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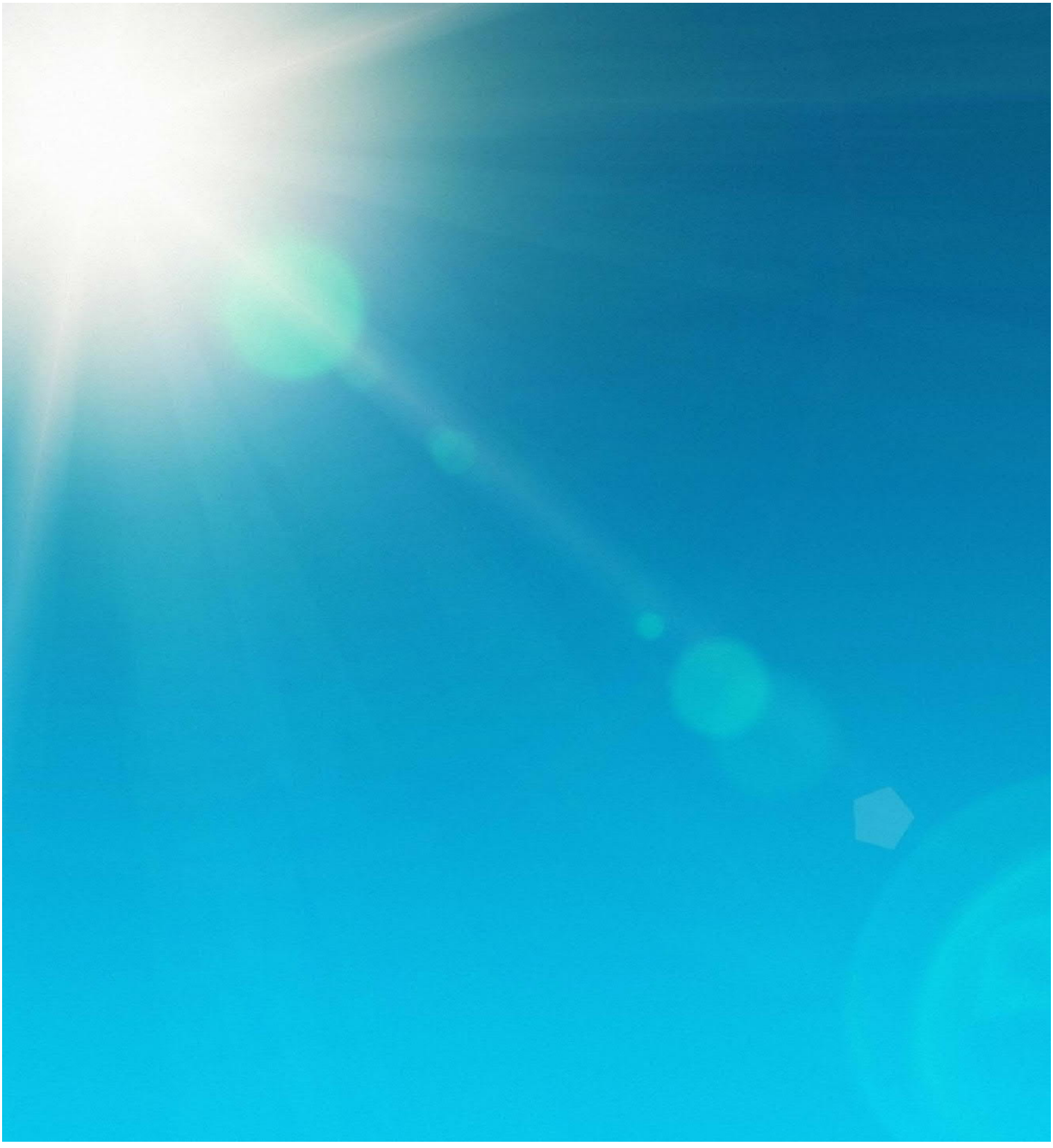
March 2022

Chapter 1- Introduction

Australia-Asia PowerLink Environmental Impact Statement

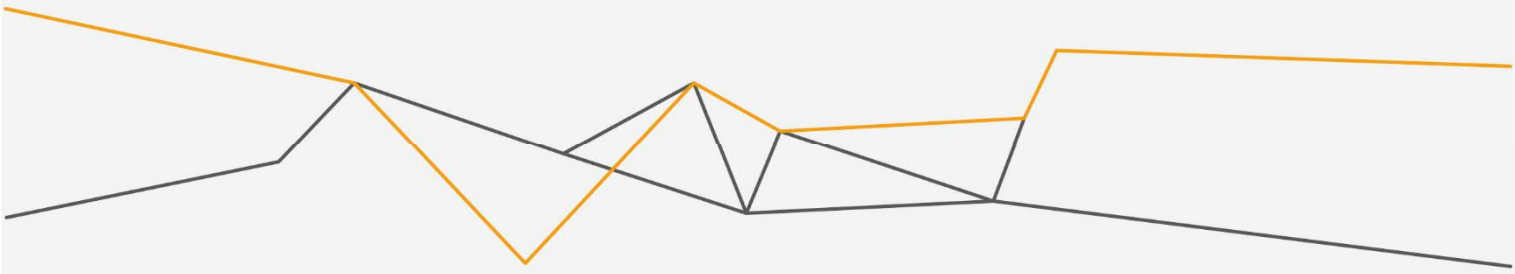


Chapter 1 - Introduction

Document ID: 201056

Revision history

Revision	Date	Purpose	Reviewed by	Approved by
0	24/03/2022	Draft EIS submission	Joe Sheridan	Mark Branson



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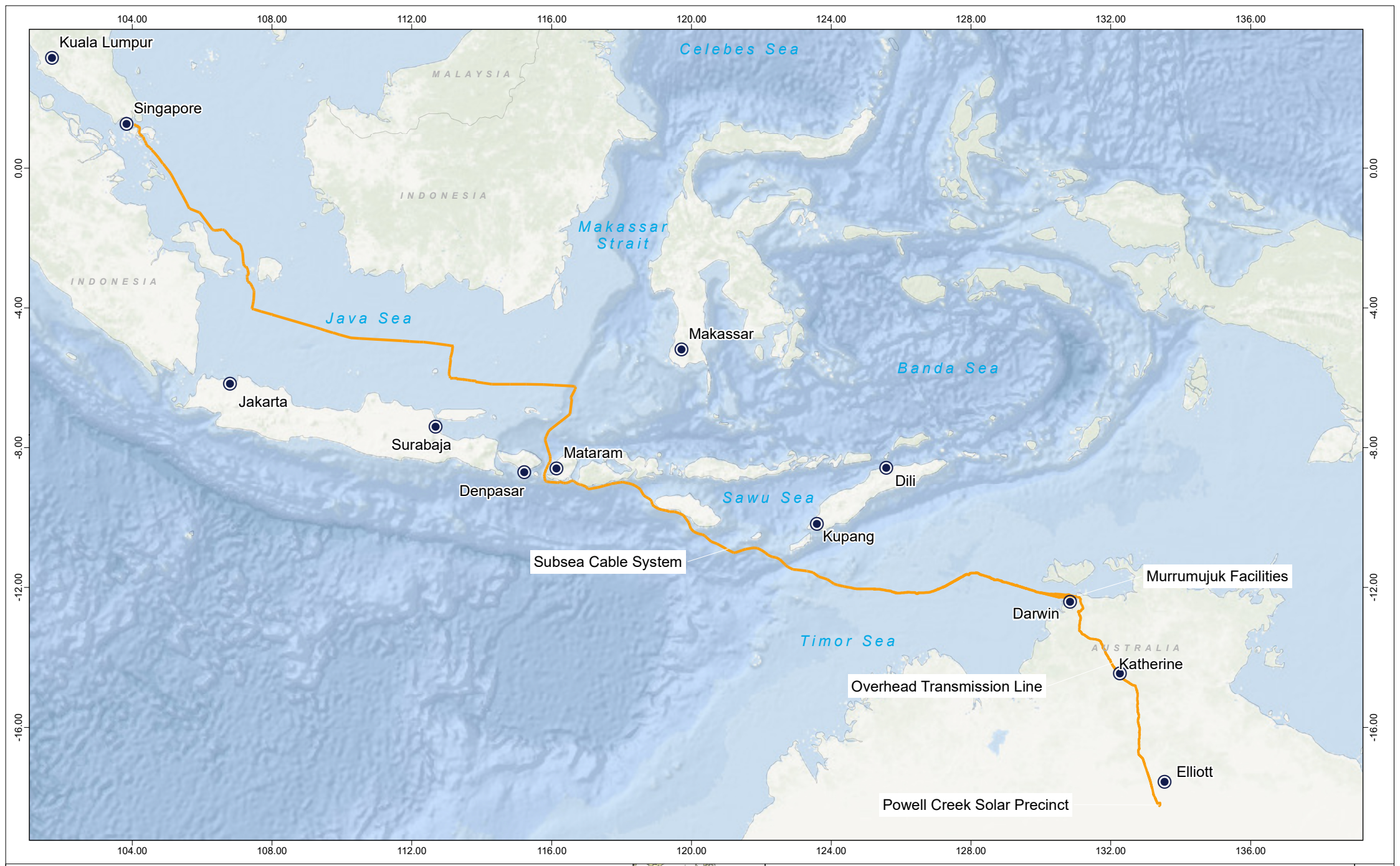
1 Introduction

This draft Environmental Impact Statement (EIS) has been prepared by the Proponent, AAPowerLink Australia Assets Pty Ltd, a wholly-owned subsidiary of Sun Cable Pty Ltd (Sun Cable), to address the requirements for environmental assessment and approval of the Australia-Asia PowerLink (AAPowerLink) proposal under both the *Environment Protection Act 2019 (Northern Territory)* and *Environment Protection and Biodiversity Conservation Act (Commonwealth) (EPBC Act)*. The AAPowerLink will be one of the world's largest solar energy infrastructure projects, integrating a 17-20 GW solar farm and battery storage facility in the Barkly region of the Northern Territory (NT), with a 5,000 km transmission system of high voltage direct current (HVDC) overhead powerlines and subsea cables, to supply Darwin, Singapore and Asian markets with reliable and competitively priced renewable electricity (Figure 1-1).

