



8 April 2016

Vehicle Emissions Working Group
Department of Infrastructure and Regional Development

E: vemissions@infrastructure.gov.au

Dear Sir/Madam,

Submission on Vehicle Emissions Discussion Paper

Origin Energy Limited (Origin) welcomes the opportunity to make a submission to the Vehicle Emissions Discussion Paper. We recognise that vehicle emissions can have a range of environmental impacts. This submission is focused on greenhouse gas emissions and associated climate change policies.

Origin recognises that climate change is a global challenge and unequivocally supports measures to progressively reduce carbon emissions. We support the global target of no more than two degree temperature change and note the strong intention of the Paris Agreement to pursue efforts to a 1.5 degree scenario. We support Australia's announced 2030 target as a minimum goal for the nation and believe that greater ambition is possible.

We support the comprehensive submission provided in *The Path Forward for Electric Vehicles in Australia*, prepared by a collaboration of industry representatives from the Electric Vehicle ecosystem, coordinated by ClimateWorks Australia. Origin was a contributor to this submission.

Key points

Origin has the following key points to highlight:

- **Appropriate policies for each sector** – we support a pragmatic approach which examines the most appropriate key policies or group of policies required for each sector.
- **Transport and electric vehicles** – we support measures to increase the deployment of electric vehicles in Australia. This could include:
 - **Up front purchase incentives** – such as point of sale rebates, and stamp duty discounts
 - **A framework for operating incentives** – such as reduced registration rates, access to priority lanes and parking
 - **Measures to encourage the supply of supporting infrastructure** – including harmonising standards for EV charge points
 - **Fleet purchasing policy** – such as minimum targets for the uptake of vehicles in Federal, State and local government fleets
 - **Information and awareness raising** of the benefits of EVs –such as fleet demonstration projects and hosting events

Policy approach to 2030 emissions reduction target

Australia's stated 2030 emission reduction target is significant. In order to achieve it, the nation's annual emissions will need to be reduced from current levels of about 545 MtCO₂ to about 440 MtCO₂ in 2030¹, or a bit over 100 MtCO₂ in terms of an annual point in time difference².

If the nation is serious about meeting this target and the even deeper reductions that will be required over the longer term then a suite of comprehensive policies will be required. Whilst Origin has consistently supported a broad-based carbon pricing scheme of some form, for practical reasons we recognise that this may take time to develop.

We therefore support a pragmatic approach which examines the most appropriate key policies or group of policies required for each sector. Transport is a relatively large source of emissions at about 17% of total Australian emissions and is growing. For the transport sector, we support the use of vehicle and fuel standards as a good starting point. We would also support more specific measures aimed at encouraging the deployment of electric vehicles powered by low emissions and renewable energy sources.

Transport sector and electric vehicles

Origin supports the general policy approach for the transport sector which includes the consideration of mandated improvements in vehicle and fuel standards for light vehicles. By way of comparison, the electricity industry has experienced the long-term results of improvements in energy efficiency brought about by mandatory performance standards for electrical appliances. It should be noted however that these policies take time to implement and flow through to emission reductions. So if they were desired to contribute towards the 2030 target in a meaningful way then such standards should be implemented soon.

A specific overlap between the transport and electricity sector involves the support for electric vehicles. As the electricity sector progressively decarbonises, it will increase the abatement potential of electric and plug-in hybrid electric vehicles (PHEVs). Further, with an already high penetration of residential solar PV systems and the emergence of home battery technologies, there is an exciting opportunity for Australia to be a market leader in electric vehicles powered by zero emissions renewable energy sources.

We suggest that policies be examined which support the cost effective uptake of new electric vehicle technology in Australia. The time feels appropriate for this with a range of new models at the more affordable end of the price spectrum expected to be launched from 2017 onwards. This also corresponds with the end of manufacturing of passenger vehicles in Australia.

As stated above, we support *The Path Forward for Electric Vehicles in Australia*, prepared by a collaboration of industry representatives from the Electric Vehicle ecosystem and coordinated by ClimateWorks Australia. Some of the key policy suggestions to encourage EV uptake in Australia in that submission included:

- **Up front purchase incentives** – such as point of sale rebates, and stamp duty discounts
- **A framework for operating incentives** – such as reduced registration rates, access to priority lanes and parking
- **Measures to encourage the supply of supporting infrastructure** – including harmonising standards for EV charge points
- **Fleet purchasing policy** – such as minimum targets for the uptake of vehicles in Federal, State and local government fleets
- **Information and awareness raising** of the benefits of EVs –such as fleet demonstration projects and hosting events

¹ This assumes all reductions are made domestically.

