

Construction Sector Deep Retrofit Opinion Base



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 890492 (Superhomes2030)



Disclaimer of Warranties

"This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 890492".

This document has been prepared by SuperHomes2030 project partners as an account of work carried out within the framework of the EC-GA contract no. 890492.

Neither Project Coordinator, nor any signatory party of Superhomes2030 Project Consortium Agreement, nor any person acting on behalf of any of them:

(a) makes any warranty or representation whatsoever, expressed, or implied,

(i). with respect to the use of any information, apparatus, method, process, or similar item disclosed in this document, including merchantability and fitness for a particular purpose, or

(ii). that such use does not infringe on or interfere with privately owned rights, including any party's intellectual property, or

(iii). that this document is suitable to any user's circumstance; or

(b) assumes responsibility for any damages or other liability whatsoever (including any consequential damages, even if the Project Coordinator or any representative of a signatory party of the SuperHomes2030 Project Consortium Agreement has been informed of the possibility of such damages) resulting from your selection or use of this document or any information, apparatus, method, process, or similar item disclosed in this document.



Abbreviations

SuperHomes 2030: Up scaling integrated Home Deep renovation services for Ireland

Partners

- EHPA: European Heat Pump AssociationESB: Electricity Support BoardLIT: Limerick Institute of TechnologyTEA: Tipperary Energy Agency
- SW: Sustainable Works



Contents

Disclaimer of Warranties	2
Abbreviations	3
Partners	3
Executive Summary	5
Methodology	5
Desk Research	5
Survey Questionnaire (Quantitative study)	6
Focus Group (Qualitative study)	6
Analysis	7
Introduction	7
Demography [Survey]	7
Demography [Focus Group]	10
Opportunities	11
Perceptions	12
Challenges	17
Visions	24
Conclusions & Recommendations	29



Executive Summary

This report, D2.2- Construction Sector Deep Retrofit Opinion Base, is an overview of inputs gathered from service providers directly involved in the delivery of residential deep retrofit projects in Ireland. These service providers are primarily made up of; Surveyors, Architects, Engineers, Contractors, Grant Service Providers, 'One Stop Shop' type organisations and other SME's.

The report seeks to form an opinion base of current understandings and beliefs about the existing retrofit market in Ireland, its drivers, and barriers and where and how the status quo might be improved to better facilitate the very challenging growth targets that have been set. This will inform both the design of the 'SuperHomes' roll out and expansion, but also relevant communications campaigns.

Some key results of the study include a 'fabric first' approach was generally agreed as the best operational approach to a deep retrofit. There was also a real appetite from all respondents for more involvement in the retrofit sector. This appetite ranged from 61-90% agreement depending on the profession of the stakeholder. Also, a key finding of this research, was that although the appetite is there, the ability to carry out quality deep retrofits is also there but it was a theme throughout that research that the fundamental issue that prevents scale up and demand is linked to the current grant scheme in Ireland.

Methodology

The SuperHomes 2030 project aims to create better understanding of the retrofit market in Ireland to grow the capacity of the SuperHomes offer. This report results from the work carried out in Task 2.1.2, Market analysis of Surveyors/SME's/Contractors. The research was carried out remotely using desk research with primary data collected through a publicly shared questionnaire / survey (Using 'SurveyMonkey' Platform and with follow up interviews and data from a focus group meeting (Using Zoom Meetings) facilitated by TEA. Limerick Institute of Technology (LIT) worked closely with TEA in defining the questions to be addressed and compilation in of this report.

Desk Research

Desk research proved to conjure limited relevant secondary research. Which could be explained by the deep retrofit industry being relatively new and rapidly growing. However, a couple of relevant studies were found. The Trades & Apprenticeships Skills Survey was undertaken within the Dublin Institute of Technology for the Construction Industry Federation (Ó Murchadha & Murphy, 2018). The study aimed to give an employer's perspective for the needs of the industry. A critical discovery from the research is that 86% of respondent companies note that there is an inadequate supply of qualified tradespeople. Skills gaps have emerged across the full range of construction trades and are most pronounced in the "wet" trades (e.g. Plastering).

Another relevant study was 'Attitudes and approaches of Irish retrofit industry professionals towards achieving nearly zero-energy buildings (2017)' with the key finding – "There is a substantial amount of ambiguity and reluctance among the professionals in reaching the Irish nearly zero-energy building (nZEB) targets."



Survey Questionnaire (Quantitative study)

A publicly disseminated online survey, targeted at Surveyors, Architects, Engineers, Contractors, and other SME's who are involved in the residential deep retrofit sector. The online platform used for the survey was 'SurveyMonkey'. It was then widely shared through email lists and on social media via; Twitter, Linked-in, Facebook and electronic newsletters as well as being sent directly to some industry representative bodies.

The survey was used primarily as a means of gathering quantitative data but with some open questions to allow for capturing of additional opinions and ideas not specifically captured in the quantitative questions.

Respondents to the Survey were invited to give permission to be contacted with a view to taking part in a follow up focus group.

Focus Group (Qualitative study)

Participants for the focus group were selected from the respondents to the survey who had explicitly given permission to be contacted and had expressed an interest and willingness in taking part in the focus group.

Great effort was taken to select focus group participants that would be broadly representative of the respondents to the survey and the retrofit sector in Ireland in general.

The focus group was the primary means of gathering more qualitative information on attitudes, opinions, and ideas on the retrofit industry in Ireland as it currently operates and how it might be improved.

