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eCargo Bike Grant Fund 2021/22 National scheme evaluation

November 2022

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Executive summary

eCargo Bike Grant Fund national scheme, funded by the Department of Transport and administered by Energy Saving Trust, offered funding to organisations based in England to procure ecargo bikes. The scheme was first launched in 2019/20, when £166,615.19 funding was provided to 109 organisations to procure a total of 228 ecargo bikes. In 2021/22, eCargo Bike Grant Fund was relaunched with a total funding of £700,000 being made available. The funding covered up to 40% of the total cost of an ecargo bike, up to a maximum of £2,500 for two-wheel models and £4,500 for three-wheel models. Applicants were able to apply for funding for up to five bikes per organisation and were also able to submit joint 'high-street' applications[1] for shared ecargo bikes. When the scheme finished claims processing in May 2022, £429,140 had been allocated to 103 organisations to purchase 197 ecargo bikes.

Following the 2021/22 scheme closure in April 2022, an independent evaluation unit of Energy Saving Trust undertook an evaluation of the scheme. The evaluation covered process evaluation, by eliciting feedback from the scheme applicants and identify areas of the scheme that could be improved.

To meet the evaluation objectives, an analysis of 2021/22 eCargo Bike Grant Fund applicants was undertaken, including the organisation type, sector and location, the types of ecargo bikes applied for and the proposed use cases. An online survey was administered to the 2021/22 grant recipients to collect feedback on the scheme. A total of 45 responses were received, corresponding to a response rate of 44% (45 of 103 organisations funded in 2021/22).

In addition, to understand how the funded ecargo bikes were being used, and the resultant behavioural change and carbon savings, a follow-up survey was also administered to 2019/20 grant recipients to elicit information on the actual usage of ecargo bikes and types of internal combustion engine (ICE) vehicles displaced. The survey was distributed in January 2022 and received 43 responses, corresponding to a response rate of 39% (43 of 109 organisations funded in 2019/20).

The key findings from this evaluation were:

- Most of the organisations supported by eCargo Bike Grant Fund 2021/22 national scheme are micro-size (69%), based in London (43%) or the South (33%). The funded organisations operate in diverse sectors, including catering and accommodation (21%), transport and distribution (17% and personal business services (16%).

[1] Multiple organisations submitting one application for shared ecargo bikes

- According to the survey respondents,[2] the most common reasons for procuring ecargo bikes were to reduce the environmental impact of their business (67%) and the suitability of ecargo bikes for their business purpose (61%). The ecargo bikes were mostly used for deliveries to their customers (61%), transporting work related equipment or tools (44%) and work travel (including staff pool bikes, 20%).

- 55% of respondents reported they would not have been able to purchase their ecargo bikes in the absence of the grant.[3] For other respondents, even though they claimed they would have purchased their ecargo bikes in the absence of the grant, they said the grant enabled them to purchase sooner, more than planned, or higher spec ecargo bikes.

- Based on the tracked mileage data provided by 2019/20 grant recipients, the average mileage travelled by the ecargo bikes was 2,656 miles per bike per year. Combined with their self-reported information on the types and mileage of ICE vehicles that the ecargo bikes displaced, the estimated carbon savings was 401 kgCO_2e per bike per year.[4]

- Feedback from 2019/20 grant recipients on their ecargo bikes was generally positive, with most of the survey respondents said they find riding an ecargo bike easy (82%) and safe (86%). 91% of the respondents also reported benefits from using ecargo bikes (including health benefits, quicker journeys, cheaper running cost and good attention for their business) and 19% said they had purchased additional ecargo bikes since eCargo Bike Grant Fund 2019/20 national scheme.

- Feedback from 2021/22 grant recipients on the eCargo Bike Grant Fund 2020/21 national scheme was generally positive with 98% of the survey respondents said they were either satisfied or very satisfied with the scheme. The scheme has a Net Promoter Score (NPS)[5] of 82, which is considered to be world class.

Findings from this evaluation, in particular the average annual carbon saving per ecargo bike, need to be considered within the limitations of this study, as outlined in Section 1.3.

[2] Combined responses from 2019/20 and 2021/22 grant recipients
[3] The percentage was calculated based on the combined responses from 2019/20 and 2021/22 grant recipients
[4] Using the UK Government greenhouse gas (GHG) reporting conversion factors. See Appendix C for carbon savings calculation method.
[5] Net Promoter Score (NPS) is a customer satisfaction benchmark that measures how likely customers are to recommend a product or service to others. See Appendix D for further information on NPS and how it is calculated.

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Contents

1. Introduction

The eCargo Bike Grant Fund was a grant scheme funded by the Department for Transport (DfT) and administered by Energy Saving Trust for the acquisition of ecargo bikes to support businesses switching to a sustainable transport solution. There are two elements to the grant: the national scheme and the local authority (LA) scheme. The national scheme provided funding to private organisations to cover part of the cost of ecargo bikes, whilst the LA scheme provided funding to LAs to cover up to 100% of the cost of ecargo bikes they purchased for their areas. This report presents the evaluation of the national scheme. A separate evaluation report is produced for the LA scheme.

When the national scheme was first launched in 2019/20, 109 organisations received £166,615.19 funding to procure a total of 228 ecargo bikes. In 2021/22, eCargo Bike Grant Fund was relaunched with total funding of £400,000 available for organisations based in England to purchase ecargo bikes. In October 2021, an additional £300,000 was made available due to the scheme being oversubscribed. The funding covered up to 40% of the total cost of an ecargo bike, up to a maximum of £2,500 for two-wheel models and £4,500 for three-wheel models. Applicants were able to opt for up to five bikes per organisation and were also able to submit joint 'high-street' applications for shared ecargo bikes. When the scheme closed at the end of May 2022, 103 organisations received funding to procure 197 ecargo bikes.

1.1. Objectives

The main objectives of this evaluation are:

- to analyse the locations and types of organisations funded in 2021/22, the types of ecargo bikes funded and their proposed use cases
- to generate insights on the motivations for obtaining ecargo bikes, influence of the grant on decision to purchase ecargo bikes, the resultant behavioural change, petrol/ diesel miles displaced and carbon savings
- to obtain feedback on applicants' experience and satisfaction with the scheme
- to generate lessons learned for informing future schemes

1.2. Method

To achieve the evaluation objectives, information collected from 2021/22 grant application forms were reviewed and analysed, including the organisation type, sector and location, the types of ecargo bikes applied for and the proposed use cases. This analysis was completed for the whole

national scheme applicant database.

In addition, two online surveys were administered to collect further information. They were:

- An online survey of eCargo Bike Grant Fund 2021/22 recipients to collect information on their motivations for purchasing ecargo bikes, influence of the grant on their decision to purchase ecargo bikes, the planned usage of their ecargo bikes and feedback on the grant process. A copy of the survey questionnaire is presented in Appendix A. The online survey was administered on an ongoing basis as part of the grant claim process. By mid-April 2022, 45 responses were received (44% response rate).

- A follow-up survey of eCargo Bike Grant Fund 2019/20 recipients to elicit information on their actual ecargo bike usage, including mileage data, types of vehicles their ecargo bikes displace and whether they have gone on to purchase more ecargo bikes. A copy of the survey questionnaire is presented in Appendix B. The survey was distributed in January 2022 and received 43 responses (39% response rate).

1.3. Limitations

For this evaluation, the main method of data collection was online surveys of 2021/22 and 2019/20 ecargo bike grant fund recipients. Whilst online surveys offered the most practical and affordable way to collecting information, we acknowledged the limitations associated with this approach:

- Despite both surveys achieving a response rate of greater than 30%, which was considered good, non-response bias could still exist, which could lead to biased results and reduced confidence in generalising the survey results to the wider population.

- Reliance on self-reported information which could be bias or inaccurate. For example, some respondents may overstate the influence of the grant on their decision to obtain the ecargo bikes or exaggerate the change in their travel behaviour as a result of the ecargo bikes.

- Carbon savings calculation also relied on respondents self-reported mileage data. For 2021/22 grant recipients, this was based on the planned usage of their ecargo bikes.[6] For 2019/20 grant recipients, the mileage data was based on their actual usage of the ecargo bikes.[7] Nevertheless, some of them were based on estimated rather than tracked

[6] At the time of the survey, 2021/22 grant recipients were unlikely to have received or would have just received their ecargo bikes.
[7] At the time of the survey, 95% of the 2019/20 respondents reported they have had their ecargo bikes for more than a year.

mileage data. Even for respondents who said their ecargo bike mileage was tracked, it was not possible to verify if the information they provided in the survey was accurate. It is also worth noting that the types of ICE vehicles displaced by the ecargo bikes were self-reported and counterfactual. Comparison and discussion of mileage data and carbon savings from different sources are provided in Section 5.

- It was not possible to attribute impact of the grant, partly due to the bias associated with self-reporting as mentioned above, but also due to other variables that come in place that would affect the impact (for example the introduction of Low Emission Zones, LEZs). Therefore, it was not possible to establish the "additionality" of the scheme, whether it only benefitted those who were already considering or in the process of purchasing ecargo bikes ("converted") or managed to convince those who were not "converted" to invest in ecargo bikes. It is worth noting that understanding additionality of a subsidy scheme is always challenging and a full evaluation may not be cost effective.

Despite the challenges above, appropriate steps were undertaken to ensure the quality and robustness of the evaluation results, including assuring anonymity of survey respondents to encourage honest answers and providing survey incentives to promote survey participants.

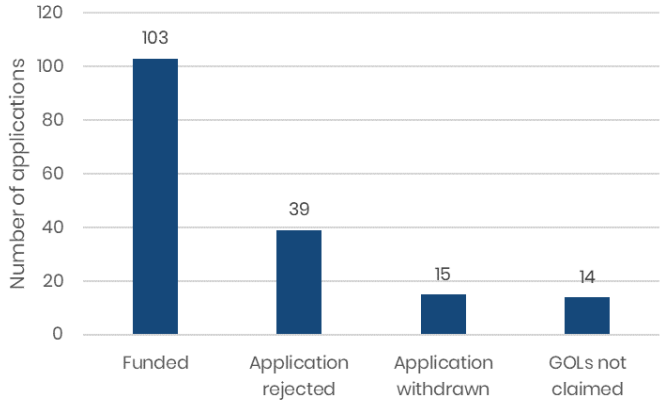
2. An overview of 2021/22 applications

To generate insights on the scheme uptake and types of organisations funded, an analysis of the applicant database was undertaken. When the scheme was closed for applications in December 2021, a total of 171 applications were received, of which only two were joint applications. 117 applications (68%) were approved and offered a Grant Offer Letter (GOL). For the remaining applications:

- 39 (21%) were rejected. In most cases, the applicants did not provide sufficient information and did not respond after queries (24). For the remaining 15, 10 applications were rejected due to the requested bike not meeting the scheme eligibility criteria; three were due to the business trading for less than 12 months; two were due to the ecargo bikes already having been purchased at the time of applying.
- 15 (9%) were withdrawn as the applicant no longer intended to purchase their ecargo bikes or claim the grant

A summary of 2021/22 application status is provided in Figure 2-1.

Figure 2-1: An overview of 2021/22 application status [N = 171]



When the scheme closed in May 2022, 103 applicants successfully claimed their GOLs (60% of the total applications), whilst the remaining 14 (8% of the total applicants), their GOLs were unclaimed for the following reasons:

- 10 did not claim before their GOLs expired
- two started claiming but did not provide sufficient information in their claim
- one did not respond to claim confirmation call
- for one claim, the bike shop did not verify their invoice

2.1. Funded organisations

Overall, eCargo Bike Grant Fund 2021/22 national scheme supported 103 organisations in procuring ecargo bikes. Most of the organisations funded were:

- limited companies (63%) or sole traders/ partnerships (25%) (Figure 2-2)
- micro- (69% less than 10 staff) or small-sized (23% less than 50 staff) (Figure 2-3)
- based in London (43%) or the South (33%) (Figure 2-4)
- operating in catering and accommodation (21%), transport and distribution (17%) or personal (16%)/ professional and business services (11%) (Figure 2-5)

Figure 2-2: Types of organisations funded [N = 103]

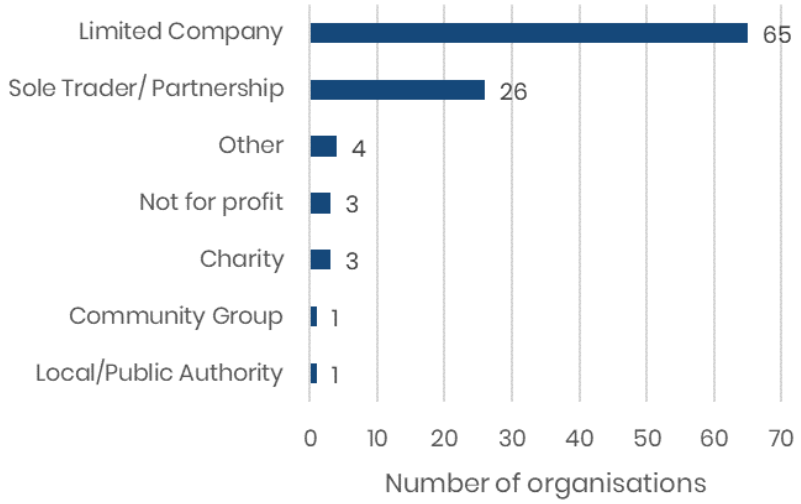


Figure 2-3: Funded organisation size [N = 103]

Figure 2-4: Geographical distribution of funded organisations [N = 103]

