

Low Emission Vehicles Contestable Fund - THL

Organisation name:	Tourism Holdings Ltd Saskia Verraes, GM Responsible Management	Project name:	Low emission travel: Accelerating low emission motorhomes availability and charging infrastructure for tourism and owners in NZ
Round of co-funding and amount received:	\$402K	Location of project:	NZ-wide
When did the project launch:	December 2018	Total cost of the project:	\$804K

PROJECT SUCCESS

About your project

Description of project

Tourism Holdings Limited (THL) and Holiday Parks Association New Zealand (HPANZ) embarked on a process to make an Electric Campervan trip a possibility in New Zealand as a low emission alternative to the current options.

THL started R&D on EVs in 2017 and introduced a Nissan ENV 200 van for road testing and user insights in Dec/Jan and worked on completing a first electric motorhome (converted) which was on display for the first time for industry trade at Trezn in early May 2018 and for the public at EV world in Aug and Big Boys Toys in Nov 2018. THL proceeded ahead of the EECA schedule and put 10 eLDVs on fleet in December - January to start getting further insights.

THL and HPANZ working on 2 itineraries based on user insights and to create a new experience.

(Project approved 8 chargers - changed to up to 50 lower cost chargers).

How did you go about the project?

2 years ago THL recognised that they needed an alternative to fossil fuel campervans. General suppliers Ford, Toyota, Mercedes didn't have any options available. Saskia researched this, and found only one option, in the UK: eNV200 van converted to electric. THL had to import it themselves. There was no information available on the NZ infrastructure - insurance, charger, health and safety, vehicle range, etc. Saskia spoke to entrepreneurs about how they converted their vehicles to get some ideas.

THL's design manager talked to customers and travelled round the holiday parks talking to the owners, and realised there was no charging set up at that stage. THL and the holiday parks NZ worked together on the LEVCF proposal: 2 itineraries, THL providing the campervan, and the holiday parks installing the charging.

Without the co-funding THL would not have done the project at the time, and definitely not so fast. The itineraries developed for the North and South Islands were an important factor. The funding gave THL the incentive and opportunity for engagement with the holiday parks.

THL hired Rebecca Agent to help with implementation. Does help to set a deadline.

THL has been in “an enormous learning curve,” as people had no idea about how to be “EV ready from an operational perspective – design process, what it means to have an electric engine versus fossil fuel, who can do what.”

NZTA certification for the campervan – NZTA didn’t have a process for that, so that delayed the process. Wanted to drive the project faster.

Now, more information available, certification process in place, more vehicles available.

What was the key driver for your project? E.g. Emissions reduction, sustainability, staff, shareholder value

Sustainable options for customers, and preparing for the future. THL is committed to sustainability and saw this project as necessary.

What was innovative or new about your project?

First project of its type in NZ. Created the travel itineraries for travellers to address any range anxiety.

THL looked at hydrogen and biofuels as ways to drive down emissions before deciding on electric, working with the Sustainable Business Network on scoping this, but realised there were too many issues:

- Hydrogen - wasn’t workable.
- Biofuel - inability to refill and enough locations. Also, supplier wouldn’t commit to more than 1% biofuel, so there was no point.
- Hybrids – wasn’t going to be needed as electrics were developing so fast. Plus benefits from maintenance costs dropping away – don’t get that from hybrids.

Saskia noted that electric hasn’t developed as fast as was anticipated – so hybrids might actually be an option to get through in the interim in NZ, and even globally.

THL has a fleet of 2,000 in NZ – cannot convert all 2,000 right now, both because of the lack of options and because there is not yet enough demand; until “people accept the fact that electric is different.”

THL is on an ongoing learning curve. Going to have to research and trial, in a continuous cycle.

How does it benefit New Zealanders?

Project business case

Where does the project fit in your organisation’s strategy? E.g. sustainability plan, fleet management plan, commitment to reducing emissions

(Paraphrased)

The way we originally did sustainability was fairly integrated but not as much as now. With the materiality assessment we used to do, emissions came out up there (high). The only way to address

emissions was to look at our fleet. But our operational emissions are fairly insignificant compared to our customer journeys.

THL is committed to Future Fit as our topline methodology – so we can be even more aggressive in pursuing a holistic method – we are willing to change our business model to get to the point where we cause no harm at all, a breakeven point. It is now a topline strategy, not a sustainability strategy on the side. This is the first year have done one report; integration of finance and sustainability in one - not one thing to make money and another thing to offset it.

Everything is now looked at lens of Future Fit, so the lens will be different. Just announced public commitment to it in August. This is the first year to apply the lens – 40 sites world-wide, 23 goals. Business decisions will be different because of that.

The Board is completely behind us still. An old style financial case for this doesn't work. But THL doesn't look at old style, we look at 6 capitals; future fit business; integrated value. This is super valuable – people capital, relationships capital, IP, we have a completely different image in that space with organisations we would never have worked with otherwise.

THL is lucky to have a Board that is so open minded, that can see the long term future, that fossil fuel is not the future, and they are happy to accept the fact that this isn't a normal old style ROI business case, even with the funding.

Who was the key senior level champion for the project? Role, interest in the project

Saskia is the champion. Started looking at sustainability as a strategic project in 2014. By 2018 started looking at setting bigger goals. Wasn't enough. Looked at methodologies – she spoke to Grant the CEO in January about the Future Fit business benchmark, and he supported it, as did Board chair Rob Campbell. It was lucky they were forward looking. Looked at what it would mean, had an exec session, and a Board session.

Future fit methodology speaks to investors, with 23 measurable goals and in finance language, but about people and environmental issues. She looked at a case study from Norway, which started with staff, not the Board, then got rolling. Saskia had top support straight away.

