

Agenda & Minutes

Innovation Advisory Committee | Meeting #11

Attendees:

Dean Lombard, *Energesis*
 Damian Sullivan, *BSL*
 Emma Chessell, *Independent*
 Isabella Powell, *Jemena*
 Jo Witters, *Independent*
 Lara Kruk, *Independent*
 Maxime Di Petta, *Clean Energy Council*
 Nando Ochoa Pizzali, *University of Melbourne*
 Scott McKenry, *Eastern Alliance for Greenhouse Action*

Apologies:

David Bryant, *BSL*
 Theodora Karastergiou, *Jemena*
 Tom Bakker, *Aurecon*

AusNet representatives:

Charlotte Eddy, *General Manager Strategy and Regulation (Distribution)*
 Ana Erceg, *Manager Grid Evolution*
 Lucy Holder, *Manager Customer Engagement*
 Fin Crantock, *Resilience Project Engineer*
 Asal Ahmadlou, *Future Network Engineer*
 Luke Ireland, *Graduate Future Network Engineer*
 Nanditha Sirigiri, *Network Planning Engineer*
 Rafi Muneer, *CER Integration Engineer*
 Kenneth Chew, *Lead CER Integration Engineer*
 Kyle Olsen, *Senior Engagement Specialist*

Item	Time	Topic	For	Presenter
	10:00am (5 mins)	Welcome Incl. responding to actions from meeting #10		Charlotte Eddy
1	10:05am (40 mins)	Innovation pipeline Overview and update for each project		Ana Erceg Fin Crantock Asal Ahmadlou
2	10:45am (30 mins)	What we're seeing EVs on the AusNet Network		Luke Ireland Nanditha Sirigiri
	11:15am (10 mins)	Break		
3	11:25am (30 mins)	EV projects at Ausnet Overview		Rafi Muneer
4	11:55pm (15 mins)	Existing industry trials DNSP Vehicle to grid		Kenneth Chew
5	12:10pm (45 mins)	Vehicle to Grid project Ideation and discussion		Kyle Olsen
	12:55pm (5 mins)	Other business and close		Charlotte Eddy

Welcome, customer moment & actions

AusNet's Charlotte Eddy opened the meeting with an Acknowledgement of Country, welcomed participants then outlined the meeting purpose and agenda.

Item 1 | Innovation pipeline – Overview and update of pipeline

AusNet's Ana Erceg updated members on the innovation pipeline and projects funded by the Demand Management Innovation Allowance.

AusNet's Fin Crantock covered an update on two resilience projects: a back-up solution for NBN, and installation of batteries for Gippsland Water.

Discussion included:

- The IAC questioned whether the Gippsland water project and similar projects should be framed as 'resilience' projects, when in some cases there is already a solution in place for resilience (i.e. Gippsland Water has back-up generators in place already).
- It was discussed that the batteries were in place to capture excess solar, provide additional resilience for the water and sewerage services to continue to be delivered for customers during storms and outages.

AusNet's Asal Ahmadlou provided an update on the ElectriFAIRcation project and gave an overview of current thinking for the implementation of home energy management systems (HEMS). This was followed by a discussion.

Discussion included:

- ElectriFAIRcation: The IAC sought additional details on the project, specifically information on the number of homes in the trial, the specific permits required for HomesVic cluster, the types of responses from households, and the key learnings that may have been implemented to make the process more cohesive. The IAC requested key learnings be included in a final report.
- On home energy management systems, the IAC provided numerous insights, suggestions and considerations through the discussion:
 - Before installing a HEMS AusNet should analyse the energy usage patterns to build a baseline, to then test the impacts following the installation of a HEMS.
 - The IAC suggested that the focus of a HEMS should be on simplicity and user experience. It was acknowledged that the technology has great potential, but it needs to be usable for an 'average' household user.
 - The IAC suggested that the HEMS provider should provide a demonstration of their product that showcases its everyday use, and its usability for everyday consumers. A system should be able to work without much human intervention ('set and forget').
 - A HEMS must also be able to provide value to households who don't have 'smart' appliances.
 - Early adopters may embrace the technology, but they do not represent the broader customer base. Addressing concerns around trust, data security, and privacy is essential to finding a balanced approach that resonates with everyday users.
 - Prioritising heat pump hot water units, HVAC systems, and EV charging can enhance network value. A thermal envelope approach—such as pre-cooling on solar surplus days—could improve efficiency, while strategies for reducing energy use during peak periods should consider user comfort.

