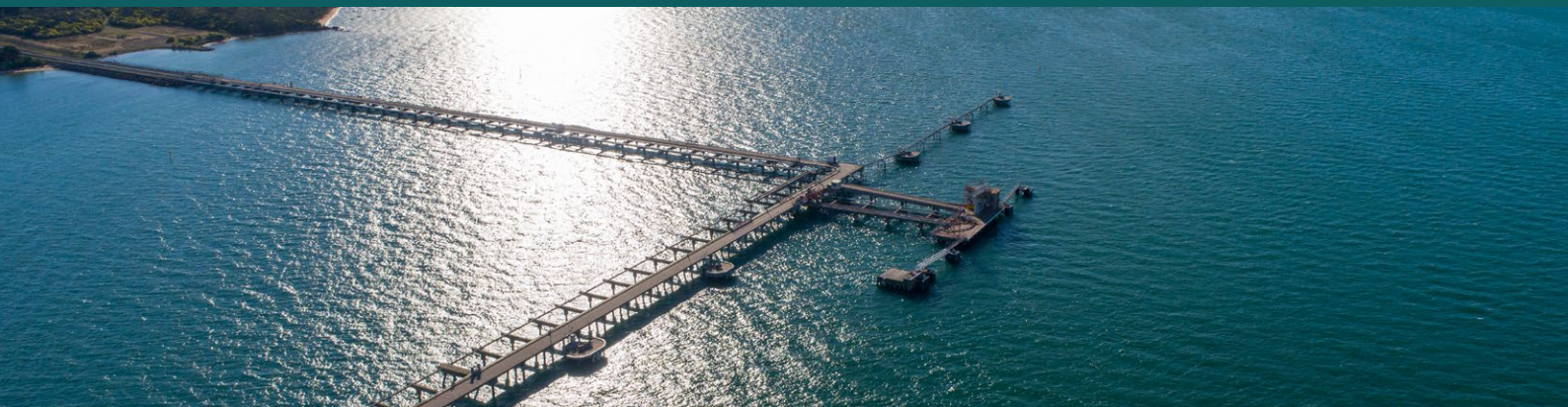


Chapter 1

Introduction



1.1 Introduction

This chapter provides an overview of the proposed Gas Import Jetty and Pipeline Project (the Project) and sets out the purpose and structure of the Environment Effects Statement (EES) for the Project.

The Project would provide an additional supply of natural gas into the south eastern Australian states for industrial, commercial and residential customers.

- The Project would establish a gas import jetty and pipeline comprising:
- a floating storage and regasification unit (FSRU) at Crib Point Jetty – the Gas Import Jetty Works
- a gas pipeline between Crib Point and Pakenham to connect to the Victorian Transmission System (VTS) east of Pakenham – the Pipeline Works.

Unless additional southern reserves and resources or alternative infrastructure are developed, domestic customers in the south-eastern states face a potential market shortfall from 2024 onwards (AEMO, 2020). The Project would improve energy security for industrial, commercial and domestic customers and would increase competition.

1.2 Proponent profiles

The joint proponents of the Project are AGL Wholesale Gas Limited (AGL) and APA Transmission Pty Limited (APA).

AGL would be responsible for the Gas Import Jetty Works. APA would be responsible for the Pipeline Works.



Floating storage and regasification unit (FSRU)

An FSRU is a vessel that stores and regasifies liquefied natural gas (LNG) for distribution.

The FSRU would store up to 170,000 cubic metres (m³) of LNG and regasify it as required to meet gas demand.

1.2.1 AGL Wholesale Gas Limited

The AGL group has over 180 years of history in the energy industry operating across the supply chain with investments in energy retailing, thermal electricity generation and renewable projects. AGL is one of Australia's largest retailers of gas and electricity with more than 3.7 million customers in Victoria, New South Wales, South Australia, Western Australia and Queensland.

Within AGL's gas operations portfolio, the company owns and operates Newcastle Gas Storage Facility, Silver Springs Gas Storage Facility, Camden Gas field, Silver Springs Gas fields, Wallumbilla LPG Refinery at Wallumbilla, and firm transportation rights on pipelines in Queensland and New South Wales.¹

Outside of gas operations, AGL owns and operates a number of coal-fired power stations, gas-fired thermal power stations, gas peaking power plants, hydro-electric power stations, and wind and solar farms.

¹ https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/gsoo/2020/2020-gas-statement-of-opportunities.pdf?la=en

Health, Safety and Environment Policy

AGL has a strategic framework in place for providing a safe working place and protecting the environment. The objective of this Target Zero framework is zero harm to people and the environment.

AGL is committed to protecting its employees, contractors and the environment and has implemented the following policies:

- AGL Health and Safety Policy
- AGL Environment Policy
- AGL Greenhouse Gas Policy.

The vision of the AGL Environment Policy is to protect the environment and minimise AGL's environmental footprint in the areas where it operates, in collaboration with its stakeholders.

The AGL Health, Safety and Environment Management System sets out how AGL will implement its Health and Safety Policy and its Environment Policy. The AGL environmental management process and practices align with the requirements of the Environmental Management System Standard (ISO 14001:2015).