The focus group was also used to explore and discuss some of the results of the survey with a view to getting a better understanding of the reasons behind some of the results.



Analysis

Introduction

On December 7th, 2020, the Survey titled "Market analysis of Surveyors/SMEs/Contractors engaging in Energy Retrofit of Domestic Homes" was launched using Survey Monkey. The purpose of this survey was to harvest data on perceptions, challenges, opportunities, and visions for deep retrofit to 2030 and beyond.

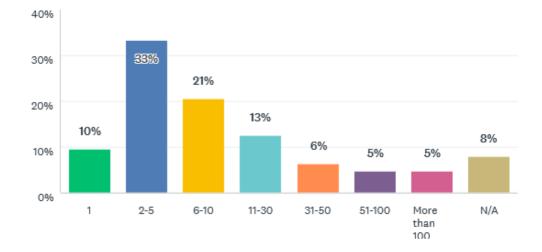
To ensure that all respondents had a similar understanding of what we meant by a 'Deep Retrofit' we defined a Deep Retrofit as follows; -

"A deep retrofit is a significant upgrade which takes a whole-house approach to energy in the home by looking at the overall effect of a combination of the most appropriate energy measures, rather than upgrading isolated parts or elements of the house. The aim is to achieve an improvement in energy efficiency towards the standard of near zero energy, while ensuring that these measures work together successfully. To achieve this all aspects of the building fabric, air tightness, ventilation and renewables should be assessed and addressed as appropriate."

The Survey was directly emailed to a number of existing contacts and shared on social media (Twitter, LinkedIn, Facebook) through the accounts of Tipperary Energy Agency and SuperHomes. The survey targeted surveyors, architects, engineers, contractors, and SMEs who engage in deep retrofit initiatives. The survey remained open until 27th January 2021.

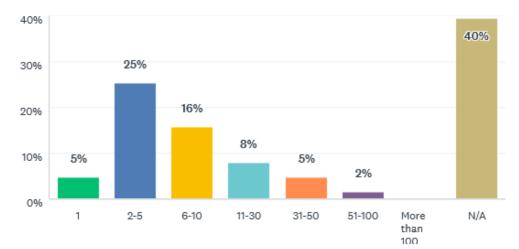
Demography [Survey]

To better understand the demography of the respondents we asked a number of questions at the start of the survey. The following provides information on the organization, size, role within retrofits, and experience (both of Retrofits & Support Schemes). The following is a summary of the results;



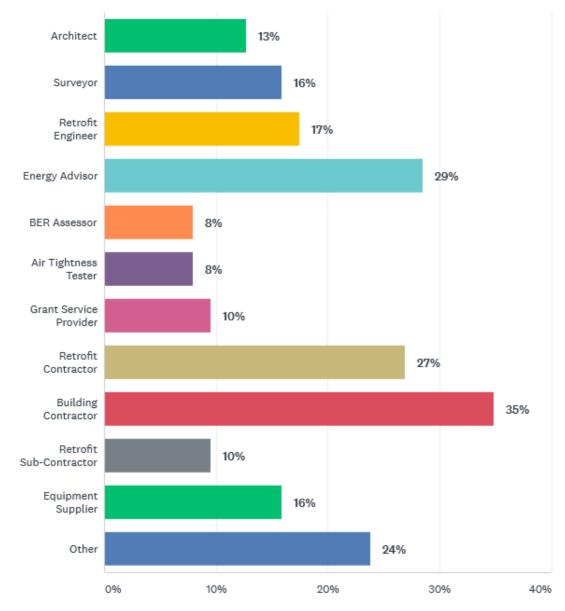
Number of Direct Employees in organization:



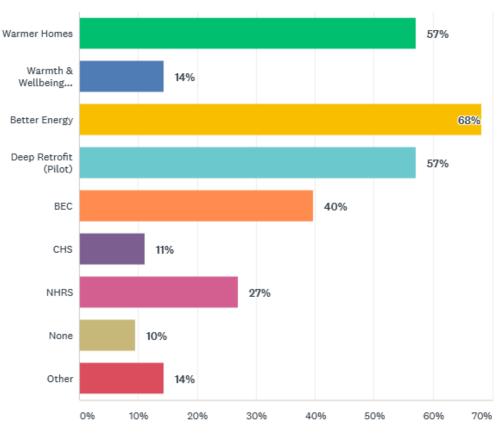


Number of Indirect Employees / Sub-Contractors in organization:





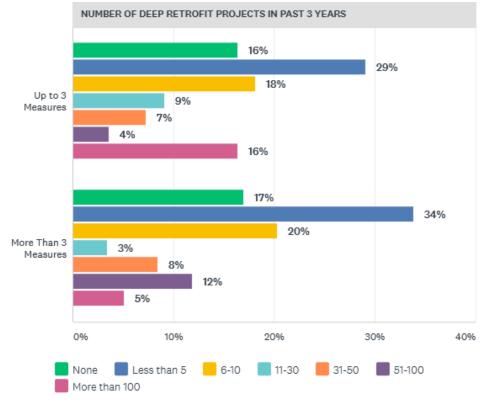




Past Involvement in SEAI Grant funded Energy Retrofit Schemes

Number of Deep Retrofit Projects over Past 3 years

- Where involved in up to 3 measures
- Where involved in > 3 measures





Overview of Demography

The majority of respondents (90%) were from organisations with less than 50 Employees reflecting that the vast majority of organizations involved in Deep Retrofit in Ireland are SME's.

Many respondents see themselves as fulfilling multiple roles (e.g., Architect / Engineer & Energy Advisor or Contractor & Energy Advisor).

