

- A site to visit. The [Centre for Alternative Technology](#) has several sustainable buildings made from different materials but you may want to visit somewhere closer to your school.
- If you cannot find any examples of sustainable buildings to visit, try and find out about buildings that have had energy saving features added to them, such as insulation.
- Even if you cannot find any positive sustainable examples, it will still be valuable to leave the classroom. Investigate a traditional building using natural materials – the materials may have low embodied energy, but how energy efficient is the building when in use? Or even investigate bad examples – pupils will gain a lot from being able to apply their knowledge.

Organise a trip to see a building or collection of buildings. Ideally, you would aim to show the pupils examples of good practice. A trip to the Centre for Alternative Technology in Machynlleth will demonstrate several buildings that use a range of low embodied energy materials. Find out about 'eco buildings' near your school. Having seen the presentation beforehand, pupils will be able to assess the building from their own perspective. For example, many modern buildings are called eco friendly because they are very energy efficient when occupied, but they may have still used materials with high embodied energy, like concrete. It does not matter if your field trip does not highlight excellent practice. The most important thing is to get the pupils investigating and discussing the issues for themselves. If there are no eco buildings at all that are near enough for you to visit, or you are very restricted for time, then simply take them down the street. Investigating eco unfriendly buildings is just as valuable an exercise, as it will motivate them to push for improvements! Pupils may either record or not record their observations as you see fit. Drawings, notes, photographs and video recordings will all act as memory joggers. It would be very useful to set up an interview with someone related to the building. This could be an architect, a caretaker, or a resident. As with previous interviews, ask the pupils to prepare relevant questions in advance, but don't inhibit spontaneity – by this stage of the project their interview skills should be improving, and they should be able to build on the response given by asking for further details or a connected question, instead of just rattling through their list of questions without listening to responses!

Particular points to investigate during the site visit are:

- What the building materials are made from
- Orientation of building (south facing for solar gain)
- Use of glass. Double or triple glazing used on south facing windows or conservatories can make use of passive solar. Just like the greenhouse effect, the light energy can pass through the glass, but when it changes to heat energy, the heat is trapped by the glass.
- Is it close to facilities like shops or bus-stops, or will people need cars to get to it?
- Energy efficiency measures – how is it insulated?

- Use of local materials
- Aesthetics – do they like it?
- Is there green space for growing?



