

Project case study: Heat Pumps for Friday Bridge, Fenland

Theme: High-density deployment of heat pumps

Heat Pump Ready: This project was part of Heat Pump Ready Stream 1, a UK government funded programme designed to test innovative methodologies for achieving high density deployment of heat pumps in homes. Further details on Stream 1, including scope and eligibility are available here: [Heat Pump Ready Programme: Stream 1, Phase 2 - GOV.UK](#)

Project name: Heat Pumps for Friday Bridge

Location: Friday Bridge, Fenland

Lead organisation: City Science

Partner organisations: Fenland District Council, Cambridgeshire County Council, Peterborough Environment City Trust,

Key sub-contractors and suppliers: Growth Guides, UK Power Networks, Hiber Finance (who replaced Lendology during the project), Macbrook Energy, Trustmark, Daikin.

Funding:

Budget: £1,815,391

Amount spent: £631,060

Dates active:

Phase 1 (feasibility): July 2022 to December 2022.

Phase 2 (mobilisation): March 2023 to July 2024. See [feasibility report here](#).



1. The project at a glance: Heat Pumps for Friday Bridge

Where?

- The Heat Pumps for Friday Bridge project targeted a neighbourhood of 576 homes in the village of Friday Bridge, Fenland.
- This area was chosen because the village has a defined geographical boundary and associated community characteristics such as a local primary school, village pub, and parish church. It also has housing stock with relatively good Energy Performance Certificate (EPC) ratings, a high proportion currently heated by gas (a pre-requisite of the programme), and sufficient capacity on the electricity grid to power heat pumps. These factors allowed properties in this area to be considered "ready" for a heat pump.

Who?

- City Science led the consortium, working with Fenland District Council, Cambridgeshire County Council and Peterborough Environment City Trust. Sub-contractors included Growth Guides (a digital marketing agency), UK Power Networks (Distribution Network Operator), Hiber Finance, Macbrook Energy (installer), Trustmark and Daikin.

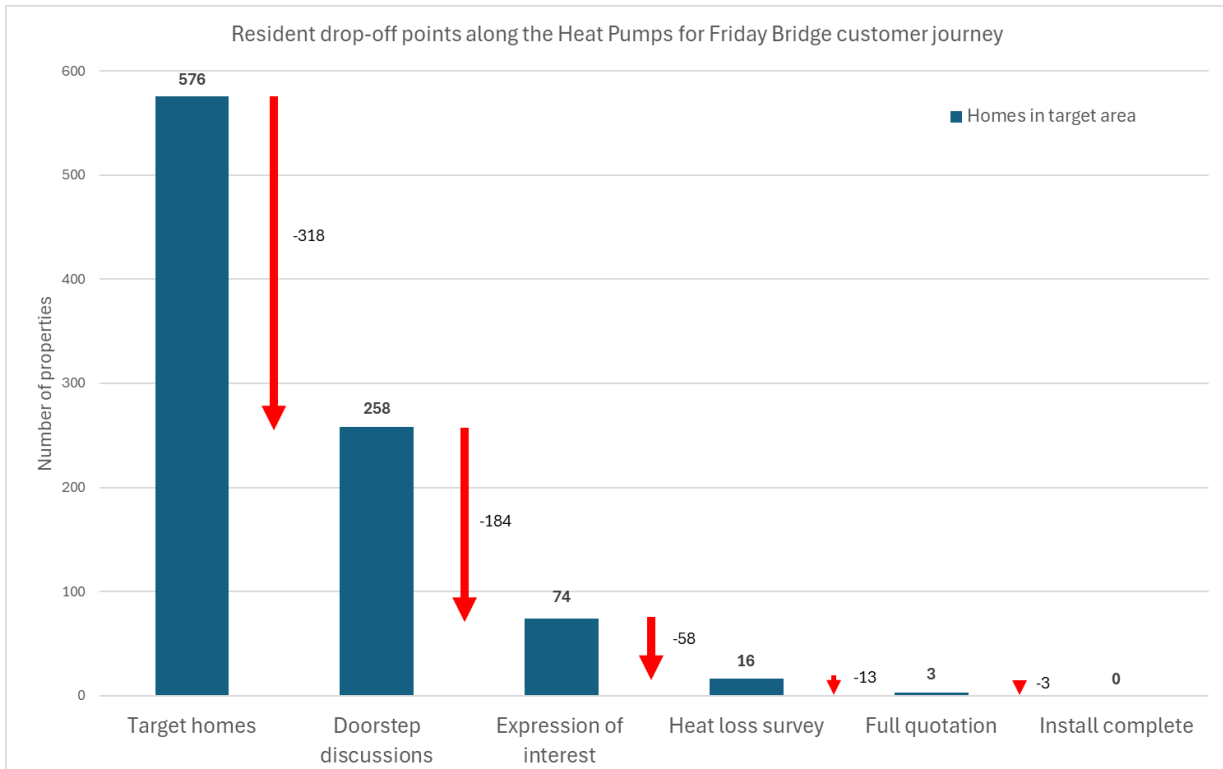
What?