AGL applies a risk-based approach to environmental management, driven and influenced by AGL's Environment Policy, to identify and minimise impacts to as low as reasonably practicable. A risk-based approach is also adopted by environmental agencies and regulators and other organisations.

As part of AGL's Greenhouse Gas Policy, AGL is moving into a carbon constrained future nationally and internationally. The Greenhouse Gas Policy provides a pathway for the gradual decarbonisation of AGL's generation portfolio by 2048.

Environmental performance

AGL's businesses are subject to a range of environmental laws and regulations as well as project and site-specific environmental permits and approvals issued at both the Federal and State Government levels. There are no past or present proceedings under a Commonwealth, State or Territory law associated with AGL Wholesale Gas Limited. Recent information on AGL Group's environmental performance is available in the sustainability report. A summary of AGL Group's environmental performance during FY19 is also available in the Annual Report. This information can be found at the following links respectively:

- <https://www.agl.com.au/about-agl/sustainability/sustainability-performance>
- <https://www.2019annualreport.agl.com.au/business-value-drivers/environment>
- <https://www.2019annualreport.agl.com.au/directors-report/other-required-disclosures/environmental-regulation>.

1.2.2 APA Transmission Pty Limited

APA Transmission Pty Limited is a wholly-owned subsidiary of the APA Group (together referred to as APA). APA is a public company listed on the Australian Stock Exchange (ASX: APA).

APA is Australia's largest natural gas infrastructure business, owning and/or operating more than 15,000 kilometres of pipeline transmission infrastructure. Its gas transmission pipelines span every state and territory in mainland Australia, delivering approximately half the nation's gas requirements.

APA also has ownership interests in, and operates, the Allgas gas distribution network and operates the Australian Gas Networks (formerly Envestra Limited) assets. Combined, these assets comprise approximately 27,000 kilometres of gas distribution mains, with approximately 1.3 million gas consumer connections.

APA also owns other energy infrastructure assets such as gas storage facilities, gas-fired power stations, and solar and wind farms. In total, APA owns and/or operates around \$20 billion of energy assets.

APA's 7,500 kilometre East Coast Grid of interconnected gas transmission pipelines provides the flexibility to move gas around eastern Australia, from Otway and Longford in the south, to Moomba in central Australia and Mount Isa and Gladstone in the north.

Health, Safety and Environment Policy

The APA Health, Safety and Environment Policy sets out APA's commitment to achieving zero harm to its employees, contractors and third-party stakeholders that operate APA assets or work near them as well as zero harm to community members who live near APA assets. APA is also committed to avoiding and minimising environmental harm where APA assets are located.

Each APA employee, contractor and sub-contractor has an obligation to prevent or minimise any environmental harm arising from APA operations and activities.

APA seeks to deliver an environmentally responsible, safe and essential service by:

- taking a systematic and risk-based approach to environmental risk management
- maintaining compliance with environmental laws in all jurisdictions including emissions reporting obligations
- including environmental risk management in all investment and procurement decision-making
- meeting or exceeding the Australian Pipelines and Gas Association (APGA) Code of Environmental Practice
- contributing to policy and responding to climate change initiatives to promote the use of gas as essential to a cleaner energy mix
- evaluating further renewable energy and low emission gas generation opportunities.

APA takes the approach of supporting reducing carbon emissions as a responsible risk mitigation response to climate change, including evaluating complementary clean energy projects.

Health and safety record

APA aspires to a zero harm workplace for its employees and contractors. In FY2019, the Total Reportable Injury Frequency Rate (TRIFR) was 5.98, down from 8.94 in FY2018. The TRIFR metric includes employees and contractors. The reduction in injuries can be attributed to the increased focus placed on Health and Safety during the year. Activities such as APA's active monitoring program requires our leaders to engage with employees on Health and Safety topics and the continued use of 'lessons learned' communications arising from incident investigations to help further prevent injuries and incidents. Importantly, there were no fatalities of employees or contractors in FY2019 (FY2018: nil).

Incidents resulting in the issuance of a regulatory notice did increase to 5 in FY2019 (FY2018: 4). All events leading to Regulatory Notices received in FY2019 have been thoroughly investigated by APA and actions implemented to rectify related issues. Three of the five regulatory notices received in FY2019 were issued to Principal Contractors conducting construction works. APA has worked proactively with these contractors so we can ensure they continue to be equipped to conduct their work safely.

Environmental performance

Pursuing a high standard of environmental stewardship forms part of the APA Way, and we are committed to minimising environmental harm across all areas of our business.

APA operates its assets under a number of approved environmental regulatory instruments within relevant federal, state and territory jurisdictions. Collaboration between APA's Technical & Regulatory and Environment & Heritage Team functions ensures that environmental obligations are planned for concurrently with other regulatory requirements so that pipeline, distribution, power and gas processing assets owned and/or operated by APA are designed, constructed, tested, operated and maintained in accordance with requirements of the relevant regulatory departments.

During the most recent reporting period (FY2019), APA received one regulatory notice relating to environmental compliance as a result of the late submission of the annual National Pollutant Inventory (NPI) report for Daandine Power Station in Queensland.

Further information on APA Group's Health, Safety and Environmental performance is available in our annual sustainability reports:

<https://www.apa.com.au/about-apa/sustainability/sustainability-reports/>

1.3 Project objectives

The Project would help action AGL's commitment to deliver gas supply certainty to the south-eastern Australian states safely, within agreed timeframes and at competitive prices, while balancing economic, social and environmental factors.

