


INNOVATE: Retrofit Together

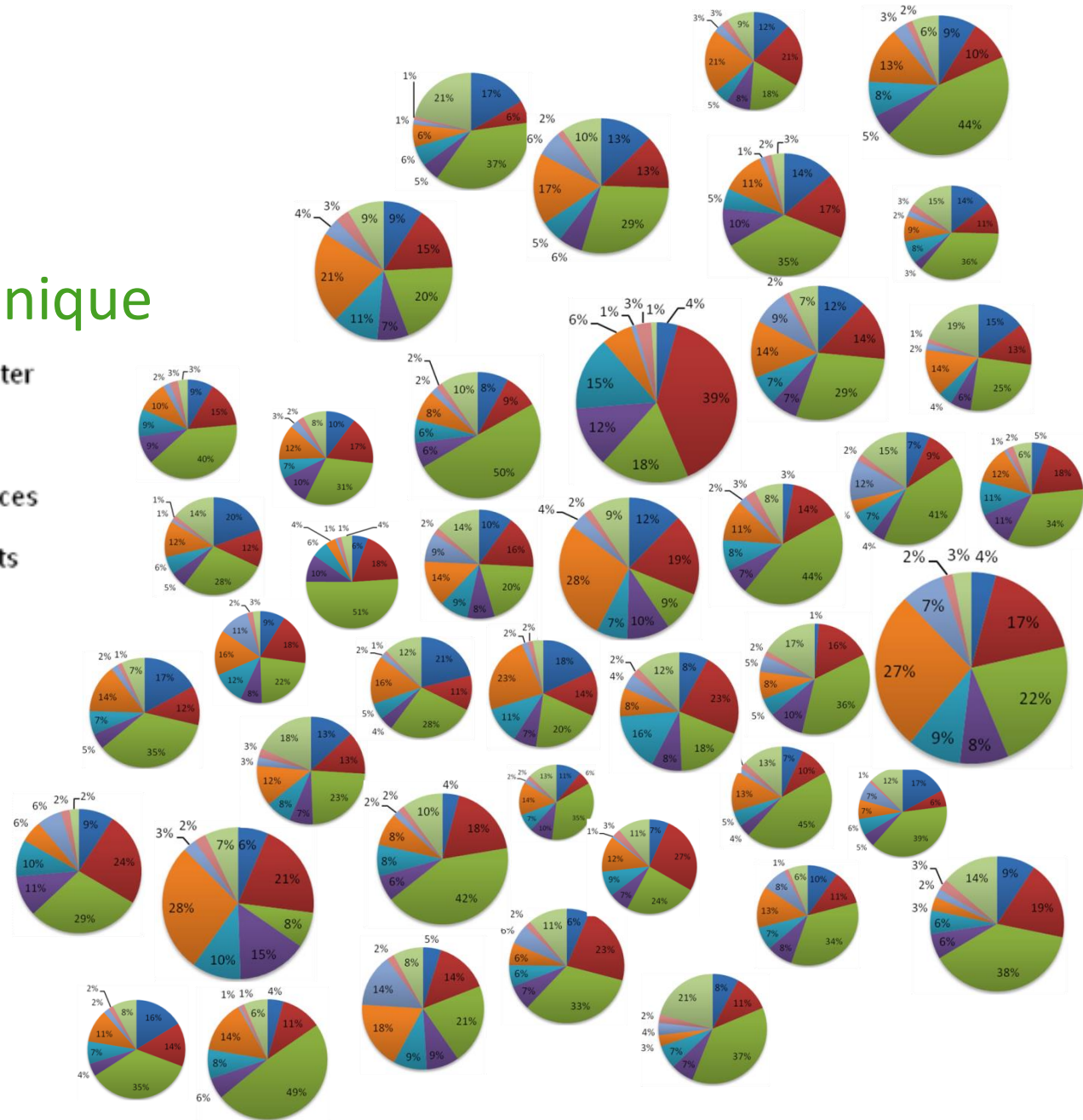
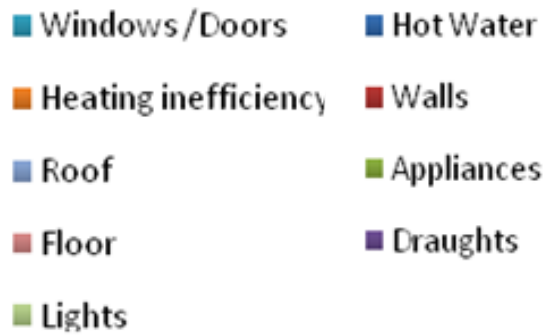