- The project aimed to take a holistic approach to heat pump deployment by improving all stages of the consumer journey, from initial awareness through to aftercare. It aimed to streamline the consumer journey by developing and building a single web platform for guidance on heat pumps, arranging a home energy survey and booking the heat pump installation.
- This project offered consumers free home energy surveys (a 'Home Assessment') and procured a heat pump survey and installation company that used a "fabric first" focus to model retrofit options for insulation alongside a Daikin heat pump. They also designed an array for solar photovoltaic (PV) panels.
- The project worked with the local Distribution Network Operator (DNO) to develop new processes to enable the bulk connection approval of heat pumps.
- A partnership with Daikin and Hiber provided tailored financial support and low-interest loans to help overcome the high upfront cost of heat pumps.
- Hyper-local customer engagement was conducted in person and online.

Results

- In total, 16 home energy surveys were carried out, and 3 households proceeded to a heat pump quotation. However, no heat pump installations occurred under the project, as shown in Figure 1. The project cited the high up-front and ongoing running costs and delays in getting home energy survey results as reasons for households not progressing with installs.

Figure 1: Resident drop-off points along the Heat Pump for Friday Bridge customer journey for homes within the target area



1.1. Overview of mobilisation activities

The key activities funded during the mobilisation phase for Heat Pumps for Friday Bridge included:

- **Identifying the heat pump readiness of each home** in the village of Friday Bridge by compiling housing archetype, EPC data and grid connection capacity, with a target of 144 installations.
- **Developing a tailored, socio-economically sensitive engagement strategy** that addressed the specific needs and concerns of residents in the area.
- **Raising awareness of the project and of heat pumps** through leaflets and letters to properties in the area, digital marketing on social media and the project website linked to Cambridgeshire councils' Action on Energy framework branding, with the endorsement by the local authority helping to increase credibility and trust.
- **Develop innovative finance offers** with Daikin and Hiber finance, tailored for 'able to pay' customers and those at risk of fuel poverty.¹
- **Customer recruitment via targeted engagement activities**, e.g., face-to-face conversations with the two Community Engagement Officers, door-knocking, delivering leaflets and letters, local advertisements and word of mouth, and hosting community events.

¹ Towards the end of the project, heat pumps were offered for free to three households who had a survey. However, this offer was not taken up by households.

- **Free home energy surveys** carried out by Macbrook, including heat loss calculations to show energy efficiency and options for retrofitting and installing the heat pump.
- **Developing a customer relationship management tool (CRM)** to streamline the survey booking process and track engagement.
- **Attending collaboration, learning and dissemination events across the Heat Pump Ready programme**, including quarterly learning workshops, the annual Heat Pump Ready conference, and external industry events.
- **Project management**, e.g. consortium engagement, KPI tracking, milestone reporting, monthly reporting meeting with the project monitoring officer and collaboration and learning manager, collating evidence for funding claims, and producing a final project report.

1.2. Delivery partners and roles

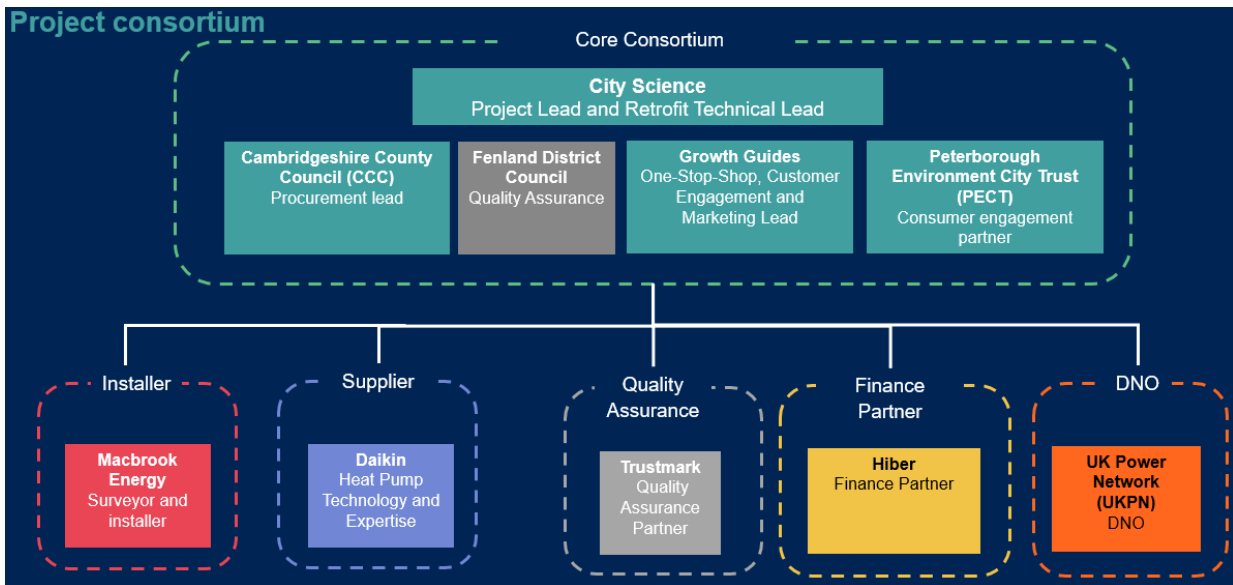
Table 1: Summary of delivery partners, key stakeholders and their roles

