## Issue
To understand customers’ (including both senders and receivers) awareness and attitudes towards EFVs and green delivery in general.

## Solution
Experience survey carried out with customers before and after the deployment of electric freight vehicles (EFVs) for qualitative insights on the experiences and shift of attitudes.

## Results & benefits
In general, respondents have very positive attitudes towards electric freight vehicles and think that EFVs have a key role to play in resolving the poor air quality, global warming and traffic noise problems that many cities in Europe face.

## Context
The attitudes of customers have an important role to play in the future electrification of freight fleets. This is not only because most logistics operators are convinced that by using EFVs (or emission free vehicles in general) they can build a positive company image for their customers, but also because it is a good sales pitch and can give them the edge over their competitors who do not have emission-free vehicles when customers are choosing which logistics company to use. In addition, from the FREVUE experience, commercial customers have significant impacts on the deployment of EFVs. For example, it is not uncommon that some commercial customers specifically asked for their goods to be delivered by EFVs.

However, these observations have not been verified by any studies so far. FREVUE provided a unique opportunity to understand the attitudes and experiences from the customers, including the environmental issues they care about, awareness of EFVs, visibility of EFVs to customers, whether the preferential attitudes to companies using EFVs are real and whether customers are willing to pay an additional fee for green delivery, and if so, how much.

## Method
The primary research method was the use of an experience survey before and after the deployment of electric freight vehicles. The survey format was mainly based on online and paper questionnaires.
Most of the respondents were commercial customers, who were either senders or receivers of the logistics operators that were partners of the project in the eight FREVUE cities. However, a few FREVUE partners made the web-based questionnaire available through their social media channels to encourage a higher number of responses. As a result, there were a small number of participants from Spain.

In total, there were 31 returned questionnaires from the before survey (conducted in mid-2014) and 53 responses from the after survey (in late 2016).

It is worth noting that due to the low return rate of the customer survey and a relatively small total number of returned questionnaires, bias is likely to be present in the results. This analysis is therefore a good indication of customers’ experience, but quantitative conclusions cannot be drawn.

**Results**

**Attitudes and awareness of EFVs**

In the after survey, 51% of respondents reported that they had heard of electric freight vehicles, while the remaining 49% said they had not. For those who had heard of EFVs, only 35% reported that they had seen one of them in their local area. Unlike electric cars, of which most people are becoming increasingly familiar, more has to be done to raise awareness of electric freight vehicles.

When customers were asked whether they are in favour of EFVs replacing conventional freight vehicles, such as diesel internal combustion engine vehicles, 63% of the respondents said yes, 29% did not think it would make much difference to them and 8% were against the idea. The numbers were very similar in the before and after survey results.

In addition, customers were asked for their opinions on a range of statements related to EFVs’ safety, environmental performance and traffic system performance, as shown in the graph.

**Would EFVs affect customers’ choice of delivery company?**

Overall, 58% of respondents confirmed that “green delivery” is indeed one of the factors they would consider when choosing a logistics company. 32% said it would not affect their decision and the remaining 9% are not sure.
Customers were then asked what would they choose if their preferred logistics company is offering two types of freight vehicles for delivery including EFVs and ICEVs at the same price. 62% of the respondents reported that they would always choose EFVs and the remaining 38% said they would not care about the type of the vehicle, as long as the service offered is the same.

**Attitudes towards companies using EFVs**

75% of respondents reported that they would have favourable attitudes or views towards a logistics company operating electric freight vehicles, or low emission vehicles in general.

In addition, 70% of respondents also said that a retailer who uses a “green delivery” service would be regarded positively, and would benefit from an improved company image and perceived environmental responsibility.

Although these numbers look very positive, 94% of the respondents reported that they did not know whether the goods delivered to them were transported by an electric freight vehicle or not. Only 6% of respondents could confirm that their goods were delivered by EFV.

**Attitudes to monetary contribution for green delivery**

Most logistics operators believed that customers were not willing to make additional payment to have their goods delivered by an electric freight vehicle. Our survey confirmed that 51% of the respondents were indeed against the idea of paying more for green delivery. Another 19% said they were not sure. There was still a sizeable 30% of respondents, however, who said they would be happy to pay more for green delivery.

When we asked further about those customers who would pay more, so as to define how much more exactly they would pay in their local currency in a percentage format, based on the existing delivery fees, 45% said they were willing to pay up to 1% more on top of existing fees, 41% reported that they were willing to pay between 1% and 5% more to have green delivery, and 14% said they can accept an increase of 5% to 10%.

**Overall results**

Analysis of the customer surveys shows that, in general, respondents have very positive attitudes towards electric freight vehicles and think that EFVs have a key role to play in resolving the poor air quality, global warming and traffic noise problems faced by many cities in Europe. Respondents also had positive attitudes towards logistics companies and retailers who use EFVs.
Lessons learnt & Recommendations

• 94% of respondents said they did not know whether their goods were delivered by EFV or conventional vehicle. Clearly, if companies are operating zero emission vehicles, they need to find a way to communicate this to their customers.

• Most respondents confirmed that green delivery is one of the factors when making choices on which logistics company to use.

• Most respondents also confirmed that they would view a retailer who uses zero emission delivery positively.

• 30% of respondents are willing to pay more to have their goods delivered by an EFV or low-emission vehicle, although bias is likely to be present in the survey results.

Further information

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The FREVUE project has received funding from the European Union’s Seventh Framework Programme for research, technological development and demonstration under grant agreement no 32162

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