

Home Decarbonisation Skills Training Competition: Phase 2 Research Survey

Prepared for MNZH and DESNZ

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Contents

Exec	cutive Summary	5
1	Introduction	8
2	Understanding and motivations	12
3	Course delivery	16
4	Competition impacts and future intentions	23
5	Key conclusions	30
6	Annex 1: Research questions	32
7	Annex 2: Detailed research approach	33
Tabl	les	
Tabl	e 1: Trainee Population Profile	9
Tabl	e 2: Trainee profile by region across Phases 1 and 2 of the HDSTC	10
Tabl	e 3: Research approach - summary of key survey elements, purpose and questions covered	10
Tabl	e 4: Which of the following were motivations for signing up to the course?	13
	e 5: Which of the following barriers have you and/or your business traditionally faced in accessing type of training?	
Tabl	e 6: Aspects of delivery that worked particularly well/needed improvement	19
	te 7: Which of the following were the main reasons for you withdrawing from/not completing the rse? – Retrofit Assessors and Coordinators	20
Tabl	e 8: What factors would influence any decision to access the same or a similar course in the future	
Tabl	e 9: Since the training, have you seen any of the following benefits?	24
Tabl	e 10: Participants' change in behaviour regarding installation of different insulation measures	26
	le 11: Since the training, has the amount of time you are spending on retrofit assessment/insulatio	
	te 12: Since the training, have you or your business delivered any work through any of the followinernment retrofit / decarbonisation schemes? WP1	_
	e 13: Since the training, have you or your business delivered any work through any of the followin ernment retrofit / decarbonisation schemes? WP2	_
Figu	res	
_	re 1: Using a scale of 1-5, where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how sfied you were with the following aspects of course? – WP1	17



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Figure 2: Using a scale of 1-5, where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how satisfied you were with the following aspects of course? – WP2	18
Figure 3: Using a scale of 1-5 where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how	
satisfied you were with the following aspects of course? – WP1 and WP2 amalgamated	21
Figure 4: Since the training, for each of the following insulation measures, please could you tell us	
whether you installed them pre and post-training (comparison):	26



Executive Summary

Introduction

The Department for Energy Security & Net Zero (DESNZ) has funded three retrofit and energy efficiency skills training competitions. The first competition was the Green Homes Grant Skills Training Competition (GHGSTC), which Winning Moves evaluated in 2022. The second and third were delivered as the Home Decarbonisation Skills Training Competition (HDSTC) Phase 1 and Phase 2. Winning Moves evaluated Phase 1, which culminated in the submission of an evaluation report at the end of October 2024.

This report complements the evaluation by providing insight into the experiences of trainees who accessed training under Phase 2 of the competition. In addition, it presents evidence collected from a smaller cohort of Phase 1 trainees (who contributed to the evaluation), to identify any further benefits derived from the training and to understand trainees' intentions in relation to accessing future provision and other related training courses.

DESNZ launched Phase 2 of HDSTC in July 2023, with delivery contracts starting from October. Targeted at people already working, or who wanted to work, in the energy efficiency and building retrofit sectors in England, this phase of the competition had budgeted for £8.85m¹ of funding to be distributed to 24 training providers, including seven that also participated in Phase 1. The funding was used to deliver accredited training supporting the scaling up of the retrofit and energy efficiency sectors. The competition - and the courses it funded - was organised into two distinct 'Work Packages' (WP); WP1 focused on retrofit assessment and coordination, with WP2² providing training in the installation of domestic insulation measures. By the end of competition delivery, Phase 2 had achieved 7,309 training place completions, against a target of 8,000 (91% of the places targeted).

WP1 – training to PAS 2035 standards for retrofit assessor and retrofit coordinator roles.

WP2 - training to National Occupational Standards, or higher, in the installation of domestic insulation measures.

This research project had three stated aims: (1) To understand trainees' experiences of the training they completed; (2) To identify the barriers and enablers they faced in accessing training; and (3) to explore the extent to which the competition and the training delivered impacted trainees' work in both the short and long-term.

The methodology comprised three distinct but interrelated surveys, delivered via telephone with online 'top-up':

- A survey of trainees who completed a Phase 2-funded course: this survey was completed by 401 respondents, 140 WP1 trainees and 261 WP2 trainees, with a response rate of 8.4% (we used 4,742 contacts to achieve the 401 interviews).
- A follow-up survey of trainees who had been surveyed as part of the Phase 1 evaluation: to obtain updated insights on impacts and future intentions, a shorter survey was conducted with 61 trainees who had completed the Phase 1 evaluation survey and agreed to be recontacted.

² Work Package 2 also included provision of the entry-level "Understanding Domestic Retrofit" course.



 $^{^{1}}$ According to total claims data identified in the final report, approximately £6.35m of this £8.85m had been claimed by participant training providers.

• An online survey of Phase 2 trainees who started but did not complete the funded training: due to DESNZ and Midlands Net Zero Hub (MNZH) interest in the number of course withdrawals, a short online survey was sent to trainees that had signed up for, but not completed Phase 2-funded courses; 69 trainees responded from 870 contacted, a response rate of 8%.

Where possible and useful, this report compares findings from the Phase 2 trainee survey with findings from the Phase 1 trainee survey and the follow-up survey (Work Package 1 only, as only 14 Work Package 2 trainees were interviewed in Phase 1).

Understanding and motivations

As in the Phase 1 survey, the cost was the most cited barrier to take up of training and the subsidisation of course costs was considered an important factor in business decisions to participate in the competition. 40% of Phase 2 survey respondents³ stated they would not have participated in the courses had the training not been free or subsidised.

Beyond cost consideration, the most common motivation was the expectation of gaining new sector specific / technical skills (reported by 92% of all respondents). Trainees also hoped that participation in the course would provide the opportunity to work on new contracts and in new work areas and futureproof their employment in the decarbonisation and green retrofit markets.

Trainee survey respondents were positive and complimentary about the competition's ability to address the most common barriers to accessing training. Almost two thirds (62%) stated the competition had addressed the cost of training barrier 'to a great extent', while 56% and 51% respectively felt that the competition had been very effective in addressing barriers around the relevance of training and course location.

Course delivery

Most trainees were happy with the course(s) they attended - 77% of WP1 and 78% of WP2 respondents stated that they were 'satisfied' or 'very satisfied' with their course overall (73% amongst Phase 1 WP1 trainees). There were similar levels of satisfaction with the quality of the trainers. As in the Phase 1 survey, several trainee respondents would have liked to have seen more opportunities to put learning into practice during the training.

The proportion of non-completers, 22% of all course enrolments, was of interest to both DESNZ and MNZH, with emphasis on understanding the reasons why individuals withdrew from the courses and what mechanisms could be employed to encourage re-engagement with similar courses in the future. Amongst those trainees responding to a separate survey, the main reasons for not completing courses were:

- 1. Changes to work commitments / contracts, meaning either (a) trainees had insufficient time to complete the course; (b) trainees felt they no longer needed to attend the courses e.g. they moved onto contracts where retrofit skills were not needed.
- 2. Changes in their personal or employment circumstances.
- 3. A feeling that they had obtained the skills and experience required without the need to fully complete the course and / or end of course assessment.

Course impacts and future intentions

From the perspective of trainee survey respondents, the courses seem to have been largely successful in delivering meaningful impacts that closely align with the trainees' original motivations for participating.

³ As in the Phase 1 evaluation survey, not all respondents identified themselves as the decision maker on whether they undertook the training. This 40% refers to all respondents and should, therefore be treated with caution.



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80% of WP1 and 71% of WP2 respondents stated they had gained new sector-specific and technical skills that they were hoping to use on contracts soon. A similarly high proportion of trainee survey respondents stated that completing the course had given them increased confidence to complete retrofit assessor/coordinator or insulation installation work in the future.

When comparing Phase 1 follow-up responses with those from Phase 2 trainees, the data suggests an increase in respondents reporting that the training generated tangible commercial benefits - more work, a pay rise / promotion, a new job, although the differences cannot be considered statistically significant.