The Majority of Respondents (90%) have had had some involvement in the past with SEAI Funded Grant Schemes; The most common ones being Better Energy (68%), Warmer Homes (57%) & Deep Retrofit (57%).

Approximately 16% or Respondents had not been involved in any Deep Retrofit projects in the last 3 years, whilst only 47% (up to 3 measures) & 54% (more than 3 measures) had been involved in less than 10 deep retrofit projects over the past 3 years. Less than 20% had been involved in more than 50 deep retrofits.

Demography [Focus Group]

A selection of respondents to the survey, who had given permission to be contacted in relation the planned focus group, were invited to take part in a 'virtual' focus group discussion with was held on 27th January, hosted by TEA.

The invitees were carefully selected to get a balance across the different organisation and business types that are involved in the Retrofit Sector in Ireland. The final selection that took part were as follows: -

Participant	Organisation Size	Primary Roles in Deep Retrofit
identifier:	Direct	
	[indirect]	
А	11-30	Energy Advisor, Grant Service Provider
	[N/A]	
В	11-30	Retrofit Engineer, Supplier, Retrofit Contractor
	[6-10]	
С	3	Energy Consultants, BER's & Air Tightness Testing.
	[6-10]	Grant Service Provider.
D	2	Architect
	[N/A]	
E	1	Architect
	[N/A]	
F	11-30	Specialist Retrofit Contractor
	[11-30]	
G	11-30	Grant Service Provider/ One Stop Shop, Specialist Retrofit
	[6-10]	Contractor.

NOTE: Quotes or contributions, from the Focus Group, will be attributed to the relevant participant by pre-fixing the quote or contribution with the Participant Identifier in superscript (e.g.; ^[D] "I'd love to be able to show my clients how much they will save on energy bills")



Opportunities

In this section of the Survey, we sought to get an overview respondents opinion on the opportunities for growth & development for the industry in providing Deep Retrofits.

It was widely accepted that the 2030 Targets do present significant and varied opportunities for those involved or considering getting involved in the Retrofit sector

Business Growth

When asked to rate the following as potential opportunities to grow your business resulting from a large increase for Deep Retrofit Projects.

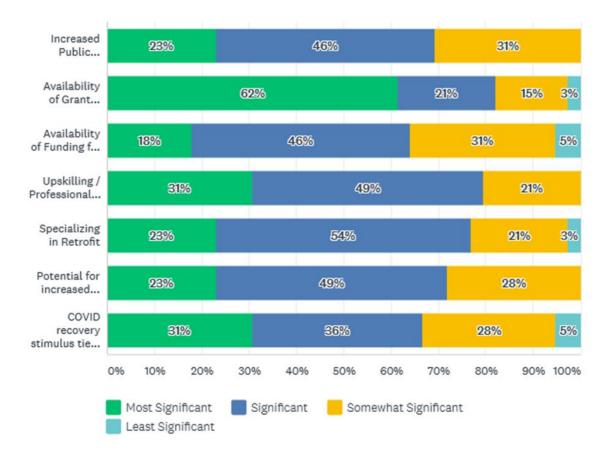
- Increased Public Awareness of Energy Efficiency leading to greater business opportunities.
- Availability of Grant funding for Retrofit Measures.
- Availability of Funding for Business Development
- Upskilling / Professional Development of potential employees
- Specializing in Retrofit
- Potential for increased profit resulting from operational efficiencies.
- COVID recovery stimulus tied to Energy Improvements.

^[D] "Development of Energy Roadmap model, supported by suitable grants, is essential. With order of measures specified."

^[G] "Energy Roadmap model must address issue of small upgrade excluding homeowners from availing of future grants for the bigger upgrade measures."

^[C] "Could grant amount be somehow based on BER Uplift x floor area, or some other simpler metrics to simplify & speed up grant approvals, rewarding higher achieving projects?".





When asked about other potential opportunities arising, the following were suggested: -

Opportunity to develop a grant scheme better suited to and taking account of special requirement for older / heritage type properties.

Perceptions

In this section of the Survey, we sought to get an overview of perceptions within the industry on topics related to Deep Retrofits such as; -

- Measures considered appropriate to Deep Retrofits.
- Preferred project types (Grant / Non-Grant, Retrofit / Newbuild).
- Views on effectiveness of existing grant amounts & schemes.
- What they believe are influencing factors for homeowners.
- Appetite for growth / increased involvement in Retrofits.

The general perceptions within the retrofit industry appear to be consistent, as outline below: Fabric First & Whole House approach is considered best option.

The current grant subsidy system in Ireland is perceived to be a significant barrier within the market and the market actor's appetite for growth. The perception has been impacted through experiences:

- Time delays relating to grant schemes together with grant-imposed deadlines. Time available for on-site works is squeezed at both ends by grant funding providers (Approval date to Completion Deadline).
- Uncertainty arising from the stop-start nature of schemes is a major barrier to growing capacity- that is the impact of current annual funding cycles



- Administrative burdens due to public expenditure policies and State subsidy schemes are perceived negatively as they were cited to need reform to allow for a more efficient, streamlined processes, with timely and reasonable decision-making.
- Majority believe that with the right improvements & conditions (with grants) *35% Grants + Low interest loans would be sufficient to get homeowners to invest,
- Confidence in the current grant subsidy schemes and process (amongst contractors and homeowners is low.

*It was regularly highlighted that any such 35% grant would need to reflect 35% of 'real costs' as opposed to 35% of an 'approved cost' which often does not reflect the real cost.

