

SIF Alpha Round 2 Project Registration

Date of Submission

Mar 2024

Project Reference Number

10083475(Correct) (1)

Initial Project Details

Project Title

Hy-Fair - Alpha

Project Contact

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Challenge Area

Supporting a just energy transition

Strategy Theme

Supporting consumers in vulnerable situations

Lead Sector

Gas Distribution

Other Related Sectors

Gas Distribution

Project Start Date

01/10/2023

Project Duration (Months)

6

Lead Funding Licensee

SGN

Funding Mechanism

SIF Alpha - Round 2

Collaborating Networks

Cadent

Wales & West Utilities

SP Energy Networks Distribution

Technology Areas

Carbon Emission Reduction Technologies

Hydrogen

Community Schemes

Gas Distribution Networks

Green Gas

Project Summary

Hy-Fair aims to address the challenges faced by Consumers in Vulnerable Situations (CVS) and Small Businesses during the transition to hydrogen and other low carbon technologies. Through the Hy-Fair Fairer Warmth Hub, we will provide a central environment equipped with specialized tools and tailored guidance to empower community champions, individuals, and small businesses. Hy-Fair's Innovative features will include a streamlined system for CVS to access financial support, guidance and simplified access to resources, data analytics for precise planning, and community engagement tools. By fostering place-based approaches, Hy-Fair will encourage collaboration and help communities deliver a fair energy transition.

Add Preceding Project(s)

10054930 - Hy-Fair

Add Third Party Collaborator(s)

CEE

Energy Systems Catapult

Fife Council

Project Budget

£547,388.00

SIF Funding

£463,201.00

Project Approaches and Desired Outcomes

Problem statement

Problem Statement: During the SIF Discovery Phase, our understanding of the problem has evolved significantly. Initially, we identified challenges faced by CIVS and Small Businesses during the transition to hydrogen gas. However, through extensive research and engagement with stakeholders, we discovered that the problem extends beyond hydrogen to encompass a wider range of low carbon technologies.

Affordability, safety, consumer preferences, and potential disruption emerged as common challenges across all stakeholders. Engaging the local supply chain, including tradespeople, is crucial to support the low carbon transition. Additionally, many specific challenges are place-based, necessitating localised solutions. Our Discovery phase research demonstrates that CIVS and communities often prefer support from local organisations they are familiar with, rather than larger entities.

The Hy-Fair Fairer Warmth Hub will address the problem by fostering community-led, place-based, fair energy transitions. This innovation will provide a central virtual environment that provides a set of tools to empower community champions, deliver tailored guidance, and facilitate community engagement for a just transition to clean energy.

Project Evolution: In response to the insights gained from consumers, businesses, and stakeholders our project has evolved beyond hydrogen to address the broader challenges associated with the energy transition. We have integrated feedback and learnings into a comprehensive approach that goes further than simply mitigating disruptions during the transition to hydrogen gas. Instead, it focuses on a place-based strategy to address challenges throughout the entire energy transition process.

This evolution requires the development of a holistic solution that considers the specific needs and concerns of various stakeholders and places local communities and trusted organisations at the heart of delivering key messages and ongoing support.

Meeting the Challenge: Our project remains committed to the primary aim and theme area of the Innovation Challenge. The development of the Fairer Warmth Hub is a novel and replicable approach for identifying, supporting, and including vulnerable and disadvantaged consumers. This holistic solution will enable individuals, communities, and organisations to collaborate in decarbonising local energy systems.

By incorporating insights gained from consumer and small business engagement, our solution will address the unique challenges faced by different consumer groups. We strive to ensure equal access to the benefits of transitioning to green alternatives. The proposed solution will support heat decarbonisation across all areas, including off-gas grid rural regions, fuel-poor households, and consumer groups with limited access to decarbonisation opportunities.

For this project we will be working with communities in Fife to co-create and trial solutions aligned with the H100 project and wider decarbonisation efforts in the region.

User Needs: To understand user needs, we established a Consumer Impact Panel of vulnerable consumers. This focus group ensures that those with lived experience at the centre of policy discussions about decarbonisation as advocated in the recent University of Manchester Power in Place report (2023). Additionally, in Discovery, we have conducted interviews with small businesses and engaged with stakeholders including Fife Council, tradespeople, and restaurateurs to understand their specific needs and challenges. In the next phase, we will collaborate with the Energy Systems Catapult (ESC) to further engage with consumer groups, ensuring our proposed solution meets their requirements.