Trainees were asked to consider the amount of contract work they had obtained from specified government schemes before and after they completed the training. Data from the survey illustrated that, for each of the government schemes listed, between 15% and 34% of all trainee survey respondents had already undertaken work since the training or planned to complete work within the next 6 to 12 months. Analysis by work package showed that for WP1 trainees, this figure ranges from 20% for the Boiler Upgrade Scheme (BUS) to 34% for the Social Housing Decarbonisation Fund (SHDF), while for WP2 trainees, this figure ranges from 15% for the BUS to 24% for the SHDF.⁴ Completion of accredited courses, including achievement of PAS qualifications has helped trainees to access work through government schemes and has served to future proof their employment for the immediate and longer term.

The benefits obtained from the HDSTC-funded training has also prompted further skills development, with 31% of WP1 respondents and 16% of WP2 respondents having already completed further training in retrofit or installation since completing the Phase 2 training. 44% of WP1 Phase 1 follow-up respondents stated they had completed further training since the HDSTC-funded training.

⁴ The BUS Scheme installs heat pumps and biomass boilers, for which training was not offered under Phase 2 of the competition. References to the BUS Scheme are likely, therefore, to have picked up on other drivers unrelated to the skills competition.



1 Introduction

The Midlands Net Zero Hub (MNZH), with support from the Department for Energy Security and Net Zero (DESNZ), commissioned Winning Moves to deliver a light touch assessment of the Home Decarbonisation Skills Training Competition (HDSTC) Phase 2 implementation and outcomes.

This study builds upon the evaluation of the Phase 1 HDSTC, which Winning Moves completed at the end of October 2024. Phase 1 of the competition was the same as Phase 2 with regard to its aims and objectives, the profile of businesses and individuals targeted, and the types of training and support offered.⁵ The one significant difference between the two phases was that Phase 1 included a Work Package for heat pump installation training, which was not maintained in Phase 2.⁶

The research project had the following three aims:

- To understand trainees' experiences of the training they completed.
- To identify the barriers and enablers they faced in accessing the training.
- To explore the extent to which the competition, and its training, have impacted on trainees' work both in the short and long-term (e.g. working in the sector and/or government schemes).

Data from the Phase 2 survey could be used to supplement insights derived from the Phase 1 evaluation.⁷

As discussed in greater detail in Section 1.2, data for this assessment was collated via telephone surveying comprising three elements:

- A survey of trainees who took part in Phase 2 of the competition.
- A survey of Phase 2 trainees who did not complete the training and/or associated assessment.
- A follow-up survey of trainees who had been surveyed as part of the Phase 1 evaluation. The
 purpose of this follow-up survey was to obtain insights on the benefits that trainees derived from
 the training after more time had elapsed.

1.1 Overview of the Home Decarbonisation Skills Training Competition – Phase 2

The HDSTC funded training for people working, or who wanted to work in the energy efficiency and building retrofit sectors in England. Up to £8.85 million (of which approximately £6.35m has been claimed) was made available as grant funding to a total of 24 training providers to deliver – and provided subsidised places for - accredited training supporting the scaling up of the retrofit and energy efficiency sectors. Funded training has been delivered through two 'work packages' (WPs):

• **Work Package One:** Provision and delivery of Retrofit Assessment and Coordinator training to PAS 2035 standards. It was expected that up to 3,000 qualifications in this area would be delivered

⁷ Additionally, this phase two survey provided an opportunity to collate findings from WP2 trainees who were underrepresented in the Phase 1 evaluation. This under representation resulted from difficulties obtaining trainee databases from participant training providers, particularly those offering courses under WP2.



⁵ Training providers could offer courses across both work packages, they were not restricted to only delivering provision under one wp

⁶ In 2023, DESNZ launched the Heat Training Grant which provides a voucher for heat pump and heat network courses. The aim of this £5m voucher scheme is to increase the number of trained heat pump installers, with the fund expected to support approximately 10,000 training opportunities by April 2025.

across this work package to learners with appropriate existing qualifications or experience, (e.g. Domestic Energy Assessor (DEA) or other similar qualifications)

 Work Package Two: Provision and delivery of training to National Occupational Standards or higher in the installation of domestic insulation measures. For example, NVQ Level 2, 3, 5 or equivalent; requirements of PAS 2030; 2019 or PAS 2035 standards.

It was expected that trainees would include both individuals with existing skills / working in relevant sectors, and those new to the sector.

Competition trainee profile

Table 1 below provides information on Phase 2 trainee profile namely, course completions and withdrawals by WP and Region. Based on data provided by MNZH, there were a total of 9,334 enrolments and 7,309 course completions (1,792 WP1 and 5,517 WP2), There were 2,025 course withdrawals, equating to 22% of all course enrolments (24% within WP1 and 21% within WP2), a higher number than both DESNZ and MNZH would have expected. There are no clearly identifiable factors explaining why withdrawals are higher than expected, but reasons for withdrawals have been explored with trainees.

Table 2 provides a more detailed comparative breakdown of trainee enrollments and course completions for Phase 1 and Phase 2 by region. As illustrated, the regional breakdown for Phase 2 is broadly similar to that of Phase 1 apart from one notable difference. The number of enrollments in the South West halved in Phase 2, reflecting the removal of Work Package 3, which equated for 93% of all enrollments in the region during the previous phase.

Table 1: Trainee Population Profile

	Work Package		Region					
	WP 1 number (% of all learners)	WP2 (% of all learners)	Greater South East (% of all learners)	South West (% of all learners)	Midlands (% of all learners)	North East and Yorkshire (% of all learners)	North West (% of all learners)	Total
Total learners completing	1,792 (19%)	5,517 (59%)	2,258 (24%)	557 (6%)	2,276 (24%	960 (10%)	1,258 (13%	7,309
Total course withdrawals	553 (6%)	1,472 (16%)	797 (9%)	173 (2%)	565 (6%)	245 (3%)	245 (3%)	2,025
Course withdrawals (Proportion of all learners in each column)	24%	21%	26%	24%	20%	20%	16%	22%

Sources: Programme/Competition Monitoring Data (Provided by MNZH in September 2024)



Table 2: Trainee profile by region across Phases 1 and 2 of the HDSTC

	Phas	se 1	Phase 2		
Region	Trainees Started	Total number of completed courses	Trainees Started	Total number of completed courses	
Greater South East	3,232 (33% of trainees starting)	2,819 (33% of trainees completing)	3,055 (33% of trainees starting)	2,258 (31% of trainees completing)	
Midlands	2,720 (28%)	2,380 (28%)	2,841 (30%)	2,276 (31%)	
North East & Yorkshire	1,099 (11%)	914 (10.5%)	1,205 (13%)	960 (13%)	
North West	1,210 (12%)	1,063 (12%)	1,503 (16%)	1,258 (17%)	
South West	1,558 (16%)	1,429 (16.5%)	730 (8%)	557 (8%)	
TOTAL	9,819	8,605	9,334	7,309	

Sources: Programme/Competition Monitoring Data (Provided by MNZH in September 2024)

1.2 Summary of research approach

Reflecting the range of research requirements, a multi-modal approach was used, comprising the following elements:

Table 3: Research approach - summary of key survey elements, purpose and questions covered

Survey research approach	Summary of purpose and issues covered
Review and analysis of secondary/programme data Monthly, interim and final progress reports; trainee monitoring data; the HDSTC 'tracker'; and trainee responses to a MNZH survey circulated at the completion of the course. Our Phase 2 trainee survey was conducted by telephone and was longer, asking a combination of closed and open response questions focused on the aforementioned objectives.	 Provide contextual evidence on the number of courses delivered and completed and the resultant number of qualifications achieved. Analyse monitoring data to provide evidence of trainee uptake, including how many had been supported by the HDSTC, split by work package and trainee demographic profile. Assess competition performance, comparing targeted versus actual training places/course enrolments, course starts and course completions.
Survey of Phase 2 Competition Trainees 401 interviews in total. Trainees' contact details were received from all participating training providers. Only those with telephone numbers were sampled for interview, resulting in the following number of contacts: WP1: 1,605; WP2: 3,137. Total responses: WP1 = 140 responses; WP2 = 201 responses.	 The objectives of the Phase 2 survey were to explore with trainees: How and why they engaged with the training. Their experience and perceptions of course delivery, including satisfaction with different aspects of the course. Impacts and benefits of training for the individual; and Future intentions and future training requirements, following completion of subsidised competition training.