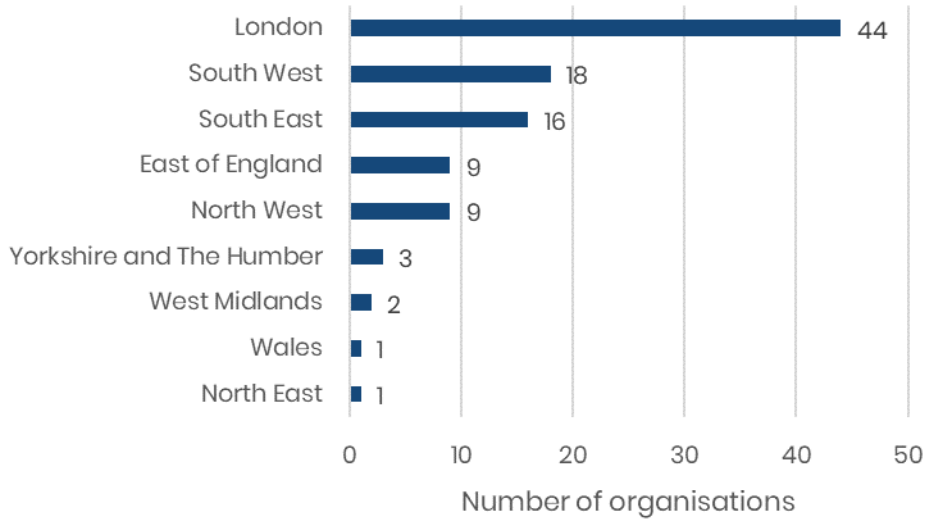
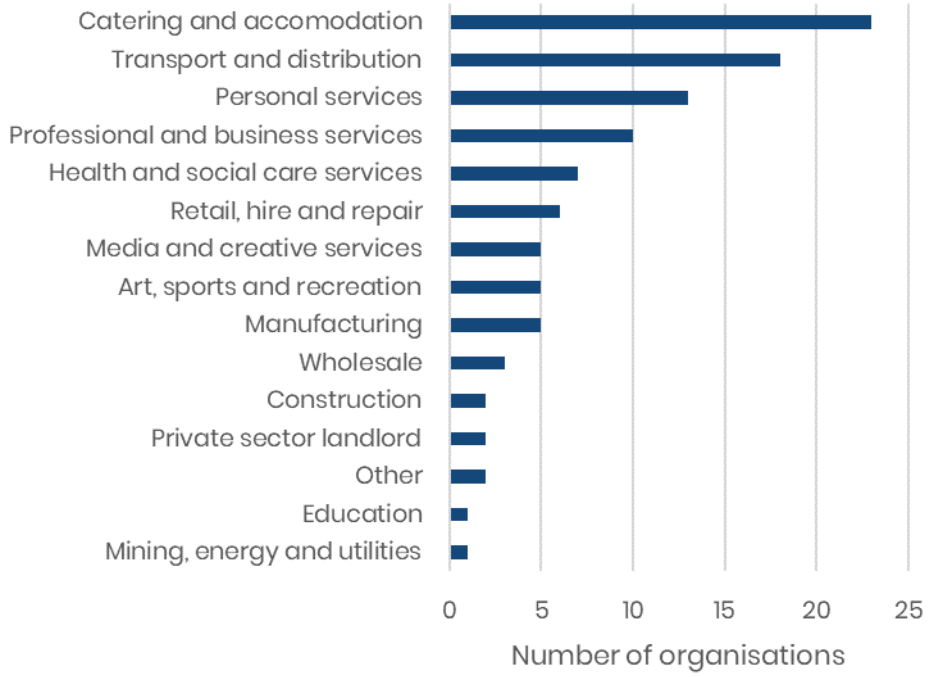


Figure 2-5: Main activities of funded organisations

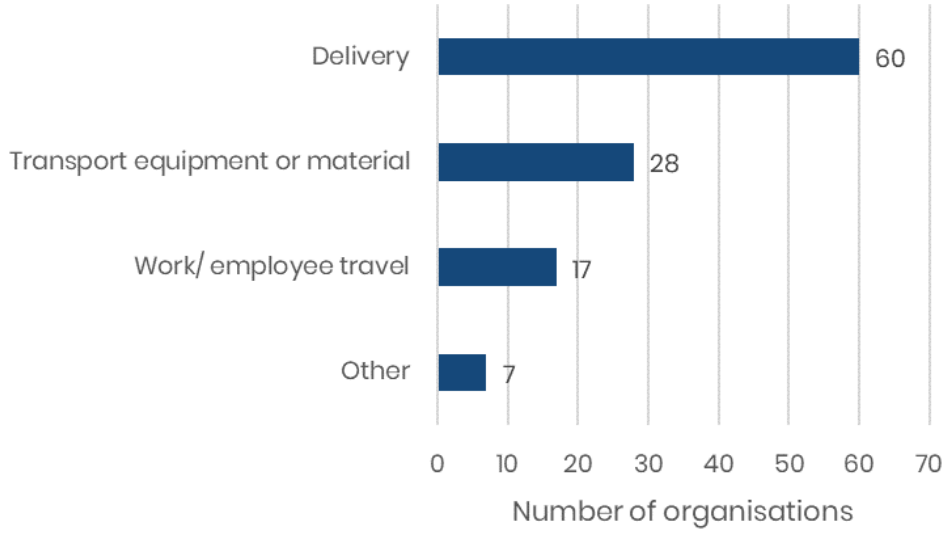


2.2. eCargo bikes funded

Across the 103 organisations funded, eCargo Bike Grant Fund supported them in procuring 197 ecargo bikes, of which around 71% were two-wheel and 29% were three-wheel model. The planned usage of the ecargo bikes is shown in Figure 2-6. Note that for some organisations, their ecargo bikes were intended for more than one type of usage. Most of the organisations planned to use their ecargo bikes for deliveries (58%), followed by transporting equipment or material

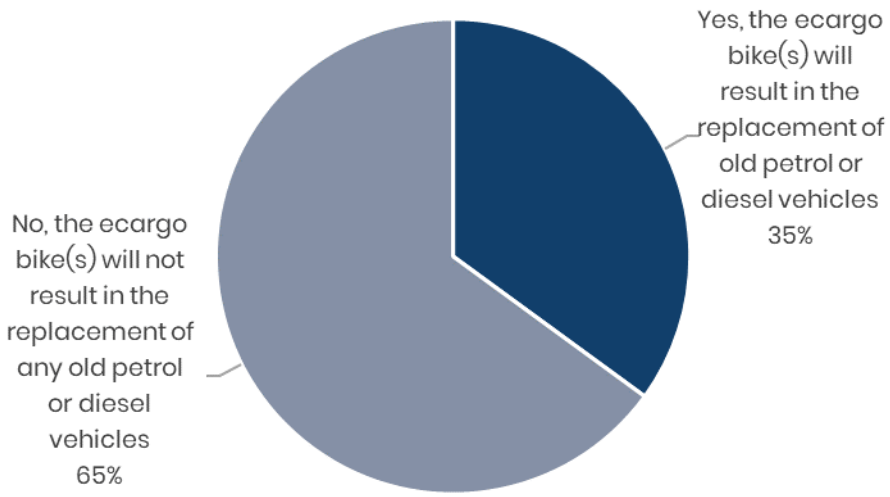
(27%) and work-related travel (17%). Other included transporting children, elderly or disabled people (3), ecargo bike demonstration, try-before-you-buy or leasing scheme (3) and for selling ice cream (1).

Figure 2-6: Planned ecargo bike use case [N = 103, coded responses, multiple responses]



Of the 103 grant recipients, 46 (45%) indicated that their ecargo bikes would replace old petrol or diesel vehicles. The ecargo bikes that these grant recipients procured corresponded to 35% of the total ecargo bikes funded (Figure 2-7).

Figure 2-7: The proportion of ecargo bikes funded that will replace old petrol or diesel vehicles [N = 197]



3. 2021/22 national scheme feedback survey

An online survey had been administered as part of the claim process to collect feedback on eCargo Bike Grant Fund 2021/22 national scheme. A copy of the survey questionnaire is presented in Appendix A. As of mid-April 2022, a total of 45 responses were received, corresponding to a response rate of 44% (45 of 103 organisations funded). Note that not all respondents answered all the survey questions, therefore the sample size (as indicated by the N number) varied by questions.

3.1. Respondents profile

Most of the respondents' organisations were:

- limited companies (51%) or sole traders (27%)
- micro-sized with less than ten employees (65%)
- operating in transport and distribution (18%), health and social care services (16%) and catering and accommodation (16%).

Comparisons of respondents' characteristics to that of the overall sample (all the funded organisations in 2021/22) are shown in Figure 3-1, Figure 3-2 and Figure 3-3. Overall, they show the characteristics of survey respondents mostly reflect that of organisations funded, except for large organisations. None of the large organisations funded responded to the survey.

Figure 3-1: Respondents' organisation types

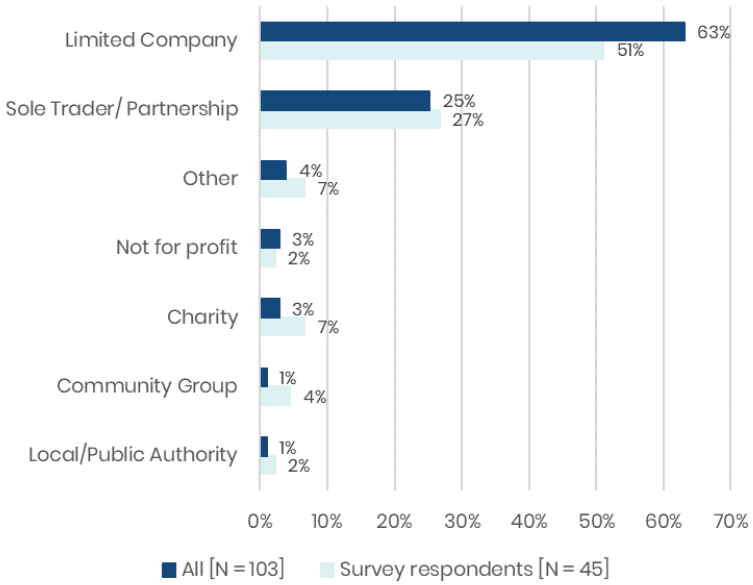


Figure 3-2: Respondents' organisation size

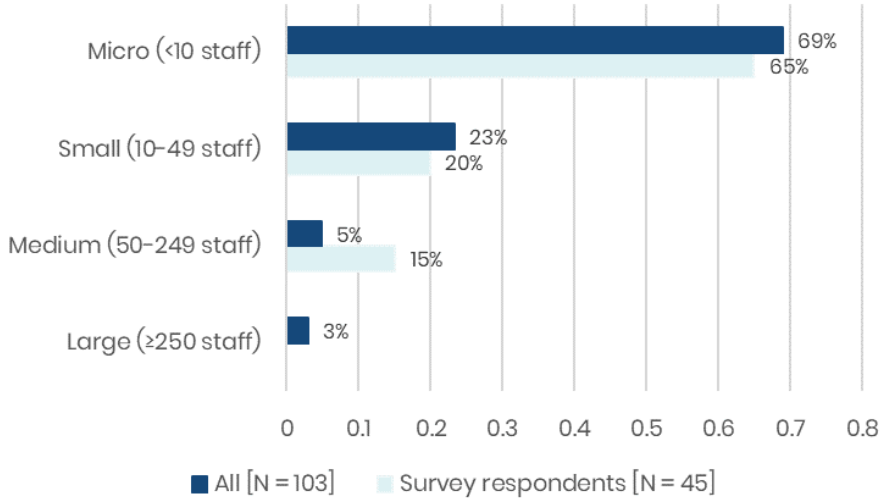
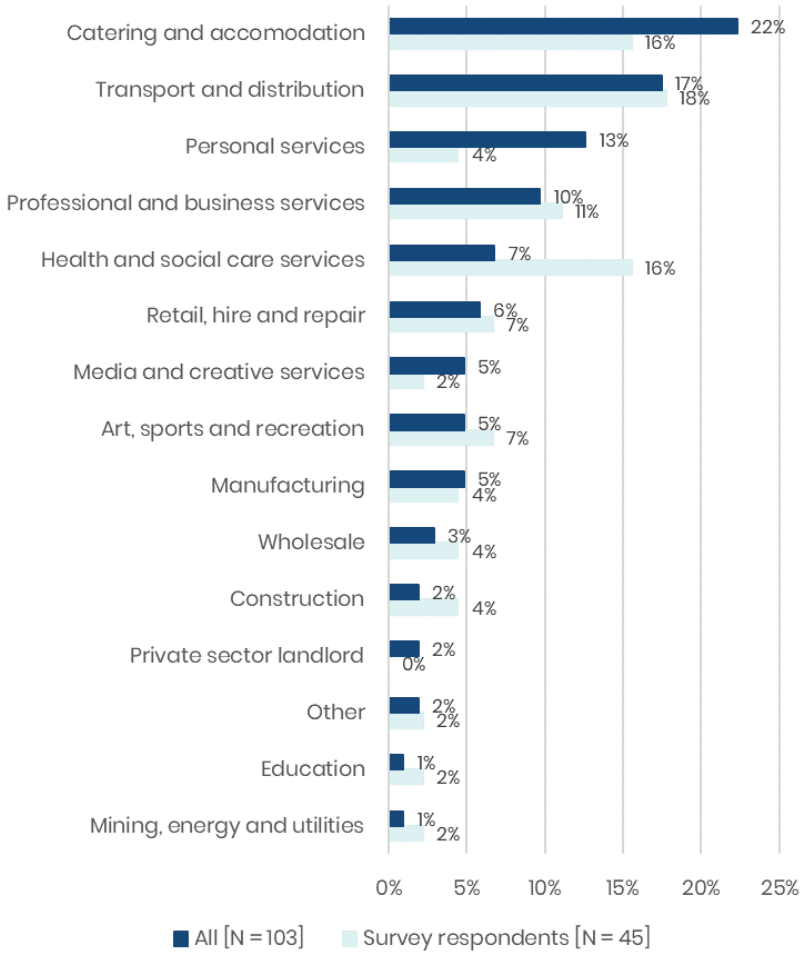


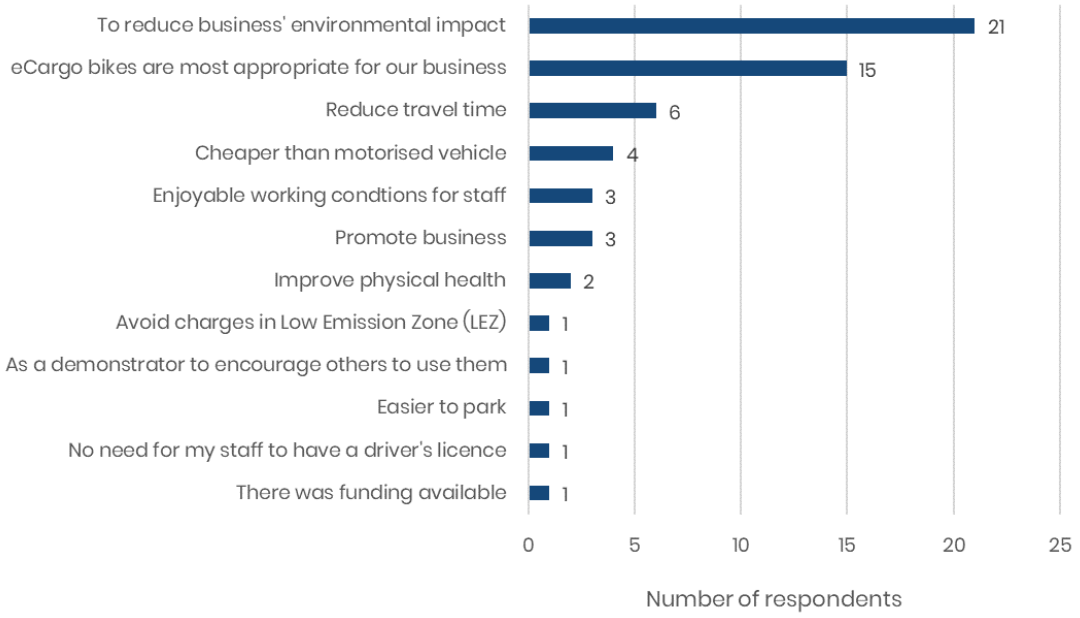
Figure 3-3: Main activities of respondents' organisations



3.2. Motivations

Respondents were asked their motivations for purchasing ecargo bikes in an open-ended question. Their responses were coded and summarised in Figure 3-4. Some respondents reported more than one motivation. Half of the respondents said they purchased ecargo bikes to reduce the environmental impact of their business, whilst for more than a third (36%), they felt ecargo bikes are the most appropriate method of travelling for their business.

