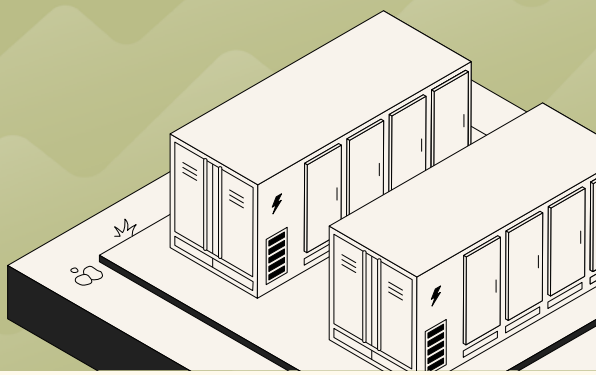
FAQS – EIS

Karangi Battery Energy Storage System



About The Project

What is proposed?

Avenis Energy is proposing the Karangi Battery Energy Storage System (BESS), approximately 11 km northwest of Coffs Harbour. The Project is proposed as a utility-scale battery facility with an indicative capacity of 240 MW / 960 MWh, meaning it could store and dispatch electricity for up to four hours at full capacity.

The Project would connect to the existing Coffs Harbour TransGrid 330 kV substation through new connection works, which may include either an underground or overhead cable route and a new 330 kV bay within the existing substation.

The current Project Site is approximately 39.40 hectares, with a preliminary Development Footprint of approximately 25 hectares.

The design is still being refined. Detailed technical studies and community feedback through the EIS process will inform the final layout, access, visual screening, noise controls, traffic management, water management, bushfire and fire safety measures, and other mitigation requirements before any construction could occur.

What is a BESS?

A BESS is a grid-scale system that stores electrical energy in batteries and releases it back into the electricity network when needed. A BESS does not generate electricity itself. Instead, it charges from the electricity grid when there is available supply and can discharge electricity during periods of higher demand, lower generation, or when the grid requires rapid support.

For the Karangi BESS, the proposed purpose is to provide flexible, fast-response storage for the National Electricity Market. This can help smooth the output of renewable generation, reduce curtailment of solar and wind generation, support peak demand periods, and provide services such as frequency control, voltage support and system strength.

Who is Avenis Energy?

Avenis Energy Pty Ltd is the developer of the proposed Karangi BESS and is progressing the Project on behalf of AE BESS 12 Pty Ltd as Trustee for AE BESS 12 Unit Trust.

Avenis Energy is dedicated to developing utility-scale battery energy storage projects and large-scale renewable energy projects that deliver clean energy into the transmission network, reduce reliance on fossil fuels and help minimise the impacts of climate change. Avenis Energy works closely with landowners, near neighbours, key stakeholders and the wider communities where its projects are proposed.

What does a BESS look like?

A BESS generally consists of rows of containerised battery units that are similar in appearance to 20-foot shipping containers, along with supporting electrical equipment such as inverters, transformers, switchgear, underground or overhead cabling, fire water storage, access roads, security fencing, and operations and maintenance facilities.

For the Karangi BESS, the preliminary design considers approximately 200 containerised battery units and approximately 70 to 80 inverters, as well as an onsite 330 kV substation and associated connection infrastructure. A double-stacked battery container arrangement is also being considered.

The final layout, configuration and appearance will be refined through detailed design, technical assessments and the EIS process, including visual impact assessment and consideration of screening and landscaping.

What type of battery units will be used?

The final battery manufacturer has not yet been selected. Avenis Energy expects to procure the batteries from tier-one international manufacturers before construction, subject to the outcomes of the EIS, detailed design, procurement and final investment decision.

The Project is currently expected to use Lithium Iron Phosphate (LFP) battery technology. LFP is a type of lithium-ion battery, but it uses a different chemistry from those commonly used in portable devices such as mobile phones and laptops.

LFP is commonly used for stationary, utility-scale energy storage because it has strong thermal stability, is suitable for repeated charging and discharging, and has a lower fire risk profile compared with some other lithium-ion chemistries. However, all battery systems require appropriate design, monitoring and safety controls.