Sun Cable acknowledges the traditional custodians throughout Australia and pays respect to their elders past and present. Sun Cable is committed to ongoing engagement with stakeholders including Aboriginal groups and representative agencies, land holders, NT government regulators and the broader community to maximise the proposal's positive impact on communities and people in the NT. Sun Cable intends to work with stakeholders to ensure that impacts to environmental, social and cultural values are avoided or minimised to the extent practicable. Stakeholder engagement undertaken to inform the EIS and Social Impact Assessment (SIA) is summarised in Section 1.6 below, along with details of how Sun Cable plans to continue engagement over the project life.

Sun Cable is working with the Northern Land Council (NLC) and Central Land Council to negotiate voluntary Indigenous Land Use Agreements (ILUA) and to seek consent from Traditional Owners and custodians. In 2020, Sun Cable entered into an agreement with the NLC for the purpose of such negotiations. Sun Cable has also entered into a costs agreement for the purpose of supporting the NLC to conduct consultation and engagement to seek consent for the AAPowerLink proposal.



Legend

Australia-Asia PowerLink Infrastructure

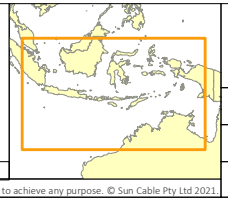


Figure 1-1 - AAPowerLink overview

Project: Australia-Asia PowerLink	Reference #: AAPL_GNR_CTA_GEN_MAP_0088		Figure: 1 of 1	Revision: A
Coordinate System:	Datum: WGS 1984	Date: 11/03/2022		
0 150 300 450 600 750 Km	Scale: 1:15,000,000	A4		

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1.1 The Proponent

The Proponent for the proposed project is AAPowerLink Australia Assets Pty Ltd (ACN 653 396 948), the entity owning the Australian assets of the AAPowerLink and is a wholly-owned subsidiary of Sun Cable Pty Ltd (ACN 623 991 006). The Proponent's trading name is 'Sun Cable', which henceforth is used in this draft EIS to refer to the Proponent for the proposal.

1.2 About Sun Cable

Sun Cable is a developer of world-leading renewable energy projects with a mission to supply renewable electricity from resource abundant regions to growing load centres, at scale. This starts with the Australia-Asia PowerLink (AAPowerLink), which will use the Northern Territory's high quality and abundant solar resource to deliver large volumes of competitively priced, dispatchable renewable electricity to customers in Darwin and Singapore.

Advances in renewable energy generation, energy storage and high-voltage direct current (HVDC) cable transmission technologies have made it commercially and technically viable to transmit renewable electricity over long distances. Sun Cable's energy projects will position Australia, Singapore and other markets in Asia as world leaders in cross border renewable electricity trade. The developed infrastructure will facilitate the electrification of new and existing industries, provide significant supply chain opportunities and support regional decarbonisation.

To deliver the AAPowerLink, Sun Cable has significantly increased its capacity and expertise across a range of professional disciplines and established offices in Darwin, Singapore, Jakarta, Sydney and Brisbane. The formation of the Integrated Project Delivery Team (IPDT) comprising Sun Cable, Bechtel, Hatch and SMEC (a member of the Surbana Jurong Group) provides world leading engineering and project management experience, together with Marsh and PricewaterhouseCoopers (PwC) who offer project risk and advisory expertise. Each company has a proven track record in developing and delivering complex infrastructure projects with a strong commitment to utility scale renewable energy projects and providing global solutions to achieve net zero targets. The combination of experience across environmental, social and governance frameworks will be essential in delivering a project of such scale and significance.

Sun Cable has complied with the legislative requirements of the NT and Commonwealth in relation to the referral of the proposal for environmental assessment and has not previously been involved in any environmental incidences or non-compliances.

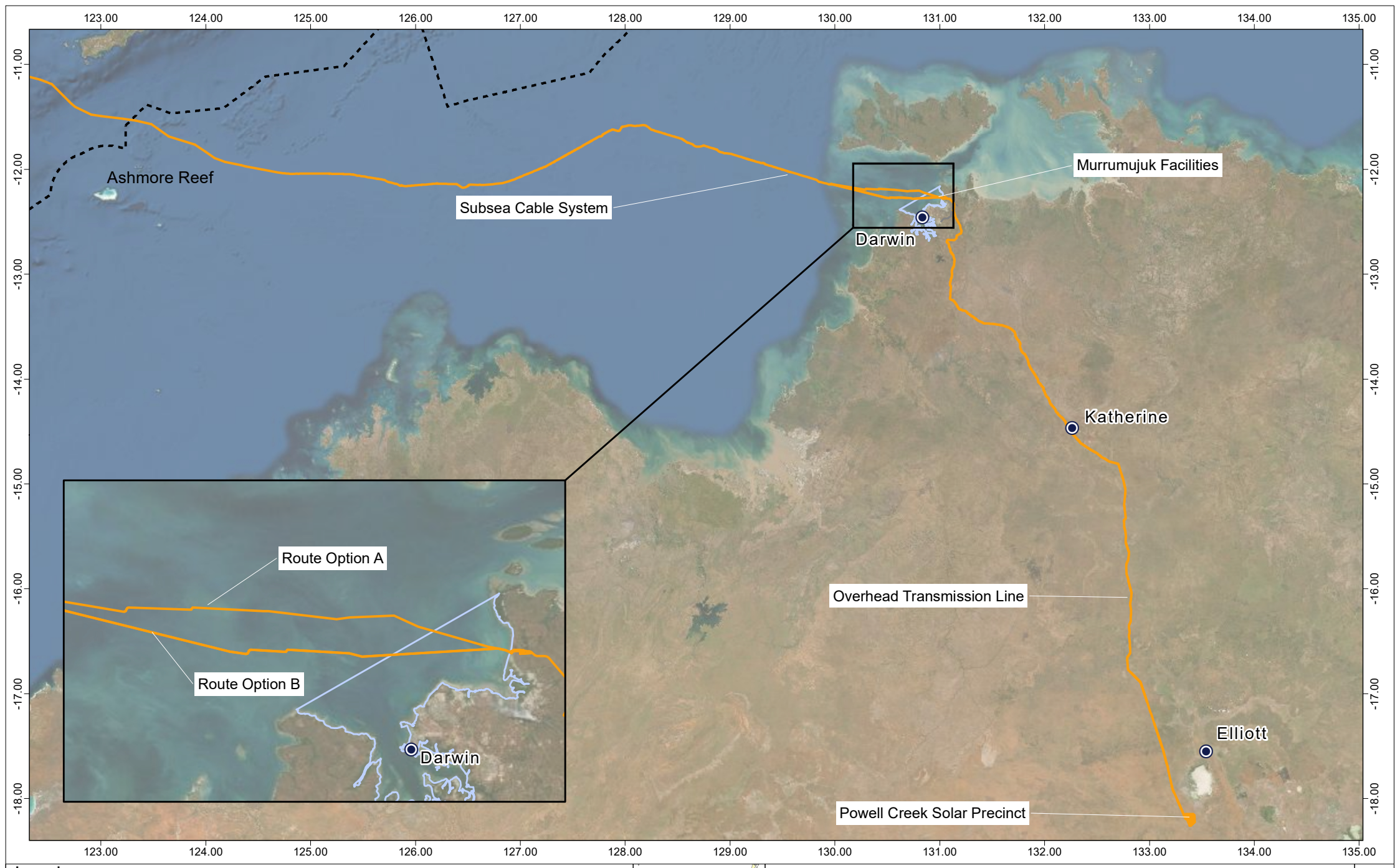
1.3 Proposal overview

The AAPowerLink proposal comprises the following six key components:

- Powell Creek Solar Precinct in the Barkly Region of the NT where electricity will be generated, stored, and transmitted
- Overhead Transmission Line (OHTL) to transmit electricity from the Solar Precinct to Darwin
- Darwin Converter Site including Voltage Source Converters (VSC), energy storage and network connection to supply electricity to the Darwin region located at Murrumujuk, north-east of Darwin
- Cable Transition Facilities at Gunn Point Beach to transition power cables between land and sea
- Subsea Cable System to transfer electricity from Darwin to Singapore
- Singapore Converter Station to receive electricity and supply the Singapore electrical network.

This draft EIS addresses only those components located within Australia, including onshore components and offshore components within the Australian Exclusive Economic Zone (AEEZ) and up to the boundary of the Commonwealth marine area. The location of these components is shown in Figure 1-2. A complete description of the AAPowerLink components and activities assessed in this draft EIS is provided in Chapter 2 Proposal Description. Components beyond that limit fall within the jurisdictions of Indonesia and Singapore and will be assessed and approved under their respective regulatory regimes as discussed in Section 1.6.3below.