Funding: Our Alpha Phase project builds upon the Discovery Phase and leverages the existing work of the Centre for Energy Equality's and wider partners' community engagement expertise. This includes recent CEE work funded by Innovate UK to utilise digital tools to help engage harder-to-reach households with effective energy advice, providing valuable insights that we will incorporate into our project. Furthermore, the project will build on Wales and West Utilities' and ESC's work to safeguard CIVS during the hydrogen transition.

Innovation justification

The Innovation: The Fairer Warmth Hub is a groundbreaking platform that will catalyse a community-led, place-based, fair energy transition. Specialised tools will empower community champions and provide tailored guidance for individuals and small businesses. This will support communities through the transition to hydrogen and other sources of clean energy. The software will be supported by a dedicated team and introduces a range of cutting-edge features as set out in the Annex.

This project addresses the specific challenge theme, is highly innovative, has customers and stakeholder centrally involved.

For Individuals and Community Champions:

Fairer Warmth App: Streamlines access to financial support and guides, simplifying the energy transition process for consumers and businesses.

A Training Toolkit for Champions: Train individual champions and organisations to become advocates for sustainable practices and energy transition advice.

Tailored Information: Customised guidance to different interest groups, including businesses, ensuring targeted support.

For Organisations:

Demographic Analysis Tool: Utilises data analytics to understand unique needs, enabling precise planning for an inclusive transition.

Contact Details for Support Organisations: Centralises contact information for relevant support networks, fostering collaboration.

Community Engagement and Transition Pathway Tools: Facilitating community involvement, empowering localised decarbonisation strategies.

The Fairer Warmth Hub's innovative features could push the sector forward by providing tailored guidance, data analytics, simplified access to support, and better community engagement.

Challenge Theme:

The project addresses the challenge theme of "Supporting a just energy transition: Novel and replicable approaches for better identification, support, and inclusion of vulnerable and disadvantaged consumers." Our project directly aligns with this theme. It will address the specific needs of vulnerable and disadvantaged consumers throughout the energy transition process. Through the Fairer Warmth Hub, we provide tailored information, financial support access, guides, and community engagement tools to ensure these consumer groups are not excluded.

Learning:

Previous innovation projects, including the ESC and Wales and West Utilities project focused on mitigating disruption caused by a hydrogen transition, have provided valuable insights and lessons. We have conducted extensive engagement with stakeholders, including vulnerable consumers, small businesses, and representative groups, to understand their concerns and incorporate their feedback into our proposed solution. The insights gained from these engagements have guided our plan for the Alpha Phase.

Working in the Open:

We have actively worked in the open with stakeholders throughout the Discovery process. By engaging with vulnerable consumers through the Consumer Impact Panel and speaking with many more businesses and stakeholders, we have incorporated diverse perspectives into our project. This collaborative approach has ensured that our proposed solution is grounded in the needs and challenges identified by the stakeholders themselves.

Technology Readiness Levels (TRL):

Throughout the project, we will develop various tools with different TRLs. The Fairer Warmth App, which will be adapted from its current use, has a higher TRL, while other tools will be developed from scratch, starting at lower TRLs. This phased approach allows us to leverage existing technologies while pushing the boundaries of innovation in areas where new solutions are required. We also aim to achieve high levels of commercial readiness, addressing barriers to BaU implementation.

SIF Funding:

SIF funding is essential for the success of our project. This central virtual environment, along with the supporting operating model, will provide communities and organisations with the necessary tools to support all consumers fairly through the energy transition. This ambitious and complex undertaking goes beyond the remit of network companies alone and requires a whole-system approach involving wider stakeholders. The SIF provides an ideal funding source, allowing us to realise this innovative vision and raise the profile of the project to ensure its success.

Impact and benefits (not scored)

Financial - future reductions in the cost of operating the network

Environmental - carbon reduction – direct CO2 savings per annum

Revenues - creation of new revenue streams

New to market – products

New to market – processes

New to market - services

Others that are not SIF specific

Impacts and benefits description

The Fairer Warmth Hub addresses the specific challenges faced by CVS and small businesses, offering a range of benefits

including financial savings, environmental impact, introduction of innovative solutions, and substantial social returns on investment. The Alpha phase will provide an opportunity to further quantify and refine these benefits, demonstrating the significant impact the Hy-Fair project can make in the field of decarbonisation.

