



Lessons Learnt Report

BetterFleet, an online tool for fleet and sustainability managers

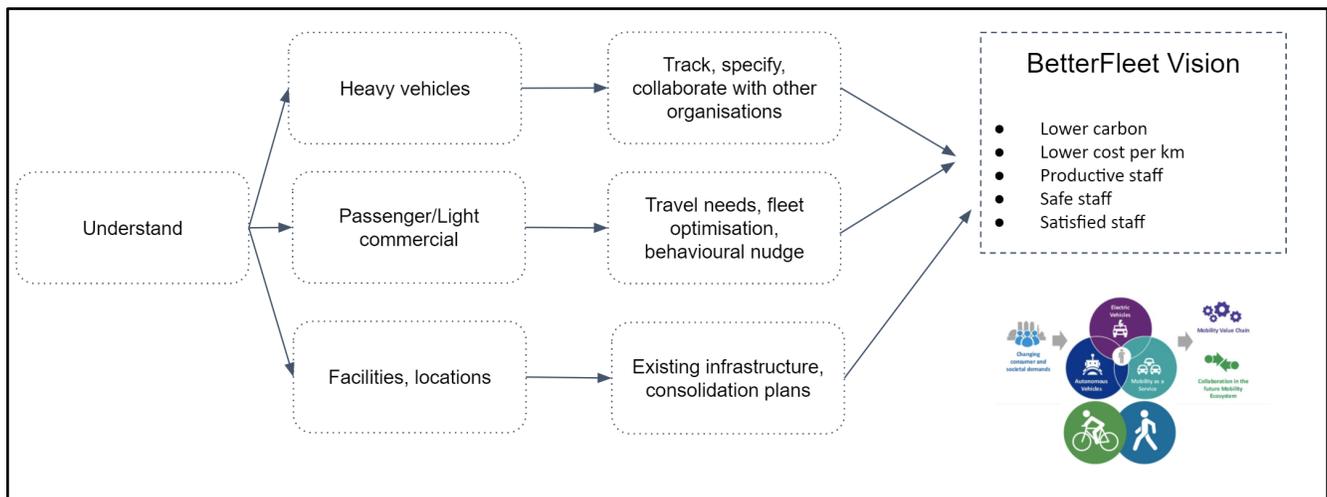
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Overview

This report outlines lessons learnt from developing BetterFleet, an online tool for fleet and sustainability managers that aims to help them understand what is involved with the transition process and help them optimise economic and environmental outcomes of transitioning to an electric, shared and connected fleet.



Accelerating the adoption of electric vehicles within fleets requires finding the potential change agents (or those being forced to go through the transition process), dealing with their objections and building their enthusiasm for making the transition, arming them with the tools they need and ensuring they can use the tools they require. Essentially it is about generating enthusiasm and removing roadblocks.

Success is ultimately measured by the number of organisations that go through a process all the way to purchasing vehicles. This requires the provision of information and tools, but also a proactive process of helping people through the journey and helping them if they get off track. To date the site has received 1500 visitors with 400 sign-ups. Of the 400 users that signed up to the platform, 79 used the BetterFleet platform more than once and 48 were active users.

In summary, the key lessons learnt throughout this process include:

1. We have a package that works well for utilities, universities and government sectors, specifically local governments. There needs to be more specific development to target market segments such as corporations and SMEs. Evernergi has started this development.
2. People who use the platform find it extremely simple to use and that it provides huge value in their process.
3. It is likely that only the organisations who are serious about fleet transition are the ones that are talking to us. What we have found is that when organisations are serious about fleet transition, they will use the ChargeTogether platform in some form.