Measures

When asked what measure types should be included in deep retrofit projects, most fabric type measures (Wall, Roof, Windows & Doors) score high up this list. However, Floor insulation scored poorest out of all fabric measures (23% saying 'always included' Vs 63% - 90% for other fabric measures). This indicates clear support in general for a 'Fabric First' approach. For Floors, however a further 75% indicated that this should 'sometimes' be used with only 2% saying never.

81% believed that Air Tightness should always be addressed. Whist Air Tightness Measures are a standard requirement for SuperHomes, it is worth noting that many other service providers in the Retrofit Sector in Ireland do not offer this to their clients as it increases the overall project cost without being reflected in increased grant support. The resulting effect of this is that many service providers do not include, or even discuss this option, with the energy upgrade because they feel it puts them at a competitive disadvantage. This can result in 'less than optimal' energy performance of retrofitted homes.

67% believed that the primary heating system should always be changed to a renewable heating source.

^[C] "Most stoves installed as part of a Deep Retrofit never get used. It just the traditional mindset that makes people think that the must have a stove".

^[A] "Air Tightness Measures always a 'Must'

The perception expressed through this study supports the belief that the SuperHomes approach on Measures (Fabric First including Air Tightness with a Renewable Heat Source at its core) is the correct approach to follow.

Project Types:

When asked about preferred project type (New Build estates, new build single houses, Grant supported Retrofits, Non-grant Retrofits); Grant Supported retrofits scored highest (46% & 21% for first and second choice respectively) whilst non-grant retrofits scored poorest (8% & 35% for first and second choice respectively) alongside new build estates.



Perceptions on Financing of Investments in Domestic Retrofit Options:

When asked to rank perceptions about the effectiveness of 35% Grants, Low interest loans or a combination of the two; it is felt that 35% grant had the biggest single influence (scoring 4.75 / 10); Low Interest loans only (scoring only 2 /10); whilst the combination of the two scored 6.6 / 10.

The opinion was highlighted and number of times by various respondents that the current stated level of grant subsidy did not reflect the rate of the grant in real terms.

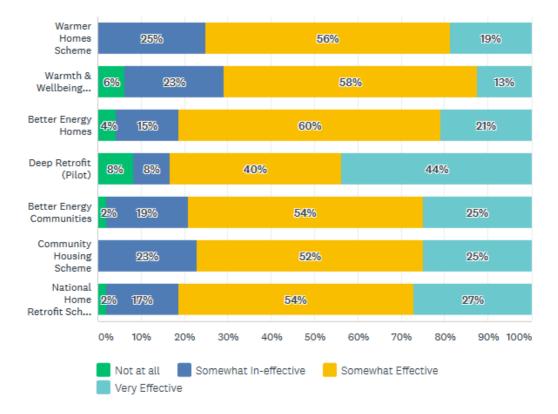
^[C] "If the grants truly were 35% of the actual total cost to the homeowner, many more of our potential customers would proceed with retrofits. They start into the process thinking that 35% of cost will be covered by the grant and when this doesn't transpire, they get frustrated and pull out".

Whilst most would prefer to see higher grant proportions relief rate than quoted, it was felt that it was more important that this rate was reflective of the actual real rate of relief based on real costs.

It was also articulated, that for more significant uptake, that easy and fast access to low interest loans (in combination with grants) was essential for most homeowners' investment undertakings.

Effectiveness of existing grant schemes:

In response to the question "How effective do you believe the existing Grant Schemes will be in playing a significant role in achieving the Government 2030 Targets?" the following were the responses:





It is worth noting that the Deep Retrofit (Pilot) had the highest number of respondents ranking it as *Very Effective* (44%) as well as the highest number of respondents ranking it as *Not at All* (8%). The positive response may be due to the higher grant aid of 50% under this scheme.

The negative response of 8% was mostly due to issues relating to a grant administration issue that resulted in negative media coverage and significant disruptions to homeowners and contractors..

The opinion of the cohort reflected a perceived ineffectiveness due to; duration of application and approval processes, uncertainty, imposed completion deadlines and the amount of administration involved. The uncertainty referred to by participates is covered later in this report, regarding the perceived knowledge gap amongst the respondents was the grant and quality requirements.

^[D] "Too much uncertainty looking ahead over a year around getting grants – Clients need to be able to forward plan with grant. Need to know criteria and availability 12 to 18 month ahead.".

Appetite for increased involvement in Energy Retrofit market:

Based on responses, 65% -71% believe there is an appetite amongst Architects, Engineers, trades & Contractors whilst the appetite amongst BER Assessors & 'One-Stop-Shops' is in the region of 90%. However, it was felt that many improvements would be required in how the grants are administered for this appetite to translate into moves towards significant growth. Some key improvements were highlighted above, within perceptions.

[F] "Needs to be less paperwork, admin & duplication.".

Opinions of Respondents on Influencing factors for homeowners:

When asked about the influence of the following factors such;

- Project Durations
- Cost Scale
- Impact of Property Values
- Running Cost Savings & Payback times
- Health & Comfort benefits



^[G] "Payback time is never going to sell the idea of a deep retrofit. Future Value, Heath & Wellbeing and dwelling performance in the long term will need to be the main selling points".

^[A] "Those who have completed deep retrofits agree that it is expensive but worth it when complete".

^[G] "Before Retrofit 'Cost' is More Important - After Retrofit 'Comfort' is more important than cost".