Figure 3-4: Motivations for purchasing ecargo bikes [n= 42, coded responses, multiple responses]



3.3. eCargo bike funded

44 of the 45 respondents reported the number of ecargo bikes that they purchased through the grant scheme (Figure 3-5). 66% of them (66%) purchased one ecargo bike. In total, the respondents acquired 86 ecargo bikes (an average of 2 ecargo bikes per respondent).

Figure 3-5: Number of ecargo bikes purchased through the grant scheme [N = 44]

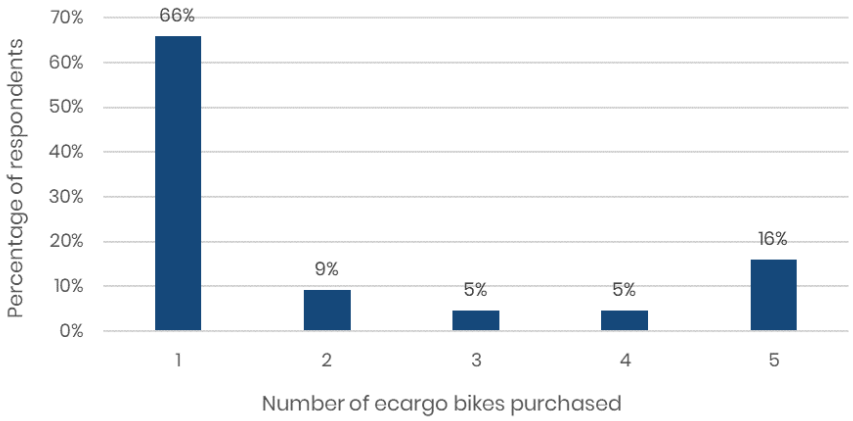
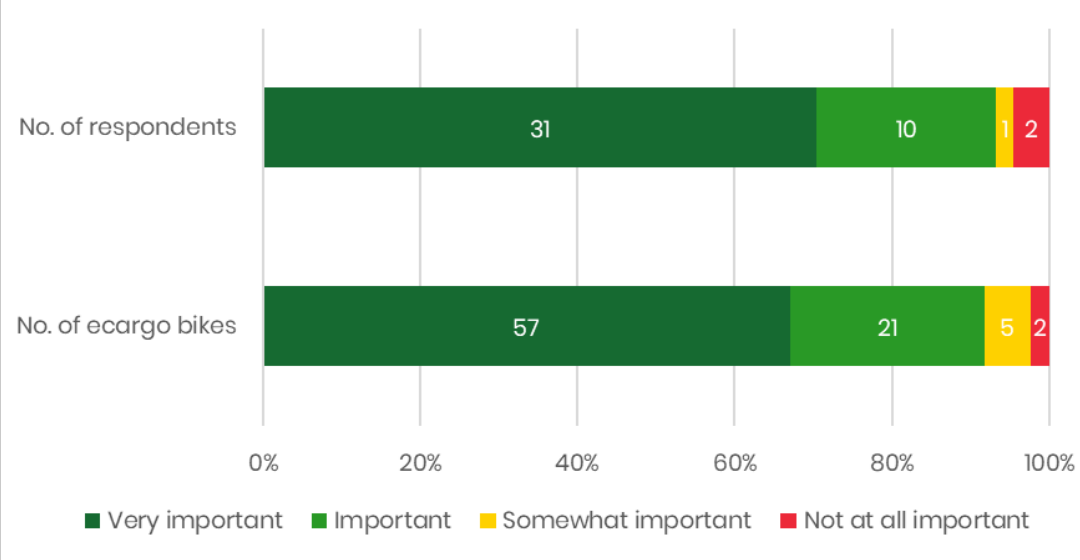


Figure 3-6 illustrates respondents' perceived importance of the grant in influencing their decision to purchase ecargo bikes. 95% of the respondents stated the grant was important in influencing their decision to purchase ecargo bikes, with 70% stated "very important". This corresponds to 98% of the ecargo bikes funded, where the fund played a role to a certain extent in influencing the purchase of these ecargo bikes.

Figure 3-6: The perceived importance of the grant in influencing respondents' decision to purchase ecargo bikes and the corresponding ecargo bikes that they purchased [N = 44]



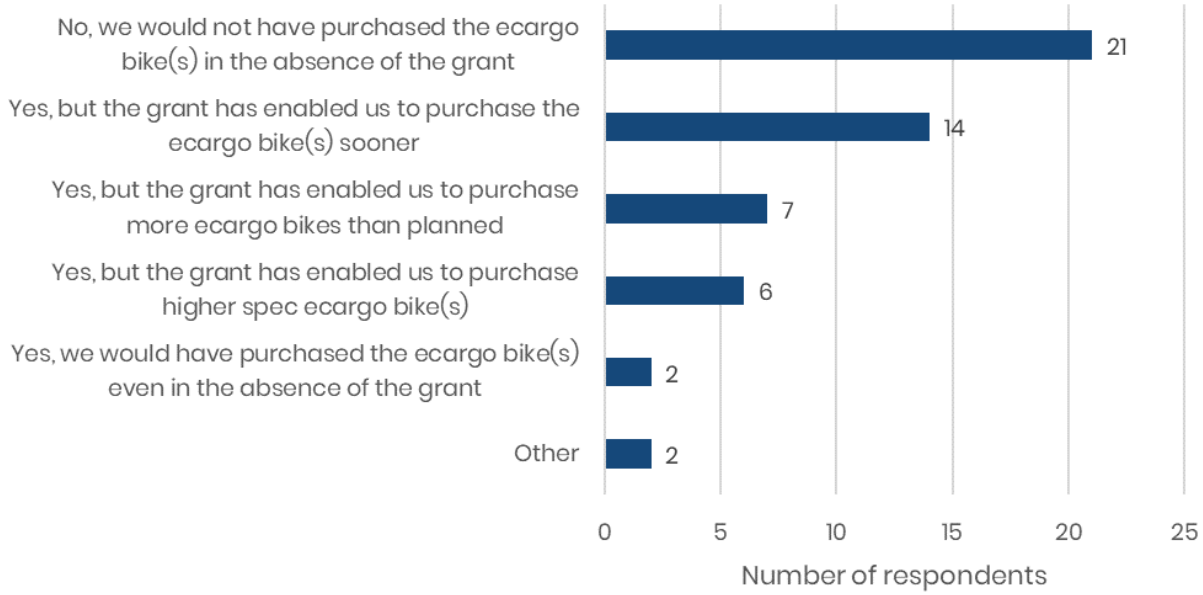
Respondents were provided with a list of statements regarding whether they would have purchased their ecargo bikes in the absence of the grant and were asked to select those that applied to them. Their responses are shown in Figure 3-7. Some respondents selected more than one option. 47% of respondents stated they would not have purchased ecargo bikes in the absence of the grant. For the remaining respondents, they stated they would have purchased ecargo bikes even in the absence of the grant, however the grant enabled them to purchase their ecargo bikes sooner (31%), purchase more than planned (16%), or purchase higher spec

ecargo bikes (13%).

Two respondents (4%) said they would have purchased their ecargo bikes even in the absence of the grant, indicating the grant had no influence on the timing, number or spec of the ecargo bikes they purchased.

The remaining two respondents who chose "Other", one said they would not have thought of ecargo bike in the absence of the grant, whilst another said the grant enabled them to purchase accessories.

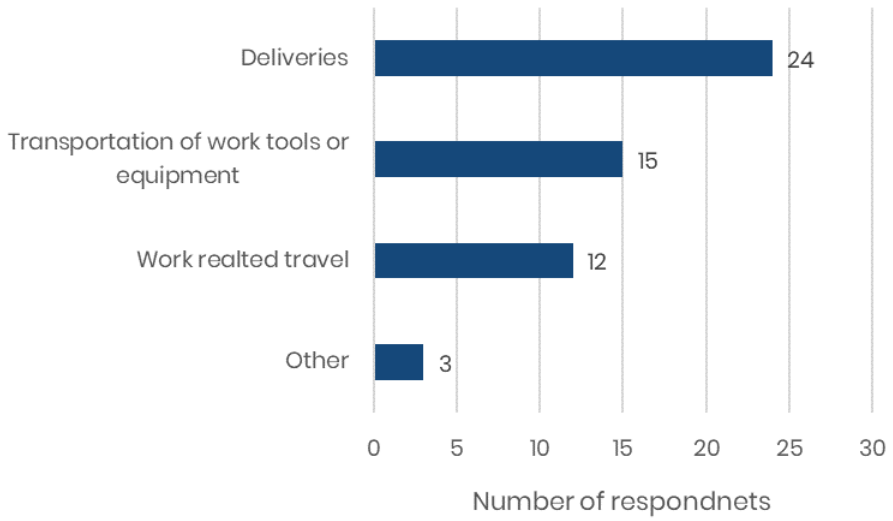
Figure 3-7: Impacts of grant on the purchase of ecargo bikes [N = 45, multiple responses]



3.4. eCargo bikes usage

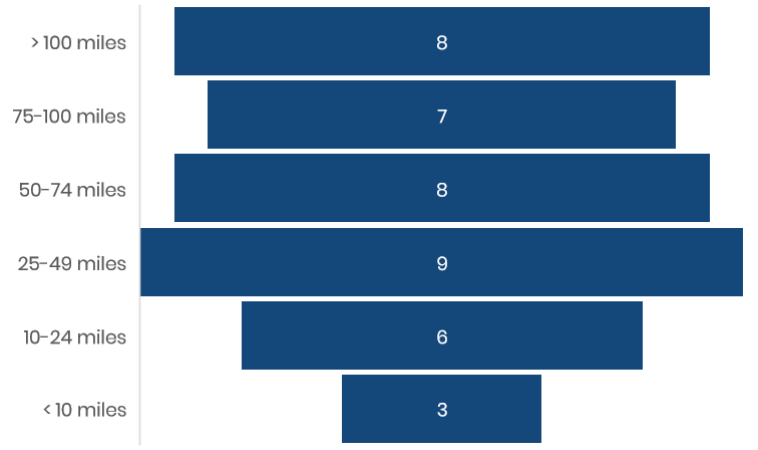
At the time of claiming the grant, the respondents would not have received their ecargo bikes or only have very little time with their ecargo bikes. Nevertheless, in the survey, respondents were asked to provide information on the planned usage of their ecargo bikes. Their responses were coded and summarised in Figure 3-8. Most respondents said they plan to use their ecargo bikes for deliveries (55%), transporting tools or equipment (34%) or for travelling (27%). Other included taking disabled community members for rides (1), rider training of staff and volunteers for local charities (1) and leading to small businesses (1).

Figure 3-8: Planned ecargo bikes usage [N = 44, coded responses, multiple responses]



41 respondents provided an estimation of their ecargo bike weekly mileage, as summarised in Figure 3-9. Altogether, their 82 ecargo bikes were expected to travel around 5,700 miles per week or 296,400 miles per year. This equates to 3,614 miles per ecargo bike per year.

Figure 3-9: Estimated weekly mileage per ecargo bike [N = 41]

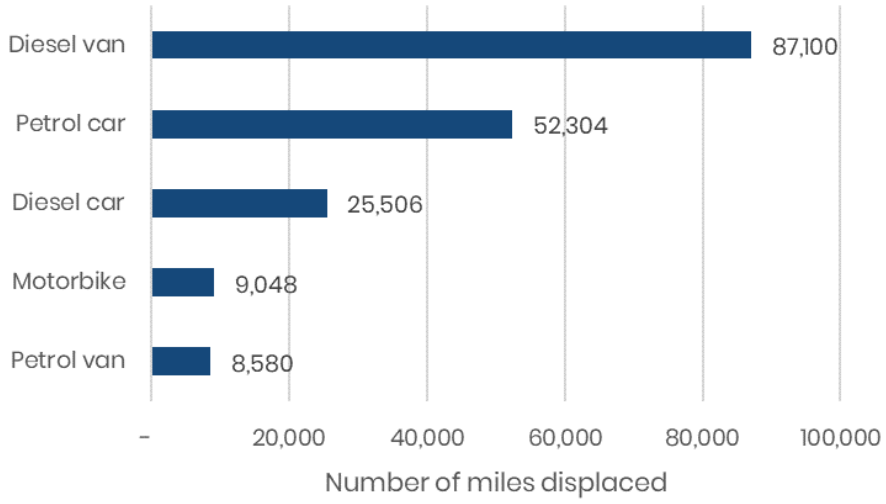


3.5. Estimated carbon savings

Of the 41 respondents who shared their estimated mileage data, 36 of them (88%) reported they expect their ecargo bikes to replace some internal combustion engine (ICE) vehicle mileage. 33 (80%) provided further information on the percentages of their ecargo bikes mileage that they would expect to undertake in ICE vehicles in the absence of the ecargo bikes. Their responses are summarised in Figure 3-10. Their responses show diesel vans would be the most likely to be displaced by the ecargo bikes in terms of mileage, followed by petrol cars. Altogether, the respondents expected their 58 ecargo bikes to displace 182,538 ICE miles per year, equivalent to

3,147 ICE miles displaced per ecargo bikes. Using the UK Government greenhouse gas (GHG) reporting conversion factors 2021,[8] the annual carbon savings was calculated as 50,025 kgCO_2e per year or 862 kgCO_2e per ecargo bike per year, of which 46% was attributable to the grant fund.[9]

Figure 3-10: Expected ICE vehicle mileage that would have been displaced by the ecargo bikes [N = 33]



3.6. Satisfaction

Respondents were asked to state the extent to which they agreed or disagreed with a number of statements regarding the process of applying and claiming funds from the grant scheme (Figure 3-11). Overall, their responses were mostly positive as the majority of the respondents either strongly agreed or agreed with the statements. Areas that could be improved were the time taken to process the applications and the claim process with 16% and 14% of respondents disagreed with the relevant statements. 14% of the respondents disagreed that Energy Saving Trust were available and helpful throughout the whole process. Comments provided in the follow-up open-ended question indicated their dissatisfaction were mostly associated with the communications around processing applications and the associated timing.

Overall, 98% of the respondents were very satisfied (53%) or satisfied (45%) with eCargo Bike Grant Fund scheme as shown in Figure 3-12.

