# C.3 COMMUNITY RELATIONS PLAN

# NEOEN



# CULCAIRN SOLAR FARM COMMUNITY RELATIONS PLAN

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# **PURPOSE**

This Community Relations Plan (CRP) was developed during the development phase by Antoine Lajouanie, Project Manager with oversight from the Community Relations Manager. Version 1 of the CRP was developed in April/May 2019, and Version 2 in October/November 2019.

This document identifies the community relations approach and objectives for the Culcairn Solar Farm and surrounding communities. It outlines the overall framework across the phases of the project lifecycle (from development through construction to operations) and proposed plans. It also provides a summary of the key stakeholders including landholders, neighbours, local community, government and business and includes a record of the consultation undertaken to date.

This template was developed in accordance with the best practice community engagement guidelines from the ACT and Victorian Government's renewable energy auction schemes, and in line with the Clean Energy Council's best practice community engagement and benefit-sharing guidelines.

The CRP is a foundational element of the Community Relations Toolkit depicted in Table 1. It is one of the three tools, along with the stakeholder register and the project website, that is intended to accompany the project all the way from early feasibility stage through to decommissioning.

# Distribution

It is intended that the CRP is part of the hand over from project manager to project manager as the project progresses from development to construction to operations. It will also be shared with nominated EPC and O&M contractors so that it can be incorporated into their site management plans to ensure our approach is consistent and coordinated. It is also designed to be a useful backgrounder for new staff members and stakeholders or those attending future community events.

# Review

Once developed, the CRP is a live document which will be updated progressively during the project's development phase and then reviewed and handed over at the following project milestones:

- Financial close (handover to Construction Manager)
- Completion of construction (handover to Asset Manager)

It will also be informed by changing circumstances, community feedback and ongoing improvements in Neoen's community relations approach, so that our communication and engagement remain:

- Relevant to the project's evolving needs, issues and outcomes
- Responsive and tailored to the needs of key stakeholders and local community
- At the leading edge of industry and global best practice.



# Community Relations Toolkit by Project Stage

Host landowner information & FAQ's Social Feasibility Scan Stakeholder Register  Community Relations Plan  Neighbour information & FAQ's, benefit options  Community Info Day Checklist & templates  Community Info Day Checklist & templates  Stakeholder Register  (O&M access)  Community Relations  Plan  Website  Stakeholder Register  Community Relations  Plan  Plan  Stakeholder Register  Stakeholder Register  (O&M access)  Community Relations  Plan  Plan  Plan  Boo number  1800 number  1800 number  1800 number  1800 number  Complaints Register  Complaints				idiney iterations	TOOIRIT BY TTOJC			
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Social Risk Matrix Job interest register Plan Community information pa		Social Risk Matrix	Job interest register	Job Interest Register		Local Participation Plan	Community	End of Project Life information pack
Benefit Calculators  Newsletter template Plan  Site Tour information pack Benefit-sharing Benefit-sharing		Benefit Calculators	Benefit-sharing	Newsletter template	-			
Website (template) program models & Job interest register Event sponsorship		Website (template)			_			
Local Employment & Guidelines Visitor information  Networking Session pack								
Handover to Asset  Handover to Manager & O&M  Construction  Manager & EPC					Construction			



# Responsibility

Over the many years of the Culcairn Solar Farm's development and lifecycle, the people responsible for and engaged in the implementation of the CRP will change.

Table 1 outlines the movement in responsibility across the project lifecycle.

Table 1: Responsibility for CRP

Stage	Project Stages	Proposed Timing	Responsibility for CRP
1	Site selection	H1 2018	Antoine Lajouanie Development Manager
2	Feasibility	H2 2018 - H1 2019	Antoine Lajouanie Development Manager
3	Planning and approvals	H2 2019	Antoine Lajouanie Development Manager
4	Post DA lodgement	Q4 2019- Q1 2020	Damien Hegarty Development Manager
5	Pre-construction	Q2- Q3 2020	Damien Hegarty Development Manager
6	Construction	H2 2020 – 2021	As per Construction Environmental Management Plan (CEMP)
7	Operation	2022 - 2052	As per Operation Environmental Management Plan (OEMP)
8	Decommissioning	2052	As per Decommissioning Environmental Management Plan (DEMP)



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# 1. COMMUNITY RELATIONS APPROACH

# 1.1 Our approach

Stakeholder and community relations are led by Neoen's project managers with support from community relations specialists. We consider it important that trusting relationships are developed between the people on the ground who know the project the best, and the stakeholders that are part of and connected to their region and local community. Due to the rural nature of the community, our overall approach to consultation for the Culcairn Solar Farm will be open, relaxed, flexible and responsive.

Neoen have a vertically integrated business model, meaning that we 'develop to own' our projects. This model is unusual in the industry, affording us a clear advantage over our competitors in respect to community relations — our starting point is the clear understanding that we will be long term neighbours and participants in the local community for the lifetime of the project. As such we are able to establish and nurture relationships, embrace partnerships and innovation, confident that we will be there to see projects and benefits to fruition.

# 1.2 Our values

As a company Neoen has a clear set of values that underpin and guide our work. How these internal values translate into our external approach to building relationships with communities is described in Table 2.



# Integrity

We operate with integrity, whatever we do, whenever and wherever we do it. We work with partners who abide by the same rules.



# Commitment

We uphold all our commitments, internal and external.
We believe in hard work and take pleasure in seeing a good job well done.



# **Audacity**

We believe we can become a world leader in renewable energy. We have the audacity to operate globally, imagining, designing and implementing competitive, effective energy solutions.



# Esprit de corps

We are loyal to each other and form a close-knit team.
We are proud of our company, our goals and our accomplishments.

Table 2: Principles and practice

Value & Principle	In practice
Integrity Mutual Respect	We provide a space for genuine dialogue where people can participate in respectful discussions.
Integrity Transparency	We demystify the development process for local stakeholders and clearly communicate which points, when and to what extent they are able to influence decisions.  We are transparent about how and why decisions are made.
Integrity Inclusiveness	We reach out to involve key stakeholders and the local community so they can play a part in decisions that affect them.  We provide a range of opportunities and avenues for ongoing and meaningful dialogue, allowing for detailed and timely discussions.
Commitment Responsiveness	We communicate well and are responsive to emerging issues, concerns and ideas.



	We provide timely information and ensure people have time to digest information, understand the project and make informed decisions.
Commitment Mutual Benefit	We seek shared outcomes of mutual benefit for the local host community over the long term.
Audacity Innovation	We are open to and pursue bold and creative ideas and solutions tailored to and driven by the local context of the project.
Esprit de corps Relationship building	We build and nurture long term local relationships and make meaningful links with local leaders and organisations.  We provide many avenues for interaction across the project lifecycle.
Esprit de corps Celebration	We value and celebrate community; our own and those of the communities we work with.  We enjoy celebrating our successes together.

# 1.3 Industry Best Practice

Our approach to engaging stakeholders is informed by the Public Participation Spectrum developed by the International Association of Public Participation (IAP2) and widely adopted as a framework for structuring consultation by the renewables industry<sup>1</sup>. The approaches and spectrum are represented in the Table 3.

Table 3: Spectrums of engagement

Spectrum	Inform	Consult	Involve	Collaborate	Empower
Community engagement objective	Provide balanced and objective information assist the community in understanding all aspects of the project, including possible problems/issue s	Obtain feedback from the community on plans, options and/or decisions	Work directly with the community throughout all stages of the project ensure community concerns and aspirations are consistently understood and considered	Partner with the community in each aspect of planning, development and decision- making, including the development of alternatives and the identification of the preferred solution	Community leads the development of the renewable energy project Place decisionmaking in the hands of the community

<sup>&</sup>lt;sup>1</sup> Lane, T. and J. Hicks (2017) Community Engagement and Benefit Sharing in Renewable Energy Development: A Guide for Applicants to the Victorian Renewable Energy Target Auction. Department of Environment, Land, Water and Planning, Victorian Government, Melbourne.



Promise to community	Keep the community informed through all stages of development, including issues and delays	Keep the community informed listen and acknowledge suggestions and concerns provide feedback on how input influenced the decision	Work with the community to ensure concerns and aspirations are directly reflected in the alternatives developed provide feedback on how input influenced the decision	Look to the community for direct advice and innovation in formulating solutions incorporate advice and recommendati ons into decisions to the maximum extent possible	Implement what the community decides
Community engagement outcomes	Securing a good site to install the renewable energy facility gaining planning permission meeting compliance regulations	Minimising objections effectively managing complaints good stakeholder relations a level of community awareness and trust in the project	Long-term broad local social acceptance and knowledge of the project strengthened local relationships and trust local advocates for renewable energy	Broad community participation, support and awareness some sense of local ownership greater community benefit and strong local relationships and trust timely development and easier planning approval some sharing of benefits beyond investors	Benefit sharing program tailored to the local context Harness the skills and capital of the community Upskill community members to manage the project Largely community owned and controlled

This CRP aims to move our engagement activities and benefit sharing approach along the spectrum listed above so that across our project portfolio we are:

- **Involving** the community in the development, construction and operation of the solar farm
- Collaborating with the community to ensure that local advice and insights are shaping our approach to engagement and benefit sharing
- Empowering the community to shape key elements of the project, such as co-designing the long-term framework of the shared benefits program



# 1.4 Emerging trends

Table 3 in the prior section shows that differing levels of participation are legitimate, depending on the goals, timeframes, resources and levels of interest/concern in the decision to be made. At all levels of engagement, it is fundamental to define the promise and ensure it is clearly understood by both the decision makers and the stakeholders to be engaged. The following figure<sup>2</sup> shows the emergent key elements of best practice as at 2018.



Stakeholders groups are likely to have differing communication and engagement needs. A level of engagement is therefore necessarily assigned to each stakeholder identified. It is possible for the level of engagement to alter at different milestones of the project; as a consequence, some stakeholders will be assigned more than one level of engagement. Each level of engagement is a valid one, provided it is delivered in a meaningful way and to a group that expects to be engaged with at that level.

The project team will engage broadly but understands there are stakeholders seeking different levels of engagement in the project. Stakeholder level of interest will evolve over the duration of the project and this analysis will be updated regularly to reflect changes and emerging issues or opportunities. A detailed Stakeholder Register incorporating the stakeholders and communities affected and/or interested in the project is maintained by the manager responsible for the CRP.

<sup>&</sup>lt;sup>2</sup> Lane, T., Wood, E. Hall, N., Webb, A. and Mey, F. Enhancing Social Outcomes from Wind Development in Australia: Evaluating Community Engagement and Benefit Sharing. Clean Energy Council, Melbourne.



# 1.5 Objectives

- 1. Foster a transparent and open approach to the development of Culcairn Solar Farm and ensure 'no surprises' for the local community.
- 2. Keep the community and stakeholders informed about Culcairn Solar Farm through the provision of accurate, timely and factual project information.
- 3. Identify and address community and stakeholder concerns and maintain transparency in the project design, implementation and ongoing operations.
- 4. Involve stakeholders and community regarding key decisions.
- 5. Identify opportunities for local business involvement and local employment in the construction and operation of Culcairn Solar Farm.
- 6. Co-design, develop and deliver a benefit sharing program in collaboration with the community, and in partnership with local stakeholders where possible.
- 7. Develop long-term relationships and partnerships with community and stakeholders.

# 1.6 Community Relations Framework

An eight-phased approach will guide the implementation of community relations strategy in alignment with each of the project stages.

Key project activities and milestones are outlined on the page below, with the associated community relations activities on the following page.

Section 3 provides detailed project-specific information on the community relations approach and strategy for Culcairn Solar Farm.

# NEOEN

# Project Activities and Milestones by Stage

DEVELOPMENT				CONSTRUCTION		OPERATION	
1	2	3	4	5	6	·····7	8
Site Selection	Feasibility	Planning & Approvals	Post DA Lodgement	Pre-Construction	Construction	Operation	Decommissioning
		0 × 0 0 × 1					
Desktop survey Identify potential	Meet and discuss with neighbours	Completion of studies and surveys	Business engagement	DA approval Finalise	Mobilise on site  Civil, mechanical &	Ongoing asset maintenance and management	Explore business case for site renewal
landowners Fatal flaw	Mapping of site constraints	Community engagement	Begin procurement process	procurement and appoint EPC and O&M contractor	electrical installation	Generation and revenue tracking &	Cease or extend
assessment	Commence development	Preparation of DA	Finalise detailed design	Finalise connection	Commissioning	optimisation	contracts
Meet and negotiate with landowners	application (DA) studies	Investigate power purchase agreement (PPA)	Commence PPA negotiations	agreement Finalise PPA	Generation commences		Removal of infrastructure
Enter options to lease	Preliminary project design	options  Grid connection	Commence grid connection	agreement Secure project	Construction Manager hands over to Asset		Site rehabilitation
	Internal approval to proceed	inquiries  Refining detailed	application process	finance leading to 'financial close'	Manager		
		project design		Development Manager hands over to Construction Manager			

# NEOEN

# Community Relations Activities by Stage





# PROJECT CONTEXT

# 2.1 Context narrative

The Culcairn Solar Farm is a 350 MW solar farm & battery storage project designed to improve New South Wales' energy security, reduce consumer power prices and facilitate greater uptake of renewable energy.

The location of the project in New South Wales has been chosen to meet several criteria to design a project that achieves competitive pricing for the end consumer in a strong part of the network. Some of the criteria taken into account are the following:

- solar irradiance
- site topography
- limited vegetation
- proximity to a strong, reliable part of the transmission network
- availability to connect additional capacity on this part of the network.

# 2.2 Background and development to date

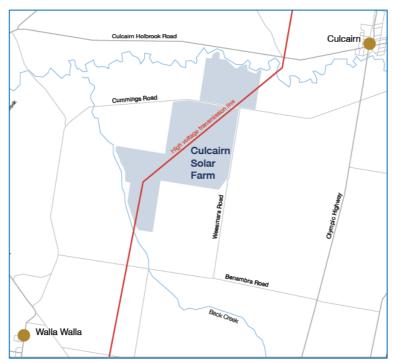
The project site was identified early 2018 and engagement with host landowners started at the end of Q1 2018.

Initial feasibility studies occurred in the course of year 2018 and planning and approvals works in the course of the year 2019.

The project is now in the late stages of the Planning & Approvals phase and Post-DA lodgement phase should occur in the course of year 2020.

# 2.3 Site location

Culcairn is located between the major regional centres of Albury (50 km to the North, population 52,000) and Wagga Wagga (80 km to the South, population 64,000).



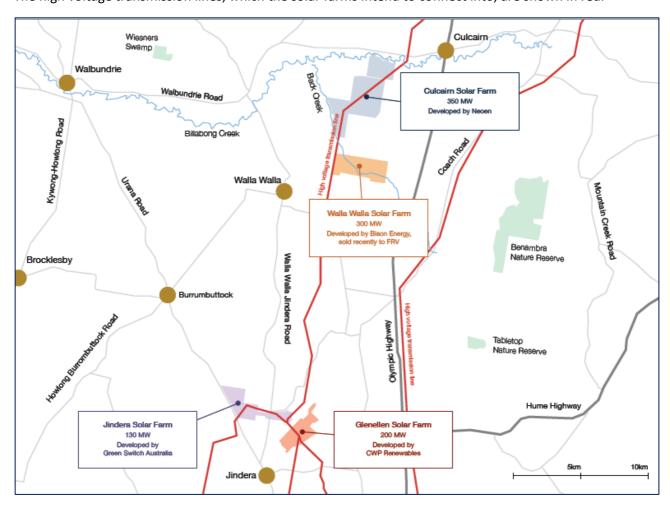


The site is approximately 5 km southwest of Culcairn and 8 km Northeast of Walla Walla.

