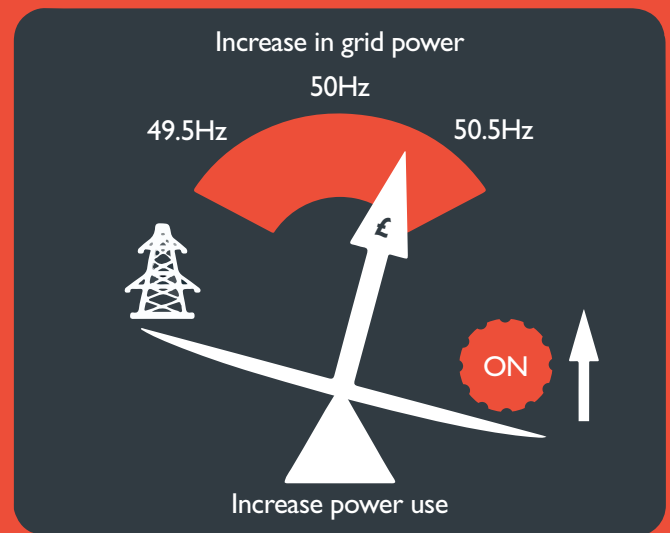
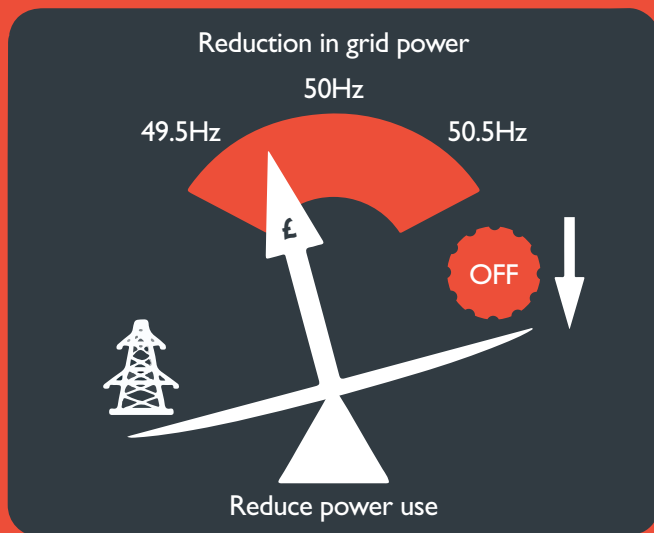


# What is Gridflex?

Gridflex, part of Calibrate Group, is an innovative platform for managing electricity for its heat pump clients and clients with high electrical usage, through Demand Side Response (DSR). Put simply, DSR financially incentivises energy users to reduce non-essential energy use at times of peak demand or increase use at times of low demand.

By adjusting your demands on the national grid, you save money and can receive additional income.

This may sound quite complicated and time-consuming, but Gridflex will do all the work for you. Using innovative software, we will work with the National Grid on your behalf to manage all aspects of DSR and assist in decarbonising the National Grid. This will generate revenue for current and future Calibrate clients. [By decarbonisation, we mean the process of reducing 'carbon intensity', by lowering the amount of greenhouse gas emissions produced from the burning of fossil fuels.]



## The Technical Part

The National Grid works by maintaining a certain level of energy production capacity, which is above actual demand. DSR is designed to provide a margin or buffer when this demand fluctuates. It is simply a balancing act. When there isn't enough energy to meet demand, you reduce the energy you use, and that 'spare' energy is available for the National Grid, and when there is a surplus of energy in the grid you increase your use.

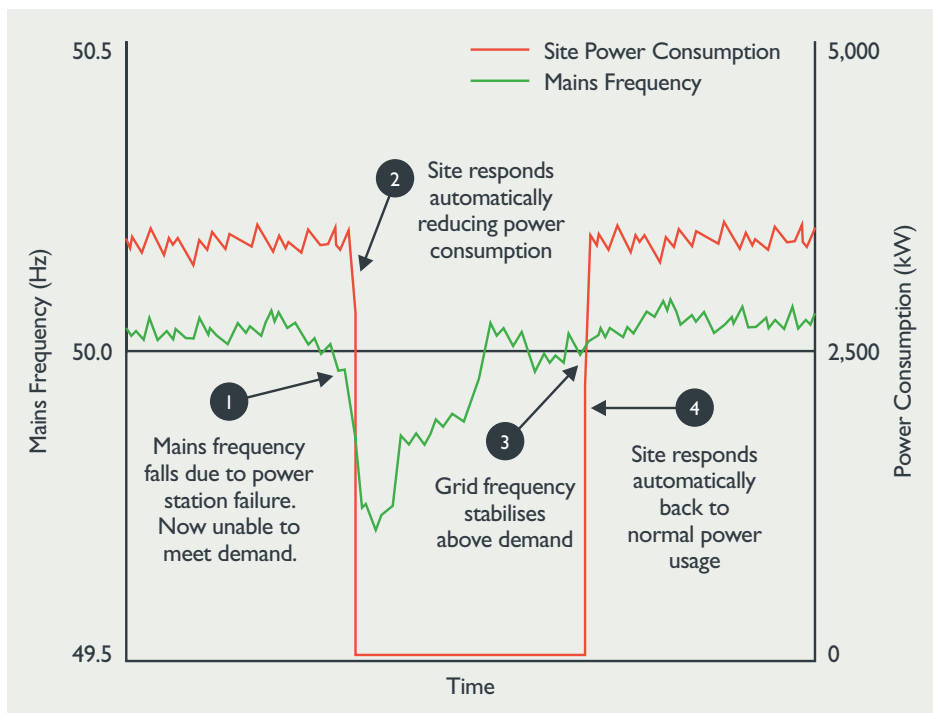
This balancing act is currently costly for the National Grid so they are offering substantial financial benefits for high energy users to help regulate their energy consumption. This means that the main power stations can run at full capacity all the time which is when they are at their most efficient. Having more DSR locations will mean as a nation, we require fewer power stations running and will negate the need to build more. The potential benefits to the environment are estimated to be between 300 and 750 tonnes of CO<sub>2</sub> saved per mW of reserve provided by DSR.

## What are the benefits to my business?

The primary benefit for a business is clearly a **financial** one, demand response not only allows businesses to avoid higher energy prices during times of peak demand, but it will also create a revenue when the grid is using your energy during times of high demand. You will also be doing this with the peace of mind that you are contributing to reducing your carbon footprint.

## Will my heat pump be affected?

The great thing about this system is that you will hardly notice the change. It is possible to adjust the amount of energy at non-critical times without dramatically affecting your processes. Typically, adjustment events will last between 30 minutes and 4 hours and depending on the type of demand, response can be called upon between 10 and 250 times per year.



The graph shows how a site responded immediately to the change in the National Grid. This is because they have opted to deliver what is known as Static Frequency Response, this means that their site is available to be turned on and off at a moment's notice, 24hrs a day in response to a fluctuation in the grid.

Another option is to have planned response times. Say the National Grid knows that on a Sunday night after 10pm there will be very little demand, then your site will be automatically programmed to turn up the amount of energy it is using.

The faster a site responds to a change, the greater the financial gain will be for the owner of the site.

## What do I need to do?

Once signed up, absolutely nothing. Gridflex will monitor your site alongside the demand of the National Grid and buy and sell your energy for you using an automated system, a bit like a stock exchange.

If you would like to know more, all you have to do is give us a call on

**01668 215 544**

