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 (CIVS) 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 CIVS 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 theAnnex.
This project addresses the specific challenge theme, is highly innovative, hascustomers 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 organisationsto become advocates for sustainable practices and energy transition advice.
Tailored Information: Customised guidance to different interest groups, includingbusinesses, 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 forrelevant support networks, fostering collaboration.
Community Engagement and Transition Pathway Tools: Facilitating communityinvolvement, empowering localised decarbonisation strategies.
The Fairer Warmth Hub's innovative features could push the sector forward byproviding tailored guidance, data analytics, simplified access to support, andbetter community engagement.
Challenge Theme:
The project addresses the challenge theme of "Supporting ajust energy transition: Novel and replicable approaches for better identification,support, and inclusion of vulnerable and disadvantaged consumers." Our projectdirectly aligns with this theme. It will address the specific needs of vulnerable anddisadvantaged consumers throughout the energy transition process. Through theFairer Warmth Hub, we provide tailored information, financial support access,guides, and community engagement tools to ensure these consumer groups arenot excluded.
Learning:
Previous innovation projects, including the ESC and Wales and WestUtilities project focused on mitigating disruption caused by a hydrogen transition,have provided valuable insights and lessons. We have conducted extensiveengagement with stakeholders, including vulnerable consumers, smallbusinesses, and representative groups, to understand their concerns andincorporate their feedback into our proposed solution. The insights gained fromthese engagements have guided our plan for the Alpha Phase.
Working in the Open:
We have actively worked in the open with stakeholdersthroughout the Discovery process. By engaging with vulnerable consumersthrough the Consumer Impact Panel and speaking with many more businesses and stakeholders, we have incorporated diverse perspectives into our project. Thiscollaborative approach has ensured that our proposed solution is grounded in theneeds and challenges identified by the stakeholders themselves.
Technology Readiness Levels (TRL):
Throughout the project, we will developvarious tools with different TRLs. The Fairer Warmth App, which will be adaptedfrom its current use, has a higher TRL, while other tools will be developed fromscratch, starting at lower TRLs. This phased approach allows us to leverageexisting technologies while pushing the boundaries of innovation in areas wherenew solutions are required. We also aim to achieve high levels of commercialreadiness, addressing barriers to BaU implementation.
SIF Funding:
SIF funding is essential for the success of our project. This centralvirtual environment, along with the supporting operating model, will providecommunities and organisations with the necessary tools to support all consumersfairly through the energy transition. This ambitious and complex undertaking goesbeyond the remit of network companies alone and requires a whole-systemapproach involving wider stakeholders. The SIF provides an ideal funding source,allowing us to realise this innovative vision and raise the profile of the project toensure 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 CIVS andsmall businesses, offering a range of benefits

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

The Hy-Fair Fairer Warmth Hub offers specific benefits that address the distinctchallenges faced by CIVS and small businesses, providing valuable contributionsin the following areas:
1. Financial Benefits:
The current BaU approach to the energy transition often encounters delays andplanning oversights due to poor engagement and messaging, resulting in potentialcost escalations. The Hy-Fair project mitigates this risk by improving communityengagement through tailored materials for CIVS and small businesses. While theexact financial impact is currently unquantified, data collection during the Alphaphase will allow for the assessment of the financial benefit in terms of reducedcosts associated with improved engagement providing metrics that can informfuture industry investment in engagement.
2. Financial Savings for Consumers:
Hydrogen, as a fuel, is more expensive than natural gas and transition costs couldlead to an uneven take up of new technologies. UKERC research shows thatsupport for hydrogen is significantly lower amongst lower income groups (UKERC,2022). Without adequate support, this price disparity and scepticism about take upcould lead to increased levels of fuel poverty and associated societal impacts. TheFairer Warmth Hub aims to address this issue by expanding access to energyefficiency advice and grants. Research has shown that following energy efficiencyadvice typically results in annual savings of up to £270 on energy bills forconsumers (Energy Saving Trust). The Alpha phase will focus on data collection toquantify the increase in uptake of home efficiency measures and the resultingfinancial savings.
3. Environmental Benefits:
By improving the uptake of low carbon measures and reducing resistance throughclear and impartial advice, the Fairer Warmth Hub can help to acceleratedecarbonisation, leading to direct annual carbon dioxide (CO_2) savings. While theprecise carbon reduction impact is currently qualified in the Discovery CBA, theAlpha 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 servicesthat improve upon existing provisions or introduce entirely new offerings. Theseadditions are detailed in response to Q3 of the funding application, showcasingthe project's commitment to fostering innovation in the energy transition sector.
5. Social Return on Investment: Improving provision for CIVS and the fuel poor bygranting access to advice and financial assistance brings significant socialbenefits to both the recipients and society at large. These are conservativelyestimated 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 accountfor the potential impact of the Fairer Warmth Hub on other types of energytransition, such as heat networks. Collaboration with new partners in the Alphaphase will enable a more comprehensive assessment of the system's widerimpact.

