

Sustainable Building

Training, Green building,
Consultancy, Surveys

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An introduction to sustainable community buildings

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Green up your Home, your World & your Future



Terminology

-‘Eco’

-‘Green’

-‘Sustainable’

-‘Low Impact’

-What do they all mean?!

-And what is ‘Greenwash’?

Dictionary definitions

‘Eco’: ‘Concerning living things in relation to their environment’

‘Green’: ‘Concerned with... conservation of the world’s natural resources and improvement of the environment’

‘Sustainable’: ‘Practice that sustains a given condition (economic growth, population, for example) without destroying or depleting natural resources, polluting the environment etc’

Or achieving what you need today without messing it up for your grandchildren (and theirs..... and theirs.....)

'Low impact': Work that one out!

Green-wash (green'wash', -wôsh') – verb:
the act of misleading consumers regarding
the environmental practices of a company
or the environmental benefits of a product
or service

What constitutes a sustainable
Community Building?

High comfort
Low environmental impact
Low energy use
Income exceeds running costs
Low carbon

Or should that be:

High comfort

Very Low environmental impact

Very Low energy use

Income exceeds running costs

Very Low carbon

?

Is this a sustainable building?



Is this?

Or this?





Well, it's a big improvement on this!



But what about these?!

Renewable energy – the universal panacea?

- Building owners can be tempted to spend money on renewable energy ‘badges’ which could have been better spent on ‘fabric measures’

For example...

Does your building need solar water heating?
Is your water use really that high, or is it just for
hand- and pot- washing?

Is an air-source heat pump (ASHP) right for your building?

ASHPs are undoubtedly far cheaper than GSHPs, but think insulation first, and thin twice if you have mains gas.

EST trials suggest ASHP CoP only 2.0ish, and with elec CO₂ at 0.617kg/kWh and gas @ 0.226, all else being equal, ASHP CO₂ emissions will be significantly higher.

Will things change to make renewable energy worth installing?

PV (solar electricity) already is, and heat-generating technologies may now be (2011 for non-domestic, 2012 for domestic), *but do the insulation first!!*

Building Regulations 'Part L' – scrape through
or 'Regs plus'?

Please, please....

Insulate, insulate, insulate! Your fuel bills will
thank you!

Sustainability's not all about what you put in
– it might also be what you leave out

OK, so what if you have no
money?

Start small!

Up to 30% of the heat lost from
an old building is via air
leakage. If you can't afford the
insulation measures, find the
ventilation heat losses, cure
them and start saving!