4. We believe that there are a number of users coming onto the platform to check it out and parking it as “I’ll come back to this later when I need it, now that I know what it is.”. This also made us realise the process had to be more proactive rather than just a website and tools.
5. It is likely that only a small percentage of the corporate market is serious about fleet transition - it is a topic for discussion but not necessarily being actively pursued as a prioritised initiative within the organisation. In day to day operations, transitioning fleet to EVs is still not high up in people’s prioritised list of things to do.
6. To accelerate the transition requires a proactive and ongoing program :
 - a. To deal with the low priority of fleet managers we designed a system that promotes itself as needing little to no time to use - just provide us data and we give you the results.
 - b. To deal with people losing momentum we instituted a process of follow-up emails, calls and workshops.
7. The tools needed to be positioned as more generally useful to Fleet Managers. If they are only for Electric Vehicles, Fleet managers are less likely to use them. When the tool was seen as a tool across all vehicles TCO calculator, more fleet managers started to use it more often.
8. While there are so few electric vehicles in the market, interested parties would focus on those vehicles which were within the price criteria of fleets. Only the Hyundai Ioniq, Hyundai Kona, Nissan Leaf, Renault Zoe and Renault Kangoo were seen as viable options by most fleets, and they would typically be compared to existing common fleet choices such as the Hyundai i30 and Nissan Ascent.

As a result of these lessons learnt, we have reprioritised our focus on local governments for the first half of 2020, and positioned the product more broadly as something that not only helps organisations transition their fleet to EVs, but also as a fleet optimisation and low emissions strategies tool.

User acquisition

The first critical process is how to acquire potential fleets onto the BetterFleet platform. Some of the key lessons learnt in this process were:

- 1. Establishing a collaborative design process helped get initial users engaged**
It was important to establish a collaborative design process with stakeholders involved in the Charge Together program including industry peak bodies and fleet and sustainability managers. This was achieved by having a clearly articulated concept at the design and prototyping stages and collaborating with the users to get their feedback through multiple rounds of user research during the product development process.
- 2. It is difficult to find and target fleet managers**
Fleet managers were time poor and mostly operationally focused on their day to day running of their organisation's fleet. In the majority of cases, transitioning to a low emission fleet is not high up on their priority of things to do, and therefore it was less important to talk to us. We were able to find and target more sustainability managers at the initial stage as they are keen to reduce transport emissions for their organisation, and therefore once they had spoken to us then they brought their fleet managers to the table.
- 3. A number of engagement channels were used to effectively access our target users** - In the first phase of the launch sustainability and fleet managers were accessed primarily via different channels such as the City Power Partnership, AFMA, the CEFC drive day and directly via outreach from EVC and Everergi.
- 4. It is hard to measure effectiveness of PR and word of mouth** - There was considerable PR when the program launched, however it is very hard to measure how many parties were acquired via this channel. It is also hard to measure the impact of word of mouth.
- 5. A combination of tools is required** - In creating the program we engaged with 18 fleet managers and a similar number of sustainability managers - both in groups and one on one interviews. During these it became clear that a combination of knowledge and tools was required. In building the program this was taken on board and a combination of a detailed knowledge base and BetterFleet platform, along with a group procurement process, was put in place.
- 6. Email deliverability is a major issue** - When you are trying to run a progressive program that tries to help users through a transition journey it is very important that a firm line of communication is established with users. In the program, as with many such programs, email deliverability becomes a major issue. Emails are becoming an increasingly unreliable form of communication as many emails will get caught in spam, or ignored. A number of methods were used to improve this, both technical and commercial, but it remains a very difficult question and led the program to focus on one on one calls to be effective.
- 7. Current statistics as at submission** - The total number of users on the BetterFleet platform is 387 spread over 262 organisations. The largest segment are users from local governments - there are a total of 91 councils signed up to use the platform.