Sun Cable has formally commenced the process to raise capital to fund the construction of the AAPowerLink and with funding supplied from a combination of equity, debt (including commercial, project and structured finance), export credit agency and non-dilutive government funding support. A final investment decision on the AAPowerLink project is planned for end of 2023, subject to the proposal receiving environmental approvals under the *EP Act* and *EPBC Act*. Construction of the AAPowerLink will take approximaltey four years and is proposed to start early 2024. Network connection availability for the NT is planned for 2026-2027, with supply to Singapore planned to be operational by the end of 2028.



Legend

- Australia-Asia PowerLink Infrastructure
- Commonwealth Marine Area Boundary
- Darwin harbour boundary

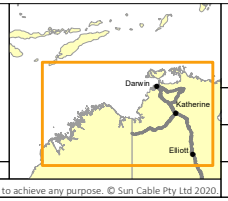


Figure 1-2 - Location of AAPowerLink infrastructure proposal components in Australia

Project: Australia-Asia PowerLink	Reference #: AAPL_GNR_CTA_GEN_MAP_0089		Figure: 1 of 1	Revision: A
Coordinate System: -	Datum: WGS 1984	Date: 11/03/2022		
0 50 100 150 200 Kilometers		Scale: 1:5,000,000	A4	

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Source: NTG data - Cadastre and roads. Imagery: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1.4 Objectives of the proposal

There is a rising electricity demand in the Asia-Pacific region, with a limited ability to meet this demand from locally produced renewable electricity. Electricity demand in the region is forecast to increase by 70% to 2040 and more than double to 2050 (International Energy Agency 2001). Existing electrical networks in Southeast Asia are not connected which undermines network durability and resilience, attracts high costs, and inhibits the opportunity to scale renewable energy sources.

The Southeast Asian region contributes a significant global share of rising greenhouse gas (GHG) emissions which expose neighbouring regions, including Australia, to increased climate risk. The Asian Development Bank notes, "from 1990 to 2010, carbon dioxide (CO_2) emissions in Southeast Asia have grown more rapidly than in any other region of the world." Assisting the region to reduce its globally impactful share of GHG emissions will therefore help in reducing the impacts of climate change.

Australia's renewable energy resource

Australia has the opportunity to commercialise its abundant renewable energy resources and supply growing demand centres by creating a renewable electricity export industry. This involves building the critical infrastructure to support giga-scale renewable energy generation and transmission projects to supply domestic and international markets with high volume, affordable, dispatchable renewable electricity. Australia will harness existing technologies to develop this infrastructure.

The proposal will also reduce CO_2 emissions through low carbon electricity production and support significant strategic manufacturing opportunities in Australia and Singapore.

The AAPowerLink will have capacity to materially increase electricity supply to the Darwin market. The net impact of the proposal to the NT is the avoidance of 110 million tonnes (MT) of CO_2e emissions, which is equivalent to a ~10% reduction in annual GHG emissions[1] from the Northern Territory (Appendix H). The availability of renewable electricity will enable diverse industries and commercial development to emerge in a way that is consistent with the NT Government's target of achieving a $40B economy from 50% renewable electricity by 2030 (Northern Territory Government 2020a).

Solar Irradiance

Australia has some of the highest solar irradiation and most widespread solar resources in the world, with 58 million petajoules of solar energy falling on Australia each year (Geoscience Australia 2010). Australia converted just 400 petajoules of solar energy to electricity in 2020 (Department of Industry, Science, Energy and Resources 2020) demonstrating the enormity of the solar opportunity in Australia. The AAPowerLink Solar Precinct features world class solar radiation, with high irradiation and low daily and seasonal variability. Annual Global Horizontal Irradiation (GHI) at the Solar Precinct is 2311.4 kWh/M^2, compared to Singapore's GHI of 1638.1 kWh/m^2 (Global Solar Atlas). There is 41% more solar energy available per unit of land area at the Solar Precinct than there is per unit of land area in Singapore.

[1] A Carbon Emissions Study and Greenhouse Gas Abatement Plan for the AAPowerLink Project is provided at Appendix H of this EIS.

Solar PV and Energy Storage

Rapidly falling solar PV and energy storage costs now enable Australia to economically harness its solar resource.

- Solar PV costs continue to reduce as technology and production methods improve enabling large scale solar generation. Utility solar cost reduced by 81% from 2010 to 2020, with PV modules falling by approximately 93% (IRENA 2020). Utility solar costs are forecast to reduce by a further 37% from 2020-2030, with PV modules falling approximately 30% (VDMA 2020).
- Similar trends are seen in energy storage costs and capabilities, allowing generation to be economically stored for 24/7 transmission. Lithium ion cell costs have rapidly decreased in cost, decreasing by approximately 87% from 2010 to 2019 (BloombergNEF 2019). Lithium battery system costs are also forecast to reduce by approximately 45% from 2020 to 2030 (BloombergNEF 2020).

High Voltage Direct Current Transmission

HVDC transmission is subject to less electrical loss over long distances compared to high-voltage alternating current (HVAC). The electrical system, from the Solar Precinct to Darwin and then to Singapore is proposed in HVDC configuration for this reason. The technological progress in HVDC subsea cable design, including increased voltage capacity of XLPE (cross-linked polyethylene) cables and reliability at great depths, has enabled reliable long-distance transmission of renewable electricity between land masses by allowing cable routes to traverse previously inaccessible subsea terrain. This technological evolution has been progressing continually for many decades as HVDC transmission systems continue to be adopted and further refined with increasing voltages over longer distances, throughout the world.

Darwin Market Rationale

The AAPowerLink supports the NT Governments plans to establish a $40B economy by 2040 through facilitating the development of emerging industries in Darwin by provisioning clean, firmed renewable electricity. By making available affordable, large scale renewable electricity to the Darwin region, the AAPowerLink will potentially assist in transitioning Darwin from a 150-300 MW economy to over a GW economy (Northern Territory Government 2017). This is consistent with NTG's policy directions towards electricity market reforms (Northern Territory Government 2018), Territory Economic Reconstruction Commission Report (Northern Territory Government 2020b). Key new industries that could be enabled through utility scale renewable electricity include data centres, green manufacturing, green minerals processing as well as electrification of existing energy-intensive industries.

AAPowerLink also proposes to make a significant contribution to GHG emissions avoidance, contributing positively to the Northern Territory's target of net zero emissions by 2050 and 50% renewables by 2030 set out in the NT Climate change response: Towards 2050 Report (Northern Territory Government 2020a) and Roadmap to Renewables Report (Northern Territory Government 2017).

In addition, the AAPowerLink will provide significant employment and education opportunities for the NT, in particularly regional communities. The project is forecast to generate approximately 1,750 construction jobs and 350 long-term operational jobs. A new Centre of Excellence for Renewable Energy will also be developed to promote knowledge sharing and develop the renewable energy sector in the NT, as a commitment to the Northern Territory Government to ensure long term benefits from for Territorians.

Sun Cable aims to develop the Australian components of the AAPowerLink predominantly utilising a local NT and Australian workforce. The company is currently developing a Territory Benefit Plan and Regional (Aboriginal) Legacy Strategy to maximise benefits for the local community and industry.

Sun Cable is also working with Aboriginal representative groups to develop culturally appropriate employment, training and business opportunities for Aboriginal communities, regional populations and Traditional Owners of the land on which the AAPowerLink is proposed. These strategies will be developed in consultation with the Northern Land Council, business and industry groups, and the NT Government.

Singapore Market - Rationale

Singapore is seeking out options to import affordable renewable electricity from reliable regional partners. More than 95% of Singapore's electricity needs come from combined cycle gas generators, fuelled by imported piped gas and LNG (Energy Market Company n.d). In 2019, 44% of Singapore's total gas supply was from LNG imports, with the remaining 56% coming from piped gas from Malaysia and Indonesia. These piped gas contracts will mostly come to an end by 2026 (Wood MacKenzie 2020). Singapore has limited renewable resources to meet their sustainability objectives. In Q1 2021, that total installed solar capacity was solar just 440 MWp, and the remaining renewable energy came from waste to energy plants (Energy Market Authority 2021). Singapore has a high demand for renewable energy from large industrial and commercial electricity users. Sun Cable is engaging with Singapore in relation to the potential role of the AAPowerLink in achieving the countries vision of a cleaner and more efficient energy future.

The Singapore government has established domestic and international policy objectives to drive the following;

- reliable regional electricity imports (Four Energy Switches),
- achieve domestic and international sustainability targets (Green Plan 2030),
- strengthen regional economic cooperation with Australia (Green Economy Agreement (GEA) and the 2020 Memorandum of Understanding (MoU) on Low Emissions Technologies)

Renewable electricity imports from Australia will reduce Singapore's exposure to international gas markets and diversify their electricity supply. Access to affordable large scale renewable electricity will catalyse growth in green industries, driving industrial development, FDI, jobs and economic growth. The Singapore Energy Market Authority is running a competitive tender process for the import of low emissions electricity and intends to complete this process in 2022-2023. The AAPowerLink will have the capacity to supply the equivalent of up to 15% of Singapore's electricity demand from 100% renewable zero emissions sources and therefore contribute considerably to global GHG emissions reductions.