David Shewan, Parity Projects
13th March 2019



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Every home is unique



Strategy



A Whole House Plan

RetrofitWorks

Impartial

Biased



RETROFITWORKS
BUILDING EFFICIENCY TOGETHER



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Where is the activity?

- Disparate market
- Influenced by grants/schemes etc. - unpredictable

**Whole house
retrofit**

- 1. Market model
removing silos**
- 2. Retrofit
Coordinator**
- 3. Multi-skilled
teams**

**Measures-
based**

Grant-focussed

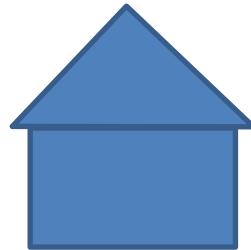
Challenges in the retrofit of a single home

- Retrofit strategy (whole house)
- Detailed design
- Budget
 - Simple economic payback?
 - Need to reduce this payback
- (Finance?)
- Procurement / value for money
- Translating design for the contractor
- Communication between all parties
- Cost control
- Quality Assurance
- Warranties and Guarantees
- Operation and Maintenance Guidance
- (Performance feedback)

the
offer

There is no market for 'retrofit'

Customers



- The offers are narrow and unattractive
- Not aware of measures and benefits
- No confidence in supply chain to deliver

Advocates

**Local Charity
/ Council etc**

- Want to drive change
- Struggle to identify customers
- No defined, reliable, local supply chain
- Local economy?



RETROFITWORKS
BUILDING EFFICIENCY TOGETHER

Finance

- Needs confidence in outcomes and ability to deliver to invest

Practitioners



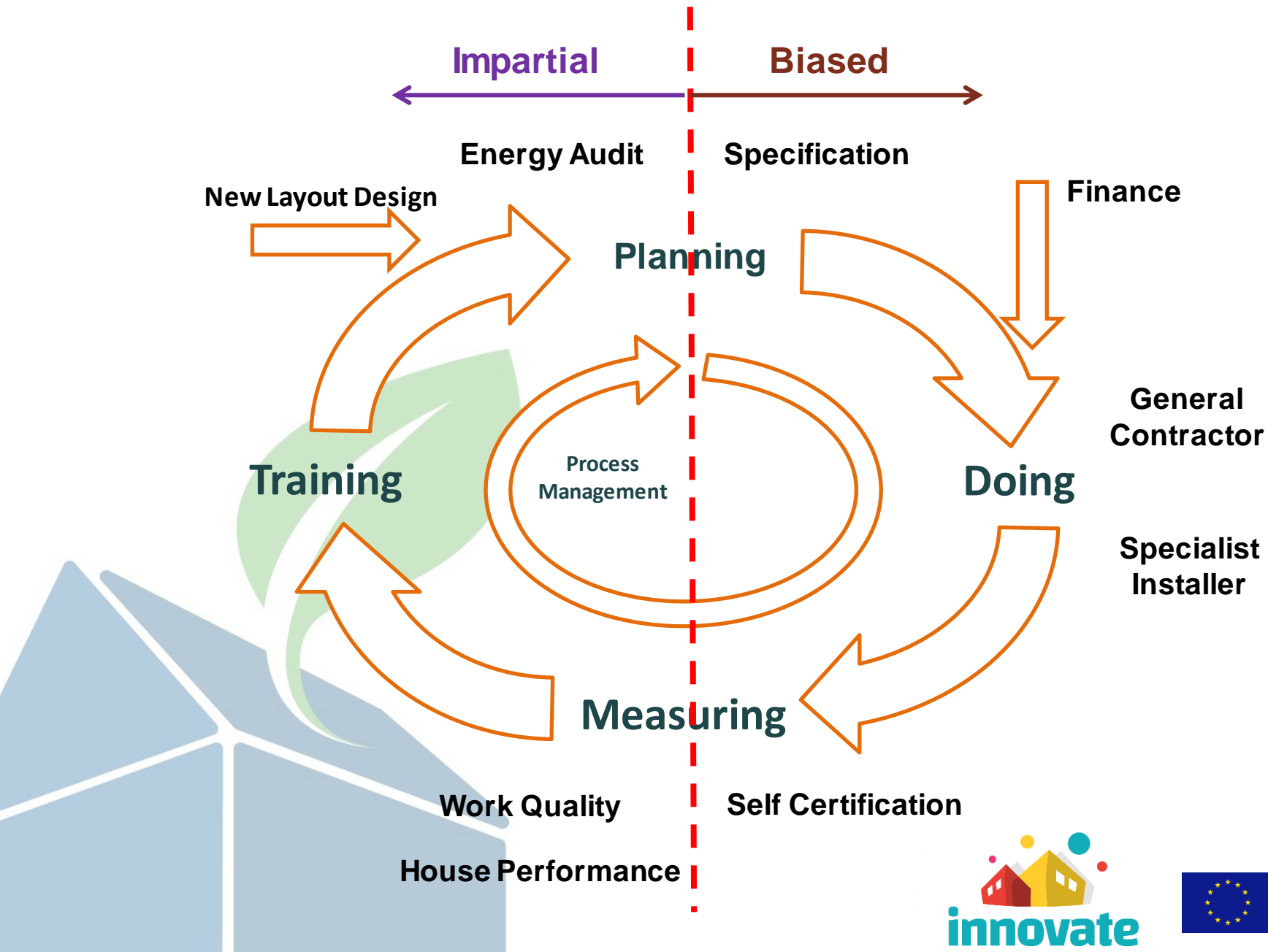
- Have the capabilities but limited confidence in the market
 - Don't invest
 - Don't promote
- Could use some help to deliver



