

**FUSION<sup>21</sup>**

**Welcome to the Fusion21  
Decarb in Focus –  
Forum SHDF Wave 3**

19 June 2024



# Fusion21 - Introduction

- Ben Nixon, Senior Associate Director, Baily Garner
- Justyna Clarke, Retrofit Programme Manager, Vivid Homes
- Ian Cartledge, Business Development Manager, E.On Energy Solutions
- Paul Towers, Framework Manager, Fusion21
- Andrew Gray, Member Relations Manager, Fusion21

# Agenda

- Introduction – Andrew Gray
- SHDF Wave 3 – What's different – Ben Nixon
- Challenges and Solutions

Supplier perspective – Ian Cartledge  
Member perspective – Justyna Clarke

- Procurement Approaches – Ben Nixon
- Q&A

# Fusion21 Decarbonisation – Our Journey

- Retrofit 2011-2015 - £30m
- Retrofit 2015-2019 - £50m
- Energy Efficiency – 2020-2024 - £123m
- Heating and Renewables – 2020-2024 - £13m
- Consultants (Lot 11) – 2021-2025 - £7m
- Decarbonisation – 2022-2026 - £450M\*

# Fusion21 – Current Offer

- Consultants Framework – Lot 11 – specialist support
- Decarbonisation – (Multi measure, PAS 2035, Full turnkey)
- Building Improvement Works – Single measure (Insulation)
- Heating, Renewables & Electricals– Single measure (Heat Pumps, Solar PV, LED and EVC)

# Key statistics - Fusion21 Decarbonisation Framework

**138**  
call-off  
contracts

**£450m**  
Estimated value

**95**  
Members using  
the Framework

**21**  
Suppliers

The Social Housing Decarbonisation Fund (SHDF) will upgrade a significant amount of the social housing stock currently below Energy Performance Certificate (EPC) band C up to that standard. It will support the installation of energy performance measures in social homes in England and facilitate the subsequent widespread adoption of decarbonised heating systems and help:

- deliver warm, energy efficient homes
  - reduce carbon emissions
  - tackle fuel poverty
  - support green jobs
  - develop the retrofit sector
  - improve the comfort, health and well-being of social housing tenants
- Wave 3 £1.2bn



**DECARB IN FOCUS**

**KEY DIFFERENCES; SHDF W2 VS W3**



# INTRODUCTION



## **Ben Nixon BSc (Hons) MCIOB MRICS**

- Chartered Construction Manager
- Chartered Building Surveyor
- 17 Years experience in Social Housing
- PAS 2035 Retrofit Coordinator
- PAS 2035 Retrofit Assessor

- 
- Provided 'Technical Assistance Function' for SHRA
  - Involved in Enerphit projects in addition to SHDF projects (from 'Demonstrator' onwards)
  - Helped to pioneer a 'Guardian' style approach to turnkey projects
  - To date, has worked on over £100m worth of funded retrofit works
  - Various articles published, inclusive of RICS BEJ

# SOCIAL HOUSING DECARBONISATION FUND

**What is**

**PAS 2035!!!!!!**

Government fund,  
efficient social  
homes. It provides 'match  
funding' to improve the energy  
efficiency of homes.



# SHDF WAVE 3

Wave 2	Wave 3
<p data-bbox="522 406 980 492"><b>Single fund</b></p> <p data-bbox="343 635 1159 806"><b>EPC 'C' &amp; 90kWh M<sup>2</sup> PA</b></p> <p data-bbox="293 863 1210 949"><b>Funding varies by type</b></p> <p data-bbox="343 1092 1159 1263"><b>Spend is against the home</b></p> <p data-bbox="318 1320 1184 1406"><b>1 - 2 year programme</b></p>	<p data-bbox="1274 406 2446 592"><b>Challenge fund and Strategic partnership</b></p> <p data-bbox="1414 635 2305 721"><b>Only requires EPC 'C'</b></p> <p data-bbox="1324 863 2395 1035"><b>Blanket £7.5k matched per home</b></p> <p data-bbox="1312 1092 2407 1263"><b>Spend can be averaged out over bid</b></p> <p data-bbox="1490 1320 2229 1406"><b>3 year programme</b></p>



## SHDF WAVE 3 (CONTINUED)

### Wave 2

**Applications considered together**

**All match funded**

**EPC 'C' homes 10% (infill)**

**50% non-social (mixed tenure)**

**100 homes minimum**

### Wave 3

**£30m for organisations <1000 homes**

**Non-matched LCH for 10% (£20k)**

**EPC 'C' homes 10% (LCH/infill)**

**70% non-social (mixed tenure)**

**100 homes minimum (*where***

# Green Funding Solutions

**SHDF Lessons Learned –  
preparing for SHDF Wave 3**

***e-on***



# A trusted partner

In 2020, Green Funding Solutions was launched to support local authorities with the delivery of the Green Homes Grants by providing an end-to-end, full turnkey solution.