The key objectives of the Project are to:

- provide gas supply certainty and security for Victorian gas customers and to customers from other states that rely on Victoria's gas supply, to respond to forecast gas supply shortages
- expand AGL and the broader market's capacity to provide gas to where it is needed, helping to put downward pressure on gas prices
- allow the most competitive sources of gas, most likely from overseas, to be supplied to the Australian east coast gas market
- provide an additional source of supply to the Australian gas market over the short to medium term so the market is well supplied if additional gas reserves in Australia fail to be commercialised
- provide supply flexibility to respond to emergencies at critical infrastructure such as the Longford Pipeline or the South Eastern Australia Gas Pipeline
- provide additional capacity and reliability for new residential, commercial and industrial gas customers.

1.4 Background to the Project

In 2019, Australia was the world's largest exporter of LNG. The growth in LNG exports was driven by a rapid increase in gas liquefaction capacity in Australia's north-west and north-east.

While LNG export projects draw on their own reserves and gas supply from the broader domestic market, gas markets in the high population centres of Australia's south-east are facing a decline in production from traditional gas supply sources. Specifically, the abundant gas supplies Victoria has enjoyed since the 1960s are in decline particularly from Bass Strait's Gippsland Basin fields which means that Victoria needs to find alternative sources of supply.

Unless additional southern reserves and resources or alternative infrastructure are developed, domestic customers in the south-eastern states face a potential market shortfall from 2024 onwards (AEMO, 2020).

LNG imports offer a flexible option of short- and long-term secure energy supply for customers as the economy and energy sector transitions to a greater proportion of renewables.

The Project would facilitate the development of essential energy supply infrastructure and support Victoria's continued liveability, economic development and growth. Due to the interconnected nature of the gas market on the eastern seaboard, the Project would not only provide benefits and energy security to Victoria but also the other south-eastern states and the national economy more broadly.

1.5 Project description

The Project comprises two sets of works: the Gas Import Jetty Works and the Pipeline Works.

AGL would undertake the Gas Import Jetty Works which would include:

- Continuous mooring of a floating storage and regasification unit (FSRU) at Berth 2 of the existing Crib Point Jetty – the FSRU would store LNG and regasify LNG into natural gas
- Jetty Infrastructure on the Crib Point Jetty including marine loading arms (MLAs) and gas piping to transfer gas from the FSRU to the Crib Point Receiving Facility
- Crib Point Receiving Facility, including metering, odorant injection and nitrogen injection, which would be located on land adjacent to the Crib Point Jetty.

APA would undertake the Pipeline Works which would include:

- an underground bi-directional gas transmission pipeline approximately 57 kilometres long that would transport gas from the Crib Point Receiving Facility to the Victorian Transmission System (VTS) east of Pakenham
- the pigging facility at the Crib Point Receiving Facility to enable in-line inspections of the pipeline with a pipeline inspection gauge (pig)
- the above-ground Pakenham Delivery Facility to monitor and regulate the gas which would be located adjacent to the Pakenham East rail depot
- the below-ground End of Line Scraper Station (EOLSS) located at the connection point to the VTS north of the Princes Highway in Pakenham
- two above-ground mainline valves (MLVs) located at different points along the pipeline alignment to enable isolation of the pipeline in an emergency.



Victorian Transmission System (VTS)

The VTS is an existing gas pipeline network comprising approximately 1,990 kilometres of pipelines which transport gas from various inlet points to load centres throughout Victoria. Almost all the natural gas consumed in Victoria is transported through the VTS.

LNG would be transported to the gas import jetty on ships (LNG carriers) delivering up to 160 petajoules per annum. A petajoule is a measure of energy. It is estimated that approximately 40 LNG carriers would be needed to deliver this amount of energy per year into the VTS. The number of LNG carriers would depend on their storage capacity, which vary from 140,000 to 170,000 cubic metres (m³).

The FSRU would also have the capability to reload LNG to an LNG carrier for transport elsewhere. This would generally only be required if the LNG was not required in the local market.

Construction and commissioning of the Project is estimated to take 18 to 27 months.

The Gas Import Jetty Works is proposed to operate for 20 years, although this may be shortened or extended depending on gas availability and the stability of gas supply to south-eastern Australia.

The Pipeline Works have a design life of 60 years and could operate even if the Gas Import Jetty Works were no longer required. Regular inspection, maintenance and other industry best practices would continue throughout the life of the physical infrastructure of the Pipeline Works if it continued to operate and the Gas Import Jetty Works were decommissioned.

Further details on the construction and operation of the Project are provided in **Chapter 4** Project description.

1.6 Project location

The Project is proposed for Victoria because it would enable the best response to shifting dynamics in Australia's gas market production and demand environment.