Online survey of non-completers 69 interviews in total, split between two types of non-completers: • Trainees 'who did some of the course, but did not complete it' (43)	 Both the Hub and DESNZ Identified a significant number of trainee withdrawals. Understand the reasons for non-completion. Explore benefits derived from what HDSTC training they engaged with.
 Trainees who 'did not really do any of the course' (26) 	 Identify what might lead them to consider re- enrolling and completing a course.
Follow-up survey of trainees surveyed as part of the Phase 1 Evaluation	To identify if a longer post-training period had resulted in any change to the extent of benefits/impacts.
Follow-up surveys with 61 trainees who completed the Phase 1 survey and who had consented to be recontacted.	
Phase 1 follow-ups only answered a subset of questions covering future intentions and further impacts. Completion time for this cohort was kept to a maximum of 10 minutes. Permission was also asked to link this survey to their Phase 1 evaluation responses.	

Source: HDSTC Research Survey Evaluation Plan FINAL

Survey profile, sampling approach and analysis

As in the Phase 1 evaluation, survey completions were monitored to ensure they were proportional to the numbers in each of the work package populations. As far as possible, we aimed to stratify by work package, training provider and region, aligning with the population breakdown. In total, we received 7,074 contacts from MNZH, including 2,332 WP1 contacts and 4,741 WP2 contacts

Trainee survey responses were not weighted for the following reasons:

- Weighting would have been for the training provider only
- They were not weighted in the Phase 1 report
- The weighting factors, in many instances were, above x5, which are too large to make any meaningful assertions.

Comparative analysis has been provided where deemed of use and interest to MNZH and DESNZ, though comparisons of WP2 trainee responses should be treated with caution due to the small number of WP2 trainee responses received during the Phase 1 evaluation.



2 Understanding and motivations

Summary of key findings by research question

How effectively were the training courses promoted to employers and trainees? What were the most effective approaches in terms of methods and messaging?

• The most cited way of finding out about HDSTC course provision was a general internet search, mentioned by 29% of all Phase 2 trainee survey respondents. 20% of respondents found out about the training from their employer.

What were the main motivations that influenced trainees to sign up for the courses?

• The main motivations behind trainees' decisions to participate in the training were to gain new sector specific or technical skills (92%) and commercial considerations, including (a) gaining access to new types of work and/or contract opportunities (86%); and (b) expectations of future growth in the decarbonisation/green retrofit markets (84%).

What are the main barriers to accessing training and to what extent has the competition been successful in addressing these barriers?

- As in the Phase 1 survey, cost of training was considered the main barrier to accessing provision by more than half of Phase 2 training survey respondents (54% of WP1; 56% of WP2). Other common barriers included the relevance of training to the trainee and their business (48% of WP1 and WP2 respondents); the location of courses (38% of WP1; 39% of WP2) and the length of training courses (36% of WP1; 38% of WP2).
- Respondents were generally positive about the extent to which the HDSTC had addressed barriers. Almost two thirds of respondents (62%) felt that the competition had addressed the cost of training 'to a great extent' (60% of WP1; 64% of WP2).

What indirect costs did employers/trainees consider when deciding whether to enrol on the courses?

When making an informed decision about whether to enrol on a course, trainee survey
respondents considered several indirect costs. Of those who could answer the question,⁸ 83%
said there was consideration of the amount of time and money that could be lost from
individuals not working on contracts, 50% mentioned the cost of course materials as a
consideration and 46% mentioned travel and subsistence costs.

Did the fact that training was subsidised impact their decision to take it up?

• 4 in 5 of all trainee survey respondents were aware that the courses were free or subsidised as part of the government funded competition.

⁸ Two thirds of Phase 2 trainee survey respondents were not asked / could not answer this question as they were not the decision maker regarding staff enrolment on training.



Summary of key findings by research question

• Of the respondents who were aware of course subsidisation, 40% stated they would not have enrolled on a course if it had not been free or subsidised (47% of WP1; 37% of WP2). Of those stating they were the decision maker, 38% would not have enrolled staff on the training if it had not been free or subsidized (52% would have enrolled anyway)

2.1 Motivations and initial engagement

Effectiveness of course promotion

All trainees were asked to state how they first heard about the training courses. As in Phase 1, there were four main ways in which Phase 2 trainee respondents found out about the training. The most common was a general internet search (29% in total - 33% of WP1; 26% of WP2). Other common routes included:

- Being told about the course by their employer (18%) (11% of WP1; 21% of WP2).
- Being approached directly by the training provider (14%) (19% of WP1; 11% of WP2).
- Recommendations from friends and family (13%) (14% of WP1; 13% of WP2).

Motivations for course enrolment

As identified through the Phase 1 survey, several factors were important in motivating employees and trainees to participate, including targets for increasing retrofit installation activities and financial support for implementation of insulation measures, both set out in recent government policy and legislation documents.

As shown in Table 5 below, almost all trainee respondents, irrespective of work package, were hoping to gain new sector specific or technical skills (92%), while the majority were anticipating:

- Access to new types of work and/or contract opportunities (WP1 86%; WP2 85%)
- Future growth in the decarbonisation/ green retrofit markets; (84% for both WPs)
- That the knowledge, skills and techniques learned through the training would make them more employable. (WP1 78%; WP2 79%)

Table 4: Which of the following were motivations for signing up to the course?

Motivations for signing up to the course	Phase 2		
	WP1 - Retrofit Assessors or Coordinators (n=140)	WP2 -Insulation Installation (n=261)	
To develop new sector-specific or technical skills	93%	91%	
To open up new types of work / opportunities	86%	85%	
Because I / the business expected future growth in the decarbonisation / green retrofit market	84%	84%	
To make myself more employable	78%	79%	
To future-proof my role at the business/in the sector	76%	79%	

⁹ 45% of survey respondents (184 individuals) stated that they had responsibility for managing and/or allocating their company's learning and development/training budget, 55% are 'regular trainees' (employees)



Motivations for signing up to the course	Phase	2
To improve my chances of promotion/increased salary	54%	54%
Employer identified a requirement to attend the course	14%	29%

The proportions of trainees who have selected the different motivations (set out in Table 4 above) are broadly the same as those recorded in the Phase 1 report. The reasons for becoming involved have stayed consistent and provide HDSTC with data to help them target any future marketing or promotional materials.

Barriers to accessing training and the importance of the HDSTC subsidy

Phase 2 trainee respondents were asked to consider a range of barriers that traditionally prevent individuals and businesses from accessing training.

As in the Phase 1 evaluation, cost of training was the most cited barrier (cited by 56% of WP1 and 54% of WP2 respondents). Around four fifths of trainee survey respondents (86% for WP1; 77% to WP2) were aware that HDSTC courses were subsidised as part of a government funded competition. Of those respondents who were responsible for making decisions regarding participation in training, 40% stated they would not have undertaken the training if it had not been free or subsidised (47% for WP1; 37% for WP2). This finding reflects that many individuals and companies are completing the training in response to changing market trends and relevant government initiatives, a finding also identified in Phase 1. One in five respondents did not think there were any significant barriers to training.

In all three evaluations of the GHGSTC and HDSTC (Phases 1 and 2), respondents have highlighted continued industry uncertainty on the future direction of government policy as a barrier to course enrolments. In the GHGSTC evaluation, one respondent stated:

"It didn't help that a few companies weren't quite sure what the government is going to be backing as the next big green thing.

As Table 5 shows, 38% of WP1 and 27% of WP2 respondents stated 'uncertainty about the future direction of the sector' as a barrier to recruitment, a perspective shared in a recent report to Parliament on progress against Net Zero targets¹⁰, which stated:

'The previous government gave inconsistent messages on its commitment to the actions needed to reach net zero, with cancellations of, and delays and exemptions to, important policies'.

Against this backdrop of continued policy uncertainty, it is understandable that businesses are reticent to invest in training and skills development, not knowing if investment in certain technologies will continue.

¹⁰ '2024 Progress Report to Parliament: This statutory report provides a comprehensive overview of the UK government's progress to date in reducing emissions'. https://www.theccc.org.uk/publication/progress-in-reducing-emissions-2024-report-to-parliament/



Table 5: Which of the following barriers have you and/or your business traditionally faced in accessing this type of training?

