning a car altogether this is better - consider car club.</li> <li>• Not strictly within Net Zero Home scope!</li> </ul>	Cost & carbon savings dependent on vehicle being replaced: eg greater for large petrol vehicle than for hybrid (HEV), and annual mileage.