1.5 Preparation of the draft EIS

The draft EIS documents an assessment of the potential environmental and social impacts and benefits associated with constructing and operating the AAPowerLink. Sun Cable engaged EcOz Environmental Consulting to prepare the EIS and they have partnered with a range of subject matter experts to deliver associated technical studies. The EIS Team's experience and/or qualifications are summarised in Appendix D. Sun Cable has worked closely with the EIS Team to ensure the EIS presents a true and accurate description of the proposal, associated activities, and impacts.

The draft EIS document responds to the Terms of Reference (TOR) issued by the NT EPA, which incorporates the Commonwealth's requirements for approval under the *EPBC Act* and addresses the requirements in the NT EPA's guideline document *'Preparing an environmental impact statement – Environmental impact assessment guidance for proponents.'* A copy of the TOR with cross-references to the relevant sections of the draft EIS is provided at Appendix A.

1.6 Statutory framework

In Australia, the AAPowerLink requires assessment and approval under both the NT *EP Act* and *EPBC Act*. Permits and consents are also required under several pieces of subordinate legislation, and Sun Cable and its partner and contractors involved in project delivery will be required to comply with the laws of the NT and Commonwealth. The AAPowerLink components located in Indonesian waters and in Singapore, will be subject to environmental assessment and approval under the statutory framework of those countries. The sections below provide a brief overview of the statutory framework that applies to the proposal.

1.6.1 Northern Territory

The proposal is recognised by the Northern Territory Government as a major project, meaning that it has met the initial criteria for:

- Project significance (e.g. capital expenditure of more than $100M)
- Strategic impact
- Complexity
- Feasibility
- Capacity to deliver.

Recognition of the AAPowerLink as a major project acknowledges the importance of the project and facilitates co-ordination within government to assist with the required statutory approval processes. It does not obviate the requirement to comply with relevant legislative requirements and statutory obligations.

1.6.1.1 Environment Protection Act 2019

The *EP Act* is the NT's primary piece of environmental legislation administered by the NT Environment Protection Authority (NT EPA). The purpose of the environmental impact assessment process under the *EP Act* (Section 42) is to ensure that:

- Actions do not have an unacceptable impact on the environment, now or in the future
- All actions that may have a significant impact on the environment are assessed, planned and carried out taking into account:
    - the principles of ecologically sustainable development
    - the environmental decision-making hierarchy
    - the waste management hierarchy
    - ecosystem-based management
    - the impacts of a changing climate
- The potential for less environmentally damaging alternative approaches, methodologies or technologies for actions is considered.
- The community is provided with an opportunity to participate, and have its views considered, in decisions on proposed actions.
- The potential for actions to enhance or restore environmental quality through restoration or rehabilitation is identified and provided for to the extent practicable.

Sun Cable referred the AAPowerLink to the NT EPA 16 October 2020 as a 'Proponent Initiated EIS Referral' initiating the assessment process under the *EP Act*. The referral and a draft Terms of Reference (ToR) for the

EIS were placed on public comment for a period of 30 business days, following which the NT EPA issued an approved ToR for the EIS on 19 January 2021.

In August 2021, Sun Cable advised the NT EPA of a change that needed to be made to the location and system specifications for the Darwin facilities and Subsea Cable System components of the proposal described in the original referral. The updated project description is described in Chapter 2 Proposal Description and was required to avoid land use conflicts on Middle Arm Peninsula[2] and Darwin Harbour identified by the NT Department of Infrastructure Planning and Logistics (DIPL) during the Middle Arm Masterplan exercise. Additionally, the proposed capacity rating of the solar farm and transmission system was increased to reflect the latest solar module specifications and electricity demand forecasts, which in turn require additional cables and converter infrastructure. A 'notice of significant variation' pursuant to Section 51(1) of the *EP Act* and a revised ToR were published for public comment for 30 business days and an amended ToR was issued by the NT EPA on 5 October 2021.

This draft EIS addresses the amended ToR and the broader requirements of the *EP Act*. Appendix A provides a table that cross-references the Chapters and section/s of this draft EIS where each item in the ToR is addressed. Appendix B provides a table that specifically addresses the requirements of sections 42 and 43[3] of the *EP Act*.

Submission of the draft EIS is one of the key assessment milestones for the AAPowerLink under the *EP Act* as summarised in Table 1-1 below. The draft EIS documentation will be published online and in hard copy at designated locations and will be open for comment for a period of up to 60 business days. Section 1.8 below provides details of how to provide comment on the EIS. On completion of the comment period, the NT EPA will provide public and NT Government agency submissions to Sun Cable to address in a Supplementary document that will also be published and open for public comment before the NT EPA makes its decision on whether to approve the proposal and under what conditions.

Table 1-1. Key assessment milestones for AAPowerLink proposal under Environment Protection Act 2019

Key assessment milestone	Status	Date if completed or legislated timeframe for future activities
Acceptance of proponent initiated EIS referral by NT EPA	Complete	16 October 2020
Referral public consultation period	Complete	27 November 2020
NT EPA decision on accepted referral	Complete	12 January 2021
Terms of Reference approved by NT EPA	Complete	19 January 2021
Notice of Significant Variation submitted by Sun Cable	Complete	5 August 2021
Variation public consultation period	Complete	13 August - 24 September 2021
Revised Terms of Reference approved by NT EPA	Complete	5 October 2021
Draft EIS submitted to NT EPA (This document)	Complete	March 2022
Draft EIS public and government authority consultation period	Future	April - June 2022 – up to 60 business days
Direction to prepare Supplement issued by NT EPA	Future	To be advised – 25 business days
Supplement submitted	Future	To be advised – late 2022
Draft EIS public and government authority consultation period	Future	To be advised – 15 business days

[2] The Darwin Converter Site and Cable Transition Facilities were originally proposed to be located on Middle Arm with the Subsea Cable System running through Darwin Harbour.

[3] Section 42 of the EP Act sets out the purpose of the environmental impact assessment process. Section 43 of the EP Act sets of the general duties of proponents under the Act. Appendices A, B and C includes tables that explain how each requirement has been met by Sun Cable and cross-references sections of the draft EIS where the supporting information is provided.

Key assessment milestone	Status	Date if completed or legislated timeframe for future activities
Assessment report provided to Minister by NT EPA	Future	To be advised – 45 business days
NT Ministers approval decision	Future	To be advised – 30 business days

1.6.1.2 Other NT legislation

Table 1-2 below summarises the key NT legislation that will apply to the AAPowerLink, including details of the specific permits and consents required and application of the legislation to the AAPowerLink.

Table 1-2. Key pieces of Northern Territory legislation relevant to AAPowerLink

Legislation	Permit/consent required	Application to AAPowerLink
LAND ACCESS		
Crown Lands Act 1992	License, lease or easement	An appropriate form of tenure commensurate with the activity and/infrastructure on the land is required from the NTG.
Land Title Act 2000	No specific permit or consent anticipated	Provides for registration of interests, or transfer, of land.
PLANNING & DEVELOPMENT		
Pastoral Land Act 1992 (NT)	Permit to clear >1ha of native vegetation	A permit to clear native vegetation will be required for clearing of the land required to develop the Solar Precinct and ancillary infrastructure on Powell Creek Station Pastoral Lease.
Planning Act 1999 (NT)	Non-Pastoral Use Permit (NPUP)	A NPUP will be required for development and operation of the Solar Precinct, which is located on Powell Creek Station Pastoral Lease.
	Permit to clear >1ha of native vegetation	Permits to clear native vegetation will be required for clearing of zoned to develop the OHTL, Darwin Converter Site and Cable Transition facilities. Subdivision approval to facilitate specific tenure arrangements may also be required.
	Development Permit	Development consent will be required for development of the OHTL, Darwin Converter Site and Cable Transition facilities which are located on zoned land. Subdivision approval to facilitate specific tenure arrangements may also be required.
Building Act 1993	Building Permit	This is required for infrastructure located within a building control area. Some remote regions of the NT are exempt.
	Occupancy Permit	This is required to ensure buildings have been constructed in accordance with a building permit.
ENERGY INFRATRUCTURE		
Electricity Reform Act 2000 (NT)	Retail Licence	Allows the licensee to trade in electricity and sell and retail electricity to customers within a specified retail area.
	Network Licence	Allows the licensee to own or operate an electricity network within a geographic area and connect the network to another electricity network.
	Generation Licence	Allows the licensee to generate electricity that can be sold to either a licensed generator or retailer. A licence does not guarantee dispatch, as this is determined by the System Controller. Batter technology is considered as generation under the licensing scheme.
	System Control Licence	Allows the licensee to exercise system control over the relevant power system by providing the functions of monitoring and controlling to ensure the system operates reliably, safely and efficiently.

