

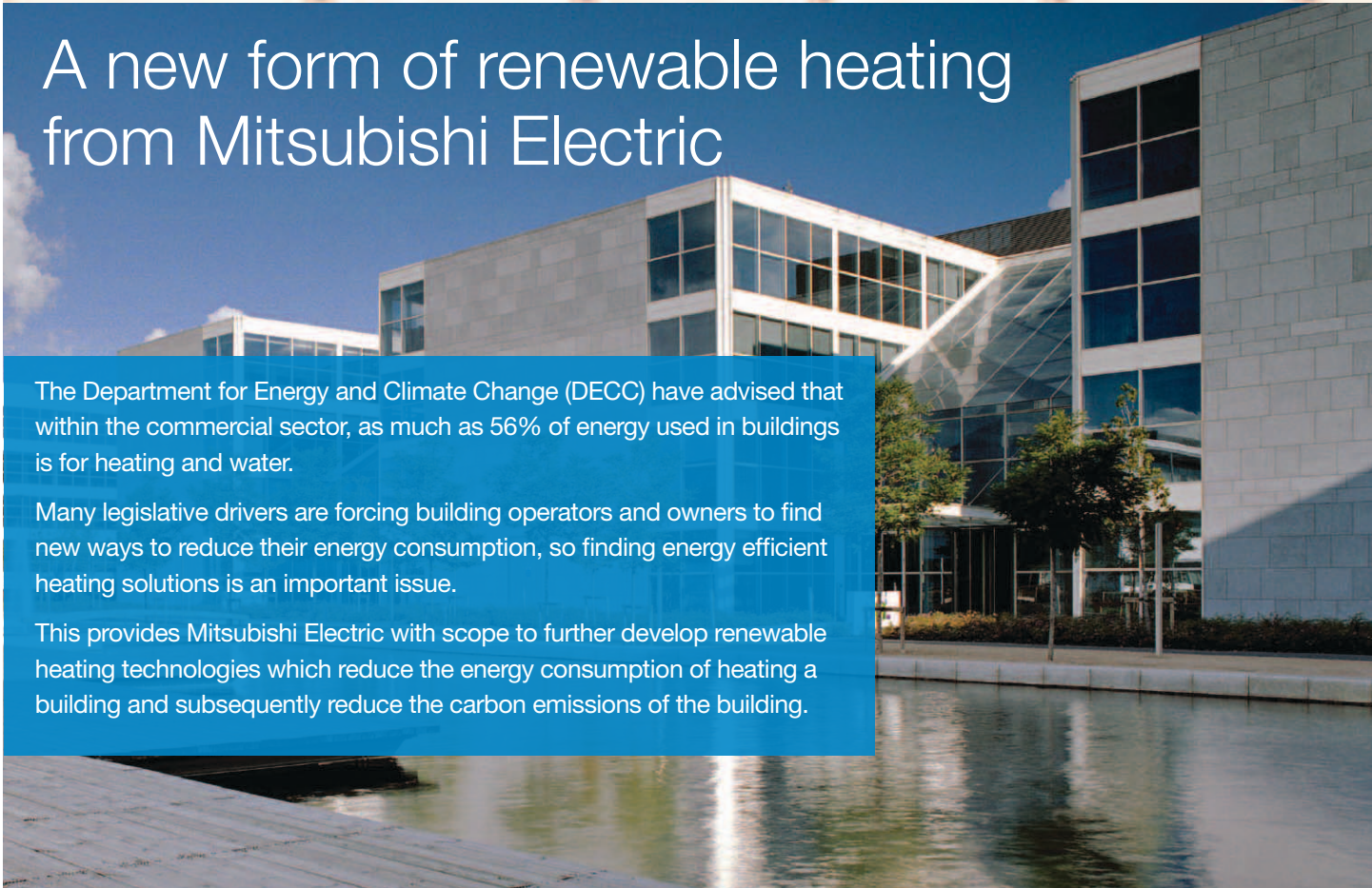


A new form of renewable heating from Mitsubishi Electric

The Department for Energy and Climate Change (DECC) have advised that within the commercial sector, as much as 56% of energy used in buildings is for heating and water.

Many legislative drivers are forcing building operators and owners to find new ways to reduce their energy consumption, so finding energy efficient heating solutions is an important issue.

This provides Mitsubishi Electric with scope to further develop renewable heating technologies which reduce the energy consumption of heating a building and subsequently reduce the carbon emissions of the building.



