



Early lessons from social housing retrofit

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Wates Living Space**

Wates Retrofit Experience



Wates Living Space

- Part of Wates Group, one of the leading construction and property services companies in the UK
- Delivering asset management services to over 500,000 homes in partnership with 50 HP's
- Supporting Clients with their decarbonisation and sustainability strategies
 - key focus on reaching EPC C across their portfolio by 2030 (1.6m homes across England)
 - multiple areas including strategy, supporting bid for Govt funding (SHDF), through to delivery.

20	2,886	£52m	17 Ext Funding
20 Retrofit Projects to PAS 2035	Delivering energy efficiency measures to over 2,800 homes	Total Project Value of £52m	3 x Local Authority Delivery (LAD) 4 x Social Housing Demonstrator Fund (SHDF) 9 x Social Housing Decarbonisation Fund Wave 1



Northampton Partnership Homes: SHDF £13m



Project Information

Funding:	SHDF Demonstrator Fund, SHDF Wave 1 – neg Fusion21 F/W
Value:	£13m (£4m SHDF Demo / £9m SHDF Wave 1)
Properties:	80 (SHDF Demonstrator), 250 (SHDF Wave 1)
Measures:	EWI, Windows, Doors, Loft Insulation, Solar PV, ASHP & Sensors
Outputs Include:	<ul style="list-style-type: none">- EPC Band Improvement from D to B/C- Reduced Space Heating Demand by 73% (208 kWh/m2 to 56)
Partners:	Constructive Thinking (Retrofit Designers) Energy Specifics (Retrofit Co-ordinators & Assessors)








Understanding and Embracing PAS 2035

				
<p>Increase the sectors knowledge and understanding of PAS 2035</p> <p>The Retrofit Academy Training</p>	<p>Acceptance a Compliance Framework is required.</p> <p>Unintended consequences following poor design</p>	<p>PAS 2035 is necessarily complex</p> <p>Do not underestimate the amount of work and cost involved</p>	<p>Partner with companies competent in PAS 2035.</p> <p>New roles – RA/RC/RD etc</p>	<p>Recognise the Value, not focus on initial cost</p> <p>“PAS is your friend!”</p>






PAS 2035 is fundamental culture shift to how projects are delivered

Data, Data, Data....Challenge & Opportunity

 <p>POOR QUALITY DATA</p>	 <p>KEEP CALM AND MAKE SMART DECISIONS</p>			
<p>Inaccurate and unreliable data</p> <p>Fragmented systems</p> <p>Sampled Datasets</p>	<p>Data Critical to making smart decisions</p> <p>Move away from EPCs to RA</p> <p>EPC C or D? 10k</p>	<p>Rich source of data becoming available through PAS 2035 process</p> <p>Survey / design / pictures</p>	<p>How are we going to manage this data?</p> <p>How will we integrate to make smart decisions?</p>	<p>Link to Golden Thread – BIM, Asset Tagging.</p> <p>Future asset management preventative</p>

Data will provide the roadmap to Zero Carbon

Maximising funding to support strategy

				
<p>Awareness and access to funding</p> <p>BEIS – SHDF LA Delivery Sustainable Warmth Energy Co – ECO4</p>	<p>Strategy led decisions...NOT funding led</p> <p>Funding should complement programmes / strategy and reduce costs.</p>	<p>Consideration of Client budget / match funding</p> <p>SHDF Funding contributions - Wave 2 - 50% min</p> <p>Likely to be over!</p>	<p>Bid ready?</p> <ul style="list-style-type: none"> - SHRA support - Strategy - Data led decision - Surveys / Design <p>“Shelf Ready”</p>	<p>Collaboration required at Bid Stage - SHDF</p> <ul style="list-style-type: none"> - Client - Contractors - Consultants

Maximise funding opportunities to delivery your strategic objectives

Procurement and Delivery Planning

				
<p>Consideration of Procurement / Delivery Routes</p> <p>Fragmented – sustain / assets / finance / procure</p> <p>Wave 1 projects still being procured</p>	<p>What services do you need?</p> <ul style="list-style-type: none"> - Data Analysts - Assessors - Co-ordinators - Designers - Contractors <p>In-house / Ext?</p>	<p>How will you access those services?</p> <ul style="list-style-type: none"> - Existing Contracts - Frameworks - One stop shop v Elemental 	<p>Supply Chain Capacity?</p> <p>Engage the supply chain to understand capacity ahead of designing large programmes / procurement</p>	<p>Collaboration / engagement is key</p> <ul style="list-style-type: none"> - Internal - External <p>Move away from silos.</p>