A BESS combines individual battery cells into modules and larger battery units, together with cooling, monitoring, control and electrical equipment. The final technology selected for the Project would need to meet applicable Australian installation and safety standards and any environmental safeguards or approval conditions identified through the EIS process.

How high will the battery units be?

The final equipment configuration will be determined through detailed design and the EIS process. The preliminary design considers individual BESS containers that would be approximately 3 m high, 2.5 m deep and 6.1 m wide.

A double-stacked battery container configuration is also being considered. The overall height of this arrangement is still to be confirmed through equipment selection and detailed design and will be assessed in the EIS.

The Landscape Character and Visual Impact Assessment will consider the height, layout, visibility and appearance of Project infrastructure and identify mitigation measures where required.

Project Need & Site Selection

Why is the Project needed, and how does it support renewable energy goals?

The Karangi BESS is proposed because the electricity system is changing. More renewable energy is entering the grid, while older coal-fired generators are progressively being retired. Renewable generation is variable: there are times when solar and wind generation is high and demand is lower, and other times when demand is high but renewable output is lower. Storage helps bridge that gap.

The Project would provide 240 MW / 960 MWh of four-hour storage capacity. This means it could charge when there is available supply and discharge during peak demand or periods of lower generation. It would also be capable of providing fast-response network services, including frequency control, voltage support and system strength, which help keep the grid stable.

Why Karangi?

The Karangi site was selected because it is close to existing high-voltage transmission infrastructure, including the Coffs Harbour Transgrid 330 kV substation. For a BESS, proximity to the grid is important because it can reduce the need for new transmission corridors, easements and associated environmental and social impacts.

The site also meets a number of preliminary site selection criteria identified for the Project. These include suitable access via the existing road network, availability of land suitable for infrastructure, use of cleared and disturbed land where possible, suitable topography, and the ability to refine the design to avoid higher constraint areas such as watercourses, riparian land, flood-prone land, known Aboriginal heritage sites and higher value vegetation.

The final design will be subject to the EIS and approval process.

Could the Project be relocated if the community objects?

The Karangi site was selected because of its proximity to existing high-voltage transmission infrastructure and other site selection criteria, including the potential to reduce the need for longer new transmission corridors.

Relocation is not proposed at this stage. However, the assessment process will consider site constraints, potential impacts, community feedback and whether impacts can be appropriately avoided, minimised, mitigated or offset. If the EIS or consultation identifies impacts that cannot be appropriately managed, that would need to be addressed through design changes, further assessment or the approval process.

Avenis Energy will continue to consider feedback through the EIS process, but any final decision on whether the Project can proceed rests with the consent authority.

Planning, Approval & Community Consultation

How does the Development Application process work?

The Karangi BESS is being assessed as a State Significant Development (SSD) under the NSW planning system. The assessment process is administered by the NSW Department of Planning, Housing and Infrastructure (DPHI) and includes the following steps:

- Scoping - A Scoping Report outlines the proposal, potential impacts and matters requiring further investigation. DPHI then issues the Secretary's Environmental Assessment Requirements (SEARs), which set out what must be addressed in the EIS.
- EIS preparation - Specialist studies and community engagement inform the Environmental Impact Statement (EIS), including assessment of potential impacts, design refinements and proposed mitigation measures.
- Public exhibition - The development application and EIS are publicly exhibited, allowing community members, government agencies and other stakeholders to review the proposal and make formal submissions.
- Response to Submissions - Avenis Energy prepares a report addressing the issues raised. Further information, assessment or changes to the Project may be required.
- Assessment and determination - DPHI completes its assessment, and the consent authority decides whether to approve the Project and what conditions would apply.

Where is the Project up to?

The proposed Karangi BESS is currently at the EIS stage of the SSD assessment process.

The Scoping Report was lodged with DPHI in August 2026, and the Secretary's Environmental Assessment Requirements (SEARs) were received on 28 August 2026. The SEARs set out the studies and information that must be included in the EIS.

Detailed technical studies and further community engagement will inform the EIS and help refine the Project's design. Once lodged, the EIS will be publicly exhibited, giving community members an opportunity to review the findings and make formal submissions.