Delivery partner	Roles
City Science	<p>Project lead</p> <ul style="list-style-type: none"> • Consortium development and lead partner • Project management and reporting • Building level modelling and analytics • Value proposition development
Cambridgeshire County Council	<p>Local authority</p> <ul style="list-style-type: none"> • Advised on neighbourhood selection • Reviewed the value proposition to ensure strategic fit with local authority decarbonisation goals • Added a trusted brand to in-person and digital communications campaigns: the Action on Energy Cambridgeshire brand • Led the procurement of the survey and installation partner through the existing council framework
Fenland District Council	<p>Local district council</p> <ul style="list-style-type: none"> • Advised on neighbourhood selection • Reviewed the value proposition to ensure strategic fit with local decarbonisation goals • Added a trusted name to in-person and digital communications campaigns

<p>Peterborough Environment City Trust (PECT)</p>	<p>A charity helping to protect and enhance the environment</p> <ul style="list-style-type: none"> • Customer engagement partner • Contributed to developing the value proposition, customer recruitment strategy and local project communications • Employed two Community Engagement Officers to lead awareness raising in the community, including door-knocking
<p>Key stakeholders</p>	<p>Role</p>
<p>Growth Guides</p>	<p>Experts in digital engagement</p> <ul style="list-style-type: none"> • Carried out market research with consumers to inform the project strategy, branding and value proposition • Created the Heat Pumps for Friday Bridge brand and logo • Developed the digital marketing and engagement strategy via social media • Created a dedicated website on the Action for Energy hub, including an online one-stop shop customer journey, and developed a CRM platform • Designed and developed the letters and flyers used by the community engagement officers
<p>Macbrook Energy</p>	<p>Technology surveyors and installers</p> <ul style="list-style-type: none"> • Surveyed homes for initial heat loss surveys • Provided an information pack for the home energy survey (the 'Home Assessment' report) • Provided quotes for the installation and any additional works • Able to install heat pumps and associated retrofit improvements
<p>Hiber</p>	<p>Finance partner</p> <ul style="list-style-type: none"> • Provided low-interest finance packages to customers at the point of sale, tailored for different socioeconomic needs • Replaced Lendology's role during the project
<p>Daikin</p>	<p>Heat pump manufacturer</p> <ul style="list-style-type: none"> • Heat pump supplier, providing a discount on heat pump units purchased for the project • Training provider for installers
<p>UK Power Networks (UKPN)</p>	<p>Distribution Network Operator (DNO)</p> <ul style="list-style-type: none"> • Responsible for the local electricity distribution network

	<ul style="list-style-type: none"> Assisted in identifying potential areas of low grid constraints where high-density deployment of heat pumps would be feasible
Trustmark	<p>Quality assurance body</p> <ul style="list-style-type: none"> Quality assurance of installations

Figure 2: Consortium organisation chart



1.3. Location and target homes

City Science conducted housing stock modelling and analysis across Fenland District Council in Cambridgeshire during the feasibility stage. This analysis identified several villages within the district as suitable for high-density heat pump deployment. The consortium selected a neighbourhood of 576 homes (with a target of 144 installs) in Friday Bridge, a village to the north of Fenland, as the location for the project. The project team narrowed down the target area by focussing on suitable building and network characteristics rather than on demographic profiling. The area was chosen because:

- Initial work with UKPN suggested that the area would not require significant network upgrades to accommodate heat pumps at high density.
- The Energy Performance Certificates for houses in the areas suggested that most homes did not require significant improvements to their thermal fabric.
- Over 85% of properties were heated by gas at the time (this was a pre-requisite for progression to the delivery phase of the programme).
- The village has a defined geographical boundary and associated community characteristics, such as a local primary school, village pub, and parish church.

The project area was divided into four target groups linked to electricity grid infrastructure boundaries (see Figure 3 and Table 2).