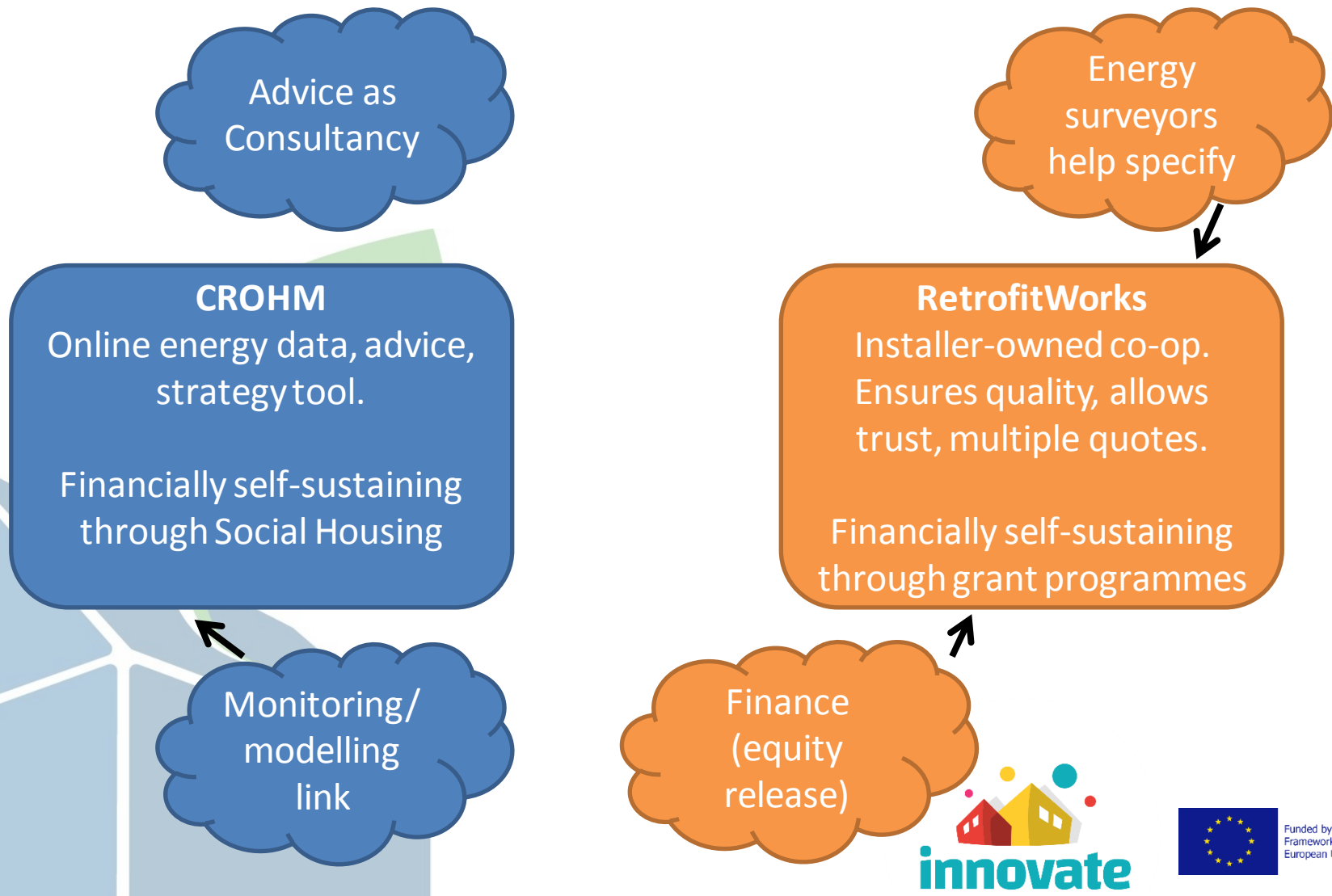
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How to build a market?

