



MaREI

Energy · Climate · Marine

One Stop Shop digital platform

EU H2020 [Turnkey Retrofit](#) project no 839134

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Role Project manager
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MaREI Retrofitting Homes Symposium, 11 June 2020

A World
Leading SFI
Research
Centre



One Stop Shop

a digital platform to guide energy retrofit

Purpose

A high quality retrofit and pleasant experience for the homeowner



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 839134





CLIMATE ACTION PLAN 2019

To Tackle Climate Breakdown

Action 47

Establish a One-Stop-Shop model
for energy efficiency upgrade

“...€50 billion to bring all homes in Ireland up to the required energy efficient standard...” [Irish Times](#) May 19th 2019

One Stop Shop

Existing types in Ireland

| One stop shop | Assist SEAI Grant | Assist Energy Credits | Impartial Advice | Financing | Professional Indemnity | Online tools | Monitor works | End to end management | Digital platform |
|---|-------------------|----------------------------------|------------------|----------------|------------------------|--------------|---------------|-----------------------|------------------|
| Community energy SuperHomes 3CEA RISEC | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | |
| Main Contractors House2Home;Kore; NCE Insulation; Lee Therm; Envirobead; DCIEnergy; Churchfield | ✓ | ✓ | | | | ✓ | ✓ | ✓ | |
| Professional service & Main Contractor Green Watt Renova | ✓ | ✓ | | | ✓ | | ✓ | ✓ | |
| Partnership ESCo + Financial Institution ProEnergy Homes (REIL + Credit Union) | ✓ | Energy credits used for services | | ✓ | | | ✓ | ✓ | |
| Utility Company SSE Airtricity Electric Ireland | ✓ | ✓ | | Launching 2020 | | | ✓ | ✓ | Launching 2020 |



“Heat pump? Bad idea, Expensive Needs a lot of space, Too noisy Loads of money”

“Dry lining? Get someone else”

“Your house is leaking like a sieve you might as well not have windows”

“I only do EWI and PV”

“SEAI grant for controls given”

(boiler dies a few weeks after the new controls installed)

“BER E2”

“You need to change ALL your windows”

(even though some were changed 7 years ago)

“It’s too complicated”

“6.9% is a good interest rate”

“I can do the front - not sure what to do with the back”

“BER C2”

“BER F”

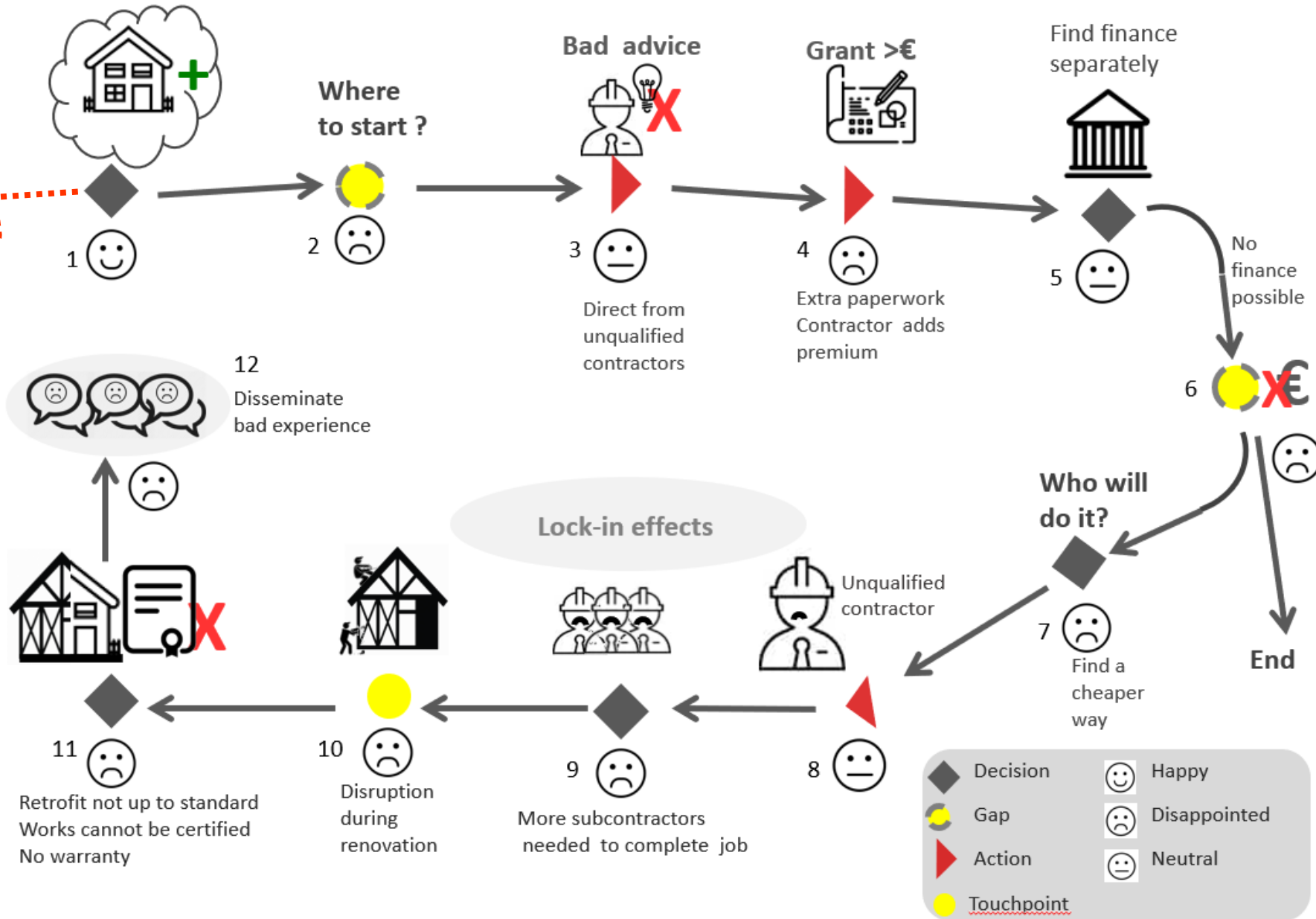
“That grant is not available anymore”

