From: Scott McKenry <[redacted]@maroondah.vic.gov.au>
Sent: Monday, 4 December 2017 11:30 AM
To: EIC; [redacted]
Subject: RE: Inquiry into Electric Vehicles - Transcript
Attachments: NAGA LGV Final Application Efficient Vehicles.pdf

Hi Prue,

Apologies for the tardy response. The transcript reads fine.

As requested, I've attached some additional information on the NAGA vehicle efficiency study. The project is in its formative stages so there is not a final report to share as yet.

Thanks,

Scott McKenry
Executive Officer
Eastern Alliance for Greenhouse Action

EAGA
EASTERN ALLIANCE FOR GREENHOUSE ACTION

Winner
Premier's Sustainability Awards 2016

Maroondah City Council | Braeside Ave Ringwood
03 [redacted] | [redacted]
(Monday to Thursday)
[redacted]@maroondah.vic.gov.au
www.eaga.com.au

From: EIC [mailto:eic@parliament.vic.gov.au]
Sent: Monday, 27 November 2017 8:57 AM
To: Scott McKenry <[redacted]@maroondah.vic.gov.au>; '[redacted]' <[redacted]>
Cc: EIC <eic@parliament.vic.gov.au>
Subject: Inquiry into Electric Vehicles - Transcript

Dear Mr McKenry and Councillor Clarke

On the behalf of the Economy and Infrastructure Committee, I would like to pass on our appreciation for the evidence you provided on 8 November 2017, for the Committee's Inquiry into Electric Vehicles.

Attached is a copy of your evidence for you to review and return to the Committee, by email (if possible) to eic@parliament.vic.gov.au or by post.

When making corrections to the transcript, please be mindful of the following:

1. Only corrections which are deemed necessary to ensure the accuracy of the transcript may be made. Corrections which materially alter sense or fact may not be accepted by the Committee.
2. Corrections must be signed by the witness.

The easiest way to mark these changes is for you to print the transcript, mark any changes by hand, then scan the marked up copy and email back.

Please return the corrected copy of evidence by close of business Monday, 4 December 2017**.** Transcripts will then be tabled with the Committee's report. If no corrections are received the Committee will accept the transcript without change.

Please note that the transcript is a formal record of your presentation and may be cited in the Committee's final report.

At the hearing, the following matter was taken on notice:

1. Further details on the project currently being undertaken by the Northern Alliance **[Page 14]**

Could you please respond to this matter once you have obtained the relevant information.

Once again, thank-you for your valuable input.

Best regards

Prue Purdey
Administrative Officer - Standing Committees
Department of the Legislative Council
Parliament of Victoria | Spring Street | East Melbourne | 3002
613 86822839 | Prue.Purdey@parliament.vic.gov.au
@VicParliament | facebook.com/VicParliament | parliament.vic.gov.au

Form Submission

Form:	Collaborative Council - Sustainability Fund Partnerships - Round 3 (F-53 v162)
Form Type:	Grant Application
Submission ID:	GA-F7628-3182
Submitted:	14/02/2017 12:09 PM
Submitted By:	Rob Law

INTRODUCTION

User Registration
It is a requirement that you are a Grants Online registered user in order to 'Save as Draft' or 'Submit' an application form. If you are already a Grants Online registered user, you will be prompted to enter your username and password. If you are not a Grants Online registered user, you will be asked to create a username and password.

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LEAD COUNCIL DETAILS

Name of Lead Council:	Nillumbik Shire Council
Lead Council's Australian Business Number (ABN): Check the ABN at ABN Lookup	64 487 894 794

Name of Chief Executive Officer

Title:	Mr
First Name:	Mark
Last Name:	Stoermer

PROJECT CONTACT

Contact details for the person who will manage this project

Title:	Ms
First Name:	Romney
Last Name:	Bishop
Position:	Senior Sustainability Officer
State:	Victoria
Telephone:	03[redacted]
Email:	[redacted]@nillumbik.vic.gov.au

Postal Address

Postal Address:	**PO Box 476**
Town / Suburb:	**Greensborough**
Postcode:	**3088**
State:	**Victoria**