² We note that consideration of cumulative emission reductions is also important, but this simple example is used for illustrative purposes.

Origin believes there are useful comparisons which can be drawn with household solar PV systems and how they were initially supported as an emerging technology in Australia. Originally small solar systems were encouraged with an up-front point of sale rebate of \$8000 which was funded by the Federal Government³. A similar amount would seem appropriate for EV support in Australia. By way of comparison, the Federal government in the USA offers a \$7,500 (USD) income tax credit which is about \$10,000 (AUD). On top of that, various States offer additional incentives⁴.

It is important that lessons should be learnt from solar PV policy in Australia as well. Subsidies for small-scale solar PV systems were at times allowed to rise to unsustainable levels⁵, the liability for which electricity consumers in some states⁶ are still paying for, many years after the schemes were ended. It is suggested that if Federal or State up-front rebates are offered for EVs, that these be kept at relatively modest levels and be budget funded so that they make use of our progressive taxation regime.

We also believe that there are exciting opportunities for retailers to bundle EVs with other products such as GreenPower and other offsets, rooftop solar PV systems, battery storage and smart metering. It is important that new product offerings are encouraged and allowed to evolve to changing consumer preferences.

On the supply side we suggest that it is important that manufacturers are encouraged to offer new EV products in Australia. Generally Australia is viewed as a small market and product offerings will lag other markets such as North America and Europe. One way to make Australia more attractive would be to aggregate the demand from a number of fleet or private buyers. In addition, the increased profile of EVs through point of sale rebates and general information awareness building of their benefits could help increase Australia as a more desirable market to export to.

If you have any questions regarding this submission please contact Matthew Kaspura (Manager Climate Change Policy) [REDACTED]

Yours sincerely,



Tim O'Grady
General Manager Public Policy and Government Engagement
Origin Energy Limited
GPO Box 5376
Sydney NSW 2001
[REDACTED]

³ A further incentive was provided by access to the Renewable Energy Target (RET) scheme.

⁴ See <https://www.teslamotors.com/support/incentives>

⁵ Such as premium rate feed-in tariffs.

⁶ For example in Queensland.

About Origin

Origin Energy (ASX: ORG) is the leading Australian integrated energy company with market leading positions in energy retailing (approximately 4.3 million customer accounts), power generation (approximately 6,000 MW of capacity owned and contracted) and natural gas production (1,093 PJ of 2P reserves and annual production of 82 PJ). Through Australia Pacific LNG, its incorporated joint venture with ConocoPhillips and Sinopec, Origin is developing one of Australia's largest CSG to LNG projects based on Australia's largest 2P CSG reserves base.

Origin also aspires to be the number one renewable and low carbon energy company in Australia. Origin is one of the largest installers of solar systems in Australia, having directly installed about 90,000 systems to date. In total, about 400,000 of our retail customers have solar products. In 2015, Origin launched a new solar leasing product, which allows more customers to access the benefits of solar without having to purchase the system. We are also exploring new battery technologies and just installed our first Tesla Powerwall. We believe that the market will continue to evolve and it is important that retail offerings are allowed to develop to serve consumer demand.

Origin is committed to meeting our obligation under the Large-scale Renewable Energy Target (LRET) and can achieve this through various options including building projects directly, underwriting projects through power purchase agreements (PPAs), or by purchasing certificates on market. We are currently considering the potential development of our 400 MW Stockyard Hill Wind Farm development option in Victoria, and the potential for utility scale solar plants to help meet the target. For example, our proposed 100 MW solar farm at Darling Downs in Queensland was recently shortlisted for grant funding under ARENA's Large Scale Solar PV competitive funding round, and also in December received Development Approval from the Western Downs Regional Council. We have also just announced a 15 year PPA for the 56 MW Moree Solar Farm in NSW.

Origin currently has three Nissan Leaf electric vehicles, twelve Mitsubishi Outlander PHEV vehicles and four Toyota Camry hybrid vehicles in our fleet. We also supply Audi and Porsche EV customers with GreenPower products.