Greater Hume Shire has 3 other State Significant solar farm projects in development:

- Glenellen Solar Farm: a 200 MW solar farm developed by CWP Renewables, to the north of Jindera.
- Jindera Solar Farm: a 130 MW solar farm developed by GreenSwitch Australia. The EIS for the Jindera Solar Farm is currently on Public Exhibition.
- Walla Walla Solar Farm: a 300 MW solar farm developed by Bison Energy, and recently purchased by FRV.

The map below identifies the four projects currently proposed in the Greater Hume Shire. It was developed in response to confusion in the community and amongst local stakeholders about which project was which. The high voltage transmission lines, which the solar farms intend to connect into, are shown in red.



# 2.4 Community attitudes and local politics

#### 2.4.1 Local Government

Greater Hume Shire is the Local Government Authority for the project. It was formed in 2004 when three former shires (Culcairn, parts of Holbrook and Hume) were amalgamated. In 2016 there were 10,351 people living in the shire (ABS Census).

Greater Hume has nine Councillors, who are listed below:

- Heather Wilton, Mayor

East Ward

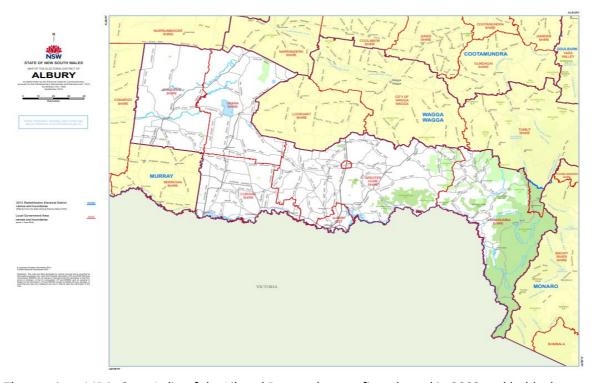


Doug Meyer, Deputy Mayor North Ward Matt Hicks South Ward Jenny O'Neill South Ward Denise Osborne South Ward East Ward **Tony Quinn** Annette Schilg North Ward North Ward **Terry Weston** Lea Parker East Ward

Greater Hume Shire voted to formally object to the Jindera Solar Farm on 6 November 2019 and to the Walla Walla Solar Farm on 20 November 2019.

#### 2.4.2 State Government

Culcairn is located in the Albury electorate of NSW. Albury electorate comprises the city of Albury and the surrounding rural councils. The electorate covers 19,686 square kms in southern NSW.



The previous MP is Greg Aplin of the Liberal Party, who was first elected in 2003 and holds the seat with a safe margin of 27%. He announced his retirement in 2018 and his successor Justin Clancy was elected in March 2019.

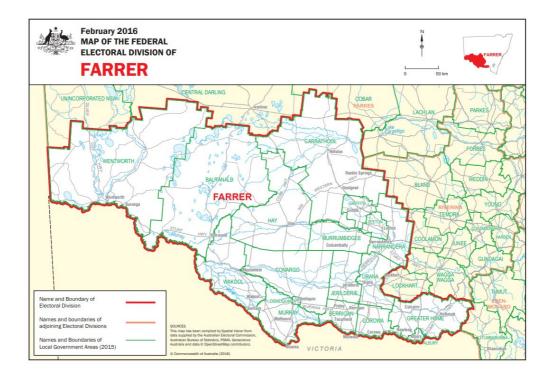
Justin Clancy was born in Albury and lives with his wife & 3 young children on a farm in Bowna (around 40km SW of Culcairn). He is a local businessman and runs his own Family Vet Centres in Albury and Wodonga.

# 2.4.3 Federal Government

Culcairn is in the Federal electorate of Farrer, held by Liberal MP Sussan Ley, who won the seat in 2001. The seat is considered secure for non Labor parties, alternating between the Liberal Party and the National Party since 1949.



The Farrer electorate includes large-scale irrigation areas (around Deniliquin, Griffith and Wentworth) and produces dairy products, sheep and cattle, orchard and vine crops, apples and rice. Other major agricultural products include wool, cotton, wheat and cereals. Many industries are based on the processing of agricultural products, such as the newsprint mill at Albury and the largest rice mill in the southern hemisphere at Deniliquin. Other industries include mineral sand mining, tourism and agricultural service industries.



Sussan Ley was born in 1961 in Nigeria and migrated to Australia with her family at 13. She holds qualifications in taxation and accountancy, and a pilot licence. During her career, she worked as Director of Technical Training at the Australian Taxation Office in Albury before entering politics in 2001.

She has been a Shadow Minister since 2007, Assistant Minister since 2010 and Minister (for Health, Sport & Aged Care) between 2014 and 2017. She was involved in an expenses scandal relating to taxpayer-funded trips to the Gold Coast in January 2017 and resigned from the frontbench. She was returned to ministerial duties in August 2018, when she was appointed by Scott Morrison as Assistant Minister for Regional Development & Territories.

Sussan Ley won the seat comprehensively at the May 2019 federal election and is currently serving Minister for the Environment.

#### 2.4.6 Local Media

Border Mail, daily newspaper for the Albury Wodonga area.

Eastern Riverina Chronicle, for the Greater Hume, Lockhart and Urana shires.

#### Local newsletters:

Culcairn Oasis Newsletter: MonthlyWalla Walla Newsletter: Monthly



# 2.5 Community Overview

The broad community around the proposed Culcairn Solar Farm is centred in the towns of Culcairn and Walla Walla. According to the Australian Bureau of Statistics<sup>3</sup> 2016 Census Table 4 is representative of the area.

Table 4: Total Population Study Map - Culcairn

Demographics	
Estimated Population	1,473
Town Population	1,133
Median Age	42
Median Weekly household Income	\$1,053
Total Dwellings	641
Education	
Bachelor Degree level and above	99
Advanced Diploma and Diploma level	97
Certificate level III or IV	234
Year 12	107
Occupation	
Managers	120
Professionals	66
Labourers	83
Technicians and Trades Workers	91
Industry	
Local Government Administration	28
Other Grain Growing	24
Grain-Sheep or Gran-Beef Cattle Farming	22
Hospitals (except Psychiatric Hospitals)	22
Primary Education	21
Home Ownership	
Owned outright	214
Owned with a mortgage	179
Rented	121

<sup>&</sup>lt;sup>3</sup> https://www.abs.gov.au/websitedbs/D3310114.nsf/Home/2016%20QuickStats



Table 5: Total Population Study Map – Walla Walla

Demographics	
Estimated Population	836
Town Population	567
Median Age	42
Median Weekly household Income	\$1,096
Total Dwellings	344
Education	
Bachelor Degree level and above	61
Advanced Diploma and Diploma level	36
Certificate level III or IV	166
Year 12	61
Occupation	
Managers	98
Professionals	35
Labourers	50
Technicians and Trades Workers	44
Industry	
Combined Primary and Secondary Education	21
Other Grain Growing	20
Grain-Sheep or Grain-Beef Cattle Farming	19
Sheep Farming (Specialised)	18
Hospitals (except Psychiatric Hospitals)	12
Home Ownership	
Owned outright	141
Owned with a mortgage	103
Rented	45



# 3. COMMUNITY RELATIONS STRATEGY

# 3.1 Needs-based approach

Each key stakeholder has a different need across each phase of the project lifecycle. To address this nuance, a needs-based approach is described for each of the key stakeholders to this project in Table 5.

Table 6: Key stakeholders

Stakeholder Group	Overview	Objectives – Needs based approach	Activities – per development phase
Host Landowners	Residents who are hosting solar on their land.	Ongoing communication and discussions as project progresses. Contribution to the project's progress, ability to provide local knowledge, advice and input. Involvement in development of Community Benefit-sharing Scheme	One-on-one meetings Landowner updates Letterbox drops Invitations & involvement in community events
Near neighbours [adjacent landholders]	Residents owning land adjacent to the project site have the potential to be affected by the visual impact of the solar, the noise and heavy vehicle traffic associated with the construction phase.	To create and maintain a close connection with direct adjacent neighbours of Culcairn Solar Farm.  To keep neighbours informed about the project from early in the project planning process and provide opportunities to raise issues and provide feedback.  To ensure that neighbours share in the benefits of the project.	Benefit-sharing:  One-on-one engagement Invitation to be provided a private photomontage Letterbox drop project updates Community Information Sessions Invitation to community events Adjacent landholders to be offered a Construction Disruption Payment to mitigate potential impacts associated with the construction phase.
Neighbourhood [Culcairn and Walla Walla]	The local people living within the Culcairn and Walla Walla townships in proximity to the project.	To keep neighbours informed about the project from early in the project planning phase To provide opportunities to raise issues and provide feedback	Letterbox drop Project Updates Community Information Sessions Invitation to community events
Council	We will work with the Greater Hume Shire Council to shape the Community Engagement	To ensure a positive and collaborative relationship with the LGA that can	One-on-one engagement Project briefings & updates Community Information



	Strategy and Benefit Sharing Program.	support the long-term goals of the community.	Sessions Pre-DA meeting
State MP	Justin Clancy	To ensure the local member is kept updated about the project and its progress	Project briefing in person by Head of Development Invitation to community events
Federal MP	Sussan Ley	To ensure the local member is kept updated about the project and its progress	Project update in person by head of Development Invitation to community events
Traditional Owners  – Indigenous community	We will seek to engage and understand what elements of the project are culturally relevant and/or sensitive.	Cultural heritage survey. Engaging with local Aboriginal groups	Invitation to community events
RFS	Local volunteers representing the Country Fire Authority	To ensure project activities abide by safety and regulatory requirements	Provide indicative design plans and updates on the project to prepare for any local fire and emergency safety requirements
Schools, TAFEs and Universities	Culcairn Public School Billabong High School St Joseph's Primary Walla Walla Public School St Paul's College Albury TAFE	To ensure organisations are updated on education and work experience opportunities associated with the project.  To use the opportunity of a local renewable project to dovetail relevant & practical sustainability education content into the syllabus.	Information and project updates provided and invitation to job/supplier networking engagement  Opportunities for site visits for local schools.
Business groups / industry stakeholders	We will seek to engage and collaborate with local businesses and business networks around what opportunities may be available such as sourcing for the solar farm development.	To ensure Neoen is maximising local economic and regional development opportunities.	Develop Local Participation Plan  Networking across local and regional business development networks in pre-construction phase
Solar farm opponents	We will seek to identify those issues that are of concern to local solar farm opponents.	To be accessible, help to address concerns proactively, and to have a best practice complaints system in place.	Complaints process implemented and transparent.
Advocacy groups	Sustainability groups Community energy groups	Discussion on community energy and zero emissions targets Potential for partnerships	Update / presentation on project Invitations to community events



Community organisations	Culcairn & Walla Walla Development Committees	To understand a project and be able to update their members To participate in / benefit from Community Benefit-sharing Scheme	Update/presentation on project Invitations to community events
Natural resource management groups	Landcare and other local groups that are involved in local conservation projects	To ensure local NRM knowledge and resourcing is available to the project. To distribute information to members	Update/presentation on project Invitations to community events

Names and contact details are held in the Stakeholder Register.

# 3.2 Sustained engagement

As well as being oriented towards the needs of individual stakeholder groups, the engagement is also planned and staged in line with the project's eight phases, so that engagement is sustained and iterative across the project's lifespan.

A summary of proposed activities is shown in Table 6, noting that this will change as the project progresses.

Table 6: Community Relations Activities by Project Phase

#### OPERATIONS 2 3 POST DA PI ANNING SITE SELECTION FEASABILITY PRE-CONSTRUCTION CONSTRUCTION OPERATION DECOMMISSIONING Develop Community Relations Plan (CRP) & Social Risk Matrix Landowner & council briefings Undertake host • Engage with • Regular host & Organise Employment & Supplier networking landowner neighbours (one with progress & neighbour community engagement one-one), decide communication celebration event Update website (one-on-one) Social Feasibility on neighbour benefit options • Council & MPs Community updates via briefings, website Launch website • Website updates & Launch Website including project email, 1800#, job interest register & feedback survey Hold community information session(s) Finalise Community-Benefit-sharing subscribers Scheme • Update website with progress & news • Email newsletter to stakeholders & · Email newsletter process Engagement with landcare groups Initial stakeholder briefinas · Presentation to & newsletters to stakeholders & Engage with Traditional ov Establish local business & Manage complaints subscribers Manage complaints community groups • Host landowner register · Undertake council stakeholde dinner & updates Establish register briefings subscribers Develop complaints register Community Benefit-sharing Scheme Delivery of Community Benefit-shar Develop Community · Organise start of Benefit-sharing construction event for host landowners Introduce Construction Manager & EPC Scheme • Hold host landowner dinners & updates Introduce Asset Scheme Manager to key stakeholders · Facilitate site visits, educational tours & open days Contractor to key

COMMUNITY RELATIONS ACTIVITIES

# 3.3 Maximising opportunities for involvement

#### **Local Participation**

One of our key areas of focus for the broader local community is facilitating the involvement of local jobseekers and businesses in the construction and operation of the solar farm to ensure a strong regional economic benefit.

During feasibility & planning/approvals phases Expressions of Interest for work are invited and received through adverts, information days and the project website. A job and supplier interest register for internal



use is created to ensure reference during construction and operation phases can be made to list of interested workers.

A Local Participation Plan will be developed in the period following the submission of the development application, which identifies the approach and strategy to ensuring a strong local and regional economic development outcome.

In the pre-construction phase a Local Employment & Supplier Networking Session will be held in Culcairn and/or Walla Walla, with invitations going out to those on the job interest register and local employment agencies, ensuring they have the opportunity to meet with the appointed construction contractors.

#### Education

We will explore opportunities to work with local schools and colleges, both at primary and secondary, to support education in sustainability, renewable energy generation, the electricity grid and electricity market.

During operations we offer opportunities for site visits from local schools and community groups and will be developing specific educational content, materials and visitor packs in 2020.

# 3.4 Sharing benefits with local community

Benefit-sharing with the local community is integral to our approach to community relations and this element is outlined in greater detail in Section 5 below.



# 4. COMMUNITY ENGAGEMENT ACTIVITY

# 4.1 Initial Engagement: Q3 2018 to Q2 2019

After identifying the site for the Culcairn Solar Farm in the first half of 2018, Neoen started engaging with the potential host landholders and the Greater Hume Shire Council.

Once the site was secured, consultation started with neighbours of the project site. Adjacent Landowners and those within 3 km of the project site were contacted with an invitation to meet for the first time in November 2018. Initial meetings were held on 8 and 9 November 2018 and 27 and 28 November 2018.

Landowners met were informed about the project and were given the following information:

- Presentation of the proponent.
- Presentation of the development process of a solar farm in NSW.
- Potential land considered for the development.
- Discussions on the concerns raised by the landowners.
- The contact email address of the project was shared.

A presentation leaflet on solar development and the proponent, a 2-page information leaflet on the project and a feedback form were provided to neighbours to allow for early feedback on the project.

During the meetings in November, landowners raised several questions and concerns. Among others, the main concerns raised were the following:

- Development of a solar farm on agricultural land.
- Local economic impact of a solar farm during its operations compared to normal agricultural operations of the land.
- Visual amenity and effect on adjacent property values.
- Heat effect of solar farms and impact on neighbouring farming operations.
- Health impacts of a solar farm.
- Bush fire risk management.
- Weed and vegetation management.

When possible at this stage of the development, the proponent has provided initial answers to those concerns.

In order to plan this first on-going early stage consultation neighbours were informed by phone or email and were offered the possibility to provide feedback through a face to face meeting or by phone when a face to face meeting couldn't be held directly.

Around the same time, Neoen engaged with the local branch of NSW Farmers and took part in a branch meeting on 28 November 2018 on Solar Farm Developments on Agricultural Land with TransGrid, the DPIE and NSW Farmers.