What is an Environmental Impact Statement (EIS)?

An EIS is a detailed, comprehensive report that evaluates the potential adverse effects of a development, and outlines strategies for mitigating them. An EIS assists the Project in proceeding in an environmentally and socially responsible manner and helps DPHI to determine the outcome of the Project appropriately.

Who approves the Project?

Avenis Energy does not decide whether the Project is approved. The Project can only proceed if development consent is granted under the SSD process.

DPHI administers the assessment process, issues the SEARs and considers the EIS, agency advice, public submissions and the applicant's Response to Submissions report.

The Minister for Planning is generally the consent authority for SSD projects, with many decisions made by DPHI under delegation. Some projects are determined by the Independent Planning Commission (IPC), an independent body that decides certain major development applications. As of September 2026, wind and solar projects generally require 100 or more qualifying public objections during exhibition to trigger IPC determination. A reportable political donation disclosed by the applicant can also trigger IPC determination.

Different referral rules apply to standalone battery energy storage projects, as explained below.

Can community objections result in the Karangi BESS being referred to the IPC?

No. Under NSW planning changes introduced on 18 August 2026, the number of public objections or an objection from Council no longer triggers IPC determination for standalone battery energy storage projects such as Karangi.

DPHI would generally assess the Project and decide whether to approve it, acting on behalf of the Minister for Planning. The IPC remains the determining authority where the applicant has disclosed a reportable political donation.

Community members can still make formal submissions during public exhibition of the development application and EIS. DPHI will consider the issues raised, and Avenis Energy will prepare a Response to Submissions report addressing them.

Community submissions, government agency advice and technical assessment findings will inform whether the Project should proceed and, if so, what design changes, mitigation measures or conditions of consent are required.

How will the community be kept informed, and how can people provide feedback?

Ongoing consultation and feedback opportunities are a core part of the Project's assessment process. Early engagement has included near-neighbour letters and meetings, a now-closed community survey, newsletters, local media advertising, community information sessions, a project website and dedicated enquiry channels.

During the EIS phase, Avenis Energy intends to continue engagement through newsletters, website updates, direct correspondence at key milestones, fact sheets, near-neighbour and stakeholder meetings, First Nations consultation, and the Project enquiry phone line and email. Recognising the busy festive season and school holiday period, in-person meetings are planned for early February 2027, with phone calls and online meetings also available before the end of 2026.

A further letter and an email to the mailing list will confirm meeting arrangements and explain how to book closer to February. Anyone wishing to register their interest early, ask questions or provide feedback can email karangi@avenisenergy.com.au or use the Project website and enquiry channels.

How will community concerns be considered in deciding whether the Project proceeds?

The Project is a proposal that is being assessed through the NSW State Significant Development process.

Avenis Energy recognises that there is local concern about the Project. That feedback is important and has already helped identify the issues that need to be assessed further. The purpose of the EIS is to test the Project's merits, assess potential impacts, identify mitigation measures and provide the community with detailed information for formal review and submissions.

Community feedback can influence Project design, mitigation measures and the issues assessed in the EIS. The consent authority will ultimately determine whether the Project should proceed and, if so, under what conditions.

Construction, Traffic & Access

When will construction commence and how long will it take?

Construction is currently anticipated to commence in early 2028 and take approximately 18 months, subject to development approval and the completion of required commercial, grid connection, procurement and detailed design processes.

These dates are indicative. Construction timing would depend on the SSD approval process, any additional permits and authorisations, contractor selection, grid connection agreement, detailed design, procurement and final investment decision.

Before construction starts, management plans would be prepared to address matters such as traffic, noise, dust, erosion and sediment control, and community notifications.

The Project is currently anticipated to be constructed and energised to the grid in 2029, subject to the matters above.

How will construction traffic and heavy vehicle movements be managed?

Construction traffic will be assessed through a Traffic and Transport Impact Assessment as part of the EIS. Construction traffic would include light vehicles for workers, heavy vehicles for equipment and materials, and some oversize or over-mass movements for major electrical components such as transformers.

