Notes on Completion: Please refer to the appropriate NIA Governance Document to assist in the completion of this form. The full completed submission should not exceed 6 pages in total.

NIA Project Registration and PEA Document

Date of Submission

Apr 2025

Project Reference Number

NIA_UKPN0108

Project Registration

Project Title

Greener Home

Project Reference Number

NIA_UKPN0108

Project Licensee(s)

UK Power Networks

Project Start

April 2025

Project Duration

2 years and 7 months

Nominated Project Contact(s)

Emily Pugsley

Project Budget

£1,716,885.00

Summary

UK Power Networks is working to deliver support at scale to vulnerable consumers at risk of being left behind by the energy system transition. This project will develop a new digital tool that aims to provide a bespoke and personalised home energy action plan to customers. Recommendations will be provided to customers on how to decarbonise their homes, reduce energy bills and make their homes warmer. By working closely with current service delivery partners, the aim is to build a tool that provides a one-stop-shop to energy efficiency, behavioural change and income max advice whilst also providing new options for consumers that would prefer to self-serve using digital channels.

Nominated Contact Email Address(es)

innovation@ukpowernetworks.co.uk

Problem Being Solved

During RIIO-ED2, UK Power Networks is working to deliver support at scale to vulnerable consumers at risk of being left behind in the energy transition. This requires a step change in volumes of vulnerable and disadvantaged customers that are identified and supported. This is especially important in a context where other factors, such as the increasing cost of living, digital exclusion, increased inflation and increasing energy costs will contribute to increasing numbers of people at risk of being left behind.

Research identified key barriers that are preventing customers from participating in the net zero transition, therefore the initial vision for Greener Home was developed as one of the key Leaving No One Behind (LNB) services networks can utilise to deliver support to customers who are disadvantaged or at risk of being left behind. This project is focused on:

1) Remove barriers to customers participating in net zero transition. A novel digital tool will provide a one-stop-shop to decarbonising customer homes and drive income maximisation through tailored advice on energy efficiency measures, appliance use,

grants/benefits.

2) Utilise latest technology advancements to provide an improved tailored experience for customers.

Method(s)

Overview of Solution

To solve the problems identified we will build a digital tool to provide a one-stop-shop of multiple support and recommendation tools across income and energy efficiency topics to provide customers with a personalised home energy plan. The tool will benefit all types of customers, regardless of housing tenure, budget and previous experience with energy efficiency measures. This tool will help customers to develop a home energy action plan with user journeys, housing tenure and experiences in mind.

Whilst the final set of capabilities and features of the tool will be determined during the design stage of the project, the key features proposed are:

· Personalised energy action plan based on users' priorities, housing tenure, and experience with energy efficiency measures

· Benefit and grant eligibility support function to help customers access benefits they could be eligible for

· Flexibility opportunity assessment personalised to the user circumstance

· Augmented Reality (AR) screen assist to help visualise home improvements

Approach

The tool will be delivered in three phases:

1. Research: research into the tool functionality and requirements, as well as an assessment of the tool benefits for users

2. Foundational tool: design, build and trial of the foundational tool, which includes the core tool functions

3. Enhanced tool: refinement and testing of enhanced tool functionality based on foundational tool trial results

The trial will be based on a minimum viable product (foundational tool) and subsequent functionality will be iteratively developed and tested as part of the project. This project delivery approach is essential to de-risk the project implementation by focusing on capturing the user requirements early and continuously developing and testing the tool.

Measurement & Data Quality Statement

The scope of this project is to provide a new and improved service to vulnerable consumers. Data gathered during the trial will be kept securely and deleted in accordance with data protection requirements. In compliance with GDPR requirements, only anonymised and aggregated data will be included in project reports for wider distribution.

Project change July 2026:

The first two phases have been successfully completed, with the foundational tool developed and currently in trial phase. The foundational tool includes a personalised home energy plan, benefits and grants checker and an appliance calculator (enabling customers to understand how using appliances differently can help save money). Work will continue to be completed to raise awareness of and increase engagement with the foundational tool.

The enhanced tool scope (phase three) has been defined based on customer testing and feedback on the foundational tool. The final selection was to develop a behaviour change game.The game will be a fun and engaging experience to help customers understand

how they can improve the energy efficiency of their home and save money in the process.

The game development company Bold Donut will lead on developing the game, with support from Hubbub and (for broader enhancements) ReciteMe. The same process of iterative customer testing and implementation of feedback will be followed. There is no change to the budget.

Scope

Phase 1: Research

1.1 Research: Conduct a research phase to understand requirements for the delivery of the Greener Home foundational tool and the enhanced tool.