PROJECT PARTNERS

Council Name	Contact Name	Position	Email
Manningham City Council	Clayton Simpson	Environment Co-ordinator	[redacted]@manningham.vic.gov.au
Moreland City Council	Stuart Nesbitt	Climate Change Technical Officer	[redacted]@moreland.vic.gov.au
Yarra City Council	Indy Lingam	Greenhouse Programs Leader	[redacted]@yarracity.vic.gov.au
Nillumbik Shire Council	Romney Bishop	Senior Sustainability Officer	[redacted]@nillumbik.vic.gov.au

PROJECT OVERVIEW

What is the name of your project?
In 10 words or less give your project a name.

Low Emissions Fleet Assessment

What are you going to do?
In 50 words or less, provide a description of the proposed project.

This project will develop 4 tailored fleet assessments to transition the 4 participating councils to 'greener' fleets that can lessen environmental impacts in order to minimise fuel consumption, carbon dioxide (CO2) emissions and other pollutants, and reduce the need for travel.

Has the group, or members of the group undertaken procurement/Shared Services before?	**Yes**

Detail what was involved

This group has a long history of working together on emissions reduction projects through the Northern Alliance for Greenhouse Action. In particular through NAGA's technical working group, the councils have a history of sharing information on low emissions vehicles and electric vehicles. This working group meets regularly to discuss key issues and challenges, hear from industry experts and highlight new technologies and develop new project ideas. The group also have had a long history working together on procurement issues in particular streetlight changeovers and electricity contracts.

Anticipated Project Start Date:	**02/07/2017**
Anticipated Project Completion Date:	**30/05/2018**

ASSESSMENT CRITERIA

In your response please address the specific questions below which are listed in the program guidelines. You may also make reference to information in your supporting documents as evidence in outlining your response.

Your responses to the criteria should reflect your expectations of a business case as well as potential benefits if you were ultimately successful in implementing the project.

Responses to each question should be no more than 500 words

1. The proposal aligns with the Sustainability Fund Objective One and/or Two *
Describe:

- How does the proposed project align with either of the Sustainability Fund objectives and/or strategic priorities as detailed in the Sustainability Fund Priority Statement?

- What existing or identified gaps and/or issues in environmental sustainability, climate change, waste management or recycling would you expect to address through this project?

Find out more about the Sustainability Fund's Legislative objectives and Priority Statement here
http://delwp.vic.gov.au/environment-and-wildlife/sustainability-fund

This project aligns with both objectives of the Sustainability Fund.
The benefits of this project and how they align to objectives 1 and 2 include:
• Unlock barriers to innovation in fleet management across local government through building council capacity and support for low emissions vehicles
• Reduce greenhouse gas emissions
• Improve air quality through reduced air pollutants such as nitrous oxide, particulate matter and carbon monoxide
• Greater fuel efficiency leading to financial savings
• Reduce waste heat from standard internal combustion engines leading to reduced contributions to urban heat
• Prepare local governments for introduction of higher fuel efficiency standards
• Demonstrate leadership to the broader community and help businesses to adopt similar practices
• Help to support and grow the market for low emissions vehicles through potential fleet purchasing coalition
In order to meet Victoria's ambitious net zero by 2050 emissions reduction target, it is necessary to accelerate the uptake of low emissions transport technologies. Transport emissions make up 20% of emissions from the NAGA region, and typically comprise between 15-25% of council corporate emissions. This covers council's corporate fleet including passenger vehicles,light commercial vehicles and refuse trucks. Councils across the NAGA region have already made much progress in reducing emissions from other sectors such as through energy efficiency in council buildings and streetlight changeovers, yet transport emissions remain a challenging sector. Several councils have demonstrated leadership through the introduction of electric vehicles and hybrids, such as Moreland City Council. Despite this, there remains significant financial, cultural, governance and organizational barriers to effecting change in local government fleet management.

