Evaluation of the HDSTC Phase 1

Prepared for MNZH and DESNZ

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WINNING MOVES
Part of Insight

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Contents

Tables

Figures

Executive Summary

Introduction

The Home Decarbonisation Skills Training Competition (HDSTC) was launched in September 2022. Midlands Net Zero Hub (MNZH) delivered the competition, using funding from Department for Energy Security and Net Zero (DESNZ). Eighteen UK training organisations received up to £1million each to fund training for people working, or who want to work, in the energy efficiency, building retrofit and low carbon heating sectors.

The overall aim of the HDSTC was to increase supply chain capacity, both in terms of volume and skill level, to support the delivery of existing DESNZ home retrofit schemes, as well as the decarbonisation of buildings, in support of the UK's net zero carbon emissions target. The competition – and the courses it funded - was organised into three 'Work Packages' ('WPs'), each addressing a different aspect of home decarbonisation:

WP1 – training to PAS 2035 standards as a retrofit assessor and retrofit coordinator.	WP2 - training to National Occupational Standards, or higher, in the installation of domestic insulation measures.	WP3 –training for the installation of domestic heat pumps (air or ground source), including design of the heating system.

This evaluation concerns Phase 1 of the HDSTC (Phase 2 was subsequently launched in June 2023) to assess the extent to which the skills training competition has achieved its stated aims and objectives, and to identify successes and challenges faced in its delivery and implementation.

The methodology comprised a review of programme data and documentation, assessment of data collected through a feedback survey with trainees (administrated by MNZH), interviews with DESNZ and MNZH staff involved in the HDSTC, interviews with providers offering funded training and a retrospective survey with trainees. This retrospective survey was completed by 447 respondents, of whom 309 received training through Work Package 1 (WP1), 14 through Work Package 2 (WP2) and 124 through Work Package 3 (WP3). Given the low number of responses from WP2, (partly due to data access limitations that will be explored later in the report), analysis of the data does not include charts for this group, and is restricted to reporting actual numbers rather than percentages. For the same reason, comparative analysis between work packages is confined to a small number of comparisons between WP1 and WP3.

The evaluation also includes a light touch assessment of the value for money of the HDSTC, considering scheme costs against those benefits that could be best demonstrated from the available survey evidence.

The implementation and delivery of the competition

MNZH received 25 applications to deliver training under the competition. Most of those who were awarded funding said they heard about the HDSTC directly from MNZH. Successful training providers were positive about the process implemented for this competition, with widespread agreement that the type and amount of information required was proportionate to the funding allocated.

Most training providers reported that there was no need to adjust existing course provision to meet competition requirements, and most built on existing relationships to engage and recruit potential trainees.

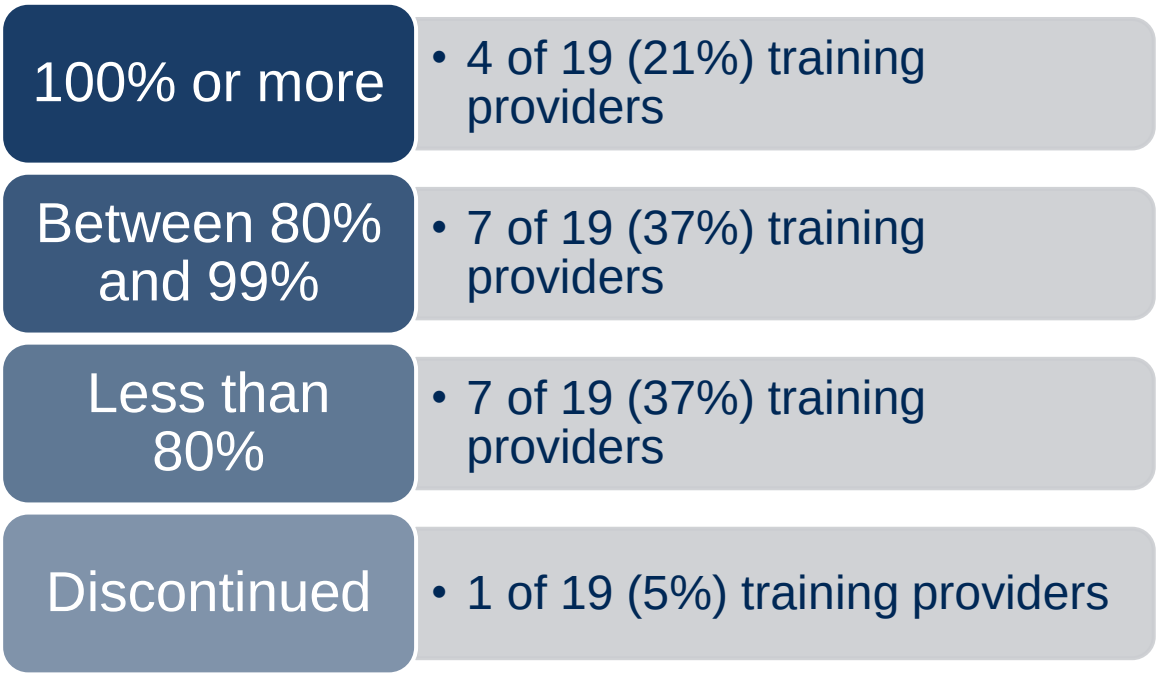
The monitoring requirements of training providers enabled MNZH to keep a good track of progress with delivery. Though it was larger providers, particularly those who had delivered training as part of the Green Homes Grant Skills Training Competition (effectively a pilot of the HDSTC), that seemed to be more comfortable meeting them. Six (usually smaller and / or less experienced) providers felt that monitoring submissions were too frequent.

The extent to which the competition has met its intended outcomes/ impacts

7,940 unique people working, or who want to work, in the energy efficiency, building retrofit and low carbon heating sectors received training through Phase 1 of HDSTC:

Work Package	Unique trainees
1	1,722
2	1,550
3	4,668
Total	**7,940**

The extent to which individual providers met their original target number of course completions is summarised below:



Of the providers interviewed in the evaluation that achieved less than 80% of their target, reasons for this were felt to be either overly ambitious targets or an insufficiently attractive offer for the types of potential learners (in particular unemployed learners) in the geographic area of the training centre.

Through supporting the provision of free or subsidised training, the HDSTC successfully addressed cost as a barrier to upskilling large numbers of the sector over a relatively short period of time. Of the employers interviewed, three stated that they would not have sent employees on the course at all as the training was too costly and only available during working hours, which would disrupt onsite contract work. Four (of the 17 interviewed) stated that subsidised and free course delivery had enabled training for a larger number of their employees, (different roles, responsibilities and levels of experience), than in the absence of the subsidy. This increased the proportion of staff with new knowledge and skills, more effectively 'futureproofing' their business for any changes in consumer demand. A further six employers stated that there would have been substantial delays in offering training to their employees without the HDSTC subsidy.

Across all three work packages, approximately three quarters of trainees were satisfied with the course overall (WP1: 73%, WP2: 13 out of 14 trainees, WP3: 74%). Delivery mechanisms, especially online modules and recorded content were perceived as flexible, allowing access to course content and completion of aspects of training at any time and place. There were slightly lower satisfaction ratings (among both WP1 and WP3 trainees) for 'having the opportunity to put skills into practice'. Dissatisfaction with this aspect was often linked to courses being online and / or lacking practical demonstrations; these, and installation experience, were highlighted as critical in preparing trainees to complete work for clients.

Overall, through interviews with the sample of trainees and employers, the evaluation found evidence of a wide range of intended HDSTC outcomes:

- Improved sector specific and technical skills and knowledge that have enabled trainees (and the businesses they work for) to expand their capacity to undertake certain types of work, take on new types of work (e.g. install new measures such as heat pumps) and / or deliver work for new clients.
- Improved sector specific and technical skills and knowledge that have impacted on the efficiency, and quality of the installation and/or assessment work being completed.
- The credentials to work on specific government schemes that businesses were not previously able to e.g. the Boiler Upgrade Scheme and Social Housing Decarbonisation Fund. There is also evidence that trainees have gone on to deliver, or are planning to deliver, work as part of government schemes, subsequent to the training. Approximately 1 in 5 retrofit assessor and coordinator trainees reported that they had not previously worked on government schemes and ECO but were planning to do so since securing required qualifications through HDSTC. Similarly, more than 1 in 4 trainees undertaking heat pump related qualifications were now planning to work within the Boiler Upgrade Scheme.
- Increased confidence that trainees will have the skills to benefit from increased demand for energy efficiency, building retrofit and low carbon heating activity i.e. futureproofing the business.
- In combination, all the above are expected to enhance the reputation of the business.

From the perspective of training providers, enhanced reputation, derived from involvement on a government funded competition, was the most cited benefit of engagement. Recognition via a government scheme was seen to effectively serve as a kite mark for quality provision that providers hoped to capitalise on.

Value for Money

Based on the evidence collected through this evaluation, it is reasonable to conclude that the HDSTC generated a wide range of trainee and organisational benefits including:

- **Jobs created and safeguarded**, with commensurate Gross Value Added (GVA) benefits.
- **Improved workforce productivity**; with employers reporting work being completed quicker/to a higher standard and reduced costs on projects.
- **Business performance improvements**; including increased numbers of contracts, increased turnover, reduced costs, and improved profit margin. Training providers also reported both reputational and commercial benefits from being involved in the HDSTC.
- **Decarbonisation benefits**; the programme's contribution to decarbonisation and improved energy efficiency through increased numbers of firms working on relevant schemes and projects.

Although this evaluation was unable to monetise these benefits due to data limitations, they appear consistent with those reported in the evaluation of the Green Homes Grant Skills Training Competition[1] (GHGSTC), a previous iteration of the HDSTC.

[1] A qualitative evaluation of the Green Homes Grant Skills Training Competition was conducted in 2022 and can be found here: https://www.midlandsnetzerohub.co.uk/hub-news/evaluation-of-green-homes-grant-skills-training-competition-reveals-92-course-satisfaction/

1 Introduction

The Midlands Net Zero Hub (MNZH) (referred to as 'MNZH' from this point on) with support from the Department for Energy Security and Net Zero (DESNZ), commissioned Winning Moves to conduct an evaluation of Phase 1[2] of the Home Decarbonisation Skills Training Competition (HDSTC).

The evaluation sought to assess the extent to which the competition has, to date, achieved its stated aims and objectives, and to identify successes and challenges around its implementation. This section covers the following:

- The context within which the competition has been introduced, with a primary focus on the strategic background and practical targets set out in the government's Net Zero Strategy[3] and the Heat and Buildings Strategy[4].
- An outline of the competition itself, including its purpose, structure, eligibility criteria, and an overview of delivery.
- A summary of the evaluation requirements / questions.
- Detail on the evaluation elements utilised to collate data and evidence. This includes discussion of methodological limitations and implications for analysis and interpretation.

1.1 Policy context – the journey to net zero

The 2021 UK Net Zero Strategy recognises decarbonisation and retrofit of the UK housing stock as a key contributor to achievement of 2050 net zero targets. Installation of heat decarbonisation and energy efficiency measures are the basis for several recent policies, including the Social Housing Decarbonisation Fund,[5] the Home Upgrade Grant (scheme) and the Boiler Upgrade Scheme (BUS).

As well as provision of funding, the Net Zero Strategy acknowledged that a crucial component of achieving the necessary levels of home decarbonisation would be addressing the significant skills gaps and capacity issues in the supply chain expected to deliver it.

In 2020, the then Department for Business Energy and Industrial Strategy (BEIS) launched the first skills training competition[6], which delivered approximately 7,000 subsidised training opportunities covering measure installation and retrofit coordination.

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[2] A second phase of the competition (offering training for insulation installation and retrofit assessors/coordinators) has recently concluded and is not assessed in this evaluation

[3] *'Net Zero Strategy: Building Back Greener'*. HM Government, October 2021. https://assets.publishing.service.gov.uk/media/6194dfa4d3bf7f0555071b1b/net-zero-strategy-beis.pdf

[4] *'Heat and Building Strategy'* Department for Business, Energy and Industrial Strategy (BEIS), October 2021. https://assets.publishing.service.gov.uk/media/61d450eb8fa8f54c14eb14e4/6.7408_BEIS_Clean_Heat_Heat__Buildings_Strategy_Stage_2_v5_WEB.pdf

[5] The Social Housing Decarbonisation Fund was recently renamed the Warm Homes: Social Housing Fund. https://www.gov.uk/government/news/home-upgrade-revolution-as-renters-set-for-warmer-homes-and-cheaper-bills

[6] The Green Homes Grant skills training competitionSkills Training Competition was designed to provide support to the energy efficiency and low carbon heating supply chains to deliver works underby delivering a suite of training solutions to support the

1.2 The Home Decarbonisation Skills Training Competition: an overview

Following on from this initial competition, DESNZ launched the HDSTC, inviting training providers to apply for funding to deliver subsidised training.

Competition aims and objectives

As described in the competition guidance document[7], the overall objective of the HDSTC was to make progress towards increasing the number of trained installers and other retrofit professionals. This upskilling, combined with attracting new entrants to the market, is needed to deliver the increase in energy efficiency and low carbon heating installations required to meet net zero targets. Table 1 provides further detail on each of the competition aims and objectives that funded training providers were expected to deliver against.

Table 1: HDSTC aims and objectives

Competition aims
Support skills training and installation of energy efficiency and heat pumps - including training to individuals with existing skills, and training to those new to the sector, as well as training for retrofit coordinators and other retrofit professionals.
Increase installer capacity within the supply chain to deliver installations by increasing the number of skilled individuals.
Increase the confidence of training providers to deliver this type of training by demonstrating demand for such training and supporting them to set up new delivery of courses.
Gather information about the supply chain and skills provision to allow BEIS to consider targeted support and future interventions.
Competition training providers were expected to achieve one or more of the following, depending on work package(s) applied for:
Deliver installation training to National Occupational Standards, or higher as appropriate; resulting in either a formal qualification for the trainee (where available) or other demonstration of competence.
Deliver training in the installation of one or more individual energy efficiency and/or heat pump measures, included in the work packages, set out in Table 2 below - including training to individuals with existing skills (who could be upskilled and redeployed to install energy efficient and low carbon technologies), and training to those new to the sector.
To provide support for training in Retrofit Assessor and Retrofit Coordinator skills to PAS 2035[8] standard, leading to the relevant qualification.

Green Homes Grant scheme, and to scale up to meet the additional consumer demand generated https://www.gov.uk/government/publications/green-homes-grant-skills-training-competition#:~:text=The%20Green%20Homes%20Grant%20skills,the%20additional%20consumer%20demand%20generated. by it.