Customers can feel confused as each contractor/ plumber / electrician offers different advice

One Stop Shop

Existing Customer journey

What about messaging and brand awareness?



+smaller energy bills

If you'd like comfort and health in your home - look no further



Peer-peer review



q&a



estimate



benefits



loan offer



professional
impartial advice



contractor offer



grants
+ energy credits



works
monitored



warranty

HEERO

French OSS that will
be adapted for
Ireland

Developed in EU Turnkey Retrofit

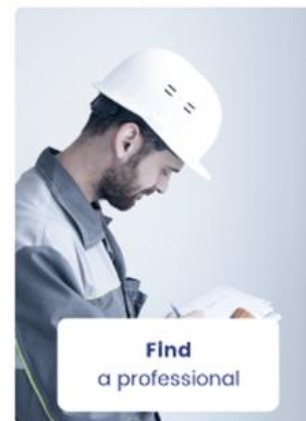
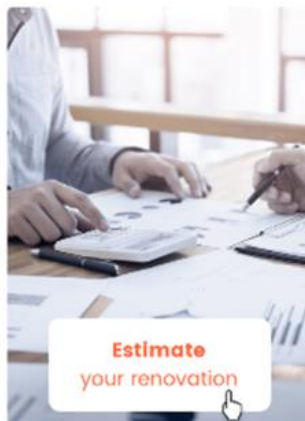
Heero simplifie la gestion de votre habitat. Un logement facile, une vie plus tranquille.

Créer un compte gratuitement



RÉALISER DES TRAVAUX

Let Heero make your renovation easy



Renovation criteria



#85671676

1 - Problems to solve

2 - Weather

3 - Windows

4 - Roof insulation

5 - Wall insulation

Problems to solve (multiple choice)



I have humidity problems : damp stains, blistered paint, moisture, fungal development, etc.



I feel cold in some locations or rooms while feeling warm in other rooms



I pay too much for heating at home



I live in a noisy environment and it disturbs me even with my windows closed.



Other...

Results: Improvement potential

Current state

Improvement potential

Energy saving *no results*

Thermal comfort *no results*


Acoustic comfort *no results*

One Stop Shop French Prototype HEERO - WIP


Renovation criteria





#85671676

1 - Problems to solve 

2 - Weather 

3 - Windows 

4 - Roof insulation 

5 - Wall insulation 

Weather : cold in winter + very hot in summer



In winter, the weather is quite cold and too hot in summer



In winter, the weather is quite cold, but comfortable in summer.