- 🌱 Must target able-to-pay
 - Scalable market (not dependent on grants)
- 🌱 We need to build a lot of components
- 🌱 Where to start?
 - Individual major components need to be financially self sustaining before they are all in place



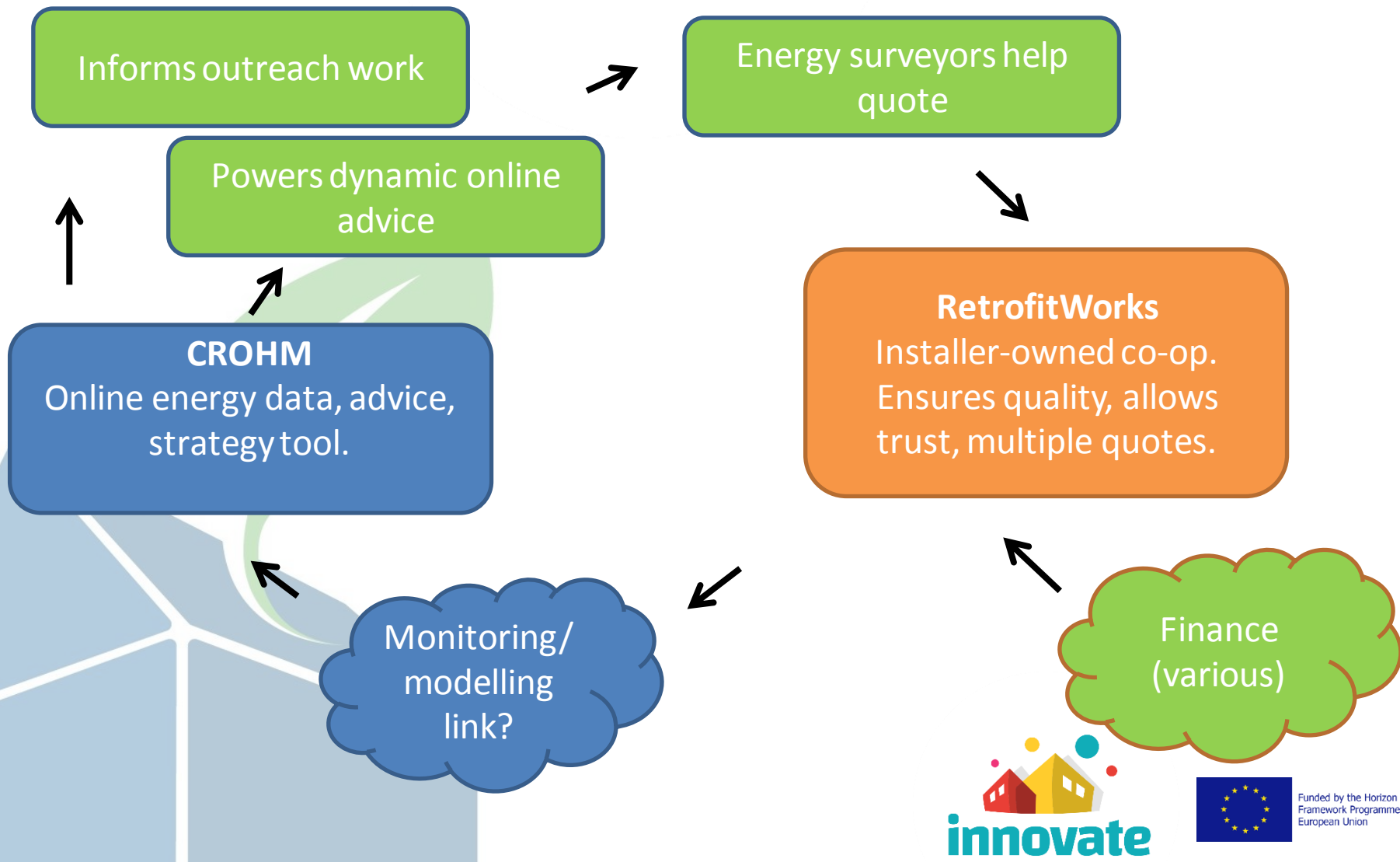
Components



INNOVATE Horizon 2020



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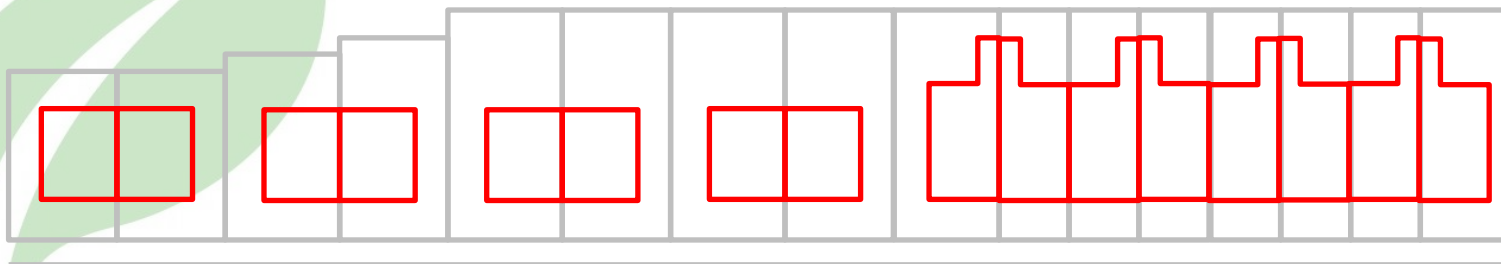
