203: Electrical installations technology  
**Worksheet 21: Micro-renewable energies**

**Answer guide**

Try the following problems.

1. **List four requirements that must be taken into consideration when planning to install a micro‑renewable system.**

**Legal**

**Regulatory**

**Building location**

**Building fabric**

1. **Is planning permission required to install a micro‑hydro system?**

**Yes**

1. **What licence is required for a micro‑hydro system?**

**Abstraction licence**

1. **List four benefits of a micro photo-voltaic system.**

**Electricity costs will be reduced**

**The government’s feed-in tariffs pay the consumer for electricity generated**

**You can sell electricity back to the Grid**

**You cut carbon footprint**

1. **List five requirements for a building-mounted wind turbine.**

Select five from:

**the house is detached**

**the top of the turbine blades is no more than three metres above the top of the house, or 15 metres above the ground**

**all of the turbine is at least five metres from the edge of the householder's property**

**there is no other wind turbine and no air source heat pump on the site**

**the bottom of the blades is at least five metres above ground**

**the turbine’s swept area is no more than 3.8m2**

**the site is not on land safeguarded for aviation or defence purpose.**