Legislation	Permit/consent required	Application to AAPowerLink
	Independent Producers Licences	A special generation licence allows the licensee to generate electricity to be sold only under contract to a licensed generator.
	Isolated System License	Allows the licensee to generate and retail electricity as well as own and operate a network. This licence is intended for systems with no (or unlikely) interaction with another licensed entity.
HERITAGE PROTECTION		
Northern Territory Aboriginal Sacred Sites Act 1989 (NT)	Authority Certificate	The Act protects sites that are 'sacred and otherwise of significance in the Aboriginal Tradition'. Authority Certificates identify sites and objects of cultural significance and identify requirements for projects to protect/manage these sites. Sun Cable has applied for Authority Certificates and now the Aboriginal Areas Protection Authority (AAPA) will engage with site custodians to identify sacred sites protection requirements.
Heritage Act 2011 (NT)	Works Approval	The Heritage Act provides a 'blanket' or 'presumptive' protection for Aboriginal and Macassan archaeological places and objects and protects sites nominated to the Heritage Register. Archaeological heritage surveys are being undertaken across the AAPowerLink footprint in consultation with cultural monitors to identify sites and assess their significance. There are no sites on the Heritage Register proximate to the proposal footprint. The Act includes provisions for an *Application to Carry Out Work on a Heritage Place or Object* to be made if impacts to archaeological places and objects could occur.
ROADS AND TRANSPORT		
Control of Roads Act 1953 (NT)	Permit to work in a road reserve	Work within NT Government road reserves requires a permit under the Act. For the AAPowerLink this will include works on the Stuart Highway to establish the access road intersection at the Solar Precinct. Permits may also be required at locations where the OHTL crosses roads.
	Road Agency Approval	Required to undertake work involving creation of a new access onto a NT Government road, modification of an existing access, discharging stormwater or installation of new infrastructure within the NTG road network.
Local Government Act	Road agency approval & stormwater infrastructure	Where roads and stormwater infrastructure are the responsibility of a local government authority, approval is required to undertake works involving establishing a new access, modification of an existing access, discharging stormwater or installation of new infrastructure within the NTG road network e.g. access to the Darwin Converter site and potentially areas of the OHTL
Motor Vehicles Act 1949 (NT)	Permits for oversize and oversize vehicles	Permits will be required to allow for safe transport of large components from the Darwin Port along public roads to the Solar Precinct, OHTL and Darwin Converter Site. The Stuart Highway and Gunn Point Road are the main transport routes that will be used. Sun Cable has commenced logistics planning and indicative oversize/oversize vehicle trips have been considered in the Traffic Impact Assessment at Appendix K.
ENVIRONMENTAL PROTECTION		

Legislation	Permit/consent required	Application to AAPowerLink
Public and Environmental Health Act 2011 (NT)	Wastewater works design approvals Food business registration	Under the Act it is an offence to cause a public health nuisance, which is anything that has or is likely to put at risk or damage public health e.g. dust, smoke, odour, waste, creation of biting insect breeding habitat. Wastewater works design approvals will be required for onsite wastewater management systems used to treat and dispose of sewage and greywater from the construction camps and permanent facilities.
Territory Parks and Wildlife Conservation Act 1976 (NT)	Permit to take or interfere with wildlife	Pursuant to Section 56, the taking or interfering with wildlife that is listed as threatened, requires approval. Survey work has been undertaken and finding are discussed in Chapter 5 Terrestrial Ecosystems).
	Permit to conduct works within a park	Pursuant to section 21A, undertaking works within a park requires authorisation. The OHTL is proposed to go through the Black Jungle Conservation Reserve within the NTG utilities corridor.
Waste Management and Pollution Control Act 1998 (NT)	Disposal of waste	The Act establishes a general environmental duty to prevent or minimise pollution or environmental harm and reduce the amount of waste. Chapter 2 Proposal Description provides details of how Sun Cable proposes to comply with this duty. Operating a premises which disposes of waste by burial requires a licence under this act. Exemptions apply for domestic waste disposed of onsite and domestic waste from temporary construction camps.
Water Act 1992 (NT)	Bore permits Groundwater extraction licences	Bore permits and groundwater extraction licences are required for water supply bores proposed at the Solar Precinct site which is located in the Daly-Roper-Beetaloo Water Control District and Darwin Converter Site which is located in the Darwin Rural Water Control District
	Permit to interfere with waterway	Approval required for work that will interfere with the waterway's shape, volume, speed or direction of water flow, bed or bank stability. This may be required for access track crossings and poles along the OHTL will be designed to avoid disturbance to waterways.
Weeds Management Act 2001 (NT)	No specific permits or consents anticipated	Under the Act it is an offence to introduce and/or spread listed weed species. Sun Cable have prepared a Weed Management Plan (Appendix Q) that provides details of how it will comply with the requirements of the Act during construction of the AAPowerLink when there will be a high weed risk. During operations, weed inspections and control will be part of routine maintenance activities.
Fisheries Act 1988 (NT)	Permit	Permit required to cause or permit a shock, sound or other vibration under water.
OTHER		
Minerals Titles Act 2010 (NT)	Extractive Minerals Permit/Lease	A permit or lease may be required over the borrow area/s proposed for use to source construction materials at the Solar Precinct. A permit or lease is not required for extraction that is incidental to a construction project and is not for the sale of the extractive minerals. Requirements for materials at other construction locations will be met from commercial sources.
Mining Management Act 2001 (NT)	Extractive Minerals Authority	An authority will be required for extractives operations on approved permit or lease areas referenced above.

Legislation	Permit/consent required	Application to AAPowerLink
Work Health and Safety (National Uniform Legislation) **Act 2011 (NT)**	Hazardous chemicals notification	The Act establishes a duty to identify and manage risks to health and safety of workers, including providing safe facilities, first aid, emergency plans, personal protective equipment, managing risks from airborne contaminants, hazardous atmospheres, storage of flammable or combustible substances, hazardous work. The Act contains specific requirements for remote or isolated work, which will apply to the AAPowerLink. Notification to WorkSafe NT required if hazardous chemical volumes stored on site exceed manifest quantities.
Marine Act 1981 **(NT)**	Licence	A licence may be required under section 131 for a declared commercial service.

1.6.2 Commonwealth

The *EPBC Act* is Australia's national environmental legislation that requires assessment and approval of projects that are likely to results in significant impact on one or more of the nine 'protected matters' listed in Table 1-3.

The AAPowerLink proposal was referred under the *EPBC Act* and the delegate of the Australian Government Minister for the Environment decided that the proposed action is a controlled action and, as such, requires assessment and an approval decision due to the potential for a significant impact on Matters of National Environmental Significance (MNES) protected under Part 3 of the EPBC Act. The proposal is being assessed under an accredited assessment process, which means the NT EPA will assess the EIS on behalf of both the NT and Australian Governments and provide recommendations to both the NT and Commonwealth Environment Ministers on whether to approve the proposal and under what conditions. This draft EIS has been prepared to address the EIS ToR, which meet the requirements of both government jurisdictions.

Appendix C provides a table that specifically addresses other matters required by Schedule 4 of the EPBC Regulations .

Table 1-3. EPBC Act protected matters relevant to AAPowerLink proposal

Protected Matter	Relevant to the AAPowerLink proposal
World Heritage Areas	**No.** There are no World Heritage Areas proximate to the proposal and no potential impacts to these areas.
Wetlands of international importance (Protected under the RAMSAR convention)	**No.** There are no wetlands of international importance proximate to the proposal and no potential impacts to these areas.
National heritage places	**No.** There are no national heritage places proximate to the proposal and no potential impacts to these areas.
Listed threatened species and ecological communities	**Yes.** There is potential for EPBC listed threatened species to occur in the proposal footprint. Surveys for these species are being undertaken and potential impacts are assessed in the draft EIS
Listed migratory species (Protected under international agreements)	**Yes**. There is potential for listed migratory species to occur in the proposal footprint. Locations where these species could occur, and potential impacts are assessed in the draft EIS.
Commonwealth marine areas	**Yes.** The Subsea Cable System component of the proposal traverses the Commonwealth marine area. Potential impacts to the marine environment in the Commonwealth marine area, including the Oceanic Shoals Marine Park[1] are assessed in the draft EIS.
Great Barrier Reef Marine Park	**No.** The proposal is not near the Great Barrier Reef Marine Park.
Nuclear actions (including uranium mines)	**No.** There are no nuclear actions associated with the proposal.
Water resources (coal seam gas development and large coal mining development).	**No.** The proposal is not a coal seam gas development or coal mining proposal.

[1] The Oceanic Shoals Marine Park is also recognised as a Commonwealth Reserve under the EPBC Act.

Other Commonwealth legislation relevant to the proposal is listed in Table 1-4.