The project team identified the need for two value propositions for different audiences: a) those in or at risk of fuel poverty and b) able-to-pay homeowners². A funding options appraisal identified two products subsidised by Daikin, who had arranged with Hiber Finance to contribute to borrowing costs where lending was used to purchase a Daikin heat pump. After the Multi-Criteria Assessment evaluation, the two highest-scoring products were a 36-month interest-bearing loan with an annual percentage rate (APR) of 6.9% and no installer charge and a 12-month interest-free loan, also with no installer charge.

2. Providing a 'one-stop shop'

To provide a single point of contact for customers along the entire customer journey with independent advice at each stage. In addition to air source heat pumps (ASHPs), the project offered eligible homeowners additional retrofit measures to improve their homes' thermal efficiency, such as insulation upgrades. It also provided a basic outline of solar PV costs and generation. These measures were offered to maximise the efficiency and cost-effectiveness of the heat pumps, as heat pumps perform best in well-insulated homes and could use electricity generated by the solar panels.

3. Free home energy surveys

These were offered to engage customers and outline the potential costs and benefits of the heat pump installation and other retrofit options. The home energy survey normally costs around £500. Figure 4 shows an example of the output from the survey, the Home Assessment report.

Figure 4: Example of a home energy survey



² No data was available on the number of households falling in these two categories, due to the case study being written after project closure, when access to customer data was no longer available.

IN SUMMARY:

The approach will result in a modern, efficient, and environmentally friendly heating system that will significantly reduce energy waste and utilise cleaner energy sources.

WE PROPOSE:

INSTALLING A HEAT PUMP

- A heat pump that will transform your heating system into a much more efficient one.
- A heat pump is a heating system that transfers heat from one place to another. It works by extracting heat from the air or ground outside your home and using it to warm the air inside. The heat is then distributed around your home through radiators, underfloor heating, or into the air.
- The most common heat pumps are air-source heat pumps - specifically, air-to-water heat pumps. These are devices that use the outside air as a source of heat to warm your home. They extract heat from the air outside your home and transfer it inside, using a refrigerant cycle like that used in refrigerators and air conditioners.



POTENTIAL FURTHER MEASURES:

LOFT

- The loft insulation acts as a barrier, preventing the transfer of heat between the inside and outside of a building. By reducing heat loss from buildings, roof insulation makes more efficient use of energy, leading to increased energy efficiency and reduced heating costs. To achieve this, we recommend the loft insulation to be topped up to 270mm which is the current standard building regulations.

SOLAR PV

- The solar photovoltaic (PV) systems do not convert sunlight directly into electricity. The electricity can then be used to power your home. Solar PV will provide a renewable and sustainable energy source that reduces reliance on fossil fuels and helps mitigate climate change. We recommend the solar PV to be roof array.

LOW ENERGY LIGHTING*

- Low energy lighting uses bulbs that consume less electricity than standard lighting solutions.

TIME AND TEMPERATURE CONTROL ZONES

- Time and temperature control zones enable personal and heating and cooling to different zones, managed by programmable or smart thermostats. This optimises comfort and energy efficiency by adjusting temperatures based on usage patterns.

*All prices are our estimate

COSTS AND HOW WE SUGGEST PHASING THE IMPROVEMENTS:

Important notes:

*The prices shown in the 'Quote' column of the table above are valid for 6 months from the date of issue and includes installation. **The quote for the heat pump includes a contribution of £7,500 from the Government grant that you should be entitled to. Please note this is a high level overview of costs. For a detailed breakdown please contact your Community Engagement Officer.

WHERE ARE YOU NOW			
FUEL CONSUMPTION Annual	FUEL BILLS Annual	tCO _{2e} Annual	
21,179 kWh (gas)	£1,276	3.9	
PHASE ONE: UPGRADE OF LOFT INSULATION TO INDUSTRY STANDARD			
COST (PER MEASURE)	FUEL BILLS Annual	tCO _{2e} Annual	
£2,860	ESTIMATED REDUCTION	ESTIMATED REDUCTION	
PHASE TWO: AIR SOURCE HEAT PUMP WITH ALL REQUIRED RADIATOR UPGRADES AND CONTROLS			
COST (PER MEASURE)	FUEL CONSUMPTION	FUEL BILLS	tCO _{2e} **
£6,371.74	5,563 kWh (electricity)	£1,263	1.2



4. A trusted brand with endorsement by Cambridgeshire County Council and Fenland District Council.

Community Engagement Officers from PECT worked through the Cambridgeshire Council's Action on Energy brand.

5. Heat pump surveyor and installer contracted by the Heat Pumps for Friday Bridge project team

These were contracted through a tender process using Cambridgeshire County Council's Action on Energy Retrofit Framework.

6. A select range of Daikin heat pump units was offered

To streamline the options for system design. Due to pricing and compatibility with chosen finance options, Daikin was selected non-competitively as the heat pump manufacturer.

