



LEGISLATIVE ASSEMBLY

FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON ENVIRONMENT, CLIMATE CHANGE AND BIODIVERSITY

Dr Marisa Paterson MLA (Chair), Mr Andrew Braddock MLA (Deputy Chair),

Ms Leanne Castley MLA

Submission Cover Sheet

Inquiry into Renewable Energy Innovation
in the Australian Capital Territory

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Standing Committee on Environment, Climate Change and Biodiversity
Parliament of the Australian Capital Territory
LCommitteeECCB@parliament.act.gov.au

13 May 2021

RE: Inquiry into renewable energy innovation in the ACT

Dear Committee,

Thank you for the opportunity to respond to Standing Committee on Environment, Climate Change and Biodiversity's Inquiry into Renewable Energy Innovation in the ACT

As you may be aware, Neoen is a global independent power producer which develops, builds, owns and operates wind, solar, biomass and storage projects for the entirety of their lifespans.

Since its founding in 2008, Neoen has rapidly expanded beyond its local market in Europe. Neoen Australia began in Sydney in 2012 and since then, the Australian branch has grown rapidly to represent Neoen's largest portfolio. The company now has a team of over 55 employees across its Canberra, Sydney and Adelaide offices with specialised expertise in development, procurement, power purchase agreement acquisition, financing, construction and operations.



Image: Neoen Australia Company Seminar in Canberra March 2021

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Since 2012, Neoen Australia has established an unparalleled track record within the industry for consistently developing and, above all, delivering innovative and highly competitive renewable assets. As of Q1 2021, Neoen has over 2GW of renewable assets in operation or under construction in Australia, representing over \$2.5 billion Australian dollars in investment to-date. More than \$1 billion of this investment has been directly triggered by the ACT's renewable energy auction program which awarded contracts to three stages of Neoen's Hornsdale Wind Farm, and the first stage of the Goyder South Wind Farm. Importantly, this investment has not only delivered low-cost renewable energy to supply the Territory's 100 per cent renewable energy target, but it has triggered many successful partnership opportunities which will continue to deliver dividends for the local economy well into the future.

Looking to the future, Neoen intends to reach 5GW of installed capacity in Australia by 2025 and the development and ongoing asset management of these projects will continue to be led from our Canberra office—providing ongoing opportunities for local innovation.

Examples of the Territory's successful innovation to-date, and opportunities to build on this success further, are outlined in detail below against a number of the Committee's identified focus areas.

Opportunities and challenges to boost renewable energy research, technology development and new zero emissions industries in the ACT

With the Territory's support, Neoen has established a significant and enduring commitment to integration and engagement with the renewable energy industry in the ACT—leveraging our unique knowledge, expertise, available data and industry insights to collaborate with, and ultimately grow the ACT energy ecosystem.

As a successful proponent of four renewable energy auction rounds, Neoen has committed investment of more than \$100 million in the ACT. Neoen's continued growth and success across Australia has, however, also included substantial in-kind contributions and has resulted in countless follow-on benefits that while more difficult to quantify, greatly exceed the commitments to the Government. This is shown in the below diagram.