Teams and resources

Industry Momentum
: During Alpha, the delivery team will include diversepartners, reflecting the growing interest and belief in the project's initiative. Theconsortium includes representation from 5 energy networks, communityorganisations, local authorities, and social housing providers. This will provide abreadth of expertise and diverse routes to engagement, resulting in a holisticapproach to address the identified challenge and enhancing the hub'seffectiveness, 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 bringvaluable expertise in the energy sector, ensuring seamless integration of theFairer Warmth Hub with existing infrastructure and networks. They willcontribute their knowledge and resources to support the project's successfuldelivery.
2.
Centre for Energy Equality (CEE):
CEE serves as the lead system developerand overall project manager. They also operate the Vulnerable ConsumerImpact Panel, providing insights into the needs and concerns of vulnerableconsumers. CEE's expertise in energy equality is instrumental in ensuring a fairand inclusive energy transition. CEE also have extensive digital expertise whichwill 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 rolein facilitating community engagement through both officers and electedmembers. Its local knowledge and connections will help drive the successfuladoption of the Fairer Warmth Hub within the

testbed community. Fife Councilitself owns \>30,000 units and active local housing associations will also beengaged.
4.
Community Groups & Social Housing:
These stakeholders will act as keyusers of the resources and champion the implementation of the Fairer WarmthHub within their respective communities including Glen Housing and WestWemyss Energy Options who are a named subcontractors. Their involvementensures the project's relevance and effectiveness at a grassroots level. Weshall also seek to engage more widely working with our network partners,aiming for Beta trials to involve communities throughout the UK in relation todifferent types of energy transition.