[8] https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021
[9] Based on respondents who reported they would not have purchased their ecargo bikes in the absence of the grant funding.

Figure 3-11: Extent to which respondents agreed or disagreed with statements regarding the process of applying and receiving funds from the scheme

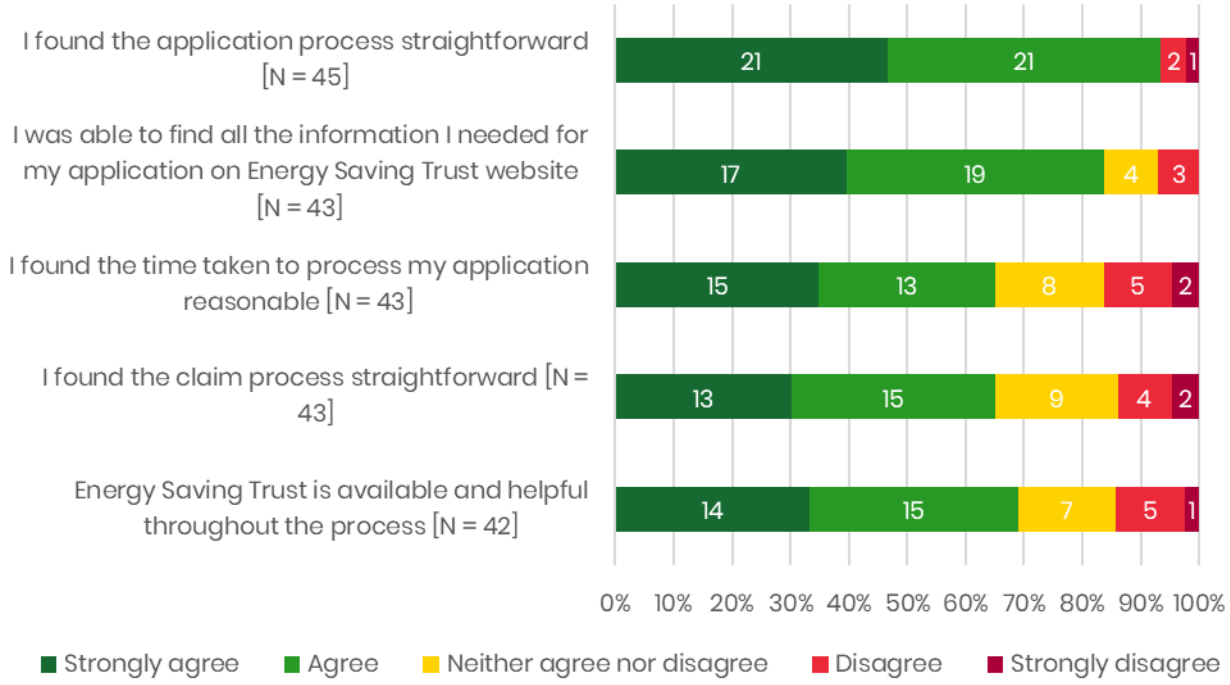
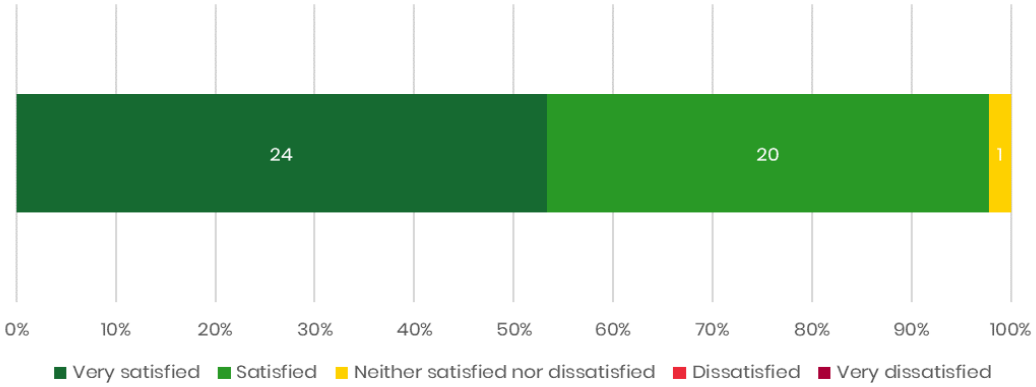


Figure 3-12: Overall satisfaction with the ecargo bike grant scheme [N = 45]



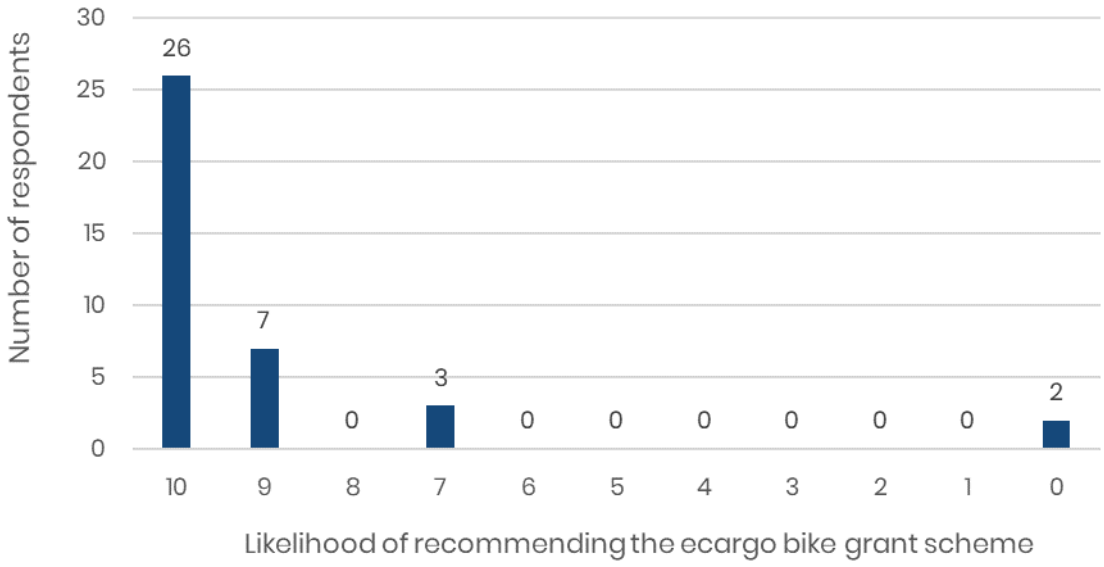
In a follow-up comment, the respondent who was neither satisfied nor dissatisfied with the scheme explained it was because they felt the process time was long and the lack of communication from Energy Saving Trust.

46% of the respondents also provided suggestions for improving the scheme. The most common type of recommendation was related to the application process (22%), which some respondents wanted to be streamlined and for the communication to be more frequent. Another frequently mentioned a suggestion to improve the scheme was making more funding available (7%).

Respondents were asked to rate their likelihood of recommending the ecargo bike grant scheme to others on a scale from 0 to 10, where 0 is extremely unlikely and 10 is extremely likely. Figure 3-13 shows that over two-thirds of the respondents (68%) selected 10, suggesting they would be extremely likely to recommend the grant scheme to others.

It is worth noting the two respondents (5%) who indicated zero likelihood of recommending the grant, one of them was very satisfied with the scheme and strongly agreed with all statements in Figure 3-11, whilst another was satisfied with the scheme and agreed/ strongly agreed with most statements in Figure 3-11, with only criticism around the length of time in processing the application.

Figure 3-13: Respondents likelihood of recommending the ecargo bike grant to others [N = 38]



These results were used to calculate a Net Promoter Score (NPS).[10] The NPS for the ecargo bike grant scheme was 82, which is considered to be world class.

[10] See Appendix D for further explanation and calculation method for NPS.

4. 2019/20 national scheme follow-up survey

The eCargo Bike Grant Fund 2019/20 national scheme supported 109 organisations to procure 228 ecargo bikes. The funding covered up to 20% of the total cost of an ecargo bike and up to a maximum of £1,000 per bike. Applications were also capped at 200 ecargo bikes or £200,000 per organisation.

In January 2022, an online survey was distributed to the grant recipients to elicit information on their ecargo bike usage and feedback on their ecargo bikes. The survey received 43 responses, corresponding to a response rate of 39% (43 of the 109 organisations funded.) This section presents the survey results.

4.1. Respondents' profile

The majority of the online survey respondents' organisations were:

- limited companies (54%) or sole traders/ partnerships (35%) (Figure 4-1)
- micro-organisations with less than 10 employees (81%) (Figure 4-2)
- located in London (35%) or the South (37%) (Figure 4-3)
- operating in retail, hire and repair business (19%), transport and distribution (14%) or construction (12%) (Figure 4-4)

Organisations of those responded to the 2019/20 follow-up survey were similar to those funded in 2021/22 in terms of organisation type, size and location. They were mainly micro-sized limited companies or sole traders/ partnerships that were based in London or the South.

Figure 4-1: Respondents' organisation type [N = 43]

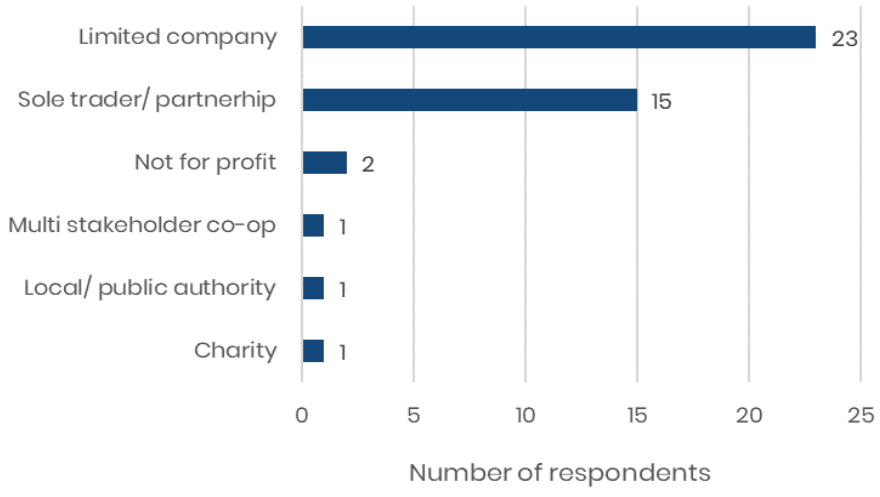


Figure 4-2: Respondents' organisation size [N = 43]

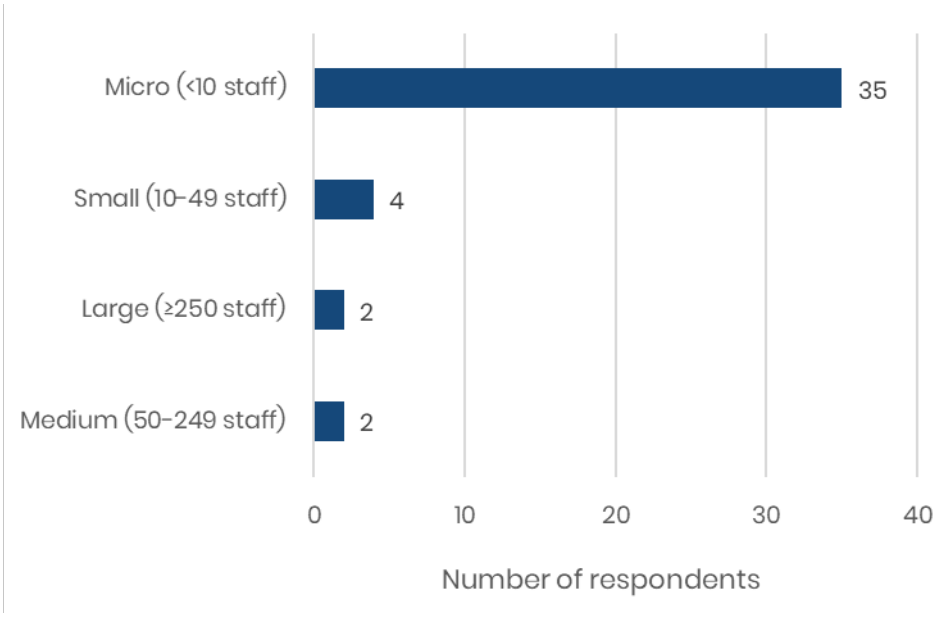


Figure 4-3: Geographical distribution of respondents' organisations [N = 43]

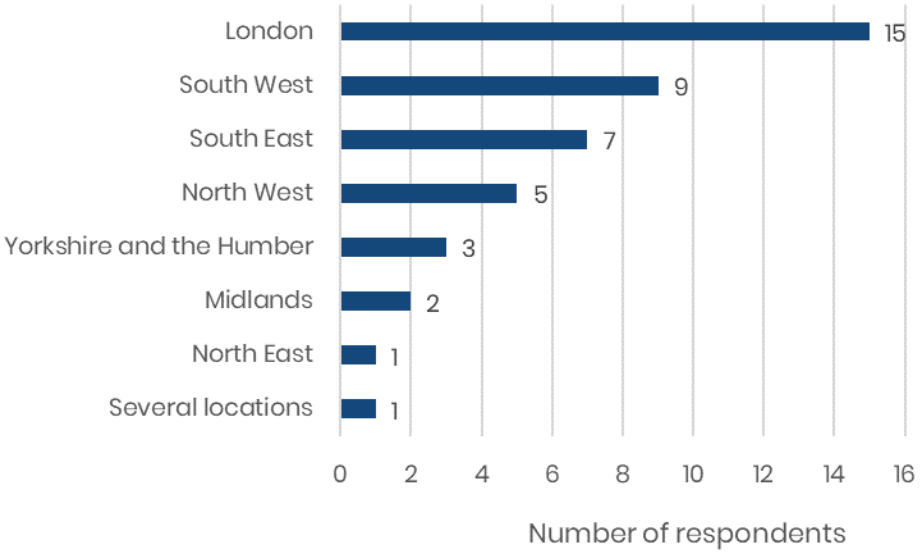
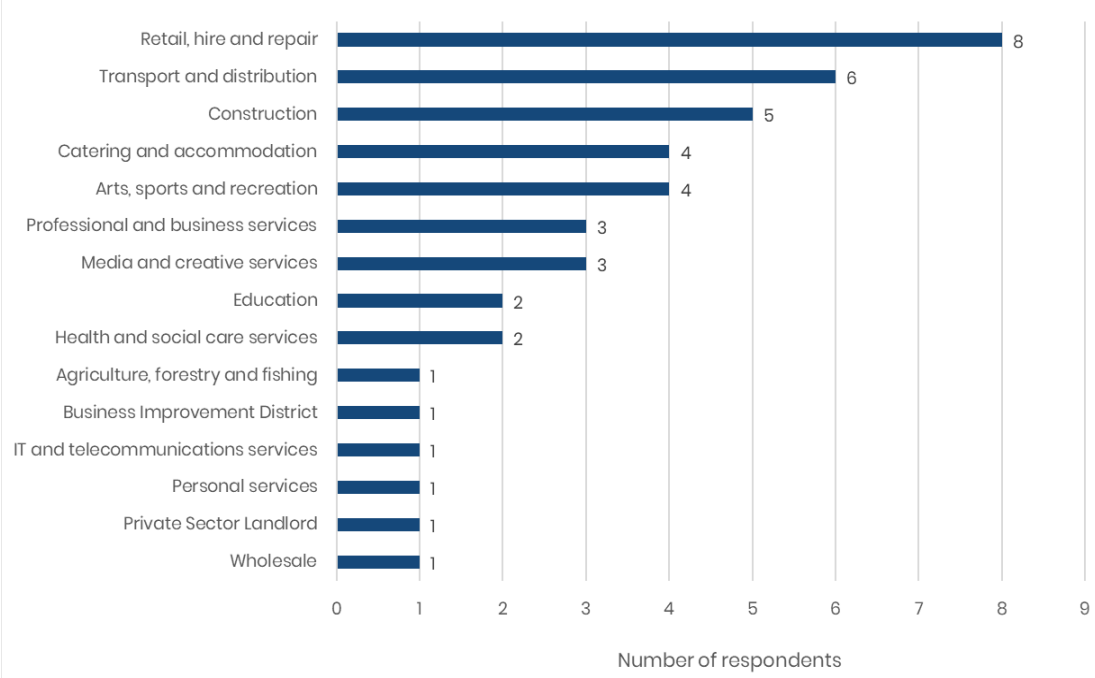


