



with David Griffiths

Horsham Society

Cost and payback of sustainability

Sustainability is playing an ever more important role in our lives as natural resources become less readily available and the need to reduce greenhouse gases, pollution, waste and environmental degradation becomes greater.

When the word 'sustainable' is related to homes, it means those which are designed to reduce the overall environment impact during and after construction. It is a home which uses energy and materials more effectively both during construction and following completion whilst minimising the damage to natural systems.

The Code for Sustainable Homes became operational in 2007 and comprised code levels 3, 4, 5 and 6. It allowed councils to select what code level they required for developments. However in 2015 the scheme was scrapped and the Building Regulations revised to incorporate elements of the code to provide the equivalent of Code Level 4. A new document was then issued called the New National Building Standards.

To complicate matters the code is still operational, but generally voluntary. Where a developer wishes to take



Solar farms are increasingly commonplace.

advantage of this option, in addition to compliance with the New National Building Standards, the dwellings are inspected during construction and assessed upon completion. A certificate is then awarded by the Building Research Establishment (BRE),

with a grading of one to six stars.

However, the provision of sustainable homes comes at a cost. Solar panels which are a common sight in Europe are now becoming a regular feature within Great Britain. The idea is for the solar panels to supplement the boiler and heat water for both heating and hot water supply using the natural output of the sun. Whilst initially there are additional installation costs, these can be recovered over a number of years. Alternatively 'ground source heat pumps' or 'air source heat pumps' can be installed. These extract heat from either the ground or air which is then used to heat the water. However the outlay of such a system is quite considerable.

Solar farms with rows of photo voltaic panels are increasingly becoming commonplace in our countryside and these harvest the sun's rays to generate electricity.

These panels can also be installed on domestic roofs where they will generate electricity for the property. Initial installation costs can be offset by selling any surplus electricity generated to the National Grid, giving an income for the household. The successful use of both solar and photo voltaic panels is subject to the orientation

of the property as the panels should ideally face south to maximise the input from the sun. Installation of the panels may be subject to planning approval.

A way of reducing the use of metered water is to harvest rainwater in an underground tank. It can then be used to supply toilets and watering the garden. This water is commonly known as grey water. Waste water and effluent is traditionally piped to a sewerage works or septic tank for treatment. Long term cost savings can be achieved by constructing reed beds on developments where waste and effluent are naturally converted into clean water, which can then be allowed to percolate into the ground.

Whilst sustainability comes at a cost, it something we should all consider, if we are to preserve the planet.

The Horsham Society is concerned about the past, present and future of the town. It seeks to promote good planning and design for the built environment and open spaces. Membership of the Horsham Society is open to anyone who shares these concerns. For more information, visit the website www.horshamsociety.org or phone 01403 259038.