5.
British Gas/Centrica:
bring their consumer-facing expertise and commitmentto supporting bill reductions and energy efficiency schemes to the consortium.They will contribute their expertise in energy pricing and affordability initiativesto develop practical strategies for bill reduction through the Fairer Warmth Hubas well as providing key input into usability of the system.
6.
Energy Systems Catapult:
Leveraging their wide-ranging connections andexpertise, Energy Systems Catapult will support the testing of innovationsutilising expertise in service design and behavioural insights. Their involvementenhances the project's technical capabilities and facilitates real-world testingthrough their Living Lab and Home Truths panels.
7.
Lane Clark & Peacock:
will provide domain expertise in energy and energydata, supporting the development of cost-benefit analysis and ensuring robustevaluation of the project's outcomes.
To ensure inclusivity and inform the project work, further engagement of widerstakeholders will include:
Consumer Impact Panel: CEE's Consumer Impact Panel, consisting ofvulnerable consumers who may face specific challenges during the energytransition.
Living Lab and Home Truths Panel: The consortium will test the tools andfeatures of the Fairer Warmth Hub through ESC's Living Lab and Home TruthsPanel. This real-world testing will provide valuable feedback and allow foriterative improvements based on user experiences.
Continued Engagement with Businesses, Community Groups, and HousingProviders: Through workshops, focus groups, and regular communicationchannels, feedback will be obtained to inform the ongoing development of theFairer Warmth Hub.
Dissemination and Awareness: including awareness campaigns, publicconsultations, and use of various communication channels to gather input andraise 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 energyconsumption, heating systems, and demographic factors. The data will beaccessible through the Fairer Warmth Hub mobile app. A rigorous process willshortlist 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 transitioneffectively. 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 trackingtools 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, andstakeholders will be sought to ensure their needs are considered. Solutions will betested with user groups to validate their effectiveness. Dissemination activities willraise awareness and encourage broader participation. An engagement strategywill be developed and implemented, outlining anticipated use of the tools from upto 3 years ahead of a community's energy transition, to the point at which thetransition 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 theservice blueprint, ownership model, and governance structures. An in-personchampion system will engage consumers who prefer direct interaction. Long-termsustainability 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. Thecollected 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 trialinvolving participants from individuals, community groups, and organisations. Thetrial will provide practical feedback to enhance the effectiveness of the FairerWarmth Hub. Wider trial areas will be identified in collaboration with new networkpartners.
Work Package 7: Project Management (All, 10% costs)
The consortium will adopt a robust and effective approach to project managementto ensure the successful delivery of the project. Key tools and mechanismsinclude regular project meetings, progress tracking, and communication channelsto facilitate collaboration and timely decision-making. The project will be managedusing an Agile methodology, with clear roles and responsibilities assigned to eachpartner and subcontractor. The project manager from CEE will oversee projectdelivery, coordinating the work packages and ensuring alignment with the projectplan.
Risk Management:
A comprehensive risk management strategy will beimplemented to identify and mitigate potential risks that may hinder the project's success. The Risk Register worksheet in the Project Management templateoutlines risks and uncertainties, including technical, political, regulatory, andenvironmental factors. Mitigation actions have been assigned to responsibleorganisations, and regular monitoring will be conducted to address emerging risksand 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 vitalcomponents of this project. The involvement of consumers and stakeholders isembedded into our project design. This will be achieved through various methods,including engagement with CEE's Consumer Impact Panel, testing tools via ESC'sLiving 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 WarmthHub and Toolkit -- a comprehensive system designed to facilitate a place-based,fairer transition to sustainable warmth for all consumers, including CIVS, and smallbusinesses.
This innovative platform will serve as a centralised hub with essential features andtools 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 andsimplifying the energy transition process for consumers and businesses.
A Training Toolkit for Community Champions to become expert advocates forsustainable practices and energy transition advice.
Tailored information and guidance to different interest groups, includingbusinesses, ensuring targeted support.
Additional tools if discovered during Work Package 1.
For Organisations:

Demographic Analysis Tool to enable tailored planning and mapping of supportservices by identifying energy needs and vulnerabilities within differentdemographic groups.
Centralises contact information for relevant support networks, fosteringcollaboration.
Community Engagement and Transition Pathway Tools that facilitate communityinvolvement, provide bespoke templates, and empowering localiseddecarbonisation strategies.
Additionally, we will generate detailed feedback and insights reporting to captureexperiences and lessons learned throughout the community energy transitions.This valuable information will be disseminated to stakeholders, policymakers, andindustry 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 tobecome embedded into BaU practices, making it accessible to a wider audienceand enabling support for any community or group of organisations undergoing theenergy transition.
A detailed roll-out plan for trials in Fife, aligned with the H100 project and broaderdecarbonisation efforts, will be developed. This plan will consider the specificneeds and objectives of the region, maximising the impact of the Fairer Warmthsystems. We will also identify additional trial communities beyond Fife, aiming toexpand the nationwide implementation of our solutions.
Dissemination Plan
To ensure the wide dissemination of our key outputs and lessons learned, wehave developed a comprehensive dissemination strategy. Our project partners,through their diverse backgrounds and networks, will play a crucial role indisseminating the outputs to relevant stakeholders across all parts of the energysector.
We will participate in at least three industry events, showcasing the Fairer WarmthToolkit and sharing insights gained from community energy transitions.Additionally, a series of webinars will provide in-depth demonstrations of theToolkit 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 thedissemination process, seeking their input and fostering collaboration.
Social media platforms will be leveraged to disseminate key outputs and lessonslearned. Regular updates, informative posts, and engaging content will be sharedacross various channels to reach individuals, community groups, businesses, andstakeholders interested in fairer warmth solutions.

