Introduction
The Government has set targets to increase energy generation from renewable sources. This is due to growing concerns over the impacts of climate change and the future decline in the supply of fossil fuels. More small-scale generation of heat and power is being encouraged. This ‘microgeneration’ is generally considered to be an installation with a capacity of less than 45kW of heat or 50kw of electricity.

Areas of Outstanding Natural Beauty
Area of Outstanding Natural Beauty (AONBs) are nationally designated areas of great distinctive character and natural beauty. Management Plans for the Wye Valley and Malvern Hills AONBs support the considered use of renewable energy through microgeneration.

Landscape
- If you are proposing to install a solar panel in an AONB it would be helpful to consider the likely visual impacts. You could identify local views and, if possible, choose the least prominent location in the landscape. There may be important views from settlements, public access land, public rights of way etc.
- Panels mounted on buildings may have a smaller visual effect than those which are freestanding. If freestanding panels are to be used consider siting these close to existing buildings and away from open landscapes. Impacts could also be reduced by siting them on downslopes.
- In villages, consider whether there might be any impacts on the overall appearance of a collection of buildings or roofs (see below for further advice).
- Aim to choose a colour and design that blends with building materials and surrounding landscapes. For example, consider non shiny, anti-glare options that will be less conspicuous in the wider landscape.

Biodiversity
Installing a solar panel on a building will usually involve associated tasks such as pipe work and wiring. This can cause disturbance to bats and birds which may be roosting or nesting and may also impede future access to roosts and nests under tiles, slates, etc. If you suspect bats and birds may be affected you can seek further advice from your Local Authority, Natural England or the Countryside Council for Wales.

Planning Requirements
There are two types of solar panel. Photovoltaic panels or tiles generate electricity from the sun’s energy. Solar panels or collectors (flat plate or evacuated tubes) use the sun’s radiation to heat water. The installation of both types of technology is permitted development if it is on or within the curtilage of a dwelling house, does not protrude more than 200mm beyond the plane of the roof slope and is no higher than the highest part of the roof. There are further limitations in Conservation Areas and on Listed Buildings.

The Purpose of this Guidance
The purpose of this guidance is to help you to plan for installing solar panels in an AONB. Specifically, it provides simple advice on ways in which you could help to reduce any impacts on the special features of the area.
AONB GUIDANCE – Solar Panels

Built Heritage

- Photovoltaic panels can be used as a building material integrated into the roof or facades of buildings, e.g., solar shingles, solar slates, solar glass laminates, and other solar design solutions. These can be integrated with traditional tiles or slates.

- Solar collectors or evacuated tubes can be incorporated into the existing roof in the same way as roof windows. Ideally, they require an angle of 30-40 degrees, ideally facing due south.

- Consider the effect of any solar installation on the appearance of the building. The examples to the right show how the positioning of panels can help to retain the balance and appearance of a building. It is a good idea to line panels up with existing windows and roof lights and to ensure the sizes of the panels are complementary to existing features on the building or nearby buildings.

- Where the installation of solar panels will affect a Listed Building or is in a Conservation Area, you will need to contact your local planning department as you may need Listed Building Consent and/or planning permission. You will also need to consider design issues such as fixings, colour, reflectivity, and size – advice can be sought from the Local Authority’s Conservation Officer.

- Solar panels can blend in well with contemporary buildings, industrial buildings, and agricultural buildings. Also, as shown in one of the pictures, outbuildings or extensions can provide good locations for panels that have minimal effect on the overall building.

- Solar panels with dark surfaces are more likely to be acceptable on buildings with slate roofs or on new buildings in areas where slate roofs are characteristic.

- Roof-mounted panels should be installed so that they are flush with the roof and do not protrude above the roofline. This can help them to blend better with their surroundings.

- You will need to comply with the Building Regulations and your local planning authority will be able to advise you.

Useful Contacts


Low Carbon Buildings Programme
www.lowcarbonbuildings.org.uk/about/


Energy Saving Trust – www.energysavingtrust.org.uk/


Natural England – www.naturalengland.org.uk

Countryside Council for Wales – www.ccw.gov.uk

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A 5kW photovoltaic roof on a new community village shop