The Hy-Fair Fairer Warmth Hub offers specific benefits that address the distinct challenges faced by CVS and small businesses, providing valuable contributions in the following areas:

1. Financial Benefits:

The current BaU approach to the energy transition often encounters delays and planning oversights due to poor engagement and messaging, resulting in potential cost escalations. The Hy-Fair project mitigates this risk by improving community engagement through tailored materials for CVS and small businesses. While the exact financial impact is currently unquantified, data collection during the Alpha phase will allow for the assessment of the financial benefit in terms of reduced costs associated with improved engagement providing metrics that can inform future industry investment in engagement.

2. Financial Savings for Consumers:

Hydrogen, as a fuel, is more expensive than natural gas and transition costs could lead to an uneven take up of new technologies. UKERC research shows that support for hydrogen is significantly lower amongst lower income groups (UKERC, 2022). Without adequate support, this price disparity and scepticism about take up could lead to increased levels of fuel poverty and associated societal impacts. The Fairer Warmth Hub aims to address this issue by expanding access to energy efficiency advice and grants. Research has shown that following energy efficiency advice typically results in annual savings of up to £270 on energy bills for consumers (Energy Saving Trust). The Alpha phase will focus on data collection to quantify the increase in uptake of home efficiency measures and the resulting financial savings.

3. Environmental Benefits:

By improving the uptake of low carbon measures and reducing resistance through clear and impartial advice, the Fairer Warmth Hub can help to accelerate decarbonisation, leading to direct annual carbon dioxide (CO₂) savings. While the precise carbon reduction impact is currently qualified in the Discovery CBA, the Alpha phase will enable the quantification of these environmental benefits.

4. Introduction of New Products, Processes, and Services:

The Fairer Warmth Hub introduces a range of innovative products and services that improve upon existing provisions or introduce entirely new offerings. These additions are detailed in response to Q3 of the funding application, showcasing the project's commitment to fostering innovation in the energy transition sector.

5. Social Return on Investment: Improving provision for CVS and the fuel poor by granting access to advice and financial assistance brings significant social benefits to both the recipients and society at large. These are conservatively estimated at several million per year in savings to the end users. It is important to note that these benefits are based on conservative estimates and do not account for the potential impact of the Fairer Warmth Hub on other types of energy transition, such as heat networks. Collaboration with new partners in the Alpha phase will enable a more comprehensive assessment of the system's wider impact.

Teams and resources

Industry Momentum

: During Alpha, the delivery team will include diverse partners, reflecting the growing interest and belief in the project's initiative. The consortium includes representation from 5 energy networks, community organisations, local authorities, and social housing providers. This will provide a breadth of expertise and diverse routes to engagement, resulting in a holistic approach to address the identified challenge and enhancing the hub's effectiveness, relevance, and positive impact.

Partners/Subcontractors:

1.

SGN (Lead) & Networks, National Gas Transmission, SP Energy Networks, Cadent & Wales and West Utilities:

SGN and the network partners bring valuable expertise in the energy sector, ensuring seamless integration of the Fairer Warmth Hub with existing infrastructure and networks. They will contribute their knowledge and resources to support the project's successful delivery.

2.

Centre for Energy Equality (CEE):

CEE serves as the lead system developer and overall project manager. They also operate the Vulnerable Consumer Impact Panel, providing insights into the needs and concerns of vulnerable consumers. CEE's expertise in energy equality is instrumental in ensuring a fair and inclusive energy transition. CEE also have extensive digital expertise which will be utilised in developing the Hy-Fair Fairer Warmth System.

3.

Fife Council:

As a key user of the innovation, Fife Council will play a vital role in facilitating community engagement through both officers and elected members. Its local knowledge and connections will help drive the successful adoption of the Fairer Warmth Hub within the

testbed community. Fife Council itself owns >30,000 units and active local housing associations will also be engaged.

4.