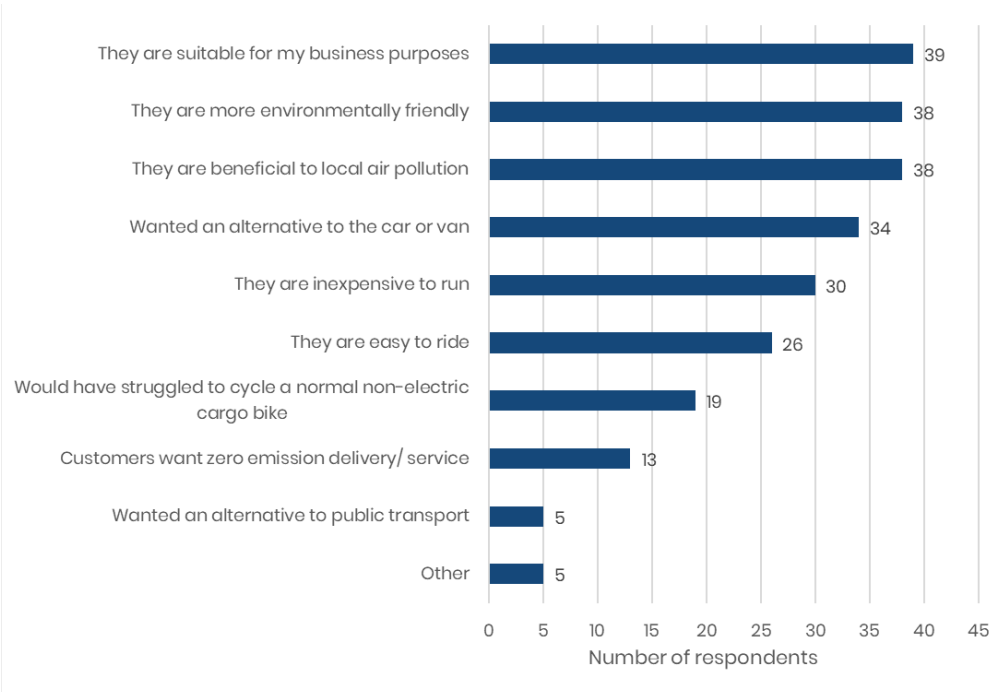
Figure 4-4: Main activities of respondents' organisations [N = 43]



4.2. Motivations

Figure 4-5 depicts respondents' motivations for acquiring ecargo bikes. Some respondents selected more than one motivation. The most frequently cited reasons for acquiring ecargo bikes were that they are suitable for their business purposes (91%), they are more environmentally friendly (88%), and they are beneficial to local air pollution (88%).

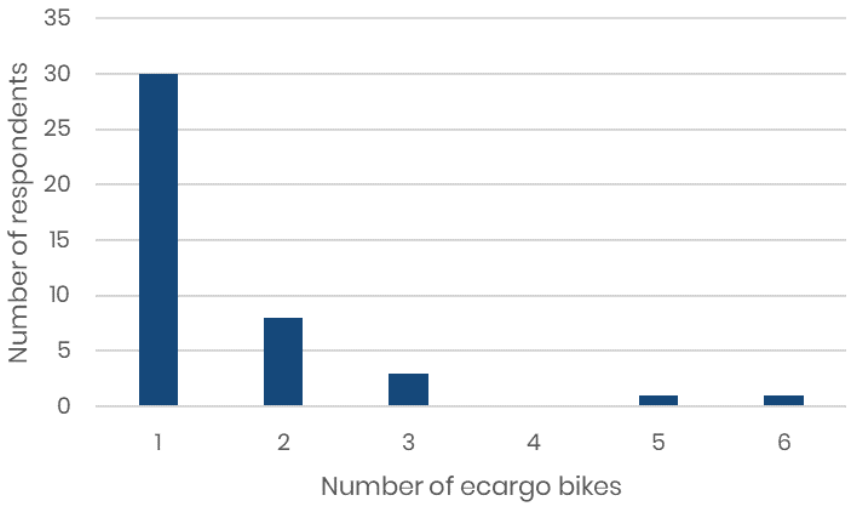
Figure 4-5: Respondents' motivations for acquiring ecargo bikes [N = 43, multiple responses]



4.3. eCargo bikes funded

Across the 43 respondents, they acquired 66 ecargo bikes with the support of eCargo Bike Grant Fund 2019/20 national scheme, an average of 1.5 ecargo bike per respondent. 70% of the respondents only acquired one ecargo bike (Figure 4-6).

Figure 4-6: Number of ecargo bikes acquired [N = 43]



4.4. eCargo bikes usage

95% of the respondents said they have had their ecargo bikes for one year and more (Figure 4-7). Most of the respondents reported they use their ecargo bikes for delivering goods or services to customers (70%) and transporting goods or equipment at work (56%) (Figure 4-8).

Figure 4-7: Length of time respondents have had their ecargo bikes [N = 43]

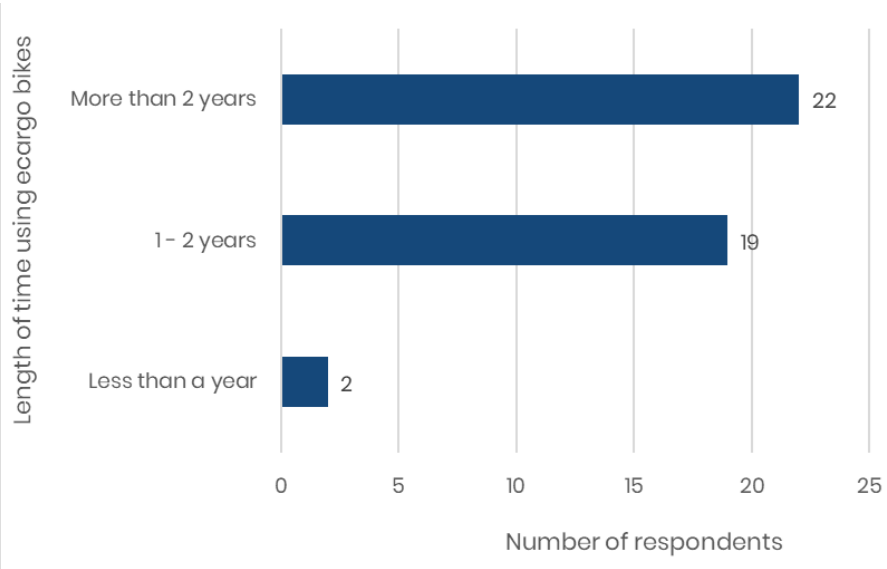
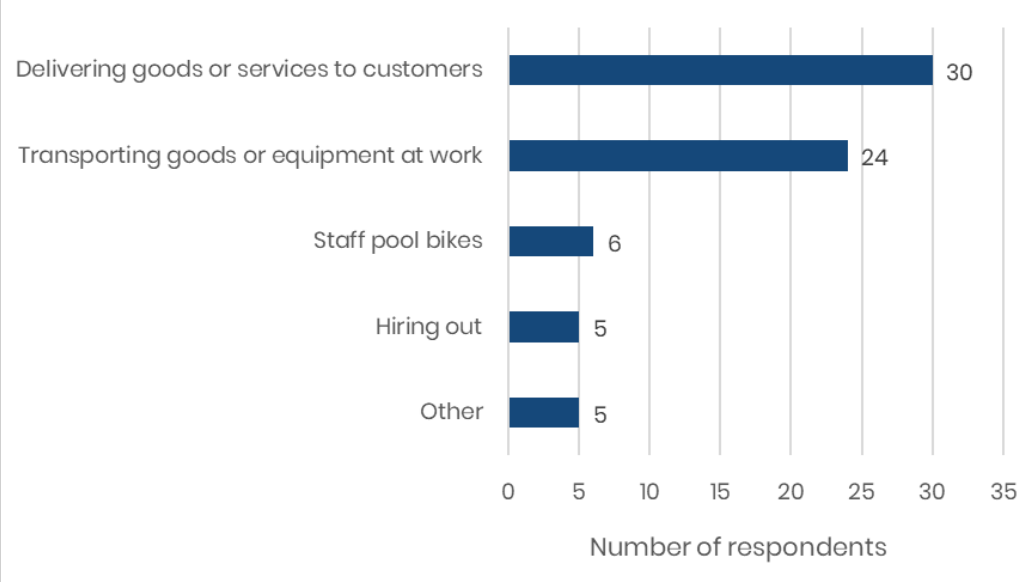


Figure 4-8: eCargo bike use cases [N = 43, multiple responses]



Of the 43 respondents, 34 (79%) shared their ecargo bike mileage data. 22 of these respondents (65%) said they track their ecargo bike mileage. For the remaining 12 respondents (35%), their ecargo bike mileage was based on estimation. Overall, their 52 ecargo bikes travelled 105,491 miles per year. This equates to an annual mileage of 2,029 miles per ecargo bike. Disaggregation of mileage data by tracked and estimated is shown in Table 4-1. It shows the average annual mileage travelled per ecargo bike is considerably higher based on tracked data, 2,656 miles than estimated data, 617 miles. This could be because people who use their ecargo bikes more or for longer journeys are more likely to track their mileage or people tend to be conservative when estimating the mileage that they have travelled.

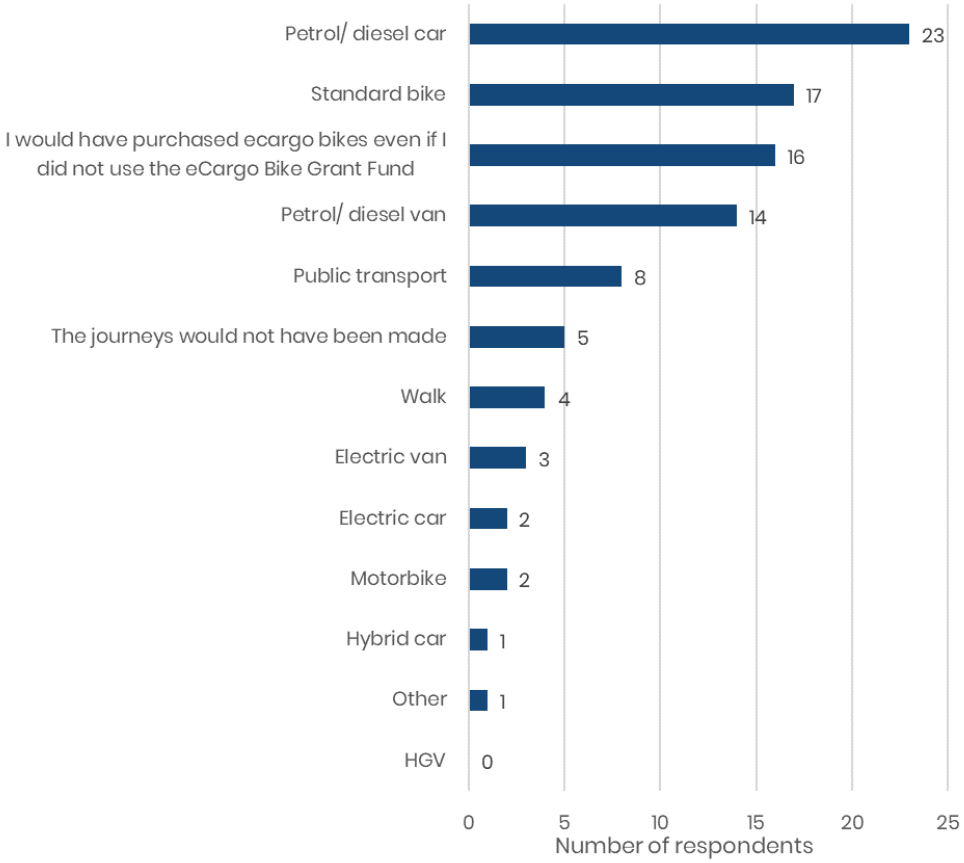
Table 4-1: Mileage travelled by ecargo bikes

eCargo bike mileage data	No. of respondents [N]	No. of ecargo bikes	Annual mileage travelled	Annual mileage travelled per ecargo bike
Tracked and estimated	34	52	105,491 miles	2,029 miles
Tracked	22	36	95,618 miles	2,656 miles
Estimated	12	16	9,874 miles	617 miles

Figure 4-9 shows the mode of transport respondents said they would have used for these journeys in the absence of their ecargo bikes. Note that some respondents chose more than one mode of transport. In the absence of their ecargo bikes, most respondents reported they would have used a petrol or diesel car (53%) or a standard bike (40%) to undertake their journeys. Overall, 32 respondents (74%) indicated that in the absence of their ecargo bikes, they would have undertaken part or all of the journeys in ICE vehicles.

37% of the respondents indicated they would have purchased ecargo bikes, even in the absence of eCargo Bike Grant Fund.