[7] *'Home Decarbonisation Skills Training Competition – Guidance'*. Department for Business, Energy & Industrial Strategy, September 2022. https://assets.publishing.service.gov.uk/media/63d8d8ebe90e0773da7fdb85/home-decarbonisation-skills-training-competition-guidance.pdf

[8] Publicly Available Specifications (PAS) fast track standardisation documents, specifications, codes of practice or guidelines developed by sponsoring organisations to meet immediate market need. PAS 2035 is a framework to follow for the energy retrofit of domestic buildings. It details best practice guidance for domestic retrofit projects and delivers a 'whole house' or 'whole building'

Source: Home Decarbonisation Skills Training Competition Guidance

Phase 1 of the HDSTC, and the courses it funded, was organised under three distinct work packages:

Table 2: Summary of competition structure by work package

Description of work packages	
Work Package 1 – Retrofit assessor and Retrofit coordinator	Provision and delivery of training to PAS 2035 standards. It was expected that up to 2,400 qualifications would be delivered across this work package to learners with appropriate existing qualifications or experience (for example Domestic Energy Assessor (DEA) or other similar qualifications).
Work Package 2 – Insulation Installation	Provision and delivery of training to National Occupational Standards, or higher, in the installation of domestic insulation measures. It was expected that up to 3,500 'training packages'[9] would be delivered to individuals. All insulation measures included in the Level 2 National Vocational Qualification (NVQ) in Insulation and Building Treatments would be suitable, including: External Wall Insulation, Cavity Wall Insulation, Cold Roof Insulation, Draft Proofing, Internal Insulation, External Wall Insulation, Warm Roof Insulation and Floor Insulation.
Work Package 3 – Heat Pump Installation[10]	Provision and delivery of accredited training for the installation of domestic heat pumps (air or ground source), including design of the overall heating system. It was expected that up to 3,000 training packages would be delivered to individuals. Training should ensure that trainees developed the Minimum Technical Competencies required for membership of a relevant Competent Person Scheme and/or the competence requirements required for MCS certification.

Source: Home Decarbonisation Skills Training Competition Guidance

The work packages were designed to be aligned to current and anticipated industry requirements and sought to address gaps in supply chain capacity identified across various DESNZ programmes and policies. Assessors and installers working on DESNZ programmes must be TrustMark registered, be MCS certified for the specified technology they are installing, and able to complete projects in compliance with PAS 2035.

Funded training providers were required to deliver courses to specific technology standards - National Occupational Standards, MCS competency standards or higher. Where such qualifications were not

approach which considers occupants and end users. https://www.bailygarner.co.uk/pas-2035-explained/#:~:text=Simply%20put%2C%20PAS%202035%20is,Each%20home%20individually%20(including%20construction)

[9] The competition guidance document refers to the delivery of 'training packages'. This reference highlights the flexibility in the course provision that could be offered i.e. providers could select the relevant types of insulation to be covered in their courses, depending on the contract work that trainees, and employers, were most commonly delivering.

[10] Funding for heat pump installation training was not included in Phase 2 of the HDSTC. This is now covered by the Heat Training Grant.

available, evidence would need to be submitted to demonstrate the trainee's competence level. The competition also set out the following additional requirements/expectations:

- The HDSTC was open to training providers, and trainees, carrying out work in England.
- To maximise participation, HDSTC-funded training was required to be heavily subsidised[11] at the point of delivery. Applicants were expected to propose an appropriate level of subsidy.
- To enhance flexibility and so take up, training could be delivered either online, in physical classroom sessions or via a combination of the two as appropriate. Aspects of heat pump installation training (Work Package 3) were expected to include a practical in-person element.
- Providers were also expected to provide evidence of compliance with competition requirements and specified delivery requirements.

Chapters 2 and 3 of this report assess the effectiveness of competition design, and how this impacted the experiences and application submissions of training providers, the effectiveness of course design and delivery, trainee accessibility, and trainee satisfaction with the courses delivered.

1.3 Summary of evaluation requirements and approach

The aims of the evaluation were to assess the extent to which the HDSTC has achieved its stated aims and objectives, and to identify successes and challenges faced in its delivery and implementation. MNZH and DESNZ may use the report findings to inform delivery of subsequent competition phases and future policy developments. To achieve these aims, the evaluation was structured into three core components, with a set of agreed key questions underpinning each[12]. Report chapters have been structured to reflect these questions.

Table 3: Core evaluation components

Core Evaluation components
Research Component 1 - **The implementation and delivery of the competition:** analysis of data on participation, delivery mechanisms and stakeholder experiences of the programme.
Research Component 2 - **The extent to which the competition has met its intended outcomes / impacts:** quantifying the competition's impact against intended outcomes, assessing whether the intended outcomes occurred for the target population and the extent to which these outcomes could be attributed to the competition.
Research Component 3 - Value for Money (VfM): drawing upon the two preceding components, indication of whether the HDSTC represented a good use of resources.

[11] Subsidised for the trainee at point of delivery; applicants to propose the best level of subsidy if there is to be some cost to the trainee / trainee's employer (this will need to be subject to subsidy control).

[12] The full list is provided in the appendices of this report.

Evaluation research approach

Given the range of evaluation objectives, a multimodal approach was used, comprising the following elements:

Table 4: Research Approach - Summary of key tasks, purpose and questions covered

Research Task	Summary of purpose and issues covered
Review and analysis of secondary/programme data Monthly, interim and final progress reports; MNZH trainee survey completions[13]; successful training provider tender responses; provider marketing or promotional material.	• Provide insight on HDSTC delivery - what went well, challenges faced, and lessons learned. • Confirm outputs in terms of trainee enrolments, course completions, and qualifications achieved. • Use trainee survey completions to detail satisfaction ratings of the courses completed, and any information on job creation and skills development.
Discussions with programme staff from DESNZ and MNZH Interviews conducted with a small number of staff (3 MNZH, 1 DESNZ) involved in delivering the competition.	• Explored views on competition delivery, successes and challenges, as well as learnings for future, similar, interventions.
Training provider interviews Semi structured interviews with 15 of the 18 funded providers that delivered training[14].	• Competition setup and delivery, including perspectives on the application process and its effectiveness. • Design of training, promotional activity, enrolment and completion numbers, employer and trainee profiles, perspectives on different aspects of course delivery, and experiences of programme monitoring and engagement with MNZH.

[13] MNZH invited trainees, who had completed their courses, to complete a short feedback survey; 608 trainees (8% of unique trainees) responded. Trainees were asked about their satisfaction with the 'training overall', customer service and different aspects of the 'customer journey (e.g. initial contact, service delivery). They were also asked whether they would recommend the course to others.

[14] Initially, 19 providers were successful but one dropped out of the competition before delivering any training.

Employer interviews Semi-structured interviews with 19 employers[15] whose staff had accessed the training.	• Business benefits, including bidding for new contracts and clients, access to work on government programmes, new or improved service offers to customers and upskilling of the workforce. • Financial benefits of engagement, such as increased turnover and profits, reduced costs, staff recruitment and jobs safeguarded.
Trainee survey 447 interviews in total; a combination of telephone (340) and online (107) completions. This is lower than originally anticipated due to data sharing issues, which meant that trainee personal data was only provided from three of the 18 training providers. Adapting to this, an opt-in approach was developed. Invitations to participate in a telephone interview – and latterly, a link to an online version of the survey – were shared with all training providers to then circulate to their Phase 1 trainees. This approach resulted in 447 responses being received from trainees of 13 of the 18 training providers: • 309 responses from WP1 trainee contacts received; • 14 responses from WP2 contacts • 124 responses from WP3 contacts	The objectives of the trainee 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 • Impacts and benefits for the participating business.

Sampling and characteristics of respondents

The original intention for the trainee survey had been to complete 800 interviews, using a full trainee database supplied by MNZH. The survey would be conducted in two waves. Wave 1 would comprise 600 interviews, with a representative sample of trainees across each of the three work packages and would focus on collating data for the process evaluation. Wave 2 would entail a follow-up interview with 400 Wave 1 respondents with questions used to inform the outcome and impact evaluation.

A delay to the start of the evaluation and negotiations over data sharing would have pushed the start of the Wave 1 survey too close to that of Wave 2. For this reason, the decision was taken to conduct one

[15] 4 predominantly accessed WP1 courses, 9 WP2 courses and 6 WP3.

survey with a target of 800 respondents, which would be representative of the trainee population. However, permissions to contact trainees were only in place for three of the 18 training providers, with the resultant contact database only containing 1,018 contacts, most of whom were WP1 trainees.

To mitigate these limitations, two approaches were adopted for respondent recruitment:

- Direct telephone contact was made with trainees for whom there was permission to contact.
- Trainees were sent a request to 'opt-in' to being contacted by the evaluators through training providers; 265 trainees opted in.

This dual approach resulted in 340 interviews. However, this respondent population mainly comprised WP1 trainees (61%). To boost responses from WP2 trainees, an online survey was circulated to trainees through training providers. This approach yielded a further 107 completions. In total, 447 responses were received (309 from WP1, 14 from WP2 and 124 from WP3), with 13 training providers represented in the sample (albeit 65% of trainee interviews were from two providers).

	WP1	WP2	WP3	Total
Unique trainee population	1,722	1,550	4,668	**7940**
Trainees who could be surveyed i.e. contacts provided or opted in	916	114	253	**1,283**
Total number of survey responses	309	14	124	**447**

As the above breakdown illustrates, there was still an overrepresentation of WP1 trainees and a very small number of WP2 trainees. For this reason, the subsequent survey analysis has been separated by work package, with WP2 analysis presented using actual numbers rather than percentages. Comparative analysis by work package has also been kept to a minimum, and only used where genuine differences can be identified.

In addition, trainee survey responses have not been weighted. The original intention was to obtain representative samples of trainees from each training provider. Due to the challenges described, this was not possible, with representation of certain providers either very low or non-existent, in particular WP2 trainees. On that basis, weights applied to certain respondent groups (particularly for trainees of individual WP2 providers) would be too high, whilst in the reported weighted statistics (either overall or by work package) some providers / courses would not be represented at all. The decision was therefore taken to report all statistics from the survey *unweighted*.

The extent to which the interviewed sample is representative of the HDSTC Phase 1 trainee population is outlined in the appendices of this report. As noted, there is very little coverage of WP2 courses and trainees.

Qualitative interviews

Interviews with DESNZ and the HDTSC programme team

Interviews were conducted with MNZH representatives involved in competition design and delivery and with a representative from a relevant policy team in DESNZ. The aims of these interviews were to explore perspectives on the competition's promotion and application processes, and the resultant profile of trainees, the delivery of funded courses and performance against intended targets, and perspectives on VfM, including identification of design and delivery improvements.

Interview with HDSTC-funded training providers

Interviews were conducted with 15 of the 18 training providers that delivered courses via the competition. These 30-45 minute interviews explored a range of topics/issues including motivations for applying to the competition, experiences of the application process, designing, promoting and delivering funded courses, as well as awareness of benefits arising from the training for their organisation, trainees and the wider supply chain, and plans for future training provision.

Employer interviews

In a third tranche of qualitative interviews, 19 employers who had used the competition training were interviewed. From a known population of 904 employers, 354 were approached for interview. Recruitment required organisational emails and telephone numbers, which were then contacted up to four times for recruitment purposes.

Respondents were individuals with responsibility for organising attendance to the training, who also have had knowledge of the outcomes and impacts of the training for their employees and the wider business. These interviews were intended to capture further insight into the organisational benefits derived from the HDSTC-funded training, and the importance of this training being subsidised. Several of these employer interviews were used to develop case studies for this final report. The case studies were based solely on the employer interview responses.

Further information on all elements of the research approach is provided in 'Appendix 1: detail on evaluation methodology'.

1.4 Research limitations

Revisions to the evaluation approach, necessitated by the limited availability of trainee contact information, resulted in several challenges and/or limitations associated with the amount of data collected and therefore the strength and reporting of evidence.

- Reduced control over quotas and sampling; rather than being able to proactively recruit and interview specific numbers of specific profiles of trainee (e.g. specific numbers of trainees of a certain training provider or region), survey recruitment and interviewing was largely reactive to which trainees opted in. This in turn increases the risk of non-response bias; for example, it may be disproportionately atypically engaged trainees opting in (though an incentive was offered to mitigate this risk).

- Responses were not evenly distributed across different projects; for five providers, none of their trainees took part in the survey, and 65% of trainee survey responses came from two providers. In particular there was a very low number of responses from WP2 trainees. As well as limiting WP2 insights for certain evaluation questions, this necessitated analysing and reporting findings separately by work package and reporting actual numbers (totalling 14) for WP2, rather than percentages. For this reason, we have not used charts to present WP2 findings, instead choosing to provide narrative analysis.
- Potentially reduced detail and insight on certain evaluation questions, as online surveying prevents an interviewer further probing to obtain more information.
- For the employer interviews, employers with only one recorded enrolment were excluded to minimise risk of duplication with the trainee survey; this meant a reduced focus on sole traders in the employer interviews. However, the main intention of the employer interviews was to understand wider organisational benefits arising from the training; sole traders interviewed as trainees would provide this insight in that survey.

Some employers and trainees also noted the range of different training courses they had completed in the months preceding and following the competition's delivery, and the issues this presented in terms of recall and accuracy of data.

1.5 Report structure and content

The evaluation report is structured into the following six sections:

- **Section 2: Competition design and delivery**: assesses the effectiveness of competition design and delivery, including marketing and promotion, the application process, and scheme monitoring.
- **Section 3: Training design and delivery**: assesses the provision of the funded training, including efforts to recruit trainees and deliver accessible and flexible course provision.
- **Section 4: Trainee outcomes**: assesses competition performance in upskilling the sector, through analysis of course completions and trainee survey responses on the benefits – including wider business benefits - they feel they have derived.
- **Section 5: Provider outcomes**: identifies and analyses the main training provider outcomes and impacts resulting from their competition engagement, including commercial benefits.
- **Section 6: Value for Money (VfM) assessment**: utilising the available data, this section provides an assessment of the costs and benefits of the HDSTC.

2 Competition design and delivery

Summary of key findings

How effectively was the competition promoted (in terms of achieving the anticipated volume and range of provider interest)?

- MNZH promoted the scheme through a number of channels, including direct approaches, government announcements, and social media; this secured 25 applications to the HDSTC. Several providers believed there had been a focus on recruiting from those organisations involved in previous schemes, which they felt may have restricted the opportunity for new providers to enter the market. MNZH representatives noted that it was positive that training providers from the previous competition were keen to become involved again, with 10 HDSTC providers involved in the Green Homes Grant Skills Training Competition (GHGSTC). In addition, 13 of the 15 providers interviewed stated that they would participate in a future competition.

How well did the application stage work for participant training providers, in terms of the type and amount of information required and the timescales?

- There was widespread agreement amongst providers that were awarded funding that the type and amount of information required was proportionate to the funding allocated, although five providers felt that some of the financial information (in the required format) was difficult to access.
- Several providers felt they could have benefited from a slightly longer application window, while others argued that the application timetable should be more considerate of work pressures including avoiding the summer holidays to better enable interested educational institutions to apply.
- The programme team noted slight delays to awards due to the application assessors requiring additional information, but that overall, the application review was robust and achieved the intended outcome – a good range of providers across a range of courses and topics.

