

## Flex Community Briefing (for installers)

### What is Flex Community?

Flex Community is an innovative response to the challenge of transitioning to a more sustainable and greener way of generating and consuming energy. Flex Community is a smart ecosystem which brings together all those involved with supplying and using energy, including householders, energy equipment providers and installers and grid operators (in our case Western Power Distribution – WPD).

Flex Community has developed an online Portal, serviced by a smart software platform (the ‘intelligence’) to help householders to:

- Shift away from oil and gas in transport and home heating.

and at the same time:

- Respond to grid requests to shift their electricity demand to different times of the day by allowing their energy devices to be remotely controlled to switch them on and off and up and down when required.

This is called **flexibility** and we are aiming to build a community of householders engaged in it so we can have a collective response. This is a way of enabling the times that householders consume energy (energy demand profile) to better match renewable energy generation, thereby paving the way to a more sustainable and low carbon grid.

Flex Community has been developed by:

- [Bath & West Community Energy](#) (BWCE), a community owned renewable energy company
- [Stemy Energy](#), a Spanish company developing digital technology to support the energy transition.

Find out more about the [Energy Demand Challenge](#).

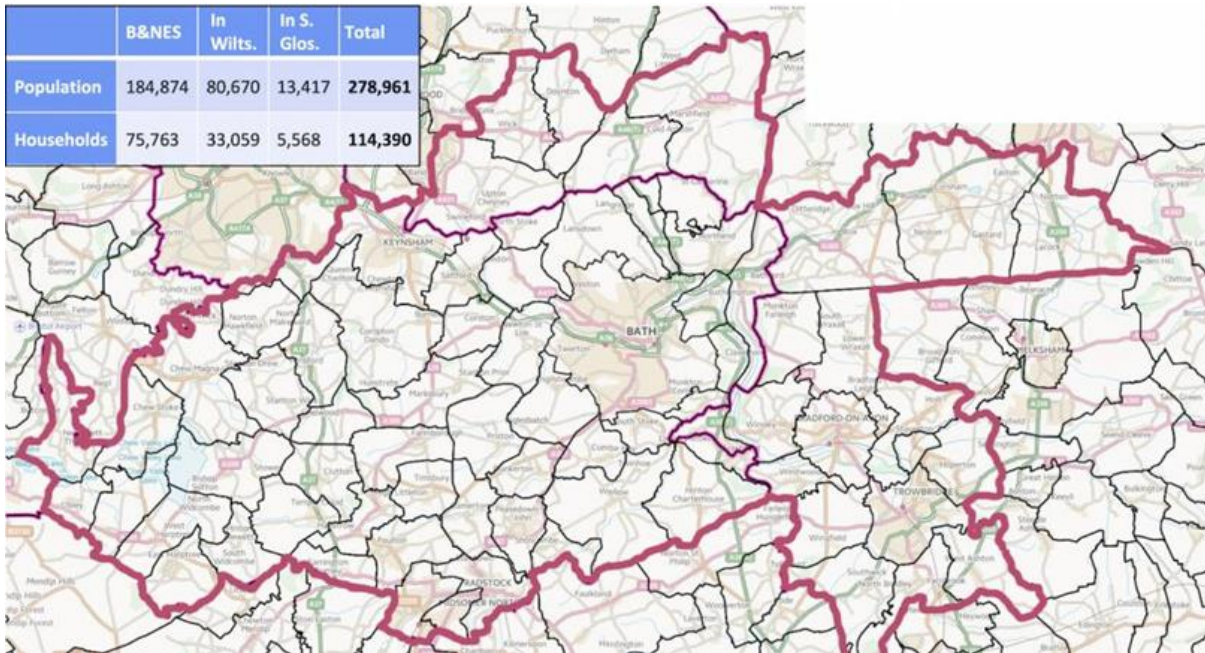
Read our [Frequently Asked Questions](#).

### What can a householder do through Flex Community?

1. If they **already have an EXISTING Mitsubishi Ecodan heat pump, ev charge point or immersion heater** we can install technology developed by Stemy Energy to enable their energy technology to offer flexibility to the electricity grid. The type of Stemy equipment that needs to be installed will depend on the type of energy technology they have installed and it is at no cost to the householder.
2. If they are **considering installing a NEW Mitsubishi Ecodan heat pump or a smart ev charge point** in the very near future i.e. within the next 6 to 12 weeks, we can help them install one which is able to communicate (via Stemy equipment) with the electricity grid to enable them to participate in offering flexibility.

## Will the householder receive anything for providing flexibility to the electricity grid?

There are areas where the grid operator pays householders for providing flexibility services. Currently, flexibility services (and payments) do not exist in the majority of the [BWCE area \(see below\)](#). Therefore, as part of our Next Generation funded trial (for the remainder of 2021) we will be **simulating flexibility requests** from Western Power Distribution to test the impact we can make.



Stemy Energy will provide householders with an annual **flexibility payment of £50** for providing simulated flexibility. If they opt out of the trial, their flexibility payment will be paid pro-rata for the time they participated and were enabled to offer flexibility.

