

Day-to-day experiences of FREVUE demonstrators

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for life



Purpose

The introduction of electric freight vehicle (EFV) fleets considerably changes the value chain of transport operators. They need to introduce the vehicle into their daily operations, get used to it and interact with new organisations, which is not always a smooth process. Experiences of FREVUE demonstrators in overcoming the barriers, and what kind of good practices they established in EFV integration, are described in this factsheet.

Evaluation

Companies participating in FREVUE filled in process evaluation forms every 6 months during the project.

Conclusion

Collaboration and communication between key partners and strong internal commitment are important factors facilitating the introduction of EFVs.

Context

Introducing EFVs to the fleet of a logistics operator requires new skills in the company, reorganisation of work and the identification of new risks. This, influences the company's internal governance processes and its management of the relations with external parties. In the process evaluation forms, soft skills and internal governance factors contributing to success or acting as an obstacle to the integration of the EFVs in daily logistics were reported.

Both the experiences during the preparation (the vehicle procurement process, installation of charging infrastructure, and, where relevant, changing the logistics models) and the operation phase (the EFVs running on the roads) were reported. Many of these factors apply more to innovations and projects in general, and perhaps less to EFVs or city logistics in particular. We still report these elements, as knowledge about these challenges or success factors can as such be useful for other logistics operators considering using EFVs and therefore contribute to the wider uptake of EFVs

Key barriers

The novelty of EFVs meant that companies were faced with long internal decision-making and validation processes, as they had to develop new relationships with other organisations, and assess new risks. Sometimes, they had to wait for similar long decision-making processes in these partner organisations, which was difficult to address as they were outside the circle of influence of transport operators.

Finding a successful and sustainable business model was hard for FREVUE demonstrators, as there were a lot of uncertainties in the cost-benefit analysis.

Even though sustainability concerns are largely discussed in the media and their priority is highlighted at city level, there is still a lack of awareness and engagement among key stakeholders in addressing these issues in practice. A lack of consistent government policy made long-term planning and commitment from partners more challenging.

The complexity of involving new, but necessary, organisations in the use of EFVs, such as electricity network operators vehicle manufacturers and leasing companies and municipalities, makes creating a business model a less-than straightforward process.

And how to address them!

The evaluation process not only identified the above-mentioned barriers, but also resulted in ideas on how to address them.

It is important that a new challenge/process should be engaging and interesting. Strong project management and motivation are essential, especially when organisational restructuring can influence the teams involved. As summarised by one of the FREVUE demonstrators is that "pushing through decisions on electrification within an organisation requires vision, persistence and partnerships". Overall it is important to design a cooperation model to ensure committed collaboration between stakeholders, so that the right combination of vehicles, infrastructure, services, financial incentives and environmental awareness is in place. These are some concrete recommendations:

Commitment, collaboration and communication

- Have a vision and share this in the company, be persistent!
- Sell the change internally using business risk and opportunity language.
- Get all parties in the chain involved, from OEM to the end customer and city authorities.
- Involve partners with complementary skill sets and access to information.
- Foster personal relationships with enthusiastic individuals in related departments and organisations, both on the local and the national level.
- Communicate in monthly or bi-monthly meetings, taking into account all partners involved in the project.
- When criticism is encountered, try and determine what exactly is causing the barrier.

Getting the project management on board

- Have a structured, informed plan prior to implementation to avoid any unexpected delays.
- Include clear “go” or “no go” moments in the project management.
- Work in a team and include regular meetings and calls.
- Have people with necessary skills working on the project, including a business controller.
- Monitor the implementation process. It can convince policymakers in the future, when you want to roll the project out on a bigger scale.

In the process evaluation forms FREVUE demonstrators reported specific recommendations in relation to different phases of setting up and operating the electric freight transport service.

Preparation phase

- When setting up an electric freight fleet - start with a pilot: it reduces risks and can be a good showcase to convince other involved parties.
- Clearly define the procurement process.
- Exchange information about existing suppliers with your network.
- Conduct market research in order to evaluate the main characteristics of the electric vehicles currently available in the market.
- Try to join forces when procuring EFVs, and use other (EU) projects' key learning points to avoid pitfalls.
- Include suppliers in the preparation and planning phase.
- Do not try to find the perfect vehicle - it does not exist... yet.
- Never underestimate the lead time for every step in the supply of EVs.

Operation phase

- Set aside time for testing vehicles on site before the real launch in case technical adjustments are required. It is better to make a good start late than a quick start with problems, as this will result in less internal support.
- Bring suppliers together to fix issues around innovation and new technology, as EFVs entail a new set up and new products.
- Ensure that all parties understand not only the benefits of EFVs but also discuss the concerns surrounding them, such as range restrictions.

Overall, it is useful to support the deployment of EFVs with a marketing campaign to attract attention to the topic of green logistics. This is to inform drivers and customers about the advantages of using EFVs as well as about real life experiences with them.

Lessons learnt

- **Make it fun and interesting**

A high-profile marketing campaign could increase EFV uptake in city logistics.

- **Broad collaboration is vital**

Committed collaboration and communication between cities and regions, vehicle manufacturers, energy suppliers and logistics operators is very important to overcome technical, legal and practical issues.

- **Internal commitment is essential for companies operating EFVs**

Since changing existing operations is difficult, and the business case for EFVs is not always evident, a clear shared vision and strong project and process management are key.

- **Cooperation with public authorities**

Strong cooperation between city authorities and partners has in some cases been decisive in overcoming technical and legal problems.

Further information

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Suitability of EVs for Logistics



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