^[D] "Confidence in grant schemes amongst contractor and homeowners alike

It was the opinion that, whilst all factors play a part, that Health & Comfort Benefits in addition to Running Cost Savings where the more significant issues for homeowners, provided they were in a financial position to do the work.



Challenges

In this section of the Survey, we sought to get an overview of challenges facing the industry in providing Deep Retrofits such as; -

- Industry capacity to deliver government targets,
- Adequacy of training & experience
- Current Grant Schemes
- Influencing Factors for Homeowners

When exploring opinions on the industry's capacity to delivery on the Governments 2030 targets it is broadly agreed by the participants in this study, that the current capacity does not meet what is required. However, whilst all sections of the sector fall short there appears to be a belief that the professions in this sector (Engineers, Surveyors, Architects, Energy Advisors etc.) have greater capacity to meet these challenges than contractors. Responses indicate that for the majority of the professions, 43% to 78% of respondents either strongly agree or somewhat agree that the professions have the capacity to meet the challenge. The exception here was for One stop Shops, for which only 38% believed that there was sufficient capacity.

The opinion on General Building Contractors and Specialist Retrofit contractors, however, was that only 21% to 25% Strongly Agreed or Somewhat Agreed that there was sufficient capacity.

Across the various trades the results were varied, but (with one exception) in general most respondents (51% to 70%) either Strongly Disagree or Disagree that there is currently adequate availability of Suitable Experienced Skilled Labour & Trades to achieve the Government targets.

^[C] "When contractors are busy (i.e., no shortage of work), they will opt for path of least resistance. Path of Least resistance = projects without SEAI grant involvement"".

^[G] "Expansion is too high risk without confidence and certainty regarding Grants"

^[G] "Tying an individual house into a package that involves multiple other houses is a complication and a risk that individual homeowners don't want to know about".

^[G] "The Stop – Start nature of the Retrofit Market (Due to Grant approval to completion Deadlines only allowing about 6 Months of work) is akin to the Ice cream Market"

^[D] "Need a scheme that can support 'Traditional' Pre 1950 houses where U-Values currently set by SEAI cannot be achieved without risk to building – too difficult to do the technically right thing & meet current SEAI requirements."

When asked about perceived challenges to growth in the retrofit sector in light of the government targets (500,000 homes to a B2 rating by 2030) the top three responses were;



- (1) Uncertainty around Grant Funding,
- (2) Grant Imposed Time Limitations
- (3) Retrofit Contractor Capacity.

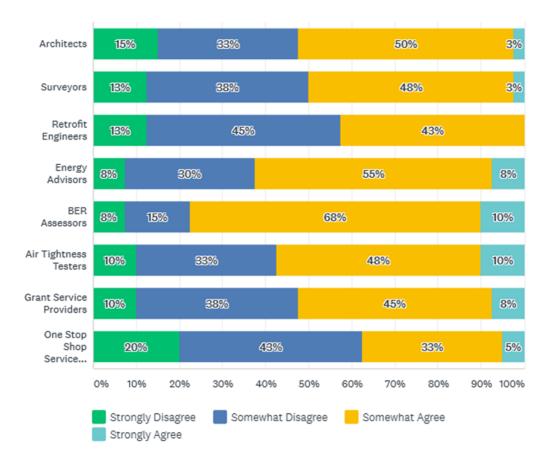
It is important to note here that it was the widely held opinion, amongst the survey respondents and focus group participants, that all potential growth in '(3) Retrofit Contractor Capacity' has been and continues to be severely limited (directly and indirectly in various ways) by (1) & (2).

^[G] "To gain significant traction in the market the Grant Process / Application MUST follow the homeowner's timeline – Not the other way around", "When homeowners are prepared to do a deep retrofit you must be able to act immediately and not expect homeowners to wait 6 months and be subject to a 50% chance that they might get grant approved."

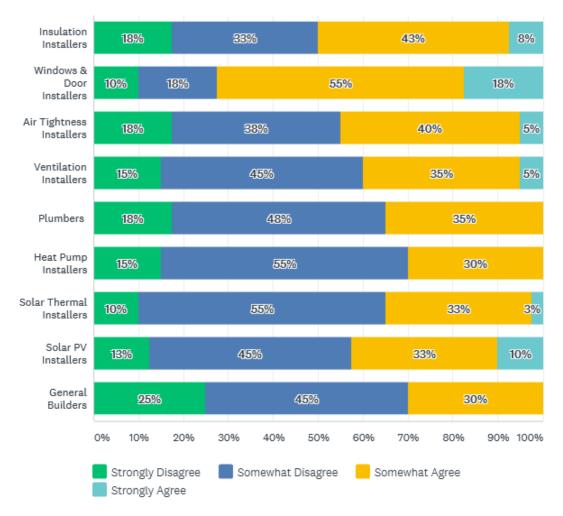
Industry Capacity

See below for responses to statements regarding current adequacy of capacity within the industry to meet the Government 2030 targets;

"There is currently adequate availability of Suitably Experienced <u>Energy Retrofit Professionals</u> to achieve the Government 2030 Targets."

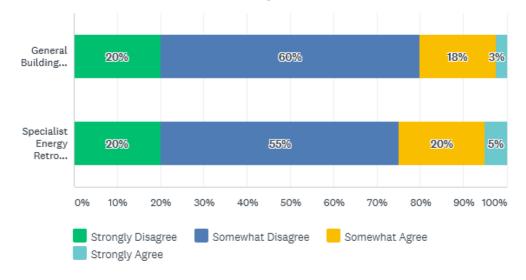






"There is currently adequate availability of Suitably Experienced <u>Skilled Labour & Trades</u> to achieve the Government 2030 Targets."