Table 1-4. Other Commonwealth legislation relevant to the AAPowerLink proposal

Legislation	Relevance to AAPowerLink proposal
Aboriginal Land Rights (Northern Territory) Act 1976 **(Cwth)**	This Act formalises inalienable freehold title for Traditional Owners of land in the Northern Territory. It also establishes Land Councils and Land Trusts to hold land for the benefit of Traditional Owners. The proposal will require the use of Aboriginal freehold land along sections of the OHTL. Relevant consultation processes under this Act must therefore be followed, and an agreement is to be reached under Section 19 of the Act.
Aboriginal and Torres Strait Islander Heritage Protection Act 1984 **(Cwth)**	This Act is intended as a last resort defence for significant sites, meaning that the Act is meant to provide emergency protection for Aboriginal and Torres Strait Islander heritage sites when all other avenues have been exhausted. As the NT has in place the Aboriginal Sacred Sites Act and Heritage Act to protect heritage sites, this Act is unlikely to apply to the AAPowerLink.
Offshore Electricity Infrastructure Act 2021 **(Cwth)**	The *Offshore Electricity Infrastructure Act 2021* was passed into legislation in November 2021. Its commencement date has not been confirmed yet, and the corresponding Regulations have not been enacted at the time of publication. Consultation with Government indicates that the Act and forthcoming Regulations are planned to commence mid-2022. Under Section 59, a Transmission and Infrastructure Licence would authorise Sun Cable to construct, install, commission, operate, maintain and decommission its offshore electricity transmission infrastructure within the Commonwealth offshore area (i.e. the Australian Territorial Sea, the EEZ and the Commonwealth Marine Area). Accompanying Management Plans and financial security would also need to be provided to the National Offshore Petroleum Safety and Environmental Manager (NOPSEMA), the current nominated Regulator for this Act. The *Offshore Electricity Infrastructure Act 2021* also makes it an offence to interfere with the exercise of Native Title rights and interest in the Commonwealth offshore area, where that interference is greater than necessary for the reasonable exercise of rights and obligations under the *Offshore Electricity Infrastructure Act 2021.*
Australian Energy Market Act 2004 **(Cwth)**	Section 6 of the *Australian Energy Market Act 2004* applies the *National Electricity Law* to the NT offshore area (i.e. the area between the edge of the Northern Territory Coastal Waters and the Australian Continental Shelf).
Native Title Act 1993 **(Cwth)**	Sun Cable is working with the NLC to negotiate voluntary Indigenous Land Use Agreements (ILUA) and to seek consent from traditional owners and custodians. In 2020, Sun Cable entered into an agreement with the NLC for the purpose of such negotiations. Sun Cable has also entered into a costs agreement for the purpose of supporting the NLC to conduct consultation and engagement to seek consent for the AAPowerLink proposal.
Submarine Cables and Pipelines Protection Act 1963 **(Cwth)**	The Act implements Australia's obligations under the United Nations Convention on the Law of the Sea. This includes provisions for penalties for parties that break or injure a submarine cable within Australia's Exclusive Economic Zone. This is also an offence more broadly recognised in international maritime law under Article II of the *International Convention for the Protection of Submarine Cables, 1884* (the Submarine Cables Convention), which applies to all legally established submarine cables situated outside territorial waters, and which make landfall to a Party State. Australia is a Party State to the Submarine Cables Convention. Article II of the Submarine Cables Convention makes it an offence to break or injure a submarine cable, either wilfully or culpable negligence. Exemptions apply where the breakage or injury to a cable is done in the course of saving lives or ships after taking every necessary precaution to avoid harming the cable.

Australian Jobs Act 2013 (Cwth)	Yes. The Act requires proponents of major projects with capital expenditure of $500 million or more to provide opportunity for Australian industry to bid to supply key goods and services.
Civil Aviation Act 1998 (Cwth)	The *Civil Aviation Act 1988* sets out a regulatory framework for the Civil Aviation Safety Authority (CASA) to maintain, enhance and promote the safety of civil aviation, with a particular emphasis on preventing aviation accidents and incidents. Part 139 of the *Civil Aviation Safety Regulations 1998* sets out the relevant criteria for determining the level of CASA involvement. It is most likely that the airstrip supporting the Solar Precinct will require Certified Aerodrome accreditation from CASA under Clause 139.025 of the *Civil Aviation Safety Regulations 1998*. This is due to the proposed size and frequency of aircraft which would use the proposed airstrip.
Air Services Act 1995 (Cwth)	Under the *Air Services Act 1995* (Cwth), Air Services Australia is responsible for airspace management, aeronautical information, aviation communications, navigation aids and technology, flight path changes, and Aviation Rescue Fire Fighting Services. Consultation would be undertaken with Air Services Australia to confirm no disruption to existing airspace architecture through the operation of a new airstrip at the Solar Precinct.
Telecommunications Act 1997 (Cwth)	Clause 4 of Schedule 3A empowers the ACMA to establish protection zones for submarine telecommunication cables within Australian waters (generally up until the extent of the Commonwealth Marine area). However, this can only be done for submarine telecommunication cables which are cables of national significance (under Clause 18). Sun Cable will continue to consult with proponents of submarine telecommunications cable projects in the vicinity of the proposal to ensure any infrastructure conflicts are notified and managed appropriately under the Telecommunications Act 1997 (Cwth).
Biosecurity Act 2015 (Cwth)	The *Biosecurity Act 2015* implements the *International Convention for the Control and Management of Ships' Ballast Water and Sediments*, 2004 in Australia. All vessels entering Australia are subject to Australia's general biosecurity framework, including any directions given to that vessel upon entry/exit. The Act also regulates the ballast water and sediment held by certain vessels as per UNCLOS. However, this does not apply to permanent ballast water which is sealed in a tank on a vessel and not discharged from that vessel. The operator of a vessel must give a report (under Section 267) if it is intended that the vessel discharge, or the vessel discharges, ballast water in the Australian Territorial Sea. There are also offences for discharging ballast water and sediments without approval (under Section 270). For Australian vessels, these offences apply whether the vessel is within or outside Australian seas. For Australian vessels and vessels whose nation is subject to the BWM Convention, this extends to the outer limits of the EEZ. For all other foreign vessels not subject to the BWM Convention, Section 270 only applies where that vessel is within the Australian Territorial Sea. Management Plan, record-keeping and the use of appropriate discharge facilities are also requirements under this Act.
Environment Protection (Sea Dumping) Act 1981 (Cwth)	The *Environment Protection (Sea Dumping) Act 1981* implements the Commonwealth Government's responsibilities under the *Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972* (London Protocol) within the Australian Territorial Sea and the Continental Shelf (i.e. all of Australia's waters bar the Northern Territory Coastal Waters). Proposed pre-sweeping and cable burial techniques under consideration required to install the proposal's Subsea Cable System may trigger further consideration under this legislation.

Underwater Cultural Heritage Act 2018 (Cwth)	The *Underwater Cultural Heritage Act 2018* protects shipwrecks, sunken aircraft and other types of underwater cultural heritage within Australian waters (generally from the edge of the Northern Territory Coastal Waters until the extent of the Commonwealth marine area, including Australia's Aboriginal and Torres Strait Islander Underwater Cultural Heritage in Australian waters. It manages Australia's general responsibilities with regards to maritime heritage, as are referred to within UNCLOS. Sections 29 and 30 of the *Underwater Cultural Heritage Act 2018* make it an offence to undertake prohibited conduct in a prohibited zone, or to engage in conduct which is likely to have an adverse impact on protected underwater cultural heritage, without first obtaining a permit under Section 23. Section 40 of the *Underwater Cultural Heritage Act 2018* makes it an offence to fail to notify DAWE in writing within 21 days of discovering an article of underwater heritage in Australian waters which appears to be of an archaeological character.
North Marine Parks Network Management Plan (Director of National Parks, 2018)	The *North Marine Parks Network Management Plan* (Director of National Parks, 2018) is managed by Parks Australia and has the force of legislation as per the EPBC Act and the *Environment Protection and Biodiversity Conservation Regulations 2000*, enabling the Commonwealth's responsibilities under the *International Union for the Conservation of Nature* to be met. The Management Plan sets out the approval and permitting regime for the Oceanic Shoals Marine Park, as part of the North Marine Parks Network, as per the *Environment Protection and Biodiversity Conservation 2000* Regulations. Generally, Section 354 of the EPBC Act makes it an offence to carry out works in a Commonwealth Reserve (including a Marine Reserve) except in accordance with a management plan in operation for the reserve. As the proposal would traverse through the Oceanic Shoals Marine Park, it would therefore be subject to this Management Plan. Activities including excavations, the erection of a structure, carrying out of works (including structure maintenance), and associated activities can only be carried out with a permit issued under Section 4.4.1, or a Class Approval issued under Section 4.4.2, or an Activity Licence or Lease issued under Section 4.4.3 of the *North Marine Parks Network Management Plan* (Director of National Parks, 2018). The general provisions in Section 4.2.1 of the Management Plan must be followed regarding general use, access and waste management. The prescriptions set out in Section 4.2.2 for commercial shipping must also be followed. Sun Cable is seeking a Class approval for activities within the marine park. Moreover, Section 4.2.10.5 provides that excavations, erection of structures, works and maintenance and associated activities may be undertaken where another Commonwealth approval is in place, such as under Part 9 of the EPBC Act, and Section 19 of the *Environment Protection (Sea Dumping) Act 1981*.
Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cwth)	NOPSEMA is empowered to prohibit certain vessels from entering or being present in a petroleum safety zone surrounding a petroleum well, structure or equipment. The AAPowerlink may traverse the Petroleum Safety Zone of the Santos Barossa gas pipeline duplication proposal. Written consent may be required to be obtained from NOPSEMA under Section 618 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* prior to entering this area.
Defence Act 1903 (Cwth) *Control of Naval Waters Act 1918* (Cwth)	Section 124 of the *Defence Act 1903* (Cwth) permits the making of regulations to establish defence practice areas. The *Control of Naval Waters Act 1918* (Cwth) provides for the declaration of 'naval waters' by Proclamation of the Governor-General. The Project could generate potential conflicts with the Military Firing Practice and Exercise Area (specifically Zones R264C and R264D) which constitute the Northern Australia Exercise Area (NAXA) adjacent to Darwin. Consultation with the Department of Defence in the Northern Territory is therefore being undertaken. Historic Department of Defence activities within the Northern

	Territory also create a general concern for unexploded ordnance, and the Department of Defence is being consulted with regards to this. Moreover, consultation will be undertaken with the Australian Air Force regarding the use of an airstrip at the Solar Precinct, in order to ensure that this will not generate any airspace conflicts with RAAF Base Tindal at Katherine, which currently operates as a joint RAAF/civilian airport.
Diplomatic Privileges and Immunities Act 1967 **(Cwth)**	As per the *Diplomatic Privileges and Immunities Act 1967*, the functions of an Australian diplomatic mission include "representing the sending State in the receiving State," as per Article 3 of the *Vienna Convention on Diplomatic Relations 1961*. Matters requiring notification under UNCLOS, and the Perth Treaty would be referred to the Department of Foreign Affairs and Trade in the first instance to undertake formal notification to other interested nation-state parties (most likely Indonesia under UNCLOS and the Perth Treaty). It is generally the case that the foreign Government be contacted and provided with the option to object to the proposed Subsea Sable System route within a stipulated period.