How well has the ongoing programme monitoring worked for participant training providers (in terms of the type and amount of information required) and the programme team (in providing sufficient detailed on course and overall competition progress)?

- Seven providers, particularly those with previous experience of engaging in similar programmes, agreed that the frequency of monitoring reports, and the level of information required, were proportionate to the funding allocated. Eight (mostly smaller) providers were more critical, claiming that monitoring submissions were required too frequently, with some confusion over what needed to be included in each submission.
- The programme team noted that there were some initial provider uncertainties as to what needed to be provided for monitoring purposes. The programme team provided further guidance through calls, meetings and workshops and subsequently most providers seemed able to provide the required information.

2.1 How effectively the HDSTC was promoted

Of the 15 providers interviewed (out of the 18 providers who delivered training through the Competition[16]), most stated they were made aware of the competition via one of the following mechanisms:

- Four providers reported a direct approach from MNZH, with whom they had a pre-existing relationship; MNZH were already aware of their experience and track record in delivering similar courses.
- Four providers became aware via advertisements on the gov.uk website.
- Three providers become aware through other organisations e.g. industry bodies, or from employers they work with who had become aware of the opportunity.
- One provider first heard about the HDSTC through a social media advertisement.
- The remaining four could not recall.

There are potential advantages to directly contacting providers (e.g. reducing the time and financial costs incurred from other promotional approaches, as well as reassurance as to a track record of delivery). However, several providers felt that this recruitment approach could result in a 'closed shop' and could limit the diversity of training providers delivering courses. Increased use of tender portals, advertisement at job / career fairs and outreach by MNZH specifically to providers who had not previously delivered under the scheme, were alternative / complementary promotional methods suggested by providers.

'We come across the same faces we saw last year and the year before... a smaller company may struggle to find information [about the Competition]'. – Training Provider

The programme team felt the HDSTC recruitment worked effectively, securing 25 applications (more than the previous competition) from a range of organisations. Amongst the 19 training providers awarded funding, a range of organisations are represented - trade bodies, local authorities, Further Education (FE) colleges, Skills Academies and private training providers.

Potential enhancements to scheme promotion[17]
• Conducting a comprehensive review of available training provision and who delivers it, using this to contact providers not already known to MNZH. • Using the wider retrofit network, attending industry events and / or advertising in relevant newsletters.

[16] As noted, there were originally 19 successful applicant providers, but one dropped out prior to delivering any courses.

[17] Provided throughout the report, these suggestions are drawn from both evaluation interviewees and analysis and research conducted by the evaluation team. Where they are from interviewees, this is noted in the text.

2.2 How well the application process worked for training providers and programme staff

Training providers that received funding through the competition were asked to reflect on three specific aspects of the application process: (i) the rules and eligibility criteria, (ii) the type and amount of information required in the application form, and (iii)the timescales for submitting applications.

These providers were generally supportive of the application and awards process and provided mainly positive reflections of their experiences and the competition timescales. It should be acknowledged that these are the views of successful competition applicants; if unsuccessful or ineligible applicants had been interviewed, there may have been a different balance to the findings.

Eligibility criteria

Competition guidance listed 15 eligibility criteria for training providers to consider when applying. Most training providers (11 of the 15 interviewed) felt the criteria, set out in the guidance, were reasonable and proportionate to the funding being applied for, with one emphasising that the HDSTC rules and eligibility criteria were more flexible[18] than they had seen in other programmes, enabling them to support a greater number of trainees. Two specific issues were raised by two providers in relation to eligibility criteria:

- A lack of clarity around what constituted a 'disadvantaged trainee'; which organisations could refer unemployed learners and what the minimum age of trainees could be.
- Access being restricted to trainees who worked or lived in England (raised by two providers).

The remaining providers either could not comment or raised issues with criteria set by the awarding body[19] as opposed to the Competition specifically.

Type and amount of information required

Larger and more experienced providers broadly agreed that all the information and data requested was readily available and was understandably necessary for completing due diligence. Four of these larger providers reported that they already had data collation systems and processes in place, and the necessary resources to synthesise that information, with limited impact on their activities.

However, five providers, often smaller or newer to this type of application, were more critical. Several felt that too much information was requested on previous financial performance and company structure, and insufficient information was requested on their actual experience of delivering similar courses.

Competition timescales

Training providers were asked to consider the suitability of the four-week window for applying. Nine providers felt there was sufficient time to compile an application[20] and that the time was proportionate to the amount of information requested. Two providers stated that, although they were successful, they

[18] Some providers cited other funding opportunities with lots of stipulations around necessary trainee profiles e.g. age groups, previous qualifications etc.

[19] One provider commented that certain awarding body prerequisites were outdated in insisting on a certain number of years' experience in certain specialisms.

[20] Of course, submission of a successful application was indicative that the timeframe was sufficient.

would have benefited from a longer application window. More time would have made it easier to balance their day-to-day activities with the resource needed to apply.

Linked to the issue of timing, colleges and FE providers, stated that the August/September application window made it more challenging for them to participate. They felt that it would be beneficial if the application window was moved to late September or early October, after their busy onboarding period at the start of the academic year.

HDSTC funding awards

All stakeholders interviewed for the evaluation viewed the HDSTC funding award process as robust and effective. None of the funded training providers raised any issues with the application review and award decisions. MNZH representatives highlighted the robustness of the assessment process, which included multiple reviews and a panel discussion. They emphasised that the application process overall produced the outcomes MNZH and DESNZ wanted, in terms of both a good spread of providers and courses. The team noted that there was strong appetite to deliver WP3 courses, and that the application process helped to somewhat rebalance allocations across the work packages.

The only slight concern voiced by the programme team was monitoring of sub-contractors. Whilst the application process restricted the lead training provider to one 'layer' of sub-contracting, there was no mechanism to check to what extent one sub-contractor might be benefitting by supporting multiple lead providers.

Potential improvements to the application and awards process
• Reviewing the application process to identify any opportunities for further simplification, particularly in relation to how, and what, financial information is requested. • More robust procedures – during both application and training delivery stages – to understand to what extent different sub-contractors might be benefitting from funding across the competition / various providers. • Several interviewees suggested changing the application window to consider patterns in provider, employer and trainee workload e.g. avoiding summer holidays.

2.3 How well the monitoring worked for participant training providers, trainees and the programme team

Effective performance monitoring was an important component of ensuring that training providers delivered against specified targets for enrolments and course completions. In the case of this competition, it also formed an important element of the financial model, with providers paid per course completed.

Mirroring the spread of views on application requirements, larger providers tended to view the frequency, amount and type of data requested for monitoring purposes as logical and relatively simple to provide. Any initial problems - with providers needing to familiarise themselves with the structure, layout and formulae used in the forms - were overcome after a couple of submissions.

'It gets across all the information we need to. It allows me to double check that what they think we have done and what we think we have done is the same…. It is good because I am confident at the end that all of the numbers matched up'. – Training Provider

Eight (predominantly smaller / less experienced) providers argued that the frequency of reporting, including weekly learner logs, fortnightly and monthly reporting, could be onerous. One provider noted that the 'cut off' points for submissions sometimes caused confusion on what numbers should be included. MNZH facilitated several guidance and training sessions, clarifying and confirming monitoring requirements, and communications from MNZH were appreciated, demonstrating that submission concerns raised by providers were being appropriately considered and addressed. This is evident as the programme team are looking to integrate the learner log and monthly report to reduce reporting for future Competitions. Several providers suggested that communication between training providers and MNZH could be further enhanced via the introduction of dedicated account managers, who could establish more open, responsive and informal dialogue.

The programme team noted that some DESNZ requests for new / additional information could carry some short-term disruption to information provision as providers adapted, but that these were quickly resolved. To further improve collation of monitoring data, the programme team are working on updating and refining the monitoring template for future Competitions, to ensure it both meets DESNZ needs and is accessible for providers. This will be complemented by a 'how to' guidance video on completing the forms, circulated to providers.

When asked their views on 'payment by outcome', four providers expressed concerns over the upfront risk to providers, due to the costs associated with promotion and recruitment for courses. For these providers, the preference appeared to be upfront payment of funding allocation and then, depending upon the frequency and magnitude of any underperformance, returning a proportional amount of the allocation.

Potential improvements to scheme monitoring

- Reassessing the balance between having an up-to-date position on performance and minimising the reporting burden on (particularly smaller) providers.
- Several providers suggested the introduction of dedicated account / performance managers, who would have a more detailed knowledge of each provider's activities and contractual targets and be 'on hand' to deal with any queries or concerns.

3 Training design and delivery

Whilst the previous section was focused on HDSTC design and delivery, Section 3 assesses the provision of funded training, including efforts to recruit trainees and deliver the necessary training.

Summary of key findings

Effective approaches to recruiting trainees

- All training providers confirmed that they used multiple mechanisms for recruiting trainees, but directly contacting organisations / individuals that previously completed courses with that provider was generally felt to be the most effective.
- There were a range of ways in which trainees reported hearing about the HDSTC courses, including social media advertisements and recommendations from other businesses and associates.

Importance of HDSTC in addressing barriers to the supply chain being able to access training

- The need to engage with retrofit, insulation and / or heat decarbonisation was the key catalyst for employer interviewees to engage with the training; this was driven by eligibility criteria to deliver work on certain schemes, and wider perceptions of the general direction of the market and government policy. Course subsidisation was not the main catalyst for generating interest in the training, but did enable some employers to enrol more of their staff onto courses.
- Several employers highlighted other costs typically associated with course attendance, such as working time lost whilst employees are offsite. Providers have sought to implement more flexible delivery mechanisms (e.g. online or onsite delivery) to allow trainees to complete aspects of training at more convenient times.

Provider experiences of designing the training and the basis for design decisions

- Almost all training providers interviewed were already delivering courses that aligned with the focus of stated work packages. Four providers referenced designing new courses or amending current course content to tailor it to HDSTC requirements / trainee needs.

Provider experience of delivering the training

- The trend towards online platforms has improved access to training, removing the barriers of timing and location. Providers also cited several benefits for their organisation – online generally being cheaper, more resource efficient and more flexible (both for themselves and for their trainees).
- However, as described below, a proportion of trainees felt that their course could have benefitted from more in-person, practical demonstration on certain elements.

Trainee / learner views on, and satisfaction with, training provision.

- Across all three work packages, most survey respondents were satisfied with the course overall (WP1: 73%, WP2: 13 out of 14 trainees, WP3: 74%).
- When asked to reflect on specific aspects of training delivery, course content / topics covered, and course length saw high levels of satisfaction.

Summary of key findings

- Lower proportions of trainees were satisfied with the 'opportunity to put skills into practice', with some calling for more supervised installations or assessments while still on the course.

3.1 Trainee recruitment and engagement

Methods used to engage and recruit trainees

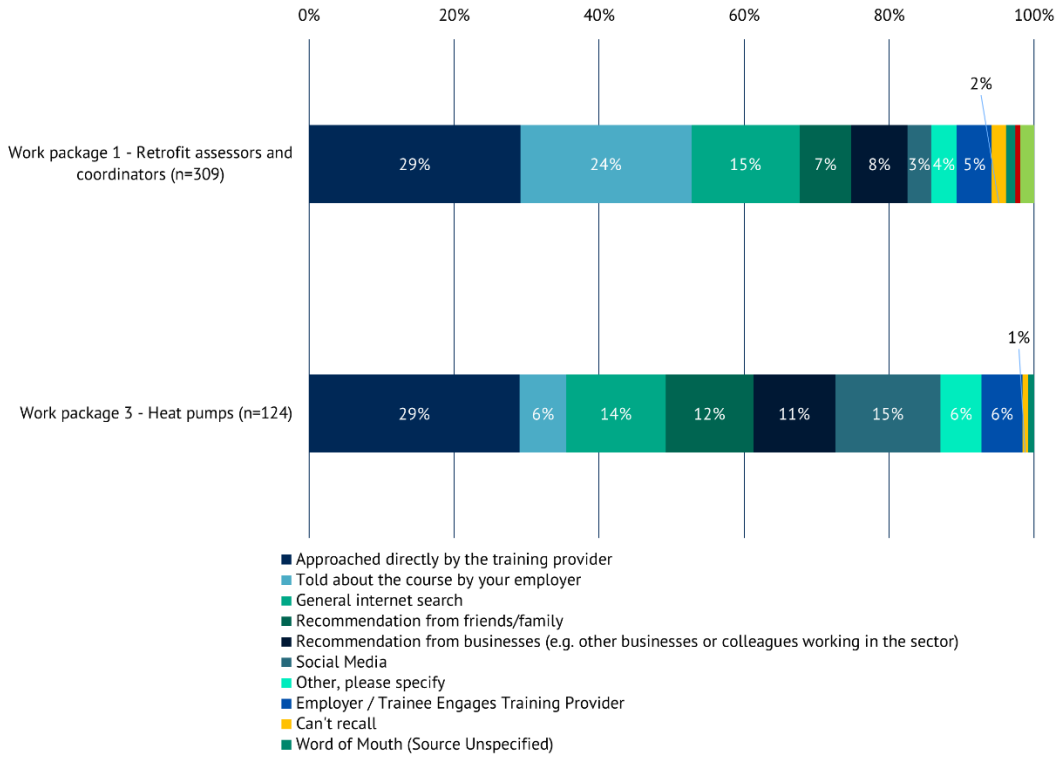
Training providers used a variety of approaches to reach trainees, including online advertisements, social media (principally Facebook and LinkedIn), and contacting employers / individuals who they had previously offered and / or delivered training to. For many providers, the latter approach was reported to be the most common and was felt to be the most effective. The programme team noted that this might particularly be the case for larger providers, with a stronger track record, much larger database of warm contacts, and even existing partnerships with larger organisations that might send relatively large numbers of trainees:

'We have a database of 3-4000 previous learners. We emailed those, offering free upgraded training. It was also promoted via our own website and our own marketing team via email drops and normal marketing channels. We found that our most successful marketing was to previous candidates." – Training Provider

While survey data somewhat supports the provider perspective, trainees have also found out about the competition in other ways, including recommendations from friends and family and from other businesses. Several respondents stated that employer and trainee testimonials could enhance marketing and promotional activities.

'I would definitely be swayed by testimonials from people who have completed the training, or maybe an interview with them that could be published on their website'. (Trainee)

Figure 1: How did you find out about the training course provided? - Retrofit Assessors and Coordinators



Source: Winning Moves Trainee Survey (2024)

Potential enhancements to trainee recruitment
• Based upon approaches taken in other business support programmes, case studies and testimonials could play a key role in raising awareness and expanding the profile of participants. • Training providers discussed the benefits of a performance monitoring framework and KPI milestones to enable quicker reallocation of funding from under-performing providers to better performing providers.