In Summer, the weather is very hot, but comfortable in Winter.



Around my house, the weather not so cold in winter or hot in summer.



I don't know

Results: Improvement potential





24 Rue Louis Malle, 44115 Basse-Goulaine

Locataire : Floriane

Ma maison

Pièces

Cadre de vie

Profil énergétique

Carte

Documents

Car

SMARTDIAG

*Step 3 – In the end
you have a notation :
4/10*

*You can compare it to
the EPC label*

Your house is a 4 / 10

Well, let's be honest, it's not very good.

*It means you can improve a lot on
comfort and energy efficiency.*



Voir le récapitulatif de mes
réponses

La note 4/10 indique que votre habitat a besoin d'améliorations au niveau confort et isolation.

Les notes entre 4 et 7 sont les notes les plus répandues en France. Cela correspond généralement aux logements construits dans les années 70, avant la mise en place des différentes réglementations thermiques. Une amélioration de votre note est cependant possible et est loin d'être compliquée. Une simple isolation ou un changement de système suffit afin de diminuer de façon significative votre consommation énergétique.

Vous voulez nous faire part de votre avis sur les résultats obtenus ?

SMARTDIAG

Step 4 – You have the choice between 3 roadmaps : “initial”, “intermediate” and “complete”

|  POUR COMMENCER Les travaux essentiels à réaliser |  ALLER PLUS LOIN Les travaux les plus rentables |  EN FAIRE PLUS Les travaux les plus efficaces pour vos économies d'énergie |
|---|--|---|
| Isolation des murs par l'extérieur ✓ | Isolation des murs par l'extérieur ✓ | Isolation des murs par l'extérieur ✓ |
| Changement de fenêtres, porte-fenêtres, ou fenêtres de toit. | Changement de fenêtres, porte-fenêtres, ou fenêtres de toit. ✓ | Changement de fenêtres, porte-fenêtres, ou fenêtres de toit. ✓ |
| Installation d'une chaudière gaz à condensation | Installation d'une chaudière gaz à condensation | Installation d'une chaudière gaz à condensation ✓ |
| Installation d'une ventilation simple flux hygroréglable de type B | Installation d'une ventilation simple flux hygroréglable de type B | Installation d'une ventilation simple flux hygroréglable de type B ✓ |
| Isolation sur le plancher bas | Isolation sur le plancher bas | Isolation sur le plancher bas ✓ |
| <p>Economisez jusqu'à</p> <p>621€/an</p> | <p>Economisez jusqu'à</p> <p>731€/an</p> | <p>Economisez jusqu'à</p> <p>1 982€/an</p> |
| <p>MONTANT TOTAL : de 35 000 à 48 100 euros</p> | <p>MONTANT TOTAL : de 49 500 à 68 100 euros</p> | <p>MONTANT TOTAL : de 61 400 à 84 400 euros</p> |

Developing an Irish prototype

One Stop Shop Local Implementation Group



10 Quality Assurance
Sample checks, BER assessment, HPI

- 1. Check the contractor's credentials and experience.
- 2. Check the contractor's insurance and public liability cover.
- 3. Check the contractor's references and previous work.
- 4. Check the contractor's health and safety record.
- 5. Check the contractor's financial stability.
- 6. Check the contractor's communication skills.
- 7. Check the contractor's ability to work with the local authority.
- 8. Check the contractor's ability to work with the customer.
- 9. Check the contractor's ability to work with the installer.
- 10. Check the contractor's ability to work with the funder.

Making the platform-process work better

An idea for...
Needs to support the Eco system
TSC should take care on it.
How can it contribute?
What expertise is required - who needs to be involved?
Take this...

13-stage Local Authority Retrofit, Upgrade, Program

Which QA is essential? Does customer understand this process?
Approved installer - 3 assesses
- Compliance
- Quality of workmanship
- Customer experience
- Trusts the installer
- Customer is informed

Are there gaps / knowledge missing?
The tests - to validate performance
- is in the Advisory Report
- monitoring will be fed back into customer's info - platform.

What expertise is required - Who needs to be brought in to make this work?
- Air tightness
- Ventilation
- Done by compliance installer!

