

## Fact Sheet

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### Economy 10 Off-Peak Periods

Economy 10 is an ideal tariff to run heat pumps on and can result in lower running costs over running the heat pump continuously.

To obtain the maximum benefit from running on Economy 10 it is important that the heating distribution is underfloor and mounted in a screed, which acts as a thermal store. It is also important that the building is well insulated.

During periods of off-peak electricity the heat pump charges the screeded floor with energy which is slowly released during the peak electricity periods when the heat pump is off.

The room temperature during the peak periods will drop slightly, however this drop will be minimal and will not be noticeable by the occupants.

Insulation is important as if the building has poor insulation the heat given up by the screeded floor will not be contained within the fabric of the building and the building will go cold.

Plated underfloor and radiators systems are not ideal for use with off-peak tariffs as they do not have a large enough thermal mass to store the energy for use during the peak periods.

For the majority of the year the heat pump will provide more than enough heat to operate effectively on an off-peak tariff. If there is a prolonged cold spell within winter, it might be necessary to run the heat pumps during peak periods, however many clients minimise this by using a second heating system such as a log burner.

Economy 7 tariffs can also be used, however Economy 10 is preferred as it provides three periods of off-peak per day, meaning that the energy in the screed is continually 'topped' up throughout the day. With Economy 7 a high degree of insulation and thermal mass would be required and it might be necessary during cold spells to run the heat pump more often using peak electricity.

Prices for off-peak electricity vary from area to area and savings over flat rate electricity can be around the 40-50% mark. However for electricity used during the peak periods this will be higher than a flat rate tariff, so it is important to minimise the amount of peak electricity used. Many clients as well as running the heat pump during the off-peak periods will also run other electrical devices such as washing machines and dishwashers during this period.

Continued...

## Facts at a glance:

### Using Off-Peak and Heat Pumps.

To effectively use off-peak the heating distribution system needs to be underfloor mounted in screed and the building needs to be well insulated.

### Economy 10

Economy 10 is ideal for heat pumps as it provides three periods of off-peak per day which tops up the energy stored in the screed throughout the day.

### Prolonged Cold Spells

During prolonged cold spells it might be necessary to run the heat pump during peak periods or look at a supplementary heating system such as a log burner.

### Off-Peak Prices

Prices for off-peak vary from area to area however savings over flat rate tariffs can be as high as 40 to 50%.

Peak prices are generally higher than normal flat rate tariffs.

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## Fact Sheet

### Economy 10 Off-Peak Periods

<b>Scottish And Southern Electric Domestic Economy 10 Periods</b>			
<b>Regional Electricity Supplier Times are GMT (Scottish Hydro is clock times)</b>			
<b>Midlands</b>	12:00 – 5:00 a.m.	1:00 – 4:00 p.m.	8:00 – 10:00p.m.
<b>Norweb</b>	12:00 – 5:00 a.m.	1:00 – 4:00 p.m.	8:00 – 10:00p.m.
<b>Southern</b>	12:00 – 5:00 a.m.	1:00 – 4:00 p.m.	8:00 – 10:00p.m.
<b>South Wales</b>	12:00 – 5:00 a.m.	1:00 – 4:00 p.m.	8:00 – 10:00p.m.
<b>South Western</b>	12:00 – 5:00 a.m.	1:00 – 4:00 p.m.	8:00 – 10:00p.m.
<b>Yorkshire</b>	12:00 – 5:00 a.m.	1:00 – 4:00 p.m.	8:00 – 10:00p.m.
<b>Scottish Hydro</b>	4:30 – 7:30 a.m.	1:00 – 4:00 p.m.	8:30 – 12:30p.m.

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