Figure 4-9: Mode of transport respondents would have used in the absence of ecargo bikes [N = 43, multiple responses]



4.5. Estimated carbon savings

Of the 32 respondents who said they would have undertaken the journeys in ICE vehicles, 23 respondents (72%) provided further information on the approximate mileage of ICE vehicles that had been displaced. Their responses are summarised in Figure 4-10. It shows diesel vans were reported to be the most common type of ICE vehicle displaced in terms of mileage, followed by petrol cars. Altogether, respondents' 32 ecargo bikes were reported to replace 35,873 miles per year, equivalent to 1,121 ICE miles replaced per ecargo bikes. Using the UK Government GHG gas reporting conversion factors 2021,[11] the annual carbon savings was calculated as 9,021kgCO_2e in total or 282kgCO_2e savings per ecargo bike, of which 39% was attributable to the grant scheme.[12]

[11] https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021

[12] Excluding those who reported they would have purchased their ecargo bikes even in the absence of the grant funding.

Figure 4-10: eCargo bikes mileage that would have been completed by ICE vehicles [N = 23]

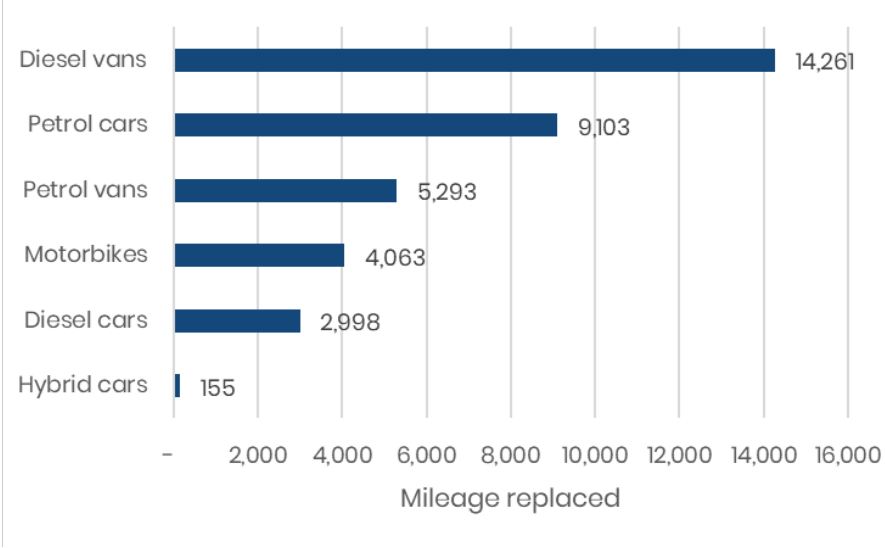


Table 4-2 shows carbon savings calculated based on tracked and estimated ecargo bike mileage data. As the reported annual mileage travelled per ecargo bike based on tracked data is considerably higher than estimated data (Table 4-1), it is expected to see the same for the reported annual ICE mileage displaced and the resultant carbon savings.

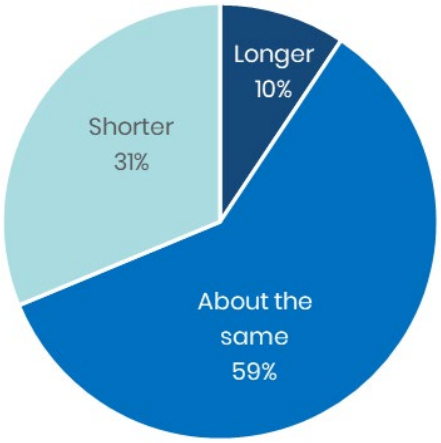
Table 4-2: Carbon savings from displacing ICE mileage

eCargo bike mileage data	No. of respondents [N]	No. of ecargo bikes	Annual ICE mileage displaced	Annual ICE mileage displaced per ecargo bike	Annual carbon savings	Annual carbon savings per ecargo bike
Tracked and estimated	23	32	35,873 miles	1,121 miles	9,021 $kgCO_2e$	282 $kgCO_2e$
Tracked	13	19	30,427 miles	1,601 miles	7,610 $kgCO_2e$	401 $kgCO_2e$
Estimated	10	13	5,446 miles	419 miles	1,411 $kgCO_2e$	109 $kgCO_2e$

4.6. Time savings

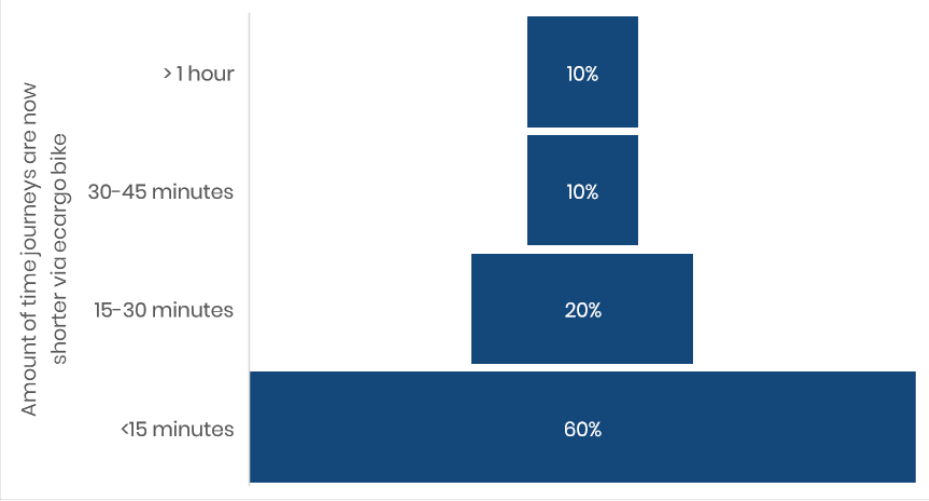
Respondents who indicated they would have used ICE vehicles to undertake part or all of the journeys were also asked if journeys by ecargo bikes take longer or shorter as compared to ICE vehicles. Their responses are summarised in Figure 4-10. 59% of the respondents said they are about the same (59%). 31% of the respondents reported the journeys were shorter using ecargo bikes, whilst 10% reported the journeys were longer as compared to ICE vehicles.

Figure 4-11: Whether journeys made by ecargo bikes were longer or shorted as compared to using ICE vehicles [N = 32]



Respondents who reported that their journeys made by ecargo bikes were shorter as compared to ICE vehicles were asked how much shorter these journeys were. Most of them (60%) said their journeys were <15 minutes shorter in an ecargo bike as compared to using an ICE vehicle (Figure 4-12).

Figure 4-12: Time savings via ecargo bikes as compared to ICE vehicles [N = 10]

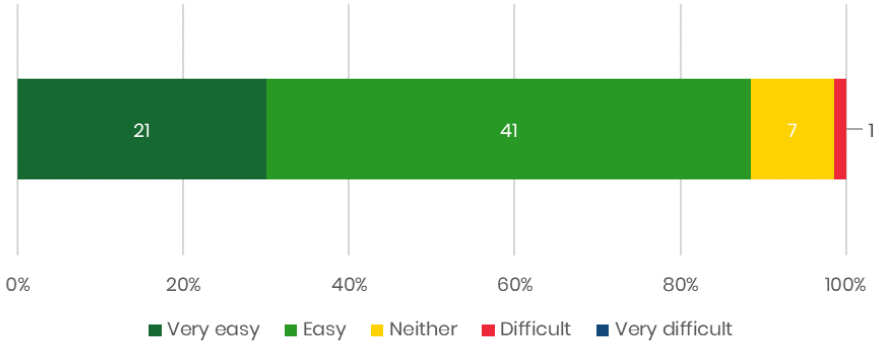


Of the three respondents who reported that their journeys were longer when made by an ecargo bike as compared to a motorised vehicle, two reported that their journeys were <15 minutes longer, while one said that their journeys were now 15-30 minutes longer in an ecargo bike.

4.7. Feedback on ecargo bikes

All respondents were asked to rate on a scale of 1 to 5, where 1 is very difficult and 5 is very easy, how easy or difficult they found to cycle an ecargo bike. Their responses are summarised in Figure 4-12. 82% of the respondents said they found riding an ecargo bike easy or very easy. 16% of the respondents found it neither easy nor difficult, whilst one respondent (2%) said ecargo bikes are difficult to ride.

Figure 4-13: Ease of cycling an ecargo bike [N = 43]



Furthermore, most respondents (86%) reported that they feel safe or very safe when using an ecargo bike. The remaining 14% said that they feel neither safe nor unsafe when using an ecargo bike (Figure 4-14).

Figure 4-14: Perceived safety of using an ecargo bike [N = 43]

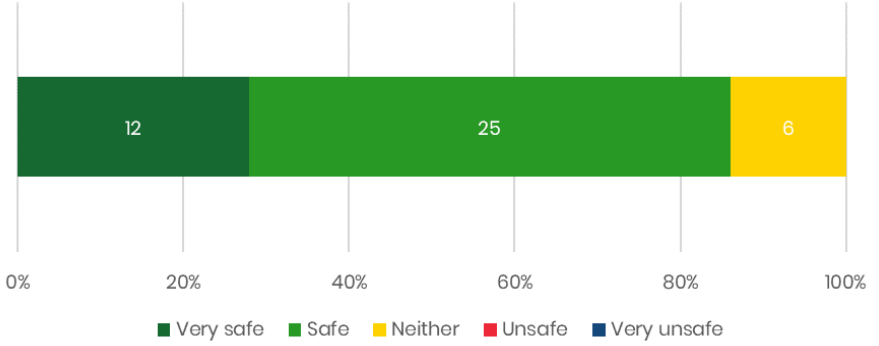
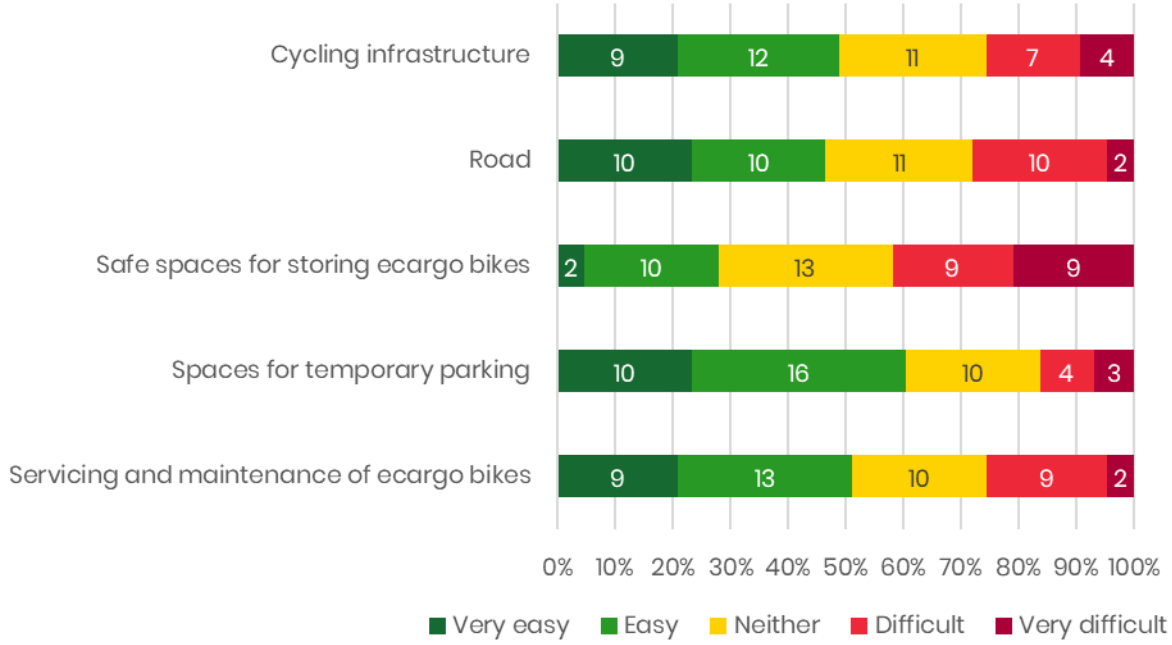


Figure 4-15 shows the extent to which respondents found the different aspects of using an ecargo bike easy or difficult. Less than 50% of the respondents reported they found cycling infrastructure, road and safe spaces for storing ecargo bikes easy. Areas that were more positive were temporary parking for ecargo bikes (which 60% found easy/ very easy) and servicing and maintaining of ecargo bikes (which 51% found easy/ very easy). Overall, feedback from respondents indicated public infrastructure needs to be improved to support ecargo bike

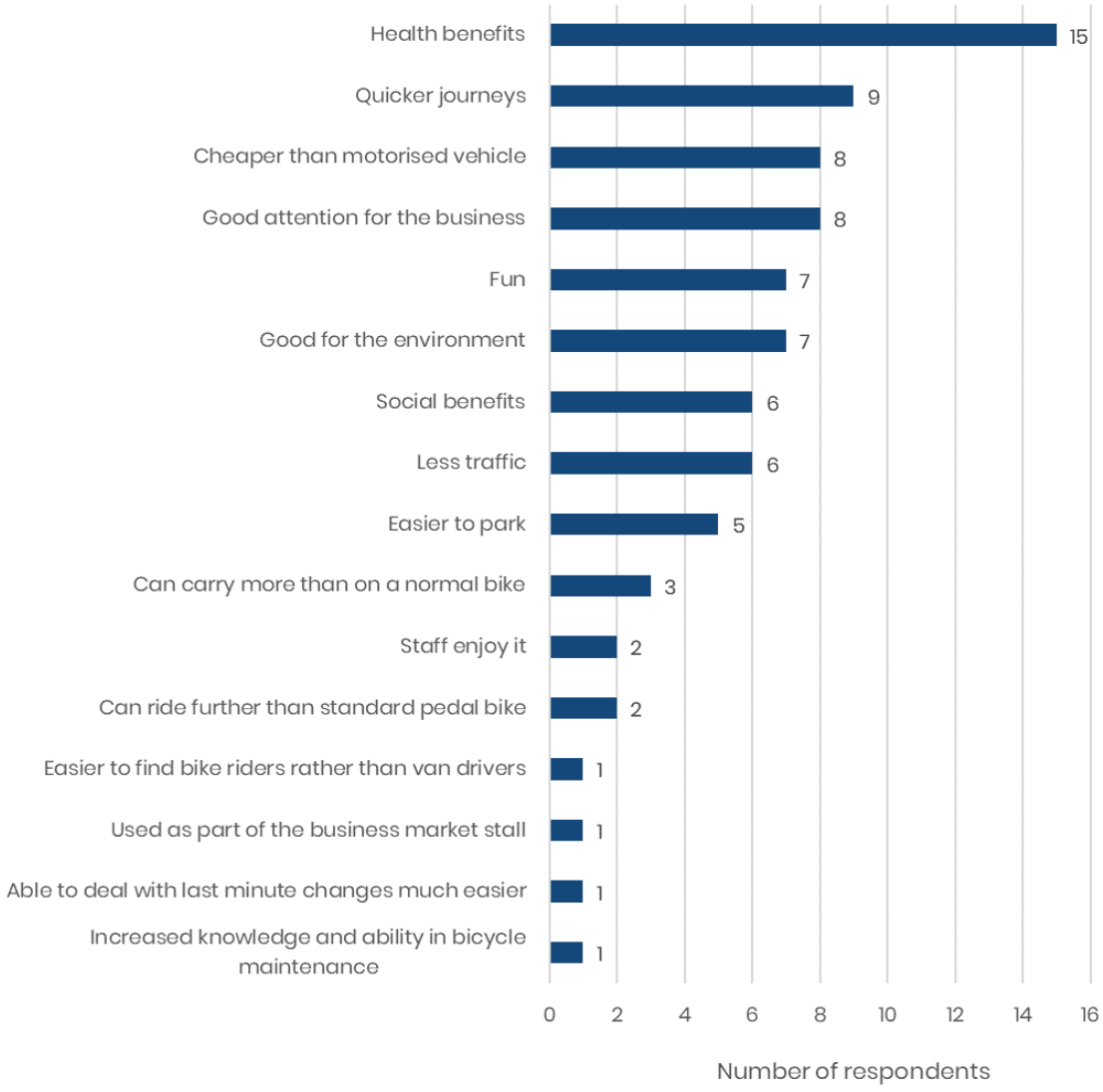
usage.