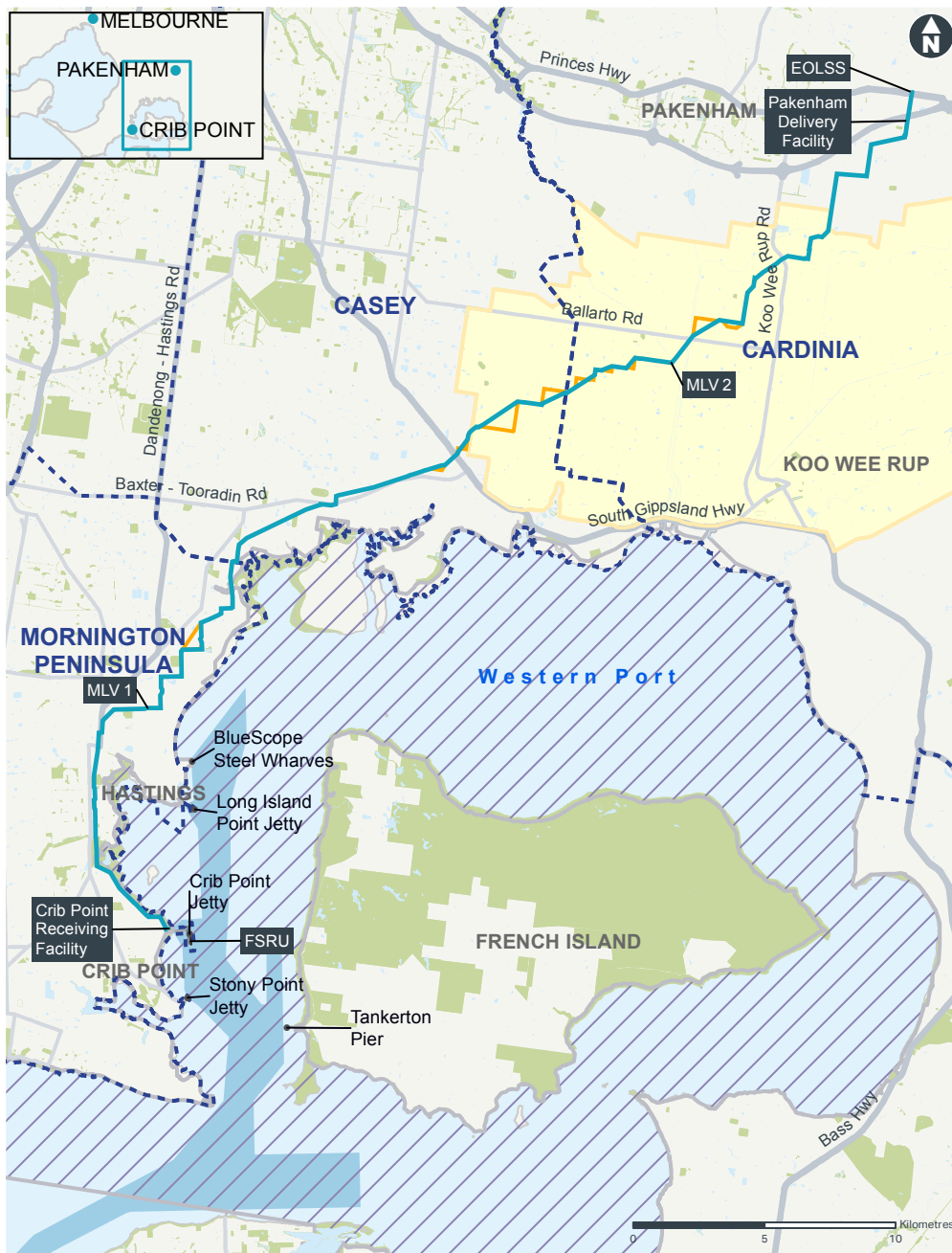
Victoria is the largest gas consumer in Australia's south-east. The Project's chosen location minimises the distance that gas is transported, reducing the tariff costs of delivering gas to customers.

The Gas Import Jetty Works would be located within the local government area of Mornington Peninsula Shire. The Pipeline Works would traverse across the Shire, as well as through the local government areas of the City of Casey and Cardinia Shire.

The Project Area comprises the construction and operation footprints of the Gas Import Jetty Works and the Pipeline Works.

The Project Area is detailed in EES Attachment VII Map book.

An overview of the Project showing the pipeline alignment and current pipeline options is shown in **Figure 1-1**.



◀ **Figure 1-1:** Project location

- Pipeline
- Pipeline Options
- Local Government Area
- Koo Wee Rup-Longwarry Flood Protection District (FPD)
- Western Port Ramsar site
- Port of Hastings boundary

1.6.1 Gas Import Jetty Works area and surrounds

The FSRU would be located at the existing Crib Point Jetty within Western Port, which is a large tidal bay opening into Bass Strait.

Western Port has been an active trading port since the mid 1800s. It also has strong environmental and recreational values.



Port of Hastings Development Authority (PoHDA)

The PoHDA is responsible for managing the operations at the Port of Hastings, including the maintenance of associated port infrastructure (except for the BlueScope steel wharves). The PoHDA is a public entity.

The Port of Hastings is a commercial port within Western Port. The Victorian Regional Channels Authority manages commercial navigation in the port waters of Hastings and is responsible for the safe and efficient movement of shipping in port waters, providing direction and control of the movement of ships, and maintaining shipping channels and navigation aids. The PoHDA manages facilities at Stony Point Jetty, Crib Point Jetty and Long Island Point Jetty.