"There is currently adequate availability of Suitably Experienced <u>Energy Retrofit Contractors</u>, capable of taking on a complete turnkey energy retrofit projects, to achieve the Government 2030 Targets."





The general opinion by the participants of this study, was that there are significant shortfalls across the board in current capacity to deliver on the 2030 targets. However, these shortfalls are more pronounced amongst professions such as Retrofit Engineers, Grant Service providers and One Stop Shop Service providers).

Less than 25% of respondents believe there is adequate capacity across General Building Contractors and Specialist Energy Retrofit Contractors to deliver on these targets.

Across all main trades (apart from window installers), the opinion is that there is a capacity shortfall if the targets under the Climate Action Plan are to be achieved by 2030.

Current Grant Support Schemes

When asked to rank the main challenges associated with the current grant schemes, the top challenges in order of severity were identified as: -

[% ranked in top 3]

- 1. Short timeframe (from grant approval to completion) [71%]
- 2. Approval to completion within same calendar year. [56%]
- 3. Inadequate level of Grant Funding. [56%]
- 4. Excessive Paperwork & Administration [43%]
- 5. Late & Delayed Grant Approval [36%]

Other Issues raised as significant challenges included: -

- Exclusion / difficulty with older / traditional construction types (solid brick & stone constructions)
- Confusion between varying requirements of different schemes
- Delays in grant pay outs.
- Upfront consultancy costs for homeowners without certainty of getting grant approval.

Influencing Factors for Homeowners

When asked to rank the main factors that influence a homeowner's decision to carry out a deep retrofit the top issues in order of importance were: -

[% ranked in top 3]

- 1. Level of Grant Funding available [98%] 60% Ranked as #1
- 2. Needing to Finance the project and claim grant aid thereafter [70%]
- 3. Complexity of Grant Process [58%]

Other Issues raised as significant influencing factors included: -

- Speedy Grant Approval = Ability to make Quick Decision
- Availability of temporary accommodation (during works)
- Need for grant approval & project to fit within homeowners required timeline rather than driven by SEAI approval & deadline dates.



Main Reasons Projects Do Not Proceed

When asked to rank the main reasons projects do not proceed the following were the results in order of significance: -

[% ranked in top 3]

- 1. Cost [96%] 73% Ranked as #1
- 2. Lack of Finance [90%]
- 3. Cashflow of Grant Amount [68%]
- 4. Grant Deadlines [40%]

Other reasons highlighted included: -

- Inflexibility of grant process.
- Sometimes cheaper to forego the grant and cut out the additional costs and limitations of the schemes.

Gaps in Ability to Upscale

When asked to rank the potential gaps in ability to upscale their business, the top issues in order of severity were identified as: -

[% ranked in top 3]

- 1. Office Admin Capacity [69%]
- 2. Uncertain Profit Margin [68%] 40% Ranked as #1
- 3. Business & Financial Planning Knowledge [66%]

Other issues highlighted included: -

- Staff shortages (suitable skills).
- Uncertainty / continuity of grants significant risk to expansion.

Operational Challenges

When asked to rank the operational challenges when delivering Retrofit Projects, the top issues in order of significance were identified as: -

[% ranked in top 3]

- 1. Organizing Labour [83%]
- 2. COVID19 [68%] 50% Ranked as #1
- 3. Working in Occupied Homes [65%]
- 4. Managing Sub-contractors [61%]

Other challenges highlighted included: -

- Brexit & COVID-19 impact on product availability & costs.
- Certainty around grants & grant deadlines.



Traditional apprenticeship / trades training

When asked if the traditional apprenticeship/trades training model (e.g., plumbing, electricians, plastering, bricklaying, carpentry etc.) can meet the skills & knowledge shortages required for the Retrofit Sector the average response on a scale of 0 to 10 was < 4.

When asked what additions or changes to the traditional apprenticeship model are required to satisfy the labour demand in the Retrofit Sector;

The option that scored highest "Multi-Skilled Retrofit Training" was deemed essential by 83% of respondents. Whilst inclusion of training on all of the following areas also scored highly (68% to 78%)

- Air Tightness
- Insulation Speciality
- Renewable Heating Systems

Training on BIM (Building Information Modelling) scored lowest with only 23% believing this was essential.

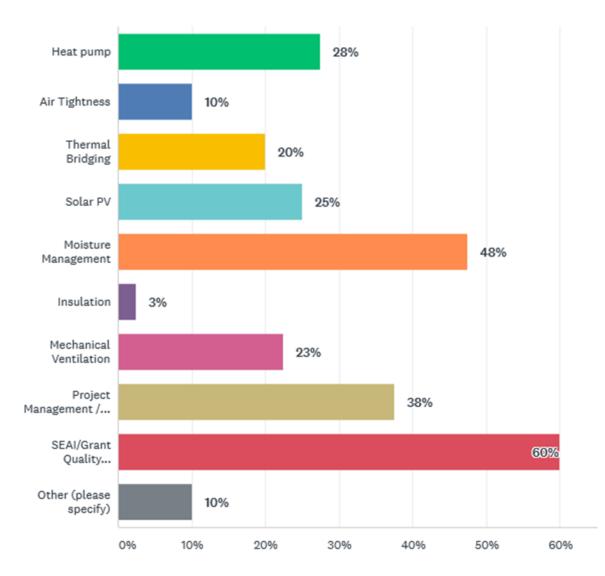
^[G] "Crossover Qualification (e.g., Heat pump Installer / Plumber & Wiring by the same tradesperson) – Wouldn't need Full Electrician status or Full Plumber status. Or EWI trades who are also trained on how to properly fit windows.