Parity Data Modelling

EPC Open
Data

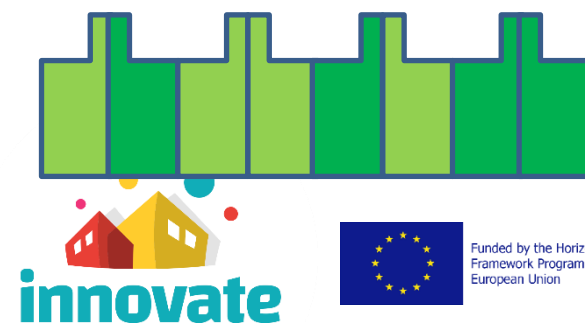


+

OS Map
Data etc.

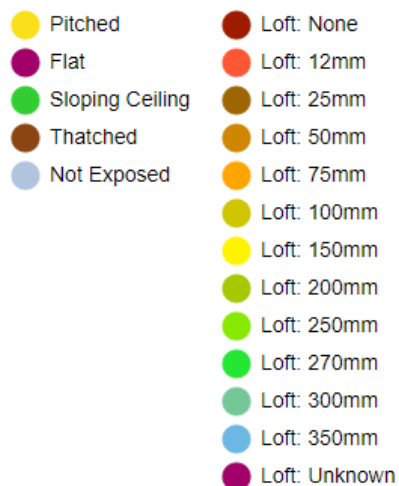


CROHM
Data



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Targeting and Segmentation



Advice / Installer Selection

Online advice for individual properties Coming March

Fill out the form details here to find your property...