Item 2 | What we're seeing – EVs on the AusNet network

AusNet's Luke Ireland gave an overview of the growth of electric vehicles throughout the AusNet network. Luke highlighted the impact of this growth in EVs and the challenges this can bring to the network. AusNet has now developed an algorithm to identify customers who have an EV and further understand usage trends associated with EV charging.

AusNet's Nanditha and Charlotte spoke to the common challenges being faced globally when managing EVs and the electricity network, and the risks of underinvesting to support the growth of EV uptake. It was noted that EV projection data from a variety of sources shows a wide range of EV uptake. AusNet took an **action to thoroughly analyse available EV projection data from multiple sources to determine the most reliable projected uptake figures.**

Discussion included:

- The IAC noted that qualified electricians are required to install EV charges in homes, they suggested that electricians could register each EV charger that they install. It was noted that this approach wouldn't capture those who would charge their EV only through a standard wall charger, but this charging method might not be used by the majority of EV owners.
- The IAC noted that home batteries would also have an impact on EV charging and would therefore impact demands on the network.
- The IAC suggested that AusNet could collaborate with organisations such as ENA and ECA to propose a policy that allows for the collection of EV registration data, while also considering customer privacy and data security.
- The IAC suggested that AusNet might consider looking further into customer profiling to determine EV uptake, but a simple and regulated registration process would be more appropriate.
- It was noted that through the use of smart meters, AusNet may already have the data and ability to be able to detect EVs, a software solution may be more appropriate than asking for EVs to be registered.

Item 3 | EV projects at AusNet

AusNet's Rafi Muneer provided an overview of the role DNSPs can play in delivering public kerbside charging and provided a summary of the recent electric vehicle charging project and the way in which AusNet and other DNSPs are supporting the rollout of EV charging infrastructure.

Rafi also gave an overview of the EVX POLECHARGER Project and why AusNet is interested in this type of project. The item was then opened for discussion and the IAC was invited to share their insights into EV charging infrastructure and the role AusNet can take in supporting this technology and rollout.

Discussion included:

- The IAC questioned whether the costs to customers for kerbside charging would vary throughout the day as electricity prices changed, and whether the live price would be displayed on the charger at the time. The IAC also questioned whether prices might be advertised in advance based on forecast conditions.
- The IAC suggested that during times of solar soak, charging EVs using this infrastructure could be free.
- If a customer is required to travel to a kerbside charger in the middle of the day, the IAC questioned whether this would have a large uptake in use, as this is an extra step for customers.
- The IAC were frustrated to learn that DNSPs in each state have different standards for electricity poles. They would like to see a standardisation across all states, something that consumers could support the push for standardisation with regulators.
- The IAC questioned how AusNet might target customers for vehicle-to-grid (V2G), this may be answered through a trial project. It was noted that the biggest opportunity for V2G may be more aligned with the use of commercial fleets, rather than everyday consumers.

- The IAC suggested AusNet consider the types of EV chargers it would install in different locations. Suggesting that use in a residential street close to homes, would be different to use in a busy shopping strip.
- The IAC also asked AusNet to consider how it partners with local authorities for the physical parking spaces adjacent to kerbside charging stations. There are different authorities and considerations for residential streets, local shopping strips, council land, and private shopping areas.

Item 4 | Existing Industry trials – DNSP vehicle-to-grid

AusNet's Kenneth Chew provided a brief overview of the electric vehicle charging trials that have recently occurred across Australia with various DNSPs.

