



 **united
living**
property services

The David Middleton Sustainability Conference

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Whole House Retrofit Lessons Learned and Next Steps

Whole House Retrofit

GLA Innovation Partnership

- Energiesprong compliant
- LB Ealing 44 – 24 – 50
- Nottingham 8 - 46



RB Kensington & Chelsea

- Treadgold House
- Energiesprong compliant
- 38 Flats



Retrofit Funding

Government Support

- Industrialise whole-house solution
- Innovate and reduce cost
- Better understanding of business case for stock investment



LAD Scheme
£300m

HUG
£150m 2022

ECO4
£4bn - 2026

WHF
£150m 2022

SHDF
£3.8bn - 2030

Whole House Retrofit

SHDF Projects – Demonstrator

- Clarion - 60 Completed
- Value £4.5m (SHDF £2.25m)
- Wimpey No Fines
- Target of 50 kWh/m² heat demand
- PAS2035 Compliance



Property address	SAP Rating (Section 12)		SAP Space heating requirement	
	Before	After	Before	After
10 Norton Crescent, Tonbridge	65.25	88.04	143.66 kWh/m ² /year	34.75 kWh/m ² /year
12 Norton Crescent, Tonbridge	65.19	88.9	144.04 kWh/m ² /year	33.19 kWh/m ² /year

Together we achieve more

Whole House Retrofit

- ✓ Fabric First
 - *Enhanced EWI system*
 - *Triple glazed windows*
 - *High Performance Doors*
- ✓ Improved Ventilation
 - *Aereco dcMEV system*
- ✓ Renewables
 - *In line solar PV system*
- ✓ Performance monitoring
 - *Switchee controls / display*



Together we achieve more

Whole House Retrofit

SHDF Projects – Wave 1

- Clarion 250 houses - £9m (SHDF £2.7m)
- Places for People 127 houses - £5m (SHDF £1.5m)
- Westminster CC 300 houses (surveys / options) - SHDF £3m

Additional...

- Folkestone & Hythe - 35 houses
- Paradigm Housing - 50 houses



Whole House Retrofit

SHDF Projects – Wave 2

- c. 7000 homes
- Collaboration with other main contractors
- Tendering for opportunities - £Ms
- Market is growing