Additionally, a letter of information was sent in December 2018 to the Federal Member for the Farrer Electorate and to the Member of Parliament of NSW for the Albury electorate. APA (gas pipeline owner) was contacted by email in July 2018 and Council consulted in February, October and November 2018 and March 2019.

An additional opportunity to meet was given in April 2019 before Neoen held their community open-day in Culcairn and an update of the project was provided by email or post mail to neighbours within 3 km of the project site informing them that the Scoping report had been lodged to the Department of Planning and Environment of NSW.

On 16 May 2019, Neoen held a Community Drop-in Session at the Culcairn Bowling Club on Olympic Highway. This session was advertised in the Border Mail, and in the two local Newsletters of Walla Walla and Culcairn. The Neoen team was available to meet and answer questions from 2 to 8 pm. The main



outline of the project was presented, with the information presented as posters (attached as Appendix 2) and made available as A4's for people to take-away. Over 100 people attended the session.

Contact numbers, project email address, and project website were shared with the community to allow for on-going information on the project. Feedback surveys were also available to fill in.

Following this first phase of community engagement on the project, Neoen took the time to gather the feedback and adjust the design of its second phase of community engagement.

# 4.2 Intensive Engagement: Q3-Q4 2019

It became evident in early 2019 that there was a formal anti-solar opposition group forming in response to the four proposed solar farms in the area.

The Community Drop-in Session in May 2019 attracted a number of vocal objectors and anti-solar protestors. Feedback from some community members indicated that they had been unable to engage in meaningful conversations and were unable to get adequate responses to their concerns due to the circumstances of the meeting, during which the police were called after an objector pushed someone over. Reports were subsequently received that some community members felt intimidated by those with antisolar views.

In response to this and intent on continuing to provide meaningful opportunities for public engagement and consultation, Neoen changed tack and recruited two local community engagement consultants to support the next phase of community engagement.

The newly formed community engagement team (two Neoen staff along with two local consultants) developed a tailored, intensive approach that primarily focused on 'kitchen table' conversations. This low-key method avoided opportunities for public protest, enabling more personalised and respectful conversations to occur, and reducing the risks and perceived risks of voicing views in public.

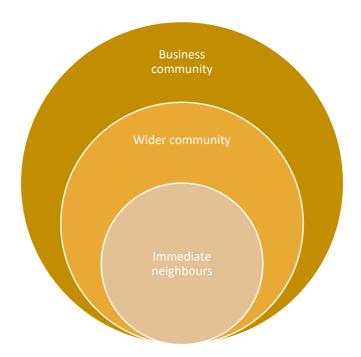
The meetings were framed as confidential, based on listening and information sharing (rather than positional) and an opportunity for residents to voice their concerns and have input to the development of the proposed Community Benefit Fund. The information needs were met iteratively, for example the first conversations there was confusion about which projects was which and who the proponent was, and there were rumours that all four projects belonged to the same company. In response Neoen developed a regional map which showed the four projects were located, their size and different companies (see pg. 16).

While many of these early conversations were with supporters of the project, over the ensuing weeks interviews were held with people holding a wider range of views or concerns. For many, it was their first opportunity to speak with someone who could answer some of the questions they had about the project.

This phase of the community consultation was conceptualised as involving three stakeholder groups;

- immediate neighbours
- the wider community
- business community





Between mid-August and October 2019 over 130 interviews were conducted with residents of Walla Walla and Culcairn, and with some of the wider shire. The majority of these were held in private homes with family members; a smaller number were with neighbours, friends or in business settings. A small number were by phone where respondents could not schedule a meeting or felt their concerns could be captured by a brief conversation. All of those who had left their details on feedback forms at the Community Drop-in Session were contacted.

Most meetings were held in private homes as many community members were willing to contribute to the discussion and address their concerns but were unwilling to be seen discussing the project in public. There were mixed views about the solar farm in the community consultation, of those interviewed the majority indicated support for the solar farm, while almost all the immediate neighbours objected to the solar farm. For this reason, the neighbour's views have been captured separately in a table below.

During this time Neoen also presented to Councillors of the Greater Hume Council as well as the Culcairn Development Committee. Conversations were held with some members of the Walla Walla Development Committee independently, including the Chairperson, but efforts to present at a committee meeting were prevented by the difficult political environment in Walla Walla. Information was instead provided to all committee members via the Chairperson, with an invitation for further meetings if questions were raised.

In response to enquiries and to provide community members with the opportunity to see for themselves, a bus trip to visit Neoen's nearby Numurkah Solar Farm was held in September 2019, with invitations extended to all community members. Approximately 20 people participated in this tour, most identified as supporters of the project, but a few were opponents who wished to see an operational solar farm. The bus was hired from a Walla Walla bus company, with catering provided by a Culcairn coffee shop.

# 4.2.1 Neighbour consultation

Consultation with neighbours and the wider community raised similar concerns; a key difference was that the neighbours highlighted the importance of including a separate 'neighbour benefits' component of the Community Benefit Fund. Meetings with adjacent neighbours to the project site who agreed to meet were held on 10 and 14 October 2019.



# Priority concerns identified by neighbours

Level of concern	Description of concern	
High	The loss of productive agricultural land in an agricultural landscape increasingly being impacted by drought and climate change.	
High	Inequity concerns: there are no neighbour benefits, neighbours have no voice in the process and yet neighbours will potentially be the most directly affected by this change.	
High	The loss of agricultural landscape i.e. aesthetic impacts and how this will impact them in an ongoing way, particularly for those that identified as intergenerational farmers.	
High	Fire risk from neighbouring properties and implications for insurance of neighbours/community	
Medium	Construction impacts: Noise, dust and heat impacts on livestock Dust effects from high traffic on dirt roads	
Medium	Length of time for any new planting of vegetation to grow and provide screening of solar farm	
Medium	Impacts on wildlife corridors/ landscape connectivity through construction and lifetime of project, including tree removal	
Medium	General concerns about management of solar project and potential risks for community e.g. weed management, drainage	
Medium	Fear of decline in property values in the area	
Low	Fear that drainage lines will be modified on solar farm block, resulting in changes to hydrology of area	
Medium: Refe	High: Referenced by neighbours as a central issue (no prompting) Medium: Referenced by all neighbours as secondary concern Low: Referenced by some neighbours	

More detailed information about concerns and how Neoen has responded is included in Section 4.3

# 4.2.2 Community-wide consultation

One on one meetings offered to all interested community members to discuss concerns and provide information. Consultation with the wider community was very mixed; while the majority supported the project, it was also acknowledged that the conversation would be different if they were a neighbouring farmer. In Walla Walla very few community members would meet in a public space and tensions in the community were frequently identified as damaging; this was less the case in Culcairn.

Maps & facts sheets were developed and distributed by Neoen to help address specific points of concern raised by community members. FAQ's were iteratively updated, with most recent version attached as Appendix 3. This includes information about decommissioning practices, retention of landform, protection of biodiversity, heat-island effect, glare from solar panels, remediation of land etc.

Opportunity for community input to shape the proposed community benefit fund, including preferred structure and benefits. See feedback in Section 5.3 of the EIS for details on community consultation.



Consultations were held with farmers and townspeople across Walla Walla and Culcairn, as well as many of the larger businesses across both towns. Meetings and phone discussions occurred between mid-August 2019 and October 2019.

Bus trips to Neoen existing solar farm sites were offered to allow people to see a project for themselves, ask any questions. One was organised to the Numurkah Solar Farm in Victoria on 2 October 2019 with 20 people attending from Culcairn and Walla Walla. A second trip is being planned for late November/early December 2019.

Neoen also engaged with the local landcare group, and the local community development groups, offering to hold a workshop with to the Culcairn Community Development Committee and the Walla Walla Community Development Committee.

# Priority concerns identified by the community

Level of concern	Description of concern
High	The loss of agricultural landscape i.e. aesthetic impacts, particularly expressed as a concern regarding immediate neighbours
High	Fire risk from neighbouring properties and implications for insurance of neighbours/community.
Medium	The loss of productive agricultural land in an agricultural landscape increasingly impacted by drought and climate change.
Medium	Impacts on wildlife corridors/ landscape connectivity through construction and lifetime of project, including tree removal.
Medium	Impacts on wildlife corridors/ landscape connectivity through construction and lifetime of project, including tree removal
Medium	General concerns about management of solar project and potential risks for community e.g. weed management, drainage, ongoing management of infrastructure, remediation of land when lease expires
Medium	Fear of decline in property values in the area
Medium	Long term effects of community division resulting from proposal for four solar farms in the area
Low	Community benefits fund mismanagement: fear of not having the funds used for local initiatives and used in the wider council area.
High: Referenced by the majority of interviewees as a critical issue when asked about concerns Medium: Referenced by around half of interviewees Low: Raised by some interviewees	

More detailed information about concerns and how Neoen has responded is included in Section 4.3 below.

# 4.2.3 Business consultation

While many of the business community expressed concerns captured in the broader community consultation; there were also questions about the opportunities available to local businesses.



The majority of local businesses interviewed were supportive of the solar project and identified potential benefits. However due to community concerns and various opinions held by staff and customers, most businesses preferred to maintain a neutral and respectful position.

# Priority concerns identified by local businesses

Level of concern	Description of concern
High	Business opportunities will be monopolised by larger external contractors with economies of scale
High	Construction and management of solar farm will have little benefit to the local economy
High  The potential for long term business impacts from the community division (many local businesses have staff both opposing and supporting the solar farm proposal)	
High: Referenced by the majority of interviewees as a critical issue when asked about concerns	

# Response & strategies to address business concerns:

- Neoen commissioned an Economic Impact Assessment for the projects (see section 6.4.2 of EIS) which highlighted that significant participation opportunities for businesses and workers located within the region will be available in a direct and auxiliary (accommodation, retail) perspective.
- No net job losses are expected, with the project replacing existing agricultural employment associated with the subject land (for both direct and indirect jobs). In addition, opportunities to continue sheep grazing will be available across the site.
- In response to this concern Neoen developed and shared a community information video in September 2019 about the local economic and community benefits that Numurkah Solar Farm brought to the surrounding area to show how another nearby project brought benefits and did not create disturbances within the community. https://www.youtube.com/watch?v=Odxl0ZLvavE.
- The ABC's 7.30 report on Numurkah in October 2019 also demonstrated how Neoen's approach is designed to maximise the opportunities, benefits and outcomes for local businesses. https://www.youtube.com/watch?v=zrKZK5j5b2k
- Neoen have developed a job and supplier registry to be able to communicate opportunities at each stage of the process.
- Neoen are developing a Local Participation Plan to maximise the local business opportunities on the project.
- Neoen will continue to meet with local businesses, industry bodies, regional economic development networks to share information and prepare for the construction period.

More detailed information about concerns and how Neoen has responded is included in Section 4.3 below.



# 4.3 Summary of concerns & responses by theme

# Theme 1: Changes to the agricultural landscape

Respondent	Level of concern
Neighbours	High
Community	Medium
Business	Low
GHS Council	Medium

While many respondents expressed a belief in the importance of renewable energy (many have solar installed on their home and/or farm) they registered an objection to the proposed project due to its location on what they described as productive agricultural land. This was particularly common amongst neighbours to the project and was the single concern expressed most often across all respondent groups. A low number of business community respondents expressed concern compared to other groups.

# Summary of concerns – subthemes & details

# Loss of productive agricultural farmland

• Neighbours expressed concern at the loss of farmland locally, impacting on local farmers ability to acquire new leases and expand operations.

# Local land capability assessment

 Neighbours and local farmers expressed a view that the NSW mapping data on regional land capability is inaccurate.

# Heat island effect and reflectiveness of solar PV's

• Many respondents expressed the fear that the heat island effect of the solar panels will impact on crops and livestock.

# Inequity concerns: how neighbours will be impacted by this change

• There was a view expressed by the majority of neighbours that neighbours are not deriving any of the financial benefits.

# **Rural landscape**

 For many, the change of the local agricultural landscape to what many express as 'industrial scale' solar farming challenges their notion of traditional farming practice and their connection to the generations before them.

### **Comments & quotes**

Many respondents expressed the view that they support renewable energy generation, but 'not in this location.' Many local farmers expressed the view that their area is still productive and that solar farms should be located 'out west where the land is marginal'.



# Summary of response

# Loss of productive agricultural farmland

- It is possible for agriculture to continue under the solar panels, with sheep being grazed on all 5 of Neoen's operating solar farms in NSW and VIC with early indications showing there is the potential for up to 80% carrying capacity under solar panels, rising to over 100% during drought conditions.
- Neoen will provide opportunities for local landowners to use the land under solar panels for sheep grazing and will explore other opportunities for combined land use, as per advice from local agronomists, farmers, researchers and Landcare.
- In response to this concern Neoen commissioned an expert review into the benefits and opportunities of combining agriculture with solar or 'agrisolar' and is implementing changes to standard practice during design, development, construction and operation phases of its solar farms to plan for best practice in agrisolar.
- The potential for agrisolar was captured in a short community information video, made in August 2019, about the experience of a local farmer at Dubbo Solar Farm which identified the co-benefits of combining grazing with solar in an accessible way. <a href="https://www.youtube.com/watch?v=uO3k9EdZjml">https://www.youtube.com/watch?v=uO3k9EdZjml</a>. The video highlights an unexpected benefit during periods of drought where the productivity of the land was found to increase due to the dripping of dew and moisture along the edge of the solar panels resulting in strips of green growth. This video was widely shared on social media, with Greater Hume Shire Council members, at community meetings, at a recent Renewables & Agriculture Forum in Wagga Wagga, and with registered members of the community via email.
- Neoen initiated discussions with CSIRO about conducting a 3 year longitudinal research project testing agrisolar options, co-benefits and ways to maximise productivity yields as well as soil quality, biodiversity and the potential for carbon sequestration. This research opportunity was presented by Neoen at the Clean Energy Council's Utility-scale PV Directorate meeting in October 2019 and an industry consortium is now advancing this world-leading research project.
- Neoen's response to the uppermost community concern about the loss of productive
  agricultural land has been considered and comprehensive. The intention has been to seek to
  understand and then to communicate the existing knowledge around the possibilities and
  opportunities for combining agriculture with solar and then to take an active role in leading the
  industry towards advancing our understanding of how to maximise combined land use
  productivity.

This technique of combining sheep grazing to provide multiple, diverse uses throughout the Project site is considered in **Section 6.5** of the EIS.

# Local land capability assessment

- The land is currently classified as Class 4 under the Land and Soil Capability Assessment Scheme (OEH, 2012). As expressed by the landowner and The NSW Department of Infrastructure, Planning and Natural Resources' capability assessment scheme, Class 4 land has moderate to severe limitations for some land uses that need to be consciously managed to prevent soil and land degradation. It is only suitable for intermittent cultivation with specialised practices. Recognising these limitations underscores the value in developing multiple uses on the project site with renewable energy generation and grazing activities running simultaneously, diversifying the value derived from the land.
- The development site's zoning classification is also RU1 land for primary production, which is also consistent with the surrounding land parcels which consist mainly of cropping and grazing activities, and as detailed previously grazing will continue on the site.
- Neoen commissioned consultancy group DC McMahon Pty Ltd to undertake an independent soil test to test the indicative quality attributes of the soil and to also mitigate the risks associated



- with soil erosion during the construction and operation of the project. It was found that the fertility of the soil was generally low to moderate quality, with sandy and pale subsurfaces found that generally do not retain fertilisers well. Allowing for multiple and diverse uses of the land via the development of the project and continued grazing opportunities will help supplement the low-moderate fertility of the soil.
- Neoen has attempted to contact NSW DPI (November 2019) to factor in the most up-to-date land mapping and classifications that may assist in reconfiguring the project site to accommodate any changes. Neoen is aware that the Draft Riverina Murray Important Agricultural Land Mapping Project (P-M IAL Mapping) has been an ongoing activity throughout 2018-19. The Department continues to work on this mapping project and results will be available in 2020 and were not able to comment specifically on their progress.