OX2 4EP

✓ I'm not a robot



Next >

Current: 764.65 kWh
Projected: 655.48 kWh

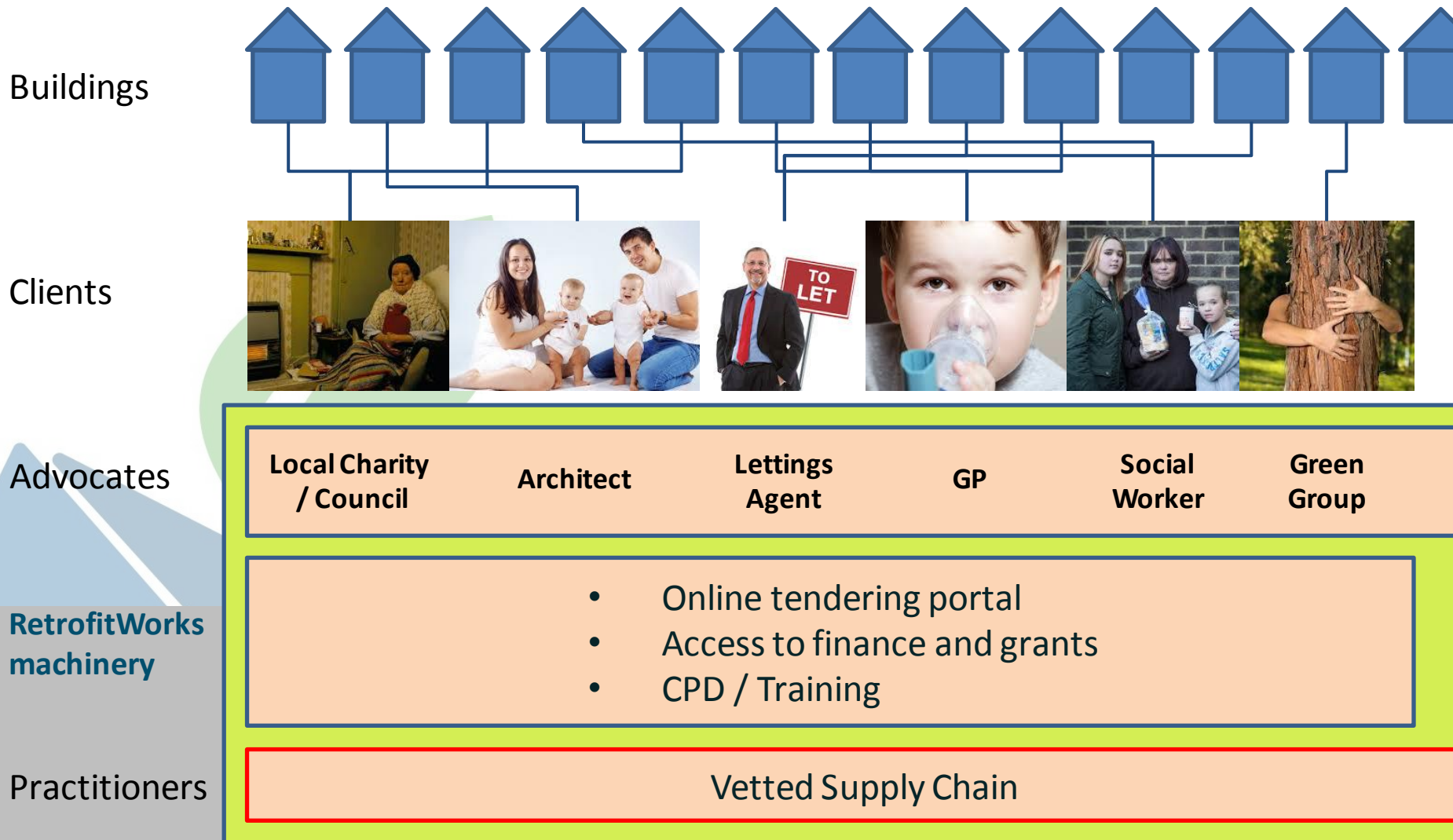
Work with our recommendations below to plan an improvement strategy for your home.