3.2 HDSTC addressing barriers to the supply chain accessing training

Trainees were asked about supply chain barriers to accessing training. The purpose was twofold. Primarily, it was to test the rationale for the HDSTC by confirming the extent to which cost of training is a key barrier. Secondly, to identify other barriers that are restricting access to training, for MNZH and DESNZ consideration. Table 5 details the list of potential barriers prompted in the trainee survey, and the proportions of respondents, under each work package, that agreed these were salient. Compared with the other work packages, a smaller proportion of WP1 trainees identified barriers to accessing training, reflecting the greater flexibility in how assessor training could be delivered and the specificity of the course, meaning that only one or two individuals in a business may need to complete it.

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=309)	WP2 - Insulation Installation (n=14) (*Actual response number*)	WP3 - Heat Pumps (n=124)
Cost of training	66%	9	69%
Length of training courses	28%	7	42%
The business missing out on paid work because employees are attending training	17%	8	54%
The time of day during which the training courses are held	20%	4	42%
Where the courses are held	33%	7	63%
Perception of the quality of the training	26%	7	52%
Relevance of the training to you and your business	34%	8	57%
Uncertainty about the future direction of the sector	26%	7	37%
Not aware of any barriers	16%	4	9%

Source: Winning Moves Trainee Survey (2024)

Endorsing the rationale for the HDSTC, approximately two thirds of all trainee survey respondents viewed the cost of training as a traditional barrier to access. Most (13) employer interviewees also shared this view, with several stating that the cost of some courses can be more than the annual training budget for a member of staff.

Trainees were asked to state whether they were aware that their course was subsidised via a government-funded programme. Across all three work packages, levels of awareness were high, with 79% of WP1, 11 out of 14 WP2, and 84% of WP3 trainees aware that their courses were subsidised. From the perspective of trainees, the subsidy appears to have been less impactful in encouraging engagement with training provision, with the following factors identified as important:

- Awareness of the government emphasis on upskilling the sector and increasing supply chain capacity, as referenced in the Net Zero Strategy[21]. And linked to this, predictions for the required level of retrofit activity needed to achieve net zero targets.
- General interest in low carbon technologies and sustainable energy generation.
- Enhancing knowledge to improve trainees' service / offers to their clients/customers.

Three employer respondents believed that they wouldn't have accessed the training at all in the absence of the funding. Four would have sent fewer employees on the courses, and six would have taken longer to send employees on the courses, with only four claiming that they would have accessed training to the same degree and at the same time in the absence of the HDSTC subsidy:

[21] Net Zero Strategy: Build Back Greener - GOV.UK (www.gov.uk)

'We wouldn't have been able to put so many people through. Instead of having people with a broad skill set, I would have had to specialise people in certain areas. What we have now is more flexibility'. - Employer

As highlighted in Table 5, the financial cost of training is not restricted to course costs, but also the earned income lost from not having staff onsite, completing contract work:

'Training courses take staff out of the business for multiple hours and, for technical and sector specific training like that delivered via this competition, for several days. When on the training, staff are not delivering contracted work, which reduces our income'. - Employer

Training providers have sought to minimise staff contract time lost to training, by developing more flexible delivery approaches, such as online delivery (which is often recorded and can be accessed at any time) and onsite delivery (where skills can be learned whilst at work).

3.3 Provider experiences of designing the training

Almost all training providers interviewed were already delivering a course portfolio that aligned well with work package objectives and required standards. Only four providers referenced designing new courses or amending current course content, reflecting that many courses were existing NVQ levels. Amendments included:

- Tailoring the course to meet the needs and profile of trainees (e.g. removing basic information that trainees already knew, or removing information on insulation not installed by the trainees).
- Updating or modernising qualifications to make sure they covered the most up-to-date technologies and legislative changes, and that they met updated PAS/BPEC standards.
- Combining two qualifications into one, specifically the Domestic Energy Assessor and Retrofit Assessor courses delivered under WP1.

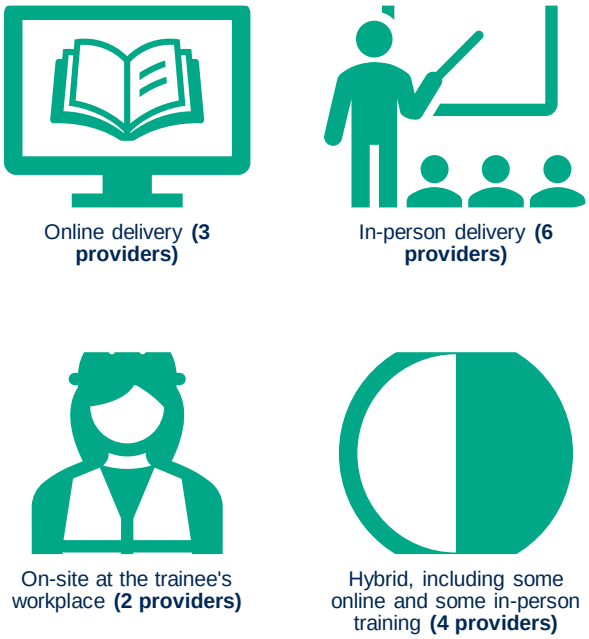
While evidence suggests that while the competition has had less of an impact on influencing course curriculum and course content, it has proven successful in expanding the volume of, and access to, existing provision offered by participating training providers:

'We have been delivering similar qualifications for many years, and these courses have always been aligned with standards and requirements. The competition has helped us to deliver more of these courses. More employers are showing an interest in our provision, and this is converting into more enrolments and, therefore, revenue.' (Training Provider)

The use of online delivery and blended learning

Since COVID-19, there has been a significant shift to online delivery, with training providers becoming more familiar with online platforms such as Microsoft Teams and Zoom. The use of online platforms has increased accessibility, removed the barriers of venue/location and allowing trainees to access recorded sessions or online content at more convenient times.

Figure 2: Delivery approaches used by training providers



Training providers confirmed that they are now delivering aspects of course content (previously delivered in-person) online, often combining online and in-person delivery to deliver courses more efficiently:

'We previously delivered the Retrofit Assessor Course entirely in-person. However, now we can use platforms like Teams and Zoom more effectively, we have switched delivery of this course to entirely online. This is cheaper for us, and more accessible to our learners who no longer need to travel' – Training Provider

Training providers commented that online delivery is often a cheaper and more resource efficient approach that provides greater flexibility for them and trainees. However, some course content needs to be delivered in-person, specifically where hands on experience with equipment is required. For example, WP1 providers found course content leant itself more easily to online delivery. Within WP2 and WP3 courses, in-person delivery was more often mandatory and necessary to confirm the practical skills and competencies that trainees needed to install insulation measures or heat pump technologies.

While online training provision should provide greater flexibility for both trainees and training providers, particularly with reference to accessing course content and completing required exercises and assessments at more convenient times, trainees identified some limitations. Four employer interviewees emphasised that online delivery restricts access to practical, on site, and in-person demonstrations.

'Online delivery works for me…That said, I think the provider relied too heavily on online delivery and could have offered some face-to-face installation demonstrations'. (WP3 Trainee)

Additionally, two employers stated that online delivery can make it more difficult to identify issues with trainee understanding and to address these issues with the individuals concerned.

'I attended the online course and thought, overall, it was well delivered and provided my staff with what they needed. However, some of my staff felt uncomfortable asking questions if they didn't understand something, and the trainer couldn't easily identify if someone was struggling' (Employer)

As part of the trainee evaluation survey, respondents were asked to state their level of satisfaction with different aspects of course design and delivery, which included the use of online or in-person delivery, and the opportunity they had to put skills into practice while on the course.

While 68% of all trainees stated they were 'very satisfied' or 'satisfied' with how the course was taught[22] (WP1: 70%, WP2: 11 of 14 trainees, WP3: 66%), only 38% were satisfied with the 'opportunity to put skills into practice, with satisfaction at a higher rate (40%) amongst WP3 trainees.

Trainee views on, and satisfaction with, other aspects of training provision

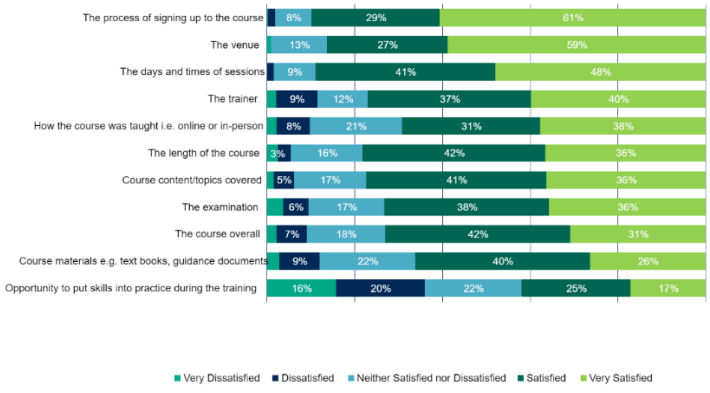
To provide further evidence on trainee satisfaction, and to increase the number of respondents from which this evidence can be derived, we have included survey findings from the MNZH Trainee Feedback survey (referenced in the research approach). This short feedback survey was a voluntary completion questionnaire sent to trainees immediately following completion of their course. 610 responses were received, of which 242 were WP1 trainees, 20 were from WP2 and 306 were from WP3. There were a further 42 where work package could not be determined.

The satisfaction questions asked in the feedback survey focused on the different aspects of the customer journey than the evaluation survey, though both asked about the course overall. Approximately three quarters (73%) of WP1 trainee evaluation survey respondents were satisfied with their course (86% among WP1 feedback survey respondents), 74% of WP3 respondents (86% among WP3 feedback survey respondents) and 13 of 14 WP2 trainee respondents (17 of 20 WP2 feedback survey respondents).

In the retrospective trainee survey, respondents were then asked to provide satisfaction ratings for a range of course aspects. Figures 3 to 5 detail satisfaction ratings for each work package.

Work Package One: Retrofit Assessors and Coordinators

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 your course? WP1



Source: Winning Moves Trainee Survey (2024), n=309

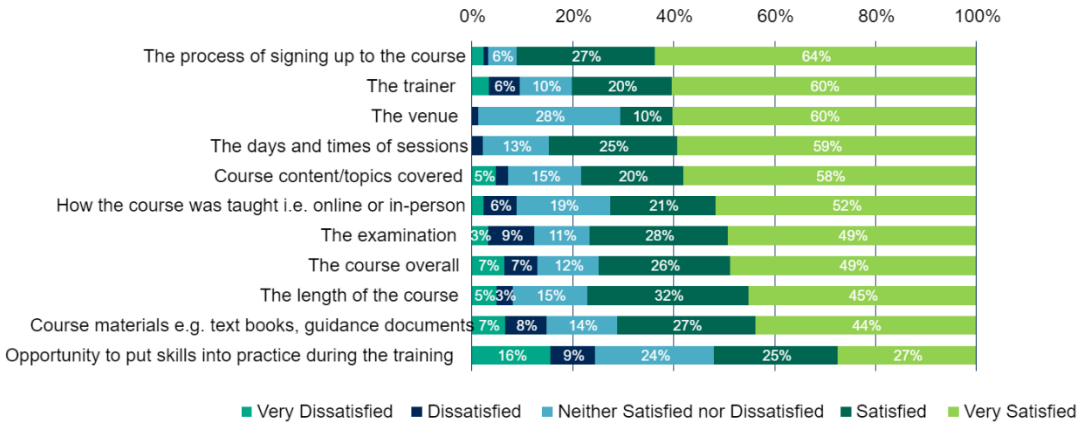
[22] This was a multiple response question that asked respondents how satisfied they were with different aspects of the courses and their delivery. The exact question wording was: *Using a scale of 1-5, where 1 is 'very dissatisfied' and 5 is 'very satisfied', please rate how satisfied you were with the following aspects of your course?.*

Work Package Two: Insulation Installation

In evaluation survey responses, most WP2 trainees were 'very satisfied' or 'satisfied' with all aspects of course delivery, with a minimum of 10 respondents (out of 14) stating satisfaction with each aspect.

Work Package Three: Heat Pump Installation

Figure 4: 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 your course?



Source: Winning Moves Trainee Survey (2024), n=114

Across all three work packages, the 'opportunity to put skills into practice' tended to score relatively low rates of satisfaction (42% in WP1, 52% in WP3 and 7 of 14 WP2 respondents) alongside 'course materials', with trainees expecting greater access to 'how to guides' and 'frequently asked questions' and provision of documents that would help them to complete assessments and installations in their day-to-day work.

'It was great to have the training and to be shown how to install technologies etc, but provision of reference documents that help us to complete installations post-training would have been really useful'. (WP3 trainee)

'It would have been useful if our staff could have brought back guidance documents and other course materials as this information would allow us to share knowledge with other staff in the future'. (Employer)

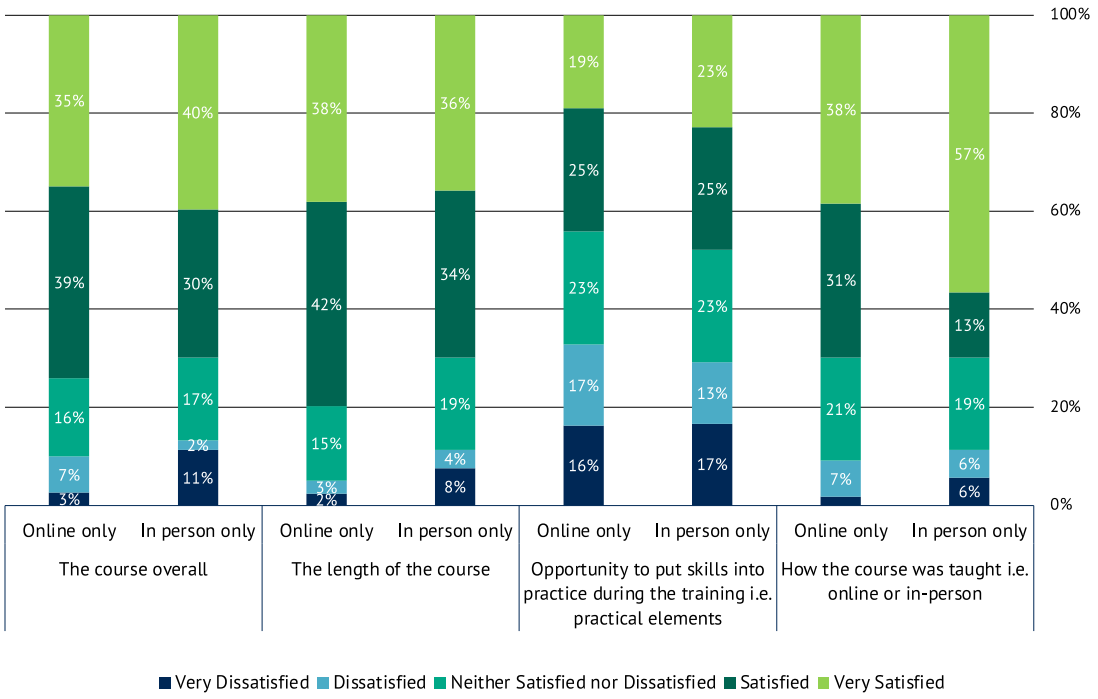
Linked to this, the aspect with lowest levels of satisfaction was the opportunity to put skills into practice. A common view among employers was that courses were too theoretical, with insufficient practical elements. Particularly among employers that had sent staff on WP1 courses, it was felt that some trainees were not yet adequately prepared to deliver work in their newly qualified role.