This land classification and zoning evidence is considered in Section 6.5.1 of the EIS.

#### Heat island effect and reflectiveness of solar PV's

- There is insufficient empirical data to back up the claim that ambient temperatures outside the solar asset perimeter are impacted by the presence of photovoltaics.
- The Independent Panel of experts created for the Shepparton Solar Farm concluded in 2018 that any potential temperature increase within the solar array will be marginal, however, any solar array should be separated 30 metres from any neighbouring property boundary.
- Although not directed to do so under the relevant NSW State Authority (DPIE) guidelines, Neoen
  intends to follow the more conservative Victorian State Authority (DELWP) guidelines by
  allowing for a minimum width of 30 metres between any solar panels and the property
  boundaries that form part of the proposed project area. The clear setbacks combined with the
  presence of vegetation screening within appropriate parts of the site perimeter will mitigate this
  concern about impacts on neighbouring properties.

This is considered in more detail in Section 7.1.2 of the EIS.

# Inequity concerns: how neighbours will be impacted by this change

- Neoen's experience on other operating solar farms in NSW and VIC is that there is no impact on neighbouring farming operations. In instances where neighbouring farmers can take advantage of the opportunity to graze sheep on the land there are benefits to neighbouring farming operations.
- In terms of deriving direct financial benefit Neoen is offering payments totalling \$200-\$300,000
  to near neighbours in a solar industry-first. The payment is configured as a one-off 'constructiondisruption payment' to acknowledge the potential impacts of the construction phase on
  adjacent neighbours.
- The total community benefit-sharing package, including a voluntary contribution to Greater Hume Shire will total an estimated \$10million over the lifetime of the project.

This is detailed in Section 5 and Section 6 of the EIS.

# **Rural landscape**

- A solar farm has relatively low visual profile in the landscape compared with a wind farm and with adequate vegetation screening can be effectively shielded from view.
- The design team has optimised the location of the more visual infrastructure (substation, battery
  enclosures) to be situated in the centre of the site, at maximum distances from the nearest
  visual receivers.
- There will be a 30m buffer zone between the edge of the panels and the site boundary. Neoen will plant a vegetation buffer along all external boundaries of the solar farm to provide visual screening and habitat. Neoen will ensure the vegetation buffer includes mixed height vegetation to provide habitat for small birds. Neoen will consider the suggestion of a minimum number of tree rows, and the inclusion of mature or fast-growing trees.



• Where hollow bearing trees must be removed from the site (old trees that are dead but provide hollows and important habitat for wildlife) Neoen will consider re-locating them to nearby swamp or riparian areas where they can be retained as habitat for wildlife, preferably in a vertical position. This was conducted recently at Numurkah Solar Farm in partnership with the local catchment authority.

This is considered in **Section 8.2** of the EIS and is noted by the Proponent as a measure to be addressed prior to construction.

# Theme 2: Biodiversity Impacts

Respondent	Level of concern
Neighbours	High
Community	High
Business	Medium
Raised by Council	Medium

This was one of the most common concerns raised across all groups. It was referenced by the majority of neighbours, particularly those that have spent considerable time revegetating their properties. More specific issues, such as impacts of construction on particular species, were raised by neighbours, and community members involved in Landcare or environmental-based community groups.

# Summary of concerns - sub themes and details

# Landscape connectivity

Many questions were raised during consultation about the likely impacts of the construction
phase and the design of the solar farm on wildlife movement and how existing wildlife corridors
can be retained.

#### **Habitat trees**

• The removal of habitat trees from the proposed site was a commonly referenced concern. Many respondents requested that any habitat trees be protected for their value in the ecosystem.

## **Vegetation buffers**

• Neighbours were particularly concerned about the dimension of vegetation buffers around the site and felt that the length of time for the screening to grow was unacceptable.

# **Comments & quotes**

While many respondents were aware of the laws and procedures in place to protect local biodiversity, there was a fear expressed that the corporates 'would find ways around the law' to expedite their project. A commonly expressed view was that 'we want some reassurance that this site is going to be



well managed' and respondents asked, 'what recourse have we got when there is a problem? Are these companies going to help us solve the problems they create?'

# **Summary of responses**

### Landscape connectivity

- Discussions held with local arborists, agronomists and Landcare to ensure local input to managing biodiversity impacts.
- Connectivity is very limited throughout the existing development site, consisting of a highly cleared landscape. The main connectivity corridors for threatened species would occur along the vegetated Back Creek and Billabong Creek. These vegetated creek lines have been avoided by the development footprint.
- Retaining the vegetation along Back Creek in the development site will maintain connectivity
  across the landscape to facilitate movement in an east-west direction. This creek line also
  connects to the remnant roadside vegetation that would be retained. Due to the highly cleared
  and fragmented landscape within the development site the proposal is not likely to disrupt the
  movement of any threatened species.

This is considered in **Section 6.8** of the **EIS.** 

#### **Habitat trees**

- Neoen's design team is continuously optimising the site layout with consideration to the
  vegetation and land constraints. This exercise will continue into detailed design, seeking to
  minimise the disturbances to trees, species and biodiversity found on site.
- An ecologist was engaged by Neoen to determine the impact to biodiversity due to the
  proposed project development. Since some vegetation clearance must occur, Neoen is
  required to offset this impact and gain approval from the NSW Department of Environment,
  Energy and Science, in compliance with the Biodiversity Conservation Regulation 2017.
- The assessment calculates offset 'credits' that Neoen is obligated to compensate the
  Department of Environment prior to the commencement of construction. This will include
  the 99 paddock trees and 3 threatened species that the ecologist deemed to be impacted by
  the development. The offset contributions made by Neoen will go towards preserving
  similarly valued species so that they can be maintained and protected in perpetuity.
- Where hollow bearing trees must be removed from the site (old trees that are dead but provide hollows and important habitat for wildlife) Neoen intends to re-locate them to nearby swamp or riparian areas where they can be retained as habitat for wildlife, preferably in a vertical position. This was conducted recently at Numurkah Solar Farm in partnership with the local catchment authority.

Greater detail on the Biodiversity Offset Scheme and required vegetation clearing is provided in **Section 6.8.2** of the **EIS.** 

# **Vegetation buffers**

- Vegetation screening is proposed to screen views of the proposal from nearby dwellings with a
  sufficiently wide buffer using a mixture of native vegetation and other specific mitigation
  measures to effectively screen the project from visual receivers, which will minimise the impacts
  to near neighbours. Neoen will consider the suggestion of a minimum number of tree rows, and
  the inclusion of mature or fast-growing trees. Potential screening opportunities are discussed in
  Section 6.2 of the EIS.
- There will be a 30m buffer zone between the edge of the panels and the site boundary.



Facts sheets developed and distributed by Neoen to help address specific points of concern relating to biodiversity. This includes information about weed management, retention of landform, protection of biodiversity, heat-island effect, glare from solar panels, remediation of land etc.

# Theme 3: Community Risks

Respondent	Level of concern
Neighbours	High
Community	Medium
Business	Low
Raised by council	Medium

Anxiety about the unknown risks was common across all groups interviewed. Neighbours and farmers were more likely to raise concerns about immediate risks to their farms, such as fire risk, livestock impacts and weed management. Community members were more likely to focus on the longer-term risks: how will our community recover from the divisions this project has created, what economic impacts will this project bring and who will clean up the solar farm infrastructure once it comes to the end of its operational life.

# Summary of concerns – subthemes & details

## Fire and public liability

• Farmers fear that a fire starting on their property (accidental) may engulf the solar farm; they expressed the fear that their public liability would not cover any damage to the solar farm.

#### Fear of decline in property values

 Most direct and near neighbours to the proposed site are concerned that the presence of a solar farm will devalue their properties.

#### Impacts from construction

 Neighbours expressed considerable concerns about how the construction period would impact on their farming operations. Common concerns were impact of traffic on shared roads, as well as dust and noise.

# Weed management

Concerns were expressed by neighbours and community members that the solar farm would not
manage weeds adequately. Silver leaf nightshade and Hairy panic were identified as a particular
problem in the area and farmers are aware of the risk to local farms if transferred from a poorly
managed property. There was distrust that quarantine procedures would be adhered to.

#### **Discarded infrastructure**

• The concern that the solar farm infrastructure would be left on the property as discarded waste was expressed widely in consultation, either in response to the perceived risk of the company



'going broke' or at the end of the project's operational life. Many expressed the view that the community would be left with a wasteland to rehabilitate.

# Community division and repair

 All groups expressed concern about how the community division created by the four proposed solar projects can be repaired in the longer term. There was acknowledgment that the division had become nasty. All groups said the divisions had made it very difficult to ask questions or seek accurate information on the proposed solar farms.

# **Comments & quotes**

Many neighbours and farmers in the area expressed fear of losing their property through a fire and felt that even if they had not been negligent that 'somehow the legal system will make us responsible.'

Many community members described feeling 'intimidated' and 'unable to have a reasonable discussion about the concerns and benefits of the project.'

# **Summary of responses**

# Fire and public liability

- Neoen will have its own insurance policy in place to provide coverage in the unlikely event that solar farm equipment is damaged by fire.
- A Bush Fire Management Plan will include procedures to deal with a fire on site, and normally requires water to be kept on site for that specific purpose. See Section 7.4.3 of the EIS for further details.
- Neoen understands the concern of adjoining landowners regarding potential damage to a Neoen facility, however the important elements for consideration are:
  - For an adjoining landowner to have any liability for fires that have spread from their property to the solar farm, it has to be demonstrated that the landowner was negligent in causing damage.
  - The occurance of a fire from a weather event (e.g. a lightning strike) that migrates from the landowner property to Neoen property would not necessarily create a legal liability for the landowner, likewise if there was a heavy rainfall event and water drained from an adjoining property to Neoen facility this again is not necessarily a negligent act of the landowner.

# Fear of decline in property values

- Neoen have found that property values have not declined in areas of proximity to their existing renewable energy projects, such as Coleambally where anecdotal evidence suggests prices have risen.
- Independent studies into the potential impact of renewable energy project developments on property prices have been conducted by the NSW Valuer-General (2009) and Urbis (2016) which conclude that there is insufficient evidence to suggest that renewable energy projects can be linked to adverse impacts on property prices.
- Anecdotally we hear that people are sometimes offered more for adjoining properties in the hope or expectation that there may be an expansion to the site.

### Impacts from construction

- Neoen will consult and communicate with neighbours about how construction will impact on the land and identify areas of concern with neighbours.
- Neoen will share projected timeframe with neighbours of construction process and likely impacts at each stage to help them with farming operations.
- Neoen will consult with neighbours regarding plans to seal/ bitumise roads pre-construction.



### Weed management

- During the project development, Neoen as land manager will comply with the general biosecurity duties under the Biosecurity Act through management of on-site weeds and pests.
- Prior to commencement of each phase, a Weed Management Procedure would be developed as
  part of the Biodiversity Management Plan for the proposal to prevent and minimise the spread
  of weeds. This would include a management protocol for declared priority weeds under the
  Biosecurity Act 2015 during construction, operation and decommissioning stages, and weed
  hygiene protocol in relation to plant, machinery, and fill.

### **Discarded infrastructure**

- Neoen is a committed project custodian and will establish circular procurement initiatives with
  its supply partners to ensure that best practices in recycling and waste management are
  followed throughout the life of the project. This is particularly the case for solar PV and battery
  modules, done in partnership with the original manufacturers and where possible, local recycling
  agencies.
- Recyclable materials are expected to constitute a large proportion of the waste generated, including timber pallets used to transport the solar panel modules. Components such as batteries and solar panels will be recycled (typically by the manufacturer) when they reach the end of their operational life.

# Community division and repair

- Neoen have been attentive to the community division that has emerged in response to the four
  proposed solar projects in the area. There has been a considered shift away from 'consultationas-usual' towards a more respectful, intensive and appropriate method of consultation. The
  appointment of a highly skilled local engagement consultant with experience in working with
  divided regional communities and mediation was designed to ensure division was not further
  inflamed, as was the choice to hold kitchen table consultations.
- There is a commitment and long-term focus on ensuring benefits are shared with the broader community. This industry leading approach has three tiers – neighbour payments, a Community Benefit Fund and a proposed voluntary contribution to Greater Hume Shire. Over the lifetime of the project this will amount to an estimated \$10 million allocated to the community. For more details see Section 5 of this plan.
- Neoen will continue to take this respectful approach during the development application period,
  with focus turning towards how to co-design the broader community benefit-sharing plan and to
  ensure local business opportunities can be maximised through the co-development of a Local
  Participation Plan. It has been our experience on other projects that the most divisive period is
  in the early development period, and that often things settle down once a project is operational.
- This section of the CR Plan, along with the FAQ's, will be made into a community information booklet and distributed to the community, so that further questions, concerns and responses can be addressed iteratively.



# Theme 4:

# Economic impacts and opportunities

Neighbours	High
Community	Medium
Business	High
Raised by Council	Medium

Neighbours and community members that object to the project expressed a high level of cynicism and expressed concerns about local economic opportunities that will flow from the solar farm, perceiving that the benefits would occur solely during the construction period. Council members and staff were also concerned that the overall economic impact on the shire would be negative. Business respondents were more aware of the wider opportunities offered by the solar farm, including the potential for developing new skills and expertise, while concerned that their capacity may preclude them from some opportunities. There was a view expressed widely that the local community would miss out on many of the economic opportunities and that the workforce would be employed from outside the region.

# **Summary of concerns**

# Local opportunities for sheep grazing

• The majority of neighbours, regardless of their objection to the solar farm, were keen to take advantage of the potential for sheep grazing on the solar farm.

# Local impacts on businesses

- Many local businesses expressed a keen interest in opportunities associated with the solar farm but also expressed a fear that the size or scale of their operations would be a barrier to their participation.
- Many business respondents, while enthused about the opportunities that the solar project could offer, struggled with how their business could expand and then contract to meet the changing work environment.

# **Comments & quotes**

Some neighbours expressed the view that they felt entitled be able to run sheep under the solar panels 'it would only be fair that we have first option for sheep grazing, considering we are the ones who have to look out on the solar farm every day.'

The greatest concern expressed in the business consultations was that local businesses would miss out 'because these big renewable projects are reliant on a FIFO workforce.'

# **Summary of responses**



# Local opportunities for sheep grazing

 Neoen will provide opportunities for local landowners to use the land under solar panels for sheep grazing and communicate with neighbours regarding other opportunities for combined land use (as per advice from local agronomists, farmers, researchers and Landcare).

# Local impacts on business

- In response to concerns raised by neighbours and the Greater Hume Shire Council that there would be an overall negative economic impact on the region, Neoen commissioned an expert Economic Impact Assessment for the project (see Section 6.4.2 of EIS) which highlighted that significant participation opportunities for businesses and workers located within the region will be available in a direct and auxiliary (accommodation, retail) perspective.
- No net job losses are expected, with the project replacing existing agricultural employment
  associated with the subject land (for both direct and indirect jobs). In addition, opportunities to
  continue sheep grazing will be available across the site.
- In response to this concern Neoen developed and shared a community information video in September 2019 about the local economic and community benefits that Numurkah Solar Farm brought to the surrounding Shepparton area to demonstrate how another nearby project brought benefits and did not create disturbances within the economy or community. <a href="https://www.youtube.com/watch?v=Odxl0ZLvavE">https://www.youtube.com/watch?v=Odxl0ZLvavE</a>.
- The ABC's 7.30 report on Numurkah in October 2019 also demonstrated how Neoen's approach
  is designed to maximise the opportunities, benefits and outcomes for local businesses.
  <a href="https://www.youtube.com/watch?v=zrKZK5j5b2k">https://www.youtube.com/watch?v=zrKZK5j5b2k</a>
- Neoen have developed a job and supplier registry to be able to communicate opportunities at each stage of the process.
- Neoen are developing a Local Participation Plan to maximise the local business opportunities on the project to ensure adequate lead-in time for local businesses to be able to build their capacities, and prepare the workforce for the opportunities.
- Neoen will continue to meet with local businesses, industry bodies, regional economic development networks to share information and prepare for the construction period.