Community Groups & Social Housing:

These stakeholders will act as key users of the resources and champion the implementation of the Fairer Warmth Hub within their respective communities including Glen Housing and West Wemyss Energy Options who are named subcontractors. Their involvement ensures the project's relevance and effectiveness at a grassroots level. We shall also seek to engage more widely working with our network partners, aiming for Beta trials to involve communities throughout the UK in relation to different types of energy transition.

5.

British Gas/Centrica:

bring their consumer-facing expertise and commitment to supporting bill reductions and energy efficiency schemes to the consortium. They will contribute their expertise in energy pricing and affordability initiatives to develop practical strategies for bill reduction through the Fairer Warmth Hub as well as providing key input into usability of the system.

6.

Energy Systems Catapult:

Leveraging their wide-ranging connections and expertise, Energy Systems Catapult will support the testing of innovations utilising expertise in service design and behavioural insights. Their involvement enhances the project's technical capabilities and facilitates real-world testing through their Living Lab and Home Truths panels.

7.

Lane Clark & Peacock:

will provide domain expertise in energy and energy data, supporting the development of cost-benefit analysis and ensuring robust evaluation of the project's outcomes.

To ensure inclusivity and inform the project work, further engagement of wider stakeholders will include:

Consumer Impact Panel: CEE's Consumer Impact Panel, consisting of vulnerable consumers who may face specific challenges during the energy transition.

Living Lab and Home Truths Panel: The consortium will test the tools and features of the Fairer Warmth Hub through ESC's Living Lab and Home Truths Panel. This real-world testing will provide valuable feedback and allow for iterative improvements based on user experiences.

Continued Engagement with Businesses, Community Groups, and Housing Providers: Through workshops, focus groups, and regular communication channels, feedback will be obtained to inform the ongoing development of the Fairer Warmth Hub.

Dissemination and Awareness: including awareness campaigns, public consultations, and use of various communication channels to gather input and raise awareness about the Fairer Warmth Hub.

Project Plans and Milestones

Project management and delivery

Work Package 1: Hub Development (CEE Lead, 15% costs)

During this phase, we will collect and organise comprehensive data on energy consumption, heating systems, and demographic factors. The data will be accessible through the Fairer Warmth Hub mobile app. A rigorous process will shortlist the most effective tools and resources that will be integrated into the hub.

Work Package 2: Tools Development (CEE Lead, 30% costs)

We will design user-centric tools for individuals to navigate the transition effectively. Advisors and communities will have access to resources for training, accessing examples of best practice, and supporting effective community engagement. Collaboration, data sharing, planning, and performance tracking tools will be developed for networks and organisations involved in the transition.

Work Package 3: Engagement & Service Design (ESC Lead, 20% Costs)

Regular input and feedback from individuals, community groups, businesses, and stakeholders will be sought to ensure their needs are considered. Solutions will be tested with user groups to validate their effectiveness. Dissemination activities will raise awareness and encourage broader participation. An engagement strategy will be developed and implemented, outlining anticipated use of the tools from up to 3 years ahead of a community's energy transition, to the point at which the transition is embedded.

Work Package 4: CBA & Operating Model (LCP Lead, 10% costs)

We will establish a robust operating model for the Fairer Warmth Hub, defining the service blueprint, ownership model, and governance structures. An in-person champion system will engage consumers who prefer direct interaction. Long-term sustainability and scalability of the hub will be prioritised.

Work Package 5: Data Gathering and Analysis (CEE Lead, 5% cost)

Key resources for the Fairer Warmth Hub will be identified through data analysis. Demographic factors will inform tailored strategies for different communities. The collected data will enable efficient decision-making and resource allocation. Known challenges associated with data sharing will be addressed.

Work Package 6: Trial Design (CEE lead, 10% costs)

Aligned with local objectives and wider Net Zero ambitions, we will design a trial involving participants from individuals, community groups, and organisations. The trial will provide practical feedback to enhance the effectiveness of the Fairer Warmth Hub. Wider trial areas will be identified in collaboration with new network partners.

Work Package 7: Project Management (All, 10% costs)

The consortium will adopt a robust and effective approach to project management to ensure the successful delivery of the project. Key tools and mechanisms include regular project meetings, progress tracking, and communication channels to facilitate collaboration and timely decision-making. The project will be managed using an Agile methodology, with clear roles and responsibilities assigned to each partner and subcontractor. The project manager from CEE will oversee project delivery, coordinating the work packages and ensuring alignment with the project plan.