The current access route is expected to use Casuarina Lane, Upper Orara Road and Coramba Road, with regional access via the Pacific Highway. The assessment will consider existing road conditions, intersection performance, pavement suitability, heavy vehicle access, oversize vehicle routes, school bus interactions, road safety, public transport, sight distances and potential impacts on local residents.

Before construction, a Construction Traffic Management Plan would be prepared. This would set out haulage routes, delivery scheduling, oversize vehicle procedures, workforce parking, traffic controls, community notifications, complaint response processes and any required road or intersection upgrades, in consultation with relevant road authorities.

Measures may include scheduling and staggering heavy vehicle deliveries to avoid peak traffic periods where practicable and managing worker arrival and departure times.

Road condition or dilapidation surveys may also be undertaken before construction to document existing conditions. Requirements for repairing road damage attributable to construction traffic would be established through the assessment and approval process and arrangements with relevant road authorities.

Will there be electricity outages during construction?

Construction of the BESS itself is not expected to require electricity outages for local customers. However, any works that involve the existing TransGrid 330 kV substation or grid connection would need to be carefully planned and coordinated with TransGrid and relevant network operators.

If any planned network outages or temporary service interruptions were required for connection or commissioning works, they would be managed through the relevant network processes and communicated to affected customers in advance by the appropriate network operator. Once operational, the BESS is intended to support grid stability by storing and dispatching electricity and providing fast-response services to the network.

Local Amenity, Property & Land Use

Will there be visual impacts, and how will rural character and scenic views be managed?

Yes, the Project has the potential to create visual change in the local landscape, and this is one of the key matters being assessed. The site is in a rural valley setting with nearby dwellings, roads and public viewpoints. Preliminary viewshed modelling indicates that parts of the Project may be theoretically visible from some non-associated dwellings and public viewpoints, although actual visibility will depend on landform, vegetation, distance and final infrastructure layout.

The Project is also located near existing electrical infrastructure, including the Coffs Harbour TransGrid substation and high-voltage transmission lines, which already influence the local landscape character. The EIS will include a Landscape Character and Visual Impact Assessment, including consideration of nearby residences, public viewpoints, road corridors, night-time lighting and cumulative visual impacts.

Mitigation measures may include layout refinements, setbacks, vegetation retention, vegetation screening, landscaping, colour and material selection, lighting controls and screening maintenance. These measures will be informed by technical assessment and community feedback.

Will the Project be lit up at night?

Renewable energy developments are generally not brightly lit at night. Lighting is typically limited to what is required for safety, security, maintenance and emergency response. In NSW, potential lighting and visual impacts are considered as part of the environmental assessment and design process to minimise visual impact. The NSW Dark Sky Planning Guideline also guides minimising light pollution, including directing lights downwards, using shielded fittings, avoiding unnecessary light spill and switching lights off when they are not required.

Where lighting is required, developments can use measures such as downward-facing and shielded lights, timers and motion sensors to minimise impacts on neighbouring properties and the surrounding nighttime environment. Additional lighting may be temporarily required during maintenance, security incidents or emergency response.

How will noise impacts from construction and operation be managed?

Noise impacts will be assessed and managed through the EIS and construction management planning. Construction is expected to be the period with the greatest potential for noise impacts due to earthworks, vehicle movements, equipment use and delivery activities.

A Noise and Vibration Impact Assessment will be prepared for the EIS. It will assess construction, operational and traffic noise against relevant NSW guidelines and identify reasonable and feasible mitigation measures. These may include work scheduling, quieter equipment, acoustic treatments, acoustic barriers, equipment enclosures, notification protocols and construction noise management measures.

Operational noise is expected to mainly come from battery container cooling systems, inverters and transformers. Batteries generate heat when charging and discharging, so cooling systems are required to maintain suitable operating temperatures. These systems may include fans and other equipment that generate sound.

The operational assessment will use equipment sound data, the proposed site layout and noise modelling to predict noise levels at nearby homes and other sensitive locations. Modelling will consider distances to nearby homes, surrounding topography, weather conditions and existing background noise. The assessment will consider applicable day, evening and night-time noise criteria and identify any mitigation required. The assessment will also consider low-frequency and tonal noise, overnight operation, and how sound may travel through the surrounding valley.

