

## Annex 2a

### Investment / Revenue/ Carbon saving Comparison

There are many technologies and approaches that can be used to reduce carbon emissions from buildings, some have quick returns in terms of carbon and finance, others save carbon but have no financial incentive to encourage investment.

The table below demonstrates the effect each initiative would have.

Typical energy consumption for a building of 1200 sq.m floor area without any energy improvement measures equates to 556943 Kwh/year (£23K revenue cost at today's prices) and 123 Tonne CO2/year.

Technology	Investment k £	CO2 save Tonne/year	Revenue save/-cost £	Payback Years	Typical Application
Gas boiler	Medium	Nil	Nil	Never	Status quo
Solar Hot water	Low	Low	Low	Prohibitive	New Build
Photovoltaic panels 10Kw	High	Low	Low	Prohibitive	New Build site specific
Wind turbine	Medium	Low	Low	Long term	Site specific
Reduce Heating 1degC	Nil	Low	Low	Quick	Everywhere
Increase loft insulation	Low	Low	Low	Quick	Everywhere
LED lighting	High	Low	Medium	Prohibitive	New Build
Auto Lighting Control	Low	Medium	Medium	Quick	Existing & new buildings
Double Glazing	Very High	Medium	Medium	Never	When windows are life expired
Draughtproofing	Low	Medium	Medium	Medium term	Everywhere
Improved Energy Controls	Low	Medium	Medium	Medium term	Medium/large premises
Loft insulation	Low	Medium	High	Quick	Everywhere
Cavity wall insulation	Low	Medium	High	Quick	Post 1960 property
Solid wall insulation	Medium	Medium	High	Medium term	Pre 1960 property
Heat pumps	Very High	High	High	Prohibitive	New Build smaller sites
Bio-Mass boilers	Medium	Very High	Nil	Never	Larger premises
Bio-diesel boilers	Medium	Very High	Cost	Never	Existing oil fired plant