Figure 4-15: The extent to which respondents found different aspects easy or difficult when using an ecargo bike [N = 43]



91% of respondents said that they had observed benefits from using ecargo bikes, whilst the remaining 9% were unsure. Figure 4-16 shows the types of benefits that respondents experienced. Note that some respondents mentioned more than one type of benefit. The most frequently mentioned benefit of using an ecargo bike was the health benefits (42%), followed by quicker journeys (25%), cheaper than a motorised vehicle (22%) and good attention for their business (22%).

Figure 4-16: Benefits reported from using an ecargo bike [N = 36, coded responses, multiple responses]



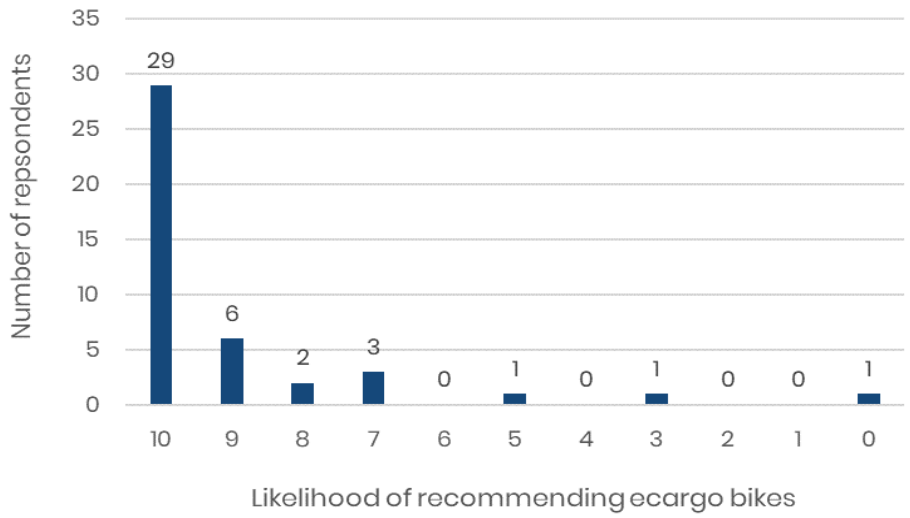
Respondents were asked to rate their likelihood of recommending an ecargo bike to friends or colleagues, using a scale from 0 to 10, where 0 is extremely unlikely and 10 is extremely likely. Figure 4-17 shows that over two-thirds of respondents (67%) selected 10, suggesting they would be extremely likely to recommend ecargo bikes to a friend or colleague. The two respondents who scored 5 and 3 did not provide specific comment but they rated most statements in Figure 4-15 as very difficult. The respondent who reported zero likelihood of recommending ecargo bikes provided a comment around subsidy for ecargo bikes rather than ecargo bikes themselves.

Based on the scoring given by respondents, the calculated NPS[13] for ecargo bikes is 74, which is

[13] See Appendix D for further explanation and calculation method for NPS.

considered as world class.

Figure 4-17: Likelihood of recommending an ecargo bikes to friends or colleagues [N = 43]

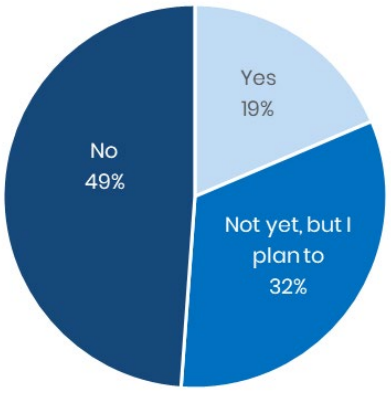


Respondents were invited to note any comments about their experience with ecargo bikes. Many provided positive comments explaining the benefits of ecargo bikes and how much they enjoy them. Some respondents provided comments about ecargo bikes which highlighted some of the negative aspects of using an ecargo bike, such as the associated costs and repairs.

4.8. Further ecargo bikes uptake

Respondents were also asked if they have purchased more ecargo bikes since receiving eCargo Bike Grant Fund 2019/20. Over half of the respondents replied they have either purchased (19%) or plan to purchase (32%) more ecargo bikes (Figure 4-18).

Figure 4-18: Further uptake of ecargo bikes by respondents [N = 43]



Of the eight respondents who had purchased further ecargo bikes, half of them said they have accessed eCargo Bike Grant Fund 2021/22 national scheme. Altogether, the eight respondents

procured 64 additional ecargo bikes since eCargo Bike Grant Fund 2019/20 national scheme, of which 17 were funded through eCargo Bike Grant Fund 2021/22 national scheme.

Of the 14 respondents who had plan to purchase further ecargo bikes, 10 said they plan to purchase 13 more ecargo bikes in total. The remaining four respondents said they needed more time before they could commit to a certain number.

21 respondents said they have not purchased any more ecargo bikes since eCargo Bike Grant Fund 2019/20 national scheme and did not intend to. When asked why that was the case, the respondents provided the following reasons:

- No need (81%) – some of these respondents were the sole employee of their business and therefore did not need to procure another ecargo bike. For others, their business had no requirements for more ecargo bikes.
- Lack of financial resources (14%) – these respondents said that they cannot afford the upfront and maintenance costs associated with additional ecargo bikes.
- Limited interest from customers (5%) – one respondent who offered their ecargo bike for business use said there was limited interest among their local businesses.

5. Conclusions

The eCargo Bike Grant Fund was a grant scheme funded by DfT and administered by Energy Saving Trust for the acquisition of ecargo bikes to support low carbon transport in England. The 2021/22 national scheme supported 103 organisations in procuring 197 ecargo bikes.

An online survey had been administered as part of the claim process to collect feedback on the scheme. A total of 45 responses were received, corresponding to a response rate of 44% (45 of 103 organisations funded). A follow-up survey had also been administered to 2019/20 grant recipients to elicit information on their actual ecargo bike usage. The survey was distributed in January 2022 and received 43 responses, corresponding to a response rate of 39% (43 of 109 funded in 2019/20).

5.1. Key findings

Types of organisations supported

An analysis of the organisations funded by eCargo Bike Grant Fund 2021/22 national scheme shows:

- most of the organisations funded are micro-size (69%), based in London (43%) or the South (33%)
- the funded organisations operate in diverse sectors, including catering and accommodation (21%), transport and distribution (17%) or personal (16%)/ professional and business services (11%)

The types of organisations funded in the 2021/22 funding round were similar to the 2019/20 funding round. Organisations that were funded in both rounds were mainly micro-sized limited companies or sole traders/ partnerships based in London or the South.

eCargo bike usage

Based on the 45 responses collected from 2021/22 grant recipients and 43 responses collected from 2019/20 grant recipients:[14]

- The most common reasons stated for procuring ecargo bikes were to reduce the environmental impact of their business (67%) and suitability of ecargo bikes for their

[14] The following percentages were calculated based on the combined responses from 2019/20 and 2021/22 grant recipients

business purpose (61%).

- The most common use cases of ecargo bikes reported were for deliveries to their customers (61%), transporting work related equipment or tools (44%) and work travel (including staff pool bikes, 20%).

- The reported ecargo bikes mileage[15] are summarised in Table 5-1. The mileage data provided by 2021/22 grant recipients were based on planned usage whilst the mileage data provided by 2019/20 grant recipients were based on actual usage.[16] The comparison shows that annual ecargo bike mileage is greater based on data from 2021/22 grant recipient (expected usage) as compared to 2019/20 grant recipients (actual usage for all cases, whether the mileage was tracked or estimated). This is in-line with the finding from the previous eCargo Bike Grant Fund evaluation, where planned usage is often more ambitious or optimistic than actual usage. In reality, the ecargo bikes may not travel as many miles as initially anticipated, for example weather conditions during the winter months may hinder the use of ecargo bikes.

Table 5-1: A summary of ecargo bikes mileage[17]

Scheme year	No. of respondents [N]	No. of ecargo bikes	Total annual mileage	Annual mileage per ecargo bikes
2021/22 (expected usage)	41	82	296,400 miles	3,614 miles
2019/20 (actual usage, tracked and estimated mileage)	34	52	105,491 miles	2,029 miles
2019/20 (actual usage, tracked mileage)	22	36	95,618 miles	2,656 miles
2019/20 (actual usage, estimated mileage)	12	16	9,874 miles	617 miles

[15] 2021/22 survey respondents were asked how many miles they anticipate their ecargo bikes to travel per week, whilst 2019/20 survey respondents were asked how long their have had their ecargo bikes (in months) and how may miles their ecargo bikes have travelled (either total, or average per week, or average per month).
[16] Mileage data from 2019/20 respondents which were based on actual usage of their ecargo bikes consisted of both tracked and estimated data. Respondents were asked if their track their ecargo bike mileage. Those who did not track were asked to provide an estimation their ecargo bike mileage.
[17] Mileage is rounded to the nearest mile

Influence of the grant

Based on the 45 responses collected from 2021/22 grant recipients and 43 responses collected from 2019/20 grant recipients:

- 55% of the respondents reported they would not have been able to purchase their ecargo bikes in the absence of the grant.[18]
- For the remaining respondents, they reported they would have purchased their ecargo bikes even in the absence of the grant, however the grant enabled them to purchase sooner (31%), more than planned (16%), or purchase higher spec ecargo bikes (13%).[19]
- 4% stated they would have purchased their ecargo bikes even in the absence of the grant, and the grant had no influence on the timing, number or spec of the ecargo bikes they purchased.[20]

Estimated carbon savings

Using the UK Government greenhouse gas (GHG) reporting conversion factors 2021, the estimated carbon savings are summarised in Table 5-2.

Table 5-2: An overview of ICE mileage displaced and carbon savings

Scheme year	No. of respondents [N]	No. of ecargo bikes	Annual ICE mileage displaced	Annual ICE mileage displaced per ecargo bike	Annual carbon savings	Annual carbon savings per ecargo bike
2021/22 (expected usage)	33	58	182,538 miles	3,147 miles	50,025 $kgCO_2e$	862 $kgCO_2e$
2019/20 (actual usage, tracked and estimated mileage)	23	32	35,873 miles	1,121 miles	9,021 $kgCO_2e$	282 $kgCO_2e$
2019/20 (actual usage, tracked mileage)	13	19	30,427 miles	1,601 miles	7,610 $kgCO_2e$	401 $kgCO_2e$

[18] The percentage was calculated based on the combined responses from 2019/20 and 2021/22 grant recipients
[19] The percentages were based on responses from 2021/22 grant recipients
[20] The percentage was based on responses from 2021/22 grant recipients

2019/20 (actual usage, estimated mileage)	10	13	5,446 miles	419 miles	1,411 $kgCO_2e$	109 $kgCO_2e$

The carbon savings estimated from the responses from 2021/22 grant recipients were based on planned usage, whilst the carbon saving estimated from the responses from 2019/20 grant recipients were based on actual usage. Whilst it is not a like-to-like comparison due to the different samples, the annual carbon savings per ecargo bike calculated from 2021/22 grant recipients (based on expected usage) is greater than 2019/20 grant recipients (based on actual usage). As mentioned above, planned usage is likely to be more ambitious or optimistic than actual usage, which leads to overestimation of carbon savings generated from ecargo bikes. The carbon saving calculated from actual usage, tracked data (2019/20) is considered to be the most accurate.

It is also worth noting that 2019/20 respondents had indicated that their ecargo bikes also replace active travel such as standard bikes and walking, as well as public transport and electric vehicles where the resultant carbon savings would have been limited.

Feedback on the ecargo bikes

Based on 43 responses collected from 2019/20 grant recipients, who have had some experience with their ecargo bikes at the time of survey:

- Most of the respondents said they find riding an ecargo bike easy (82%) and safe (86%)
- However, less than half of the respondents reported the infrastructure that supports the use of ecargo bikes easy, in particular safe spaces for storing ecargo bikes (28%), road (47%) and cycling infrastructure (49%)
- 91% of the respondents said they have observed benefits from using ecargo bikes, including health benefits (42%), quicker journeys (25%), cheaper to run (22%) and good attention for their business (22%)
- Eight respondents (19%) said they have purchased additional 64 ecargo bikes since eCargo Bike Grant Fund 2019/20 national scheme. A further 14 respondents (32%) said they have plan to purchase more ecargo bikes

Feedback on the eCargo Bike scheme

Based on the 45 responses collected from 2021/22 grant recipients:

- 94% of the respondents reported the application process as straightforward, but some

felt the time taken to process the applications was long (with 65% of respondents agreed that the time was reasonable)

- 65% of the respondents said the claim process was straightforward
- 69% of the respondents found Energy Saving Trust were available and helpful throughout the process
- Overall, 98% of the respondents were very satisfied (53%) or satisfied (45%) with eCargo Bike Grant Fund. The scheme has a NPS score of 82, which is considered to be world class

5.2. Recommendations

Recommendations based on findings from this evaluation are:

- Improving communication with applicants during the application process to manage expectation in terms of process time. Claim process is another area that could be improved, with 14% of the respondents felt the claim process was not straightforward. However, no specific suggestions were provided by these respondents on how the process could be made easier for them.
- Using the planned ecargo bikes usage data and the expected ICE vehicles displaced could lead to over-estimating of carbon savings. Therefore, it is recommended to conduct longer-term follow-up with ecargo bike grant recipients to elicit information on the actual usage of ecargo bikes and their tracked mileage data for calculating carbon savings.
- Beyond providing financial support to organisations to adopt ecargo bikes, infrastructure that supports ecargo bikes usage needs to be improved. Based on the feedback from 2019/20 grant recipients, less than half of them found safe storing space, road and cycling infrastructure easy when using ecargo bikes.