User onboarding

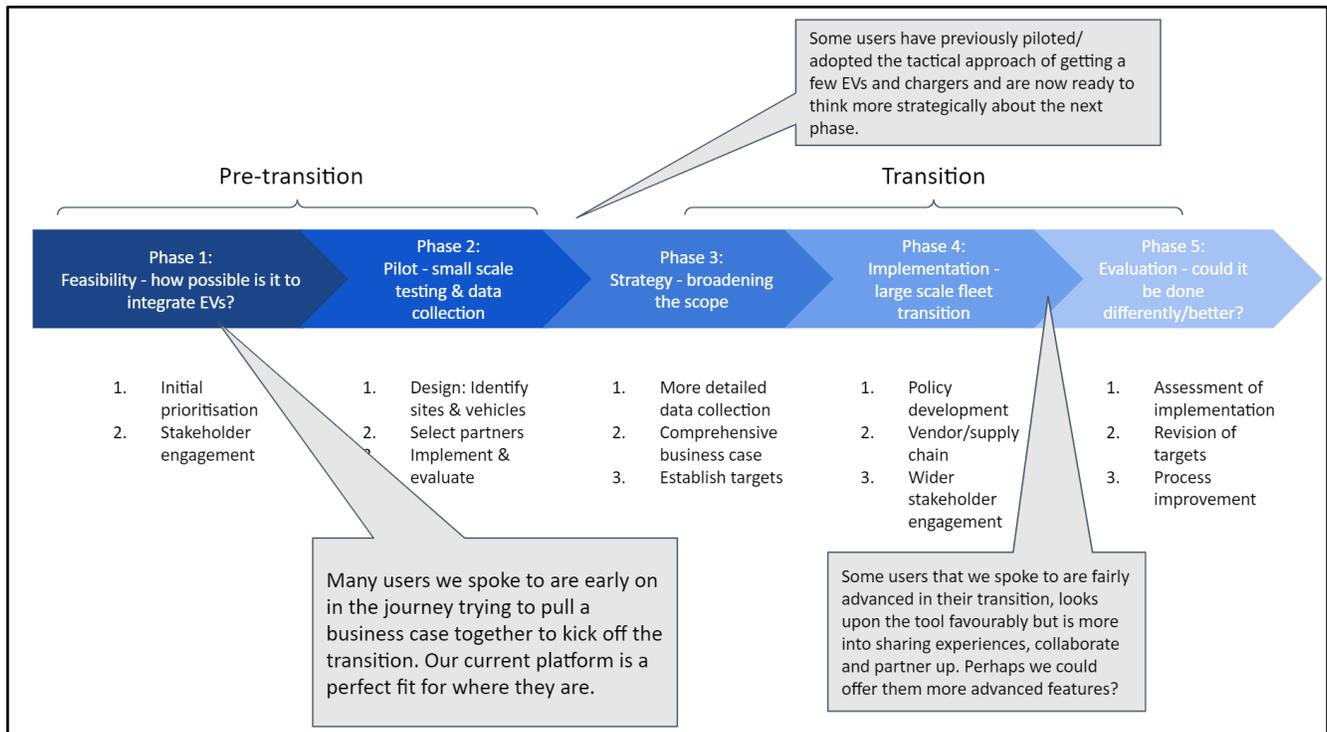
As it can be seen, the end to end process of acquisition, then onboarding into a transition journey can be very complex and organisationally specific. To address a number of these nuances and to help with the major technical problem - getting email deliverability to an adequate point - we ended up using the following process as a starting point :

1. All users signing up received two set-up emails - one on the program and one to ask them to reset their password and start using the platform.
2. When signing up some information was collected - however it was decided that this data collection would be minimised so as to avoid putting people off signing up.
3. We then followed up with a call to see if they wanted a demonstration of the platform. We realised that given the complexity of the journey, at this stage it was important to get further context from an organisation.
4. For those that booked the demo, there was an implicit interest in moving forward with a transition.
5. In this demo we were able to make sure they could use the tool and 100% of the time they would see value in what we were offering.
6. During the demo we were able to find out more about the individual organisation's situation and were able to learn more about how people would use the tool and therefore make more specific recommendations around where to go next on their transition journey.

Transition user journey

When we were co-designing the Charge Together project with fleet and sustainability managers, a transition customer journey (outlined below) was used in conversations to help develop an understanding of what was needed in terms of tools at each stage.

What became clear was that while some organisations were leading the pack in electrification, the majority of organisations were stalled at the very first step - building an initial understanding and feasibility study. The main focus on the program then became helping people to get past this initial hurdle - being able to quickly and inexpensively create a business case for management and provide the knowledge required to ensure people felt comfortable talking about the space.



User segmentation

As we got further into the project, it became apparent that the transition journey is highly dependent on the segment of users that were going on the journey, the type of fleet within their organisation, the ability of staff to influence the process, and the mandate that they had from the organisation to pursue the transition.