Online vs In-person delivery

A little more than two thirds of WP1 (69%), and almost two thirds of WP3 (63%), trainees were satisfied with how the course was delivered (11 of 14 WP2 trainees).

Figure 5 below compares satisfaction levels between trainees receiving online and in-person provision for four delivery aspects, where there were differences.

Figure 5: Comparing satisfaction between online and in-person delivery



Source: Winning Moves Trainee Survey (2024), n=447

As shown in the Figure 5, highest satisfaction levels for online and in-person delivery were identified for 'the length of the course' and the 'course overall'. Slightly more than two thirds of online only trainees (69%) were satisfied with how the course was taught, of which 38% were 'very satisfied'. A similar proportion (70%) of in-person only trainees were satisfied, with more than half (57%) stating they were 'very satisfied'.

As noted earlier in the chapter, regarding satisfaction with how the course was taught, trainees in receipt of online delivery stated it provided greater flexibility and accessibility to course content and materials, allowing them to access the course at more convenient times of the day (e.g. during lunch, in the evenings or at weekends). However, trainees also expressed the desire for more in-person delivery, where their learning could benefit from practical demonstrations and hands-on experience.

Potential enhancements to course design and delivery

- Consideration of ongoing subsidising of training to support employers and trainees, as this is clearly a salient and ongoing barrier to access.
- Whilst acknowledging the benefits of online course provision (especially given the need to rapidly increase the supply chain skills / capacity), balancing this with recognition of the need for some in-person provision, including opportunities for trainees to complete their own supervised assessments or installations.

4 Trainee outcomes

Summary of key findings

Course completions vs original expectations / targets

- Analysis indicates generally good performance. Four of 18 providers fully achieved or overachieved against their targeted completions, while a further seven achieved between 80 and 99% of it.
- Of the remaining providers who fell somewhat short of targets, four achieved between 50% and 79% of their targeted enrolments, with three achieving less than half of their targeted enrolments (the lowest being 36%). There are likely to be a range of factors (course demand, provider experience and contacts) contributing to this, in addition to trainee drop-out.
- While enrolments by region are not split equitably, this may simply reflect the geographical distribution of the supply businesses[23].

Extent to which the HDSTC has increased the capacity of the workforce and addressed skills gaps

- Survey evidence indicates that over four-fifths of trainees feel they have gained sector-specific and technical skills, aligned to the different work packages. Though as noted in chapter 3, some employers question whether this translates to trainee ability to immediately perform related work.

To what extent are the observed impacts and outcomes attributable to the HDSTC

- Across providers, there was recognition that trainee numbers were significantly greater than those that would have been delivered in the absence of the HDSTC.
- Subsidised and free course delivery has enabled 11 of 17 employers to offer training to a wider pool of employees, allowing them to position their business for any future increase in demand.
- While most employers (10 of 17) did state that they would have enrolled a similar number of staff on the same training over a longer period, the HDSTC, and the availability of subsidised training, had accelerated this engagement.

4.1 Assessment of competition performance

Performance by training provider and work package

Table 6 compares course completions (from training provider monitoring reports), with original targets. DESNZ's target for the HDSTC was the completion of 9,000 training courses. Following the bidding process, training providers collectively targeted 11,143 course completions. This was effectively a stretch target, approved for training providers. Overall performance, detailed in the last row, shows that 8,605 courses were completed (96% of the Department target and 77% of the more stretching target).

[23] Data on the population and geographical distribution of the retrofit supply chain is not available.

Table 6: Comparing course completions with original targets, overall, by training provider

Training Provider	WP	Target	Total number of completed courses (multiple courses per trainee)	% of completions vs target
Retrofit Academy	1	475	313	**66%**
	2	800	276	**35%**
Provincial Seals	1	70	34	**49%**
The Insulation Assurance Authority Commercial Services	1	150	72	**48%**
	2	390	257	**66%**
	3	180	148	**82%**
Elmhurst Energy	1	1,100	1,006	**91%**
GTEC	3	1,200	1,200	**100%**
North West Skills Academy Ltd	2	550	496	**90%**
CB Heating	3	318	185	**58%**
The BESA Academy	3	250	230	**92%**
Essex County Council	1	50	45	**90%**
Think Construction Skills	2	400	405	**101%**
Optimum Energy	3	1,300	1,102	**85%**
Oil Firing Technical Association Limited	3	1,000	770	**77%**
DMR Training and Consultancy	2	180	169	**94%**
Heat Geek	3	794	538	**68%**
Net Zero Training	2	150	39	**26%**
	3	50	33	**66%**
Farnborough College	3	152	152	**100%**
Option Skills	3	900	962	**107%**
ISO Energy	3	180	173	**96%**
Competition total	**1,2 and 3**	**11,143**	**8,605**	**77%**

Source: MNZH Monitoring Data

Table 7 below makes the same comparison of course completions against original targets, this time by work package. Across all work packages, 88% of those trainees who started a course were confirmed as completing. The highest completion rate among trainees was for WP3, where 91% of starters were recorded as having completed the course, compared to 84% for WP1 and 81% for WP2.

Table 7: Comparing course completions with original targets, overall by Work Package

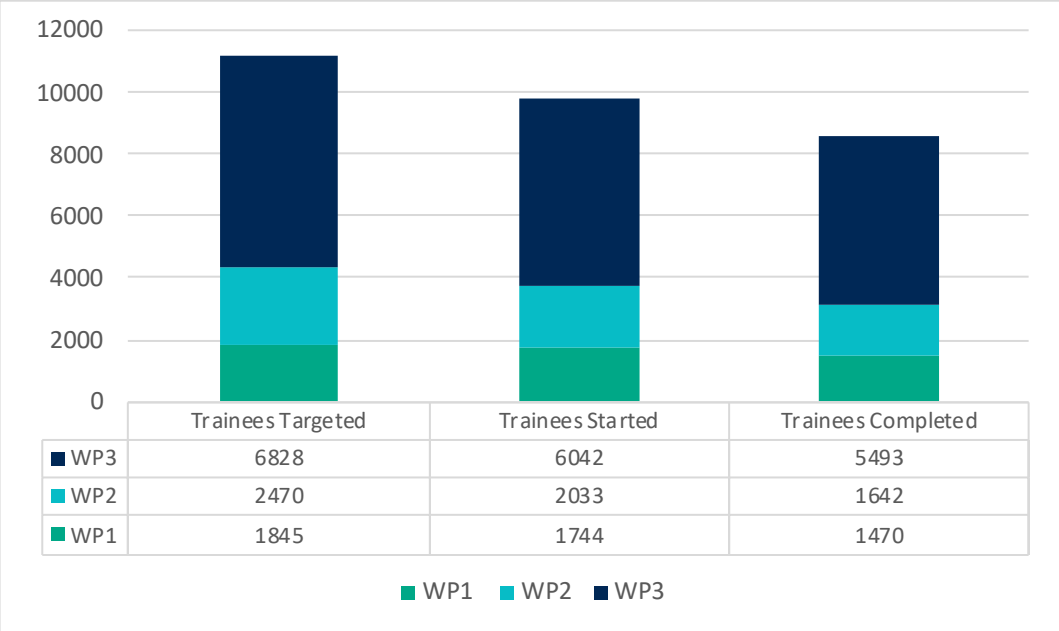
Work package	Trainees Targeted	Trainees Started	% of trainees started compared to target	Total number of completed courses (multiple courses per trainee)	% of trainees completed to those started
WP1 - Retrofit Assessors or Coordinators	1,845	1,744	95%	1,470	84%
WP2 - Insulation Installation	2,470	2,033	82%	1,642	81%

Work package	Trainees Targeted	Trainees Started	% of trainees started compared to target	Total number of completed courses (multiple courses per trainee)	% of trainees completed to those started
WP3 - Heat Pumps	6,828	6,042	88%	5,493	91%
Competition Total	**11,143**	**9,819**	**88%**	**8,605**	**88%**

Source: MNZH Monitoring Data

Across the work packages, four of 18 providers fully achieved or overachieved against their targeted completions, while a further nine providers performed well against their target, achieving between 80 and 99% of it. Only four providers achieved less than 50% of their agreed target.

Figure 6: Comparing course starts, completions and enrolment targets by work package



Source: MNZH monitoring data

Overall, WP2 showed the greatest underperformance in both (a) number of learners enrolled onto courses compared to targets, and (b) conversion rates from starting to completing courses. WP1 showed the highest rate of learners starting courses compared to targets, whereas WP3 had the highest completion rate for learners who started courses.

Across interviews with training providers, trainees and the programme team, the following reasons for varying performance were suggested:

- Smaller / less established training organisations had a greater reliance on social media to attract learners, which was deemed a generally less effective approach to recruit trainees. Similarly, this profile of training provider tended to struggle to recruit large employers (vs., for example, sole traders) that would encourage staff to complete courses.

- As might be expected, it was more challenging to secure completions on longer courses. The programme team felt that some providers had underestimated likely levels of drop-out[24] / ability to keep trainees engaged.

Region

The evaluation sought to consider the extent to which, if at all, the competition had addressed regional imbalances in training provision and the supply of retrofit skills. Table 8 provides a regional breakdown of trainee starts, completions and associated pass rates for the five regions covered by the competition, based on training provider monitoring data.

To accurately explain the differences in trainee starts and completions and to assess the extent to which any imbalances have been addressed by the HDSTC, data on the population and geographical distribution of the retrofit supply chain is required.

In the table below, the breakdown of HDSTC trainees by region has been compared to 2022 ONS data on the breakdown of construction sector employees by region[25]. This is a proxy; most retrofit activity will take place in the construction sector, but this comparison should be treated with caution. In addition, the HDSTC stats on region reflect the region in which the trainee is based, not necessarily which region(s) they may do work in.

Table 8: Comparing course completions with targeted trainee numbers by region

Region	Trainees Started	Total number of completed courses (multiple courses per trainee)	% of trainees completing	Size of construction workforce (% of total employees)
Greater South East	3,232 (33% of trainees starting)	2,819 (33% of trainees completing)	87%	41%
Midlands	2,720 (28%)	2,380 (28%)	88%	19%
North East & Yorkshire	1,099 (11%)	914 (10.5%)	83%	15%
North West	1,210 (12%)	1,063 (12%)	88%	13%
South West	1,558 (16%)	1,429 (16.5%)	91%	12%
TOTAL	**9,819**	**8,605**	-	-

Sources: Programme/Competition Monitoring Data (Provided by MNZH on 18th June 2024); Construction Statistics, Great Britain (2022) (Office for National Statistics).

The table shows that the regional breakdown of trainees that started and completed was almost identical i.e. no region had a particularly strong or poor rate of completion.

The regional breakdowns of trainees and construction sector employees are broadly similar. However, assuming the validity of comparison to ONS regional breakdowns of employees, there does seem to be overrepresentation of trainees in the 'Greater South East' and underrepresentation of trainees in the 'Midlands'.

[24] Linked to this, the programme team noted some interesting use of incentives by some providers e.g. the need to complete the course before a certain deadline, at which point the course would be charged at full price.

[25] For the purposes of the comparison the HDSTC 'Midlands' was assumed to cover 'East Midlands' and 'West Midlands' in ONS stats, 'Greater South East' was assumed to cover 'South East' and 'London' and 'North East & Yorkshire' was assumed to cover 'North East' and 'Yorkshire and Humber'.

4.2 Extent to which the HDSTC supported a diverse profile of trainees

As for assessment of regional imbalances, robustly assessing the extent to which the competition supported a diverse profile of trainees relies in part on national level data on the profile of the supply chain workforce. However, data from the MNZH trainee feedback survey provides a comparison to the evaluation trainee survey data (presented as the figure in brackets).

Employment status

Table 9: Employment status at time of course enrolment, split by work package, taken from MNZH trainee feedback survey (Evaluation trainee survey responses in brackets)

Employment Status	WP1 - (Feedback survey n=242; Evaluation survey n=309;)	WP2 - (Feedback survey n=20; Evaluation survey n=14)	WP3 – (Feedback survey n=306; Evaluation Survey n=124;)	Total
In full time employment at a business	59% (43%)	7 (8)	38% (37%)	**47% (47%)**
Self-employed/running your own business	31% (46%)	12 (6)	52% (59%)	**43% (45%)**
Unemployed	5% (5%)	1 (0)	1% (4%)	**1% (5%)**
In part time employment at a business	5% (2%)	0 (0)	3% (0%)	**4% (2%)**

Sources: MNZH trainee feedback survey and evaluation trainee survey (2024)

Other demographic information was as follows:

- The majority (80%) of participants who completed the feedback survey were male (15% were female, 3% preferred not to state their gender)
- Trainees were most commonly aged between 35 and 44 (31%), with 25% aged between 45 and 54, and 18% aged between 55 and 64.

4.3 Recognition of upskilling and achievement of qualifications

Qualifications gained because of the Competition

Evaluation trainee survey respondents were prompted with various benefits they may have obtained from participating in the training. Pertinent to this section, 89% of all respondents stated they had gained new qualifications or certifications.

MNZH feedback survey analysis shows that 422 (70%) of the 608 respondents provided the name and level of the qualification achieved, with most being at Level 2 or Level 3. This corresponds to course information derived from the gov.uk website, where 9 of the 18 providers reported the qualifications offered. Essex County Council, IAACS and Retrofit Academy, offered a Level 4 or Level 5 course; the remaining providers offered qualifications at Level 2 or Level 3.