Risk Management:

A comprehensive risk management strategy will be implemented to identify and mitigate potential risks that may hinder the project's success. The Risk Register worksheet in the Project Management template outlines risks and uncertainties, including technical, political, regulatory, and environmental factors. Mitigation actions have been assigned to responsible organisations, and regular monitoring will be conducted to address emerging risks and implement appropriate contingencies. An additional 'Transition Risk Register' has been included in the workbook to ensure the main project objectives are met, enabling a just transition to clean energy.

Consumer Interaction:

Consumer engagement and interaction are vital components of this project. The involvement of consumers and stakeholders is embedded into our project design. This will be achieved through various methods, including engagement with CEE's Consumer Impact Panel, testing tools via ESC's Living Lab and Home Truths Panel, and continued engagement with businesses, community groups, and housing providers.

Key outputs and dissemination

Outputs:

The Alpha phase of our project will develop the HyFair Fairer Warmth Hub and Toolkit – a comprehensive system designed to facilitate a place-based, fairer transition to sustainable warmth for all consumers, including CVS, and small businesses.

This innovative platform will serve as a centralised hub with essential features and tools to support communities to participate in

the low-carbon energy transition. Individuals feature of the hub shall include:

For Individuals and Community Champions:

Fairer Warmth App, streamlining personalised access to financial support and simplifying the energy transition process for consumers and businesses.

A Training Toolkit for Community Champions to become expert advocates for sustainable practices and energy transition advice. Tailored information and guidance to different interest groups, including businesses, ensuring targeted support.

Additional tools if discovered during Work Package 1.

For Organisations:

Demographic Analysis Tool to enable tailored planning and mapping of support services by identifying energy needs and vulnerabilities within different demographic groups.

Centralises contact information for relevant support networks, fostering collaboration.

Community Engagement and Transition Pathway Tools that facilitate community involvement, provide bespoke templates, and empowering localised decarbonisation strategies.

Additionally, we will generate detailed feedback and insights reporting to capture experiences and lessons learned throughout the community energy transitions. This valuable information will be disseminated to stakeholders, policymakers, and industry professionals to foster knowledge exchange and drive future innovation.

The project will provide a summary of the Fairer Warmth Hub's operating model, including recommended methodologies and a CBA. This will allow the system to become embedded into BaU practices, making it accessible to a wider audience and enabling support for any community or group of organisations undergoing the energy transition.

A detailed roll-out plan for trials in Fife, aligned with the H100 project and broader decarbonisation efforts, will be developed. This plan will consider the specific needs and objectives of the region, maximising the impact of the Fairer Warmth systems. We will also identify additional trial communities beyond Fife, aiming to expand the nationwide implementation of our solutions.

Dissemination Plan

To ensure the wide dissemination of our key outputs and lessons learned, we have developed a comprehensive dissemination strategy. Our project partners, through their diverse backgrounds and networks, will play a crucial role in disseminating the outputs to relevant stakeholders across all parts of the energy sector.

We will participate in at least three industry events, showcasing the Fairer Warmth Toolkit and sharing insights gained from community energy transitions. Additionally, a series of webinars will provide in-depth demonstrations of the Toolkit and engage a broader audience.

Direct engagement will be pursued with local authorities, community groups, energy sector organisations, and other key stakeholders through meetings, workshops, and presentations. This approach will involve stakeholders in the dissemination process, seeking their input and fostering collaboration.

Social media platforms will be leveraged to disseminate key outputs and lessons learned. Regular updates, informative posts, and engaging content will be shared across various channels to reach individuals, community groups, businesses, and stakeholders interested in fairer warmth solutions.

To ensure local engagement, we will conduct targeted outreach efforts, working closely with local authorities and community groups to organise workshops and dedicated events in Fife and other trial communities.

All dissemination activities and their impact will be documented in a comprehensive report. This report will serve as a valuable resource for future projects, providing guidance on effective dissemination strategies and showcasing the real-world impact of the Fairer Warmth Hub and Toolkit. It will be publicly available through the Smarter Networks Portal and distributed to relevant stakeholders and organisations to facilitate knowledge sharing and replication of successful approaches.