Over time we hope to develop this concept into a market proposition, expand it to more householders and make income from providing flexibility available long term. For now, we are conducting these trials to understand the commercial and technical viability. We do expect that, as more renewable energy is installed on the grid, flexibility payments for domestic customers will become more common and expand into more areas of the country.

## What is the Flex Community Portal

The **Flex Community Portal** developed by Stemy Energy in collaboration with BWCE is the website which enables householders and installers to participate in Flex Community. It is also known as the 'Ecosystem'.

The Flex Community Portal enables householders to:

1. Upload information to build up a comprehensive smart energy profile.

2. Apply to install Stemy smart technology to enable compatible energy technology they already have to provide flexibility to the electricity grid.
3. Apply to install new compatible energy technology (e.g. heat pump, EV charge post) PLUS Stemy smart technology enabling them to provide flexibility to the electricity grid.
4. Arrange site surveys with potential installers and choose which one they wish to proceed to installation with.
5. Arrange an installation date.

Once they have arranged an installation date (5) the householder **goes outside the portal to complete their installation** and make the necessary **contractual arrangements with the installer**.

## How do householders use the Portal?

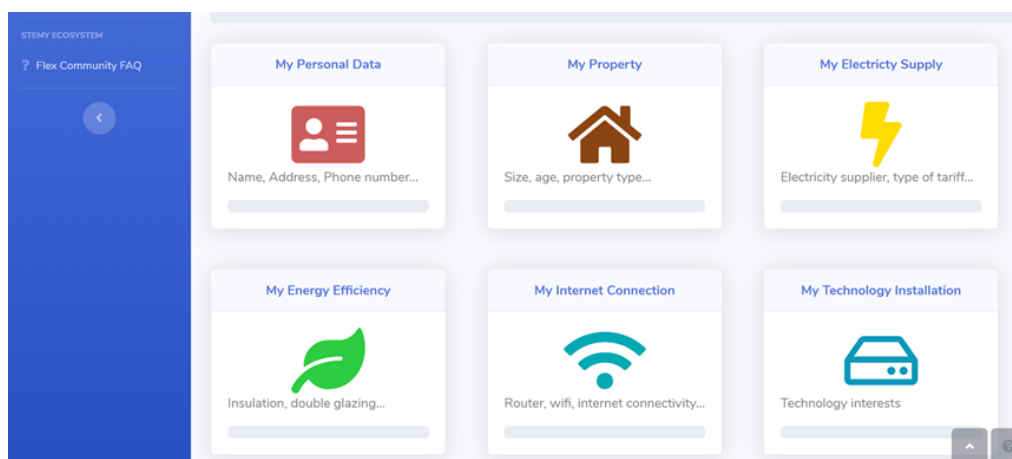
### 1. They register

By registering, they are agreeing to the Terms and Conditions with Consumers in relation to the Use of Ecosystem, with its associated Privacy Policy, which cover their use of the Portal.

### 2. They complete My Profile

They do this by completing a series of questionnaires to build up their smart energy profile:

- Personal data.
- Property - including age and size in square metres (all floors) plus **photographs** of their property, fuse box and electricity meter; examples of photos will be provided to guide the householder as to what is required
- Electricity supply – name of supplier and tariff.
- Energy efficiency – including details of cavity wall insulation, loft insulation and double glazing plus a **photograph** of their Energy Performance Certificate (EPC) if they have one to upload.
- Internet connection.
- Existing energy technology installation(s).

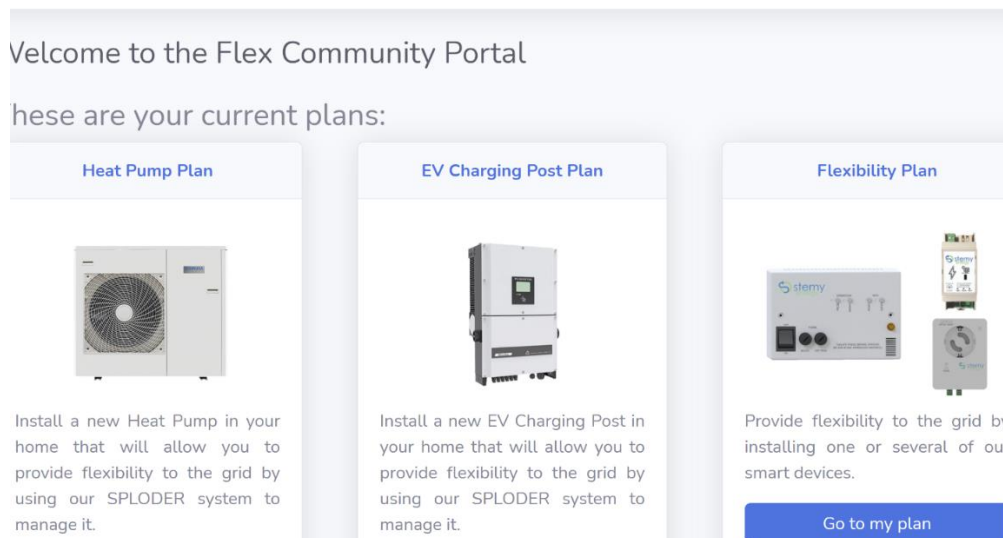


Completion of all questions in My Profile is mandatory and the householder will not be able to proceed to the next step until they have been completed.