Barriers to accessing training	WP1 - Retrofit Assessors or Coordinators (n=140)	WP2 -Insulation Installation (n=261)
Cost of training	56%	54%
Length of training courses	36%	38%
The business missing out on paid work because employees are attending training	34%	33%
The time of day during which the training courses are held	30%	32%
Where the courses are held	38%	39%
Perception of the quality of the training	36%	39%
Relevance of the training to you and your business	48%	48%
Uncertainty about the future direction of the sector	38%	27%
Not aware of any barriers	22%	21%

Having identified barriers, trainees were then asked to consider the extent to which the HDSTC and the training offered had addressed them:

- 62% of those citing cost of training as a barrier felt the HDSTC had addressed this 'to a great extent' (19% stated 'to some extent').
- 56% of those citing relevance of training felt that the competition had addressed this to a 'great extent' (24% stated 'to some extent'), as did 51% of respondents who stated 'where the courses are held' as a barrier (19% stated 'to some extent').

Consideration of indirect costs

Phase 2 trainee survey respondents were asked to state whether they had considered any indirect costs associated with completing the courses when making their decision to participate. After removing those respondents who were not the decision maker, or who did not know whether indirect costs were considered (65% of respondents), more than 4 in 5 (83%) of those asked the question stated that they considered the amount of time and money that could be lost from individuals not working on site. 50% considered the cost of course materials, and 46% considered travel and subsistence costs when making their decision.



3 Course delivery

Summary of key findings by research question

How satisfied are trainees with the design and delivery of the training? And why?

- 77% of WP1 and 78% of WP2 respondents were 'satisfied' or 'very satisfied' with the course overall (9% of WP1 and 5% of WP2 actively dissatisfied).
- 78% of WP1 and 83% of WP2 respondents were 'satisfied' or 'very satisfied' with the quality of trainers on the HDSTC-funded course (6% of WP1 and 4% of WP2 actively dissatisfied), with several specifically highlighting that their trainers were knowledgeable, approachable, and professional.
- As in the original Phase 1 trainee survey, Phase 2 trainee survey respondents would like to see more opportunities to put skills into practice during the training.

How accessible/flexible was the training for employers and their trainees, in terms of (a) location, (b) delivery approach and (c) timing/duration?

- 93% of WP2 trainee survey respondents and 88% of WP1 respondents were either 'satisfied'
 or 'very satisfied' with the venue for their training (4% of WP1 and 1% of WP2 actively
 dissatisfied)
- 85% of WP2 and 75% of WP1 respondents were either 'satisfied' or 'very satisfied' with how the course was taught and the length of the course (4% of WP2 actively dissatisfied; 7% of WP1)

What factors are influencing trainee course withdrawals? What changes could be made to the competition/course delivery to encourage continued engagement?

- Insufficient time to complete the course and changes to individual circumstances (e.g.
 transferring onto longer-term contracts where retrofit skills were not needed, changes to
 family circumstances or changing their employment) were the most cited reasons for course
 withdrawal.
- 71% of non-completers stated better course quality (practical onsite elements) or more
 relevant content (aligned more to the work their business conducts) would be an influencing
 factor on whether to re-engage with training. Other factors identified included having time to
 complete the course and provision of courses aligning with industry requirements.

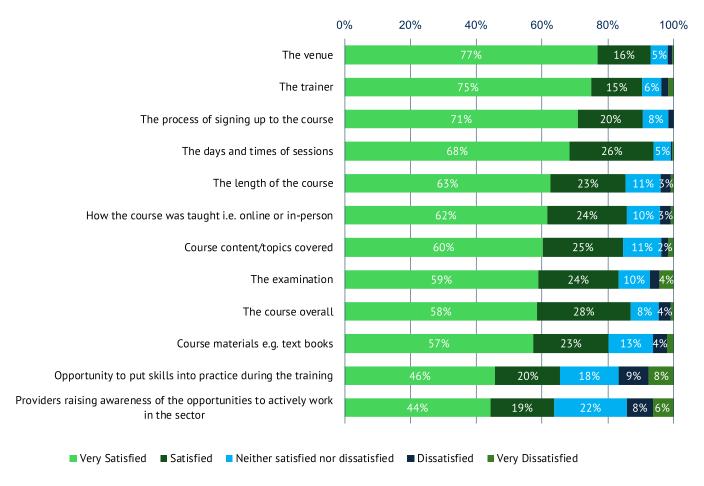
3.1 Experiences of course delivery

Satisfaction with aspects of course delivery

Phase 2 trainee survey respondents, who completed their course, were asked to state their level of satisfaction with different aspects of the customer journey and with specific aspects of course design and delivery. Before focusing on specific course aspects, comparisons with overall course satisfaction are provided. 83% of Phase 2 trainee survey respondents were either 'satisfied' or 'very satisfied' with the HDSTC-funded course overall (WP1: 77%; WP2: 86%). For comparison, 73% of Phase 1 WP1 survey respondents were 'satisfied' or 'very satisfied' with the training overall. Figures 1 and 2 separate WP1 and WP2 trainee responses as to their satisfaction with different aspects of course design and delivery.



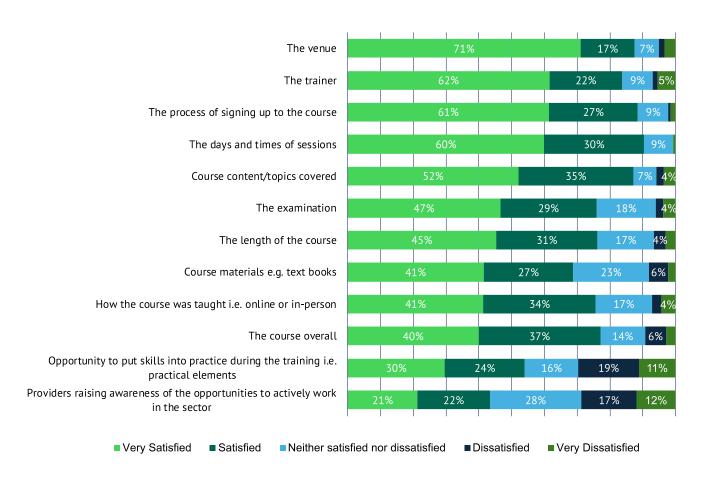
Figure 1: Using a scale of 1-5, where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how satisfied you were with the following aspects of course? – WP1¹¹



 $^{^{11}}$ For this and all other charts, the full question wording has been used as the chart title.



Figure 2: Using a scale of 1-5, where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how satisfied you were with the following aspects of course? – WP2



Across both WPs, the aspects with the ordering of aspects – from the highest levels of satisfaction to the lowest – were similar. Satisfaction was highest for aspects such as course venue, trainer and timing, whilst respondents tended to be less satisfied overall with opportunities to put skills into practice.

To provide explanations for satisfaction ratings, and further insight into trainee perceptions of course design and delivery, trainee survey respondents were asked about aspects of course delivery¹² that they thought worked particularly well and any aspects where further improvements could be made. The most praised aspects of delivery are detailed, together with quotes, in Table 6:

¹² Having provided satisfaction ratings for different aspects of delivery, respondents were asked the following open response questions: Were there any aspects of course delivery that you felt worked particularly well? Were there any aspects of course delivery that you felt could have been improved? The information contained in Table 6 provides examples of the most cited aspects for each question.



Table 6: Aspects of delivery that worked particularly well/needed improvement

Aspects of delivery that worked particularly well

The flexibility of onsite and online course delivery:

'The fact that the course was delivered online, and you could choose your own time to do it. You didn't even need to leave home to complete aspects of the training'

'The course was delivered in a hybrid way. We went onto site to see demonstrations of different installation techniques but were able to complete the theory/legislative components online. Sessions were also recorded so you could watch them back when you had time'. (WP2 trainee)

'Course delivery was really flexible. The trainer came out to site and used actual installations to demonstrate new technical skills. We all found this very useful'. (WP2 trainee)

The quality of the trainers delivering courses:

'The instructor seemed like he had been in the field for many years, had significant experience and could make tailored adjustments to the course to reflect our needs'. (WP1 trainee)

'The trainer was informative and taught the course in a manner that was accessible and easy to understand'. (WP1 trainee)

'The trainer was great, and he explained things really well. The quality of the teaching was excellent'. (WP1 trainee)

Aspects of delivery that could be improved

Practical experience / applying learning

'The course content was quite heavy and required a lot of reading. There was also death by Powerpoint and a lot of people don't learn in that way. A more varied medium of content would be beneficial as would have been the opportunity to complete aspects of installation work while with the trainer' (WP2 trainee)

'More practical training would have been beneficial, also the course could have been spread over more days' (WP1 trainee)

'We haven't got that much experience of installing cavity wall insulation, but the course allows us to install it. I, and several others thought that an opportunity to install this as part of the training, would have been particularly useful '. (WP2 trainee)

Relevance of course content

'While the course content was interesting, it didn't really align with the types of activity I complete when on site. I could see the relevance to other businesses, but more tailoring is needed. We only provide loft and cavity wall insulation so did not need to know about the other insulation types'. (WP2 trainee)

'I think the content was quite out of date and this was actually quite noticeable. I work in the industry and could see there was a lot of stuff that was potentially missing and there were missed opportunities to impart further knowledge and skills'. (WP1 Trainee)



Aspects of delivery that worked particularly well

Quality of assessments (where used)

'The assessment was relatively useful for the theoretical components but, there was no equivalent for the practical installations' (WP2 trainee)

'The mock tests in the exam weren't anything like the course material. It was more like the Level 3 course that I'm completing now, so I failed twice and passed on my third attempt (WP1 trainee).