Item 5 | Vehicle-to-grid – Ideation and workshop

AusNet's Kenneth Chew provided a brief overview of the different types of vehicle-to variants and shared some initial thinking on a potential vehicle-to-grid project. This led to a workshoping exercise, lead by AusNet's Kyle Olsen.

Members of the IAC, alongside AusNet staff collaborated on designing a potential vehicle-to-grid project AusNet could trial. Split into 3 working groups, they were asked to:

1. Brainstorm the benefits of vehicle-to-grid for both customers and the network
2. Identify the top benefits and prioritise them
3. Brainstorm the design of a V2G project, covering:
 - a. Trial objectives and secondary benefits
 - b. Suitable locations
 - c. Potential partners
 - d. Key success factors

Each working group provided their insights into the above exercises, with **AusNet to draft a potential trial project to present back to the IAC at the next meeting.**

Discussion included:

Topic	Discussion
Benefits of vehicle-to-grid	For community: • Bill offsets and managing energy use at home • Collective community support (i.e. 'cheap' energy) • Fosters a sense of community by supporting the network • Back up power supply during outages • Provides an additional use for EVs while not in use for driving For the network: • Helps to manage peak demand • Potential network augmentation deferral • Resilience support during longer outages

Primary objectives and secondary benefits	• Testing incentive methods • Finding most suitable locations for a future rollout • Demand management potential • Potential for customers to discharge from home during peak periods • Increase use of public transport and less congestion on roads • Learnings on what context and what incentive is required for EV owners to participate • Customer experience in using this infrastructure
Suitable locations	• Residential homes • Local community locations (parking lots, kerbside) • Community with good solar penetration • Start with a specific group rather than a large community • Public transport location (end of line)
Potential partners	• Retailers • Other DNSPs • Parking lot owners ◦ Wilson ◦ Supermarkets • Fleet owners • EV manufacturers • Councils • Victorian government public transport operators
Key success factors	• Proof of V2G effectiveness • Proof that V2G doesn't degrade vehicle battery • Most suitable location • Clear outline for what participants can expect

Worksheets can be found in appendix 1.

Photos of the IAC during the workshop can be found in appendix 2.

Other business & close

Charlotte Eddy closed the meeting.

Action items			
Agreed action	Assigned to	Status	Due date
AusNet to thoroughly analyse available EV projection data from multiple sources to determine the most reliable projected uptake figures.	Grid Evolution Team	In progress	August 2025
AusNet to draft a potential V2G trial project to present back to the IAC at the next meeting.	Grid Evolution Team	In progress	August 2025

Appendix 1.

Worksheets from vehicle-to-grid workshopping session.

Designing a V2G trial project

WHAT WOULD BE THE PRIMARY OBJECTIVE OF THE TRIAL?	IN WHAT CONTEXT DOES A EV USER WANT TO PARTICIPATE AND WHAT INCETIVE IS REQUIRED FOR THEM TO PARTICIPATE (SCENARIOS - e.g. local community kerbside vs station carparks vs coastal town visit).
WHERE WOULD A TRIAL BE BEST LOCATED TO REALISE THE BENEFITS?	within home and/or local kerbside. (Success of the trial would benefit from more than location type).
WHO SHOULD WE PARTNER WITH TO DELIVER? FOR THE TRIAL	Wilson Parking? Supplier / Retailer Starting point to partner with various third parties → however allow for a trigger whereby a change of ownership of these components to AusNet is possible
WHAT KEY SUCCESS FACTORS MUST BE IN PLACE FOR AN EFFECTIVE TRIAL?	- Appropriate enabling infrastructure → e.g. location for holiday location near playgrounds, cafes etc.
ARE THERE ANY OTHER SECONDARY BENEFITS THIS PROJECT COULD DELIVER?	Experience information on charging at these locations and additional charging data

What are the benefits of Vehicle-to-Grid?