We use this information to help Stemy work out who is eligible for different Plans and to ensure we have a baseline of information to provide flexibility services. Some of this information is also shared with installers to help them understand the householder's needs when they are referred through to the installer for a quote for a heat pump or EV charge post.

### 3. They apply for a Plan

- A Plan is a combination of energy technology PLUS smart Stemy Equipment to enable the energy technology to communicate with the electricity grid via the Flex Community intelligence to offer flexibility.
- They need to complete a **Plan survey** (a detailed questionnaire).
- They can apply for as many Plans as are appropriate to their circumstances and interests.



Their circumstances/interest	Relevant Plan to apply for
<p>For <b>EXISTING</b> owners of the following technology:</p> <ul style="list-style-type: none"> <li>• Mitsubishi Ecodan Heat pump</li> <li>• Electric vehicle charging post (depending on type)</li> <li>• Immersion heater (which they are prepared to use as their prime source of heating hot water)</li> </ul>	<p>They can apply for the <b>Flexibility Plan</b> to install Stemy smart technology to enable their energy technology to offer flexibility to the electricity grid.</p> <p>There are different solutions to achieve this which Stemy allocate to them depending on the technology they have. As installers you will see details of which Stemy Equipment you can install (including relevant installation manuals) on the Portal.</p>

<p>If they want to install a <b>NEW Mitsubishi Ecodan heat pump plus Stemy smart technology</b> to offer flexibility to the electricity grid.</p>	<p>Apply for the <b>Heat Pump Plan</b>.</p> <p>As installers you will see details of which Stemy Equipment you can install (including relevant installation manuals) on the Portal.</p>
<p>If they want to install a <b>NEW smart EV charging post plus Stemy smart technology</b> to offer flexibility to the electricity grid.</p>	<p>Apply for the <b>EV Charging Post Plan</b></p> <p>As installers you will see details of which Stemy Equipment you can install (including relevant installation manuals) on the Portal.</p>

By registering on the Portal and applying for a Plan they **are not yet committing themselves** to participate in Flex Community. They need to follow the process to request an evaluation visit (if necessary), obtain quote(s) from up to two installers like yourself and then decide to sign up as follows:

### **What happens after they have completed a Plan survey?**

There may be follow-up enquiries via email from Stemy Energy before they are informed whether or not they are accepted for a Plan. If they are not accepted, they will be told the reasons why their household/property isn't suitable.

If they are accepted onto a Plan, Stemy will prepare a Plan Solution, which comprises the energy technology the householder is interested in, plus the required Stemy Equipment to ensure the energy technology can be flex enabled. Depending upon whether the householder has opted to liaise with one or two installers, Stemy Energy will assign installer(s) to that householder. This means that Stemy will notify the assigned installer(s) that there is a potential customer waiting for them on the Portal.

By logging onto the portal, the installer retrieves the potential customer's details and makes contact with them to arrange an evaluation survey (if necessary) and then to prepare installation quote(s) and design(s), including the Stemy Equipment. It may be that one installer is able to prepare more than one quote if different products are suitable.

Once they have received their quotes, they then choose one and notify the installer directly as well as notifying the portal.

Once they have chosen an installer, they will liaise directly with that installer to sign an order (outside the portal) with the installer and then the installer will contact them again to arrange an installation appointment.

Once the installer has arranged an installation appointment with the householder, the installer logs it onto the portal so that Stemy know there is a new customer and to arrange the delivery of Stemy Equipment to the installer. .



To confirm, arrangements for installation are made directly with the chosen installer outside the portal following the normal purchasing and contracting procedure of that installer.

Once their energy technology PLUS smart technology has been installed, the householder will receive information on arrangements for providing **flexibility** to the electricity grid. This will be done via a free App for their mobile phone provided by Stemy Energy. Details will be provided on how to download and use the App.

The process of providing flexibility will go through several stages:

1. A period of time in monitoring or ('Manual mode' in the App) to build up a profile of their usual energy use with regard to the energy technology (e.g. heat pump, EVCP immersion heater)
2. A period of time when the Stemy software platform optimises their use of the Energy technology based on preferences set by them during the manual mode period and other factors e.g. presence of solar pv or a Time of Use Tariff (called 'Automatic mode' without flex in the App).
3. A period of time when the Stemy platform simulates flexibility requests without connecting to the WPD platform (called 'Automatic mode' with flex in the App).
4. A period of time when the Stemy platform simulates flexibility requests to the WPD Platform (also called 'Automatic mode' with flex in the App)

### **Feedback is valuable to us**

Flex Community is exploring how householders and installers can become active participants in the transition to a low carbon energy system. Learning from the householder and installer experience is an integral part of this process of exploration and there will be occasions when we will ask participants to complete online surveys or invite them to group feedback discussion. We will also hold briefing and feedback sessions for installers and area happy to receive informal feedback at any time.

Last updated May 2021