1.2 Customer validation: Engage in customer testing to test functionality of the novel tool with customers using mock-ups of the foundational tool and the enhanced tool.

1.3 Benefit assessment: Conduct a detailed benefit assessment to map out the value to customers along with development of KPIs to manage the tool effectively.

Phase 2: Foundational tool

2.1 Tool design: Develop the design (including user interface and user experience (UI/UX)), for the foundational tool, providing wireframes and clickable prototypes for customer testing.

2.2 Logic and functionality: Develop and build the calculations and functionality behind the foundational tool. Develop the content for all articles and outputs for all users of the Greener Home tool.

2.3 Customer testing: Carry out focus group customer testing.

2.4 Development: Development of the tool, in line with results from the tool design and customer validation.

2.5 Trial period: Run a trial period to demonstrate the tool performance and identify any opportunities for enhancement in content and functionality.

Phase 3: Enhanced tool

3.1 Identify suitable partner to implement enhanced functions, such as AI and AR.

3.2 Develop and integrate enhanced functions into Greener Home foundational tool.

3.3 Trial to demonstrate the enhanced tool performance and benefits.

3.4 Develop a plan for deployment into BAU.

Project change July 2026**:**

Phases 1 and 2 have been completed. Phase 3 is now in progress, with the behaviour change game selected as the enhanced function to be developed. The scope outlined for phase 3 will be followed to develop, trial and integrate the game, and ensure smooth deployment into BAU for the foundational tool and enhancement developed.

Objective(s)

· The research phase will assess and scope the technical requirements for the tool. The in-depth scoping and research will inform the functional requirements.

· The tool will provide customers with a personalised plan factoring in their home profile, living situation, energy efficiency understanding and will ensure it meets their service expectations.

· The enhanced tool phase will further enhance overall user experience.

Consumer Vulnerability Impact Assessment

The tool will deliver support to vulnerable consumers at risk of being left behind in the net zero transition.

Extensive customer testing with customers on the PSR will provide insights into the support required by vulnerable customers to inform the design of the tool.

The solution deployed by this project will ensure that consumers receive tailored advice appropriate for their personal situation that aims to increase the wellbeing of the consumer.

One-stop-shop

Build on previous energy efficiency measures and fuel poverty support tools to deliver a one-stop-shop of the most relevant and useful tool functionality, enabling customers to receive tailored advice across a range of areas without requiring the customer to grapple with multiple disparate tools, reducing the need for customers to re-enter the same information repeatedly, especially if sensitive information.

Wide variety of needs met

This tool will be tackling a barrier to entry in participating in the energy transition and provide support for vulnerable customers who would benefit from income maximisation, customers who are renters, anyone interested in saving money and improving the energy efficiency of their home. The tool will provide practical steps to ensure customers are empowered to make changes to their situation ensuring no customer is left behind in the net zero transition now and in the future.

Success Criteria

· The research phase has effectively and clearly identified innovative requirements for the delivery of the Greener Home foundational tool and the enhanced tool.

· The tool receives positive feedback in customer testing and is approved for launch.

· The integration of the enhanced functions drives more users to the Greener Home tool

Project Partners and External Funding

This project will be delivered in partnership with InBest, Sirio, Explain, Tangent, Sia Partners, SiaXperience, Centre for Sustainable Energy (CSE).

Other than NIA funding and the compulsory contribution from UK Power Networks, there is no other external funding support which will be contributed to this project.

Project change July 2026: The selected partner to develop the enhancement for the foundational tool is Bold Donut.

Potential for New Learning

Expected Key Outputs

The research and foundational tool will offer potential for new learning to understand:

· Supporting vulnerable consumers at scale: Learnings about how increasing the scale of the support impacted the quality and uptake of advice.

· Barriers to uptake of low carbon technologies: Learnings about issues customers face in actioning the recommended energy efficiency measures

· Disadvantaged customer engagement with digital tool: Learnings on preferred engagement methods, i.e. engaging with a digital tool as opposed to in person delivery

Project change July 2026: Delivering support directly as a DNO: Learnings on how to build awareness and trust for DNOs to allow effective delivery of support.

Dissemination Approach

This approach is based on UK Power Networks' previous experience of running successful innovation projects. The aim is to update the dissemination plan as the project progresses.

UK Power Networks will look to share project successes and discoveries via its social media channels with the possibility of publishing external press media where appropriate.

NIA reporting will include regular reporting on project progress and outcomes to ensure transparency and sharing of learnings.