Knowledge Gaps

When asked to indicate where the knowledge gaps are for respondents and their staff in delivering deep retrofit projects, 60% indicated 'SEAI Grant & Quality requirements'; followed by Moisture management [48%], Project Management [38%] & Heat Pumps at 28%.

Another area identified was 'application of upgrades & grants in older / traditional construction properties.





Visions

In this section of the Survey, we sought to invite respondents to share their visions of where and how the Retrofit Sector could better serve the common goals of meeting the retrofit targets on topics such as: -

- Operational Innovations
- Financial Innovations
- Delivery Organizations
- Other.

^[G] "Further Development of the 'TABULA webtool' (https://webtool.buildingtypology.eu) to a point where it could be used for an initial Design & Costing of Retrofit Projects (perhaps together with a Pre Works BER) to save time and surveying costs."

^[G] "Getting groups of houses in estates to commit at the same time is difficult, but perhaps it could be made more attractive with a 'bonus' top up to a grant?"

^[G] "Energy Retrofit Sector in Ireland needs a voice! Contractors currently depend on TEA / 3CEA etc to represent the market. Lack of broader ground up representation including all parties! This can be used to bring a unified list of wants or needs to SEAI / Govt departments on what is needed to make the upscaling of Retrofit possible.

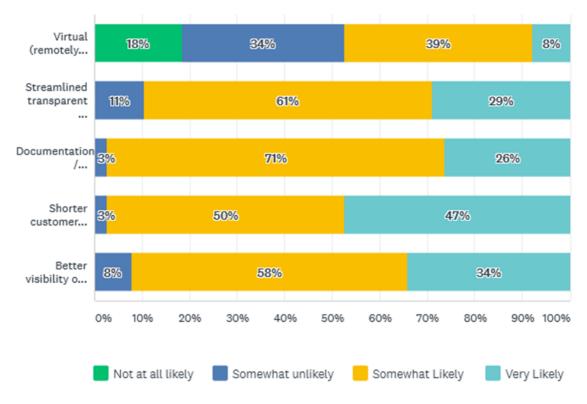
^[A] Public education & awareness on benefits & true costs required "Campaigns on the same level as Anti-smoking & Road Safety Campaigns are required".

Operational Innovations

Rate the following OPPERATIONAL INOVATION functions that would assist you in carrying out Retrofit Projects: -

- Operational Innovations
- Streamlined transparent / visible process.
- Documentation / Certifications Library
- Shorter customer journey (from initial idea through funding confirmation to project completion and grant payment)
- Better visibility of actual performance measurements





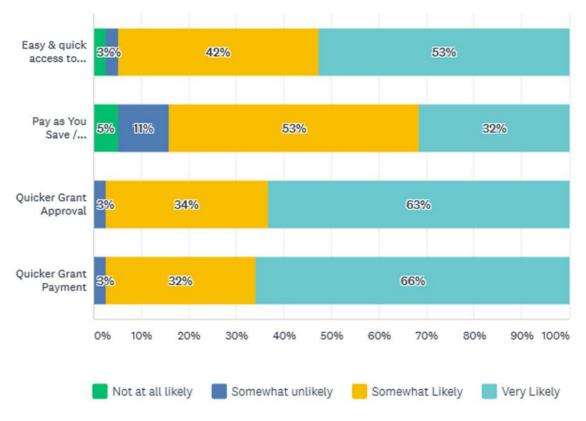
It would seem from the responses that anything that will help streamline and therefore speed up the processes would be very desirable from the point of view of improving operations.

Financial Innovations

Respondents were asked to rate the following FINANCIAL INOVATION functions that would assist in carrying out Retrofit Projects: -

- Easy & quick access to finance
- Pay as You Save / instalment / finance model.
- Quicker Grant Approval
- Quicker Grant Payment



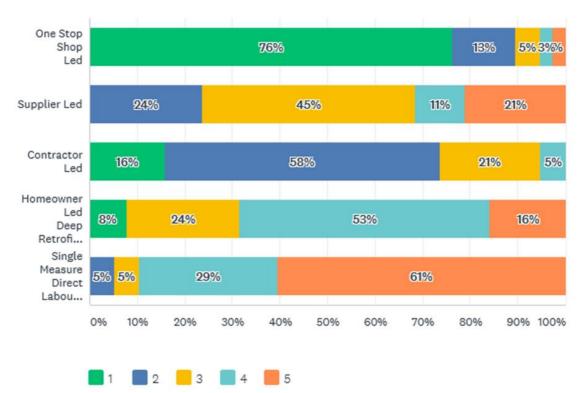


When it comes to Financial Innovation visions speed seems again to be more important: -

- Quicker Grant Approval
- Quicker Grant Payment
- Easy & Quick Access to Finance



Delivery Organizations



Respondents were asked to rank types of Delivery Organizations in order of preference.

The responses place the 'One Stop Shop' model ahead as the number 1 choice. This is a positive result for SuperHomes as it validates the current business model.