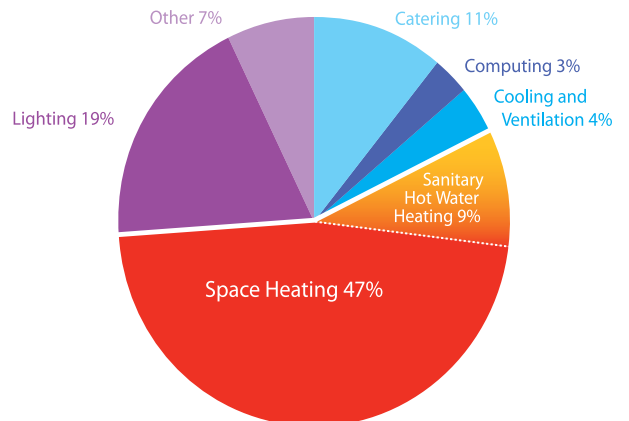
Why use Renewable Technologies?

Climate change, energy security, fuel poverty, fossil fuel availability and rising fuel prices are all factors that are creating the need for renewable technologies to reduce the consumption of fossil fuels and reduce carbon emissions, in order to meet UK energy and emissions targets.

The UK has committed to sourcing 15% of it's energy from renewable sources by 2020. In addition, the new Part L guidelines require buildings to have a 25% reduction of CO₂ emissions compared to 2006.

 Continued

Energy use in a typical commercial property*



*Source: DECC - Digest of UK Energy Statistics (2009)

Mitsubishi Electric Commercial Heating Solution



Mitsubishi Electric has developed a unique solution to heat commercial buildings and help end users meet their renewable targets. Recent technological advances have enabled us to use proven Variable Refrigerant Flow (VRF) heat pump technology to design a ground-breaking, renewable heating system to rival that of traditional gas fired heating and biomass systems.

Finding energy efficient and renewable solutions for heating commercial buildings can be a challenge. Heat pumps offer a new approach, based on well established and reliable technology. The added benefit is heat pumps are officially recognised as 'renewable' by the EU. The units are pre packaged and modular with pre-piped water connections to flow and return water headers for easy 'plug-and-play' installation. The heat pumps heat room space, central heating and hot water.



What about the market?

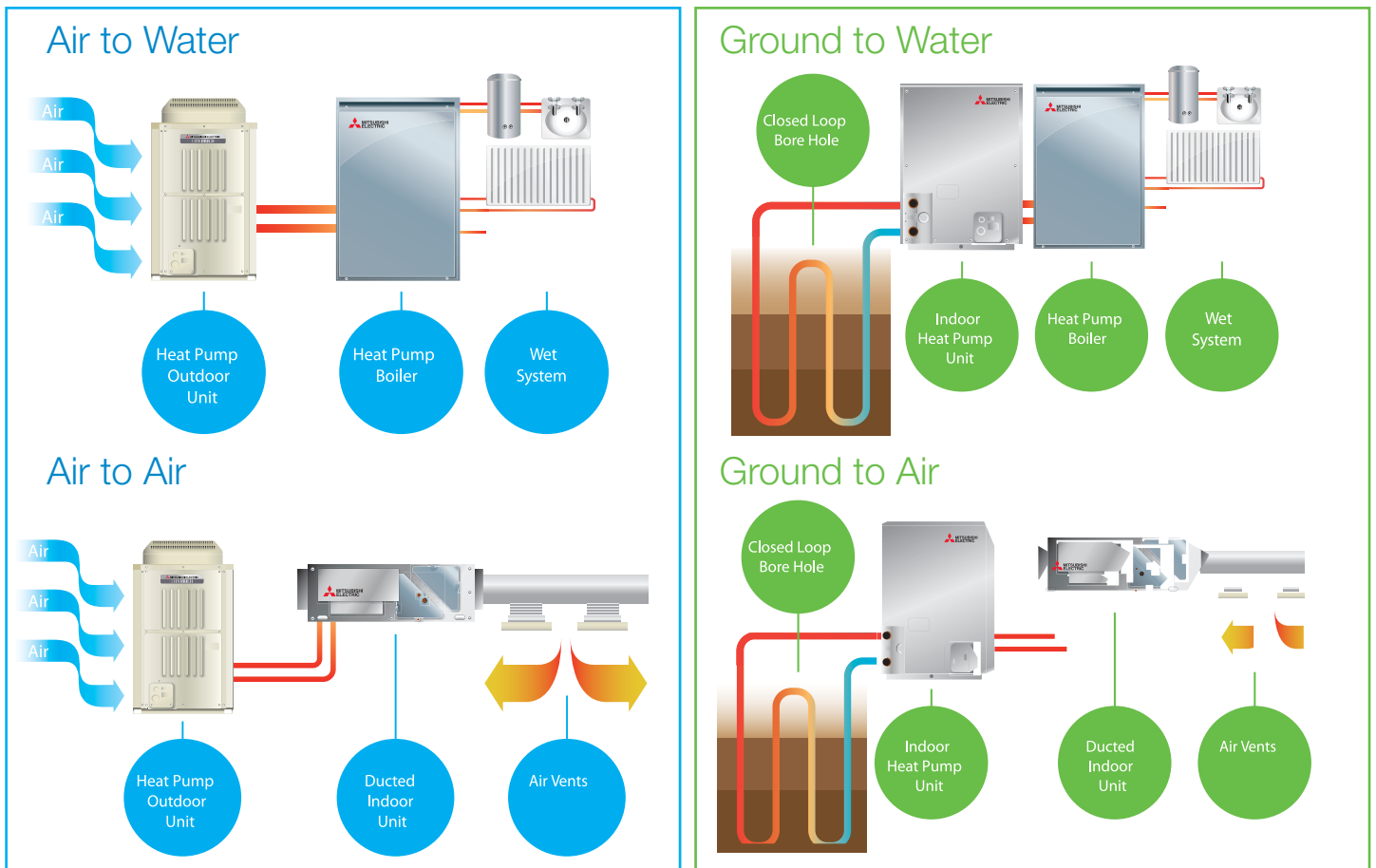
Many Corporate Social Responsibility programmes, if not all, include green policies. Reducing energy use and carbon emissions is a priority, especially when companies with a large energy use are targeted and financially penalised for excessive energy use as part of the CRC Energy Efficiency Scheme.