# 4.4 Perceived Benefits

While many of the conversations with neighbours were focused on the concerns with the proposed solar farm, there was also considerable positivity within the range of views expressed.

# **Neighbours**

# **Perceived Benefits Identified**

Positive impacts on the local economy

Farming opportunities e.g. sheep grazing

Potential for access to solar farm infrastructure e.g. WIFI

Improvements to local roads

Opportunity for community benefit fund to support agricultural enterprise

# **Community**

# **Perceived Benefits Identified**

Positive impacts on the local economy through employment and education

Represents a practical response to climate change and supports the transition to renewables

Potential for new ideas to help reenergise the local economy and community

Long term impacts of the community benefits fund over the life of the project

Contribution to native vegetation recovery through offsets and revegetation work

Potential for community to invest in the solar farm

Solar farm installation gives the land a rest from intensive agriculture regime

Opportunity for local agronomists and farmers to have input to land management practices on the solar farm

Opportunities for local schools to support student learning about renewables

# **Business**

# **Perceived Benefits Identified**

Positive impacts on the local economy during the construction period

Employment opportunities for local businesses and contractors

Potential for development of skills and expertise in the renewables sector (and future application to other projects)

Potential for local businesses to take on apprentices during the construction period

Permanent employment for local people



# 5. COMMUNITY BENEFIT SHARING

To ensure both short and long-term benefits flow through to the community as a result of the establishment and operation of Culcairn Solar Farm, we establish a Community Benefit Sharing Program (CBSP).

The CBSP will be designed to deliver benefits to key stakeholders in the community in a way that aims to meet their needs and aspirations. Specifically, our objectives are to:

- deliver significant and meaningful improvements to the community surrounding Culcairn Solar Farm;
- ensure a wide range of different stakeholder groups benefit from Culcairn Solar Farm;
- empower the community to shape the design and implementation of the different initiatives;
- build support for renewable energy in the Greater Hume Shire.

The majority of initiatives will be delivered during the construction and operations phase.

In alignment with Neoen's organisational vision, it is important that the benefit be a true benefit and be tailored to meet each distinct communities' need.

From an industry best practice standpoint, several principles are seen as being helpful guides in developing or assessing a benefit sharing strategy, as outlined in Table 7 below<sup>4</sup>:

Table 7: Benefit sharing principles

Principle	Description
Appropriate	Benefit sharing is tailored to local circumstances, culture and need, helping to address (not create or reinforce) patterns of conflict or inequality. It makes sense and is appropriate in the local context.  The local community provides guidance on how benefit sharing can create a positive, lasting and meaningful impact for their local community. We work with the local community to develop specific benefit sharing strategies that respond to their unique local context and need.
Flexible	Benefit sharing is an aspect of project development that will greatly benefit from being open to community involvement, influence and negotiation. Having the flexibility to respond to local context will ensure benefit sharing has the best and biggest local impact.  The lifecycle of renewable energy developments is significant (25 years or more), a lot can change in a community during that period of time. Therefore, it is important to build in flexibility so that benefit sharing can evolve as the community needs do.
Transparent	The benefit sharing strategy is transparently available to the community and provides a clear and understandable rationale for the various programs and who is eligible to participate.  Benefits are freely given for the sake of sharing the proceeds of the project and building relationships. Benefit sharing must not come with conditions of silence or consent.
Integrated	Benefit sharing seeks to integrate the project owner/operators as valuable community members by building links and relationships into the community.

<sup>&</sup>lt;sup>4</sup> Lane, T & Hicks, J, (forthcoming) Benefit Sharing Options for Renewable Energy, 2019, Clean Energy Council



	The benefit sharing approach is integrated with Neoen's broader approach to community engagement and project development.
Mutually Beneficial	The approach is designed to bring mutual benefit to local communities and the project.
Proportionate	The benefits are perceived as being proportionate to the scale of the project and the level of change or disturbance experienced by local people. Given community members living closest to projects experience greater impacts, they should receive a proportionate benefit.
Strategic	Create a positive legacy in the local community. Look to bring ongoing and lasting value to the local area. Integrate benefit sharing opportunities with broader strategies by building local partnerships.
Accountable	Systems and processes are deployed to ensure the credibility and reputation of the benefit sharing program.  Benefit sharing is managed in a transparent and accountable way that involves local stakeholders.

# 5.1 Scope of the Community Benefit Sharing Program

This CBSP does not include:

- required activities under our permit conditions such as for visual screening
- annual council rates payments or fire levies (where applicable)
- host landowner payments;
- the value of local jobs and investment.

However, it is worth noting that these activities will all deliver significant value to the community.

The dollar value for the Culcairn Solar Farm Community Benefit Sharing Program is \$150,000 per annum (CPI indexed) for the lifetime of the project, a total estimated figure of \$4.8 million.

Another indirect community benefit-sharing component is Neoen's proposal to enter into a Voluntary Planning Agreement with the Greater Hume Shire. The proposed sum is \$150,000 annually (CPI indexed) for the lifetime of the project. This proposal is currently under consideration by Council, who have indicated they would allocate it towards improving roads.

Neoen have a number of mechanisms to enable benefits to be shared in a meaningful and equitable way. Community input has been sought into these options (and other local ideas canvassed) through an interactive poster at the community information session, via the community feedback survey and through kitchen table discussions. Options can be found in Table 8.

The final program is likely be a mix of 2-3 benefit-sharing mechanisms from the following list:

- Community Benefit Fund
- Neighbour payments
- Lower energy bills through solar and/or storage subsidies
- Lower energy bills through partnership with an energy retailer
- Community co-investment
- Investment to address specific local issue e.g. poor mobile coverage, electricity blackouts



Table 8: Options for benefit sharing

Option	Pros	Cons	Requirements	Constraints
Near Neighbour payments	Provides benefit- sharing option for near neighbours who may be most affected by the project, particularly during construction.	Can be difficult to ascertain an appropriate radius. Can be perceived by some as 'buying out' neighbours.	Needs to be tailored to the local context. Must be offered without conditions in relation to complaints, avoidance of compliance activities etc. Must be equally applied and transparent.	Population, topography, visual impact, scale. Not applicable to involved landholders.
Community Benefit Fund	Can create strong regional economic development outcomes.  Can create a strong legacy in community.	Local government can negotiate to 'own' the fund – which may result in a higher cost of administration and potential politicisation of the program.  There can be a lack of sophisticated local programs or projects to apply to fund– may need to codevelop.	Strong governance with community representation.  Strong evaluation and acquittal.  Flexible funding streams to enable longer term projects to access the fund.  Consider other existing regional funding bodies and look to enhance or offer point of difference.	Not applicable to committed activities funded by any level of government.  A goal of \$150,000 per year of fund to be allocated to projects within Culcairn and Walla Walla local communities.
Lower energy bills through solar and/or storage subsidies	One off deployment of offer.	Onerous to organise a defendable procurement contract.	Delivered by local CEC accredited installers.  Easiest model is to select an installer – perform due diligence and deploy initiative at a fixed price (bulk buy approach).	May be competing subsidies – such as state government that need to be taken into consideration – how to complement?
Lower energy bills through retail offer	Offer that is equitable across the community – anyone can access it	Long term issues must be accounted for in the design – new arrivals, transition to solar and battery,	Needs the right scale – minimum participation levels.  Needs the 'right' discount – i.e. minimum of 25-	Retailer desire to partner.  Marketing and customer acquisition needs



	Connection to the renewable energy project.	competitive retail offers in the future.  Locals need to transfer to new energy supplier  Customer churn.	30% to enable 'sticky' customers.	to be adequately resourced locally.
Community co-investment	Enhancing regional economic benefits. Sharing the profits of the solar farm with community retail investors. Enabling participation in the development and deepening the connection and interaction with the project. The economies of scale of large scale projects can delivered significant returns.	Can be challenging to integrate the investment in the back end of the project finance structure.  May not be a supported concept in all communities — may be dependent on social economic factors.  Can be onerous to administrate — ensure the impact/costs/ delegations are well modelled.	Can be delivered through fractional investment or crowdfunding platform.  Need to determine investment structure, debt vs equity, length of term, rate of return etc, and what is negotiable for community feedback	Considerations around equity or debt structures.  Consider timing of offer to reduce community investor exposure to issues such as connection delays.  Consider budget for marketing and development and impacts on other benefit sharing initiatives.
Investment to address specific local issue	Can enable direct solutions to broader community needs/issues.	Longevity of solution and appropriateness of solution can be difficult to establish.	Community needs assessment to harvest ideas and then validate a chosen approach.	Consider the budget allocation and how this may impact on other benefit sharing items.

# 5.2 Community Input

In an interactive poster at the Community Drop-in Session, via feedback surveys and at kitchen table discussions, community members were asked for input and ideas on the formation of Community Benefit Sharing Program.

Table 9 provides a summary of the responses received.



Table 9: Community Input into Benefit-Sharing Options

Option	Support	Comments
Community Benefit Fund	Majority support – most people interviewed supported this idea.  Some opponents see this as a form of 'buying-out'.	Nearly 100% expressed concern that if this fund was managed by Greater Hume Shire the funds would be distributed across the Shire, rather than to Culcairn and Walla Walla.  The delivery model is considered critical. Preferred delivery model for delivery (95%) is through the Culcairn and Walla Walla Development Committees, which both have a high level of community trust.  In Culcairn, the positive impact on Henty from the Bendigo Bank is referenced a lot in conversation. The potential impact of a community benefit fund is often likened to this model.  A long list of potential organisations that could seek funding include footy and netball clubs, gardening club, bowls cub, art projects etc. Also, a lot of interest in accessing funding to enhance public buildings and create public space projects e.g. Town hall equipment for events, attracting businesses to town, tourism information precinct.  A formal application process is seen as fair.  A common question was asked about how this would support the farmers/neighbours that will bear the impact of the project.
Lower energy bills through solar and/or storage subsidies	Medium support	Many people already have solar and are not interested in further subsidies, although many see good sense in offering subsidies for solar, rather than discounted electricity bills.
Lower energy bills through retail offer	High level of support initially, but not if it means there is no Community Benefit Fund i	Most people are initially very supportive of discounted electricity bills, but common questions are:  How much discount would be offered to each household?  Will all properties receive the same discount?  How would this impact on a community fund of \$150k per annum?



		How would this incentivise energy efficiency?  Does this include local businesses?  Would we have to change retailer to access this discount?  Once people discuss the issues, the majority express the view that community benefit is a higher priority than household discounts (as it provides a genuine community legacy). There was still support for a discount but not at the cost to community.
Other - Support of local art & tourism	Medium support	Broad support for these initiatives, more so with town residents. Seen as one part of the community benefit fund. Concerns raised, primarily by farmers, that the money could easily disappear into town assets that the farming community only minimally benefit from.
Other - Agribusiness grant fund	High support	One idea from a young farmer in Walla Walla is that Neon consider establishing an annual grants program specifically to support agriculture in the area. He suggested this could be framed as a start-up grant for agribusiness ventures (e.g. \$10k) to help famers diversify their income and/or implement sustainable practices.  Other people consulted have agreed this was a great idea for rural and farming communities of Culcairn and Walla Walla.

# Summary & other comments

- While those interviewed were initially supportive of the idea of discounted electricity bills, it was very clear that community benefits were more important than individual benefit.
- Many people asked what benefits there were for the neighbours.
- Subsidies for rooftop solar were popular with those who didn't have solar, less so for those already with solar.
- Many farmers asked what benefits could be offered to the agriculture sector.
- The structure for distribution of funding is seen as critical. There was a strong preference for distribution of funds through the development committees rather than the Greater Hume Shire, although some were concerned about the risk of interference from local politics. Many highlighted the success of the Bendigo Bank model and suggested an independent structure would be preferable.



# 5.3 Community Benefit Sharing Program Components

# 5.3.1 Neighbour Payments

Those in closest proximity to the project (but who are not involved as host landowners) are a special stakeholder group, who are most likely to be impacted during the construction phase.

# Identified need in the community

Near neighbours, as well as some in the broader community asking how they will benefit from the project, have raised the possibility of neighbour payments and neighbour benefits.

# Summary of mechanism

Whilst neighbour payments are now fairly common for wind farms, we are not aware of any corresponding neighbour payments or schemes existing for utility-scale solar projects, largely due to the visual impact and amenity issues being lower. In an industry-first we are offering a one-off 'construction disruption' payment for adjacent neighbours to acknowledge this group's proximity to the project site and to mitigate potential impacts during construction.

# 5.3.2 Community Benefit Fund

# Identified need in the community

The main feedback from the community is that the benefit fund should be community driven rather than individually driven and should be used as an investment for the future of the communities. For example, while many people expressed an interest in discounted electricity bills, they did not want to see this at the expense of funding for community projects.

# Summary of mechanism

Depending on community feedback, Neoen will commit \$150,000 per year to the Community Benefit Fund to be administered and distributed by an entity to be decided or created in discussion with the Culcairn and Walla Walla communities.

While the final terms and the administration will be co-developed with the community, funded projects for other Community Benefit Funds usually align with at least one of our community growth focus areas:

- 1. Environmental sustainability participation, development and uptake of new technologies
- 2. Health and wellbeing contributing to improved health and wellbeing outcomes
- 3. Strong connected communities community participation, involvement and connection
- 4. Sport and recreation increasing participation in sport and recreational activities
- 5. Arts and culture fostering creativity and connection in the community through art and culture
- 6. Skills, education and training addressing local skills development and educational opportunities
- 7. Investment to address a specific local issue e.g. agriculture / agribusiness development

# Scope for community to shape this initiative

The fund will be administered and distributed by an entity to be decided or created in discussion with the Culcairn and Walla Walla communities.

The composition of the funding is also something that can be shaped by the community. The great suggestion of an agribusiness grant will be further investigated and developed in Q1-2 2020. Depending on the outcome of this investigation, it could be that a portion of the fund is allocated to this each year.



# 5.3.2 Contribution to Greater Hume Shire

The final, less direct component of the Community Benefit Sharing Plan is a significant proposed contribution to the wider Greater Hume Shire by means of a Voluntary Planning Agreement (VPA), which Council have indicated they would allocate to building and maintaining roads. As the name suggest this agreement is not mandated or a condition of approval and is undertaken by Neoen on a voluntary basis.

Neoen have proposed a total VPA of \$5 million (based on a 2% inflation rate) which it proposes to contribute at a rate of \$150,000 per annum (CPI index linked) over 26 years once construction commences.

# 5.4 Implementation timeline

Table 9: Benefit Sharing Program - Implementation Timeline

Initiative	Site selection – feasibility	Planning	Pre- Construction	Construction	Operations (25-30 years)
Neighbour Payments	Investigate	Discuss	Implement	-	-
Community Benefit Fund	Plan	Seek feedback	Co-develop	Design	Implement
Voluntary Planning Agreement	Investigate	Agree	-	Implement	Implement

# 5.5 Total estimated value

Table 10: Benefit Sharing Program

Initiative	Planning	Pre- Construction	Construction	Operations (25-30 years)	Total \$ contribution (indexed on CPI assumed at 2%)
Neighbour payments		\$200-300,000			\$200-300,000
Community Benefit Fund				\$150,000 p.a.	~\$4,800,000
Voluntary Planning Agreement			\$150,000	\$150,000 p.a.	~\$5,000,000
Total Value					~\$10million



# 6. COMMUNITY RELATIONS TOOLKIT

Community Relations Toolkit by Project Stage



# 6.1 Stakeholder Register

In order to record, manage and track our interactions with different community stakeholder groups over time we establish a project-specific Stakeholder Register during Feasibility stage.