Retrofit Model

When asked to rank Retrofit Models 'Single Project Deep Retrofit' was clearly the first preference; -

- Single Project Deep Retrofit (all works happen together) [79% as #1 Choice]
- Graduated Improvements over time (Energy Roadmap) [13% as #1 Choice]
- Single/Standalone Measures (homeowner can pick and choose in any order) [8% as #1 Choice]

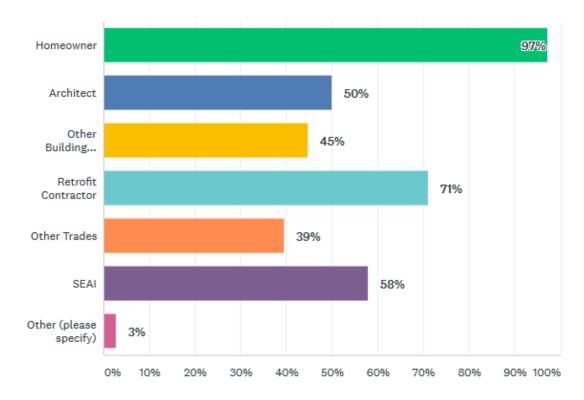
The consensus was that a 'Fabric First' approach should be followed with all appropriate measures happening as a single project wherever feasible.

However, it was recognised that this was not always possible and that some way of facilitating the second choice (Energy Roadmap) should be found. Currently the existing grant mechanisms to not facilitate this.



Who Benefits from Energy Advisors

We asked who benefits from the value added by having Retrofit Advisors, such as SuperHomes, involved in the Energy Retrofit Process. (Respondents could make multiple selections). The following were the responses.



Other Ideas & Visions

When asked for any other Ideas or Visions for Deep Retrofit in the residential sector the following were recurring themes: -

- Supports to Address retrofits to Traditional / Heritage Structures (e.g., Allow alternative insulation methods more suited to traditional builds and higher grant amounts in line with the higher costs of these alternatives)
- All Year-Round Grant Support Schemes without SEAI imposed deadlines.
- Means of Simplifying & Speeding up Grant application process (e.g., maybe base grant purely on BER uplift)
- Addressing Tranches of homes together (entire Street / Block) as a single project.



Conclusions & Recommendations

The aim of this research was to build a construction industry 'opinion base' on the expansion of deep retrofit. The methods used were desk research, industry actor survey and industry actor focus group. There was a mixture of quantitative and qualitative data. The research will help to inform SuperHomes and other industry actors on the needs of the market, in respect of the ambitious growth targets set out in the programme for government.

The main conclusions from each of the four researched areas (Opportunities, Perceptions, Challenges, Visions) are discussed.

Not many conclusions could be drawn from respondents on the opportunities for the retrofit market, other than the negative conclusion that any opportunities that may exist rely heavily on the removal of barriers to grant funding.

The conclusions drawn on perceptions also centred around grant funding, in particular, a conclusion that for example, the 'real' grant value often didn't reach the quoted 35% and would often be 20% or 30%.

When asked about their perceptions of the process, one interesting conclusion is a 'fabric first' approach emerged as the most important retrofit process. 81% of respondents also considered air tightness testing to be a 'must' and 67% of respondents believed switching the heating system to a renewable source was also essential.

In terms of the respondent's appetite for more involvement in the retrofit sector, these results were high. With 65-71% of Architects, engineers, trades, and contractors and 90% of BER assessors and One Stop Shops expressing a strong appetite for more involvement in the retrofit sector.

The 'challenges' section of the survey was split into different sub-topics in which participants were asked how they see each challenge of the industry. Some standout conclusions were noted. It was a broad agreement that upscaling the capacity of the industry to meet the governments 2030 target is going to be difficult. The top 3 reasons for this were found to be Uncertainty around grant funding, grant imposed limitation and retrofit contractor capacity.

As this first section suggests, the participants in their responses showed negative attitudes towards the grant funding system. This would be a theme throughout the rest of the challenges section of the survey, with some other notable conclusions.

This is most starkly highlighted with the question asking what the main challenge is influencing homeowners where 98% of respondents said level of grant funding. This was again re-enforced when asked why some projects may be initiated but not moved forward, the main responses were cost 96%, lack of finance 90% and cashflow 68%.

The survey then also focused on the respondents themselves, where organizing labour was seen as the greatest operational challenge and the top knowledge gap with 60% of respondents choosing 'SEAI grant + Quality Requirements.'

These conclusions on challenges all carry a certain theme. Within the analysis many challenges are discussed but the top scoring challenge with both the participants and the customers seems to revolve around the grant system, whether it is the level of grants, process of attaining grants or simply knowledge of the requirements for the grants.

In the 'visions' section of the survey, respondents were asked to give some input into how they can see the industry improve to benefit all the stakeholders. Some key conclusions were drawn within the analysis.



- Simplifying & Streaming of processes to speed operations up.
- Faster and easier access to finance for homeowners to fund retrofits.
- Shorter overall customer journey from initial contact to completion and grant pay-out.
- Bigger and more 'One-Stop Shop' service providers to manage the customer journey.
- A Fabric First 'Whole house' approach as a single project is the preferred model.
- Where this 'Whole House' single project approach is not possible, a means of following an 'Energy Roadmap' for a homeowner, without being penalized, would be the next best option.

The research carried out within deliverable 2.1 is significant as it provides a great opportunity to see the opinions and perspectives of key stakeholders within in the industry. The data does provide a range of conclusions that can inform the stakeholders on how they can address the needs of the market in the future. However, the main theme of the research showed a negative attitude towards the current grant scheme that seemed to stand out at every section of the survey. These issues are largely out of the hands of these industry stakeholders as the initiative to change these lies at the feet of the government and SEAI.