Table 10: Provider stating qualification level and type in their training offer

Training Provider	Qualification	Work Package
DMR Training and Consultancy Ltd	• NVQ Level 2 and Level 3 Insulation and Building Treatments • Level 3 Energy Efficiency for Older and Traditional Buildings • Level 2 Award in Understand Domestic Retrofit	Work Package 2: Insulation Installation
Essex County Council	• Level 2 Understanding Domestic Retrofit • Level 3 Retrofit Advisor • Level 4 Retrofit Assessor • Level 5 Retrofit Coordinator	Work Package 1: Retrofit assessor and retrofit coordinator.
Farnborough College of Technology	• LCL L3 Award in the Installation and Maintenance of Heat Pump Systems • Awareness of environment technologies • Electricity for Plumbers • LCL L2 Award in Principles of Metering for Renewable Heat Installations • Essential Electronics and Safe Isolation of Electrical Equipment	Work Package 3: Heat pumps
The Insulation Assurance Authority Commercial Services (IAACS)	• NVQ level 2 and level 3 Insulation and Building Treatments • Level 5 Retrofit Coordination and Risk Management • Understanding Domestic Retrofit • Air Source Heat Pumps	Work packages 1, 2 and 3: Retrofit assessor and retrofit coordinator; insulation; heat pumps
ISO Energy Ltd	• Level 3 Heat Pump Systems (non-refrigerant Circuits) • Level 3 Installation and maintenance of Air Source Heat Pump Systems • Low Temperature Hot Water Heating Systems • Level 3 Surveying & Calculation of Building Heat Loss to BS EN12831 • Level 3 Understanding Electrical Obligations for Heat Pump Installation	Work Package 3: Heat pumps
Optimum Energy Solutions UK	• Level 3 Award in Heat Pump Systems • Level 3 Award in Air source Heat Pump Systems • Level 3 Surveying & Calculation of Building Heat Loss • Level 3 Award: Understanding Electrical Obligations for Heat Pump Installation	Work Package 3: Heat pumps
Options Skills	• Level 3 Installation and Maintenance of Heat Pump (Air source and Ground source) • Level 3 in Low temperature Heating Design • Level 3 Water Regulations (WRAS) • Level 3 HWSS (Unvented Hot Water Systems) • Part L Building Regulations	Work Package 3: Heat pumps
Provincial seals	• Level 3 Retrofit Assessor training • Level 3 Energy Efficiency for Older & Traditional Buildings	Work package 1 and 2: Retrofit assessor

Training Provider	Qualification	Work Package
	• NVQ Level 2 Cold Roof Insulation	and retrofit coordinator and insulation
Retrofit Academy	• Level 2 Award in Understanding Domestic Retrofit • Level 3 Award in Domestic Retrofit Advice • Level 4 Award in Domestic Retrofit Assessment • Level 5 Diploma in Retrofit Coordination and Risk Management	Work package 1: Retrofit assessor and retrofit coordinator

Source: Home Decarbonisation Skills Training Competition: Phase 1 successful projects. https://www.gov.uk/government/publications/home-decarbonisation-skills-training-competition-successful-projects/home-decarbonisation-skills-training-competition-successful-projects

Combined with the course completion numbers reported in Section 4.1, this table illustrates the scale of new qualifications in the sector.

Upskilling trainees

When prompted as to benefits they had received through the training, 84% of WP3, 79% of WP1, and 13 of 14 WP2, trainees agreed that they had gained new sector-specific or technical skills.

'I have more technical knowledge that I'm able to take away into everyday working life. I can use the retrofit assessor accreditation to show clients that I have upgraded/upskilled' - WP1 trainee

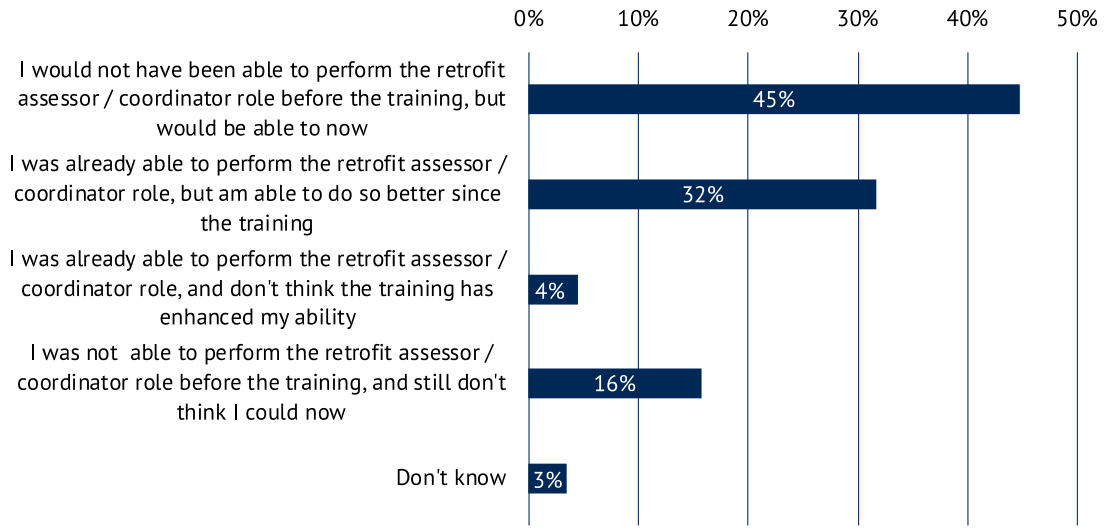
Employers reported not only the development of sector-specific and technical skills, but also highlighted the transferable skills trainees had developed e.g. improved understanding of the retrofit and installation markets, improved understanding of the environmental and financial benefits of retrofit activities for clients, better time management and planning of resources, and improved attention to detail.

Relevant to the work package of their course, evaluation trainee survey respondents were asked questions to further reflect on HDSTC course impacts. Figures 7 and 8 summarise their responses.

Work Package One: Retrofit Assessors and Coordinators

77% of WP1 trainees felt the HDSTC-funded training had helped them to develop skills allowing them to perform the retrofit assessor or coordinator role either (a) better than they could before the training, or (b) that they could not perform at all before the training.

Figure 7: Following the retrofit assessor / coordinator training, which of the following statements would you say most closely applies to you?



Source: *Winning Moves Trainee Survey (2024), n=309*

Work Package Two: Insulation Installation

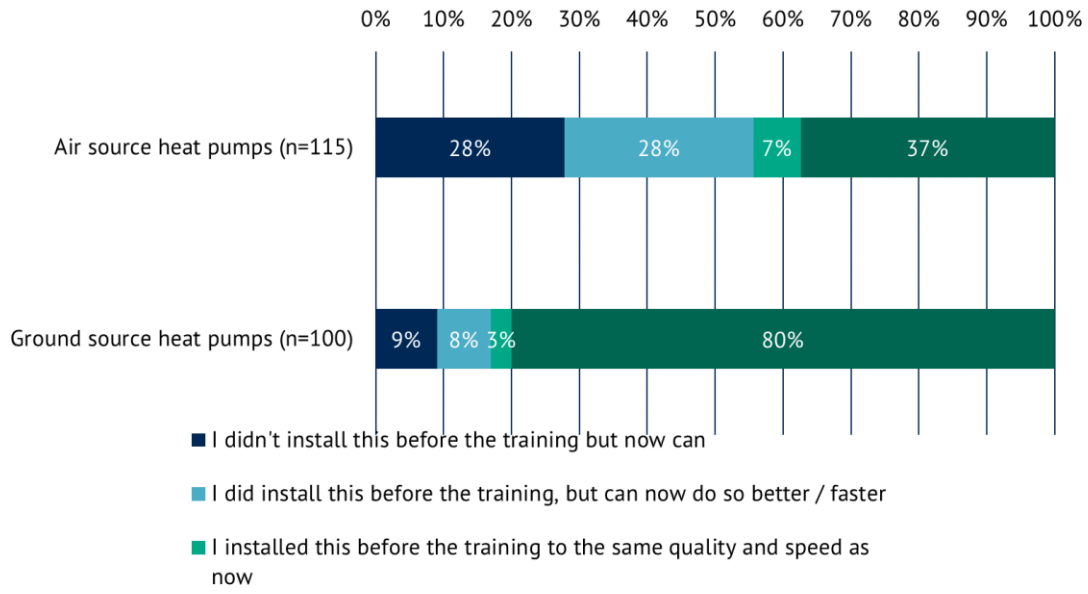
Albeit from a small sample, almost all WP2 trainee respondents saw improvements to the types of insulation they could install and / or the speed and quality with which they could install it. 8 of 14 trainee respondents stated they could install loft insulation more competently, as did 7 of 14 for external / internal solid wall insulation.

Work Package Three: Heat Pumps

WP3 trainees were asked about subsequent heat pump installation activity; it should be noted that depending on the course content, it may not be expected that trainees would have started to install certain technologies i.e. GSHPs, if the course they attended focused solely on ASHPs.

Figure 8 illustrates that slightly more than one quarter (28%) of trainee respondents did not install air source heat pumps before the training, but can now do so, and a further 28% can now install air source heat pumps (ASHP) 'better and / or faster'. The lower numbers for ground source heat pumps (GSHP) and water source heat pump (WSHP) (where only two of 114 respondents provided an applicable response) likely reflect the limited numbers of trainees / employers that would be expecting to install these anyway. Linked to this, with regards to WSHP in particular, it is unlikely that many courses covered this technology to any meaningful extent.

Figure 8: Following the heat pump installation training, which of the following statements would you say most closely applies to you?



Source: Winning Moves Trainee Survey (2024)

Several employers questioned whether their WP3-trained staff would have sufficient opportunity to implement the skills learned, perceiving that contracts for heat pump installation are limited in number.

Case Study 1: Evidence of upskilling

Business A were hoping that upskilling of their staff would ensure they had the skills to install ASHPs and GSHPs, allowing them to promote the benefits of alternative heating technologies to prospective customers and to futureproof the business if the heat pump market expands in line with predictions.

The subsidisation of the course allowed the respondent (a company director) to put multiple members of staff through the heat pump installation training at the same time, instead of spreading training across the financial year. This included installation engineers, with years of previous experience in installation of gas central heating systems, and apprentice engineers who had been shadowing these more experienced staff. In securing training for multiple staff, the business has also protected itself from the potential loss of skills and knowledge should individuals retire.

'Like most businesses, we are always on the lookout for subsidised training or fully funded training. In this instance, the heat pump installation training [subsidy] allowed us to enrol a number of experienced and apprentice engineers in one cohort. This has allowed more rapid upskilling of staff and knowledge is now shared among more individuals in the business'. (WP3 Trainee)

The respondent felt that the course was well designed and pitched at the appropriate level of complexity to allow individuals with different levels of experience to benefit. Staff have developed a range of technical skills that will help them with not only the installation of heat pumps in general, but identification of buildings where heat pump installation can be optimised, and optimal heat pump sizing based on those buildings.

'I learned about hydronic heating schemes; I've learned about flow rates…I've learned how to do in depth heat loss calculations. I'm getting quite adept at understanding where opportunities for installation exist in new buildings. I can pass that to my clients and I'm getting quite a lot of work from it'. (WP3 Trainee)

Business A has already been able to encourage several private homeowners to upgrade their heating systems, including installation of GSHPs, and are in discussions with several local authorities about supporting the retrofitting and upgrading of their social housing stock.

4.4 HDSTC impact on ability to deliver more work (including through government schemes)

Delivery of more retrofit work

The evaluation trainee survey included a 'routing' question to ascertain whether the respondent felt confident enough to provide accurate information on organisation-level benefits. 256 survey respondents felt they could provide a view on these.

These respondents were prompted with several business benefits and asked if any of them had arisen since completion of the training. Five of these benefits related to accessing new areas of work, including contracted work under relevant government schemes, and future proofing the business to benefit from changing market demand in retrofit and installation activities.

Table 11: Which of the following benefits do you think your business has obtained from your participation in the training?

Business benefit	Proportion of respondents identifying stated benefit			
	WP1 - (n=157)	WP2 - (n=7)	WP3 - (n=93)	Total (n=256)
The business can bid for new types of work / contracts that it couldn't access before	54%	4 of 7	59%	**56%**
'The business can work on specific government schemes that it wasn't previously able to e.g. the Boiler Upgrade Scheme and Social Housing Decarbonisation Fund *(Proportion of this group that weren't working on any government schemes prior to the HDSTC training)*	38% *23% (14 respondents)*	6 of 7 *1 respondent*	29% *22% (6 respondents)*	**36%**
The business is working with new clients that it couldn't or wouldn't have worked with before	35%	6 of 7	47%	**41%**
Enhanced business reputation	54%	6 of 7	62%	**58%**
Futureproofing the business	66%	7 of 7	71%	**68%**

Source: Evaluation trainee survey (2024)

As shown in Table 11 above, the evidence suggests that the training has delivered commercial benefits for a significant proportion of participant businesses. Responses from the employer interviews supported these claims. Of the 17 employer respondents:

- 12 agreed that following the training the business can bid for new types of contracts / clients that it couldn't access before.
- 7 reported their ability to work on government schemes they couldn't previously.
- 12 stated they were able to build networks / relationships with other companies, via their engagement with the training/competition.

Delivery on Government schemes

There are several Government funded schemes to encourage the retrofit and take up of alternative, low carbon heat sources and energy efficiency measures. An expectation of the HDSTC was that completion of accredited training and qualifications would enable a higher proportion of businesses and individuals to access and deliver work under these schemes. The evaluation trainee survey asked respondents two questions:

- *Before the training*, had you or your business delivered any work through any of the following government retrofit / decarbonisation schemes?

- *Since the training*, have you or your business delivered any work through any of the following government retrofit / decarbonisation schemes?

Overall, across work packages, the evidence suggests that the training delivered increased supply chain engagement with these schemes. The survey findings point to an increase in trainees / participating businesses either delivering work through or planning to deliver work through these schemes in the future. Findings for each work package are detailed in Tables 12-14, below. The final column in the table combines (at the time of interview) the proportions working on the schemes post-training, and those *planning on* working on these schemes in the future.

Table 12: Proportion of trainees who are now delivering, or planning to deliver work through government schemes who had not done so before training – WP1 Retrofit Assessors and coordinators

Scheme Name	No before/ have done since or now planning to	No before / no plans to	No before / don't' know
Social Housing Decarbonisation Fund (n=309)	22%	22%	17%
Local Authority Delivery Scheme[26] (n=309)	19%	25%	17%
Home Upgrade Grant (n=309)	21%	24%	18%
Energy Company Obligation (n=309)	21%	24%	15%

Source: Winning Moves Trainee Survey (2024), n= 309

Table 13: Proportion of trainees who are now delivering, or planning to deliver work through government schemes who had not done so before training – WP2 Insulation Installation

Scheme Name	No before / now planning to	No before / no plans to	No before / don't' know
Social Housing Decarbonisation Fund (n=14)	1	3	2
Local Authority Delivery Scheme (n=14)	2	3	1
Home Upgrade Grant (n=14)	1	3	1

[26] The Local Authority Delivery Scheme was recently renamed the Warm Homes: Local Grant https://www.gov.uk/government/news/home-upgrade-revolution-as-renters-set-for-warmer-homes-and-cheaper-bills

Scheme Name	No before / now planning to	No before / no plans to	No before / don't' know
Energy Company Obligation (n=14)	1	2	0

Source: Winning Moves Trainee Survey (2024), n=14

Table 14: Proportion of trainees who are now delivering, or planning to deliver work through government schemes who had not done so before training – WP3 Heat Pumps

Scheme Name	No before/ have done since or now planning to	No before / no plans to	No before / don't' know
Boiler Upgrade Scheme (n=114)	28%	24%	14%
Social Housing Decarbonisation Fund (n=114)	19%	48%	17%
Local Authority Delivery Scheme (n=114)	17%	47%	22%
Home Upgrade Grant (n=114)	17%	43%	25%
Energy Company Obligation (n=114)	12%	45%	23%

Source: Winning Moves Trainee Survey (2024), n=114

Whether trainees in different work packages had accessed certain schemes is strongly influenced by the relevance of those schemes to the business activity[27]. However, across all three work packages, and all five schemes tested, the proportions of trainees participating, or intending to participate, was higher than the proportions that had participated pre-training.