Max Budget Cost

Recommendations

	Low energy lighting	i ✓ ✗	£60
	Full multi zone controls (TRVs, programmers and room...	i ✓ ✗	£650
	Internal insulation to pre 1900 solid walls	i ✓ ✗	£6,367
	WWHRS in suitable wet rooms with a bath	i ✓ ✗	£650
	A rated gas combi from C rated gas combi	i ✓ ✗	£1,500
	Insulated floors (50mm) from pre-1900 solid floor	i ✓ ✗	£1,645
	Oversized radiators from normal radiators	i ✓ ✗	£1,750
	Part L insulated doors	i ✓ ✗	£1,300
	Triple glazing from new double glazing	i ✓ ✗	£7,800

RetrofitWorks: Membership



RetrofitWorks: Work specifications

Loft insulation specification
© RetrofitWorks 2016

Version 1.1 October 2016



Loft Insulation Specification

GENERAL

Item 1. This specification should be used as default in all instances of work unless a different document has been cited as part of the design of a particular scheme.

Item 2. A loft for the purposes of this general requirements and guidance is the attic space directly below the roof of a domestic dwelling, not used for accommodation but often for storage.

CHECKING PRE-CONDITION

Item 3. An initial survey of the loft space is to be carried out prior to commencement of any works. This shall be documented and retained by the contractor (see section 5.7.1). No works shall be carried out unless the state of repair of the roof space together with any installations meets the general requirements and guidance below:

Ventilation

Item 4. Ventilation is a necessary requirement of loft spaces to prevent the risk of harmful condensation forming. Condensation promotes mould growth, which can endanger the health and well-being of building occupants and ultimately the integrity of the building fabric through rotting and degradation. The requirement for adequate ventilation is particularly the case when additional insulation is fitted, as the loft space will be colder in winter than previously. If there are distinct signs of inadequate ventilation pre-installation, such as mustiness, wet or dry rot or mould growth, the works shall not progress until the ventilation issue is addressed. Recommended remedial action should be recorded in the survey. Specific consideration, relating to condensation, should be given to traditional, pre 1919, buildings. The ventilation general requirements and guidance are detailed in clause 5.1.2.

Rainwater penetration

Item 5. There shall be no visible ongoing rainwater penetration or evidence of such penetration.

Ceiling condition

Item 6. The ceiling shall be in a good visible state of repair.

Electrical connections

Loft insulation specification
© RetrofitWorks 2016

Version 1.1 October 2016



Item 20. The logistics of handling any materials that are blocking the placement of any loft insulation will be set down as part of individual scheme design.

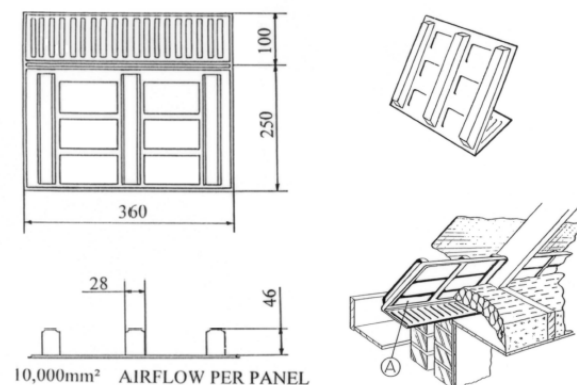
PREPARATORY WORKS TO INSULATION

Ceiling holes and gaps

Item 21. All holes at ceiling drops for pipes and other services shall be sealed where practically possible using silicone sealant, foam, tape, or a combination of these. Holes or gaps in the ceiling too large to fill require building work which would need to take place before any loft insulation works. Where the ceiling represents part of a fire compartment then penetrations should be protected according to current building regulations/standards.


Ventilation

Item 22. All ventilation inlets in the roof space inadvertently sealed during the installation or blocked by any original insulation material shall be cleared. If necessary, insulation interrupters/rafter trays should be fitted to ensure the air path remains open. Refurbishment products are available for this purpose, such as those depicted below.