Commercials

Intellectual property rights, procurement and contracting (not scored)

For SIF projects, each Project Partner shall own all Foreground IPR that it independently creates as part of the Project, or where it is created jointly then it shall be owned in shares that are in proportion to the work done in its creation. The exact allocation of Foreground IPR ownership will be determined during the contractual negotiations with the Project Partners on the agreement for the project.

SGN intend to ensure each Project Partner will comply with Chapter 9 SIF Governance Document through the contractual terms governing the project. However, precisely how this is done will be subject to contractual negotiations with the Project Partners on the agreement for the project.

The initial Discovery project aims to identify and prioritise future solutions to be developed in later phases, therefore it is not likely that significant IP will be generated until these stages.

Commercialisation, route to market and business as usual

Route to Commercialisation and Market:

Soft market testing during Discovery and through other funding mechanisms has successfully demonstrated that the approach proposed with HyFair (including a digital energy advice tool developed by CEE) has great potential to deliver benefits across multiple communities in the UK, demonstrating utility of the product and potential market. Building on this success, the Fairer Warmth Hub aims to expand its reach and impact. A clear route to market strategy is in place to ensure widespread adoption of the system and its benefits for energy consumers nationwide that will be expanded upon during Alpha as outlined below.

The consortium, led by CEE, is committed to actively promoting and disseminating the Fairer Warmth Hub across its network and beyond. Working closely with community partners, local authorities, and energy sector organizations, CEE will advocate for the Hub's adoption as a standard system for community energy transitions, including hydrogen. Through targeted marketing and awareness campaigns, the consortium will ensure that the Fairer Warmth Hub reaches a broad audience and gains recognition as a valuable resource.

To support the commercialisation and BaU deployment of the Fairer Warmth Hub, a dedicated team will be established and adequately funded, pending successful trials. This team will oversee the implementation and scaling up of the system across different networks, ensuring integration into existing energy advice and support services. There are also potential commercialisation mechanisms to ensure the Fairer Warmth Hub can continue to grow which may include ongoing fees from Hub users, and generation and commercialisation of data sets that could support, for example, energy companies to identify areas in most need of grant funding support.

Partner Readiness:

The project partners involved in the consortium are well-established organisations with extensive experience in the energy sector, demonstrating their commercial readiness for the widespread adoption of the Fairer Warmth Hub without significant additional investment requirements. CEE, with its track record in delivering community-focused energy initiatives and strong network of stakeholders and partners, is well-positioned to drive the commercialisation of the Hub across communities and networks. Many of the partners will likely be lead customers of the end solution as it moves into business-as-usual operations. British Gas, as a project partner, brings consumer-facing capabilities and deep understanding of the energy market, enhancing the commercial readiness of the Fairer Warmth Hub. This ensures its alignment with consumer needs and market dynamics, further supporting its successful integration.

Investment Need: It is envisioned that SIF funding in Alpha and Beta stages will enable the Fairer Warmth Hub to be embedded as a key tool in achieving a just transition, without further investment.

Senior Sponsor:

The project has secured the support of a senior sponsor from the lead partner, SGN. The Head of Customer Service at SGN has actively championed the project and its community-led approach to a fair transition to clean energy. This sponsorship demonstrates SGN's commitment to the project's implementation, long-term sustainability, and success and provides a clear route to market. The senior sponsor will provide strategic guidance, advocate for the project within and outside SGN, and leverage SGN's resources and expertise to support its objectives.

As a result of the backing of a senior sponsor from SGN, the Hy Fair project has secured sector credibility, five network partners representing the majority of the UK, and support to drive commercialisation and ensure the Hub's integration into BaU operations. Overall, our commercialisation plan encompasses a clear route to market, leveraging existing successful deployments, and the establishment of a Nationwide consortium. The project partners' commercial readiness, supported by their expertise and strong networks, enables the system's adoption without significant additional investment.

Policy, standards and regulations (not scored)

At present the SGN and the project team are confident that the proposed concept would not provoke any regulatory, standards or policy barriers that could affect or hinder delivery of either the Alpha or Beta phases. The system will be adaptable to new regulation and government policy, particularly in relation to funding availability for consumer support, levies, and broader policy decisions that relate to the adoption of hydrogen and other sources of low carbon energy.