Our service has helped to provide local authorities and housing providers with skilled resource and expertise in writing funding applications and compliantly delivering high quality installations.

Supporting over 40 SHDF projects E.ON is one of the market leaders. Learning from our valuable experience, our retrofit solutions have been designed and developed to successfully deliver on all the funding requirements.



# Our Full Turnkey Solution



## Stock Analysis

A strong bid starts with robust data analysis. E.ON will assess your stock data, identifying suitable homes for retrofitting. As part of this process, E.ON will seek to conduct property assessments to ensuring the accuracy of information being used.



## Property Modelling

E.ON will model your properties, ensuring proposed improvements achieve all funding requirements



## Bid Writing Support

Our experienced team of Bid Writers have a proven track record of success when it comes to Funding bids. E.ON will take away the stress and resource requirements, pulling together a strong submission on your behalf.



## PAS 2035 services

E.ON provide all your PAS 2035 requirements including Retrofit Design, Retrofit Assessments and Retrofit Coordination, to ensure that everything is fully compliant with industry standards.



## Resident Engagement

Our Customer Delivery Team will develop a bespoke engagement programme to keep residents engaged and fully informed throughout the entire project.



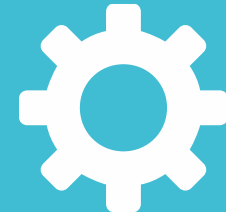
## Project management

E.ON's award-winning retrofit delivery team offer a fully managed service that takes care of every component for you, providing confidence that quality will be delivered.



## Accredited supply chain

E.ON have trusted, pre-procured, fully accredited local and national supply chain partners to deliver quality retrofit works at scale.



## Project Reporting & Compliance

Our processes, systems and dedicated teams manage all compliance requirements and align our reporting to DESNZ reports and KPI's.

# Data is Key

- Don't rely on **historic, out of date, or inaccurate** property data.
- Start your data analysis **as early as possible**.
- Identify the **gaps and weaknesses** in your stock data.
- **Use time wisely**, cleanse your data, undertake sample EPC's, Retrofit Assessments and Technical Surveys at pre-submission stage.
- **Understand your targets**, be clear about what you are setting out to achieve through SHDF.
- Make sure you **have a backup list**, it will be needed.
- **Engage early** with Planning, Building Control, DNO's, etc.
- Understand what **information you will need** to provide e.g. asbestos surveys





# Resident Engagement

In some projects throughout the sector it's been known for as many as 40% of residents to have refused works when offered retrofit solutions or improvements. Many other residents will drop out mid project due to property suitability.

- Strong, effective **communication is vital**.
- Residents need to understand:
  - **what** is happening
  - **how** it's happening
  - **why** it's happening
  - **when** it's happening
- Engage **as early as possible** with residents
- Make resident engagement part of **BAU**
- Get residents involved – job opportunities, social value
- Use **every communication channel** possible
- Face to face, **resident engagement days** are a great



# Top 5 Takeaways

- 1) Don't rely on inaccurate property data
- 2) Conduct pre-bid surveys and assessments
- 3) Select your Retrofit Delivery Partner early
- 4) Engage comprehensively with tenants
- 5) Integrate SHDF with planned capital works programmes





More homes, bright futures

# Farnborough Project: lessons learned

# No regrets EPC C/net zero emissions pathway

## 1. Insulate homes to get to EPC C: 2022 to 2030

Reduce heat demand/resident heat costs to allow for low carbon heating upgrades later

Heat pump upgrade pilot from 2025 (prioritise off gas solid fuel/oil heating)

Improve ventilation

Include homes already at EPC C that need EWI (area-based delivery)

## 2. Low carbon heating delivery: 2030 onwards

Large scale deployment of low carbon heating systems to individual houses

Large scale deployment of low carbon heat networks

## 3. Large scale solar PV delivery to decarbonise electricity: 2040-2050

## 4. Offsetting of remaining carbon from 2050



Electricity  
grid  
decarbonisation

## Farnborough project: SHDF Wave 2.1

- 400 poor performing, houses and low-rise, system build flats in Farnborough
- External wall insulation, loft insulation and new windows
- Improvements to the visual appearance of the estate