Scale of Project

The tool's accessibility and its ability to meet the diverse needs of many customers make it highly scalable. It addresses barriers to entry and is particularly beneficial for vulnerable customers seeking income maximisation, and anyone interested in saving money and improving their home's energy efficiency. The tool's wide-ranging benefits ensure it is easily scalable and can be promoted across various platforms and demographics. This ensures that all customers are empowered to make changes to their situation, leaving no one behind in the transition to net zero, both now and in the future.

The scale of the investment is to design a tool that brings multiple relevant and personalised benefits to a wide demographic of disadvantaged consumers, and trial it with a sufficient sample size of customers.

We will use a trial launch to maximise the learnings from the development and trial. Furthermore, by scoping and building the tool in

separate phases it ensures that the relative cost of the build and the benefits each feature provides can be considered to ensure value for money and the most effective outcomes delivered.

Technology Readiness at Start

TRL5 Pilot Scale

Technology Readiness at End

TRL7 Inactive Commissioning

Geographical Area

Customers in all UK Power Networks licence areas will benefit from the tool.

Revenue Allowed for the RIIO Settlement

No funding was provided within the current RIIO settlement that will become surplus to requirements as a result of this project.

Indicative Total NIA Project Expenditure

The total project budget is £1,716,886 of which 90%, £1,545,197 will be recovered from NIA.

Project Eligibility Assessment Part 1

Requirement 1

Facilitate the energy system transition and/or benefit consumers in vulnerable situations

Please answer **at least one** of the following:

How the Project has the potential to facilitate the energy system transition:

N/A

How the Project has potential to benefit consumer in vulnerable situations:

The project addresses barriers to entry and is particularly beneficial for vulnerable customers interested in saving money and improving their home's energy efficiency.

Greener Home builds on previous energy efficiency measures and fuel poverty support tools for vulnerable customers to deliver a one-stop-shop of the most relevant and useful tool functionality, enabling customers to receive tailored advice on a range of areas without requiring the customer to grapple with multiple disparate tools, reducing the need for customers to re-enter the same information repeatedly, especially if sensitive information.

Requirement 2 / 2b

Has the potential to deliver net benefits to consumers

Project must have the potential to deliver a Solution that delivers a net benefit to consumers of the Gas Transporter and/or Electricity Transmission or Electricity Distribution licensee, as the context requires. This could include delivering a Solution at a lower cost than the most efficient Method currently in use on the GB Gas Transportation System, the Gas Transporter's and/or Electricity Transmission or Electricity Distribution licensee's network, or wider benefits, such as social or environmental.

Please provide an estimate of the saving if the Problem is solved

N/A

Please provide a calculation and/or description of the expected benefits of the solution

The total benefit of this project is estimated based on the following points:

· Assumed the tool will serve 10,000 customers per year, this estimate is based on previous volumes achieved from similar campaigns.

· SROI is calculated using proxies from the DNO rulebook and evidence of the anticipated advice and support for energy efficiency, net zero transition and income maximisation advice.

· Assumed Greener Home Tool will increase the efficiency of LNB services as the tool is scalable to high volumes of customers.

· Based on the above assumptions, the project is projected to produce societal benefits of £6.16m (net) during RIIO-ED2.

Please provide an estimate of how replicable the Method is across GB

Once successful, the solution has the potential to be replicated by all network operators across Great Britain.

Please provide an outline of the costs of rolling out the Method across GB.

The roll out costs will be comprised of:

· The cost of the APIs selected and licence cost of using the proposed solution

· The cost of design and development to suit DNO objectives and brand

· The costs associated with integrating the solution into BAU processes

Requirement 3 / 1

Involve Research, Development or Demonstration

Projects must have the potential to have a Direct Impact on a Network Licensee's network or the operations of the System Operator and involve the Research, Development, or Demonstration of at least one of the following (please tick which applies):

☐ A specific piece of new (i.e. unproven in GB, or where a method has been trialled outside GB the Network Licensee must justify repeating it as part of a project) equipment (including control and communications system software).

☐ A specific novel arrangement or application of existing licensee equipment (including control and/or communications systems and/or software)

☐ A specific novel operational practice directly related to the operation of the Network Licensees system

☐ A specific novel commercial arrangement

Involve Research, Development or Demonstration - Please select all that apply

☐ A specific piece of new equipment (including monitoring, control and communications systems and software)

☑ A specific piece of new technology (including analysis and modelling systems or software), in relation to which the Method is unproven

☑ A new methodology (including the identification of specific new procedures or techniques used to identify, select, process, and analyse information)

☐ A specific novel arrangement or application of existing gas transportation, electricity transmission or electricity distribution equipment, technology or methodology

☐ A specific novel operational practice directly related to the operation of the GB Gas Transportation System, electricity transmission or electricity distribution

☐ A specific novel commercial arrangement

Specific Requirements 4 / 2a

Please explain how the learning that will be generated could be used by the relevant Network Licensees

Insights relevant to network licensees may encompass trends and the adoption of low carbon technologies. These insights reveal what customers have already installed, their priorities, and the measures they are keen to learn more about. This information can help tailor services to better support customers in the low carbon transition and identify barriers that networks can address to facilitate uptake.