The key audiences could be segmented in several key ways :

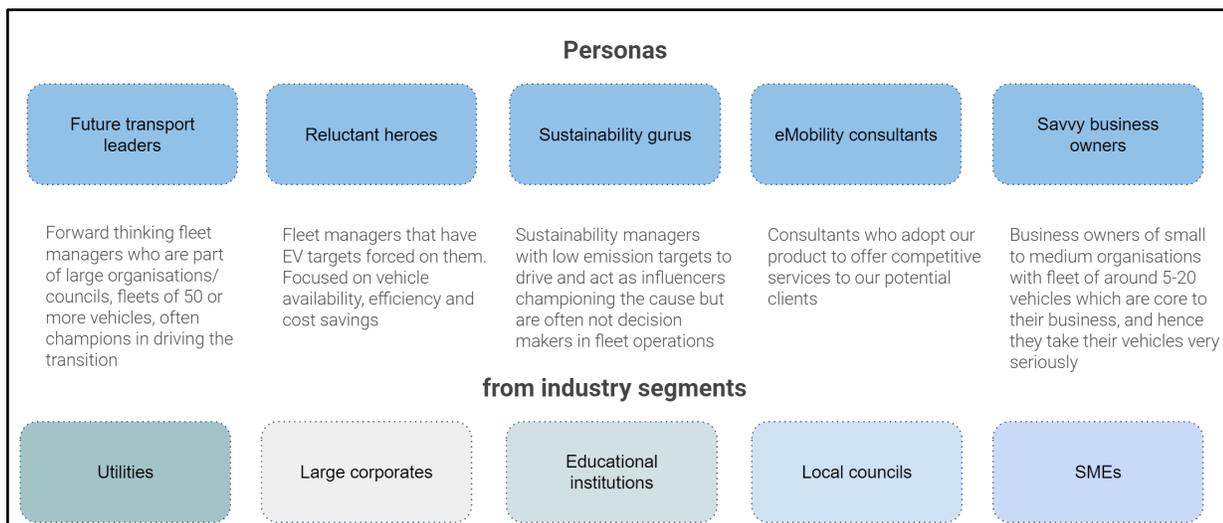
1. Job description - Typically either sustainability manager, fleet manager or executive
2. Industry - local government has been the most active
3. Level of authority over the process
4. Stage in the transition journey
5. Level of understanding of the transition process
6. Level of engagement with the transition process
7. How mission critical vehicles were in their fleet

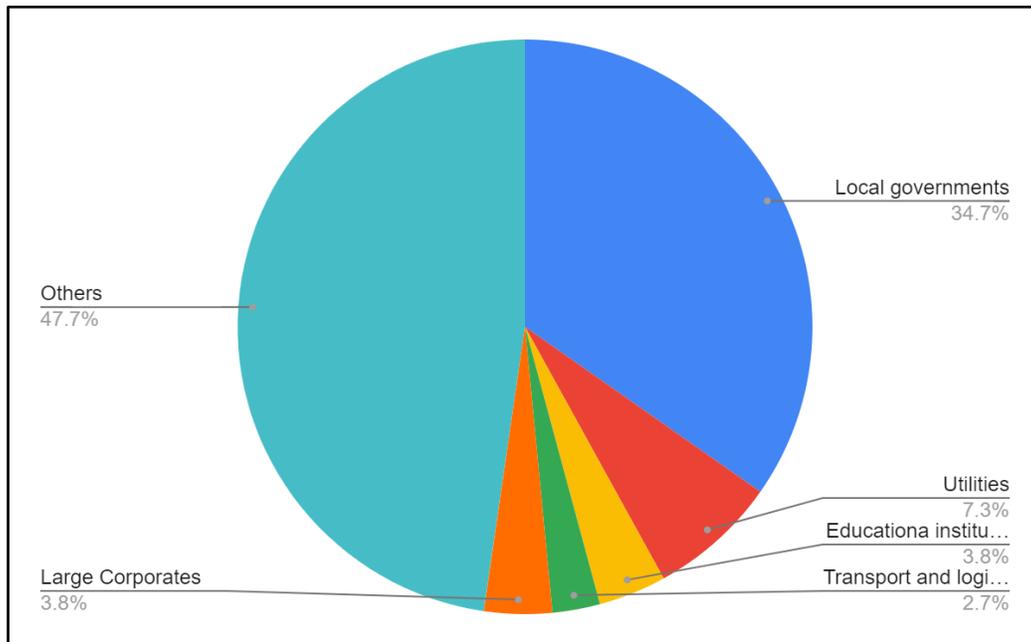
8. Persona were derived from the output of qualification questions that we had during user interviews - the key question is around understanding where the user's organisation is in its fleet transition journey and the part the user plays in it. The questions are as follows:

- What is your role?
- Do you own this transition process for EVs?
- Do you see it as part of a general mobility transition, or specific to EVs?
- What is the size and composition of your fleet?
- Where do you see the future of your fleet?
- How do you think you can get there?
 - Who are your key partners/suppliers?
 - Who are the key stakeholders?
 - What systems do you use? What do you need?

What we found was that we could broadly categorise our users into the following personas:

- future transport leaders
- future transport influencers
- reluctant heroes
- reluctant even keel
- resistant





What does a “successful transition” look like?

To create a transition, the process had to identify what a “successful transition” looked like and what an unsuccessful one may look like. What was identified was that people with a longer term view of planning were more likely to establish a successful transition pathway. People who were reactionary and just evaluating electric vehicles on a case by case basis could not put in place the organisational structures and frameworks to create a successful transition.

The sense is that the reason so few corporations engaged with the platform was that they operate in shorter planning cycles whereas local governments have 5-10 year goals, particularly when it comes to emissions targets.

Successful transition pathway	Less successful transition pathway
<ol style="list-style-type: none"> 1. Build the transition into long term planning 2. Build the required teams and put in place pathway for institutional changes (i.e. fleet policy change) 3. Create a structure for on-going monitoring, tracking and reporting 4. Work with operational realities of fleets, creating a realistic set of KPIs that understand these realities (or many fleet managers will be less likely to buy-in) 5. Understand the dynamics of sites clearly in terms of installing charging infrastructure and have a clear site 	<ol style="list-style-type: none"> 1. Look at opportunistic marketing-driven opportunities for purchasing 2. Create unrealistic targets that are separate from operational realities of fleet 3. Create a point-in-time report that does not allow for ongoing monitoring and reporting 4. Haphazard charging installations

- | | |
|--|--|
| selection criteria - don't just haphazardly install
6. Ensure that charging infrastructure fulfils mid-term requirements in terms of operational reporting, analysis. | |
|--|--|

Qualify current readiness of organisation

While it is appropriate to look at this journey based on a set of “principles” rather than steps, a set of questions were identified that were asked for each step of the transition process - and can therefore be addressed with knowledge, or as a way of qualifying whether to invest the effort in a transition at the current time. These questions were incorporated into the user interviews as part of the collaborative design process, and is in the process of being integrated into the tool to qualify users during the sign up and onboarding process.

Pre-Transition. Question 1 : Regardless of TCO - can EVs even work for my organisation right now?

- How do I charge them?
- Do they drive far enough?
- How do I service them?
- Is there one that fits my operational requirements?

Pre-Transition. Question 2 : Is there a significant enough driver to start the transition journey and is the current TCO and vehicle availability realistic for my organisation?

- Do we have an emissions target?
- Do we have any other organizational alignment with transitioning?
- What like-for-like vehicles could be procured?

Pre-Transition. Question 3 : Do we have organisational capacity and buy-in to do this right now?

- Is there a sponsor, or someone that can be made a sponsor?
- Is a key stakeholder opposed to the idea?
- Are there other priorities or things that are a condition precedent to the project going ahead?
- Is the right person driving the process?
- Is there any budget that could incorporate a transition process?

Initiate the transition process

In this actual transition process there are a further set of key questions that are important in navigating the next steps. From a program perspective it also became clear that it was important to funnel resources towards helping organisations where the program could make the biggest difference.

Transition. Question 1 - Who should be engaged in this process?