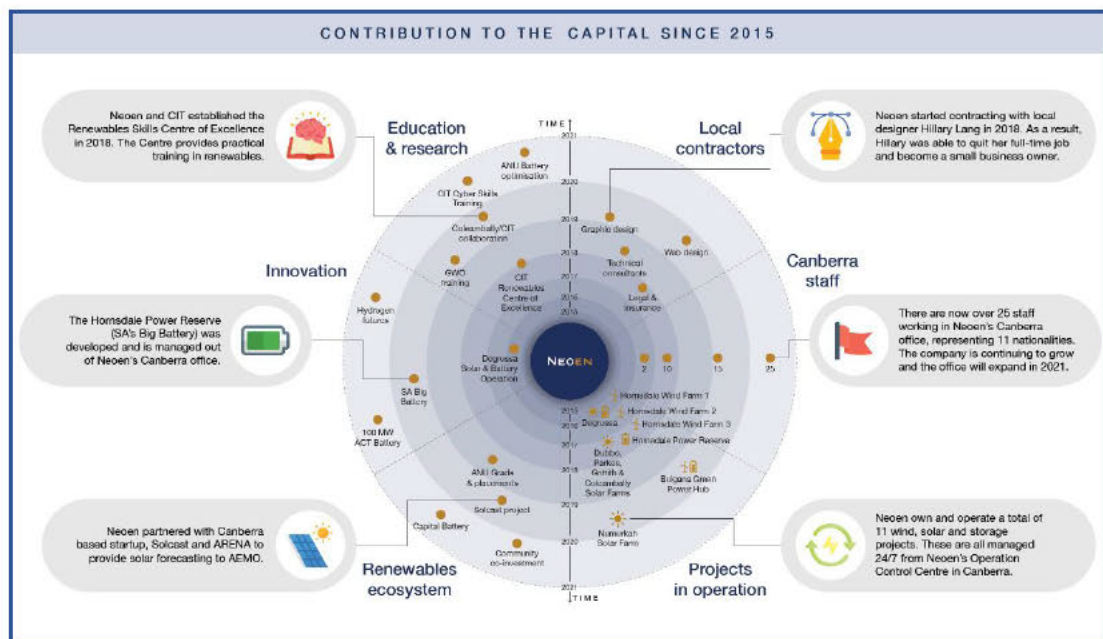


Image: The Ripple Effect – Neoen's Australia's Growth in the ACT since 2015 (Source: Neoen)



Importantly, Neoen has focused on research, training and demonstration projects in collaboration with local partners to deliver industry relevant outcomes by leveraging Neoen's significant insights into the challenges facing the efficient development and deployment of renewable energy projects. In this way, the investment has a clear and direct benefit to the advancement of knowledge in the ACT in this high-growth sector.

In addition to looking for new opportunities for industry collaboration facilitated by Government processes and procurements, continued grant funding to support emerging technologies linked renewables and related sectors will be critical to developing and attracting new innovative companies to the ACT. The industry funded Renewable Energy Innovation Fund and the Government's Innovation Connect Grant Program are good examples of the potential for targeted funding which focuses on leveraging local expertise and skills.

Opportunities and challenges to innovatively finance and/or manage renewable energy in the ACT

Neoen believes that the ACT's strategy of providing bankable power purchase contracts for large-scale renewable energy has been critical to ensuring the Territory secures the lowest-cost renewable energy assets possible. We believe that the Government remains uniquely placed as a credible counterparty and off-taker of energy services in the Territory. As the market continues to evolve to provide the right investment signals and create new value streams to facilitate the entry of new technologies that complement renewables (such as batteries), it will be critical for state and territory governments to trigger and support these investments. As has been the case with the successful renewable reverse auction program, this could be achieved through the development of new programs backed by legislation to create long-term certainty, through direct Government contracts and grants or through Government underwriting of commercial contracts.

The effectiveness of administration and funding of Australian Capital Territory Government policy and regulatory settings relating to renewable energy, climate action and emissions reduction

Neoen believes that allowing battery projects to be retrofitted into existing planning legislation and frameworks is an efficient and resourceful way to regulate the planning approvals process for battery projects. As a successful proponent of the ACT's Fifth Renewables Auction, Neoen is committed to delivering the first battery project located in the Territory and recently received a Notice of Decision approving the development of the Capital Battery project. With the support of the ACT's Environment, Planning and Sustainable Development Directorate, the Capital Battery was classified under the *Territory Plan 2008* umbrella term 'Major Utility Installation', allowing the development to be assessed for approval under existing planning regulatory frameworks. Neoen considers, however, that there are additional opportunities to further clarify and improve the efficiency of the planning and crown lease variation process more generally. Such improvements could make investment in new battery and energy projects in the Territory more attractive and we would be happy to discuss this in further detail.

Furthermore, Neoen believes the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011* provides an effective mechanism to stimulate investment in large-scale renewable energy in the Territory. The Objectives of the Act are well aligned with battery storage, as storage supports a higher penetration of renewables. Additionally, the reverse auction is a process that is well understood by industry and financiers and enables Government to ensure benefits are directly returned to electricity consumers via EvoEnergy. In particular, Neoen is also supportive of the transparent re-bidding process that was delivered through the reverse auction mechanism for the Next Generation Fifth Renewables Reverse Auction.

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Opportunities and challenges in battery storage including neighbourhood-scale batteries and vehicle-to-grid technologies

Neoen's experience is that utility and commercial scale batteries connected to the national electricity grid via the transmission networks can deliver the most value for investment. This is made evident when benchmarking capital expenditure and relative revenue, as shown by the table below.

	Utility	Suburban	Commercial	Residential
Relative CAPEX	100%	130%	160%	300%
Relative revenues	100%	75%	150%	150%
Potential distribution deferred investment relative to CAPEX	0%	10%	7%	7%
<i>Subtotal</i>	0%	-45%	-3%	-143%

Neighbourhood-scale batteries suffer a reduced ability to optimally participate in the wholesale electricity markets and therefore have less revenue stream opportunities. Conversely, 'big batteries' connected via transmission networks are able to deliver a range of grid-supporting capabilities via the national electricity network. These are outlined in the diagram below.

