Net Zero Innovation Portfolio-Flexibility Innovation Programme:

Non-Domestic Smarter Tariff Comparisons Project: Information Event

4th April 2023 at 2pm



Purpose of Today

The aim of today's market engagement is to provide an overview of proposed future innovation activity in the area of smarter tariffs for smaller non-domestic customers and to provide an opportunity to invite feedback

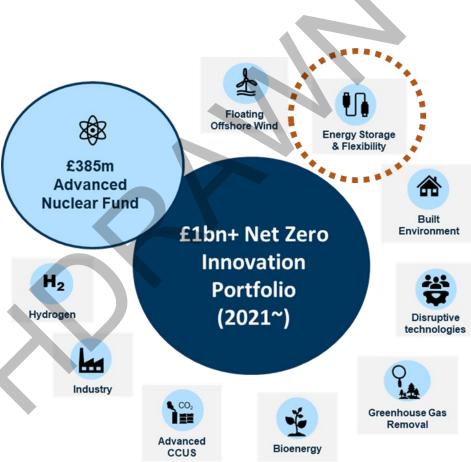


Net Zero Innovation Portfolio: Background



NZIP Overview





Department for Business, Energy & Industrial Strategy



NZIP Flexibility Innovation Programme

Flexibility Innovation Programme (up to £65m)

Seeks to enable large-scale widespread electricity system flexibility through smart, flexible, secure, and accessible technologies and markets

Integrating systems for Flexibility

- Interoperable Demand Side Response Programme (over £12.8m)
- V2X Innovation Programme (up to £12.6m)
- Inclusive Smart Solutions Programme (up to £2.75m)

Data and Digitalisation

- Automatic Asset Registration (up to £2m)
- Energy System "Digital" Spine" (~£200K)
- Smart Meter System based IoT Applications (up to £1.8m)
- SM Energy Data Repository (up to £1m)

Markets for Flexibility

 Alternative Energy Markets (up to £18m)

Longer Duration Energy Storage Programme

(up to £68m)





- Cross programme engagement
 - Knowledge sharing
 - International leadership
 - Evaluation

Flexibility Innovation Programme - Progress

Announced October 2021; finishes March 2025

To date:



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Non-Domestic Smarter Tariff Comparison Project

Net Zero Innovation Portfolio – Flexibility Innovation Programme



Policy Background to Non-Domestic Smart Meter Tariff Comparison Project (1)

- Smart meters being rolled out to businesses & public sector organisations across Great Britain as well as in homes.
- Two types of smart meter in non-domestic sector advanced meters and "SMETS" meters (i.e. that meet the Smart Metering Equipment Technical Specifications).
- Large Industrial & Commercial (I&C) organisations already have advanced meters Ofgem AMR rollout. Smaller sites (private and public sector) are in scope of the "smart metering mandate" - which covers 3 million meters/ 2 million sites & a range of sectors.
- 52% of these smaller sites are smart (SMETS or advanced) so far equating to 1.7 million meters (as of end of 2022).
- New targets-based framework commenced in January 2022; energy suppliers set annual installation targets for smart meter installations until 2025.



Policy Background to Non-Domestic Smart Meter Tariff Comparison Project (2)

- Smart metering makes it possible to remotely access half-hourly consumption data (with relevant permissions from the customer) which could be analysed to provide tailored tariff recommendations, including more complex time-of-use (TOU) tariffs.
- Size of prize is large rollout expected to deliver £1.4Bn of non-domestic consumer benefits and £1.5Bn demand reduction benefits, as result of consumers saving energy or shifting consumption to another time.
- Wider landscape also changing- Market-Wide Half Hourly Settlement (MHHS) on horizon, recent changes to non-domestic smart meter customer data offer.
- Aims of competition are therefore to enable new ways of comparing tariffs and drive uptake of and engagement with time of use tariffs in non-domestic market, with a focus on smaller customers.
- However, we also want proposals to engage with possible barriers, including:
 - Addressing consumer engagement challenges associated with smaller sites
 - Managing diversity in the customer base (sector, size, organisational motivations)
 - Relationship between end customers & Third Party Intermediaries (TPIs)
 - Complexities in non-domestic metering landscape.