FOR CUSTOMERS / COMMUNITY

- Benefit when at HOME, can help with bill offset and HEMS. (2)
- Benefit when out and about limited (Incentive: Discount on parking or net \$\$\$ benefit (paid more for V2G than subsequent charging) case of use time) (1)
- Benefit to support grid during a peak condition (opt in to opt only option).
- For community supports collective community access to 'cheap' energy → like a community battery (3)

FOR THE NETWORK

- After SOLAR SOAK (managing MSL and then being placed to support with V2G later on).
- HELP TO MANAGE CONGESTION (peak demand)

Designing a V2G trial project

WHAT WOULD BE THE PRIMARY OBJECTIVE OF THE TRIAL?	- Start with a large EV community or EV low community? - Commercial fleets e.g. councils
WHERE WOULD A TRIAL BE BEST LOCATED TO REALISE THE BENEFITS?	- Community with good solar penetration - Might be better to start with specific group rather than large community - Public transport e.g. end of line ↳ charging locations in priority spots ↳ Vic Gov, partner with new stations
WHO SHOULD WE PARTNER WITH TO DELIVER?	- Existing fleet part of a VPP or with the potential → already have a value stack ↳ extra - VPP operators e.g. AGI, Engie, Reposit, Powersync - See interest from EV fleets and owners
WHAT KEY SUCCESS FACTORS MUST BE IN PLACE FOR AN EFFECTIVE TRIAL?	- Clear outline for what participants can expect - Solar carpark at station → may need to be solar soak model → move to home for V2G - people living nearby could contribute
ARE THERE ANY OTHER SECONDARY BENEFITS THIS PROJECT COULD DELIVER?	↳ increased use of public transport → less congestion on roads ↳ potential for customers to discharge from home during peak period ↳ hitting climate/emissions targets for LGAs ↳ not having a myki fee for those participating

Designing a V2G trial project

	- Isabella - Nando - Damian - FIN - Asat
WHAT WOULD BE THE PRIMARY OBJECTIVE OF THE TRIAL?	- incentive methods (tariff or direct payment) - how much? - locations of where to test V2G - Residentially located, parked car at home to grid - Community located, parking lot, community hub/centre - Rural locations
WHERE WOULD A TRIAL BE BEST LOCATED TO REALISE THE BENEFITS?	- in home or community located (parking lot) - Rural or sub urban.
WHO SHOULD WE PARTNER WITH TO DELIVER?	- Jemena?? - Retailers. - Aggregators (market participants) - Parking lots - Wilson - Airport - Woolies/coles - Fleet owners. - Bus companies. - EV manufacturers - few EVs are V2G compatible
WHAT KEY SUCCESS FACTORS MUST BE IN PLACE FOR AN EFFECTIVE TRIAL?	- proof of V2G - proof that V2G doesn't degrade battery quickly. - confirmation of most suitable locations for V2G
ARE THERE ANY OTHER SECONDARY BENEFITS THIS PROJECT COULD DELIVER?	- Demand management potential. - VPP benefits - grid impacts from V2G? Increased strain on network. - Investigate how V2G is managed? - equipment needed? - thresholds? when to discharge to grid?

What are the benefits of Vehicle-to-Grid?