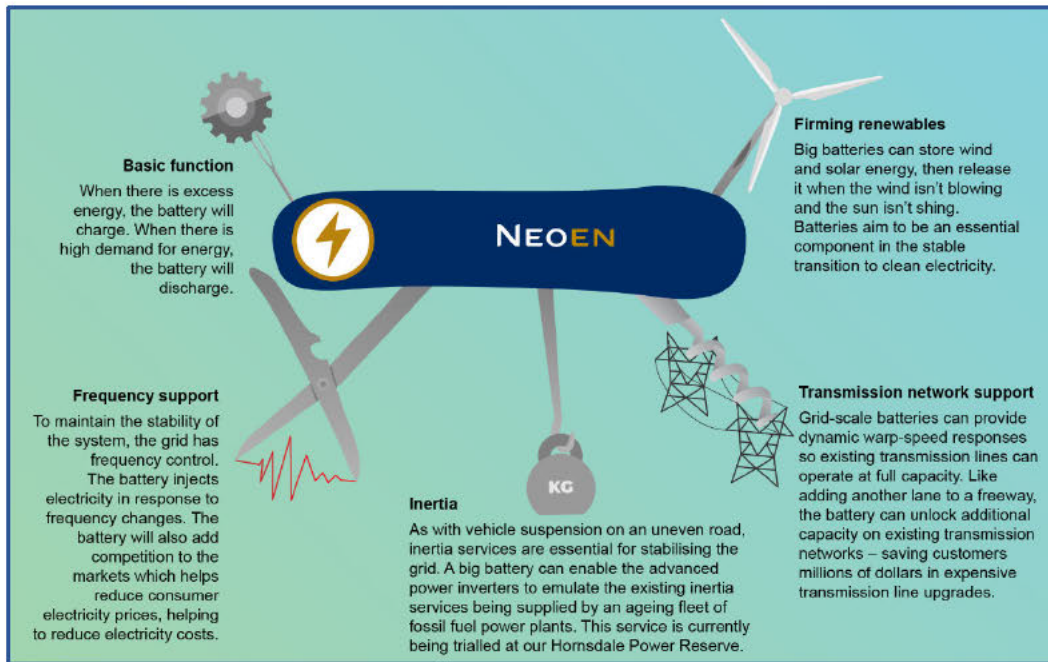


Image: What can a 'big battery' do? (Source: Neoen)

Additionally, in connecting via the distribution network, neighbourhood-scale batteries are currently subject to two network charges: transmission use of service (TUOS) and distribution use of service (DUOS). This creates a major cost-driven challenge for neighbourhood-scale batteries, further exacerbating investment returns and the overall benefits relative to CAPEX as revenue estimates fall even further.

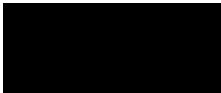


The same applies to behind-the-meter batteries, such as vehicle-to-grid and household batteries. Further to that, the opportunities for behind-the-meter batteries to defer distribution network investment are limited. Such batteries are not necessarily co-ordinated with distribution peak loads without significant additional intervention from third parties. Such coordination, while potentially beneficial, is likely to continue to be extremely challenging with low overall returns due to the diverse nature of small customers—as has been shown with the Government’s Next Generation Energy Storage Program. While we believe there will continue to be a role for distributed household level renewables and storage as a way to engage consumers in the wider decarbonisation challenge, relative to the electricity market, the deferral benefit is small and therefore less effective in offsetting costs. Behind-the-meter batteries do have higher relative revenues however, due to greater tariff arbitrage opportunities.

Instead, Neoen believes that integrating benefit-sharing schemes—such as a community co-investment program—with the delivery of ‘big battery’ projects in the ACT is a more effective mechanism to ensure community benefits (beyond the provision of secure and affordable electricity) can be directly realised by ACT consumers. As such, Neoen intends to deliver a co-investment program for the Capital Battery. This will be available to all ACT residents and will be delivered ahead of the battery project’s commercial operation date to ensure that community investors do not bear construction risks.

Neoen is proud of our role to-date in delivering on the Territory’s zero emission target. We look forward to continuing to grow our presence here and further contributing to the Territory’s leadership on climate action. Should it be of assistance, please do not hesitate to request further information on any of the matters outlined above.

Yours sincerely,



Louis de Sambucy
Managing Director – Neoen Australia