The Port of Hastings serves international shipping operations including the import and export of products such as crude oil, ethanol, liquefied petroleum gas (LPG) and steel.

The Port of Hastings also provides connection to oil and gas offshore platforms, import and processing facilities and connection to Victoria's two oil refineries via pipeline.

For the last 20 years, the number of commercial vessels using the Port of Hastings has varied from a peak of 262 in the 2002–03 financial year to a low of 100 vessels in 2012–13, with an average of 190 vessels per year during this time. In recent years, approximately 150 ships per year were received in the Port of Hastings, reflecting changing market demand.

The Crib Point Jetty is approximately 970 metres in length, running west to east for approximately 530 metres with a berthing head running north to south for approximately 440 metres. Industrial activities have occurred in the vicinity of the Crib Point Jetty for more than 50 years. The existing concrete jetty at Crib Point was constructed as part of the infrastructure for the BP refinery in the 1960s. The Crib Point Jetty is shown in **Figure 1-2**.

The Crib Point Jetty is currently operating as a working industrial site with two berths for mooring vessels. Berth 1 is used by United Petroleum to transfer liquid fuel to its onshore storage facility located near Hastings. Berth 2 was decommissioned when the BP refinery closed in 1986. The jetty is also used infrequently for pipe spooling (prefabrication) operations for offshore subsea pipelines.

The Crib Point Jetty and adjacent land where the Crib Point Receiving Facility would be located is zoned Port Zone (PZ) and Public Conservation and Resource Zone (PCRZ) under the Mornington Peninsula Planning Scheme.

The FSRU would be located in Port of Hastings waters within and adjacent to the PZ at the Crib Point Jetty, with the associated Jetty Infrastructure located in the PZ. The Port of Hastings waters are located within Crown Land and are managed by PoHDA.

Victoria's integrated Planning Policy Framework (PPF) includes state, regional and local planning policy. One purpose of the PPF is to ensure that land development near commercial trading ports are compatible with port operations and provide reasonable amenity expectations.

A key provision of the Local Planning Policy Framework contained within the Mornington Peninsula Planning Scheme (Clause 21.06 – Strategic Framework and the Peninsula's Settlement Pattern) seeks to ensure urban development is not to take precedence over port-related development and activity. This is to be achieved through appropriate buffers/separation between residential areas and incompatible land uses, including land designated for port and port related development.

Western Port was designated as a wetland of international significance under the Ramsar Convention on Wetlands of International Importance in 1982. The Western Port Ramsar site covers 59,950 hectares and is the third-most important area for wading birds in Victoria.

The environmental, social and economic value of Western Port was recognised further in 2002 with the declaration of Western Port as a UNESCO biosphere reserve. The reserve includes three marine national parks.

Western Port is a popular place for recreational boating activities, including recreational fishing and sailing.



◀ **Figure 1-2:** Gas Import Jetty Works at Crib Point Jetty

1.6.2 Pipeline Works area and surrounds

The Pipeline Works would traverse land from the Crib Point Jetty to the Victorian Transmission System (VTS) connection east of Pakenham.

The pipeline alignment has been selected to minimise impacts on sensitive land uses and where possible follows existing pipeline easements.

The pipeline would pass through a mix of land uses including rural residential, road corridors, conservation reserves, hobby farms, horse studs, agricultural and horticultural areas.

The pipeline would pass through the Hastings township, generally along the Stony Point rail reserve. It would also pass near the regional centres of Crib Point, Tyabb, Pearcedale, Warneet, Tooradin, Cardinia and Pakenham.

The northern extent of the pipeline would be located within the former Koo Wee Rup Swamp, which is now recognised as the Koo Wee Rup-Longwarry Flood Protection District.

Western Port and the drainage areas around the Koo Wee Rup-Longwarry Flood Protection District are recognised for their agricultural and economic values due to rich agricultural soils. The predominant land use in this area is agricultural, consisting of grazing, livestock and mixed farming.

The pipeline alignment would intersect the Western Port Ramsar site at Warringine Park and Watson Creek.

1.7 Project assessment and approvals

The following sections provide an overview of the regulatory framework for the Project.

The Project proponents AGL and APA must obtain a number of statutory approvals as part of the regulatory approval processes. Details are provided in **Chapter 5 Key approvals and assessment framework** and EES Attachment II *Legislation and policy report*.

1.7.1 Environment Effects Statement

Victoria's *Environment Effects Act 1978* (Environment Effects Act) sets out the process under which the Victorian Minister for Planning may require the proponent of a project to prepare an EES.

An EES is the proponent's statement about a proposed project and its environmental effects. An EES helps to inform the Victorian Minister for Planning's assessment on the acceptability of a project's environmental effects.

The EES process is an assessment that demonstrates the ability of a proposed project to meet statutory requirements and is not an approval process in itself. A project's statutory approvals cannot be considered and issued by regulatory authorities until they have considered the Minister's Assessment once it is made available.