QA input from customer point of view -
"How do we know the performance has improved?"
People want to know

Two workshops and many face to face meetings



Customer

- Clear process
- Excellent job
- Logical sequence
- Certainty of grant
- Low interest rates
- Warranties

Financial Institution

- Safety net
- Supported by Central Bank
- Independent professional oversees works for compliance

Qualified Professional

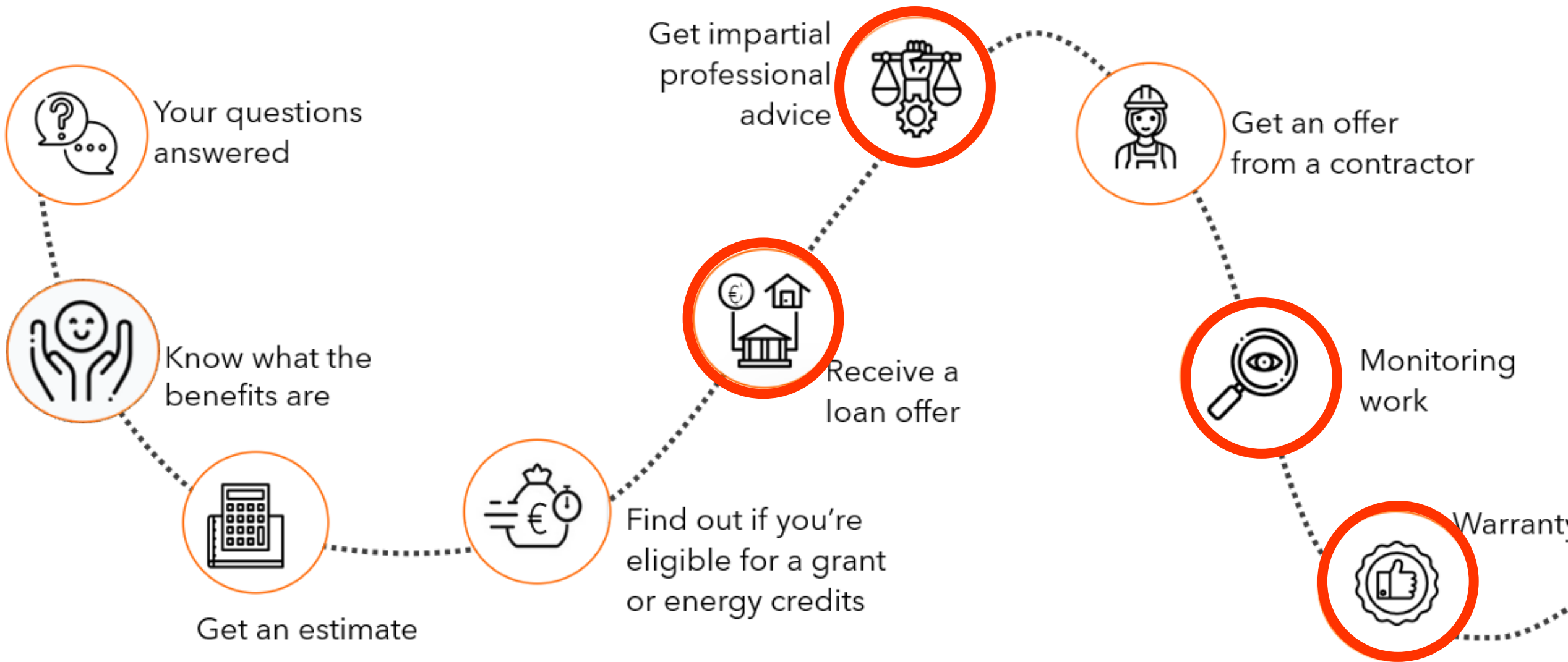
- *Professional led
- ****Road map** and strategy prevents lock-in
- Qualified person with professional indemnity