- Do we have the right people working on the project?
- Who will do the tasks required on the project? Data gathering, reviewing information provided and taking actions. How do they act on the information provided?

Transition Question 2 - How should we approach the transition?

- Should we appoint a consultant to do a document?
- Should we use software?
- Should we do it internally?
- Are there other alternatives?

Transition - Question 3 - What key initiatives should we focus on first?

- Should we focus on specific vehicles, asset classes, departments?
- Should we just pick low hanging fruit and do a trial?
- Should we be putting in charging infrastructure?
- Should we be focused on collecting data first? What data do we have? Is it enough to enable good decision making?
- Should we do this properly and get a strategic plan?

Transition - Question 4 - What data do we have, what data do we need?

- What data do we need to understand where we are at and establish a transition strategy?
- What data do we have and where are they sourced from?
- Where are the gaps in the data and how do we bridge those gaps?

What are the possible outcomes of the transition process?

In the journey generally it is important to make the outcomes action oriented and specific.

- Set realistic KPIs and set up reporting against KPIs
- Buy first electric vehicles
- Change organisational policies - to enable processes to happen in future
- Structured charging infrastructure purchasing
- Order charging infrastructure
- Order vehicles
- Implement organisational change management initiatives as borne out of the data
- Create forward estimates and rolling asset replacement budgets
- Monitor market and make sure that when new vehicles emerge procurement is evaluating them clearly and fairly

User experience

Despite this complexity there were some overarching trends that emerged within those that signed up.

- 1. There is a very subtle balance between trying to “sell” the benefits of transition and providing impartial advice**
Early on in the process it was determined that it was more important to be impartial than to

provide promotion for the benefits of electric vehicles. Convincing cynical stakeholders is important, and providing a “voice” that is too evangelical will put them off potentially finding information and opportunities they did not anticipate.

2. There is a common pattern in terms of finding the right champion for the process

While many fleet managers did sign up to the platform, in many cases the sustainability manager was the enthusiastic influencer and promoter of the transition process and then the program and platform. In some cases the sustainability managers are the key driver for the transition process, but in most cases the fleet manager is the key stakeholder and the platform needs to support the sustainability manager in engaging with the fleet manager. Some of the key learnings around getting fleet managers engaged include :

- (a) The platform was designed with engagement and feedback from 18 fleet managers
- (b) The platform provides fair and honest comparisons
- (c) The platform includes all vehicles - not just electric vehicles so is a useful tool for them regardless

3. Although hard to measure empirically, the sense was that the majority of users were not highly engaged in the process for long periods

This result was originally muddled by the fact that there was a significant lag between signing up and using the tool, but the ultimate result was similar - in the market currently the majority of people have a window of opportunity to look at this area which they do so intensively, and then stop.

However, a transition is not a once off process. We had a lot of debate about whether to have the platform freely accessible rather than requiring a username and password. While this may have created more initial engagement, the decision was made that in order to help with the transition, it was important that organisations were identified to enable follow-up correspondence.

4. There was a strong sense that there is a significant cohort of organisations who are legitimately starting to explore the transition process

To date the site has received 1500 visitors with 400 sign-ups. Of the 400 users that signed up to the platform, 79 used the BetterFleet platform more than once and 48 were active users.

5. Qualifying those organisations ready to transition, and then helping them to move forward, seemed to be the most productive use of time as the program progressed

At this early stage of the market, and with the relatively limited resources of the project it became clear the most likely success in meeting the objectives of accelerated adoption of vehicles would come from focusing on those organisations who have genuine enthusiasm for moving forward.

As above, it was challenging to use the platform to “sell” the benefits of transitioning, and as such it was impossible to use this as a forum for such a process.

6. Although charge together included a message board, webinars knowledge base and BetterFleet platform, the majority of interaction and engagement was around the platform

Given the channels we had used to get people to the Charge Together project, there was not as much engagement with our knowledgebase content as had been expected.

Of the content that was used - making the business case, EV basics and EV charging basics were some of the key content that was visited. The key lesson here (to be tested this year) is that people are more likely to find content using google than directly on these sorts of sites.

7. Webinars

The webinars were another key success from the program. They are well attended and create content that is more engaging and more likely to be useful to the target markets. Interestingly, remote and regional organisations were particularly excited about the ability to access webinars.