3.2 Factors influencing trainee course withdrawals

The number of Phase 2 trainees who did not complete the training course was higher than for Phase 1. Our online survey of these non-completing trainees aimed to understand the reasons for non-completion, it also explored what benefits, if any, they had obtained while engaging with the courses.

Around nine-tenths of non-completer respondents said that they didn't reach the end of the course, with around a tenth saying that they did attend all the course, but didn't pass the final assessment. Of those who did not complete the course, around a third had not really engaged with it at all (41% of WP1 respondents and 35% of WP2).¹³

When non-completers were asked about their reasons for not completing the course, 'insufficient time to complete the course' and 'changes to individual circumstances' were the most cited.

Table 7: Which of the following were the main reasons for you withdrawing from/not completing the course? – Retrofit Assessors and Coordinators¹⁴

Main reasons for withdrawing from / not completing the course	WP1 - Retrofit Assessors or Coordinators (n=24)	WP2 -Insulation Installation (n=45)
Insufficient time to complete the course	50%	60%
Changing individual circumstances:	32%	35%
Didn't want / need to complete the final assessment:	18%	28%
Obtained the skills and experience needed:	9%	25%
Decrease in demand for retrofit work / unable to obtain retrofit work:	18%	10%
[NEW] ¹⁵ Lack of communication with provider	18%	10%
Changing company circumstances / interest:	14%	10%
Another reason:	9%	5%
[NEW] Still in the course	5%	5%
[NEW] Stiil intending to complete the course	0%	5%
[NEW] Failed the exam	5%	0%

Source: Winning Moves Phase 2 Non-Completers Survey (2024)

¹⁵ Options labelled as 'NEW' were computed variables added based on the verbatim response provided.

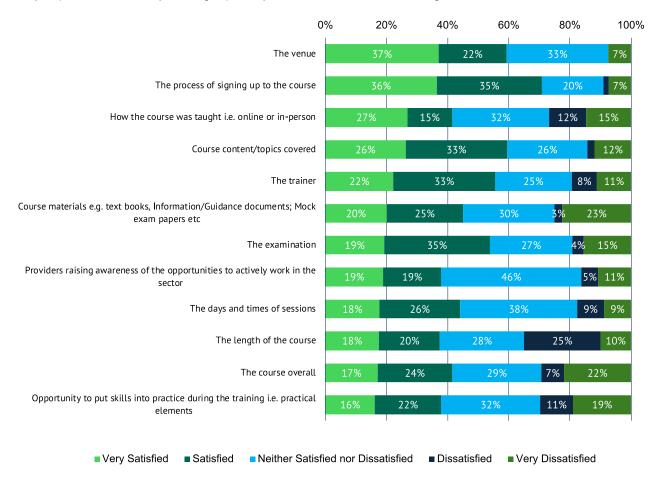


 $^{^{13}}$ If this percentage was applied to the 2,025 course withdrawals, this would equate to 668 trainees who would not have engaged with the course much at all.

¹⁴ Options have been ordered according to WP2 percentages, who provided almost two thirds of submitted completions.

Those that engaged to some degree with the HDSTC-funded course were asked about their satisfaction with various aspects. Whilst the ordering of aspects (from highest % satisfied to the lowest % satisfied) was similar, levels of satisfaction with each aspect tended to be much lower than for completers. For example, 67% of WP1 and WP2 non-completer trainees were satisfied with their trainer, compared with 84% of WP1 and 90% of WP2 completers.

Figure 3: Using a scale of 1-5 where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how satisfied you were with the following aspects of course? – WP1 and WP2 amalgamated



Source: Winning Moves Phase 2 Non-Completers Survey (2024)

The ordering of course aspects are different from respondents who completed the course, while the proportions stating they are 'very satisfied' and 'satisfied' are far lower, reflecting a higher proportion who have provided a neutral response.

Non-completer survey respondents were also asked what factors might influence their decision to access the same or a similar course in the future. Findings for this question are detailed in Table 8 below:



Table 8: What factors would influence any decision to access the same or a similar course in the future?

Factors influencing any decision to access the same or a similar course in the future	WP1 - Retrofit Assessors or Coordinators (n=22)	WP2 -Insulation Installation (n=45)
Better course quality/ content or more support from	27%	33%
provider		
Less time constraints (have time available to do the	32%	20%
course common more flexible completion deadline)		
Job market opportunities (higher market demand for	23%	18%
this work, better job prospects)		
Availability of funding/fewer financial constraints	5%	10%
No further interest	5%	10%
Wishing to meet industry requirements	5%	10%
Other	0%	5%
Don't know	5%	0%

Some quotes exemplifying these points are detailed below:



^{&#}x27;The quality of the course was okay but could have been better. Specifically, more information on the updated legislation would have been useful, together with information on measurements/parameters for thickness of insulation' (WP2 trainee)

^{&#}x27;The course was delivered online and I think that made it difficult for the trainer to identify who might have been struggling with the content. I could have done with a little more one to one engagement on content I didn't fully understand' (WP1 trainee)

4 Competition impacts and future intentions

Summary of key findings by research question

To what extent and how has the competition met the needs of employers and trainees? In particular, what impact has the training had on (a) technical and (b) transferable skills development, (c) their likelihood of becoming more involved in retrofit installations?

• From the trainees' perspective, the competition has proven very successful in enhancing their technical and transferable skills, with 80% of WP1 and 71% of WP2 respondents stating they had gained new sector specific and technical skills, and more than half reporting enhancement in their transferable skills.

To what extent has the competition given trainees the confidence to complete retrofit assessments and insulation installation activities?

 More than three quarters of all Phase 2 trainee survey respondents reported an increase in confidence in completing retrofit assessments or insulation installation activities, while almost two thirds reported that subsequent to the training, they were able to complete the same work to a higher standard.

What are trainees' future intentions after they have completed the training?

- Across both work packages, responses indicate increased supply chain engagement with the government schemes the survey prompted to respondents.
- Trainees were asked to consider the amount of contract work they had obtained from specified government schemes before and after they completed the training. Data from the survey illustrated that, for each of the government schemes listed, between 15% and 34% of trainee survey respondents had already undertaken work since the training or planned to complete work within the next 6 to 12 months.

Compared to before the training, what proportion of time is spent on retrofit vs other work?

• For 28% of WP1 respondents and 17% of WP2 respondents, there has been an increase in the proportion of their working time spent on retrofit-related work subsequent to the training.

What proportion of trainees have already gained gain new qualifications or certifications and / or intend to do so?

- Of the 7,092 unique learners identified from the databases as having completed their training, 3,056 (43%) appear to have obtained an accreditation or qualification.
- 31% of WP1 trainee survey respondents and 16% of WP2 respondents have already completed further training (which may or may not provide an accreditation / qualification) in retrofit or installation; albeit from a small sample, 44% of WP1 Phase 1 follow-up respondents reported that they had completed further training.



Summary of key findings by research question

 More than three quarters of Phase 2 trainee survey respondents stated their intention to complete more training or additional qualifications in the future, although a time frame for doing so was not specified.

4.1 Achievement of accreditations and qualifications

Before exploring trainee benefits derived from the training, trainee database data received from all 24 training providers (via MNZH) was used to identify the number and proportion of trainees who obtained an accreditation or qualification through the training. Of the 7,092 unique learners who took part in training under the HDSTC, 3,056 (43%) appear to have retained an accreditation. This is based on the number of unique learners for whom the training providers have recorded and submitted an accreditation date. Analysis by work package shows that 1,029 trainees (33% of trainees identified as receiving an accreditation) did so through WP1, with 2,027 (67%) receiving the qualification or accreditation through WP2. These proportions were based on database information provided to Winning Moves during September 2024.