# Procurement approach

The logo for VIVID, featuring the word "VIVID" in a bold, sans-serif font. The letter "V" is blue, "I" is purple, "V" is orange, "I" is purple, and "D" is blue.The logo for FUSION21, featuring the word "FUSION" in a bold, green, sans-serif font, followed by "21" in a white, sans-serif font inside a green circle.The logo for e-on, featuring the word "e-on" in a red, italicized, sans-serif font.The logo for BAILY GARNER, featuring a stylized geometric icon composed of blue, yellow, and red shapes to the left of the text "BAILY GARNER" in a blue, sans-serif font.

SHDF Wave 2.1 was announced when no internal sustainability team was present

Decision was made to procure turn-key solution

Additionally, Employer's Agent was appointed

# Procurement approach

**Using Fusion 21, E.ON was directly appointed as a turn-key solution provider:**

- ✓ Bid writing
- ✓ PAS2035 compliance (assessments, design and coordination to Trust Mark Lodgment)
- ✓ Resident engagement strategy
- ✓ External Wall Insulation delivery
- ✓ Monthly reporting to DESNZ

**The same approach was used to appoint Baily Garner to deliver:**

- ✓ PAS2035 Audit and Project Support Services
- ✓ Contract Administrator ( Employers Agent )
- ✓ CDM Principal Designer

# Journey

- Before SHDF Wave 3 was officially announced ~40 Retrofit Assessments were carried out in Farnborough to confirm eligibility
- Internal team started forming
- Leaseholders were identified
- Engagement with Social Housing Retrofit Accelerator – now RISE
- Bid writing by E.ON
- Continue work on Retrofit Assessments
- Resident engagement commenced
- Site office set up: additional resident engagement tool
- Asbestos surveys commenced



# Lessons learned

## What worked

Wholistic approach in hands of one contractor

Special events and comms to the residents

Reporting to DESNZ

Support in PAS2035 compliance by the Employer's Agent

Technical Working Group to discuss various technical solutions

Project Execution Plan

Extra layer of scrutiny on delivery from Employer's Agent

## What we would reconsider

Turn-key: you still need a team (asset management tasks)