Qualified Main Contractor SEAI NSAI

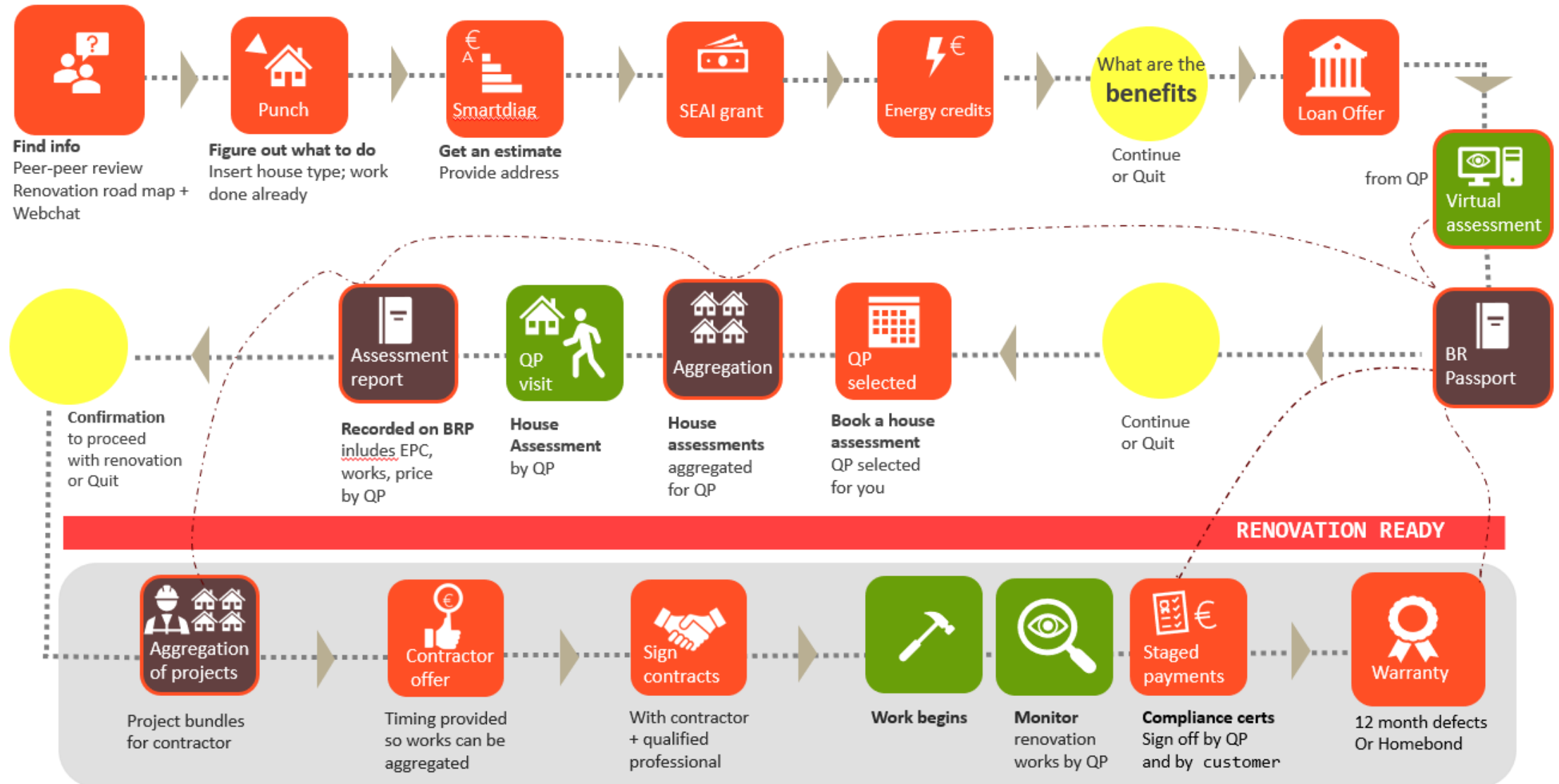
- Certainty of pipeline of work via pre qualified framework contract
- Certainty of duration of grant schemes
- Skilled sub contractors
- Management app to scale up aggregation

*Grant for professional project manager would be provided for this service - similar to KfW