1.6.3 Overseas approvals

1.6.3.1 Indonesia

The AAPowerLink consists of a 525 kV High Voltage Direct Current subsea cable system crossing Indonesian waters. No landfall is proposed in Indonesia for the AAPowerLink system, however some onshore components and activities may be proposed (e.g., facilities for marine operations and cable maintenance). The development phase commenced in Indonesia in November 2020 when Sun Cable began introducing the Project to Indonesian government agencies and will continue through a Notice to Proceed. Sun Cable has established an office in Jakarta with a growing team of local Indonesian personnel and has contracted a number of local consultants, institutions and organisations to support the development of the Project.

The AAPowerLink crosses approximately 3,403 km of Indonesian territorial waters (Indonesian Territorial Sea and Exclusive Economic Zone, entering from Nusa Tenggara Timur, through the Strait of Lombok entering the Java Sea, into the waters between Bangka and Belitung, through the waters of Batam and Bintan and into Singapore waters. Extensive consultation with Indonesian Government, Provincial governments, special interest groups and communities potential affected by the project has been underway since 2020.

A detailed Regulatory Approvals and Permits Plan has been developed to identify the many permits and authorisations required for the Indonesian components of the Project, which is in the process of being implemented. AAPowerLink will be subject to an Environmental Impact Assessment, or AMDAL, to obtain an environmental approval from the Ministry of Environment and Forestry. A number of other Indonesian permits and approvals are required including an Approval of the Conformity for Marine Spatial Utilization Activities or Persetujuan Kesesuaian Kegiatan Pemanfaatan Ruang Laut (PKKPRL). Various other Indonesian laws also govern the management of environmental impacts more generally, as well as security matters with respect to the use of and passage through Indonesia's waters.

Sun Cable continues to engage with the regulators and stakeholders in Indonesia to confirm the applicability of, and process for completing, these regulatory processes with respect to the proposal.

1.6.3.2 Singapore

Singapore is a highly regulated environment where there are codes and standards governing major infrastructure and built environment. Land resource is one of the major challenges facing Singapore and the shortage of developable land has resulted in investment dilemma for the government.

Sun Cable has been engaged with the Singapore Government and the Energy Management Authority since 2019 with regard to the proposed project. Sun Cable has established an office in Singapore with a local professional team responsible for corporate, commercial and development functions of the company.

The project consists of a subsea cable system, a landing site with converter facilities, battery energy storage and interconnection with the Singapore electrical network. Two landing sites are under consideration and are subject to the Singapore electricity import licence process.

A detailed Regulatory Approvals and Permits Plan has been developed for the Singaporean components of the Project and is in the process of being implemented. There are many permits and authorisations required for the Project facilities in Singapore. The primary approvals include:

- Electricity Import License
- COMET Approval
- Land Lease
- Foreshore Lease
- Environmental Approval

Sun Cable continues to engage with the regulators and stakeholders in Singapore to confirm the applicability of, and process for completing, these regulatory processes with respect to the proposal.

1.7 Stakeholder engagement

Sun Cable is committed to embedding ongoing, transparent dialogue with stakeholders throughout the proposal's life cycle from planning through to post-closure. Within the last twelve months, Sun Cable has established a Darwin office and recruited a team of Territorians with a detailed understanding of AAPowerLink's complex, multi-faceted and unique operational and engagement landscape. This team is responsible for the NT development and engagement activities, including the implementation and management of the Social Impact Management Plan (SIMP; Appendix J), which is a key organisational tool to control and manage environmental and social risks to people. Sun Cable's investment in additional resourcing for the proposal demonstrates the company's commitment to respond to stakeholder concerns raised during the EIS process and proactively manage relationships moving forward.

In 2020, Sun Cable engaged Darwin-based communications and social impact assessment (SIA) specialists True North to assist with stakeholder consultation for the EIS. True North prepared a stakeholder engagement and communications strategy, outlining key stakeholders likely to be impacted, interested or influential during AAPowerLink planning and delivery. A scoping study for the SIA (Appendix I) was also undertaken to identify key issues that could arise from the AAPowerLink, potential positive and negative impacts and strategic stakeholder engagement priorities and methods for Sun Cable to employ. The Stakeholder Consultation Report (Appendix F) provides an analysis of the engagement and communications methods undertaken, issues raised by stakeholders, and a snapshot of Sun Cable's ongoing engagement priorities and planned activities

1.7.1 Objectives

The objectives and approach to stakeholder consultation have been guided by the *Northern Territory Environment Protection Authority's (NT EPA) Guidance for proponents on stakeholder engagement* (2021) and by the *Core Values and Quality Assurance Standards* of the *International Association for Public Participation (IAP2)*. The objectives of stakeholder consultation for the EIS were to:

- Provide all community and other stakeholders with timely, accurate and relevant information
- Tailor consultation methods and communication materials to the needs of diverse stakeholders, including culturally appropriate consultation for Aboriginal stakeholders
- Inform scoping and project planning through the life cycle of the project

- Provide Sun Cable and regulators with confidence that the community's attitudes, beliefs, values and concerns are well-understood
- Inform balanced decision-making by giving equal weight to community knowledge and technical studies
- Provide feedback to stakeholders on how their input influenced regulatory and project decisions.

1.7.2 Stakeholders

The key stakeholder groups consulted are shown in Figure 1-3 and engagement is ongoing. The Stakeholder Consultation Report (Appendix F) documents each specific entity consulted during the preparation of the EIS and SIA. All consultations are recorded in Sun Cable's Stakeholder Register, including details of people consulted, issues raised, and follow-up actions required.

1.7.3 General engagement

Methods used to provide information and seek feedback included:

- **Briefings and meetings** with key stakeholders, community and industry groups to outline the project, respond to questions and listen to feedback, including Government Coordination meetings and Barkly Regional Deal workforce development committee (generally attended by both Sun Cable and True North)
- **Workshops** with Northern Territory Government departments (Sun Cable)
- Sun Cable has worked with the **NT Industry Capability Network (ICN)** to provide information on the ICN Project Gateway site on the AAPowerLink Project and separate ancillary projects (a proposed manufacturing facility at East Arm and battery on East Arm)
- **Key informant interviews** with specific stakeholders to elicit insights, local and specialist knowledge (generally True North and Mark Stoyles Consulting)
- **Public information sessions**, primarily designed to reach stakeholders who may have been unaware of the project (12 sessions between 22 September and 4 November at shopping centres and public places in the Greater Darwin Region, Katherine, Tennant Creek, Elliott and Marlinja which were advertised in local media, by email and the distribution of community posters)
- **Industry briefings** (NT Chamber of Commerce, Manufacturers' Council and Energy Club)
- **Attendance at conferences,** such as the First Nations Clean Energy Conference in Alice Springs in November 2021.

Figure 1-3: Categories of stakeholders consulted. Source: True North (2022)

1.7.4 Engagement with Aboriginal people

Sun Cable is committed to fostering and maintaining ongoing, transparent, and culturally appropriate dialogue with Aboriginal stakeholders using multi-method and adaptive communication approaches throughout the proposal's life cycle from planning through to post-closure. Sun Cable will continue to work with land councils and other representative bodies, to ensure that engagement methods and communications materials are appropriately targeted and delivered to meet people's needs and statutory requirements.

Sun Cable recognises the roles, interests and aspirations of Aboriginal peoples across the proposal footprint. AAPowerLink will promote dialogue with Aboriginal stakeholders, operate with respect for cultural authority, and seek to promote the cooperative use of Aboriginal knowledge of cultural heritage for the life of the proposal. As such, the company is committed to:

- Developing an Aboriginal Engagement Strategy to increase participation across the proposal, identify Aboriginal enterprise opportunities and aspirations of key stakeholder groups
- Working with community groups and other stakeholders to develop a suite of communications materials in Plain English, utilising multimedia to ensure communications materials are accessible to Aboriginal stakeholders across the proposal footprint and enhance local understanding of and engagement with the AAPowerLink
- Negotiating voluntary legal agreements across the proposal footprint that recognise Aboriginal traditional land ownership
- Developing a Regional (Aboriginal) Legacy Strategy for the proposal that will have lasting social, cultural, economic and environmental benefits.