Competition Objectives

- To incentivise development of innovative solutions to provide tailored advice, recommendations and/ or comparisons of energy tariff products (standard, time of use, and/ or tariffs bundled with flexibility technologies or services) that can be utilised in the smaller non-domestic market;
- To encourage wider engagement with and take-up of energy tariffs (including time of use tariffs) and to help consumers understand where they could potentially benefit from different tariff types;
- To give consumers confidence in choosing tailored tariffs (and third parties in recommending them);
- To bring forward and deliver the benefits of demand side flexibility in the smaller non-domestic market.



Proposed Innovation Activity

- To develop, demonstrate and user test innovative solutions that use customer data (including half-hourly consumption data) to provide tailored advice, recommendations and/ or comparisons of energy tariffs (standard, time of use, and/ or tariffs bundled with flexibility technologies or services) for smaller non-domestic consumers.
- This proposed innovation activity would aim to assess the technical and commercial feasibility of tools and/ or services for consumers, Third-Party Intermediaries (TPIs) or other key parties.

Recent innovation projects of relevance to this proposed innovation activity are:

Non-Domestic Smart Energy Management Innovation Competition (NDSEMIC)

'Smarter Tariffs - Smarter Comparisons' (STSC) projects.

Wider initiatives this proposed innovation activity is relevant to:

The Smart Systems and Flexibility Plan 2021

Market-Wide Half Hourly Settlement (MWHHS) Programme



Outcomes of Proposed Innovation Activity

- Establish the technical feasibility of innovative solutions taking into account sector requirements, data access requirements and commercial feasibility;
- Develop, demonstrate and user test a prototype tariff comparison tool or service, that access customer data (including half hourly consumption data);
- Demonstrate key features of the proposed Technical Solution, with utilisation of actual consumption data from Smart and/ or Advanced meters, and with either real or simulated tariffs, e.g. user interfaces and retrieval of tariff type or tariff price information;
- Industry engagement with key parties to support development of prototype and with readiness for commercialisation (or viable commercialisation plans);
- Reporting, including evidence and shared learnings.



Scope of Proposed Solutions

Across the Competition, we anticipate:

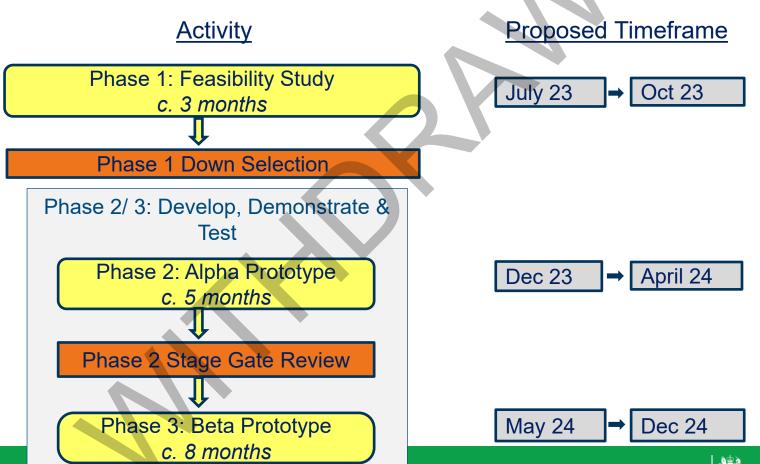
- In Scope: Small Non-Dom Consumers
- Multiple projects to develop a diversity of prototype tools or services with functionality tailored to different small non-domestic users (consumers, Third-Party Intermediaries (TPIs) or other key parties) and/ or business sectors.
- Functionality for as much of the smaller non-domestic market as possible ranging from microbusinesses up to medium-sized businesses and including public sector organisations.
- Comparison of tariffs that currently exist and tariffs that are likely to exist in the future, or the ability to integrate these tariffs in the future.
- Within projects, we anticipate:
 - Maximised coverage across market meter types (utilising ideally both SMETS and AMR meters, with the former being essential).
 - Different tailoring required for audiences and contexts there may even be different requirements with functionality tailored to different users and/ or sectors.
 - Prototype solutions that include energy tariffs (standard tariffs, time of use tariffs, and/ or tariffs bundled with flexibility technologies or services).