What controls will be in place to reduce dust during the Project?

Dust and air quality impacts will be assessed as part of the EIS and managed through construction controls if the Project is approved. Dust is most likely to occur during construction activities such as earthworks, vehicle movements, material handling and use of exposed areas.

Standard dust controls may include water carts or sprays, stabilising exposed areas, covering or managing loads, maintaining equipment, limiting unnecessary vehicle movements, enforcing site speed limits and responding to weather conditions that increase dust risk.

These controls would be documented in a Construction Environmental Management Plan and implemented by the construction contractor if the Project proceeds.

Will neighbouring insurance premiums be impacted by the development?

Based on available information, Avenis Energy is not aware of evidence that energy infrastructure has a direct impact on neighbouring insurance premiums.

The Australian Energy Infrastructure Commissioner's (AEIC) December 2025 position statement explains that broader insurance premium increases are driven by factors such as climate-related losses, higher reinsurance costs, increased claims and inflation, rather than the renewable energy transition. The Clean Energy Council similarly identifies broader market pressures as the main drivers of rising insurance costs.

This issue can continue to be considered through engagement and the assessment process where relevant.

How will property, homes and landowner impacts be addressed?

Avenis Energy recognises that property, homes and land use concerns are important to nearby landholders. Property and real estate markets are influenced by many factors, so individual property or market outcomes cannot be predicted at this stage.

The EIS will consider the underlying amenity, land use and social concerns that may influence how nearby residents experience the Project, including through the Social Impact Assessment and Economic Impact Assessment.

The Project will assess potential impacts including noise, visual amenity, traffic, dust, water, flooding, bushfire, hazards, EMF, biodiversity, agriculture and social impacts. Mitigation may include site layout refinements, setbacks, vegetation screening, noise controls, traffic management, construction management, erosion and sediment controls, stormwater controls, emergency access, asset protection zones, fire water supply and operational management plans.

Safety, Health & Emergency Management

Are there any health risks associated with EMFs from a BESS?

Electromagnetic fields, or EMFs, are produced by electrical infrastructure, including powerlines, substations, transformers and inverters. The Karangi BESS would introduce localised EMF sources associated with the proposed inverters, transformers and new grid connection to the existing Coffs Harbour TransGrid substation.

EMF levels reduce rapidly with distance from the source. Initial assessment indicates that EMFs at the site boundary are expected to be well below public exposure guidelines and are not expected to pose an adverse impact to human health. This will be assessed as part of the EIS against the International Commission on Non-Ionizing Radiation Protection (ICNIRP) exposure guidelines.

Do batteries increase fire risk, and how will fire risk be managed?

Battery energy storage systems introduce specific fire and emergency management considerations, and these are being treated as key matters for the Karangi BESS. The Project Site is mapped as bush fire prone land, and the EIS will include detailed assessment of both bushfire risk and battery storage hazards.

Potential battery hazards include overheating, electrical faults, manufacturing defects and thermal runaway. Thermal runaway occurs when a battery cell experiences an uncontrolled increase in temperature, which can release gases and potentially result in fire.

The Project is currently expected to use LFP battery technology, which is recognised for thermal stability and a lower fire risk profile than some other lithium-ion chemistries. Fire safety would be addressed through multiple layers of controls, including battery management systems, thermal monitoring, cooling systems, fire detection and appropriate fire protection systems, automatic isolation or shutdown functions, separation distances between equipment, asset protection zones, emergency access, first responder access, fire water supply and operational procedures.

Battery management and monitoring systems help identify abnormal conditions early so affected equipment can be isolated or shut down. Separation distances and site-wide fire controls help reduce the potential for an incident to spread to other equipment or surrounding areas. The specific fire protection and suppression systems will be confirmed through equipment selection, detailed design and the fire and hazard assessments.

The EIS will include a Bushfire Risk Assessment and Preliminary Hazard Analysis. Relevant fire and emergency services, including NSW Rural Fire Service and Fire and Rescue NSW, would be consulted on matters such as site access, firefighting water supply and emergency response arrangements.

