

## Summary Document

### EES main report

#### Volume 1:

- Chapter 1. Introduction
- Chapter 2. Project rationale
- Chapter 3. Project development
- Chapter 4. Project description
- Chapter 5. Key approvals and assessment framework

#### Volume 2:

- Chapter 6. Marine biodiversity
- Chapter 7. Terrestrial and freshwater biodiversity
- Chapter 8. Surface water
- Chapter 9. Groundwater
- Chapter 10. Contamination and acid sulfate soils
- Chapter 11. Greenhouse gas
- Chapter 12. Air quality
- Chapter 13. Noise and vibration
- Chapter 14. Landscape and visual
- Chapter 15. Transport
- Chapter 16. Safety, hazard and risk
- Chapter 17. Land use
- Chapter 18. Social
- Chapter 19. Business
- Chapter 20. Agriculture
- Chapter 21. Aboriginal cultural heritage
- Chapter 22. Historic heritage

#### Volume 3:

- Chapter 23. Climate change risk
- Chapter 24. Sustainability
- Chapter 25. Environmental Management Framework
- Chapter 26. Stakeholder engagement
- Chapter 27. Conclusion

### Technical reports

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>A. Marine biodiversity</li> <li>B. Terrestrial and freshwater biodiversity</li> <li>C. Surface water</li> <li>D. Groundwater</li> <li>E. Contamination and acid sulfate soils</li> </ul> | <ul style="list-style-type: none"> <li>F. Greenhouse gas</li> <li>G. Air quality</li> <li>H. Noise and vibration</li> <li>I. Landscape and visual</li> <li>J. Transport</li> <li>K. Safety, hazard and risk</li> <li>L. Land use</li> </ul> | <ul style="list-style-type: none"> <li>M. Social</li> <li>N. Business</li> <li>O. Agriculture</li> <li>P. Aboriginal cultural heritage</li> <li>Q. Historic heritage</li> </ul> |
|---|---|---|

### Attachments

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>I. Matters of National Environmental Significance</li> <li>II. Legislation and policy report</li> <li>III. Environmental risk report</li> <li>IV. Climate change risk report</li> <li>V. Community engagement reports</li> </ul> | <ul style="list-style-type: none"> <li>VI. Draft planning scheme amendment</li> <li>VII. Map book</li> <li>VIII. Works Approval Application</li> <li>IX. Pipeline Licence Application</li> </ul> |
|---|--|

# Contents

## Volume 1

<b>Foreword</b>	<b>iii</b>	<b>Chapter 3 – Project development</b>	<b>3-1</b>
<b>Executive Summary</b>	<b>ES-1</b>	3.1 Introduction	3-1
<b>Glossary and Abbreviations</b>	<b>7</b>	3.2 Gas Import Jetty Works design development	3-3
<b>Chapter 1 – Introduction</b>	<b>1-1</b>	3.3 Pipeline Works design development	3-14
1.1 Introduction	1-1	<b>Chapter 4 – Project description</b>	<b>4-1</b>
1.2 Proponent profiles	1-1	4.1 Introduction	4-1
1.3 Project objectives	1-3	4.2 Project overview	4-3
1.4 Background to the Project	1-4	4.3 Gas Import Jetty Works	4-6
1.5 Project description	1-4	4.4 Pipeline Works	4-23
1.6 Project location	1-5	4.5 Construction	4-30
1.7 Project assessment and approvals	1-9	4.6 Operation and maintenance	4-47
1.8 Purpose of this EES	1-12	4.7 Decommissioning	4-49
1.9 Approach to the EES	1-12	4.8 Waste and spoil management	4-50
1.10 EES structure	1-14	4.9 Project summary	4-51
<b>Chapter 2 – Project rationale</b>	<b>2-1</b>	<b>Chapter 5 – Key approvals and assessment framework</b>	<b>5-1</b>
2.1 Overview	2-1	5.1 Overview of assessment framework	5-1
2.2 East coast gas production and Project need	2-2	5.2 Key approvals	5-2
2.3 Gas is an important enabler of the energy transition	2-21	5.3 EES draft evaluation objectives and assessment framework	5-7
2.4 Current initiatives to alleviate gas supply issues	2-23	5.4 Impact and risk assessment approach	5-10
2.5 FSRU approach and site selection	2-24	5.5 Existing conditions	5-12
2.6 Pipeline options	2-31	5.6 Consultation	5-15
2.7 Project rationale and benefits	2-43	5.7 Integrated assessment	5-16
		5.8 Independent peer review	5-16