To ensure local engagement, we will conduct targeted outreach efforts, workingclosely with local authorities and community groups to organise workshops anddedicated events in Fife and other trial communities.
All dissemination activities and their impact will be documented in acomprehensive report. This report will serve as a valuable resource for futureprojects, providing guidance on effective dissemination strategies and showcasingthe real-world impact of the Fairer Warmth Hub and Toolkit. It will be publiclyavailable through the Smarter Networks Portal and distributed to relevantstakeholders and organisations to facilitate knowledge sharing and replication ofsuccessful approaches.

Commercials

Intellectual property rights, procurement and contracting (not scored)

For SIF projects, each Project Partner shall own all Foreground IPR that itindependently creates as part of the Project, or where it is created jointly then itshall 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 thecontractual negotiations with the Project Partners on the agreement for theproject.
SGN intend to ensure each Project Partner will comply with Chapter 9 SIFGovernance Document through the contractual terms governing the project.However, precisely how this is done will be subject to contractual negotiations withthe Project Partners on the agreement for the project.
The initial Discovery project aims to identify and prioritise future solutions to bedeveloped in later phases, therefore it is not likely that significant IP will begenerated until these stages.

Commercialisation, route to market and business as usual

Route to Commercialisation and Market:
Soft market testing during Discoveryand through other funding mechanisms has successfully demonstrated that theapproach proposed with HyFair (including a digital energy advice tool developedby CEE) has great potential to deliver benefits across multiple communities in theUK, demonstrating utility of the product and potential market. Building on thissuccess, the Fairer Warmth Hub aims to expand its reach and impact. A clearroute to market strategy is in place to ensure widespread adoption of the system and its benefits for energy consumers nationwide that will be expanded uponduring Alpha as outlined below.
The consortium, led by CEE, is committed to actively promoting and disseminatingthe Fairer Warmth Hub across its network and beyond. Working closely withcommunity partners, local authorities, and energy sector organizations, CEE willadvocate for the Hub's adoption as a standard system for community energytransitions, including hydrogen. Through targeted marketing and awarenesscampaigns, the consortium will ensure that the Fairer Warmth Hub reaches abroad 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 successfultrials. This team will oversee the implementation and scaling up of the systemacross different networks, ensuring integration into existing energy advice andsupport services. There are also potential commercialisation mechanisms toensure the Fairer Warmth Hub can continue to grow which may include ongoingfees from Hub users, and generation and commercialisation of data sets thatcould support, for example, energy companies to identify areas in most need ofgrant 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 theFairer Warmth Hub without significant additional investment requirements. CEE,with its track record in delivering community-focused energy initiatives and strongnetwork of stakeholders and partners, is well-positioned to drive thecommercialisation of the Hub across communities and networks. Many of thepartners will likely be lead customers of the end solution as it moves intobusiness-as-usual operations.
British Gas, as a project partner, brings consumer-facing capabilities and deepunderstanding of the energy market, enhancing the commercial readiness of theFairer Warmth Hub. This ensures its alignment with consumer needs and marketdynamics, further supporting its successful integration.
Investment Need: It is envisioned that SIF funding in Alpha and Beta stages willenable the Fairer Warmth Hub to be embedded as a key tool in achieving a justtransition, without further investment.
Senior Sponsor:
The project has secured the support of a senior sponsor fromthe lead partner, SGN. The Head of Customer Service at SGN has activelychampioned the project and its community-led approach to a fair transition toclean energy. This sponsorship demonstrates SGN's commitment to the project'simplementation, long-term sustainability, and success and provides a clear routeto market. The senior sponsor will provide strategic guidance, advocate for the project within and outside SGN, and leverage SGN's resources and expertise tosupport its objectives.
As a result of the backing of a senior sponsor from SGN, the Hy Fair project hassecured sector credibility, five network partners representing the majority of theUK, and support to drive commercialisation and ensure the Hub's integration intoBaU operations.
Overall, our commercialisation plan encompasses a clear route to market,leveraging existing successful deployments, and the establishment of aNationwide consortium. The project partners' commercial readiness, supported bytheir expertise and strong networks, enables the system's adoption withoutsignificant additional investment.