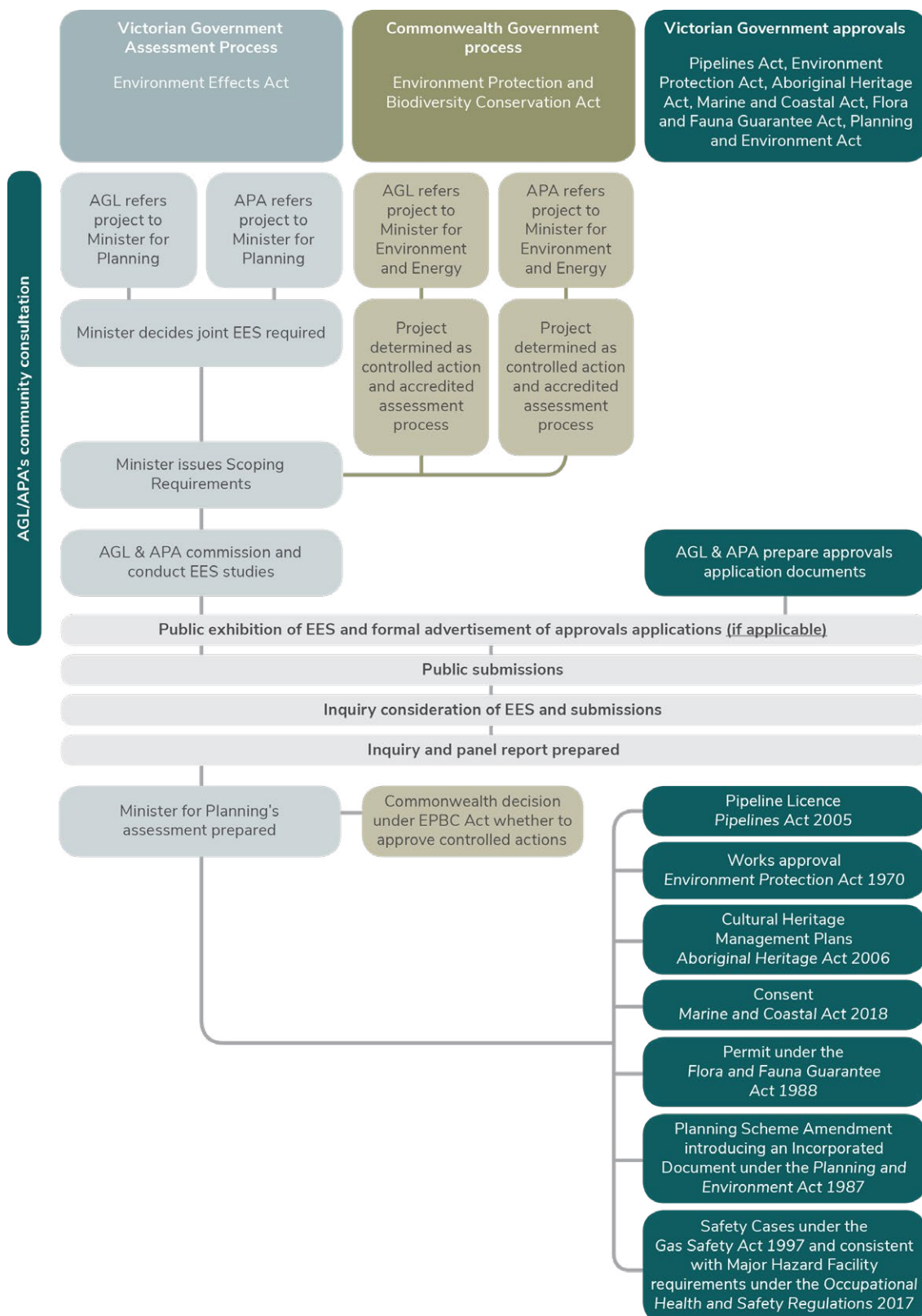
The main steps in the EES process and the statutory approvals for the Project are shown in **Figure 1-3**.

The Project was referred to the Victorian Government under the Environment Effects Act as two separate projects (the Gas Import Jetty Works and Pipeline Works) on 13 September 2018 by AGL and APA respectively.

On 8 October 2018, the Victorian Minister for Planning issued a decision determining that an EES was required for the Project in its entirety due to the potential for a range of significant environmental effects.

The Minister's reasons for making this decision included the following recommendations:

- The Project has the potential for significant environmental effects, including on native vegetation and the habitat of threatened terrestrial and aquatic species listed under the Flora and Fauna Guarantee Act 1988 (Vic), as well as risk to some aspects of the ecology in the North Arm of the Western Port Ramsar site.
- There are potential effects from construction and operation of a gas pipeline on water quality of waterways and the Western Port Ramsar site and on Aboriginal cultural heritage.
- While these potentially significant effects and other residual effects could be assessed and managed through a range of separate statutory processes, an EES is warranted to help ensure the effects and relevant uncertainties of the Project are rigorously investigated as part of an integrated assessment process before any statutory approval decisions are made.

Figure 1-3: EES process and statutory approvals for the Project

1.7.2 Commonwealth approvals

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides the legal framework to protect and manage designated Matters of National Environmental Significance (MNES). Under the EPBC Act, if the Commonwealth Minister for the Environment decides that a project has, will have, or is likely to have a significant impact on a MNES, the project becomes a 'controlled action' that must be assessed and approved by the Minister before it can proceed.

The Project was referred to the Commonwealth Government under the EPBC Act as two separate projects:

- 2018/8297: Crib Point to Pakenham Pipeline (Pipeline Works)
- 2018/8298: Gas Import Facility (Gas Import Jetty Works).