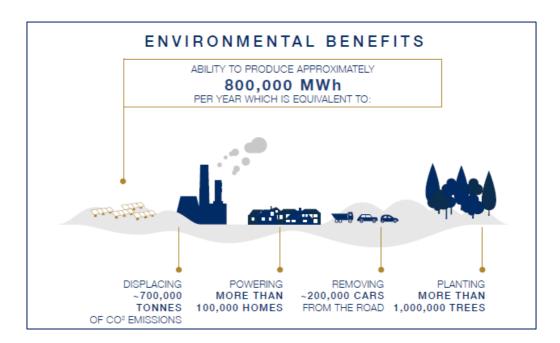
Neoen use a stakeholder engagement software tool which provides detailed records of our interactions with stakeholders. It links to surveys and registers on the project website and project staff's Outlook email service to facilitate and automate data capture. The Stakeholder Register has varying levels of access, for example during construction and operations it will be accessible to key EPC and O&M contractor staff with stakeholder communication responsibilities.

# 6.2 Benefit Calculators

### Environmental

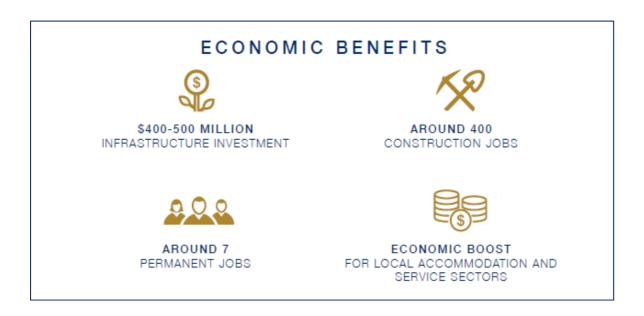
The following infographic represents the per annum generation and environmental offsets applicable. This data has been sourced from Neoen's bespoke Environmental Calculator (state-specific, recent & sourced).





# **Economic**

The following overview is developed and updated using project specific estimates and the local economic boost is sourced from Neoen's bespoke Economic Calculator.



# 6.3 Project Website

The project website is set up during Feasibility stage to provide clear and accessible information about the project and suggest a number of ways for people to get involved.

These include but are not limited to:

- Email us contact@culcairnsolarfarm.com.au or call 1800 966 122
- Complete a feedback survey on front page of the project wesite
- 'Work with us' register job or supplier interest
- Join us at forthcoming event (Community days, Local Employment sessions etc)
- 'Visit us' events during operations.
- Apply for funds or other mechanisms, as part of Community Benefit Sharing Program during operations.



- Make a complaint Complaints Register and Complaints Management plan to be put in place during construction and operations (See Section 7).
- See project documents

# 6.4 1800 Number

The project's 1800 number is 1800 966 122. This is set up towards the end of the Planning & Approvals stage, prior to the development application submission. The number remains with the project for its lifetime.

Calls to this number is forwarded to mobile of the person responsible for the CR Plan as shown in Table 1. They are forwarded during office hours Mon-Friday 9am-5.30pm, with a project specific recorded answering message at other times. Messages are sent to the project email address.

# 6.5 Key messages

Key messages assist in providing information in a consistent way. Initial key messages (to be developed further by the project team) for the Culcairn Solar Farm are in Table 11 as follows:

Table 11: Key messages

Theme	Key messaging
Neoen Australia	Neoen is an independent power producer specialising in renewable energy. We have a vertically integrated business model meaning we 'develop to own'. This means we will be the long-term owners of the project, and long term neighbours.  Culcairn Solar Farm is managed by a highly experienced team, who are internationally recognised leaders in their field.
Innovation and technology	This project is ambitious, innovative and ground-breaking This project will combine a battery energy storage system with a solar farm.
Jobs & growth	Culcairn Solar Farm will result in an estimated 400 jobs during construction, and 5 to 10 ongoing jobs  We are committed to employing local people where possible.  Local businesses will be involved in the construction and ongoing operations
Community	The project will result in many benefits to the local community including more jobs and economic prosperity into the future.  Neoen has proposed a \$10 million combined Community Benefit Sharing Scheme plus contribution to Greater Hume Shire Council.  Neoen will work closely with the local community and will listen to concerns, ideas and opportunities.  Neoen is committed to sharing benefits with the local community in meaningful and equitable ways.  We will establish a \$150,000 annual Community Benefit Fund. We will seek community input and involvement in the structure and administration of the fund which will be prioritised  In an industry first, Neoen has committed to construction disruption payments for adjacent neighbours.  A local community engagement practitioner has been engaged to make information more easily available and feedback and concerns more easily heard.



Environment	Culcairn Solar Farm is a large-scale renewable energy project which will substantially mitigate against climate change.
	More than 800 GWh will generated yearly by the solar farm.
	This is the e of powering more than 100,000 NSW homes, or removing
	around 200,000 cars from the road.

# 6.6 Implementation Plan

The implementation plan is be supported by a comprehensive communications plan and an implementation timeline (see Appendix 1. Community Engagement Implementation Q4 2019-Q1 2020).

Each approach of the IAP2 Spectrum is explored in Table 12: **Inform, Consult, Involve, Collaborate and Empower**. The Key Performance Indicators (KPIs) are listed for the current phase.

Table 12: Community Relations & Communications Implementation Plan

		Planned Activities	
Tools	Feasibility - planning	Pre-construction - construction	Operations
Stakeholder identification and mapping (Inform)	Key stakeholder groups identified and relationships established.	Further stakeholders and interest groups harvested for Stakeholder Register.	Further stakeholders and interest groups harvested for Stakeholder Register.
One on one briefings (Inform)	Regular briefings held in the 3km neighbourhood zone as well as in local towns with interest groups and key stakeholders.	Quarterly meetings held in the 3km neighbourhood zone as well as in local towns with interest groups and key stakeholders.	Briefings held in neighbourhood zone annually.
Newsletters: neighbourhood and public  (Inform)	Neighbourhood database to be established for neighbourhood area, or, agreement with local post office to send out to the neighbourhood area.  Public enews subscription available on the website.	Neighbourhood newsletter sent throughout construction period - digital and hard copy for those without email.	Public enews sent out & available on website
Project website (Inform)	Project website implemented with transparent logging of key documents such as planning permit application.	Project website maintained and updated quarterly with construction updates.	Project website maintained and updated.



Media releases and local print media ads	Notification for community information sessions as well as community survey	Regular media releases and local ads for key project milestones.	Media releases for key events and project achievements such as Community Benefit Fund announcements and outcomes.
Fact sheets (Inform)	Fact sheets and relevant FAQs for website to proactively address potential issues.	Fact sheets and website FAQs developed proactively.	Fact sheets and website FAQs developed proactively.
Information sessions / Project presentations / solar farm tours / stalls at community events  (Inform)	Community event schedule developed.	Community event schedule	Open days, solar farm tours and educational opportunities offered to the public via the website.
Community survey (Consult)	Available community survey form available on the project website.	Future surveys to be implemented as part of the monitoring and evaluation program.	Future surveys to be implemented as part of the monitoring and evaluation program.
One on one meetings with key stakeholders  (Consult)	Offer meetings to key stakeholder to update them on the project and allow them to provide inputs.		
1800# Telephone line (Consult)	Direct line set up to record inquiries.  KPI:		
Events (Involve)			Organise a community event to celebrate the inauguration of the Solar Farm
Benefit Sharing Program Co-design process and delivery of program	Have initial discussions with community members and community groups to design the CBSP.	, -	
(Empower)  Local business procurement opportunities  (Empower)	Register local business interests.	Organise meetings and sessions with local businesses to involve them as much as possible in the construction and operation	On-going relations with local businesses an future business implemented locally.



phases. Contact local businesses that previously	
registered their interest.	

# 6.7 Resourcing the Implementation Plan

The implementation Plan will be updated and resourced from on-going discussions with community members and stakeholders at all levels. The Project Manager and the Community Relations Manager from Neoen, and the local community engagement practitioner will enact the plan and provide the feedback necessary to keep it live.

# 6.8 Decommissioning phase engagement

The focus of the CRP is for the estimated lifecycle of the solar farm. Further we understand that the decommissioning phase will need to be well resourced in relation to community engagement and will ensure this is embedded in our future strategy.



# 7. COMPLAINTS MANAGEMENT PROCESS

The following process has been developed in accordance with the Australian / New Zealand Standard Guidelines for complaint management in organisations and in consideration of recommendations from publications by the National Wind Farm Commissioner:

The process for managing complaints and grievances involves several key steps including receiving, registering, investigating, responding to and addressing complaints received by stakeholders.

Contact details for complaints made via telephone or in written form are contained in Table 13.

Table 13: Complaint lodging contact details

Project website	culcairnsolarfarm.com.au
Telephone number (toll-free)	1800 966 122
E-mail	contact@culcairnsolarfarm.com.au

The contact details in Table 13 will be published on the project's public website, alongside an outline of the complaints and investigation process. This information will also be made available in community consultations that occur in the lead up to construction commencement, and at any community consultation that is held during the construction period.

# Step 1: Receive and register a complaint

Complaints from stakeholders may be received through the following methods: verbally either in person or via telephone or in written form via electronic mail and/or via the website.

Upon the receipt of a complaint, a set of standardised information will be collected, recorded and filed to ensure an efficient and standardised process.

The following information will be collected from stakeholders:

- The complainant's name and address;
- A unique reference number for each complaint that is to be communicated to the complainant;
- Any applicable turbine or monitoring mast reference number;
- The complainant's concerns including date, time, prevailing conditions and description of the complaint

This information must then be recorded in the relevant project's customer relationship management (CRM) database. Stakeholders will have the option of lodging an anonymous complaint. These will be logged and reported with other complaints to facilitate continuous improvement.

# Step 2: Acknowledging complaints

A complaint will be acknowledged by the responsible Project Manager (see Table 1) within 24 hours of the complaint being submitted. This acknowledgement will be made via phone or email with any written correspondence dated and kept on file.

The acknowledgement will include:

A summary of the complaint;



- The proposed investigation approach; and
- An estimated timeframe in which the stakeholder can expect to receive a response.

The acknowledgement step also provides an opportunity to clarify issues relating to the complaint or a request for further information if required.

Where a complaint can be easily resolved or is better categorised as a request by stakeholder for additional information, it may be appropriate for the Project Manager to immediately respond to the stakeholder.

# Step 3: Investigating complaints

The Project Manager is responsible for ensuring all complaints are investigated and that all reasonable attempts to seek a resolution are made. The investigation may be delegated to an appropriate Neoen staff member. Accurate records of the investigation must be maintained including records of meetings, discussions and activities.

The investigation may involve:

- Site visits, particularly in the instance of reported property damage;
- Consultation with Neoen staff or contractors, including senior management when required;
- Acquiring monitoring data and evidence (e.g. for noise or dust complaints); and
- Contacting external stakeholders.

# Step 4: Responding to stakeholder/complainant

Following the investigation, the results, including details of the findings and proposed resolution, will be clearly explained to the complainant. In most circumstances, it will be at this stage that the complainant will determine if the resolution is satisfactory.

# Step 5: Closing the complaint

If the proposed resolution is accepted, the Project Manager will close the complaint and make a file-note to this effect. This will be recorded on the CRM. Formal written correspondence must also be issued to the complainant confirming that the resolution has been accepted and the complaint closed.

If a complainant is not satisfied with Neoen's investigation and proposed resolution, the complainant will be advised by Neoen that they have the right to contact a number of other bodies such as Greater Hume Shire or the National Wind Farm Commissioner or seek legal advice. Neoen will provide complainants with the relevant contact details, as seen in Table 14.

**Table 14: Alternative complaint contacts** 

Greater Hume Shire Council	mail@greaterhume.nsw.gov.au
National Wind Farm Commissioner	nwfc@environment.gov.au
LegalAid NSW (Riverina Murray - Albury)	02 6766 6322

# Step 6: Recording and registering the complaint



Upon the closing of a complaint, the following information will be updated in the CRM with the additional following details:

- The process of investigation that was undertaken to resolve the complaint;
- Whether or not the complaint has been resolved to the satisfaction of the complainant.



# 8. REPORTING, EVALUATION & CONTINUOUS IMPROVEMENT

This plan will be continuously monitored and updated to reflect the themes and issues emerging from engagement. Ongoing market research and media monitoring will be undertaken to better understand the underlying narrative in the community regarding the project and to assess the key messaging and effectiveness of the communication and engagement activities.

Neoen is committed to continually improving the approach to and identifying opportunities for the community to shape future plans and initiatives. Where possible, monitoring and evaluation activities will be designed to complement other engagement activities. A detailed monitoring and evaluation plan would be developed if the project is successful in obtaining its planning permit.

Evaluation is not a stand-alone or isolated process rather; evaluation is an integral and on-going component of every communication and engagement activity or process. Consequently, evaluation at the beginning of the consultation planning process is as important as it is during and following implementation. Evaluation is a vital element for forward planning and can provide a strategic basis for decisions about issues, including the allocation of resources.

The evaluation process consists of two components (as seen in Table 15):

- 1. Outcomes increased satisfaction, awareness or attitudinal change
- 2. Outputs measuring and monitoring what is actually produced, released or implemented

Table 15: Evaluation Process - Outcomes and Outputs to be achieved

Evaluation	What will be achieved?
Outcomes	General community awareness and understanding of the project.  Long term broad local social acceptance of the solar farm  Widespread understanding among project team, employees, residents, stakeholders and broader community of Neoen's commitment to engaging with the community  General satisfaction among stakeholders that they have been given the opportunity to express their views and that they have been heard Expectations and issues managed effectively through communications and meaningful engagement Strong local relationships and trust
Outputs	Social risk analysis Data collected from Feedback Survey throughout the Project Regular departmental meetings and reporting Progress meetings with applicant and government Issue timely and relevant media releases, project bulletins, email broadcasts, direct mail letters and FAQs Update website with timely and relevant information (ensure email enquiries are logged and responded to)
	Schedule for Community Information Days, Open Day, Site Tours, Neighbouring Landholder Forums and other face-to-face engagement events and briefings
	Schedule regular briefings with key stakeholders i.e. Council.  Introduce, manage and maximise benefits from 'stakeholder issues database'



Ensure Stakeholder Database is regularly updated, so that relevant stakeholders receive project updates
Complaints register

Community-developer partnerships

Benefits sharing model tailored to the local context

Local advocates for renewable energy

# 8.1 Objectives of evaluation

The objectives of monitoring and evaluating the delivery of the activities outlined in this CRP are to:

- identify opportunities to improve the approach;
- ensure key stakeholders including the community, partners, and contractors have a clear understanding of the progress and performance of key initiatives;
- identify opportunities for the community to shape future plans and initiatives;
- ensure a current understanding of community concerns and to track any complaints;
- report back to key stakeholders about the performance of Culcairn Solar Farm and associated programs

# 8.2 Methods and process

The reporting will show the progress against the plan and timelines that are outlined in this CRP. In particular, Neoen will ensure the reporting process is transparent with information about what has gone to plan, what hasn't and why, what has gone to schedule, what has been delayed and why.

The following section outlines how input (feedback, submissions, comments etc.) from stakeholders will be recorded, considered and addressed throughout the project and presented to relevant stakeholders including Government departments.