A Fire Management Plan or Emergency Response Plan would be developed before operation, setting out how fire risk is monitored and managed, how incidents would be escalated, and how the Project would coordinate with emergency services.

How will the site be monitored and secured, including in an emergency?

The Project would operate continuously and would include operational monitoring, maintenance and emergency management arrangements appropriate for a utility-scale BESS. Final arrangements, including emergency contacts, site access, monitoring systems and escalation protocols, will be developed as the design and operational model are finalised.

Security fencing is part of the proposed ancillary infrastructure. Final security measures may include controlled site access, locked gates, signage, operational monitoring, maintenance inspections and emergency access arrangements, subject to detailed design and approval requirements.

Before operations commence, emergency response arrangements would be established, including coordination with relevant emergency services. Public contact details for project enquiries and incident reporting would be made available, and any approval conditions relating to safety, monitoring or emergency management would be implemented.

Environment, Water & Cultural Heritage

Is the site affected by flooding, and how will flood risk be managed?

Yes, parts of the broader Project Site are identified as flood prone due to proximity to the Orara River, Karangi Creek, Wongiwomble Creek and other drainage lines. Flooding is therefore a key issue for assessment.

Council has raised concerns about the flood mapping used in the Scoping Report and whether the preliminary layout extends into the area affected by the Probable Maximum Flood. A detailed Flood Impact and Risk Assessment will verify flood conditions and inform the layout. It will consider potential dam break risks associated with Karangi Dam, climate change, and whether the Project could affect flood behaviour, erosion, water quality, access or downstream properties.

Where the assessment identifies risks, design refinements or mitigation measures would be required. These may include site layout changes, drainage design, stormwater controls, erosion and sediment controls, emergency access planning and construction management measures.

Is there a contamination risk?

Potential contamination risks will be assessed and managed through the EIS and environmental management plans. The Project Site is currently used for rural and utility purposes, and the EIS will include a site investigation to identify any potential historical contamination risks. If required, further investigation would be undertaken before construction.

During construction and operation, fuels, oils, chemicals and other materials would be managed through standard controls such as designated bunded storage areas, spill kits, material safety data sheets, chemical registers, equipment maintenance and spill response procedures. Waste would be classified, handled, transported and disposed of in accordance with applicable NSW EPA requirements and approval conditions.

Battery cells, modules and related components at end of life would be removed by suitably qualified contractors and directed to authorised recycling, recovery or disposal facilities where practicable and lawful.

How will Aboriginal and cultural heritage be respected during the Project?

Respecting Aboriginal cultural heritage and connection to Country is a key part of the assessment process. The EIS will include an Aboriginal Cultural Heritage Assessment prepared in accordance with NSW guidelines and in consultation with Aboriginal stakeholders and Registered Aboriginal Parties.

The assessment will include desktop review, AHIMS searches, review of previous investigations, Aboriginal stakeholder consultation, archaeological survey with Registered Aboriginal Parties, and test excavation if areas of archaeological potential are identified. It will assess potential impacts on known and unknown Aboriginal cultural heritage values and identify management and mitigation strategies.

Avenis Energy has already commenced early engagement with First Nations stakeholders and has committed to ongoing engagement to better understand cultural heritage values, local Indigenous business capabilities, and opportunities for participation in the Project.

How will the natural environment, flora and fauna be protected?

The area contains environmental values and constraints, including waterways, vegetation, flood risk, bushfire risk and nearby rural residences. The Project's suitability has not been assumed. The EIS will test whether impacts can be avoided, minimised, mitigated or offset to an acceptable level.

The Project will be assessed through a detailed EIS, including specialist studies on biodiversity, water, flooding, visual amenity, noise, traffic, bushfire, hazards, soils, agriculture, heritage and social impacts. The preliminary design has been developed to avoid and minimise impacts where possible, including by locating infrastructure away from sensitive receptors, avoiding watercourses and riparian land, avoiding flood-prone areas where possible, retaining existing vegetation where practicable, and avoiding known Aboriginal heritage sites.

Impacts on flora and fauna will be assessed through a Biodiversity Development Assessment Report prepared under the NSW Biodiversity Assessment Method. Where impacts cannot be avoided, the EIS will identify mitigation and, where required, biodiversity offset obligations.