Policy, standards and regulations (not scored)

At present the SGN and the project team are confident thar the proposed conceptwould not provoke any regulatory, standards or policy barriers that could affect orhinder delivery of either the Alpha or Beta phases. The system will be adaptable tonew regulation and government policy, particularly in relation to funding availabilityfor consumer support, levies, and broader policy decisions that relate to theadoption of hydrogen and other sources of low carbon energy.
Looking to the future and considering possible long-term regulation impacts, it isunderstandable that the future net-zero ambitions of the energy networks mayresult in amendments or additions to regulation. Therefore, the project team willendeavour to remain updated in terms of regulatory understanding going forward.
The project team will be working closely with Consumer Service, IT, GDPR andother business areas who will all play an important part in the development of thisconcept to ensure that any concepts are designed appropriately with current andfuture business needs.
In order to ensure the success of the project outcomes into BaU, workshops havebeen scheduled at key points of the project where partners and stakeholders canchallenge the designs, test campaigns and outputs.
Should any of these challenges result in a substantial change to the scope of theproject, 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 byproceeding 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 Deltawith the majority of SIF expenditure allocated to these partners. Energy and LocalAuthority Partners will be users of the innovation (along with wider stakeholders)and shall have less involvement in delivery but play key roles in guidingdevelopment, providing expert domain and local knowledge, coordinating localstakeholders and delivering smaller work packages. British Gas will have aparticular role in informing elements associated with affordability of hydrogen andother decarbonisation methodologies.
A summary of each partners costs and contributions are outlined below.
SGN and Network Partners SP Distribution, Cadent, Wales and West Utilitiesand 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 moneyand return on investment for consumers if successful. Highly conservative estimates from the attached CBA shows a return of ~3.0 based on social returnsassociated with effective engagement. This is based on relatively low levels ofadoption of hydrogen and does not account for potential wider transition benefitsand the impact of delayed infrastructure due to consumer activism ordisengagement. Overlooking an issue that brings delays and additional roll-outcosts for even a small percentage of customers would lead to substantially largeincreased network costs associated with delayed projects and rework. This hasalready been seen in relation to small scale hydrogen and heating trials across theUK.
By helping businesses to adapt to the hydrogen transition and other low carbonheating 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 usedto engage diverse communities in an inclusive way, that leaves nobody behind inthe transition to clean energy. The fact that the system will be malleable for anyarea means that it will be highly replicable throughout the UK. Communities andindividuals need personalised plans, delivered by local organisations -- this projectwill provide a solution that delivers this.
There is also a particular focus on vulnerable businesses and providinginformation 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 forthe future. This is stagnating supply chain development and leading to concernsabout costs, disruption and required investments. Our project will provide keyinformation, resources and communication mechanisms that address thesechallenges ensuring that businesses can plan accordingly.
All partner and subcontractor costs have been benchmarked against SGN'sexisting pool of suppliers and are considered cost competitive.
Other Funding/use of Pre-existing Assets:
Part of Hy-Fair, the Fairer WarmthConsumer App, has received wider funding from Innovate UK to develop a simpleMinimum Viable Product and has been tested with excellent feedback. Thisdemonstrates that the system, if built upon and expanded via SIF, could makelarge and tangible impact and will have a head start when considering impact andadoption. No replication of funding to date is included in this proposal. Fundingwould 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?

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