1.5. Approach to customer engagement and recruitment

The project created a strong online communications strategy to engage with the residents in their target area to promote their offer. This hyper-local digital marketing was used to introduce the project and raise awareness of home energy efficiency measures, including heat pumps. This was followed up by in person visits and community events with Community Engagement Officers.

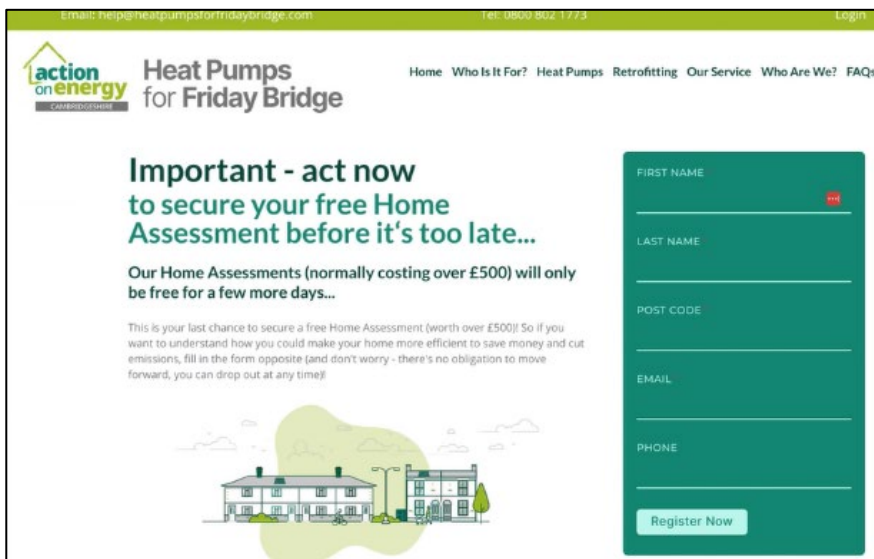
The following stages were followed:

Digital engagement strategy

The project's branding was built on Cambridgeshire councils' existing Action on Energy Cambridgeshire brand and was used for all project communications.

As shown in Figure 5, a Heat Pumps for Friday Bridge page was hosted on the Action on Energy website run by Cambridgeshire County Council. Links on all publicity material directed residents to this page, which acted as a central location for obtaining information and registering interest in the project—a one-stop shop for residents.

Figure 5: Project page on Action on Energy website



Hyper-local digital engagement was core to the project's awareness-raising and recruitment approach. Growth Guides designed and delivered digital communications, including social media adverts targeted at people in the defined area of Friday Bridge. Marketing approaches such as search engine optimisation (SEO) for Google and location-targeted paid advertising through Facebook were tools employed to engage customers in the neighbourhood, the latter included the Action on Energy logo, as shown in Figure 6.

Figure 6: Example of paid social media advertising



Face-to-face engagement

The digital engagement strategy was supplemented by in person community engagement, including dedicated support from the two Community Engagement Officers. Letters branded by both the county and district councils were hand-delivered to all homes within the target group, as shown in Figure 7. The Community Engagement Officers carried out door-to-door visits to all properties in the target area to both raise awareness of the Heat Pumps for Friday Bridge offer and to provide ongoing support to those who took up the offer. They were knowledgeable about the proposed heat pump systems as well as

other retrofit options, and focused on low-pressure, non-forceful engagement (as opposed to a hard-sell approach) to create a dialogue with residents.

Figure 7: Example of an offer letter



The project team were invited to attend local parish council meetings, and this helped promote the project, especially in the early stages.

The project launch event was held at a local tearoom and was well attended, see Figure 8, while further community events were less popular, possibly due to their midweek timings.