**Road map in the form of a Building Renovation Passport - logs strategy and evidence



One Stop Shop Irish One stop shop - flow diagram



QP : Qualified Professional

BRP: Building Renovation Passport

Action on platform

Live Interaction with person

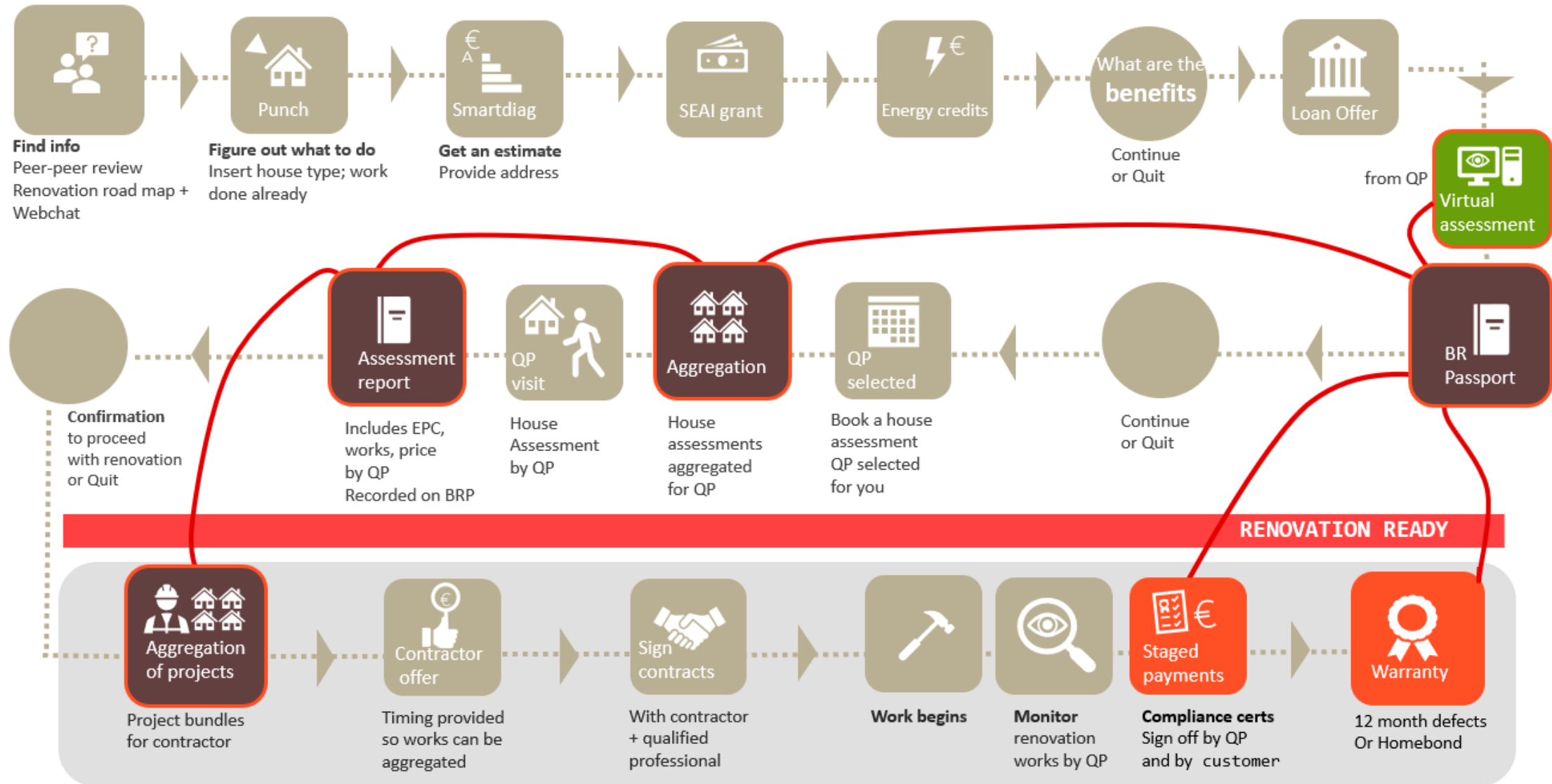
Connect to logbook-BRP

Decision made outside

Action outside

One Stop Shop

Aggregation from the logbook or BRP



QP : Qualified Professional

BRP: Building Renovation Passport

Red box: Action on platform
Brick required

Green box: Live Interaction with person
thru platform - Brick required

Blue box: Connect to logbook-BRP
thru platform - Brick required

Yellow circle: Decision made outside
the platform

Green box: Action outside
the platform



EU Turnkey Retrofit project
Guide your retrofit journey
from start to finish

Thank you

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We warmly invite you to the
Turnkey Retrofit tomorrow to
hear about the French prototype

10 a.m.
12th June 2020

If you have feedback or can help
us in any aspect of the OSS
minimum viable product

Contact us
NUI Galway
Irish Green Building Council

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