4.2 Impacts on trainee skills

Phase 2 trainee survey respondents were prompted with a list of potential benefits they may have obtained from the training (detailed in Table 8 below) and asked which they had observed to date.

Across both Phase 2 WPs, the most recognised benefits were improved skills, confidence in completing assessment or installation work and qualifications. As might be expected, there was less recognition of the types of benefits that might follow from this given more time e.g. more work, pay rises or new jobs.

When comparing Phase 1 follow-up responses with those from Phase 2 trainees, the data suggests an increase in the proportion of respondents citing more tangible commercial benefits - more work, a pay rise / promotion, a new job, although the differences cannot be considered statistically significant.

Table 9: Since to				

Since the training, have you seen any of the following benefits	WP1 - Retrofit Assessors or Coordinators (n=140)	WP2 - Insulation Installation (n=261)	Phase 1 WP1 comparison	Phase 1 Follow-up WP1 (n=61)
Gained new sector specific / technical skills (e.g. knowledge of / skills with new measures, technology, equipment or machinery)	80%	71%	79%	78%
Increased confidence in doing certain types of work	76%	81%	79%	81%
Ability to demonstrate compliance with industry standards	75%	70%	76%	70%
Gained new qualifications/certifications	74%	74%	89%	68%
Ability to do the same work to a higher standard	61%	72%	65%	67%



Since the training, have you seen any of the following benefits	WP1 - Retrofit Assessors or Coordinators (n=140)	WP2 - Insulation Installation (n=261)	Phase 1 WP1 comparison	Phase 1 Follow-up WP1 (n=61)
Ability to register with a TrustMark certification body	57%	26%	N/A ¹⁶	37%
Ability to do the same work quicker	47%	49%	37%	35%
Gained more general transferable skills (e.g. communication, team working, problem solving)	46%	52%	50%	40%
Networking / new contacts	41%	30%	24%	27%
Gained more work	39%	33%	N/A ¹⁷	49%
Moved to a new job related to green retrofit / decarbonisation	17%	13%	19%	25%
Received a promotion / pay rise	15%	11%	13%	24%
No benefits at all	3%	3%	3%	5%

Although they did not complete their course, non-completers were asked to identify benefits they may have gained during their engagement with the training. Overall, 71% stated they had obtained new sector-specific or technical skills through the training, while 29% reported 'increased confidence in doing certain types of work' and 26% felt they were able to do the same work quicker'.

Delivery of insulation installation work

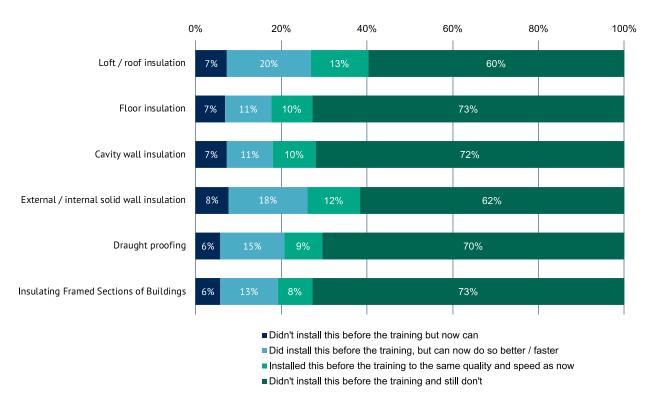
WP2 trainees, specifically, were asked to compare their insulation installation experience pre and post-training completion.

 $^{^{17}}$ 'Gained more work was not a question option provided in the Phase 1 evaluation survey



¹⁶ Ability to register with a TrustMark certification body was not a question option provided in the Phase 1 evaluation survey

Figure 4: Since the training, for each of the following insulation measures, please could you tell us whether you installed them pre and post-training (comparison):



Asked of WP2 trainees only, the above questions sought to understand the impact of the HDSTC-funded training on the installation of various insulation measures. Across the measures proposed, between 6% and 8% of Phase 2 WP2 trainees stated they could now install insulation measures that they were unable to install prior to the training. For each measure, approximately 1 in 6 respondents could now install better and or faster than before the training. However, the large percentages stating they didn't install these before the training and still don't, would be influenced by firms who might specialise in particular measures and would therefore answer 'didn't install' for most of them. To address this, we established two computed variables one identifying the proportion of respondents who did not install at least one measure before the training but do now and one identifying those that now install at least one measure better or faster than they did before the training (this groups respondents by number of measures). As Table 10 below shows, 38% of Phase 2 WP2 respondents who are either installing insulation measures that they were not before the training or are installing them faster or better.

Table 10: Participants' change in behaviour regarding installation of different insulation measures

Installation of different insulation measures – change in behaviour	%	Number of respondents
Already installed at least one measure before the training but now can install at least one measure faster/better:	29%	76
Already installed some measures before the training, but now can install new measures	5%	14

¹⁸ These responses will include individuals who completed courses in understanding domestic retrofit, which is an entry-level awareness course and not a course that directly leads to installing insulation.



Installation of different insulation measures – change in behaviour	%	Number of respondents
Didn't install any measure before the training but now can (i.e., can	4%	11
now install at least one measure)		
Already installed at least one measure before the training and the	10%	25
training made no difference		
Didn't install any measure before the training, and still don't	52% ¹⁹	137
Total	100%	263

Comparative analysis with Phase 1 respondents is not meaningful for this question, as only 14 responses from WP2 trainees were received.

Time spent on retrofit assessment and insulation installation work

Phase 2 trainee survey respondents were asked whether the amount of time they are spending on retrofit assessment or insulation installation work (depending on their WP) since completing the training courses had 'increased', 'decreased' or 'stayed the same'. As shown in Table 11, slightly more than one quarter (28%) of WP1 respondents and 17% of WP2 respondents stated that the amount of working time spent on retrofit-related work has increased; most of the remainder estimate that it has 'stayed about the same'.

Table 11: Since the training, has the amount of time you are spending on retrofit assessment/insulation installation work increased, decreased or stayed about the same?

Amount of time spent on retrofit assessment/insulation work	WP1 - Retrofit Assessors or Coordinators (n=180)	WP2 -Insulation Installation (n=231)	PHASE 1 Follow-on respondent comparison (n=58)
Increased	28%	17%	40%
Stayed about the same	66%	76%	55%
Decreased	4%	4%	3%
Don't know	2%	3%	2%
Total	100%	100%	100%

Source: Winning Moves Phase 2 Trainee Survey (2024) and Phase 1

Among Phase 1 follow-up respondents (WP1 only), 40% reported that the amount of their working time they spend on Retrofit Assessor or Coordinator work has increased, perhaps indicating that this is increasingly likely to happen over time.

Engagement with Government schemes

DESNZ and MNZH anticipated that completion of accredited training and qualifications would enable more businesses to access and deliver work through relevant Government funded schemes supporting retrofit activities. Phase 2 trainee survey respondents were asked the following:

¹⁹ This proportion was not influenced greatly by respondents who completed the 'Introduction to Domestic Retrofit' course at either Level 2 or Level 3. Only 8 survey respondents completed these courses meaning the number is too small to make a statistically significant or discernible difference to the percentage referenced in the table



• (1) Before the training, (2) Since the training, had you or your business delivered any work through any of the following government retrofit / decarbonisation schemes?

Overall, across both work packages, responses indicate that engagement with competition training has delivered an increase in supply chain engagement with the prompted government schemes, However, the small sample size means that the figures presented in Table 12 should be treated with some caution.