It is proposed that the project manager would be responsible for the monitoring and evaluation.

The project manager would be responsible for establishing an Evaluation Committee which would contain a selection of representatives, and would be expected to include:

- Project Manager
- Contractor representatives during construction
- A host landowner
- A neighbour
- Representative from the community

# 8.3 Timeline

During planning and construction, it is proposed that reporting occurs on the following:

- Stakeholder Risk (including complaints)
- Community engagement
- Benefit sharing

This would occur during planning – as a baseline survey, and then a second feedback survey could occur at the start of operations as a follow-up/tracking of shifts in awareness/support etc.



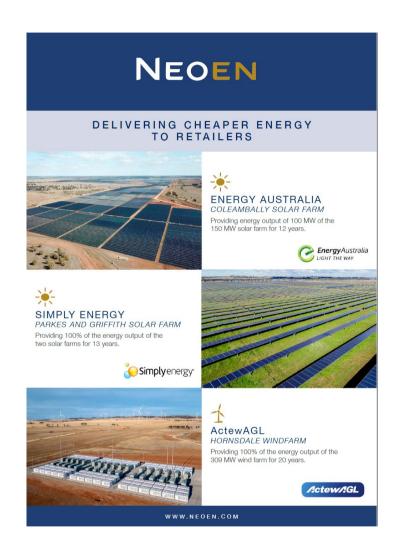
# APPENDICES

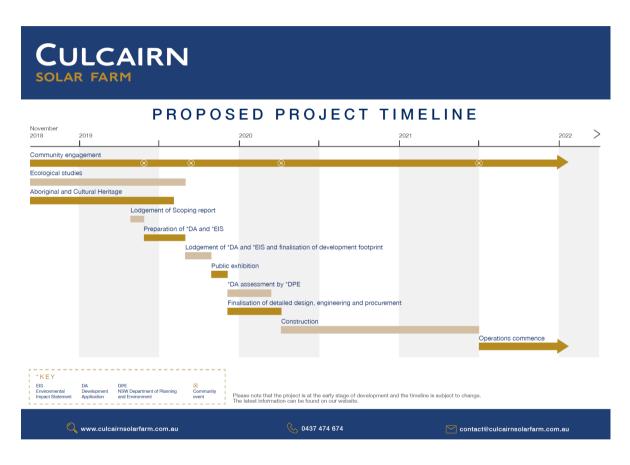
# APPENDIX 1. Community Relations Implementation Timeline (Q4 2019 – Q1 2020)

Objective	Action	Stakeholders	Tools	Resp	Timing
WHY are we doing this?	HOW are we going to do it?	WHO are we going to tell?	WHAT do we need?	WHO is going to do it?	WHEN are we going to do it?
Foster a transparent and open approach to project development and ensure 'no surprises' for the local community		<ul><li>Local businesses</li><li>Culcairn &amp; Walla Walla</li><li>Development committees</li><li>Local agribusiness leaders</li></ul>	<ul><li>Project info</li><li>Videos</li><li>Economic Impact Report</li><li>Case Studies (Numurkah)</li></ul>	Michelle Croker Damien Hegarty Patrick Dale	November 2019
<ol> <li>Keep the community and stakeholders informed about the project through the provision of factual project information</li> <li>Identify and address community and stakeholder concerns and maintain transparency in the project design &amp; implementation.</li> <li>Ensure Indigenous participation and employment through co-development and implementation of an Indigenous Participation Plan.</li> </ol>	– Landowner Update	– Host landowners	– Project info	Michelle Croker Damien Hegarty Patrick Dale	Monthly
	– Neighbour Meetings	– Neighbours	– Project info	Damien Hegarty Patrick Dale	Q4 2019-Q2 2020
	•	<ul><li>Neighbours</li><li>Community</li><li>Government</li></ul>	<ul><li>Project info to take away</li><li>Feedback forms</li></ul>	Michelle Croker Damien Hegarty Patrick Dale	Nov/Dec 2019
	<ul> <li>Greater Hume Shire Council presentation at meeting</li> </ul>	<ul> <li>– GHS Councillors &amp; staff</li> </ul>	<ul><li>VPA proposal</li><li>Project Update</li><li>Videos</li></ul>	Garth Heron Lisa Stiebel Damien Hegarty Michelle Croker	TBC December 2019 (Q1 early 2020)
5. Identify opportunities for local business involvement in the construction and				Wheneve eroker	
operation of the project, implementing a Local Participation Plan  6. Co-develop and deliver a community benefit sharing program (CBSP) in collaboration with the community and in partnership with local stakeholders where possible	Networks and Partnerships	<ul> <li>Albury Chamber of Commerce</li> <li>GHS Industry liaison</li> <li>Industry networks</li> <li>Regional development networks</li> </ul>	<ul> <li>Project Presentation</li> <li>Case Studies &amp; videos</li> <li>Economic Impact Report</li> <li>Job/Supplier info pack</li> </ul>	Michelle Croker Construction Manager	Q4 2019-Q2 2020
	Session	<ul> <li>Parties on job register</li> <li>Local businesses</li> <li>Local &amp; regional networks</li> <li>Local employment agencies</li> </ul>	<ul><li>Media release</li><li>Advertising</li><li>Posters</li><li>Job/Supplier info pack</li></ul>	Damien Hegarty Lisa Stiebel Michelle Croker Construction Manager EPC Contractor	TBC Pre-construction

# NEOEN

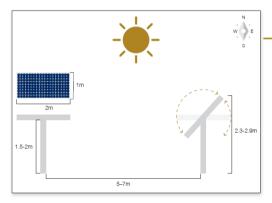
# APPENDIX 2. COMMUNITY INFORMATION POSTERS





# NEOEN



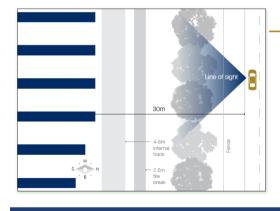


Solar panels are normally 1m x 2m in size.

They are mounted on a single axis structure that tilts from east to west throughout the day to follow the sun and optimise energy generation.

At maximum tilt, the height of the solar panels is between 2.3 – 2.9m and the space between rows of panel is 5–7 m.

In the event that panels are mounted on a higher structure, the maximum height would be 4 m. In this case, the space between rows would be 10 m.

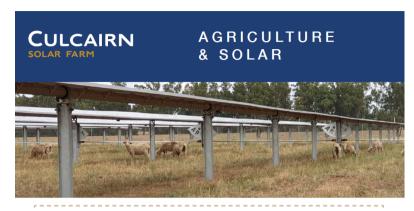


0437 474 674

As part of any permit application, Neoen will complete a comprehensive assessment of potential impacts on landscape character and visual amenity. To minimize the visual impact of solar panels:

- A setback of minimum 30 meters from land boundaries will be applied.
- Vegetation screening will be planted along public roads.
- We will work with nearby neighbours of the project to fund tree planting and visual screening.

contact@culcairnsolarfarm.com.au



# ARE FARMERS PREVENTED FROM FARMING

#### NEIGHBOURING LANDS?

Neoen doesn't impose any additional requirements on adjacent farming operations.



# IS THE LOCAL CLIMATE CHANGED BY THE SOLAR FARM OPERATION?

In some specific weather conditions, a temperature increase creates an "island effect" within the solar farm. As its name indicates, this effect occurs as an island and does not extend beyond 25 m from the edge of solar panels. There will be at least 30 m from the edge of solar panels to the boundary of the solar farm.

# SHEEP TRIAL AT PARKES SOLAR FARM

A three-week trial was held over the summer of 2017/2018 at Parkes Solar Farm in NSW. It was a joint exercise between the local landowners, Neoen and our construction company Bouygues.

The trial used approximately 15 hectares of the Parkes Solar Farm. Within this section of the solar farm and throughout the trial period the Parkes single axis tracking solar farm was in full operation.

#### Rapid hazard reduction

The trial used about 400 sheep in a small section (15 hectares) of the Parkes Solar Farm.

Under normal circumstances, farmers would usually place 15-30 sheep within this area, however this trial intended to facilitate rapid reduction of dry grass within the trial area, while demonstrating safe and sustainable farming practices within solar farms.

#### Well-fed, well-shaded livestock

The sheep were monitored closely during the trial period. Towards the end of the trial, the sheep were observed to be relaxed, eating well and moving freely around the paddock. By the end of the trial, all of the grass had been eaten to a reasonable length and the hazard reduction was determined to be a success.

#### **AGRISOLAR**

There are numerous other international examples of agriculture being successfully combined with solar. Neoen are investigating a number of different opportunities that could work in Australia.



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# **ECONOMIC BENEFITS**



\$400-500 MILLION INFRASTRUCTURE INVESTMENT

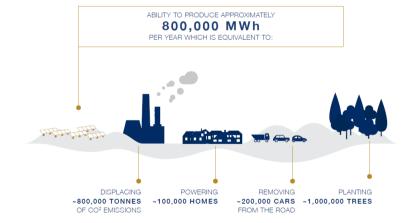


AROUND 400 CONSTRUCTION JOBS





# **ENVIRONMENTAL BENEFITS**



# LOCAL COMMUNITY BENEFITS



COMMUNITY FUNDS
FOR PROJECTS TO BE
DISCUSSED WITH THE COUNCIL

You know this area and local community best so we'd like to hear from you. In early discussions, community members have proposed the following ideas.

We wouldn't necessarily be able to pursue all of these projects, so we're interested to see which ideas are the most popular.

Your ideas so far:	Place your stickers next to the ideas you like or add your own:
Community benefit fund	
Discounted electricity bills	
Subsidies for solar and storage	
Support of local art and tourism	
Possibility to invest in solar farm	
Your ideas	

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# NEOEN

#### FREQUENTLY ASKED QUESTIONS



#### ABOUT SOLAR FARMS

#### How long does it take to build a solar farm? The construction timeframe depends on the project size and the

number of workers deployed on site. For a 100 MW power plant, an 8 to 12-month timeframe is typical, with a peak construction period of 2 to 3 months. A large project like Culcairn will take around 12 to 18 months to construct with a peak construction period of 5 to 8

#### What technology does Neoen use to build its solar farms?

Neoen uses similar technology to that used in residential solar photovoltaic installations with the main difference being that panels are usually mounted on systems that track the sun through the sky. The Culcairn Solar Farm will use premium quality solar panels and battery technology provided by leading manufacturers, selected through a competitive process. All components come with long warranty periods; solar panels and inverters are generally warrantied for 20 to 25 years.

#### What is the life cycle of a solar farm?

A solar farm will typically operate for between 25 and 30 years. Depending on the local environment, the panels can generate electricity for 30 years or more with only about 0.5% efficiency loss

#### How does solar generation work?

When photon of light shine on a solar panel they knock electrons free on an electrical circuit and product electricity. Inverters regulate the accumulation of electricity from a selection of solar panels and at the substation the electricity is distributed to the grid. The angle at which the light hits the panel relates to the amount of energy that can be harvested from it, which is why tracking systems help to optimise solar generation.

How high are solar panels?

Most solar panels are 1m x 2m in size. Arrays of solar panels are usually 30, 60 or 90 m long. Rows of panels are separated by 5 to 7m. However, this can vary from project to project. Depending on the time of the day the height of rows is between 1.5 to 2.5m for rows

#### How do you stop the solar facilities from impacting our landscape?

We acknowledge that solar facilities do impact the visual amenity of its near area, and we work with communities to ensure they have the lowest possible impact on visual amenity. Neoen encourage individuals and groups that have questions about visual impact and remedies to engage with us early. Overall, we consider that the immediate and long-term benefits which solar farms bring to communities offset any loss of visual amenity.

#### Will the solar panels generate glare?

Photovoltaic panels are designed to reflect as little light as possible (generally around 2%) in order to maximise their efficiency. This is why solar farms are not considered reflective and have been installed

#### ECONOMY

Do solar farms benefit the Australian/local economy? Each project benefits the local community by creating employment. At Neoen's Coleambally Solar Farm 300 people were employed locally during the construction phase and five people are now employed locally in full-time positions during operations. Neoen provides opportunities for local contractors to submit tenders and local jobseekers to seek employment by hosting a series of contractor sessions in the local area prior to any construction commencing. In addition, Neoen establishes a community fund to

# How much do renewables cost compared with other energy

Renewable energy projects are now the cheapest sources of new energy generation. Solar energy projects produce energy at less than \$50 per megawatt hour. The costs of other sources of generation

Existing coal; approximately \$40 per megawatt hour

support local community projects.

- Combined gas-cycle: approximately \$75 per megawatt hour
- New coal: approximately \$130 per megawatt hour

#### Who pays for any transmission upgrades required?

Negen pays for any electrical transmission upgrades necessary to connect and operate the project in the electricity grid. This includes construction and maintenance costs for the life of the project

#### Do solar farms result in a decrease in electricity prices?

Solar energy forms just one part of the Australian Energy Market Operators (AEMO) move towards renewable energy. Solar farms add to the supply side of the electricity supply-demand equation, which puts downward pressure on all electricity bills.

#### Does Negen require government subsidies to build its projects?

Neoen does not require government subsidies to finance its projects. We finance our projects through a combination of our own equity and long-term bank loans. However, we sometimes enter into agreements with governments or businesses to sell the power

#### Who assesses the projects?

All Neoen projects meet strict State and Federal Government regulations and are assessed under these regulations. We work closely with governments to ensure we meet all legal requirements and exceed these requirements wherever possible, possible. This project is a State Significant Development and will be assessed by the Department of Planning and Environment of NSW.

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#### HEALTH AND CULTURE

### Are there any health risks associated with solar

Solar panels are deployed on more than 25% of Australian homes and have been deployed for the past 10 to 15 years on people's homes in the world. No health issues have been associated with solar panels. and the Culcairn Solar Farm would use the same type of technology. High voltage infrastructure would remain along the existing transmission line and would not increase health risks.

Can solar farms' noise affect local residents? Solar farms create no noise during operations.

#### Will the project reduce air quality?

Monitoring of dust levels during construction is a basic requirement of each project. Dust generating activities are assessed during windy conditions and are stopped and rescheduled where adequate control of dust generation cannot be achieved.

Visual observation of machinery is undertaken during site inspections in addition to daily pre-start checks which ensure all machinery has appropriate emission control devices, is in good working order and is maintained

#### Is cultural heritage taken into consideration? Negen complies with all legislation, including laws

regarding the protection of cultural heritage. A cultural heritage assessment forms part of initial studies as does consultation with local Indigenous groups to ensure cultural heritage is protected.



#### ENVIRONMENT

Do solar farms impact on flora and fauna? Neoen engages specialist consultants to undertake detailed flora and fauna surveys to determine the ecological attributes of the land.

On all of our projects, we aim to minimise the impact on flora and fauna by designing projects to be constructed outside areas of high conservation significance and adopting control measures during the construction

Other mitigation measures include preparing management plans, identifying 'no-go zones' within the project site and conducting pre-clearance surveys. Neoen also consults with government departments of environment and biodiversity throughout the development, construction and operational stages of projects, as well as local non-government organisations

#### Do solar farms affect farm/domestic animals?

Neoen owns and operates the Coleambally, Griffith, and Parkes solar farms on multiple properties in New South Wales. We have sheep grazing on many of our solar farms and conducted a sheep grazing trial at Parkes

Sheep take a couple of days to get used to the site, and then are very comfortable with them – they use the shade from the solar arrays during summer.