Broadly speaking, there are three ways to reduce greenhouse gas emissions from fleets:
1. Improved fuel efficiency, employing advances such as lightweighting, homogenous charge compression
ignition, and common rail diesel engines.
2. Use of lower emission fuels, including renewable fuels (such as biodiesel and ethanol) and gaseous
fuels (such as natural gas and liquefied petroleum gas).
3. Electrified drivetrains, including hybrid vehicles, plug in hybrid vehicles, purely electric vehicles and
fuel cell vehicles (adapted from the South Australian Low Emissions Vehicle Strategy 2012-2016).

Reducing emissions from corporate fleets is often seen as a low hanging fruit for emissions reductions. However, a number of financial, technical and cultural barriers have limited the uptake of low emissions vehicles in council fleets that are necessary to seek to overcome. These include:
• Lack of exposure to new technologies leading to misinformation and lack of trust in technologies
• Uncertainty on new technologies capacity for a range of service duties (eg. tool-of-trade, pool, executive, and a range of other specific purpose vehicle applications.)
• 'Range anxiety', long charging times and a lack of charging infrastructure for EVs
• Lack of capacity for understanding maintenance issues
• Perception that low emissions vehicles are too expensive and untested
• Higher overheads for business case design compared to standard fleet options
• Overcoming negative experiences from previous investigations or trials

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2. Proposed output/s to take the form of a business case, feasibility study, proof of concept or similar. *
Describe:

- The scope of your project and the key outputs that will be developed
- The objectives of your project and how it aligns with the Program's objectives
- How consistent the project is with the Plans of participating councils and/or alignment with current State Government policies?

This 12 month project will assist the 4 participating local governments plan to transition

to a lower emissions and lower cost transport future through a feasibility study and 4 tailored business cases.
A: Feasibility study: The feasibility study will assess the current circumstances of each participating councils and identify opportunities for reducing emissions through an assessment including:
• type and age of vehicles;
• usage of vehicles (including purpose, mileage, load capacity, frequency of use);
• company tax considerations;
• FBT and salary packaging implications;
• evaluation of Buy versus Lease models;
• plans for phasing out obsolete vehicles;
• change management;
• driver training for transition;
• increased pool car implementation;
• new data-driven support for fleet managers; and
• specific behaviour modification programs for employees
• tender specifications for contracted services

B: 4 x business cases: The assessments will produce pragmatic, fully costed targets for transport operations emissions reductions in an informed manner based on local data and evidence to produce shovel ready business cases. While it is anticipated that the assessments will be conducted by a third-party organisation with the requisite expertise, the approach is designed to build the capacity of local government officers with regard to transitioning to low emissions fleets. It will also identify opportunities for encouraging low emissions vehicles by contracted businesses through both support measures and stricter tender requirements.
C: Information sharing: The approach has the potential, and will be tested for its viability, to be extended to the wider community through information and awareness campaigns and the replication of the approach for local business fleets. In addition, the project will actively promote the outcomes of the project through regular updates to other interested local governments, through the greenhouse alliances network and suitable communications channels.

The project aligns with a number of State Government policies and council plans:

• Victorian Energy Efficiency and Productivity Statement 2015 – Priority action 4 –Government leadership and best practice;
• Victorian Zero Net Emission target 2050 included in the Victorian Climate Change Bill 2016;
• Victorian Government standard motor vehicle policy
• Victorian Transport Technologies Sector Strategy 2016;
• New Energy Technologies Strategy 2016
• Victorian electric vehicle trial

Participating councils each have plans to reduce corporate transport emissions in the following plans:
• Climate Change Action Plan 2016-2020 (Shire of Nillumbik)
• Council Corporate Carbon Reduction Plan (Moreland City Council)
• Climate 2020 Action Plan (Manningham City Council)
• Environmental Sustainability Strategy (City of Whittlesea)
• Climate Change Action Plan (Darebin City Council)
• Yarra Environment Strategy 2013-2017 (Yarra City Council)
• Building the case for emissions reductions and introduction of electric vehicles in council fleets is directly aligned with the strategic objectives of the Northern Alliance for Greenhouse Action (NAGA). Specifically the NAGA strategic plan 2016 – 2020.