On 28 November 2018, the delegate for the Commonwealth Minister for the Environment and Energy determined that the two projects were each a 'controlled action' and that further assessment and approval was required under the EPBC Act before they could proceed.

The decision was made due to the potential for significant impacts on the ecological character of the internationally significant Ramsar-listed Western Port wetlands and listed threatened and migratory species and communities.

The Victorian EES will serve as the accredited assessment process for the purpose of the EPBC Act under a Bilateral Assessment Agreement between the Commonwealth and Victorian governments.

After considering the Victorian Minister for Planning's assessment under the *Environment Effects Act*, the Commonwealth Minister for the Environment or their delegate will decide whether the Project is approved, approved with conditions or refused under the EPBC Act.

1.7.3 Victorian approvals

Gas Import Jetty Works

The Gas Import Jetty Works require the following approvals under Victorian legislation:

- a Works Approval under the *Environment Protection Act 1970* (Vic) (*Environment Protection Act*) for the FSRU component of the Gas Import Jetty Works
- a licence under the *Environment Protection Act* before the Project starts operating for the discharge of waste for the FSRU component of the Gas Import Jetty Works (EPA Licence)

- Planning Scheme Amendment to apply the Specific Controls Overlay to the Gas Import Jetty Works (including the FSRU) allowing the application of an Incorporated Document to the site under the Mornington Peninsula Planning Scheme and in accordance with the *Planning and Environment Act 1987* (Vic)
- a Gas Safety Case must be submitted to and accepted (or provisionally accepted) by Energy Safe Victoria for the Gas Import Jetty Works (excluding the FSRU) under the *Gas Safety Act 1997* (Vic) and *Gas Safety (Safety Case) Regulations 2018*
- a Safety Case will be submitted for the FSRU that is consistent with the requirements of a major hazardous facility (MHF) under the *Occupational Health and Safety Regulations 2017* (Vic) (OHS Regulations) in recognition of the importance of ensuring the safety hazards and risks are appropriately assessed and managed
- an approved Cultural Heritage Management PI (CHMP 16300) under the *Aboriginal Heritage Act 2006* (Vic)
- consent under the *Marine and Coastal Act 2018* (Vic) for the components of the Gas Import Jetty Works on marine and coastal Crown land (excluding the Crib Point Receiving Facility)
- permits to take native flora and fauna species listed under the *Flora and Fauna Guarantee Act 1988* (Vic).

Pipeline Works

The Pipeline Works require the following approvals under Victorian legislation:

- Pipeline Licence under the *Pipelines Act 2005* (Vic) for construction and operation of the Pipeline Works
- Safety Case for the Pipeline Works facilities in accordance with the *Gas Safety (Safety Case) Regulations 2018* under the *Gas Safety Act 1997* (Vic)
- consent under the *Marine and Coastal Act 2018* (Vic) for the components of the Pipeline Works on marine and coastal Crown land
- two approved Cultural Heritage Management Plans (CHMP 1583 and CHMP 15384) under the *Aboriginal Heritage Act 2006* (Vic)
- permits to take native flora and fauna species listed under the *Flora and Fauna Guarantee Act 1988* (Vic).

In addition to the above, the Pipeline Works will require various other approvals under the *Pipelines Act*, including the acceptance of a Construction Environmental Management Plan (CEMP) and Safety Management Plan (SMP) for construction and operation of the pipeline.

Other approvals required for the Project under Victorian legislation are noted in **Chapter 5** Key approvals and assessment framework and discussed in EES Attachment II Legislation and policy report.

1.7.4 Relevant policies, strategies, guidelines and standards

In addition to approvals, the Project must consider relevant environmental policies, strategies, guidelines and standards.

The relevant policies, strategies, guidelines and standards have specific requirements for the impact assessment and some have implications for construction and/or design of the Project – such as contingency measures to address unanticipated situations like discovering heritage items.

Relevant policies, strategies, guidelines and standards and their implications for the Project are summarised in EES Attachment II *Legislation and policy report* and in each technical report of the EES.

1.8 Purpose of this EES

The EES describes the Project and its potential environmental effects in sufficient detail for the Minister for Planning to make a final assessment as to the Project's acceptability.

The EES is required to:

- assess the Project's potential effects on the environment
- assess alternative Project layouts to meet the draft evaluation objectives as described in **Section 1.9.1** (Scoping requirements and evaluation objectives) of this chapter
- describe approaches to avoid environmental risks and mitigate negative potential effects where appropriate.

This EES was prepared in accordance with the Victorian Minister for Planning's decision, the scoping requirements for this EES issued by the Victorian Minister for Planning in February 2019 and the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978*.

The EES addresses the potential impacts on the environment and informs an Environmental Management Framework (EMF) for the Project. 17 specialist technical studies were undertaken, and the findings of these studies are presented in the technical reports attached to this EES and summarised in **Chapters 6 to 22**.

The EES also seeks to inform the public and stakeholders about the Project, its potential impacts and how these impacts can be avoided, minimised or managed. Community members and stakeholders can provide feedback on the EES and associated approvals applications during the public exhibition period.