In scheduling consultation to date, priority was given to directly affected stakeholders, in particular, Native Title Holders for the site of the proposed Solar Precinct on Powell Creek Station. In March 2021, the NLC organised meetings for Powell Creek Native Title Holders and neighbouring estate groups in Tennant Creek,

Elliott and Katherine. In addition, Sun Cable carried out dedicated engagement with Traditional Owners and Native Title Holders including:

- An estimated 33 days in the field with paid cultural monitors for ecological surveys and the cultural heritage surveys on Powell Creek, Gunn Point and the Litchfield utilities corridor
- Sun Cable meetings with the Northern Land Council (NLC), Central Land Council (CLC), Tiwi Land Council (TLC), Larrakia representative bodies and individuals and families with ties to affected areas
- Dedicated meetings by the Northern Land Council (NLC) to inform Indigenous Land Use Agreement (ILUA) negotiations
- A site visit for Traditional Owners organised by the NLC and Sun Cable in April 2021 to discuss the final location and boundaries of the Solar Precinct footprint
- A briefing of the Mantiyupwi Clan Estate in Darwin and on the Tiwi Islands to discuss Tiwi cultural connections to the Gunn Point Peninsula and the subsea cable route
- Lodgement of the AAPowerLink Project Authority Certificates with the Aboriginal Areas Protection Authority (AAPA) after extensive consultation and review (additional sacred sites clearances will be conducted by the NLC to satisfy ILUA requirements)
- Site visits with family groups to view a Technology Research Station on Powell Creek Station, including work being done by local companies (this work was approved separately and is not covered by the EIS).

1.7.5 Addressing stakeholder concerns

The Stakeholder Consultation Report (Appendix F) documents detail the issues raised by stakeholders and provides details of where the issues are addressed in the EIS. A Social Impact Management Plan (SIMP) (Appendix J) has been prepared to address these key issues. The SIMP summarises the potential social, cultural and economic risks and opportunities of the proposal and provides a management tool to control and manage these risks through mitigation, management and commitments. Sun Cable is developing strategic initiatives to manage the social and economic impacts of the AAPowerLink. These include:

- A Territory Benefit Plan and specific communication strategy, including non-statutory community and strategic investments
- A Regional (Aboriginal) Legacy Strategy to outline how the proposal will deliver lasting, intergenerational benefits throughout the proposals life span
- A Local Workforce Strategy (see Appendix within the SIA Appendix I) to deliver jobs for Territorians across the construction and operating phases of the Project, generate benefits for NT businesses, and create pathways from endemic unemployment and poverty to jobs
- Industry capability mapping and gap analysis study of trades, services, and supply capacity in the Northern Territory by the NT Industry Capability Network (ICN) (Appendix Y)

1.7.6 Future engagement

Sun Cable is committed to maintaining ongoing, transparent dialogue with stakeholders throughout the Project's life cycle from planning through to post-closure. Sun Cable will continuously refine its adaptive communications approach and embed engagement into every facet of the AAPowerLink.

The EIS public consultation period (see Section 1.8 below) provides a formal process through which stakeholders can raise issues/concerns with the NT EPA. In addition to this process, Sun Cable's proposed future engagement includes:

- Consultation by the NLC with Native Title Holders as part of negotiations for several ILUAs
- Discussions with AAPA, NLC and Aboriginal custodians through the Authority Certificate process

- Working with the NLC on consultation along the proposed OHTL corridor
- Sun Cable consultation with other stakeholders along the railway corridor
- Negotiation of a voluntary engagement agreement with key Larrakia organisations to maximise benefits in the Darwin region
- Presentations to a range of local government, NT government, community and business groups, including regional industry forums
- Working with existing governance structures, such as the Barkly Regional Deal and community planning in Elliott
- Identifying relevant events Sun Cable can attend or present to in 2022, including the Katherine and Barkly Major Projects Conference (May 2022)
- Key agency briefings and public consultation associated with the draft EIS lodgement and subsequent supplementary process.

1.8 How to have your say

The draft EIS documentation will be published online and in hard copy at designated locations (see below) and will be open for comment for a period of up to 60 days. Notification of commencement of the public comment period will be provided online through the NT EPA Consultation Hub (https://ntepa.nt.gov.au/consultation/open-consultations) and will be advertised in local and national media outlets. Sun Cable will be actively engaging with the community and stakeholders throughout the exhibition period with the objective of raising awareness of the AAPowerLink proposal, foster a clear public understanding of the proposal, and the opportunities available to 'Have your say' through the EIS process.

The draft EIS documentation will be available online at:

- NT EPA Consultation Hub (https://ntepa.nt.gov.au/consultation/open-consultations)
- Sun Cable AAPowerLink website aapowerlink.sg

The documentation will also be made available in hard copy at the following designated locations:

- NT EPA, Level 1, Arnhemica House, 16 Parap Road, Parap
- Adelaide River Post Office Store, 1 Stuart Highway, Adelaide River
- Barkly Regional Council Office, 41 Peko Road Tennant Creek NT
- Elliott Post Office, Elliott
- Environment Centre Northern Territory, Unit 3, 98 Woods Street, Darwin
- Katherine Public Library, Level 1, Randazzo Centre, Katherine Terrace, Katherine
- Northern Land Council, 45 Mitchell Street, Darwin
- Northern Territory Library, Parliament House, Darwin
- Victoria Daly Regional Council – Pine Creek Office, 55 Moule Street, Pine Creek

General information about how to make a submission is provided in the NT EPA Guideline *Making a public submission during the environmental impact assessment process* [Available here]. Specific instructions on how to make a submission on the AAPowerLink draft EIS are provided on the NT EPA Consultation Hub. Submissions can be made in writing or orally as follows:

- NT EPA Consultation Hub 'Submit your comments' link
- Hard copy posted to Northern Territory Environment Protection Authority, GPO Box 3675 Darwin NT 0801, or delivered in person to: Level 1, Arnhemica House, 16 Parap Road, Parap.

- Orally in person or by audio or audio-visual communication or recording. If this method is used, the NT EPA must give the proponent a written statement of the substance of an oral submission made to the NT EPA.
- In any other manner approved by the NT EPA pursuant to regulation 261 of *the Environment Protection Regulations.*

Submissions received by the NT EPA will be forwarded to Sun Cable to address in the Supplementary EIS and the submissions and Sun Cable's response will be taken into consideration by the NT EPA when deciding whether to approve the proposal.

1.9 References

International Energy Agency 2001, World Energy Outlook 2001, OECD/IEA, Paris.

Geoscience Australia, 2010, Australian Energy Resource Assessment. 1st Ed. Geoscience Australia, Canberra.

Department of Industry, Science, Energy and Resources (2020), Australian Energy Update 2020, Australian Energy Statistics, September, Canberra.

Global Solar Atlas n.d. *Global Solar Atlas*, Solargis. Available at https://globalsolaratlas.info/map.

IRENA 2020, Renewable Power Generation Costs in 2020. Available at https://www.irena.org/publications/2021/Jun/Renewable-Power-Costs-in-2020

VDMA 2020, International Technology Roadmap for Photovoltaic (ITRPV) 2020 Results. Available at https://www.vdma.org/international-technology-roadmap-photovoltaic

BloombergNEF 2019, *A Behind the Scenes Take on Lithium-ion Battery Prices 2019.* Available at https://about.bnef.com/blog/behind-scenes-take-lithium-ion-battery-prices/

BloombergNEF 2020, Battery price cost survey 2020, BloombergNEF.

Northern Territory Government 2020a, *Climate Change Response: Towards 2050*. Office of Climate Change, Department of Environment and Natural Resources. Available at https://depws.nt.gov.au/__data/assets/pdf_file/0005/904775/northern-territory-climate-change-response-towards-2050.pdf

Northern Territory Government 2018, *Electricity market reform*. Department of Treasury and Finance. Available at https://treasury.nt.gov.au/dtf/economic-group/electricity-market-reform

Northern Territory 2017. Northern Territory Roadmap to Renewables: 50 per cent by 2030, Available at https://roadmaptorenewables.nt.gov.au/?a=460760

Northern Territory Government 2020b, Territory Economic Reconstruction Commission Report. Available at https://ntrebound.nt.gov.au/publications/final-report

Energy Market Company n.d, National Electricity Market of Singapore Market Reports from 2016-2020. Available at https://www.emcsg.com/aboutus/publicrelations/marketreports

Wood Mackenzie 2020, Singapore gas and LNG long-term outlook H1 2020. Available at https://www.woodmac.com/reports/gas-markets-singapore-gas-and-lng-long-term-outlook-h1-2020-326839

Energy Market Authority 2021, *Energy Market Statistics.* Available at https://www.ema.gov.sg/Statistics.aspx

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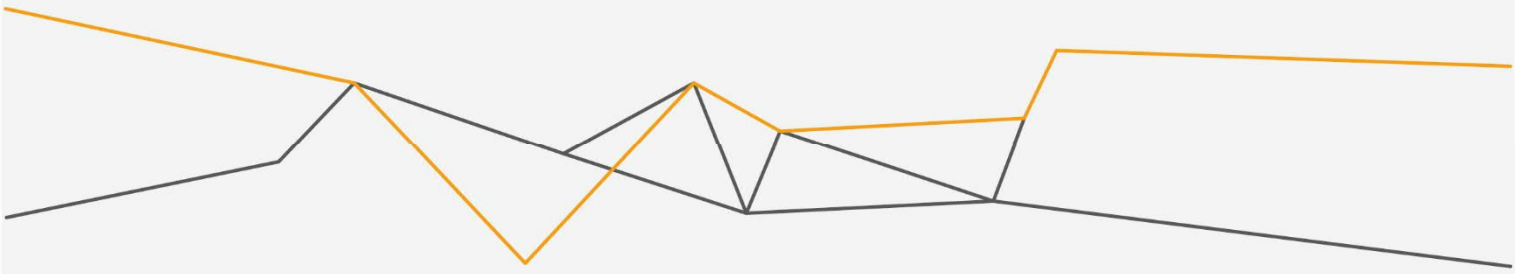

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