ASSESSMENT CRITERIA - continued

3. Be a collaborative proposal between 2 or more local governments. Applications with additional non-council partners will also be considered. * Describe:

- The local governments participating in the proposed activity and their respective contributions
- A rational for the collaborative group, i.e. why this group has formed and the possible benefits
- The role of other non-local government parties if included
- Any previous experience of collaboration between the applicant group
- NOTE: there is no requirement for applicant local governments to be geographically contiguous.

The following NAGA councils will be participating in the project:
• Nillumbik

• Manningham
• Moreland
• Yarra
Each of the participating councils will provide $2000 cash contribution and $2000 inkind to the project except for Nillumbik who will provide $1500 cash and $2900 inkind. In addition, the NAGA secretariat will provide a further $5000 inkind.
This group has a long history of working together on emissions reduction projects through the Northern Alliance for Greenhouse Action. In particular through NAGA's technical working group, the councils have a history of sharing information on low emissions vehicles and electric vehicles. This working group meets regularly to discuss key issues and challenges, hear from industry experts and highlight new technologies and develop new project ideas.
This project will seek to overcome some of the existing barriers to effecting change in fleet management in council operations, and be replicable across other councils in Victoria. The project will also aim to benefit local businesses with significant fleets. The Northern Alliance for Greenhouse Action is comprised of nine local government members in northern metropolitan Melbourne. NAGA's secretariat is hosted by the Moreland Energy Foundation, and will help to coordinate the project on behalf of the Shire of Nillumbik. A specialist third party consultant will be engaged to undertake the majority of the feasibility study and business case, given the requisite knowledge requirements. All participating councils are members of NAGA, which has a long track record in fostering collaboration between councils through projects and information sharing. Through NAGA the councils have worked together to change over streetlights to more efficient technologies such as LEDs, and participate in a Solar Scale Up working group, leading to over 5MW of solar PV installed on council facilities to date.

Recently NAGA hosted an Electric Vehicle forum targeting fleet managers from across the region to share case studies, presentations from industry experts, and showcase demonstration vehicles. The forum included a workshop with council sustainability officers and fleet managers to discuss key opportunities and barriers to accelerating the uptake of low emissions vehicles like Electric Vehicles. This particular project has developed out of this EV forum.

Following is a list of some of the collaborative projects these councils have delivered together:
• NAGA regional adaptation strategy (VASP project)
• Towards Net Zero Emissions Strategy

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4. Demonstrate how the proposal will identify or deliver savings and/or improved business practices.*
Describe:

- How does your proposed activity seeks to reduce costs or improve services
- Provide some demonstrated benchmarking or outline cost benefits

This feasibility study and business case will help councils in the NAGA region choose the most cost effective pathway to transition their fleets to low emissions vehicles, which suit their local circumstances and organizational requirements. In 2014, Moreland Council engaged Pitt & Sherry to undertake a cost/benefit analysis between the Nissan Leaf and Toyota Camry hybrid. It found that there are financial benefits for extending fleet to include electric vehicles. While the capital cost of purchasing the vehicle is $12,000 higher upfront, the fuel costs and maintenance are significantly lower over 3 years - $7,300. In addition the Leaf has a higher re-sale value leading at an overall benefit of $9,000 to council over 3 years. In other NAGA councils, such as the City of Whittlesea and the Shire of Nillumbik, it will be necessary to consider different operational requirements as fleets are needed to cover vast distances and some off road driving.

According to the Energy Supply Association of Australia – Sparking a debate on electric vehicles report of 2013 electric vehicles provide the lowest fuel cost of any vehicle propulsion type currently available. Cost per km of travel for electric vehicles is modeled to be $0.03 compared to internal combustion engine cars of $0.10. Another study referenced in this report found the charging costs for electric vehicles are between 20% and 50% the cost of a internal combustion engine car. Given that council already purchases cheap electricity these savings are likely to be even higher than other sectors.