Webinar	Number of registrations
Global EV Outlook: Bloomberg NEF	70
Fast Charging Australia: Tritium and the NRMA	69
Commercial EV applications: Woolworths & SEA Electric	103
Leading the EV transition for local Govts: Waverley Council, Moreland Council, City of Adelaide	97
EV Policy in Aus - the road ahead: EVC & RACQ	119
E-Mobility adoption	54
Australia’s largest EV fleet installation: ACT Govt & JET Charge	79

Using CTF to build the business case: Dan	46
Electric buses: TransGrid and Zenobe	93

8. Some user segments were more engaged than others

It very quickly became apparent that local government users were the most engaged, based on commitments to carbon emission reduction targets. Other industries such as logistics were second, universities and utilities were also engaged.

9. Australian corporations are the least engaged in the process

To a large degree Australian corporations are not actively engaged in the electric vehicle transition process. Many have outsourced the process by migrating their staff to salary packaging, where the emissions no longer reflect on their reporting requirements. Many organisations are focused on so many things that vehicle electrification just does not get attention.

10. Perhaps the biggest barrier to transition is that Fleet Managers do not see it as a priority

Fleet management is a highly challenging role. Operational pain points around optimisation of whole of life, safety, maintenance management, IT projects, asset management are a constant pressure. Many of them have much higher priority “special projects” that they are not getting to - such as telemetry - that could deliver higher returns on investment.

To deal with this - the focus became “you have no time for this” so we have built a system that requires almost no time.

11. Collecting data is a major challenge for many organisations

As outlined in technical challenges below, the collection of useful data is a critical part of the process. Many organisations still operate on fairly rudimentary systems. Implementation of new systems did not really address the core problem of needing a “lite” process that did not get bogged down in internal discussions about data acquisition.



Technical considerations

Platform architecture

The BetterFleet platform was implemented using a highly flexible architecture with significant data acquisition and maintenance of a range of complex algorithms (in Python) and the output using a React Native platform.

Test and learn approach

Evenergi uses an agile and highly iterative development approach and the process drew upon input from 18 fleet managers and 12 sustainability managers. As we built components of the product we performed one on one interviews with these stakeholders to test the components and how it fit together into an overall product, and the future product roadmap. Based on the insights derived from user feedback we enhanced, and continue to enhance, the platform features and usability.

Key lessons learnt here are:

1. It is impossible to make everyone happy - we needed to prioritise the feedback and come up with solutions that cater for the majority of our users
2. Not all feedback carries equal weight - we needed to separate what is a matter of opinion to feedback that requires enhancing features or design.
3. We needed to analyse the feedback based on the persona of the users that we spoke to
4. We needed to make the 'calls to action' really obvious for users to do what we want them to do - a very small design variable makes a significant change to how the users used the tool

Data collection

The BetterFleet platform itself focused mainly on getting users to the point where they are comparing the next vehicle they buy to see if there is an economic case for electric vehicles.

The advanced services that are now being offered extend this by using the clients own data to provide more advanced services.

There are some significant lessons learnt in this data collection process :

1. Most organisations have limited access to data
2. Many organisations are moving to similar ERP systems
3. Most organisations are very sensitive about sharing GPS data
4. Many organisations have not implemented GPS due to the fact that there are too many internal issues around data privacy
5. Fuel card data is a fairly ubiquitous data source
6. It is important to offer a service will enables multiple data sources to be used



There were a number of other lessons learnt in the process :

1. The project developed real range data and this was controversial
2. It is unusually difficult to get people to follow the process in this product
3. Development of a residual value algorithm is very complex
4. Fleet managers essentially want to be able to tweak every single variable in a model
5. Sensitivity analysis is a good way to present an objective view of total cost of ownership, by letting people think about how they can improve the payback on electric vehicles
6. Fleet managers like total cost of ownership to be displayed in different ways - some by km, some by month, some by year, and some in total over a contract period
7. Implementation of Australian vehicle tax systems is highly complex as there are different rules in every state
8. Tax structures for local governments are different to other organisations