The EES and any submissions will be considered by an inquiry appointed by the Victorian Minister for Planning under the *Environment Effects Act*. An inquiry report will be prepared and provided to the Minister.

The EES, submissions and the inquiry report will enable the Minister to issue an assessment of the environmental effects of the Project under the *Environment Effects Act*. The Minister's assessment will inform statutory decision-makers in Victoria.

1.9 Approach to the EES

This EES presents a holistic assessment of the Project. It considers the Gas Import Jetty Works and Pipeline Works independently (considering individual design approach, construction methodology, operation and specific potential environmental impacts of each of the works) as well as a whole (considering the cumulative impacts of the Project overall).

1.9.1 Scoping requirements and evaluation objectives

The matters to be investigated and documented in the EES are set out in the scoping requirements issued by the Victorian Minister for Planning. The purpose of the scoping requirements is to ensure the EES:

- properly responds to the decision made by the Victorian Minister for Planning that an EES is required
- identifies potential significant environmental effects of the Project
- explains how the environmental effects of the works are proposed to be managed for the different stages and aspects of the Project
- provides sufficient and appropriate information to allow the Minister to assess the environmental effects of the works under the *Environment Effects Act*.

Draft scoping requirements were exhibited by the Department of Environment, Land, Water and Planning (DELWP) for public comment in November 2018. After considering public submissions, the Minister published final scoping requirements in February 2019. This EES was prepared in accordance with the final scoping requirements.

The scoping requirements established draft evaluation objectives for the EES which are listed in **Table 1-1**. The EES may further investigate significant issues not identified in the scoping requirements that emerged during the EES technical studies and consultation.

1.9.2 Environmental impact assessment

To ensure all key issues identified in the EES scoping requirements are addressed, 17 specialist technical assessments evaluated the potential environmental effects of the Project design, construction methodologies and operational requirements.

The technical studies assessed how potential adverse environmental effects could be avoided, managed and mitigated. The findings of the studies are provided in the technical reports attached to this EES and summarised in **Chapters 6 to 22**.

A risk-based approach was applied to identifying and assessing potential environmental effects of the Project. The assessment approach is described in **Chapter 5 Key approvals and assessment framework**.

1.9.3 Mitigation measures

The 17 specialist technical assessments developed an initial set of mitigation measures based on compliance with legislation and standard requirements as part of their impact assessments.

Through the risk assessment process, the initial set of mitigation measures were refined to a set of recommended mitigation measures that address the findings of the impact assessment, ongoing iterations to the Project design and stakeholder inputs.

Additional mitigation measures were developed where initial risk ratings were categorised as medium or higher, and incorporated into the Project design or description and/or included in the EMF.

The mitigation measures for the Project are listed in **Chapter 25 Environmental Management Framework**.

The approach adopted to develop and refine the mitigation measures is described in **Chapter 5 Key approvals and assessment framework**.

1.9.4 Environmental Management Framework

The EMF is a framework for addressing the environmental requirements for the Project. The EMF includes the mitigation measures that AGL and APA would implement to mitigate potential adverse effects.

The mitigation measures set out in the EMF have been developed in this EES to avoid and minimise adverse environmental effects. The mitigation measures will be given effect through the relevant statutory approvals including (but not limited to): the Works Approval; the Pipeline Licence; and the Planning Scheme Amendment.

The mitigation measures will inform the conditions administered by relevant statutory authorities, and the relevant proponent and their contractors will be responsible for their implementation. Contractual arrangements with contractors responsible for construction, operation and decommissioning of the Project will include requirements for contractors to adhere to specified mitigation measures.

The proposed EMF and mitigation measures are presented in **Chapter 25 Environmental Management Framework**.

Table 1-1: 1 Draft evaluation objectives

Draft evaluation objective
Energy efficiency, security, affordability and safety – To provide for safe and cost-effective augmentation of Victoria's natural gas supply in the medium to longer term.
Biodiversity – To avoid, minimise or offset potential adverse effects on native flora and fauna and their habitats, especially listed threatened or migratory species and listed threatened communities.
Water and catchment values – To minimise adverse effects on water (including groundwater, waterway, wetland, estuarine, intertidal and marine) quality and movement particularly as they might affect the ecological character of the Western Port Ramsar site.
Cultural heritage – To avoid or minimise adverse effects on Aboriginal and historic cultural heritage.
Social, economic, amenity and land use – To minimise potential adverse social, economic, amenity and land use effects at local and regional scales.
Waste management – To minimise generation of wastes by or resulting from the Project during construction and operation, including accounting for direct and indirect greenhouse gas emissions.

1.9.5 Consultation

A consultation plan was developed to guide consultation with the community and other stakeholders as part of the EES process. The consultation process included opportunities for community and other stakeholders to raise issues of concern and informed the EES technical studies and the design of the Project.

It is noted that on 18 October 2017, the Minister responsible for the *Pipelines Act 2005* approved a consultation plan developed by APA which sets out the information that APA would provide owners and occupiers of land that would be potentially impacted about the pipeline's construction.

Community consultation and stakeholder engagement would continue to be undertaken during construction of the Project. This consultation program is described in **Chapter 26** Stakeholder engagement.

1.10 EES structure

The structure of this EES is shown in **Figure 1-4**.



▲ **Figure 1-4:** EES Structure

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