Residents often prefer to talk to their landlord rather than a contractor

Long "distance" between a client and actual on-site team

Asbestos: should also be included in the contract to speed up delivery



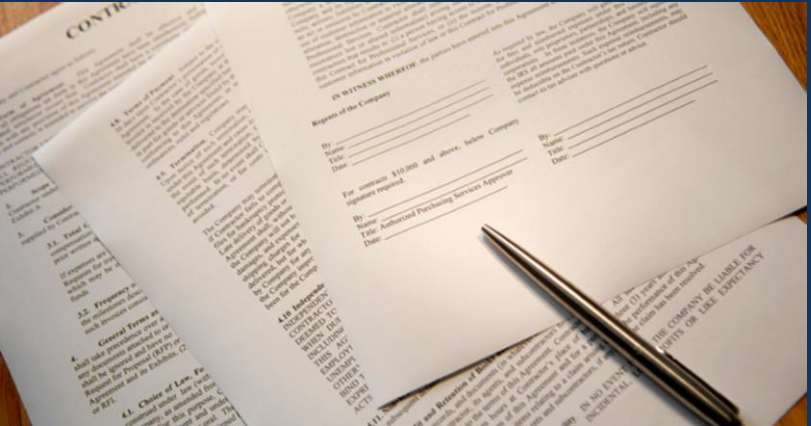
**DECARB IN FOCUS**

**PROCUREMENT APPROACHES**

# PROCUREMENT APPROACHES



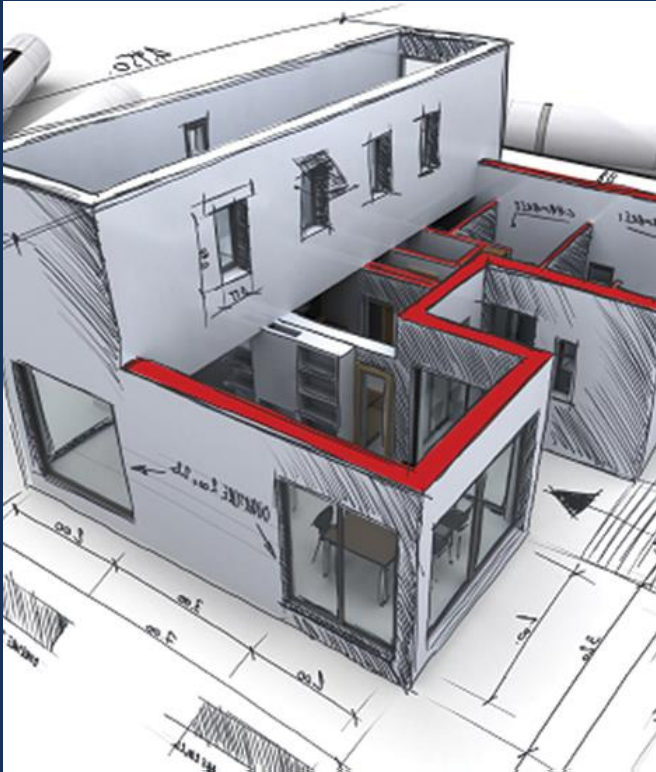
- Why we have Contracts
- Procurement Strategy



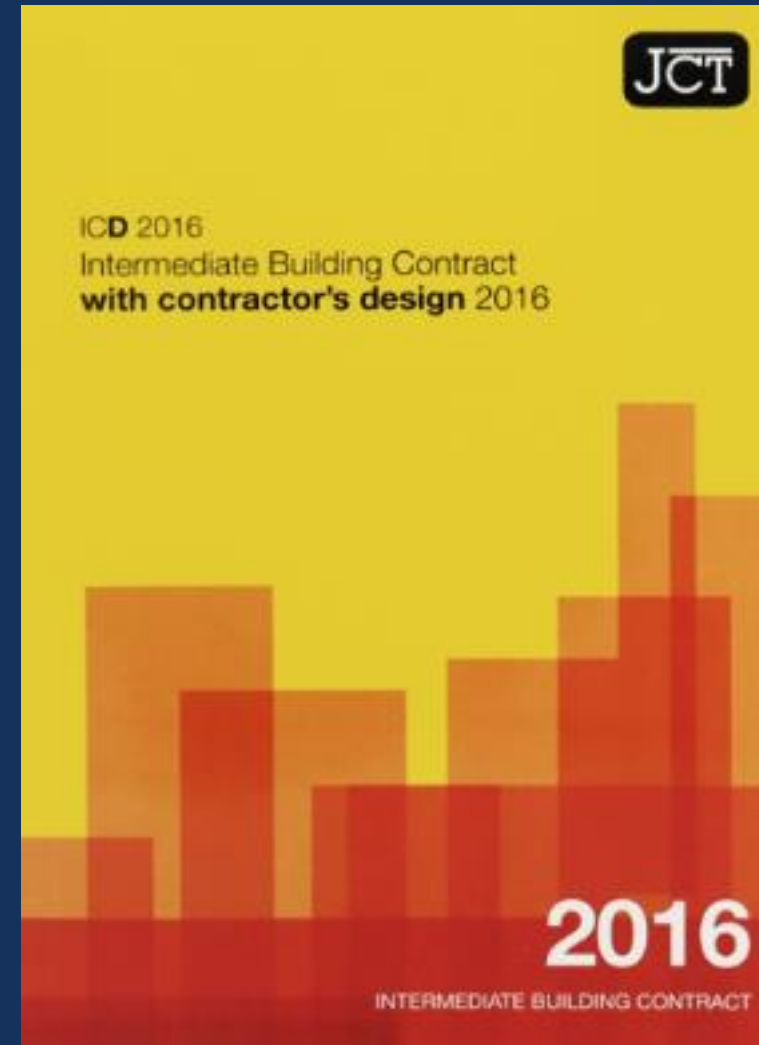
- Considering the Procurement Route
- Funding Requirements



# PARTNERING ARRANGEMENTS / D&B



# TRADITIONAL FORMS



# THE PAS ROLES

## Turnkey

**Most straightforward (on Paper)**

**Most potential for conflict**

**Still advise contract management**

**Most cohesion between functions**

**Likely to be more costly**

**One (or no) procurement exercise**

## Consultant

**Most Control**

**Most conflict management**

**RC can cover contract management**

**Most disconnect between functions**

**Likely to be a cheaper option**

**Potential multiple exercises**



# THANK YOU

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