Currently being considered and possibly due to be in place from April 2011, the Renewable Heat Incentive (RHI) is intended to offer financial support for use of renewable heating across England, Scotland and Wales. It aims to bridge the financial gap between conventional and renewable heating in domestic, commercial and industrial properties.

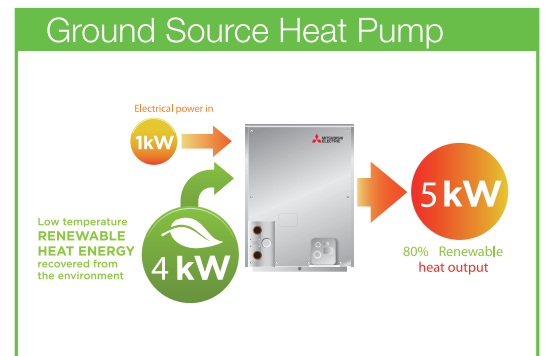
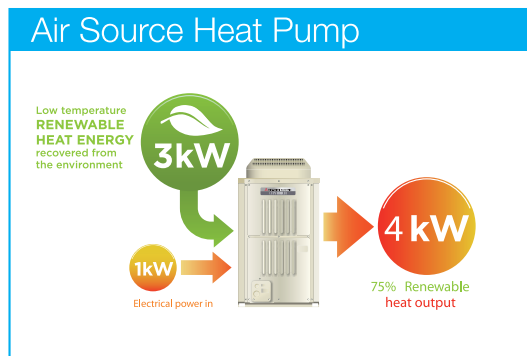
Covering a wide range of renewable technologies, including heat pumps, the RHI should see energy users paid for every kW of renewable heat. RHI at present is being reviewed having been through the consultation period and is therefore subject to change, details can be found at www.decc.gov.uk



Mitsubishi Electric Commercial Heating Solution



Able to deliver up to 5kW of heat for every 1kW of electricity consumed, our heat pump heating systems offer as much as 500% efficiency and a COP of 5 - making them an ideal renewable heating solution.



Benefits

- Achieve renewable targets easily using our UK Government and EU classified renewable heating
- Cut running costs and CO₂ emissions with high efficiency heating systems – VRF inverter driven technology
- Easy design and installation ensures an immediate solution for minimal cost and disruption
- Satisfy any heat demand with a heating system powered by a dependable fuel source - electricity
- Fully scalable and able to work in conjunction with other systems or independently
- Cost effective heating systems for new build and refurbishment
- High COPs of 5 for Ground Source and 4 for Air Source applications

For further details please see the [Commercial Heating Brochure](#)