Appendix A: eCargo Bike Grant Fund 2021/22 national scheme feedback survey questionnaire

Please fill in this short online survey to provide your feedback on the ecargo bike grant fund. The survey should take less than 10 minutes to complete. Your feedback will help Energy Saving Trust and Office for Zero Emissions Vehicles (OZEV) understand the impact of the scheme and how it could be improved.

1) What is the name of your company?
2) What motivated you to purchase ecargo bikes?
3) How important was the grant in influencing your decision to purchase ecargo bikes?
    - Very important
    - Important
    - Somewhat important
    - Not at all important
4) Would you have been able to afford your ecargo bike(s) in the absence of the grant? Please select all that apply.
    - Yes, we would have purchased the ecargo bike(s) even in the absence of the grant
    - Yes, but the grant has enabled us to purchase more ecargo bikes than planned
    - Yes, but the grant has enabled us to purchase the ecargo bike(s) sooner
    - Yes, but the grant has enabled us to purchase higher spec ecargo bike(s)
    - No, we would not have purchased the ecargo bike(s) in the absence of the grant
    - Other, please elaborate:
5) How many ecargo bike(s) have you purchased through the grant scheme?
6) What will the ecargo bike(s) be mostly used for?
7) On average, how many miles do you anticipate the ecargo bike(s) to travel each week (across all bikes in total)?

8) If your ecargo bike(s) will be used to replace journeys that would have been done by a petrol or diesel vehicle, please use the table below to indicate which type of vehicle and mileage that will be displaced. (Note: Small van = up to 1.305 tonnes, medium van = 1.305 to 1.74 tonnes, large van = 1.74 to 3.5 tonnes)

	Vehicle size (small, medium, large)	Estimated mileage displaced
Motorbike		
Petrol car		
Diesel car		
Hybrid car		
Petrol van		
Diesel van		

9) If the type of vehicle displaced is not listed above, please specify below and the mileage displaced.

10) Please indicate to what extent do you agree or disagree with the statements below. [Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree]
    - I found the application process straightforward.
    - I was able to find all the information I needed for my application on Energy Saving Trust website.
    - I found the time taken to process my application reasonable.
    - I found the claim process straightforward.
    - Energy Saving Trust is available and helpful throughout the process.

11) Overall, how satisfied are you with the ecargo bike grant scheme?
    - Very satisfied
    - Satisfied
    - Neither satisfied nor dissatisfied
    - Dissatisfied
    - Very dissatisfied

12) Please explain your answer above.

13) Do you have any suggestions on what could be improved about the scheme? If yes, please describe below.

14) How likely is it that you would recommend ecargo bike grant fund scheme to others?

0-not likely at all 1 2 3 4 5 6 7 8 9 10 – extremely likely

15) What is your organisation type?
    - Limited company
    - Charity
    - Local/ public authority
    - Sale trader/ partnership
    - Community group
    - Not for profit
    - Other, please specify:
16) What is your organisation size?
    - Medium (<250 staff)
    - Small (<50 staff)
    - Micro (<10 staff)
17) What is the main activity of your organisation?
    - Agriculture, forestry and fishing
    - Arts, sports and recreation
    - Catering and accommodation
    - Construction
    - Education
    - Health and social care services
    - IT and telecommunications services
    - Manufacturing
    - Media and creative services
    - Mining, energy and utilities
    - Personal services
    - Professional and business services
    - Private Sector Landlord
    - Retail, hire and repair
    - Transport and distribution
    - Wholesale
    - Other, please specify:

Appendix B: eCargo Bike Grant Fund 2019/20 national scheme follow-up survey questionnaire

We are currently conducting an evaluation of the eCargo Bike Grant Fund that is funded by the Department for Transport. Our record shows that you previously applied to the grant to purchase ecargo bikes. Please fill in this short online survey on your ecargo bikes usage to help us understand the impact of the scheme. The survey should take less than ten minutes to complete.

1) * How many ecargo bikes did you purchase using the 2019/20 eCargo Bike Grant Fund?
2) * For how long have you been using your ecargo bikes?

   Number of months:
3) What motivated you to purchase ecargo bikes? Please tick all that apply.
   - They are beneficial to local air pollution
   - They are more environmentally friendly
   - They are suitable for my business purposes
   - They are easy to ride
   - They are inexpensive to run
   - Would have struggled to cycle a normal non-electric cargo bike
   - Wanted an alternative to public transport
   - Wanted an alternative to the car or van
   - Customers want zero emission delivery/ service
   - Other, please specify:
4) What are the ecargo bikes mostly used for? Please tick all that apply.
   - Delivering goods or services to customers
   - Transporting goods or equipment at work
   - Staff pool bikes
   - Hiring out
   - Other, please specify
5) Is the mileage that you have travelled using the ecargo bikes monitored?
   - Yes
   - No

6) What is the total mileage that all of your ecargo bikes have travelled since you received them? You can provide the total mileage travelled or average mileage travelled per week/ month using one of the boxes below. If the mileage is not monitored, please provide an estimation if possible.

   Total mileage travelled (km):

   Average mileage travelled (km) per week:

   Average mileage travelled (km) per month:

7) * What mode of transport would you have used for these journeys in the absence of the ecargo bikes? Please select all that apply.
   - I would have purchased ecargo bikes even if I did not use the eCargo Bike Grant Fund
   - Motorbike
   - Petrol/ diesel car
   - Hybrid car
   - Electric car
   - Petrol/ diesel van
   - Electric van
   - HGV
   - Standard bike
   - Public transport
   - Walk
   - The journeys would not have been made
   - Other, please specify

8) * How much of the ecargo bike mileage has replaced journeys that would have otherwise been made in the motorised vehicles?
   - All journeys undertaken by the ecargo bikes would have been completed using the motorised vehicles
   - Some of the journeys undertaken by the ecargo bikes would have been completed using the motorised vehicles
   - Not sure

9) * If some of the journeys, please indicate the percentage of ecargo bike mileage that would have been completed by the motorised vehicles.

10) Please use the table below to indicate which types of vehicles and what percentage of each you would have used. For example, if the ecargo bike's mileage that would have been done by motorised vehicles were 40% by a medium petrol car and 60% by a Class I diesel van, please input 40% and 60% in the respective row. (Note: Small van = up to 1.305 tonnes, medium van = 1.305 to 1.74 tonnes, large van = 1.74 to 3.5 tonnes.)

	Vehicle size (small, medium, large)	Percentage of ecargo bike's mileage
Motorbike		
Petrol car		
Diesel car		
Hybrid car		
Petrol van		
Diesel van		

11) If the type of vehicle you would have used is not listed above, please specify below and the percentage of ecargo bike mileage that would have been completed by the vehicle.

12) * Do journeys by an ecargo bike take shorter or longer time when compared to using a motorised vehicle?

- Shorter
- About the same
- Longer
- Not sure

13) [If shorter] On average, how much shorter is each journey via an ecargo bike as compared to using a motorised vehicle?

- <15 minutes
- 15-30 minutes
- 30-45 minutes
- 45-60 minutes
- > 1 hour

14) [If longer] On average, how much longer is each journey via an ecargo bike as compared to using a motorised vehicle?
    - <15 minutes
    - 15-30 minutes
    - 30-45 minutes
    - 45-60 minutes
    - > 1 hour
15) * On a scale of 1 to 5, how easy or difficult is it to cycle an ecargo bike?
    - 1 - very difficult
    - 2
    - 3
    - 4
    - 5 - very easy
16) * On a scale of 1 to 5, how easy or difficult do you find the following when using your ecargo bikes? [1 - very difficult, 2, 3,4, 5 - very easy]
    - Cycling infrastructure (eg cycle lane or cycle track)
    - Road
    - Spaces for temporary parking
    - Safe places to store the ecargo bikes
    - Servicing and maintenance of the ecargo bikes
17) * On a scale of 1 to 5, how safe do you feel using an ecargo bike?
    - 1 - not at all safe
    - 2
    - 3
    - 4
    - 5 - very safe
18) * Have you observed any benefits from using ecargo bikes?
    - Yes
    - No
    - Not sure
19) [If yes] What benefits have you experienced from using ecargo bikes?
20) * How likely is it that you would recommend ecargo bikes to a friend or colleague?

0 – not likely at all 1 2 3 4 5 6 7 8 9 10 – extremely likely

21) Do you have any other comments about your experience with ecargo bikes? If yes, please provide your comments in the space below.

22) * Have you purchased more ecargo bikes since receiving the 2019/2020 eCargo Bike Grant Fund?

- Yes
- Not yet, but I plan to
- No

23) [If yes/ plan to] How many ecargo bikes have you purchased/do you plan to purchase?

24) [If yes] If you have accessed the 2021/22 eCargo Bike Grant Fund to purchase some or all of the ecargo bikes, please specify how many ecargo bikes were purchased using the grant.

25) [If no] Why have you not purchased any more ecargo bikes?

26) * What is your organisation type?

- Limited company
- Charity
- Local/ public authority
- Sale trader/ partnership
- Community group
- Not for profit
- Other, please specify:

27) * What is your organisation size?

- Medium (<250 staff)
- Small (<50 staff)
- Micro (<10 staff)

28) * Which city or town is your organisation based?

29) * What is the main activity of your organisation?

- Agriculture, forestry and fishing
- Arts, sports and recreation
- Catering and accommodation
- Construction
- Education
- Health and social care services
- IT and telecommunications services

- Manufacturing
- Media and creative services
- Mining, energy and utilities
- Personal services
- Professional and business services
- Private Sector Landlord
- Retail, hire and repair
- Transport and distribution
- Wholesale
- Other, please specify:

Appendix C: Carbon savings calculation method

This section outlines the methods used in this evaluation for estimating the carbon savings. Different survey questions were posed to 2021/22 and 2019/20 grant recipients to elicit the information. Table 6-1 shows the questions within the 2021/22 national scheme feedback survey (see Appendix A) and an example response for calculating carbon savings. It is worth reiterating that at the time of the survey, 2021/22 grant recipients were unlikely to have received their ecargo bikes or would have just received their ecargo bikes. Therefore, the mileage data and ICE vehicle displaced were based on their expectation.

Table 6-1: 2021/22 national scheme survey questions and example response for carbon savings calculation

Survey question no.	**Survey question**	**Example response**
5	How many ecargo bike(s) have you purchased through the grant scheme?	1
7	On average, how many miles do you anticipate the ecargo bike(s) to travel each week (across all bikes in total)?	60 miles
8	If your ecargo bike(s) will be used to replace journeys that would have been done by a petrol or diesel vehicle, please use the table below to indicate which type of vehicle and mileage that will be displaced	100% small diesel van

The ecargo bike mileage associated with this particular respondent is calculated as:

Average annual mileage travelled = 60 miles * 52 weeks = 3,120 miles

According to the respondent, in the absence of their ecargo bike, 100% of the ecargo bike mileage would have been completed by a small diesel van. Using the UK Government greenhouse gas (GHG) reporting conversion factors 2021 for a small diesel van (0.23608 kgCO_2e per mile), the carbon saving is calculated as:

Carbon savings = 3,120 miles * 0.23608 kgCO_2e per mile = 736 kgCO2e

Table 6-2 shows the questions within the 2019/20 national scheme follow-up survey (see Appendix B) and an example response for calculating carbon savings. For 2019/20 grant recipients, they would have experienced using their ecargo bikes for a while at the time of the survey.[21] Therefore the mileage data provided was based on their actual usage of ecargo bikes. They were asked to indicate if their ecargo bike mileage is monitored.

Table 6-2: 2019/20 national scheme follow-up survey questions and example response for carbon savings calculation

Survey question no.	**Survey question**	**Example response**
1	How many ecargo bikes did you purchase using the 2019/20 eCargo Bike Grant Fund?	1
2	How long have you had ecargo bikes (number of months)	17
5	Is the mileage that you have travelled using the ecargo bikes monitored?	Yes
6	Total mileage since receiving ecargo bikes (km)	1300
8	How much of the ecargo bike mileage has replaced journeys that would have otherwise been made in the motorised vehicles?	Some
9	If some of the journeys, please indicate the percentage of ecargo bike mileage that would have been completed by the motorised vehicles.	60%
10	Please use the table below to indicate which types of vehicles and what percentage of each you would have used	40% medium petrol car / 20% medium diesel van

The ecargo bike mileage associated with this particular respondent is calculated as:

Total mileage travelled since receiving ecargo bikes = 1300 km * 0.621371 = 808 miles

Average monthly mileage travelled = 808 miles / 17 months = 47.5 miles

[21] 95% of 2019/20 respondents said they have had their ecargo bikes for more than a year at the time of survey

Average annual mileage travelled = 47.5 miles * 12 months = 570 miles

In the absence of the ecargo bike, 60% of the ecargo bike mileage would have been completed by an ICE vehicle: 40% medium petrol car and 20% medium diesel van. Using the UK Government greenhouse gas (GHG) reporting conversion factors 2021 for medium petrol car (0.30231 kgCO2 e per mile) and medium diesel van (0.29476 kgCO2e per mile), the carbon saving is calculated as:

Carbon savings = 0.4*570*0.30231 + 0.2*570* 0.29476 = 102 kgCO2e

Appendix D: Net Promoter Score

Net Promoter Score (NPS) is a customer satisfaction benchmark that measures how likely customers are to recommend a particular product or service to others, which in turn gives an insight into the value that customers place in the product or service. To collect this data, respondents in certain evaluation surveys were asked to rate their likelihood of recommending the product or service to another person from 0-10, where 0 is not at all likely and 10 is extremely likely.

To calculate NPS, results are split into three groups: Promoters (those who rate 9 or 10), Neutral (those who rate 7 or 8) and Detractors (those who rate 0 to 6). NPS is determined by calculating the percentage of all Promoters (respondents who rated 9 or 10) and Detractors (respondents who rated 0 to 6) and converting this percentage into a value. For example, if from a survey of 150 respondents 100 are Promoters and 40 are Detractors, then the value for Promoters is 66.7 (100/150= 66.7%) and for Detractors is 26.7 (40/150= 26.7%). The Promotor value is then subtracted by the Detractor value to produce the NPS. In this example, the NPS would be 40 (66.7-26.7). Table 6-3 shows the benchmark for Net Promoter Scores.

Table 6-3: Benchmark for NPS

Score	Considered	Comments based on global NPS standards
A “negative” score or NPS below 0	Action needed	NPS below 0 is an indicator that the project needs to start understanding and improving its customer satisfaction levels
A “positive” score or NPS above 0	Good	NPS above 0 is an indicator that the project has a more loyal customer base
NPS above 50	Excellent	NPS above 50 indicates that the project places customer satisfaction high in priority and has a lot more satisfied customers than dissatisfied ones
NPS above 70	World class	NPS above 70 places the project in the list of top customer-centric companies. This most likely means that customers generate a lot of positive word of mouth referrals