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 schemes. These include available resource (some firms may have enough work already), as well as the cost and / or administration barrier attached to certain schemes (e.g. TrustMark/MCS certification).

[27] For example, it would not be expected that businesses with a sole focus on wall insulation would be delivering work under the Boiler Upgrade Scheme.

Case Study 2: How funded training has increased access to government schemes

'Government schemes are an important revenue stream for our business. We recognised the importance of, and benefits to, obtaining the necessary accreditations and qualifications needed to access them.'

The training has given business B's employees the necessary skills, qualifications and accreditations necessary to install heat pumps, which has, in turn, given them access to the Boiler Upgrade Scheme and other government schemes. This has provided additional revenue streams and served to future proof the business in the short-term.

Businesses like business B, including others interviewed for this evaluation, are placing more importance on securing contracts under these schemes. Not only did business B consider the benefits of additional contract work through the Boiler Upgrade Scheme, but also the impact that delivery under a government funded programme could have on reducing competition, enhancing their reputation, and on securing other installation work:

'Theoretically, acceptance onto these schemes should limit the competition we face to secure contracts. This should translate into an increase in the volume of work derived from these schemes. Our involvement with the Boiler Upgrade Scheme will hopefully serve to enhance our reputation in the sector and allow us to obtain other installation contracts'.

Improvements to the installation and/or assessment work being completed

Many respondents to the trainee survey agreed that engagement with the competition had impacted on the efficiency, and quality, of their installation and/or assessment work.

- Of the WP1 trainee survey respondents, 63% agreed they could complete the work to a higher standard, 33% that they could complete their work quicker, and 44% felt their business was now able to charge more for the expertise and services they offered.
- Of the WP3 trainee survey respondents, 62% agreed their work was being completed to a higher standard, 32% that they were now completing work more quickly, and 49% felt their business was now able to charge more for their expertise and services offered.

Establishing the 'platform' for future business productivity and growth

The subset of trainee survey respondents that felt able to respond on business benefits were also asked about any changes in key financial performance metrics, arising from the intermediate business benefits explored above. These included increases to retrofit work contracts, improved profits and profit margins, and the recruitment and safeguarding of jobs.

Table 15: Which of the following benefits do you think your business has obtained from your participation in the training?

Impact / benefit	WP1 (n=157)	WP3 (n=93)
Safeguarded jobs	13% (n=21)	33% (n=31)
Increased value or number of decarbonisation / retrofit work contracts	17% (n=27)	27% (n=25)
Larger turnover than usual since completing the training	10% (n=16)	27% (n=25)
Improved profits / profit margin since completing the training	8% (n=12)	23% (n=21)

Impact / benefit	WP1 (n=157)	WP3 (n=93)
Recruited new staff/employees	3% (n=4)	15% (n=14)
Reduced costs on projects	5% (n=8)	10% (n=9)

Source: Winning Moves Trainee Survey (2024)

Employers were prompted on similar benefits arising from the training and the business performance improvements it enabled; of the 17 employers who were able to comment:

- Eight safeguarded jobs that would otherwise have been at risk i.e. due to the movement in the market away from gas and towards renewable solutions, the quantity of jobs for gas-technology installation is decreasing.
- Nine experienced larger than usual turnover in the period since the training.
- Nine saw improved profits / profit margins since the training.
- Eight recruited new staff / employees because of the training, either to fill gaps of those who have upskilled, or to increase capacity to match increase in job size / complexity that is being seen as a result of the training.
- Three saw reduced costs on projects, due to increased efficiency in terms of time and resources used, and the ability to conduct work which may have previously been subcontracted out.

Only three employers reported no financial benefits for the organisation.

Case Study 3: Positioning the business for changing market demand

At the time of responding to the survey, Respondent C's business had yet to deliver any heat pump installation contracts and none of the business' staff had previously signed up to or completed any heat pump installation training.

A key motivation for this business to sign up to the training was to upskill existing staff and to lay the foundations from which to build entrance into, and growth within, the heat pump installation market. Since completing the training, staff have sought to market and promote their services to customers; the expectation is that in the longer term, customers may seek to replace their current heating systems with water source heat pumps.

'As a business, we were interested in the heat pump technologies and wanted to learn the basics of installation, together with understanding the potential market for these installations in the future'. We have long been aware of the governments interest in, and their commitments to, significantly increasing the number of annual heat pump installations to around 600,000. With this expansion of the heat pump installation market, it was important, from a business perspective, that we positioned ourselves to benefit from greater demand'

5 Provider outcomes

Summary of key findings

- Six of the fifteen training providers interviewed stated the numbers enrolling on, and completing their courses, was much higher for HDSTC-subsidised courses compared with pre-competition numbers for the same or similar courses.
- A quantitative assessment of HDSTC participation on provider revenues and profits was not possible. However, four of the 15 providers interviewed specifically reported that both income and profits had increased.
- Enhanced reputation, derived from involvement on a government funded competition, was the most cited benefit of engagement.
- To maximise the financial benefits derived from engagement with the HDSTC, seven of the 15 providers reported hiring new trainers with enhanced skills, or investing in enhancing the skills of existing trainers.
- Providers are recognising the potential market for this type of training and are positioning themselves to benefit from any longer-term demand for similar courses.

5.1 Commercial benefits for training providers

Increases in revenue and profits

Four providers quantified positive effects on revenues and profits. One reported an increased income of £250,000 and a profit margin increase of approximately 20%, directly because of the competition. A further three providers reported additional fees beyond the HDSTC of between £20,000 and £100,000, with much of this increase coming from employers returning to request training for other staff members. Five providers hoped the HDSTC would be a catalyst for future market interest and engagement with the provider, whether this be for further training, renewal courses or other services (such as registering for MCS accreditation to install with the organisation etc.).

Enhanced reputation

The most acknowledged business benefit attributed to the competition (acknowledged by ten of the 15 interviewed providers), was the increased market awareness and enhanced reputation that came with being involved in a government scheme; involvement was felt to provide reassurance of quality, increasing customer enquiries:

'Since our involvement with Phase One of the competition, we have seen an increase in the number of customers inquiring about our Level 2 and Level 3 heat pump installation provision…several employers and individuals have referenced [our involvement in HDSTC] during conversations'. - Training Provider

5.2 Impact of HDSTC engagement on trainers

Seven of the providers interviewed for the evaluation reported hiring new trainers, or investing in enhancing the skills of existing trainers, to increase internal resource in response to course demand. Initially recruited on short-term contracts, covering the duration of the competition, four providers have extended the contracts of new trainers, reflecting their confidence in the future trajectory of the market. Whilst a lack of skilled trainers was not generally acknowledged as an issue by training providers, two did

report that certain training centres did not have the number of trainers needed to deliver the courses they promised at application, meaning that they did not meet enrolment targets.

Where providers had invested in developing the skills of their existing trainers, this was in response to changes in accreditation requirements or reflected the need for trainers to familiarise themselves with new technologies and installation requirements:

'By enhancing the knowledge and skills of my trainers, so that they can confidently demonstrate the installation of different technologies, I have future proofed my business and positioned it to benefit from future market demand for this training.' – Training Provider

Case Study Four: Confidence in the market

Training provider D felt the HDSTC had served as a 'barometer' for the likely market potential in this area. Engagement with the competition allowed their organisation to deliver a suite of training courses at low cost and low risk. Offering HDSTC courses resulted in an immediate financial boost, through rapid take up of their retrofit assessor qualification. It has also allowed them to explore likely future interest in these courses among their customer base:

'We have been able to engage with a larger number of our existing clients within a shorter than usual time frame. In discussions with employers, they have told us how subsidised provision has brought forward their training in retrofit assessment and allowed them to 'fund' more staff to complete it. This has resulted in more enrolments and income for us and provided an opportunity to promote our wider training portfolio to our clients'.

In addition, their HDSTC experience has prompted the business to conduct their own market research to try and determine the potential market for these courses in the future:

'Government policy documentation has talked about the need for more installation and assessor skills in the supply chain and for a significant increase in the installation of low carbon measures; we need to try and understand how this 'vision for change' may translate into long-term and sustainable market demand.'

6 HDSTC Value for Money assessment

Summary of key findings

- The available evidence suggests that the HDSTC has provided cumulative benefits exceeding the costs associated with delivering it.
- Amongst the sample interviewed in this evaluation, there was recognition of a range of trainee and organisational benefits, including:
  - Jobs created and safeguarded, with commensurate GVA benefits.
  - Improved workforce productivity; with employers reporting work being completed quicker/to a higher standard and reduced costs on projects.
  - Business performance improvements; including increased numbers of contracts, increased turnover, reduced costs, and improved profit margin. Training providers also reported both reputational and commercial benefits from being involved in the HDSTC.
  - Decarbonisation benefits; the programme's contribution to decarbonisation and improved energy efficiency through increased numbers of firms working on relevant schemes and projects.
- Even assuming some level of deadweight, if these are monetised and extrapolated to the participant population, and if the persistence of certain benefits is taken into account, it seems reasonable to conclude that.

6.1 Context

Based on trainee survey response numbers and decision not to weight the data, the VfM comprises an overview of the costs and types of benefits delivered by the HDSTC to date, and benefits that may arise in future. This provides a more qualitative view of the value of the Competition.

6.2 Summary of HDSTC delivery costs

All benefits and the associated impacts should be considered against the following costs, confirmed with MNZH.

Table 16: Costs by Work Package

Work Package	Amount
Work package 1 - Retrofit assessors and coordinators	£932,715
Work package 2 - Insulation installation	£2,295,914
Work package 3 - Heat pumps	£3,946,102
HDSTC administration costs for MNZH	Approx. £800,000
TOTAL	**£7,974,730**

6.3 Summary of beneficial outcomes

The following section lists the beneficial outcomes that were assessed qualitatively based on evidence collected through the trainee survey, qualitative interviews with employers and training providers, and the analysis of HDSTC learner logs.

Across the three WPs, 7,940 unique trainees completed 8,605[28] courses through the HDSTC. This would equate to a cost of approximately £927 per course completed.

As noted in Section 4, the evaluation trainee survey included a 'routing' question to ascertain whether respondents felt confident enough to provide accurate information on organisation-level benefits[29]. In total, 257 survey respondents felt they could provide a view on these.

- **Jobs**; a total of 19 of these 257 trainee respondents reported that their company created new jobs as a result of the training delivered through the programme, whilst 55 reported that their firm had safeguarded jobs[30]. Interviews with 17 employers found that an even higher proportion of them reported job creation and job safeguarding benefits from the training received by their staff. This may indicate that trainees' views represent an underestimate of the impact of the competition on employment[31]. Taken together, the evidence suggests that alongside safeguarding jobs, new employment was also generated. Of the 23 trainee survey respondents who were unemployed at the point they accessed training, 11 reported having subsequently accessed employment because of the training[32].

  A modest level of GVA[33] benefits would be associated to each FTE safeguarded by the programme. An additional benefit would also be associated with unemployed trainees that have accessed employment because of the intervention. In addition, the benefit associated with jobs created and safeguarded would be significantly greater if employment benefits were to persist beyond a single year over a longer period.

- **Workforce productivity**; where individuals have accessed higher levels of qualifications due to the training received, lifetime productivity benefits are also likely to be generated. Six of 17 employer interviewees reported work being completed quicker/to a higher standard and four reported reducing costs on projects due to the training received by their staff.

- **Business performance improvements**: as described in Section 4 of the report, almost a third of the 27 trainee survey respondents – and most of the 17 employers - reported some form of business improvement, including one or more of the following[34]: increased numbers of contracts, increased turnover, reduced costs, and improved profit margin. Around a fifth of trainee survey respondents were planning to work on government retrofit / decarbonisation schemes after the training, moving more into the retrofit sector.

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[28] 1,470 in WP1; 1,642 in WP2; 5,493 in WP3 total course completions (multiple completions are possible for an individual trainee)..

[29] This was reliant on self-reported roles and knowledge, and it is possible that some trainees overestimated their knowledge and struggled with some subsequent questions on business benefits.

[30] Though some trainee survey respondents are employers / business owners.

[31] The evaluation trainee survey included a 'routing' question to ascertain whether the respondent felt confident enough to provide accurate information on organisation-level benefits. Therefore, ostensibly only those that felt able to answer these questions, though some may have been unaware of specific business benefits or decisions, or not in a position to create new roles (e.g. sole traders).

[32] It is possible that the person entering employment has displaced another unemployed person from entering employment. However, given that employment will require the specialist skills learned through the training provided by this programme, the potential for such displacement was considered to be low.

[33] Gross Value Added

[34] This has the potential to deliver significant economic benefits. However, it was often difficult to capture reliable business level data around turnover and profitability. In addition to small sample sizes, many of the responses to the survey provided limited or incomplete data and where uplifts were quantified, there was typically no baseline position to compare to.

As well as participant businesses, the training providers reported both reputational and commercial benefits from being involved in the HDSTC, e.g. increased awareness of their courses, a catalyst to invest in their staff / curriculum.

- **Decarbonisation benefits**; clearly a major benefit will be the programme's contribution to decarbonisation and improved energy efficiency. It is not possible to estimate this through the surveys, as this will require a view on training capacity within the sector and the extent to which this is constraining the roll-out of decarbonisation investments.

To better capture data on benefits – particularly around business performance - in the future, it is recommended that:

- Participant businesses are asked to provide data on headline business characteristics when applying for training (e.g. turnover, number of employees, etc.). These can be provided as bands to avoid sensitivity over sharing data.
- To enable a QEA assessment, the HDSTC team / providers could also capture company information on sign up (e.g. company registration number) and permission to link to external data.
- Participant surveys can then ask questions which can draw on this baseline data.
- Post-training it may also be appropriate to undertake follow-on engagement with businesses in addition to participants to capture more reliable business level data.

6.4 Conclusions on VfM

As noted in the previous sections, there are limitations around (a) the numbers and profile of participant businesses with whom benefits were discussed; (b) the extent to which respondents were able to quantify any benefits.

Amongst the sample interviewed in this evaluation, there was recognition of a range of trainee and organisational benefits, including:

- Jobs created and safeguarded, with commensurate GVA benefits.
- Improved workforce productivity; with employers reporting work being completed quicker/to a higher standard and reduced costs on projects.
- Business performance improvements; including increased numbers of contracts, increased turnover, reduced costs, and improved profit margin. Training providers also reported both reputational and commercial benefits from being involved in the HDSTC.

Decarbonisation benefits; the programme's contribution to decarbonisation and improved energy efficiency through increased numbers of firms working on relevant schemes and projects.Based on the evidence collected through this evaluation, it is reasonable to conclude that the HDSTC generated a wide range of trainee and organisational benefits. Albeit qualitative, these benefits are similar in type and

scale to those reported in the evaluation of the Green Homes Grant Skills Training Competition[35] (GHGSTC), a previous iteration of the HDSTC.