How will the Orara River and surrounding waterways be protected?

Protecting the Orara River and surrounding waterways is a key issue for the Project. The Orara River is a significant watercourse adjacent to the Project Site, with riparian vegetation and water quality values that need to be protected.

The Project will implement a 40m riparian buffer from the highest bank of the Orara River, consistent with relevant riparian corridor guidance. The EIS will also include assessment of surface water, groundwater, flooding, water quality, erosion, runoff, aquatic habitat and riparian corridors. This will help determine whether further design refinements or mitigation measures are required.

Construction controls would be set out in a Construction Environmental Management Plan and would likely include erosion and sediment controls, stormwater management, spill response procedures, controlled storage of fuels and chemicals, waste management, and monitoring or inspection requirements.

Local Benefits & Economic Opportunities

What benefits, jobs and local investment could the Project provide?

The Project is expected to provide local and regional benefits if approved. These include construction employment, operational roles, procurement opportunities for local businesses, and a proposed community benefit program.

The Project is expected to require up to 100 construction workers during the peak construction period. It is also expected to support at least four full-time equivalent operational roles.

During construction, there may be increased demand for local accommodation, hospitality, trades, plant hire, materials, transport, traffic management and other services. During operation, maintenance and support services may provide further opportunities for local suppliers.

Avenis Energy is proposing a community benefit program if the Project is approved. The structure is still being developed through engagement with Council, the community and stakeholders, with regard to applicable NSW benefit-sharing guidance.

Community feedback will help identify local priorities. Depending on the program's final structure, this may include support for local projects, services, facilities, community groups or other initiatives that provide lasting benefits to the area.

The Project would also support the broader electricity system by storing electricity and dispatching it when needed, helping improve reliability and support the integration of renewable energy.

Operation, Decommissioning, Recycling & Grid Connection

How long will the Project operate, and what happens at the end of its life?

The Project has a likely operational lifespan of up to 35 years. During that period, the facility would be monitored and maintained to ensure it continues to operate safely and efficiently.

Battery modules and related equipment may need to be replaced or upgraded during the life of the Project to maintain performance and reliability. At the end of the approved operating life, the Project would either be decommissioned and the land rehabilitated to a suitable previous or agreed use, or repowered, subject to future energy needs, landowner arrangements and any approvals required at that time.

A Decommissioning and Rehabilitation Management Plan would guide infrastructure removal, site rehabilitation and reuse or recycling of materials where practicable.

Are batteries recyclable?

Battery recycling and recovery will be considered as part of the Project's lifecycle management. Batteries contain materials that can potentially be recovered and reused. Depending on the selected battery chemistry, these may include lithium, iron, copper, aluminium and graphite. Supporting electrical equipment and infrastructure also contain recoverable materials such as steel, copper and aluminium.

At the end of service life, replaced or decommissioned battery cells, modules and associated components would be removed from site by suitably qualified contractors and managed in accordance with approval conditions and regulatory requirements in force at that time.

Recycling and resource recovery would be pursued where practicable. Any materials that cannot be recovered would be classified, transported and disposed of at facilities lawfully authorised to receive them. Where lithium-ion batteries are transported, they would be handled in accordance with applicable dangerous goods requirements.

The final recycling and disposal pathways will depend on the battery supplier, technology selected, regulatory requirements and recycling market available at the time of replacement or decommissioning.

Will new transmission lines or substations be required?

Yes, new electrical connection infrastructure would be required. The Project is proposed to connect to the existing Coffs Harbour TransGrid 330 kV substation via a new connection. The final connection may be underground or overhead and will be determined through the EIS, consultation with TransGrid and detailed design.

The Project also includes an onsite 330 kV substation with supporting equipment such as transformers, harmonic filters, switchgear and a switch room. In addition, connection works would include construction of a new 330 kV bay within the existing Coffs Harbour TransGrid 330 kV substation and associated augmentation works.

How can local suppliers get in touch?

EMAIL US AT

karangi@avenisenergy.com.au

QUESTIONS AND FEEDBACK

For more information please visit our project website:
www.avenisenergy.com.au/projects/karangi