The project willl seek to track benefits through the following benchmarks:
• Number of EV's or low emissions vehicles adopted over time
• Reduction in corporate transport emissions
• Changes to vehicle policies and procurement processes
• Reduction in fuel consumption and maintenance costs

ASSESSMENT CRITERIA - continued

5. A realistic outline of both environmental and financial potential benefits of the project *
Describe:

- How the proposed activity will directly or indirectly benefit the environment
- What financial or service delivery benefits are anticipated to be realised by undertaking the activity

This project will directly and indirectly benefit the environment through:
• The reduction of greenhouse gas emissions: The emissions intensity of electric vehicles is fundamentally lower than those associated with internal combustion engine vehicles even when powered by fossil fuel based electricity. As councils in the NAGA region either purchase green power or have equivalent investments in renewable energy, emissions from electric vehicles in council fleets will result in a net reduction in the overall carbon intensity of council fleet operations. GHG emission reduction is possible even accounting for replacement batteries across vehicle life time.
• Improved air quality: low emissions vehicles have either significantly reduced or no tailpipe emissions (eg. Electric vehicles) which leads to enhanced air quality through the reduction of air pollutants such as nitrous oxide and carbon monoxide.
• Reduced fuel consumption: through the use of more efficient engines, and the increase in electric vehicles, councils will see a reduction in fuel consumption, having positive impacts on the environment from the reduced use of fossil fuels, which are often imported oil products.
• Reduced contribution to the urban heat island: A significant contributor to elevated temperatures in urban areas (the urban heat island) is the production of waste heat from vehicles. Low emissions vehicles produce vastly less engine heat than standard internal combustion vehicles.
• Reduced noise levels: low emissions vehicles are also by their nature much quieter than older inefficient cars. This is particularly the case for waste truck applications where noise limits reduce operating times of waste trucks in residential zones. Hydrogen fuel cell waste trucks offer negligible engine noise potentially opening up night time operating hours for these trucks.
The project expects to lead to significant financial and service delivery benefits for council. These include reductions in fuel costs and maintenance issues, as low emissions vehicles particularly EV's have less servicing requirements.

6. Ability to assess the project's proposed outcomes and some ability for the project to generate a replicable or shareable activity or collaborative model for local governments. *
Demonstrate the extent to which your project:

- Trials or tests the feasibility of collaboration
- Contributes to the building of local government's collaborative capacity and capability
- How the project's outcomes can be assessed
- How the project benefits might be implemented or sustained once funding ceases
- Is to be implemented around proven or new collaborative model

Through the collaboration of the partner councils, it is expected that this project will provide an assessment that can be easily applied to other council fleets across local governments in Victoria. Each of the participating councils has diverse fleet characteristics and operational requirements, enabling greater comparisons to a wider range of councils. As the Federal Government investigates introducing new fuel efficiency standards, more and more local governments will be interested in understanding the most cost-effective approach to transitioning to low emissions vehicles.

Through NAGA's Electric Vehicle forum it became evident that there is a need to build capacity across councils of new low emissions vehicles. Fleet managers recognized that the day to day demands of fleet management make strategic decision making on future fleet options difficult. This project will enable fleet managers to build their capacity of new technologies and purchasing options and how that relates to their own circumstances and council operating requirements. It will also provide for a strong evidence base to support fleet managers internally with this transition such as by getting senior executive support for the changes needed.

The project will assess its outcomes through:
• Engagement of council fleet managers
• Evaluation of number of council reports seeking endorsement of low emissions vehicles
• Changes to procurement processes within council for vehicle purchase or leasing

• Number of low emissions vehicles adopted, or changes to fleet targets
• Emissions reductions from council fleet operations which is already data captured through the National Carbon Offset Standard (NCOS) reporting for some councils
• Delivery of a feasibility study
• Delivery of 4 council specific business cases for low emissions vehicles

The assessment undertaken in this project should identify how to transition councils fleets to low emissions vehicles. The project outcomes are designed to ensure they are sustainable without ongoing Victorian Government funding and can be adopted by each of the councils own internal budget allocations and procurement processes. Given that fleet management is council core business it is likely that the projects findings will be highly useful for councils going forward to understand market opportunities and key decision making criteria around low emissions vehicles. As such, it is hoped that the project will lead to tangible outcomes and accelerate the transition for councils to reduce fleet emissions. NAGA will ensure the lessons learnt from the project can be shared and picked up by other interested councils.