Table 12: Since the training, have you or your business delivered any work through any of the following government retrofit / decarbonisation schemes? WP1

Scheme Name	Didn't work on this before but have done since or are now planning to	Didn't work on this before and still no plans to	Don't' know the business' plans to work on this
Boiler Upgrade Scheme (BUS)	20% (12%)	38% (37%)	0% (21%)
Social Housing Decarbonisation Fund (SHDF)	34% (22%)	14% (22%)	5%
Local Authority Delivery Scheme (LAD)	24% (19%)	33% (25%)	5%
Home Upgrade Grant (HUG)	20% (21%)	33% (24%)	10%
Energy Company Obligation (ECO)	20% (21%)	24% (24%)	5%

Source: Winning Moves Phase 2 Trainee Survey (2024) (n=21) Figure in brackets is from Phase 1 survey (n=58)

Table 13: Since the training, have you or your business delivered any work through any of the following government retrofit / decarbonisation schemes? WP2²⁰

Scheme Name	Didn't work on this before but have done since or are now planning to	Didn't work on this before and still no plans to	Don't' know the business' plans to work on this
Boiler Upgrade Scheme (BUS)	15%	43%	10%
Social Housing Decarbonisation Fund (SHDF)	24%	28%	5%
Local Authority Delivery Scheme (LAD)	17%	29%	9%
Home Upgrade Grant (HUG)	17%	30%	8%
Energy Company Obligation (ECO)	18%	27%	10%

Source: Winning Moves Phase 2 Trainee Survey (2024) (n=92)

As in Phase 1, it should be noted that regardless of the training and the qualification / accreditation it brought, there may have been – and continue to be – several reasons why trainees wouldn't have accessed employment opportunities through government schemes. The most common issue currently preventing the supply chain from registering with a TrustMark scheme provider, and identified in several recent articles, ²¹ is the lack of certainty around national policy, short-term funding cycles and an inconsistent approach to sector-specific competence framework. The required recruitment to support

²¹ 'Retrofit: Solving the Skills Crisis: Practical steps for a locally driven retrofit skills revolution'. Ashden. https://ashden.org/sustainable-towns-cities/retrofit-solving-the-skills-crisis/ and Roadmap of skills for net zero: Competencies for Domestic Retrofit. Construction Leadership Council. https://www.constructionleadershipcouncil.co.uk/wp-content/uploads/2024/05/CLC-Roadmap-of-Skills-for-Net-Zero-Report_07-May-2024.pdf



²⁰ Some of the WP2 courses taken are entry-level awareness courses and would not be expected to lead to an individual moving into completing scheme work.

widespread building decarbonisation in the UK will require supportive long-term national policy that provides greater certainty for the supply chain when accessing training and employment opportunities in the retrofit sector.

4.3 Future Intentions

Survey respondents were asked about further training completed and / or planned subsequent to the HDSTC-funded course.

- 31% of Phase 2 WP1 trainee survey respondents and 16% of Phase 2 WP2 respondents have already completed further training in retrofit or installation; 44% of WP1 Phase 1 follow-up respondents have done so.
- 75% of Phase 2 WP1 and 84% of Phase 2 WP2 trainee survey respondents stated their intention
 to complete more training or additional qualifications in the future, with the principal focus on
 practical installation techniques and forthcoming legislative changes relating to the 'Future
 Homes Standard' due in 2025.

These two statistics highlight the positive role that engagement with the HDSTC has played in encouraging trainees and their companies to continue to access additional training and to prepare for commercial opportunities that may arise from future legislative developments.



5 Key conclusions

At the outset, this research had three overarching aims, which were to:

- understand trainees' experiences of the training they completed;
- identify the barriers and enablers they face in accessing the training; and
- explore the extent to which the competition and its training have impacted on trainees' skills and expertise and current and future work in assessment and installation.

To collate the evidence required to achieve these aims, Winning Moves implemented three separate but interrelated trainee surveys: 1) Trainees who took part in Phase 2 of the competition; 2) trainees who did not complete the training and/or associated assessment; 3) follow-up survey of trainees who had been surveyed as part of the Phase 1 evaluation.

What follows are the key findings derived from each of the surveys, together with brief discussion of some potential improvements that trainees identified.

5.1 Key findings

- Trainee motivations for participating in the competition, focused primarily on aspects of personal
 and professional development the development of new sector specific or technical skills, which
 individuals hoped would ultimately facilitate access to new types of work and / or employment
 opportunities.
- 62% of trainees surveyed felt that the HDSTC had greatly helped in addressing the cost barrier to training; those not completing training tended to have encountered challenges with concurrent workload.
- Reflecting trends in satisfaction identified during the Phase 1 evaluation, 77% of WP1 and 78% of WP2 respondents were 'satisfied' or 'very satisfied' with the design and delivery of their courses. Lower levels of satisfaction were found for the opportunity to put skills into practice during the training (54% were 'very satisfied' or 'satisfied).
- Development of sector-specific and technical skills was an important motivator for trainees. 80% of WP1 and 71% of WP2 respondents stated they had gained new sector-specific and technical skills, and more than half reported enhancement in their transferable skills as a direct result of the training. Engagement with HDSTC-funded training has served as a catalyst for many trainees to complete more training or additional qualifications.
- Evidence from the survey suggests that participation in training has delivered increased supply chain engagement with various government schemes, while also impacting positively on the proportion of time that individuals and businesses are spending on retrofit work.

5.2 Potential improvements

Training design

As in the Phase 1 evaluation, trainees would have liked the opportunity to develop practical skills
in insulation installation. Specifically, on site delivery would have benefited from demonstrations
of installation techniques, together with the opportunity for trainees to install different types of
insulation whilst being supervised by the trainer.



- Course relevance was an important factor in trainees' completing their courses and taking any end of course assessment. Rates of non-completion could have been reduced by greater tailoring of course content to the needs of the individuals or their employer. Several trainees suggested that providers should avoid the use of 'off the shelf' delivery and be more responsive to the needs and requirements of attendees. However, any tailoring of course content needs to be cost-effective/economically viable for the training provider. Additionally, some trainees stated that some course content needs updating to reflect recent changes in legislative requirements.
- Course non-completion rates were high enough to be of concern to DESNZ. Training providers should consider the need for disincentives to discourage trainees from dropping out of courses.
 Non-completion rates could be further reduced by the implementation of financial penalties for course dropouts or via other disincentives.
- Based on the reflections of learners who completed examinations or end of course assessments, greater consideration could be given to the purpose, structure and relevance of these assessments to ensure that they align with course content and adequately test the knowledge and skills developed during the courses.

HDSTC Evaluation

- As the evaluators of the phase one competition, we would recommend a longitudinal element to
 evaluation that would allow the capturing of outcomes across a longer time period post-training.
 Related to this, training providers could be encouraged to more systematically track the activities
 of trainees post course completion.
- To aid more accurate evaluations of competition impacts, we would suggest that more formal
 contractual agreements are considered to encourage training providers to collate, record and
 share accurate data on their course enrolments, completions and expenditure.



6 Annex 1: Research questions

Research Questions

Before attending the training:

- What retrofit and/or installation work did the employers and trainee undertake before completing the training?
- How effectively were the training courses promoted to employers and trainees? What were the most effective approaches in terms of methods and messaging?
- What information did employers/trainees need to make an informed decision on whether to enrol on the courses? How easy was this information to obtain?
- What were the main motivations that influenced trainees to sign up for the courses?
- To what extent and how did the costs associated with completing the course(s) influence employer/trainee enrolment decisions? Did the fact that training was subsidised impact their decision to take it up? Did the employer/trainee consider indirect costs when making their decisions? How did course duration influence individual/employer enrolment decisions?

Training delivery:

- How accessible/flexible was the training for employers and their trainees, in terms of (a) location, (b) delivery approach and (c) timing/duration?
- What are the main barriers to accessing training and to what extent has the competition been successful in addressing these barriers?
- How satisfied are trainees with the design and delivery of the training? And why?
- What factors are influencing trainee course withdrawals? What changes could be made to the competition/course delivery to encourage continued engagement? What economic/market/policy drivers would make trainees/employer reconsider their involvement in training provision?
- To what extent and how has the competition met the needs of employers and trainees? In particular, what impact has the training had on (a) technical and (b) transferable skills development, (c) their likelihood of becoming more involved in retrofit installations?
- To what extent has the competition given trainees the confidence to complete retrofit assessments and insulation installation activities?
- What improvements/adaptations to course content, design and delivery do trainees recommend to further enhance the competition offer in the future?

Future intentions:

- What are the trainees' future intentions after they have completed the training? Specific reference to (a) government schemes and (b) 'retrofit' more widely (c) additional training courses to pursue (d) retrofit role/qualification/accreditation
- What proportion of trainees: (a) have already gained gain new qualifications or certifications;
 (b) intend to gain new qualifications or certifications during the next six months"
- Compared to before the training, what proportion of time is spent on retrofit vs other work?
- What are the barriers preventing newly trained/qualified individuals from undertaking retrofit work?