## Volume 2

### Chapter 6 – Marine biodiversity

6.1	Overview	6-1
6.2	Methodology	6-10
6.3	Existing conditions	6-19
6.4	Risk assessment	6-61
6.5	Construction impacts	6-69
6.6	Operation impacts	6-69
6.7	Potential impacts on Ramsar values	6-116
6.8	Mitigation measures	6-118
6.9	Conclusion	6-122

### Chapter 7 – Terrestrial and freshwater biodiversity

7.1	Overview	7-1
7.2	EES evaluation objective	7-2
7.3	Methodology	7-2
7.4	Study area	7-3
7.5	Existing conditions	7-4
7.6	Risk assessment	7-30
7.7	Construction impacts	7-42
7.8	Operation impacts	7-58
7.9	Character of Western Port Ramsar site (Risk ID FF19, FFO6 and FFO7)	7-63
7.10	Cumulative impacts	7-66
7.11	Mitigation measures	7-67
7.12	Offsets	7-74
7.13	Conclusion	7-76

### Chapter 8 – Surface water

8.1	Overview	8-1
8.2	EES evaluation objective	8-1
8.3	Methodology	8-2
8.4	Study area	8-2
8.5	Existing conditions	8-3
8.6	Risk assessment	8-13
8.7	Construction impacts	8-15
8.8	Operation impacts	8-17
8.9	Mitigation measures	8-18
8.10	Conclusion	8-21

### 6-1

### Chapter 9 – Groundwater

9.1	Overview	9-1
9.2	EES evaluation objective	9-2
9.3	Methodology	9-2
9.4	Study area	9-3
9.5	Existing conditions	9-4
9.6	Risk assessment	9-10
9.7	Construction impacts	9-10
9.8	Operation impacts	9-16
9.9	Mitigation measures	9-17
9.10	Conclusion	9-17

### 9-1

### Chapter 10 – Contamination and acid sulfate soils

10.1	Overview	10-1
10.2	EES evaluation objective	10-2
10.3	Methodology	10-2
10.4	Study area	10-3
10.5	Existing conditions	10-3
10.6	Risk assessment	10-17
10.7	Construction impacts	10-21
10.8	Operation impacts	10-25
10.9	Mitigation measures	10-26
10.10	Conclusion	10-30

### 10-1

### Chapter 11 – Greenhouse gas

11.1	Overview	11-1
11.2	EES evaluation objective	11-2
11.3	Methodology	11-2
11.4	Study scope	11-2
11.5	Existing conditions	11-4
11.6	Risk assessment	11-5
11.7	Construction impacts	11-8
11.8	Operation impacts	11-10
11.9	Mitigation measures	11-13
11.10	Conclusion	11-14

### 11-1

<b>Chapter 12 – Air quality</b>	<b>12-1</b>	<b>Chapter 15 – Transport</b>	<b>15-1</b>
12.1 Overview	12-1	15.1 Overview	15-1
12.2 EES evaluation objective	12-2	15.2 EES evaluation objective	15-1
12.3 Methodology	12-2	15.3 Methodology	15-2
12.4 Study area	12-3	15.4 Study area	15-2
12.5 Existing conditions	12-4	15.5 Existing conditions	15-2
12.6 Risk assessment	12-8	15.6 Risk assessment	15-8
12.7 Construction impacts	12-10	15.7 Construction impacts	15-11
12.8 Operation impacts	12-12	15.8 Operation impacts	15-19
12.9 Mitigation measures	12-18	15.9 Residual impacts and legacy impacts	15-23
12.10 Conclusion	12-20	15.10 Cumulative impacts	15-23
<b>Chapter 13 – Noise and vibration</b>	<b>13-1</b>	15.11 Mitigation measures	15-23
13.1 Overview	13-1	15.12 Conclusion	15-25
13.2 EES evaluation objective	13-2	<b>Chapter 16 – Safety, hazard and risk</b>	<b>16-1</b>
13.3 Methodology	13-2	16.1 Overview	16-1
13.4 Study area	13-3	16.2 EES evaluation objective	16-3
13.5 Existing conditions	13-4	16.3 Methodology	16-3
13.6 Risk assessment	13-7	16.4 Hazard identification	16-5
13.7 Construction impacts	13-10	16.5 Quantitative Risk Assessment results	16-7
13.8 Operation impacts	13-18	16.6 Safety in design and operation	16-8
13.9 Mitigation measures	13-23	16.7 Emergency management and response	16-10
13.10 Conclusion	13-28	16.8 Mitigation measures	16-10
<b>Chapter 14 – Landscape and visual</b>	<b>14-1</b>	16.9 Conclusion	16-12
14.1 Overview	14-1	<b>Chapter 17 – Land use</b>	<b>17-1</b>
14.2 EES evaluation objective	14-1	17.1 Overview	17-1
14.3 Methodology	14-2	17.2 EES evaluation objective	17-2
14.4 Existing conditions	14-4	17.3 Methodology	17-2
14.5 Construction impacts	14-6	17.4 Study area	17-3
14.6 Operation impacts	14-7	17.5 Existing conditions	17-3
14.7 Mitigation measures	14-13	17.6 Risk assessment	17-20
14.8 Conclusion	14-14	17.7 Impact assessment	17-21
		17.8 Construction impacts	17-21
		17.9 Operation impacts	17-23
		17.10 Mitigation measures	17-25
		17.11 Conclusion	17-26