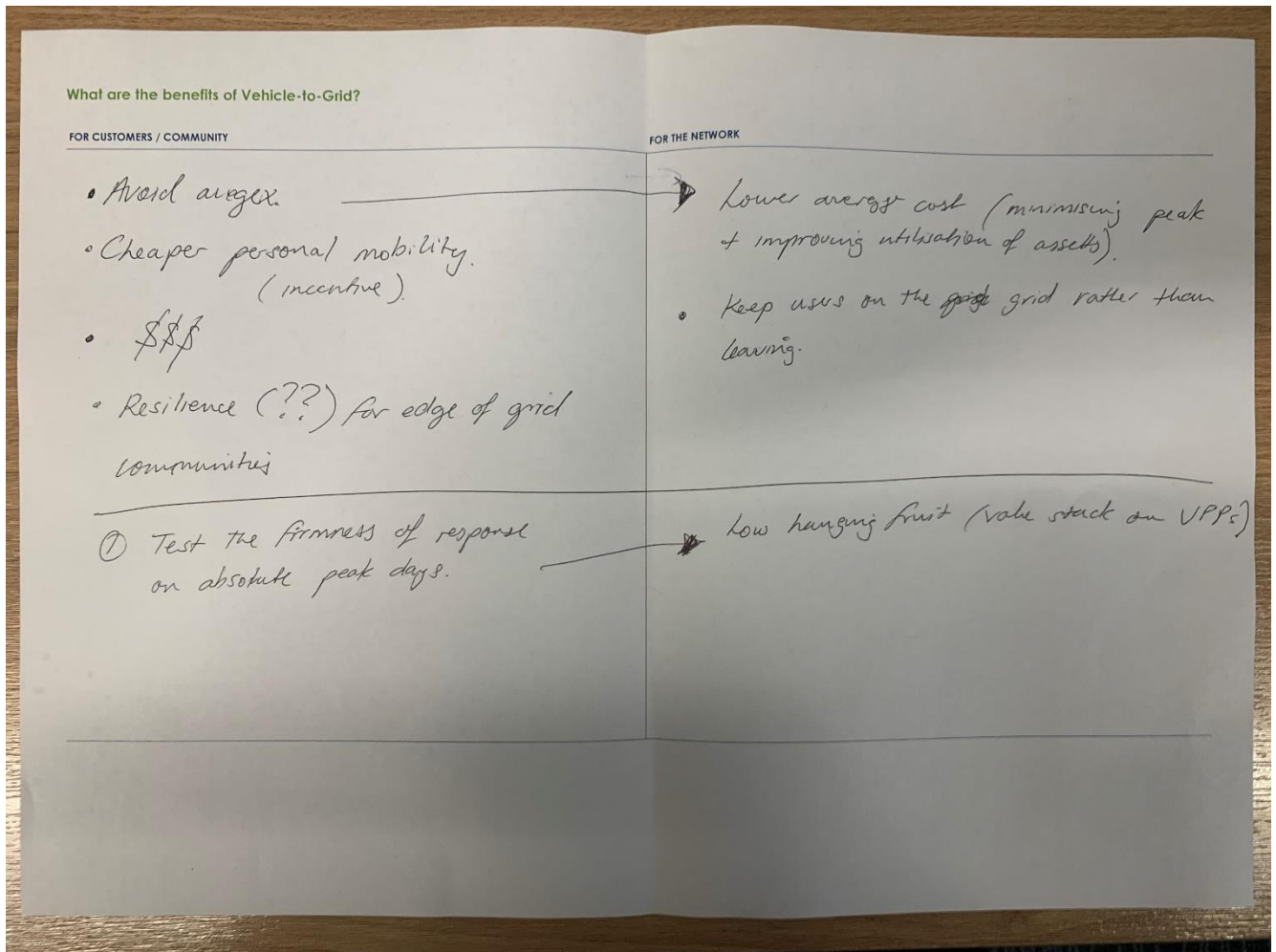
FOR CUSTOMERS / COMMUNITY

- Paid to provide energy to the grid (tariffs) or direct payment
 - ↳ more incentives required.
- good feeling of supporting the network. (sense of community)
- having a back up power source to run house appliances during outages.
 - long outages might be less common, however feature is valuable when needed.
- batteries should be looked at before V2G in terms of demand management support.
- Utilising growing number of EVs that can be utilised while not in use.

FOR THE NETWORK

- Demand management support
- Potentially network augmentation deferral
- Resilience support during long outages.

- V2G seen as needing more incentive than standard demand management from switching off equipment



Appendix 2.

Photos of the IAC during the workshoping session.