7 Annex 2: Detailed research approach

This appendix provides further detail on the research approach used for conducting each of the three survey elements. It also summarises the approach taken to data collation, analysis and reporting.

7.1 Research objectives

The research project, and the constituent survey elements, had three main aims: understand trainees' experiences of the training they had completed; identify the barriers and enablers they faced in accessing the training; and explore the extent to which the competition, and its training, have impacted on trainees' work, both in the short and longer term.

To effectively address these overarching aims, Winning Moves, DESNZ and MNZH agreed a series of research questions structured under the three broad objectives.

Befo	Before attending the training			
1.1	What retrofit and/or installation work did the employers and trainee undertake before completing the training?			
1.2	How effectively were the training courses promoted to employers and trainees? What were the most effective approaches in terms of methods and messaging?			
1.3	What information did employers/trainees need to make an informed decision on whether to enrol on the courses? How easy was this information to obtain?			
1.4	What were the main motivations that influenced trainees to sign up for the courses?			
1.5	To what extent and how did the costs associated with completing the course(s) influence employer/trainee enrolment decisions? Did the fact that training was subsidised impact their decision to take it up? Did the employer/trainee consider indirect costs when making their decisions? How did course duration influence individual/employer enrolment decisions?			
Trair	ning delivery			
2.1	How accessible/flexible was the training for employers and their trainees, in terms of (a) location, (b) delivery approach and (c) timing/duration?			
2.2	What are the main barriers to accessing training and to what extent has the competition been successful in addressing these barriers?			
2.3	How satisfied are trainees with the design and delivery of the training? And why?			
2.4	What factors are influencing trainee course withdrawals? What changes could be made to the competition/course delivery to encourage continued engagement? What economic/market/policy drivers would make trainees/employer reconsider their involvement in training provision?			
2.5	To what extent and how has the competition met the needs of employers and trainees? In particular, what impact has the training had on (a) technical and (b) transferable skills development, (c) their likelihood of becoming more involved in retrofit installations?			



2.6	To what extent has the competition given trainees the confidence to complete retrofit assessments and insulation installation activities?
2.7	What improvements/adaptations to course content, design and delivery do trainees recommend to further enhance the competition offer in the future?
Futu	re intentions
3.1	What are the trainees' future intentions after they have completed the training? Specific reference to (a) government schemes and (b) 'retrofit' more widely (c) additional training courses to pursue (d) retrofit role/qualification/accreditation
3.2	What proportion of trainees: (a) have already gained gain new qualifications or certifications; (b) intend to gain new qualifications or certifications during the next six months"
3.3	Compared to before the training, what proportion of time is spent on retrofit vs other work?
3.4	What are the barriers preventing newly trained/qualified individuals from undertaking retrofit work?

Source: HDSTC Research Survey – Evaluation Plan FINAL (2024)

The research methodology comprised three discrete but interrelated trainee surveys, described below.

7.2 Survey of Phase 2 trainees that completed courses

A telephone survey, lasting between 10 and 15 minutes was conducted with trainees of HDSTC Phase 2-funded training (fieldwork ran from Friday 26th September to Friday 1st November 2024.). To ensure, where possible, continuity and comparability with the Phase 1 evaluation survey, we used a questionnaire that combined many of the questions asked in Phase 1 (minus business impact questions that were not relevant to the objectives outlined in section 6.1), whilst also incorporating new questions on future intentions and future requirements. The full survey script is set out in Annex 2.

Database development and sampling approach

In our original evaluation plan, we stated that a minimum requirement of 2,400 records would be needed to secure the agreed 400 Phase 2 survey responses. Once all training provider databases had been received from MNZH, we had a sample of 4,742 unique learner records (our imported numbers excluded non-completers and any course completers who we did not have a contact telephone number for). We aimed to complete 132 interviews with Work Package 1 trainees and 268 with Work Package 2 trainees, with numbers proportional to / reflecting the overarching trainee population breakdown. All respondents were given a £10 voucher incentive to complete the survey to help maximise the response rate.

Of the 4,742 unique learner records uploaded, 4,248 were contacted. Quotas were applied as part of our proposed sampling approach to provide balanced representation in the survey responses and were calculated based on the proportion of trainees for each provider in the overall population.



Work Package	Number of learners completing courses (not unique learners)	Phase 2 Sample (withdrawals)	Survey responses
Work package 1 – Retrofit assessors and coordinators	1,792	1,605 ²² (409)	140
Work package 2 - Insulation installation	5,517	3,137 (461)	261
Total	7,309 ²³	4,742 (870)	401

In addition to the survey breakdown population breakdown by Work Package, the table below also provides a breakdown of unique trainees and survey completions by training provider. Overall, we met 28 of the 35 quotas that were set. There were some instances where we fell short. For Unyte (WP1) we completed 4 interviews instead of the 5 targeted and for Trade Engine (WP2) we completed 5 of the targeted 6. The largest shortfall was for Elmshurst (WP2), where 11 interviews were completed against a target of 27.

Provider	Total unique trainees	Number of survey respondents
Carrington Lime	41	5
Coventry College	24	5
DMR	306	17
Edwards Hart	262	17
Elmhurst	1,316	51
Essex College	26	5
ET Training	818	47
Exeter College	12	2
GTEC	228	13
Langley	96	6

²² The reduced number, compared to the first column again reflects that course completers for whom we did not have a telephone number were excluded from the upload.

²³ Data in this table comes from MNZH Phase 2 dashboard, which references 7,309 'learner completions'. These are not unique trainees as one individual can enrol on multiple courses. The 7,074 refers to unique learners and is derived from the training provider databases received from MNZH.



LSDN	184	11
Nottingham	27	5
Passivhaus	190	22
Reeds	154	9
Retrofit Academy	802	42
SB Skills Solutions	249	14
Simply Learning	50	5
STC Group	234	13
The IAA	705	38
Think	293	18
Trade Engine	119	5
UKSA	374	21
Unyte Academy	561	30
TOTALS	7,074	401

7.3 Survey of Phase 2 non-completers

As shown in the table below, there were more than 2,000 withdrawals occurring across the work packages, equating to 21% of all course enrolments. To understand the reasons behind non-completion, to identify any benefits that were derived from engagement with the training, and to consider what might lead non-completers to re-enrol and complete a course, we implemented an online 5-minute non-completer survey between Monday 20th October and Monday 4th November 2024. Given the likely difficulties in obtaining responses from individuals who did not complete the training, the survey was designed to be short, and the decision was taken not to establish any targets or quotas for respondent numbers, but to exhaust the available sample to collate the most responses possible.

Work Package	Number of withdrawals	Phase 2 Sample (withdrawals)	Number of interview completions
Work package 1 – Retrofit assessors and coordinators	553	409	24



Work package 2 - Insulation installation	1,472	461	45
Total	2,025	870	69

7.4 Survey of Phase 1 follow-ups

This comprised re-contacting trainees who were surveyed as part of the Phase 1 evaluation to explore the effects of more time lapsing since training on the recognition of benefits; at the time of completing the Phase 1 survey, a proportion of trainees had only recently completed their courses.

To ensure a good response rate and effective use of resource, the follow-up survey targeted those trainees who had submitted an evaluation survey response interview in Phase 1 and who had agreed to be recontacted as part of any future research. This totaled 194 trainees.

To minimise the respondent burden, Phase 1 follow-up contacts were only asked questions covering future intentions and any further impacts since they had completed the previous survey. In total, 61 Phase 1, WP1 trainees responded to the 10-minute questionnaire between Monday 7th October and Friday 1st November 2024.

Limitations to analysis

Following discussions with both DESNZ and MNZH, the following decisions were agreed in relation to data analysis and reporting:

- Due to small sample sizes, survey data would not be weighted, reflecting the approach taken to
 Phase 1 and allowing comparative analysis to only be provided where deemed appropriate. Any
 charts or tables in the report, depicting responses from fewer than 30 responses, and any
 subsequent analysis or narrative, should be treated with caution.
- Where comparisons were drawn between Phase 2 and Phase 1 findings, these have only been reported for Work Package 1. During Phase 1, we only received 14 responses from WP2 trainees, meaning comparisons with Phase 2 WP2 respondents, totaling 261, would be unhelpful and statistically inaccurate.