What were the project targets or success factors? Did you achieve them?

10 vehicles on the road. 50 slower chargers installed.

What were the key components of your business case? How did these play out, actuals versus expected?

- Build
- Rent
- Sell

Project results

What has this project saved or avoided in energy, emissions and other costs? (comment on what you were expecting if different)

“The 10 campervans that were built with co-funding, will not be the way forward for that model; they are performing well but have a limited range, and the current infrastructure causes issues from a majority

uptake perspective. The majority mindset is definitely not there yet (i.e. in accepting electric and the different way you need to travel to make it work). People have good intentions but the reality is they want to do things they can't do with an electric campervan. Some people have come back after a day to swap to diesel. Generally if people keep it for 2 days then they're ok and love it. But other people are not really prepared yet."

The funding all helps to mainstream and get people to accept it.

The journey wasn't just about the engine, it was also about the materials use for rest of campervan, to make as suitable as possible, to extend the range, make it lighter and more durable. The engine is not going to give out, you can just change the battery.

Still doing lifecycle assessment – EV project question that Saskia still gets from people is about the lifecycle – are EV batteries worse than ICE – how do you compare LDV vs diesel. THL is almost ready to publish a case study with Thinkstep – the results are that electric is better. Saskia's vision is to have a database that shows all campervan types and their energy ratings, so customers can see the star ratings, and THL can adjust pricing on that basis. Long term plan.

Project key learnings

What feedback have you had from customers, staff or other people? Have you seen behaviour change?

Tourism – THL wants to stop people from doing old style travel, to use electric to help change travelling to a different type of experience, slower. That's why the campervans worked in Coromandel, Northland etc, areas that usually miss out on tourism dollars, so much to see, and requiring a slower travelling style.

Saskia has seen a little bit of change but generally the market hasn't shifted yet – “people who have chosen to do slower trips post raving reviews on both itineraries and campervans, and there's good feedback about the people connections that they make because of it. But generally that's not what people come to NZ for. Domestically we haven't seen it either yet. We are early, and we wanted to be.”

What key learnings would you pass on to others undertaking a similar project? E.g.

- Senior level support/sponsorship – THL's Board was fully supportive of the project.
- Position in the business plan/organisational strategy – part of Future Fit.
- Approvals process and timing – THL was lucky with the level of Board support for the project, so there were no issues with approvals.
- Business case – THL used Future Fit, a methodology that looks at the 6 capitals. They recognised the business case would be very different for this project.
- Certifications – no certification process was set up at the time for campervans. Check with NZTA/ Worksafe before doing your project.
- Availability of vehicles – no suitable options were available in NZ. Trial vehicles. THL converted a van themselves, and is considering converting the rest of their fleet rather than wait until a suitable EV is available.
- Timeframes around booking tradies – this was really difficult, and impacted the implementation of the chargers at the holiday parks. The owners struggled to get tradies in. There were not enough registered electricians, and these were very expensive. Just to do one or two chargers, the owner

would have to line it all up, trench diggers, chargers, all at same time. Often they did not provide the paperwork on time, and often chose not to turn up.

PROJECT INFLUENCE

How will you communicate the results of your project? Please detail the activities you have undertaken to share your project results and knowledge, and which you have planned for the future. How could you work with us further to help us promote the results of the project?

How has the project evolved since you delivered it? Have you scaled up or extended the project since the completion date?

What other emissions reduction activity or commitments have you made since completing the project, or as a result of committing to the project?

E.g. purchased additional low emission vehicles, set emissions reduction targets, public commitment and/or membership of climate /sustainability organisations.

THL is trialling different things, pushing suppliers to come out with new models. Grant Brady and the THL CEO went to the motor show in Germany to talk to suppliers about R&D plans – they were very disappointed with what is planned to come to NZ.

At the same time THL are trialling converting ICE to electric. Eventually that will probably be the way to go faster with the 2,000 current fleet, if it is viable to do that [rather than wait to replace ICE with electric]. To suddenly make a big change, put vehicles into a factory and get big chunks done.

Starting to see in UK that travel operators are looking at implementing a “create your lowest carbon trip calculator” – showing the combination of trip options that would deliver the least carbon. Saskia would love it if people wanted to measure this.

REPLICATION POTENTIAL

How might other businesses follow in your footsteps? Which ones do you feel would benefit from a similar approach?

What advice would you give them? E.g. what to avoid, what to ensure you do or get in place.

- Just go for it. Be prepared to learn, talk to the experts, talk to colleagues and peers in the industry.
- Start small. Trial one, let staff try it.
- Set a policy to replace company cars to electric as they come up for renewal. Not everybody is going to like it, but just do it. Give them no choice, unless they have a really compelling reason.
- Install chargers at your site - chargers are good to attract customers and also for staff. See in Japan how well integrated chargers and cars are – people start using it because it’s just there, part of the norm. The more people get confronted with it, the more it seems normal. People want to be part of it because they see it there.

- Allow extra time for tradies to complete their work, as often they'll reschedule, or if it's a small job they won't want to do it. Line up all the tradies, contractors, trench diggers so one doesn't hold up the other as your whole project will be delayed.

What would you find useful if you did the project now?

- Basic knowledge – how does it work in plain terms.
- Costs.
- What you need to do think about if you put a charger in.
- Basic stuff, like insurance and H&S.
- Understanding of electricity, power.

KEY LEARNINGS FOR EECA

Do you have suggestions for EECA to improve its processes, communications or contracts?

In general it was a smooth process. Admin is always a pain.

Do you have suggestions for programme development?

EECA could set up a more structured process for smaller operators to set up their projects, e.g. provide a list of registered tradies, so you know who to call.