Structure of Proposed Innovation Activity

c16 months, composed of 3 phases

Overall Budget: Up to £1.9m





Phase 1 – Feasibility

Funding mechanism: SBRI

Budget: Up to £250K (£50K per project)

Up to 5 projects funded conducting feasibility studies over 3 months; incorporating:

- Identification of key requirements in chosen sector/ users;
- Technical analysis and assessment of market and options;
- Proposal for prototype tool to be developed in Phase 2, including;
 - Technical solution/ output;
 - Energy consumption data access;
 - User testing;
 - Assessment of future commercialisation potential.
- Report summarising key findings and learnings.

A competitive down-selection of projects will take place at the end of Phase 1



Phase 2/3 – Develop, Demonstrate and Test

Budget: Up to £1.65m (£550K per project)

Up to 3 projects funded over 13 months, comprising 2 Phases:

Funding mechanism: SBRI

Phase 2: Alpha (indicatively 5 months)

- Iterative development of Alpha prototype;
- Regular end-user testing;
- · Demonstration of alpha prototype;
- Reporting and assessment of feasibility for Phase 3.

A Stage-Gate review will take place between Phase 2 and Phase 3

Phase 3: Beta (indicatively 8 months)

- Further iterative development and refinement of Beta prototype;
- Testing with consumers and wider market (e.g. Third Party Intermediaries);
- Industry engagement to support development and commercialisation;
- Assessment and demonstration of Technical performance;
- Readiness of prototype for commercialisation, with viable plans;
- Final Reporting.



Key Considerations for SBRIs

- The Competition funding will be awarded using the Small Business Research Initiative (SBRI) approach.
 - SBRI is aimed at organisations working on research and development (R&D) of an innovative process, material, device, product, or service prior to commercialisation.
 - Eligible project costs must reflect actual costs at a 'fair market value' and suppliers are not permitted to include profit or contingency.
 - Projects requesting funding for commercialisation activities are not eligible.
- The sharing of risks and benefits is an important aspect to the SBRI approach. Projects receive financial support and retain any intellectual property generated, with certain rights of use retained by BEIS.
- Project outputs are also expected to be shared widely and publicly and project teams are not permitted to include profit in the eligible project costs.



How to apply using Smart Surveys

- We use the online form platform Smart Survey to run our Competitions. It enables us to easily process the information attached and contained in an application.
- We will publish a registration form and the link to the application form on the competition website. You will have approximately 6 weeks to complete and submit your application.
- We encourage applicants to use the offline word version of the application form that we supply to build their application, and to transfer over to Smart Survey once completed. This is easier for the applicant, as Smart Survey does not allow applicants to jump to a specific question – instead, they must go through the form sequentially.
- Please read the cover page of the application form which will have additional advice.



Next steps and feedback

Anticipated launch of proposed innovation activity end April 2023

We would appreciate feedback and comments in the following areas (via Q&A function or to the project's email address):

- Is the structure and phasing of the proposed innovation activity clear?
- Do you think it is an appropriate timeline for the innovation activity and phases proposed?
- Is there anything you think is unclear or missing in the proposed scope for this innovation activity?
- Would you anticipate submitting a bid for this innovation activity?
- (response to this does not commit any applicant to the submission of an application or the department to the acceptance of an application)
- Will 6 weeks be sufficient time to prepare and submit your application?



Comments & Feedback

- We welcome feedback on the proposed innovation activity. The feedback will
 not be published but the department may use it to inform future innovation
 competitions.
- The Q&A function will be kept open for 10 minutes after the event has finished to allow for any feedback.
- This presentation will be published on the <u>Flexibility Innovation Programme</u> website
- Feedback can also be submitted via email to <u>flexibilityinnovation-smartmeterndt@beis.gov.uk</u> until 15:00 11th April 2023. Any comments and feedback received will not published.
- We will **not** be responding to questions at this event.
- Please note, the proposed innovation activity is under development and therefore proposals in these slides are **subject to change**.