Looking to the future and considering possible long-term regulation impacts, it is understandable that the future net-zero ambitions of the energy networks may result in amendments or additions to regulation. Therefore, the project team will endeavour to remain updated in terms of regulatory understanding going forward.

The project team will be working closely with Consumer Service, IT, GDPR and other business areas who will all play an important part in the development of this concept to ensure that any concepts are designed appropriately with current and future business needs.

In order to ensure the success of the project outcomes into BaU, workshops have been scheduled at key points of the project where partners and stakeholders can challenge the designs, test campaigns and outputs.

Should any of these challenges result in a substantial change to the scope of the project, the project partners will approach UKRI to agree the necessary changes, including halting the project if it is apparent that little of value will be delivered by proceeding further.

Value for money

Cost:

The overall project cost is £547,388. A total project contribution of 15.38% has been made meaning total SIF funding requested is £463,201.

Balance of Costs

: The lead delivery partners will be CEE, ESC and LCP Delta with the majority of SIF expenditure allocated to these partners.

Energy and Local Authority Partners will be users of the innovation (along with wider stakeholders) and shall have less involvement in delivery but play key roles in guiding development, providing expert domain and local knowledge, coordinating local stakeholders and delivering smaller work packages. British Gas will have a particular role in informing elements associated with affordability of hydrogen and other decarbonisation methodologies.

A summary of each partner's costs and contributions are outlined below.

SGN and Network Partners SP Distribution, Cadent, Wales and West Utilities and National Gas Transmission:

Total Cost: £33,480

SIF Funding Requested: £33,480

Centre for Energy Equality

Total Cost including subcontractors: £273,705

SIF Funding Requested: £230,000

Fife Council

Total Cost: £6,447

SIF Funding Requested: £3,250

British Gas New Heating

Total Cost: £59,900

SIF Funding Requested: £40,000

Energy Systems Catapult

Total Cost: £119,856

SIF Funding Requested: £107,871

LANE CLARK & PEACOCK

Total Cost: £54,000

SIF Funding Requested: £48,600

Value for Money:

The Fairer Warmth Hub will deliver excellent value for money and return on investment for consumers if successful. Highly conservative estimates from the attached CBA shows a return of ~3.0 based on social returns associated with effective engagement. This is based on relatively low levels of adoption of hydrogen and does not account for potential wider transition benefits and the impact of delayed infrastructure due to consumer activism or disengagement. Overlooking an issue that brings delays and additional roll-out costs for even a small percentage of customers would lead to substantially large increased network costs associated with delayed projects and rework. This has already been seen in relation to small scale hydrogen and heating trials across the UK.

By helping businesses to adapt to the hydrogen transition and other low carbon heating systems, new green businesses and products will be developed faster, helping to grow the economy overall.

The intention with this project is to design a place-based solution that can be used to engage diverse communities in an inclusive way, that leaves nobody behind in the transition to clean energy. The fact that the system will be malleable for any area means that it will be highly replicable throughout the UK. Communities and individuals need personalised plans, delivered by local organisations – this project will provide a solution that delivers this.

There is also a particular focus on vulnerable businesses and providing information and guidance to local supply chains. Without a place-based solution, we heard from businesses in the Discovery Phase that it is very difficult to plan for the future. This is stagnating supply chain development and leading to concerns about costs, disruption and required investments. Our project will provide key information, resources and communication mechanisms that address these challenges ensuring that businesses can plan accordingly.

All partner and subcontractor costs have been benchmarked against SGN's existing pool of suppliers and are considered cost competitive.

Other Funding/use of Pre-existing Assets:

Part of Hy-Fair, the Fairer Warmth Consumer App, has received wider funding from Innovate UK to develop a simple Minimum Viable Product and has been tested with excellent feedback. This demonstrates that the system, if built upon and expanded via SIF, could make large and tangible impact and will have a head start when considering impact and adoption. No replication of funding to date is included in this proposal. Funding would be for new and innovative developments only.

Associated Innovation Projects

- ☐ Yes (Please remember to upload all required documentation)
- ☒ No

Supporting documents

File Upload

SIF Alpha Round 2 Project Registration 2024-03-18 4_48 - 79.4 KB

Documents uploaded where applicable?