[35] A qualitative evaluation of the Green Homes Grant Skills Training Competition was conducted in 2022 and can be found here: https://www.midlandsnetzerohub.co.uk/hub-news/evaluation-of-green-homes-grant-skills-training-competition-reveals-92-course-satisfaction/

A.1. Appendix 1: detail on evaluation methodology

This appendix provides further detail on the methodology utilised for the evaluation, covering the originally proposed approach (and rationale for that), challenges encountered (particularly around trainee contact data provision), the approaches used to mitigate those challenges, and the effects of those.

Evaluation objectives and overarching method

The overarching aim of the evaluation was to understand the outcomes of the HDSTC (especially around enhancing the supply chain), and the effectiveness (and cost effectiveness) of delivery. The full set of Evaluation Questions (EQs), agreed with Midlands Net Zero Hub (MNZH) and Department for Energy Security and Net Zero (DESNZ), are set out in the table below, organised by process, impact and economic categories:

Process Evaluation	
1.1	How effectively was the competition promoted (in terms of achieving the anticipated volume and range of provider interest)?
1.2	How well did the application stage work for (a) participant training providers, in terms of the type and amount of information required, and the timescales for preparing and submitting an application; (b) the programme team, in ensuring optimal providers and courses.
1.3	How well has the ongoing programme monitoring worked for (a) participant training providers and trainees, in terms of the type and amount of information required; (b) the programme team, in providing sufficiently detailed and clear view on individual course - and overall competition – progress?
1.4	How did providers engage and recruit trainees? What were the most effective approaches in terms of methods and messaging?
1.5	What were provider experiences of designing and delivering the training? What worked and what didn't? What challenges were encountered and how (if at all) were these addressed?
1.6	How satisfied are trainees with the design and delivery of the training? And why?
1.7	Overall what lessons for the future are there for (a) training providers; in terms of training recruitment, design, and delivery; (b) the programme team, in terms of the design and delivery of future targeted support and other interventions, in particular the timescales for competition delivery and completion of training?
Outcome and Impact Evaluation	

2.1	To what extent did actual numbers on recruitment and delivery of qualifications match original expectations / targets for: (a) energy efficiency measure installation; (b) heat pump installation; (c) retrofit coordination / assessment? If not, why not?
2.2	To what extent, and how, has the programme increased the capacity of the workforce - and addressed skills gaps - by upskilling, educating, and certifying more installers and retrofit professionals?
2.3	To what extent has the programme provided a platform for installers and retrofit professionals to deliver more retrofit work, and in particular work on current Government schemes e.g. the Great British Insulation Scheme or Social Housing Decarbonisation Fund?
2.4	To what extent did the programme address barriers to training participation and delivery?
2.5	To what extent has the programme given training providers confidence to deliver this type of training in future i.e. by demonstrating demand for courses and supporting set up?
2.6	To what extent has the competition addressed regional imbalances in a) training provision and b) the supply of retrofit skills?
2.7	To what extent has the competition supported a diverse profile of trainees, particularly new entrants to the decarbonisation / retrofit market?
2.8	To what extent are the observed impacts and outcomes attributable to the competition, and how? What would have happened in its absence?
Value for Money Assessment	
3.1	What economic benefits have been achieved by the Skills Training Competition?
3.2	Have there been differences between the different courses in terms of the costs and benefits achieved?
3.3	What was the average cost of the training provided through the competition?
3.4	Did the competition represent good value for money? In particular, a) whether the competition resulted in an efficient use of resources? b) whether the competition was effective in meeting its intended objectives?

The evaluation methodology was designed to address these questions, collecting and then synthesising data from the multiple primary and secondary research elements[36].

Primary – interviews with:	Secondary – review and analysis of:
• Representatives of DESNZ and the MNZH programme team • HDSTC-funded training providers • A sample of trainees attending HDSTC-funded courses • A sample of employers utilising HDSTC-funded courses	• MNZH data on overall and per provider trainee numbers. • MNZH monitoring data tracking training provider delivery and issues. • Analysis of responses to a short satisfaction survey circulated to trainees by MNZH immediately following the completion of training.

The following sections describe each primary research element in turn – the originally intended approach and evaluation questions explored, any changes to that, and any resultant effects on the reporting of findings.

The final section provides further detail on the calculations used in the VfM assessment approach.

Interviews with DESNZ and the HDSTC programme team within MNZH

Several qualitative interviews were conducted with (a) MNZH representatives that were involved in the design and / or delivery of the HDSTC (b) a representative of a relevant policy team within DESNZ. These interviews explored representative's perspectives on:

- The effectiveness of HDSTC promotion, application stage and the resultant profile of funded training providers and courses.
- The delivery of funded courses and the extent to which, at the time of interview, the HDSTC was delivering against its intended outcomes.
- Overall HDSTC value for money, and any ways in which the HDSTC design and / or process could be improved.

Interviews with HDSTC-funded training providers

Fifteen qualitative interviews were conducted with representatives of training providers funded through the HDSTC; these explored the following:

- Provider motivations for applying to the HDSTC and to what extent they would have delivered the funded course(s) in its absence.

[36] This was not a theory-based evaluation, though obviously underpinned by an understanding of how the HDSTC was designed and the outcomes it was anticipated to deliver.

- Experiences of applying to the HDSTC and meeting the ongoing monitoring / reporting requirements.
- Experiences of designing, promoting and delivering the funded course(s), including any potential areas for improvement.
- Provider awareness of the benefits arising from the HDSTC (a) to their own organisation; (b) to those organisations receiving training; (c) to the wider supply chain.
- Provider plans for future training provision and perceptions of priority decarbonisation subject areas.

The original intention was to interview all 19 providers that successfully applied to the HDSTC. However, one provider dropped out of the competition early on (before any training was delivered), so was not deemed appropriate for interview. The remaining three did not respond to repeated approaches to participate. It is suggested that payment of a portion of future per provider HDSTC funding could be made contingent upon their participation in subsequent evaluation activity.

All training provider interviews were conducted on Microsoft Teams and averaged 53 minutes in length.

Survey of trainees attending HDSTC-funded courses

The short MNZH survey circulated to trainees immediately following provision of the training provided some robust data around immediate satisfaction with the courses. Follow up surveys were included as part of the evaluation to further explore certain aspects of the process, and outcomes after the training.

Original proposal: two-stage survey sampling from a full database of trainees

At the outset of the evaluation, it was understood that a full trainee database would be provided, comprising all those that attended HDSTC-funded training. Using this, it was proposed that a two-stage survey would be conducted:

- Wave 1 would comprise 600 interviews with a sample of trainees representative of distribution across the three work packages. The interviews would largely inform the process evaluation through gathering feedback on the implementation and delivery of the scheme.
- Wave 2 would comprise follow-up interviews with 400 Wave 1 respondents (assuming some drop out) largely inform the outcome / impact evaluation through gathering data on any difference the scheme has made to the skills and capabilities of those who have undertaken training.

All interviews would be conducted by telephone[37] and the sample sizes were set to ensure a good confidence level for whole-sample findings around satisfaction and outcomes.

Challenges with timescales and moving to a single wave

The evaluation began later than intended. In addition, discussion and negotiation on data sharing meant the intended window for the Wave 1 survey had to be pushed back and – based upon the planned evaluation completion date - close to the intended start of the Wave 2 survey window. As the latter

[37] Recognising that some respondents were unlikely to be available during typical working hours, a number of recruitment calls and interviews were conducted in the evening (post-5pm).

survey was intended to be a follow up of Wave 1 respondents, this proximity was an issue for Wave 2 survey response rates due to likely respondent survey fatigue.

In light of the delays, it was agreed that instead of two trainee telephone survey waves exploring different evaluation questions, there would be one, slightly longer telephone survey (15-20 minutes, depending on responses and routing) covering all relevant EQs. This survey would aim for 800 interviews.

The sampling plan also sought to ensure at least a minimum level of representation across training providers; the original plan was as follows:

Provider	Total unique trainees completing a course	Suggested interview number	Interviews Conducted
CB Heating	185	20	4
DMR Training and Consultancy	121	10	11
Elmhurst Energy	1,117	150	151
Essex County Council	61	5	0
Farnborough College	99	10	8
GTEC	573	40	5
HeatGeek Ltd	930	50	46
ISO Energy	173	20	0
Net Zero training	33	5	0
North West Skills Academy	374	100	0
Oil Firing Technical Assoc	728	50	1
Optimum Energy	1072	50	20
Options Skills	441	30	30
Provincial Seals	25	5	0
Retrofit Academy	989	140	140

The BESA Academy	307	10	10
The Insulation Assurance Authority Commercial Services	478	75	19
Think Construction Skills	234	30	2
TOTAL	**7,940**	**800**	**447**

Challenges with trainee data sharing and alternative recruitment and survey approaches

Whilst it had been originally envisaged that all trainees could be contacted for evaluation purposes, this was found not to be the case. Trainee databases could be shared by MNZH to enable analysis of trainee population numbers / numbers per work package etc. However, permissions to contact / necessary data sharing agreements between MNZH and training providers were only in place for three providers; these comprised only 1,018 contacts, most of whom were WP1 trainees.

Progressing with a trainee survey using only those contacts would have meant that (a) achieving the intended 800 interviews would, even with an incentive, be very challenging (requiring a >50% response rate); (b) those interviews would greatly over-represent WP1 trainees.

In terms of sampling, it was agreed that there would therefore be two approaches to respondent recruitment:

1. The originally intended direct contact and recruitment of trainees across the three databases for which there were permissions to contact.

2. A request to all other training providers to circulate emails to their trainees[38], asking them to fill out a short form to 'opt in' to being contacted by the evaluators. Any trainees completing that form could be added to the database and directly contacted.

These combined approaches achieved a total of 340 interviews, though as per above, the majority were with WP1 trainees and after several weeks of fieldwork, to attempt to rebalance the sample of interviews, WP1 trainees were no longer recruited.

The telephone survey ran between 26th February and 4th June, and interviews averaged 17.5 minutes in length.

Acknowledging that WP2 trainees were under-represented in the available sample, and therefore interview numbers, a further request was made of training providers to circulate to their trainees a link to an online version of the survey.

[38] These could not be sent directly as there were no permissions in place for the evaluators to contact. Invitations were ultimately sent to over 6,000 trainees.

The online survey was conducted between 17th June and 27th June, and this further recruitment effort achieved a further 107 survey completions, bringing total responses to 447.

However, the vast majority of the online completions were from trainees of one WP1 course provider[39], exacerbating the disparities in the telephone survey and not significantly boosting the WP2 sample. The final interview breakdowns – across work package and training provider - were as follows:

Work Package	Number of completions	Completion Mode		
		Database	Online	Opt-in
Work package 1 – Retrofit assessors and coordinators	309	140	102	67
Work package 2 - Insulation installation	14	11	1	2
Work package 3 - Heat pumps	124	8	4	112
Total	**447**	**159**	**107**	**181**

Training Provider	Number of completions	Mode of Completion		
		Database	Online	Opt-in
CB Heating	4			4
DMR Training and Consultancy	11	11		
Elmhurst Energy	151		102	49
Essex County Council	0			
Farnborough College	8	8		
GTEC	5			5
Heat Geek	46		2	44
ISO Energy	0			
Net Zero Training	0			
North West Skills Academy Ltd	0			
Oil Firing Technical Association Limited	1			1
Optimum Energy	20		2	18
Option Skills	30			30
Provincial Seals	0			
Retrofit Academy	140	140		
The BESA Academy	10			10
The Insulation Assurance Authority Commercial Services	19			19
Think Construction Skills	2		1	1
Total	**447**	**159**	**107**	**181**

[39] This was an accepted risk of the opt in and online survey approaches, in that WP1 trainees were more likely to spend a greater proportion of working time desk-based, where they would more readily pick up and respond to requests. The converse was true of WP2 respondents (especially trainees who were employees rather than running their own business), who may be spending most, if not all, of their working day on site / away from desks, and not picking up or responding to approaches.

Weighting and analysis

Assuming provision of a database of all HDSTC Phase 1 trainees, and therefore a survey of 800 across all providers, the intention was to conduct analysis of the trainee survey respondent dataset as follows:

- For each training provider, weighting the trainee interview numbers to their respective 'unique trainee' populations. This would correct for any under or over representation across training providers and WPs; whilst the originally suggested per provider interview numbers were broadly proportionate to the per provider populations, the intention to interview a minimum number per provider meant varying degrees to which trainee interview numbers were representative of the trainee populations for that provider.

- Calculation and presentation of frequencies / %s for the whole weighted dataset, as these would be representative of the whole trainee population.

- Crosstabulations / comparisons of WPs on certain findings, as the respondent number for each WP would allow this and again be representative of the trainee population for that WP.

However, due to the actual interview numbers obtained, and their distribution in terms of work package and training provider, the original approach was not feasible. As outlined in Section 1 of the main report, the decision was taken not to weight the trainee survey data, as certain work packages and courses were either underrepresented or not represented at all.

As illustrated in the tables above, trainee populations for certain providers were not represented, either because no trainees of that provider had been interviewed at all, or because there were so few responses for a particular provider (<5) that it was not deemed appropriate to weight them as if they could be considered representative of the trainee population for that provider. Linked to this, there were large disparities in responses by work package. These limitations meant that:

- Because the trainee survey respondents were only representative of a portion of the total trainee population, and that portion was not reflective of the trainee population overall, findings / %s for the 'whole trainee population' are limited in the report; most analysis is presented by WP.

- It was not sensible to present much if any comparison between WPs, especially any comparison to WP2. Findings were presented for each WP separately.

Employer interviews

The evaluation design included a limited number of semi-structured telephone interviews with representatives of organisations that utilised the HDSTC-funded training. Respondents were individuals with overarching responsibility for organising attendance to the training, whether or not they attended this themselves.

The intention of the conversations was to provide further insight into the organisational benefits derived from the HDSTC-funded training, and the importance of this being subsidised. It was anticipated that some conversations could form the basis of case studies of benefits.

The original intention was to conduct 30 interviews. As providers could not share details of lead contacts at businesses with whom training had been arranged, this necessitated a lengthier process of contacting general numbers to identify the most appropriate contact. Overall, 17 interviews were conducted with employer representatives (via both Teams and telephone), averaging 37 minutes in length.

Value for money assessment

The original intention was to capture and monetise trainee and employer benefits arising from the training (identified through the trainee survey and employer interviews), setting these against the costs of delivering the HDSTC to generate a VfM assessment. There were two key challenges to this intended approach:

- Low response numbers in the trainee survey amongst certain providers and work packages, and limited time since the completion of the HDSTC training, meant that many respondents were not able to say with confidence whether certain benefits had been / would be realised. Even those that could were often unable to accurately quantify such benefits.
- Linked to this, as the trainee survey responses could not be meaningfully weighted, no extrapolation of quantified impacts mentioned in interviews was possible. Taking only unweighted impacts quoted by specific respondents would mean an unrepresentatively small total benefit and a skewed VfM calculation.

On this basis, the decision was taken to replace the VfM calculation with an overview of the costs and types of benefits delivered by the HDSTC to date, and benefits that may arise in future. This provides a more qualitative view of the value of the Competition.


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