RetrofitWorks: Online Job Portal

1) Managing leads

 **RETROFITWORKS**

Welcome, Russell

Home

My Calendar

Leads

Clients

Buildings

Projects

Members

Schedule

Documents

Reports

Accounts

User Management

Company Settings

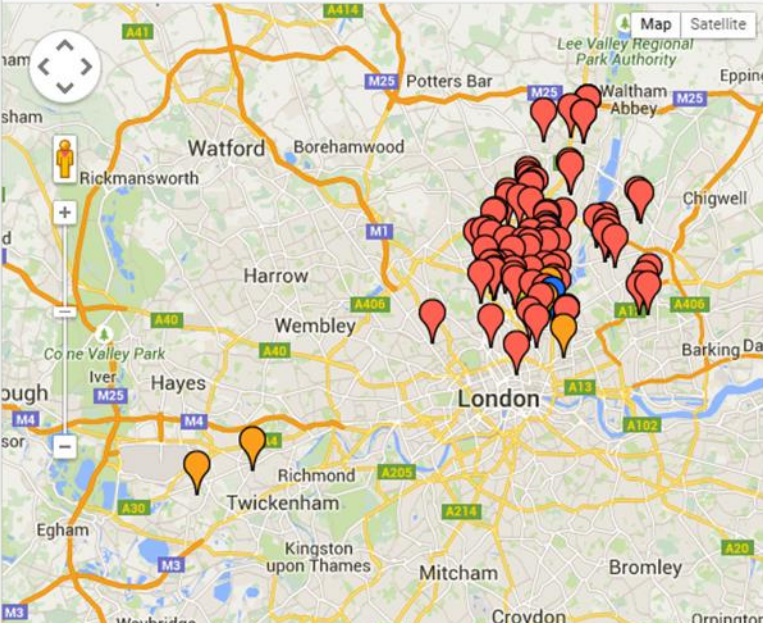
Home

Projects

Jobs

Tenders

Projects Map



Projects List

Project ID	Project Name	Jobs	Tenders	Status
15-0133	Hounslow Energy Grants for Landlords - 7 Churchill Close	2	0	In Progress
15-0132	260 Hanworth Road TW3 3TY	1	0	In Progress
15-0131	Fry - Appleby Road - SMART	0	0	New
15-0130	Kaya - Flat 8, 510 Hertford Road - SMART	0	0	New
15-0129	Kaya - Flat 7, 510 Hertford Road - SMART	0	0	New
15-0127	Kaya - Flat 6, 510 Hertford Road - SMART	0	0	New
15-0126	Kaya - Flat 5, 510 Hertford Road - SMART	0	0	New

Member Entry Requirements

Industry Standards
PAS91-2013 (Q Ref)
SSIP (Safety Schemes in Procurement)
TrustMark
Renewable Energy Association (Consumer Code)
PAS 2030
Green Deal Code of Practice

Membership Alignment
Federation of Masterbuilders
Electrical Contractors Association
National Federation of Builders
Glass and Glazing Federation
Microgeneration Certification Scheme
Solid Wall Insulation Guarantee Agency
Royal Institute of British Architects
Building and Engineering Services Association
Association of Plumbing and Heating Contractors

Each Home Counts

The Retrofit Coordinator

The custodian of the truth

Energy competent

Design expertise

Commercially savvy



Customer journey: Design

- **We are carrying out design from three perspectives, for every home:**
 1. That each recommended measure is satisfactorily designed, in and of itself (Competent Person Scheme....)
 2. That each measure within the immediate package complements the others.
 3. That all future measures are facilitated: 'future proofing'


Advocate Members: Case Study

South East London Community Energy

 Aim to enable SE London residents to access energy saving measures

3 Partners

- RetrofitWorks: does the work
- Selce: Identifies individuals interested in self funded measures or eligible for funded measures
- Lewisham Council: Funds pilot phase of the project and makes ECO flex declarations

 Ultimate goal: Self sustaining business model. RW gives Selce referral fees and that enables Selce to continue to employ someone to generate and process leads

Next Steps

- Soft launch starting March 2019
 - heating measures only
 - randomised control trials, testing branding and messages
- Phase 2 rollout mid 2019
 - ‘Whole Home Retrofit Package’
 - online
 - randomised control trials, testing offers

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