

**EXPLANATORY MEMORANDUM TO**  
**THE CLIMATE CHANGE AND SUSTAINABLE ENERGY ACT 2006**  
**(SOURCES OF ENERGY AND TECHNOLOGIES) ORDER 2008**

**2008 No.1767**

1. This explanatory memorandum has been prepared by the Department for Business, Enterprise and Regulatory Reform and is laid before Parliament by Command of Her Majesty.
2. **Description**
  - 2.1 The Climate Change and Sustainable Energy Act 2006 defines ‘microgeneration’ in relation to technologies and sustainable energy sources. This definition is key to the definition of microgeneration in other related legislation.
  - 2.2 Currently, the sources or technologies defined as ‘microgeneration’ in the Climate Change and Sustainable Energy Act 2006 are:-
    - (a) biomass;
    - (b) biofuels;
    - (c) fuel cells;
    - (d) photovoltaics;
    - (e) water (including waves and tides);
    - (f) wind;
    - (g) solar power;
    - (h) geothermal sources;
    - (i) combined heat and power systems.
  - 2.3 The Climate Change and Sustainable Energy Act 2006 (Sources of Energy and Technologies) Order 2008 adds to that list of sources and technologies by inserting after (h):

“(ha) heat from air, water or the ground;”
3. **Matters of special interest to the Joint Committee on Statutory Instruments**
  - 3.1 As this order amends primary legislation a draft of the order has been considered by the Office of Parliamentary Counsel.
4. **Legislative Background**
  - 4.1 The Climate Change and Sustainable Energy Act 2006 defines microgeneration for the purposes of that act and is relied upon in the Electricity Act 1989, The Gas Act 1986 and The Electricity and Gas (Carbon Emissions Reduction) Order 2008 (S.I. 2008/188).
  - 4.2 The definition of microgeneration is found at section 26(1) of the Climate Change and Sustainable Energy Act 2006 and provides that:

“microgeneration” means the use for the generation of electricity or the production of heat of any plant (which, for this purpose, includes any equipment, apparatus or appliance)—

- (a) which, in generating electricity or (as the case may be) producing heat, relies wholly or mainly on a source of energy or a technology mentioned in subsection (2), and
- (b) the capacity of which to generate electricity or (as the case may be) to produce heat does not exceed the capacity mentioned in subsection (3);

The capacity mentioned in subsection (3) is 45kW for the production of heat and 50kW for the generation of electricity.

4.3 The list of sources and technologies is at section 26(2) which provides:

Those sources of energy and technologies are—

- (a) biomass;
- (b) biofuels;
- (c) fuel cells;
- (d) photovoltaics;
- (e) water (including waves and tides);
- (f) wind;
- (g) solar power;
- (h) geothermal sources;
- (i) combined heat and power systems.

4.4 Section 26(4) provides that section 26(2) may be amended by adding to the list of sources of energy and technologies where the Secretary of State considers that the use of that source of energy or technology would cut emissions of greenhouse gases in Great Britain. The Secretary of State considers that the use of heat from air, water, or the ground would cut emissions of greenhouse gases in Great Britain. The power to amend is exercised by statutory instrument which must be laid before Parliament and has been approved by a resolution of each House.

4.5 The Energy Act 2004 also provides a statutory definition of microgeneration for the purposes of that act and is relied upon in Income Tax (Trading and Other Income) Act 2005, Taxation of Chargeable Gains Act 1992, The Town and Country Planning (General Permitted Development) Order 1995 and also some sections within the Climate Change and Sustainable Energy Act 2006. That definition is found at section 82(6) and (7) and is framed in the same manner as the definition in the Climate Change and Sustainable Energy Act 2006. Section 82(7) includes the same sources or technologies as are currently in section 26(2) of the Climate Change and Sustainable Energy Act 2006, but with an additional category:

“(j) other sources of energy and technologies for the generation of electricity or the production of heat, the use of which would, in the opinion of the Secretary of State, cut emissions of greenhouse gases in Great Britain.”

## **5. Extent**

5.1 This instrument applies to the United Kingdom.

## **6. European Convention on Human Rights**

6.1 The Parliamentary Under Secretary of State for Energy has made the following statement regarding Human Rights:

In my view, the provisions of The Climate Change and Sustainable Energy Act 2006 (Sources of Energy and Technologies) Order 2008 are compatible with the Convention Rights.

## **7. Policy background**

7.1 The term ‘microgeneration’ covers both low carbon and renewable energy which produces under 45KW (for heat) and 50KW (for electricity). The current list of energy sources and technologies (see para 2.2. above) was compiled by The Department of Trade and Industry in 2006. The insertion of heat from air, water or the ground should cover a set of technologies called heat pumps (comprising Air Source Heat Pumps, Ground Source Heat Pumps and Water Source Heat Pumps).

7.2 It was the intention that the definition of microgeneration included Ground Source Heat Pumps at the time of the passing of the Act. At second reading of the Climate Change and Sustainable Energy Bill the minister explicitly referred to Ground Source Heat Pumps as microgeneration (See Hansard HC Deb 11 November 2005 vol 439 c620). At the time air source heat pumps were not widely established in the UK, and it was not therefore the intention to include them. The central purpose of this order is to include air source pumps as a source of microgeneration.

7.4 There is legitimate debate as to whether Ground Source Heat Pumps are already fully included within the definition of microgeneration, by virtue of the inclusion of the categories of geothermal or solar (and the extent to which they can be said to fall within those categories). The government therefore also intends to use the opportunity of amending the definition of microgeneration to put the matter beyond doubt regarding ground source and water source heat pumps.

7.5 Accordingly the amendment applies to the source of energy for the three types of heat pump, namely the heat from air, water, or the ground.

7.6 Whether the installation of a heat pump is appropriate in any particular case will depend on the facts of the case. Where the installation is appropriate, the heat pump will promote an emissions saving. The SoS therefore considers that the use of heat pumps will cut greenhouse gas emissions in Great Britain.

7.7 This instrument will not affect the definition of microgeneration in the Energy Act 2004. In accordance with Section 82(7)(j), since the Secretary of State is of the opinion that the use of heat from the air, water or the ground would cut emissions of greenhouse gases in Great Britain, the definition of microgeneration in that Act must be read as including heat from the air, water or the ground.

7.8 Consultations on this proposed amendment have taken place with DEFRA, Ofgem and the microgeneration industry. They fully support the inclusion of the proposed amendment to the list.

## **8. Impact Assessment**

8.1 An Impact Assessment has not been prepared for this instrument as it has no impact on business, charities or voluntary bodies.

## **9. Contact**

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