#### How is any potential fire risk managed?

There is no inherent fire risk attached to photovoltaic panels or solar farms. There is a cleared vegetation zone around the edges of the solar farms to prevent fire propagation. This is complemented by a strict vegetation

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# FREQUENTLY ASKED QUESTIONS



### How does solar generation work?

When photons of light shine on a solar panel they knock electrons free on an electrical circuit and produce electricity. Inverters regulate the accumulation of electricity from a selection of solar panels and at the substation the electricity is distributed to the grid. The angle of incidence of the light ray on the panel is of high importance in the amount of energy that can be extracted from it. This is why installing tracking systems helps increase the energy generation.

### What technology does Neoen use to build its solar farms?

Neoen uses similar technology to that used in residential solar photovoltaic installations with the main difference being that panels are often mounted on systems that track the sun through the sky. Neoen is experienced in financing, constructing and operating solar farms and in all areas only engages experienced contractors with a proven track record. The Culcairn Solar Farm will utilise premium Tier 1 quality solar panels and battery technology provided by leading manufacturers.

Neoen's projects use premium quality panels, inverters and battery technology provided by leading manufacturers. This is selected through a competitive process for each project. All components come with long warranty periods and performance guarantees.

# Why is a battery included in Neoen's proposal?

Neoen has vast experience in the integration or large-scale batteries into the Australian electricity network, owning and operating Australia's largest BESS – Hornsdale Power Reserve.

Large-scale battery deployment can remove price spikes in electricity prices to create a more stable market with reduced costs for consumers. The BESS supports the variability of renewable generation by smoothing output, whilst absorbing excess capacity during low demand and release during peak occurrences.

Also, due to the fact the BESS interfaces with the electricity network via a digital inverter, it can support the frequency in the event of a contingency with response times within 200 milliseconds of a system disturbance. This achieves balanced power and frequency, which is much faster and more accurate than alternative generation technologies that depend on mechanical turbines.

Finally, the battery can also provide an alternative solution than simply building more poles and wires. Transmission network augmentation can be deferred as this project has the ability to support New South Wales' network congestions, thus creating a savings for the network owners, government and household consumers.

# How long does it take to build a solar farm?

The construction timeframe depends on the project size and the number of workers deployed on site. For a 100 MW power plant, an 8 to 12-month timeframe is typical, with a peak construction period of 2 to 3 months. A large project like Culcairn will take around 12 to 18 months to construct with a peak construction period of 5 to 8 months.

### What is the life cycle of a solar farm?

A solar farm will typically operate for between 25 and 30 years. Tier 1 solar panels that will be procured for the project generally come with a 25-year manufacturer's warranty. Depending on the local environment, they can generate electricity for 30 years or more with only about 0.5% efficiency loss each year. It is anticipated that the solar farm will operate for between 25 to 30 years.

# How long will the batteries last?

Batteries lifespan is dictated by the usage and frequency of cycles (charge / discharge). Neoen will procure the batteries from Tier 1 supplier, such as Tesla, who are able to provide a performance guarantee that will warrant the performance for 10-20 years, with an agreed degradation rate based on the propose use case and cycling frequency.

Temperature is also a key factor on the overall life of the battery cell, which is why the Battery Energy Storage System (BESS) integrates multiple HVAC units to regulate the operating temperature of the system to ensure it stays within the optimal temperature envelope to maximise cell life.

# How high are solar panels?

Generally speaking solar panels have a dimension of  $1m \times 2m$ . Rows of solar panels are usually 30, 60 or 90 meter long. And rows of panels are separated by 5 to 7 meters. However, this varies from project to project.

### Will the solar panels generate glare?

Improved manufacturing techniques on Tier 1 panels include anti-reflective (AR) coatings on solar panels. This increases the amount of energy converted by the panels from sunlight. In addition, by minimising reflective losses from (or trapping more light within) solar panels, their performance can be increased while costs are lowered.

Fresnel's equation predicts that roughly 4% of the sunlight is reflected off the panel at normal incidence (i.e. when the sun's rays make an angle of 90°). Because every photon makes a difference in the efficiency electricity generation, significant investment has been made in AR coatings. AR coating can reduce the normal incidence reflectance to less than 1%.

The AR coating performance directly translates to increased power and energy output – designed to achieve greater than 99% transmittance. This coating is applied as a spray process integrated into the panel manufacturing process.

Because of these innovations and detailed research, solar panel installations are now commonly found in airports around the world where any issue of glare would be highly scrutinised. The Adelaide airport now has 5,000 solar panels with a capacity of 1.28 MW on the roof of the terminal and carpark, and the Mildura airport has 400 panels with a capacity of 100 kW on the roof of the terminal.

Similarly, a 6.0 MW system is installed at Brisbane's airport, representing the largest installation at an Australian Airport and largest commercial rooftop solar system in the Southern Hemisphere, consisting of 22,000 PV modules spanning an area twice the size of the Melbourne Cricket Ground (MCG).



# Where is the site and what route will large vehicles utilise?

The solar farm is proposed to have a capacity of 350MW, and will be split between two sites that are separated by Cummings Road. Access to the sites will be provided via Weeamera Road, which connects to Benambra Road and Olympic Highway. A vehicle crossing will be established across Cummings Road to provide traffic movements between the sites

Access to the Project will be provided via Weeamera Road, which connects to Benambra Road and Olympic Highway. The majority of plant is expected to be delivered from the south along Olympic Highway.

A detailed Traffic Impact Assessment and Management Plan has been undertaken by Neoen in the Development Application.



# Do solar farms benefit the Australian/local economy?

Each project benefits the local community by creating employment. At Neoen's Coleambally Solar Farm 300 people were employed locally during the construction phase and five are indirectly employed locally in full-time positions during operations. Neoen provides opportunities for local contractors to submit tenders and local jobseekers to seek employment by hosting a series of contractor sessions in the local area prior to any construction commencing. In addition, Neoen establishes a community fund for each solar farm to support community group projects. Media reports also indicate that some drought-stricken farmers are turning to solar farm contracts as a way of earning additional income and future-proofing their enterprises against climate change.

# How much do renewables cost compared with other energy sources?

Renewable energy projects are now the cheapest sources of new energy generation. Solar energy projects produce energy at less than \$50 per megawatt hour. The costs of other sources of generation are:

- » Existing coal: approximately \$40 per megawatt hour
- » Combined gas-cycle generation: approximately \$75 per megawatt hour
- » New coal: approximately \$130 per megawatt hour

Neoen pays for any electrical transmission upgrades necessary to connect and operate the project in the electricity grid. This includes construction and maintenance costs for the life of the project.

# Do solar farms result in a decrease in electricity prices?

Solar energy forms just one part of the Australian Energy Market Operators (AEMO) move towards renewable energy. Solar farms add to the supply side of the electricity supplydemand equation, which puts downward pressure on all electricity bills.

# Does Neoen require government subsidies to build its projects?

Neoen does not require government subsidies to finance its projects. We finance our projects through a combination of our own equity and long-term bank loans. However, we sometimes enter into agreements with governments or businesses to sell the power produced by our projects.

### Who assesses the projects?

All Neoen projects meet strict State and Federal Government regulations and are assessed under these regulations. We work closely with governments to ensure we meet all legal requirements and exceed these requirements wherever possible.

### COMMUNITY



# Should I expect the value of my near-by property to decrease due to the project's development?

This objection is extremely common in development of renewable (primarily wind) projects both in Australia and overseas. Neoen fully appreciates that for most households, their home is their primary asset and that factors which may affect its value are of deep significance. Accordingly, the company takes concerns regarding property values very seriously.

However, Neoen is not aware of, and has not been presented with, any reliable, impartial research or evidence which establishes a correlation between real estate values and proximity to renewable infrastructure (providing that such infrastructure has been appropriately sited).

The most recent and relevant study carried out in Australia was commissioned by the NSW Office of Environment and Heritage and published by planning consultancy Urbis in July 2016¹ This report comprised both an analysis of available sales data and a 'literature review' of Australian and international studies (including a 2009 report prepared for the NSW Valuer-General's office). Its conclusions are most easily understood when divided into 'agricultural' and 'lifestyle' land.

Whilst property values are influenced by a range of factors and it is therefore difficult to determine if solar farms (or other similar infrastructure) can cause land values on neighbouring agriculture properties to increase or decrease, it is not expected that the Culcairn Solar Farm would affect productivity of neighbouring agricultural properties.

<sup>&</sup>lt;sup>1</sup> Urbis, 'Review of the Impact of Wind Farms on Property Values' (July 2016) accessible online at <a href="www.environment.nsw.gov.au/resources/communities/wind-farm-value-impacts-report.pdf">www.environment.nsw.gov.au/resources/communities/wind-farm-value-impacts-report.pdf</a>.



# What are the insurance implications for my nearby property and for the project regarding my property and the broader community?

Neoen will have its own insurance policy in place to provide coverage in the unlikely event that solar farm equipment is damaged by fire. A Bush Fire Management Plan will include procedures to deal with a fire on site, and normally requires water to be kept on site for that specific purpose.

The Environmental Management Strategy will include obligations that prevent the spread of fire across the site (such as grass cutting and an asset protection zone if required).

Neoen understands the concern of adjoining landowners regarding potential damage to a Neoen facility, however the important elements for consideration are:

- » For an adjoining landowner to have any liability for fires that have spread from their property to the solar farm, it has to be demonstrated that the landowner was negligent in causing damage.
- » The occurance of a fire from a weather event (e.g. a lightning strike) that migrates from the landowner property to Neoen property would not necessarily create a legal liability for the landowner, likewise if there was a heavy rainfall event and water drained from an adjoining property to Neoen facility this again is not necessarily a negligent act of the landowner.

In summary, Neoen has its own insurance and would seem to make claim on that first in the event of fire damage to the solar farm, however Neoen recommends that farmers on nearby properties take all maximum precautions to prevent the ignition and spreading of fires, and seek advice from their insurance providers on individual insurance policy matters.



# Are there any health risks associated with solar farms?

Solar panels are deployed on more than 25% of Australian homes and have been deployed for the past 10 to 15 years on people's homes in the world. No health issues have been associated with solar panels and the Culcairn Solar Farm would use the same type of technology dispatched on a great area in a low voltage infrastructure. High voltage infrastructure would remain along the existing transmission line and would not increase health risks.

# (Safety) Is there any risk of chemical leaks from the solar PV?

Because PV panel materials are enclosed, and do not mix with water or vaporize into the air, there is little, if any, risk of chemical releases to the environment during normal use. The most common type of PV panel is made of tempered glass. They pass hail tests, and are regularly installed in Arctic and Antarctic conditions.

# Can solar farms' noise affect local residents?

Solar farms create no noise during operations apart from the normal noise you would have anywhere during daytime hours.

# Will the project reduce air quality?

Monitoring of dust levels during construction is a basic requirement of each project. Dust generating activities are

assessed during windy conditions and are stopped and rescheduled where adequate control of dust generation cannot be achieved.

Visual observation of machinery is undertaken during site inspections in addition to daily pre-start checks which ensure all machinery has appropriate emission control devices, is in good working order and is maintained correctly.

Trucks that spray water to suppress dust will be utilised when required to reduce the impact of dust from the various truck deliveries throughout the construction phase.

# Is cultural heritage taken into consideration?

Neoen complies with all legislation, including laws regarding the protection of cultural heritage. A cultural heritage assessment forms part of initial studies as does consultation with local Indigenous groups to ensure cultural heritage is protected.



# Do solar farms impact on flora and fauna?

Neoen engages specialist consultants to undertake detailed flora and fauna surveys to determine the ecological attributes of the land.

On all of our projects, we aim to minimise the impact on flora and fauna by designing projects to be constructed outside areas of high conservation significance and adopting control measures during the construction process. Pre-exsiting patches of vegetation are retained.

Other mitigation measures include preparing management plans, identifying 'no-go zones' within the project site and conducting pre-clearance surveys. Neoen also consults with government departments of environment and biodiversity throughout the development, construction and operational stages of projects, as well as local non-government organisations.

# Do solar farms affect farm/domestic animals?

Neoen built and operates the Coleambally, Griffith, and Parkes solar farms on multiple properties in New South Wales.

Sheep take a couple of days to get used to the site, and then are very comfortable with them – they use the shade from the solar arrays during summer.

# How do you stop the solar facilities from impacting our landscape?

We acknowledge that solar facilities do impact the visual amenity of its near area, but will work with communities to ensure our solar farms have the least possible detrimental impact on visual amenity. Neoen encourage individuals and groups that have questions about visual impact and remedies to engage with us early.

Overall, we consider that the immediate and long-term benefits which solar farms bring to communities offset any loss of visual amenity.

# How does Neoen manage solar panels after they are decommissioned and no longer in use?

Solar panels are manufactured using few components; predominantly aluminium, glass and silicon, and over 90%



of a panel's weight can be recycled. These materials can be separated and captured, for reuse in the manufacture of other products.

Neoen is committed to Project Custodian responsibilities and will ideally implement such recycling practices with a local company, such as Reclaim PV Recycling. Based in Adelaide, Reclaim PV offers a solar waste management / resource recovery solution. This includes logistics and recycling of PV modules, inverters and batteries.

# Will the batteries end up in landfill once their capacity is diminished?

Neoen works with key equipment supply partners to deliver its projects, such as Tesla, who share sustainability principles and Project Custodian commitments. This represents a driving force behind the company's commitment to industry, via procurement that accounts for total cost of ownership and leading recycling programs.

With lithium-ion batteries and PV modules forming the critical asset components, Neoen values commitments made by Tesla to recover recycle all returned battery packs and modules. This equates to over 60% of the battery materials being recovered for reuse, such as cobalt and nickel. In addition, up to 90% of the solar module's weight can be recycled, such as the glass, aluminium, and plastics.

With respect to the project's battery, Neoen stipulates in the supply contract that the original battery manufacturer, such as Tesla, will be required to implement this recovery and recycling scheme. Within this recovery process, an assessment of the batteries capacity and health will determine if the manufacturer disposes it, recycles the valuable metals, or preparing for reuse in a '2nd-life application'.

Important measures are developing in the battery value stream prior to recycling and disposal that extend the useful life of the battery cells beyond the original Project's use case. The project's batteries shall have an original design life and performance specification that after significant use and cycling over many years will no longer meet the original performance specifications due to degradation. However, these battery cells will still possess useful capacity that can be used in '2nd-life applications' that require less-frequent battery cycling (charge/discharge).

An example of an alternative use case is in 'standby back-up' power systems that require less cycling and capacity than Neoen's primary use case via the Project. This is exemplified by the Arena project at Amsterdam's soccer stadium (Nissan, 2018). This development indicates the industry's progress in repurposing lithium-ion batteries from previous applications and matches them with an second alternative use case.

# How is any potential fire risk managed?

There is no inherent fire risk attached to Photovoltaic panels or solar farms. There is a cleared vegetation zone around the edges of the solar farms to prevent fire propagation. This is complemented by a strict vegetation management plan.

The BESS is monitored on a constant basis, utilising NEM compliant metering arrangements that automated and individualised control and diagnosis of individual battery modules. The BESS will incorporate a Battery Management System (BMW) for control and safety, ensuring that in case of temperature rise in the battery cabinet (e.g. due to HVAC failure), the battery module and individually fused cells will trip on high temperature and shut down the module or BESS, or both. This is possible due to the dedicated power electronics and system architecture that isolate the batteries from the common DC bus.

It is anticipated that the battery modules will have secondary containment, to ensure that any one battery module failure (e.g. any battery fires or thermal runaway event) is contained. This is an integral design feature of the system's architecture with one of the Proponent's key suppliers, Tesla.

The fire suppression system within the Battery Energy Storage System would comprise the storage and release of inert gas within each battery container using either electrical detectors/ionisers, or a mechanical system in which the heat destroys a seal to release the gas. The fire suppression system's agent will be either CO2 or Novec 1230 or possibly water spray systems. This aspect will be covered under Detailed Design by Neoen and / or the Designated Construction Contractor.