As detailed above, the project will be managed through the existing Northern Alliance for Greenhouse Action, which has demonstrated over 12 years of collaboration between the participating councils. The project will help to build upon collaborations and relationships with fleet managers in the region established in the Electric Vehicle Forum held by NAGA in late 2016.

ASSESSMENT CRITERIA - continued

7. Written support of participating council CEOs

- Support must be indicated in the form of a letter or email that specifically relates to the proposed activity
- Additional detail of related activities or council actions provided by the CEO to demonstrate endorsement and support will be considered favourably.

Please provide any comments below and attach letter of support to final page of this application

Letters of support are attached to this application.

8. Provision of 50% in kind services or contribution by councils to the proposed budget

- Applicant councils must demonstrate an investment in the proposed activity via budgetary or in-kind supports
- There is no requirement for all proposed activity participants to contribute equally, however activities that demonstrate some support from all participants in the form of budget and/or in-kind resourcing will be considered more favourably

Please provide any comments below and use the next section to outline contributions to the project budget

Participating councils are contributing $2000 cash and $2000 inkind to the project, except for Nillumbik which are contributing $1500 cash and $2900 inkind. In addition, NAGA will commit $5000 of inkind to the project. This is a total of $7500 cash and $13900 inkind contribution to the project.

PROJECT DELIVERABLES

	Deliverable	Demonstrating deliverable is complete	Due date
1.	***Feasibility Study***	***Lodging final feasibility study to state government***	***12/12/2017***
2.	***4 x Business Cases***	***Lodging final 4 business cases to state government***	***25/05/2018***

BUDGET

INCOME		EXPENDITURE	

Amount Requested from this Program	***33,500.00***	Project Management	***41,000.00***
Grants (Other)	***0.00***		
In Kind Contributions	***13,900.00***	In Kind Expenses	***13,900.00***
Other Income	***7,500.00***		
Other Income Description If you have used 'Other Income' above, provide a breakdown including the description and dollar amount for each item (maximum of 250 characters).	***Manningham - $2000 Moreland - $2000 Yarra - $2000 Nillumbik - $1500***		
TOTAL INCOME	***54,900.00***	TOTAL EXPENDITURE	***54,900.00***

DECLARATION

I certify that I am authorised to submit a grant application on behalf of the applicant organisation. I state that the information in this application and attachments is to the best of my knowledge true and correct. I will notify DELWP of any changes to this information and any circumstances that may affect this application. I acknowledge the Privacy Collection Notice in the Introduction section of this application. I understand that DELWP is subject to the Freedom of Information Act 1982 and that if a Freedom of Information request is made, DELWP will consult with the applicant before any decision is made to release the application or supporting documentation. I understand that this is an application only and may not necessarily result in funding approval. I understand that if this application is successful, that funding will be subject to terms and conditions set out in agreement with the Department.

I have read and understood the Program Guidelines.

Please check this box to confirm that you accept the declaration	***true***

You must accept the declaration prior to submitting your application

Name:	***Rob Law***
Position:	***Project Manager***
Date:	***14/02/2017***

After you click on the 'Save and Submit' button a confirmation message will be displayed on your screen. If you do not receive this message please contact 1300 366 356

SUPPORTING DOCUMENTS

Provide the required supporting documents with your application.

Please ensure that your attachments are of an acceptable file type and do not exceed the maximum size of 5MB each.

If you can not attach all your supporting documents below, the additional documents can be emailed to grantapplications@delwp.vic.gov.au
Ensure you clearly name each supporting document and include the application number in the subject line of your email.
Supporting documents must be received on or before the closing date.

Letters of Support	***(attachment)***
Attachment two (if required)	***(attachment)***
Attachment three (if required)	***(attachment)***
Attachment four (if required)	***(attachment)***