N/A

Is the default IPR position being applied?

☑ Yes

Project Eligibility Assessment Part 2

Not lead to unnecessary duplication

A Project must not lead to unnecessary duplication of any other Project, including but not limited to IFI, LCNF, NIA, NIC or SIF projects already registered, being carried out or completed. Networks must explicitly mention similar projects that they have considered and how these differ.

Please demonstrate below that no unnecessary duplication will occur as a result of the Project.

We are aware other distribution networks have built digital tools to deliver fuel poverty and low carbon technology advice, such as SPEN's HomeWise APP tool. However, we have developed Greener Home with differentiating factors to provide a one-stop-shop of the most relevant and useful tool functionality, enabling customers to receive tailored advice on a range of areas without requiring the customer to grapple with multiple disparate tools, reducing the need for customers to re-enter the same information repeatedly, especially if sensitive information.

Greener Home stands out with a clear unique selling point by integrating multiple functionalities under one platform, including a home energy plan developer, grant checker, benefit checker, and appliance calculator.

Additionally, the tool's key differentiating factors from other tools on the market (such as Homewise) include offering flexibility advice and providing tiered complexity of information. This allows users to receive tailored advice at any stage of their energy efficiency journey. These unique functionalities have not been implemented in BAU elsewhere, as confirmed by our market benchmarking exercise.

If applicable, justify why you are undertaking a Project similar to those being carried out by any other Network Licensees.

We are undertaking a project similar to those carried out by other network licensees because our tool offers unique differentiating factors that set it apart in the market. By providing flexibility advice and tiered complexity of information, we ensure that users receive tailored guidance at any stage of their energy efficiency journey. These functionalities, which have not been implemented elsewhere according to our market benchmarking exercise, address specific needs that other tools lack. This approach not only enhances user experience but also ensures that we deliver comprehensive and personalised support, making our project a valuable addition to the existing landscape of energy efficiency solutions.

Additional Governance And Document Upload

Please identify why the project is innovative and has not been tried before

N/A

Relevant Foreground IPR

The outputs and deliverables produced as part of the project will conform to the default treatment of IPR.

Background from the tool build partner, identified in Phase 3, might be required to develop and build some of the foreground IPR. However, the scope of the tool will be developed so that multiple suppliers could be capable of providing a similar background IPR that allows the replicability of this project.

Data Access Details

To view the full Innovation Data Sharing Policy, please visit UK Power Networks' website here:
https://d1oyzg0jo3ox9g.cloudfront.net/app/uploads/2025/11/UKPN-Innovation-Data-Sharing-Policy.pdf

UK Power Networks recognises that Innovation projects may produce network and consumption data, and that this data may be useful to others. This data may be shared with interested parties, whenever it is practicable and legal to do so, and it is in the interest of GB electricity customers. In accordance with the Innovation Data Sharing Policy, UK Power Networks aims to make available all non-personal, non-confidential/non-sensitive data on request, so that interested parties can benefit from this data.

Please identify why the Network Licensees will not fund the project as a part of it's business and usual activities

The project aims to trial a new and innovative technology that, to our knowledge, has not been used to support vulnerable consumers in this manner across distribution networks. Given this, it is considered high risk for the business to trial such a solution without prior validation. Innovation can accelerate the adoption of this technology, facilitating a smooth transition to business as usual once the project successfully achieves its objectives.

Please identify why the project can only be undertaken with the support of the NIA, including reference to the specific risks (e.g. commercial, technical, operational or regulatory) associated with the project

As noted in the NIA guidance, certain projects are speculative and yield uncertain commercial returns. This is true for this project. There is a commercial risk that the solution developed may not be adopted by stakeholders after the trial period. This could be due to the solution not reaching the required maturity for business-as-usual application or due to stakeholder sentiment. This risk is being mitigated through early engagement with customers and stakeholders, ensuring requirements are clearly defined and documented. If the project is successful, it will demonstrate several technical solutions and business processes that will enhance customer service.

This project has been approved by a senior member of staff

☑ Yes