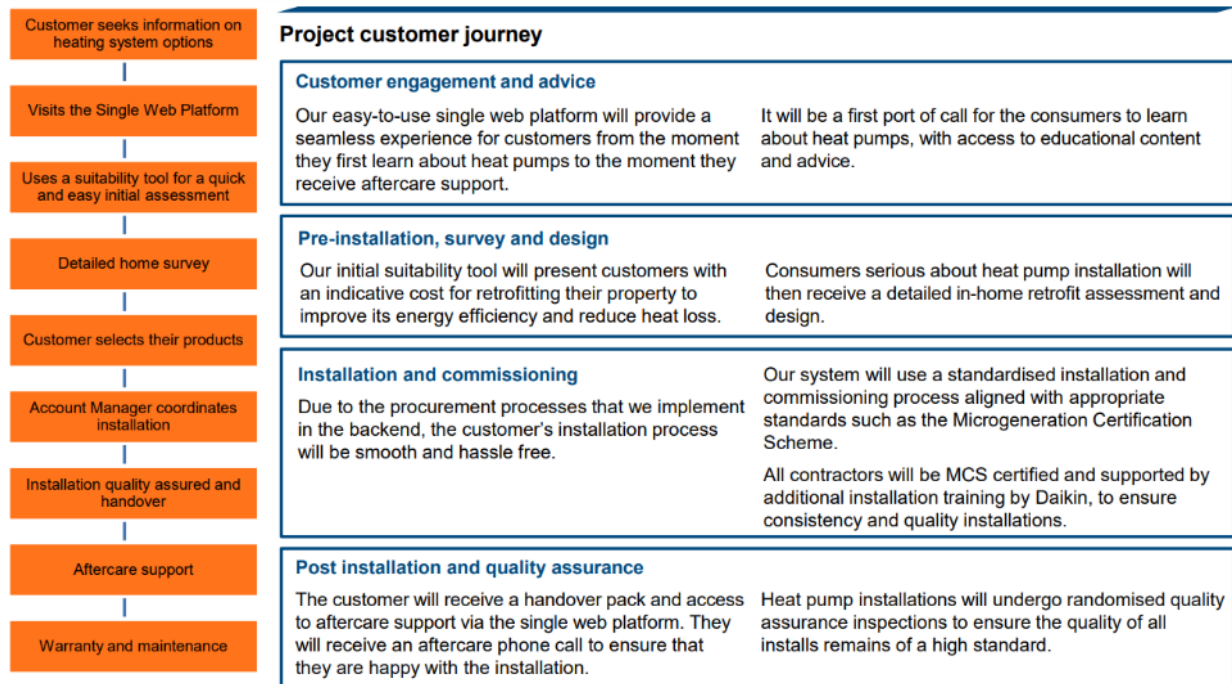
Figure 8: Community events



1.6. Proposed customer journey

No heat pumps were deployed during the project due to insufficient uptake (only three households, out of a target of 144, proceeded to get a quote for a heat pump). However, the Heat Pumps for Friday Bridge consortium had developed a detailed customer journey to guide customers from enquiring about heat pumps to installing them and receiving aftercare support, as shown in Figure 9.

Figure 9: Outline of the proposed customer journey



Customer engagement and advice

The branded website was a central resource for information on the project and heat pump technology. Digital marketing, social media posts and letters were all signposted to this website. Community engagement officers visited all residents and were available to answer questions about the technology and installation process.

Pre-installation, survey and design

Once a resident expressed interest in the project, a community engagement officer booked a survey with Macbrook's engineers. Macbrook visited the property at a convenient time and carried out a home energy survey, which included carrying out heat loss calculations and outlining options for retrofitting and installing the heat pump. A limited range of carefully selected Daikin heat pump options was selected to be used throughout the project. Growth Guides made the technical assessment report more customer-friendly, explaining the data and the options available. An initial indicative quote was provided for the works.

Installation and commissioning

If a customer was happy with the proposal, Macbrook would revisit to confirm the design and provide an updated firm quote for all required measures, including the heat pump. Macbrook would draw up a contract with the homeowner and plan a date to install the heat pump and associated retrofit options.

Post-installation and quality assurance

Trustmark would have conducted post-installation quality assurance checks and provided any follow-on support after installation. The customer's position throughout this journey could have been monitored and tracked via the website by the customer, installer and the project team.

2. Project outcomes

2.1. Awareness of the project, surveys completed and heat pumps installed

Awareness of the project in the target neighbourhood was good, with 100% of the residents asked in small informal surveys towards the end of the project stating they were aware of the project. However, only 50% said they wanted to understand how to improve their home's heating and energy efficiency.

By the end of the project, 74 households out of 576 had formally expressed an interest in the offer. In total, 29 households signed up to learn more about Heat Pumps for Friday Bridge, 16 home surveys were carried out, and 3 households proceeded to a heat pump quotation. However, no heat pump installations occurred under the project.

Under the requirements of the Heat Pump Ready programme, the project needed 25% of households within each target area to sign up for heat pumps for funding to be provided for heat pump deployment.

City Science categorised the customer prospects across their four target groups as follows:

Figure 10: Customer lead status key

Customer Lead Status	Description
Informed	Customers who have received information (home visit / letter)
Cold Lead	Customers who have stated they are not interested.
Warm Lead	Customers who have shown an interest but are not actively engaged.
Hot Lead	Customers who are actively engaged and progressing through the customer journey.