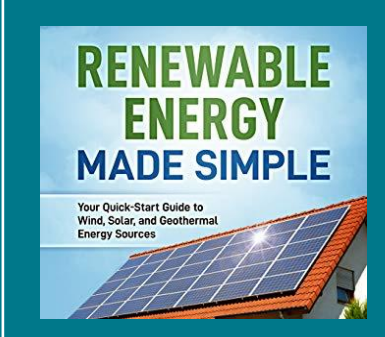
Clear procurement & delivery strategy incorporating skills / capacity

Fabric 1st - Integration with Asset Management

				
<p>Holistic approach of assets / communities - not in isolation.</p> <p>Decarb / Fire / Disrepair / Fuel Poverty etc healthy homes & communities</p>	<p>Maximise efficiencies within existing investment programmes</p> <p>W&D, Roofs etc</p> <p>Min Disruption for residents</p>	<p>Retrofit Plans – path to Zero Carbon</p> <p>Allows long-term sequential measures to suit budgets, programmes</p>	<p>Consideration for future proofing of homes</p> <p>e.g. Heat Pump Ready</p> <p>Strengthening Roofs for PV etc</p>	<p>Collaboration with other contractor partners is key.</p> <p>Planned, Heating, Repairs etc.</p>






Opportunity to create efficiencies through integration with asset management

Importance of Resident Engagement

					
<p>Residents – the champions for retrofit</p> <p>Front and centre of conversation</p>	<p>Residents are often unaware, apprehensive or reluctant to change</p> <p>= access / uptake Issues</p>	<p>Focus on motivating factors</p> <p>e.g. bill reduction, visual e.g. Thermal Imaging.</p>	<p>Power of positive stories / experiences</p> <p>Bad news travels fast however!</p>	<p>Requires energy literate customer facing staff</p> <p>Carbon Literacy Trust – RLO's</p>	<p>Demystify the Technology</p> <p>Tailored Comms to meet diverse resident needs</p>

Residents need to be at the centre of our thinking at all stages

Project Risks to be managed

				
<p>Planning Issues</p> <p>Early Consultation with Planning Authorities – particularly conservation areas</p>	<p>Electrical or telecoms cables, gas pipes.</p> <p>Consideration at design phase</p> <p>Early engagement with DNO's.</p>	<p>Ecological Considerations</p> <p>Undertaking ecology surveys where possibility of bats / nesting birds</p>	<p>Economic uncertainty / Inflation</p> <p>Bulk orders at favourable rates</p> <p>Storage of materials</p>	<p>Supply Chain Capacity</p> <p>Engagement of supply chain</p> <p>Pipeline visibility and capacity building</p>

Risks can be mitigated through early identification / engagement

Retrofit Capacity and Skills Gap

				
<p>Mandatory Accreditations</p> <ul style="list-style-type: none"> - Assessors - Co-ordinators - Designers - Installers 	<p>Accreditation Support</p> <p>Supporting supply chain transition – SME’s – local economy</p>	<p>Investment Confidence</p> <p>£3.8bn / 10yrs committed in a SHDF</p> <p>£100bn for SH to reach Net Zero</p>	<p>National Retrofit Employers Group</p> <ul style="list-style-type: none"> - Partnerships - Pipeline - Gaps - Training 	<p>Education Partnerships</p> <p>Strategic approach – FFP.</p> <p>Training pathways and employer links.</p>

It's time to skill up and scale up for Retrofit

Wider Environmental Impact

				
<p>Embodied Carbon?</p> <p>Industry focus on meeting EPC C / taking a whole life approach.</p> <p>Procurement?</p>	<p>Miyawaki Forest</p> <p>Supporting biodiversity, air quality.</p> <p>Health and wellbeing</p>	<p>Wates Innovation Network</p> <p>Connects customers to market-leading sustainable technologies and services.</p>	<p>Supply Chain Sustainability School</p> <p>Develop skills and knowledge in industry to deliver a sustainable future.</p>	<p>Green Schools Project</p> <p>Raising awareness of climate change</p> <p>Inspires them to lead projects in their schools</p>

Requirement to consider the wider sustainability impact

Thank you