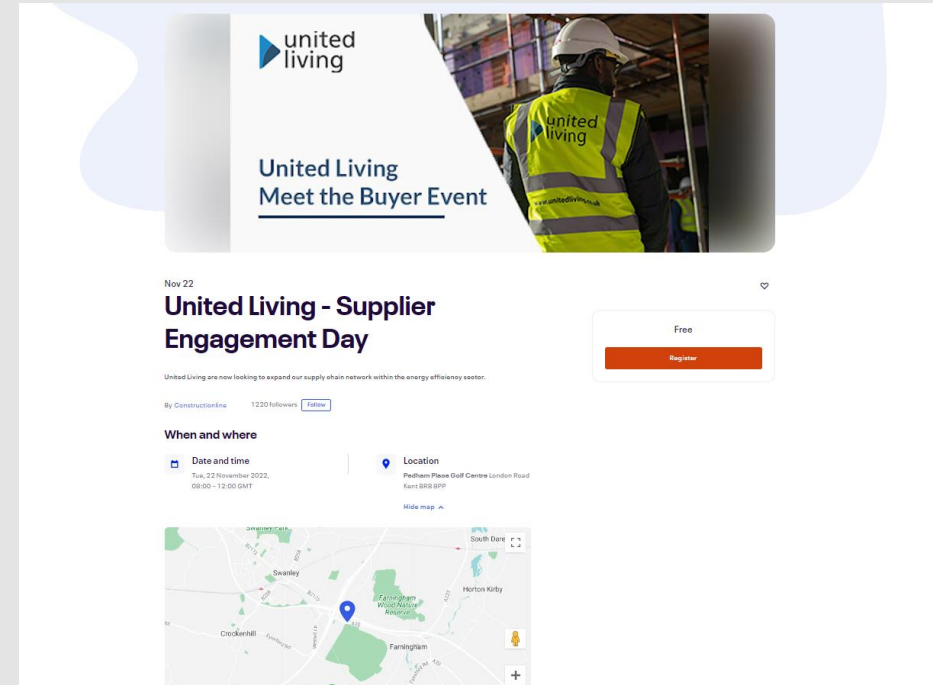
Lessons Learned

- Not enough competent suppliers
 - *Historic piecemeal approach had impacted industry*
- Lack of awareness PAS 2030 / PAS 2035
 - *clients / contractors / installers*
 - *additional costs / delays*
- Procurement
 - *needs early planning*



Next Steps

- Supply Chain Engagement
 - *Meet the Buyer Events*
 - *PAS 2035 support*
- Working with Retrofit Academy
 - *Focused training sessions*
 - *Employees / Clients*

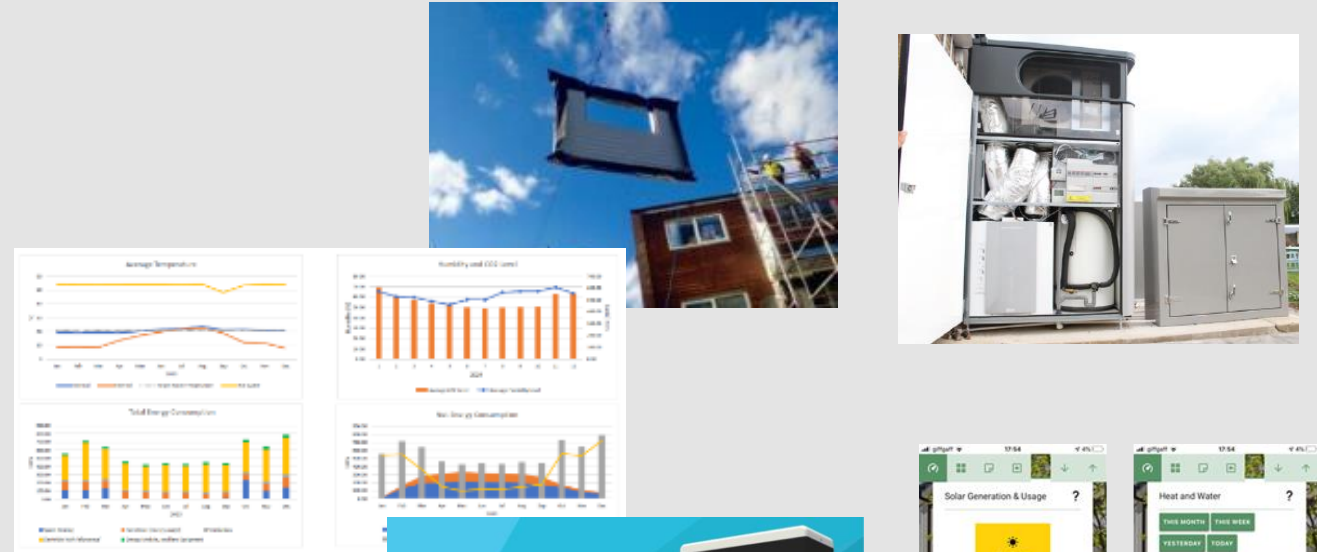


Together we achieve more

Next Steps - Innovation

Solution

- Off-site manufacturing
- Walls / Roofs
- M&E Pods

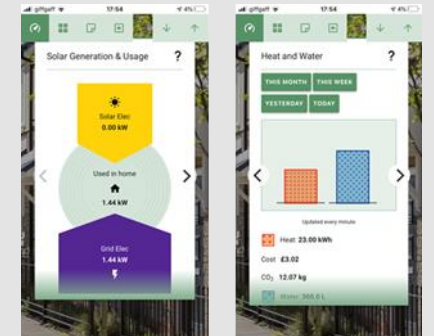


Data and Customer Engagement

- Monitoring solutions

Smarter Technologies

- Smarter batteries / DSR
- Time of Use Tariffs



Together we achieve more