The spread of the lead status across the four target groups was as follows:

Table 3: Snapshot of statistics from the lead status across target groups

Target group	Number of properties	Hot Leads	Warm Leads	Cold Leads
1	32	9.4%	6.3%	84.4%
2	68	0.0%	4.4%	50.0%

3	99	3.0%	2.0%	76.8%
4	377	5.0%	9.8%	14.0%
Total	576	4.3%	7.6%	32.9%

2.2. Barriers faced through consumer recruitment

Interviews with the project partners and key stakeholders suggested that the following reasons were most significant in explaining the lack of uptake of the Heat Pumps for Friday Bridge proposition:

- Perception amongst households that there were **high running costs**, with limited savings after installing a heat pump. Project partners felt it was important to remain transparent about realistic costs and potential bill savings. However, the electricity prices at the time were such that no savings could be shown (this is a broader market issue rather than being specific to the project).
- **High up-front costs** were also a barrier faced, however even when heat pump installations were offered to residents for free towards the end of the project, there was zero take-up, suggesting that a perception of high up-front costs was not the only barrier.
- The **financial support options were not compelling enough** for consumers and were not stated clearly enough in the marketing materials. The letters and leaflets offered an equivalent grant to the Boiler Upgrade Scheme (BUS), but due to the timing of negotiations first with Lendology then with Daikin, the low interest loans available through Hiber were not promoted from the start of the project. This meant there was no clear differentiation between this scheme and BUS.
- Many residents stated they were **content with their existing heating system** and saw no need to replace it with a heat pump, especially without a compelling financial case.
- There was a **lack of demand, awareness and acceptance of heat pumps** as a technology within the Friday Bridge area, with limited households seen as 'early adopters'. This was also partly fed by negative media coverage and scare stories from others. No analysis was carried out of the sociodemographic profile of households, or an understanding of attitudes to issues such as the environment, cost savings and interest in new technology. Those who did have a home survey were driven by financial, rather than environmental, motivations.
- **Few residents knew others with a heat pump**, and poor visibility of heat pump technology in the area increased the perceived risk. Residents stated it would have been beneficial to see a heat pump in practice, particularly one installed in an older property, to better understand the practical implications of installation.
- There was a **lack of pre-existing community energy social infrastructure** – Friday Bridge had limited community networks, and the absence of an environmental group meant no identifiable organisations to champion the project.
- There was a delay of up to two months between customers showing interest in having a home survey and the project team getting the installer (Macbrook) on board to carry out the energy surveys. This was impacted by procurement delays whilst setting up the installer through the local authority framework.

2.3. What other challenges did the project encounter?

The project partners noted that there were additional challenges in the following areas:

- **Council involvement presented obstacles:** Alongside the benefits of a trusted local council brand, the project encountered challenges due to communication and task delegation issues with the district and county councils. Lengthy internal sign-off processes meant decisions about project planning and deliverables had to be delayed, which had knock-on effects for other project workstreams.
- **Remote work and resource constraints impacted local expertise:** Fenland District Council's partial withdrawal due to resource limitations resulted in a perceived loss of valuable local expertise, which would have benefited project planning and consumer engagement. The fully remote project team structure limited opportunities for in-person interaction, which may have hindered the consortium's potential to collaborate on project design.
- **Differentiated finance options were not tested:** The plan to tailor the value proposition in terms of financing options offered to two consumer segments ('able to pay' and those at risk of fuel poverty) did not happen in practice. This was because no customer had reached this stage of the customer journey. Therefore, the overall marketing approach was general, with consumer engagement officers taking a tailored approach in direct conversations with residents.
- **Finding an appropriate finance provider was challenging:** The consortium initially considered using Lendology, a social enterprise lender specialising in working with councils, as a finance partner. However, after investigating this option, it was found unviable in this area. Hiber Finance was brought on board instead.
- **Lack of a heat pump demonstrator unit:** Daikin was unable to provide a heat pump for demonstrations in the local area. On reflection, the project partners considered that having a technology provider embedded within the consortium from the start of the project would have increased involvement.
- **Procuring a heat pump survey and installation contractor faced delays:** Procurement was conducted through an existing framework contract developed by Cambridgeshire County Council, which included five contractors. A mini competition was held initially for a property energy surveyor and a separate heat pump installer. There was some delay in the tender process and low interest from suppliers, but eventually, two bids were received, potentially reflecting a limited local supply chain. Macbrook was chosen despite limited experience with Daikin heat pumps and their surveying and installation conditions, as they felt more comfortable quoting for their own designs.
- **Low level of engagement at community events:** After an encouraging introductory meeting at the tearoom, further events hosted by Heat Pumps for Friday Bridge did not attract any residents.

2.4. Which aspects of the project worked well?

Interviews with the project partners and key stakeholders suggest several project elements worked well despite the lack of progress toward heat pump installations.

- The project team took an approach to consumer engagement that focused on low-pressure, non-forceful engagement (as opposed to a hard-sell approach). Project partners indicated that

this was an effective approach for getting the community on board with the project idea and was perceived to be much more effective at getting people to engage with/open up to talking about heat pumps.

- Local authority endorsements were perceived by the project team as important for building trust and credibility for the project among residents.
- The project team considered the free home surveys delivered by Macbrook to be a notable incentive in engaging consumers who progressed this far in the customer journey. Growth Guides designed the home survey reports to be user-friendly and easy for customers to understand. Project team members generally considered the home survey reports to effectively convey the necessary information in a digestible and informative way. 16 surveys were carried out, and customers indicated that they were pleased with the detail and thoroughness provided in the home survey report. However, customer interviews highlighted considerable delays in organising the survey and receiving survey results.
- 34 homeowners attended the launch event at a local café, which gave a good opportunity to promote the project to a self-selected audience. Many of those who registered interest in Heat Pumps for Friday Bridge attended this initial event.
- Collaborating with industry stakeholders (e.g., Daikin and Hiber) can lead to better financing options and cost benefits. The partnership with Daikin led to subsidised loans, providing more competitive rates and interest-free options, thereby enhancing the attractiveness of the finance products.

2.5. What lessons would the project partners pass on to other organisations looking to deliver neighbourhood-based approaches to high-density heat pump deployment?

- **Maintaining regular contact with the DNO is valuable.** The DNO, UKPN, provided data on the grid capacity of the Friday Bridge area, which fed into the project's decision to choose Friday Bridge as the target location. After the initial involvement, UKPN were only to be involved in an ad hoc capacity, but effort was required to maintain engagement with the DNO in order to apply for consent for any heat pumps that were to be installed.
- **Allow sufficient time for pre-launch activities.** Allowing 8-10 weeks for pre-launch activities gave enough time to promote the events and to get press releases and associated material signed off by the local authority.
- **Having dedicated community engagement officers helped to build trust** and generate conversations between local residents/potential consumers. This gave the project a local presence and helped residents become familiar with the team.
- **Clearly state the financial offering upfront** to reassure homeowners and reduce ambiguity around finance options.
- **Conduct household analysis as well as property analysis upfront.** Project partners did not conduct any segmentation analysis, as this was planned to be conducted after customers had expressed interest, where finance offers would be considered on a case-by-case basis. In hindsight, information about the demographics and economic capabilities of the households would have pre-informed the engagement strategy. Project partners reported that this

information should have been collated before the door-knocking phase of customer engagement to streamline the group of potential customers most likely to be interested in installing a heat pump.

- **Identify and work with early adopters.** Friday Bridge turned out to be an inappropriate target location due to a lack of early adopters. A more targeted approach to engagement that focused on early adopters may have achieved wider uptake.
- **Consider targeting an area with diverse types of households.** More traction and interest in heat pump installations may have occurred if the target group involved more than one village – project partners mentioned that if the project were to have included the neighbouring village of Elm in the target group, the age range and diversity of homeowners would have increased, leading to more varied reasons for considering heat pumps.
- **Involve the installer in explaining the practicalities to households.** While participants indicated that the community event was informative, some felt there was a lack of direct interaction with the installation provider. They suggested that more detailed explanations about the practical aspects of installing a heat pump, such as the installation process and its impacts on their homes, would have been beneficial.
- **Design the procurement process with the contractor in mind.** The planned approach was to have two separate contractors for the surveying and installation work packages. However, this approach did not attract any responses due to the low value of the survey elements and contractors' preference to work with their own heat pump design. Therefore, to mitigate the associated delays and resource waste, projects should make sure that they are attractive for contractors (such as having multiple elements and sufficient value).
- **Consider widening the reach of procurement if the local supply chain is limited.** The limited number of responses to the mini-competition may indicate a limited supply chain within the local area for appropriate or qualified contractors. Therefore, the project could have benefitted from widening its reach by including contractors from a wider geography in the initial framework contract or by using a separate procurement approach for this individual contract.

3. Next steps

City Science is continuing to refine its Net Zero Partnerships offering, and its HPR learnings will inform the approach to hyper-local retrofit strategies, helping local authorities across the UK accelerate their transition to sustainable, energy-efficient communities.

Since finishing their Heat Pump Ready project, City Science has been working with Carbon Rewind, the installer from their sister HPR project in Cherwell, and Cambridgeshire County Council on the Action on Energy Tool. The tool will be a retrofit model based on the Home Energy Model (HEM) rather than SAP10. This newer model will provide more representative energy usage than SAP10 which uses data now over 12 years out of date.

Cambridgeshire County Council's Action on Energy brand (also known as CERP) is ongoing and was recently nominated for the [Public Sector Transformation](#) awards.

The council, as the lead authority of the Cambridgeshire Energy Retrofit Partnership (CERP), was awarded £8.5 million through the [Warm Homes: Local Grant](#). This funding will be used to deliver energy performance and low carbon heating upgrades to low-income homes. The upgrades could include insulation, solar panels or an air source heat pump. Learnings from the Heat Pump Ready programme, including using community engagement officers and providing wider retrofit advice clearly to homeowners, will be incorporated in this new project.