**Chapter 18 – Social**

18.1	Overview
18.2	EES evaluation objective
18.3	Methodology
18.4	Study area
18.5	Existing conditions
18.6	Project benefits
18.7	Construction impacts
18.8	Operation impacts
18.9	Mitigation measures
18.10	Conclusion

**Chapter 19 – Business**

19.1	Overview
19.2	EES evaluation objective
19.3	Methodology
19.4	Study area
19.5	Existing conditions
19.6	Risk assessment
19.7	Construction impacts
19.8	Operation impacts
19.9	Mitigation measures
19.10	Conclusion

**Chapter 20 – Agriculture**

20.1	Overview
20.2	EES evaluation objective
20.3	Methodology
20.4	Study area
20.5	Existing conditions
20.6	Stakeholder engagement
20.7	Risk assessment
20.8	Construction impacts
20.9	Operation impacts (Risk IDs AG6 and AG7)
20.10	Mitigation measures
20.11	Conclusion

**18-1**

18-1
18-1
18-2
18-3
18-4
18-9
18-9
18-13
18-14
18-16

**19-1**

19-1
19-1
19-2
19-2
19-5
19-11
19-12
19-14
19-14
19-16

**20-1**

20-1
20-1
20-2
20-2
20-4
20-10
20-10
20-12
20-14
20-15
20-17

**Chapter 21 – Aboriginal cultural heritage 21-1**

21.1	Overview	21-1
21.2	EES evaluation objective	21-2
21.3	Methodology	21-2
21.4	Study area	21-2
21.5	Existing conditions	21-2
21.6	Risk assessment	21-12
21.7	Construction impacts	21-14
21.8	Operation impacts	21-17
21.9	Mitigation measures	21-17
21.10	Conclusion	21-18

**Chapter 22 – Historic heritage 22-1**

22.1	Overview	22-1
22.2	EES evaluation objective	22-1
22.3	Methodology	22-2
22.4	Study area	22-2
22.5	Existing conditions	22-2
22.6	Risk assessment	22-12
22.7	Construction impacts	22-14
22.8	Operation impacts	22-16
22.9	Maritime heritage impacts	22-16
22.10	Mitigation measures	22-16
22.11	Conclusion	22-17

## Volume 3

<b>Chapter 23 – Climate change risk</b>	<b>23-1</b>	<b>Chapter 26 – Stakeholder engagement</b>	<b>26-1</b>
23.1 Overview	23-1	26.1 Overview	26-1
23.2 EES evaluation objective	23-1	26.2 EES evaluation objective	26-1
23.3 Methodology	23-2	26.3 Pipelines Act 2005	26-2
23.4 Study area	23-3	26.4 Approach	26-2
23.5 Climate projections	23-3	26.5 Stakeholders	26-5
23.6 Risk assessment	23-5	26.6 Aboriginal cultural heritage	26-7
23.7 Adaptation measures	23-7	26.7 Engagement channels	26-15
23.8 Conclusion	23-7	26.8 Overview of engagement	26-16
<b>Chapter 24 – Sustainability</b>	<b>24-1</b>	26.9 Community feedback	26-21
24.1 Overview	24-1	26.10 Monitoring and evaluation	26-36
24.2 Sustainability framework for this EES	24-3	<b>Chapter 27 – Conclusion</b>	<b>27-1</b>
24.3 Identifying ESD principles in Commonwealth and Victorian legislation	24-4	27.1 Overview	27-1
24.4 Defining ESD objectives and key sustainability themes for this EES	24-7	27.2 Project evaluation against the scoping requirements	27-2
24.5 AGL and APA sustainability commitments	24-8	27.3 Environmental Management Framework	27-13
24.6 Project alignment with ESD principles	24-10	27.4 Justification	27-14
24.7 Project alignment with ESD objectives	24-12	27.5 Next steps in the EES process	27-14
<b>Chapter 25 – Environmental Management Framework</b>	<b>25-1</b>	27.6 Conclusion	27-16
25.1 Overview	25-1		
25.2 EES scoping requirements	25-2		
25.3 Regulatory and compliance framework	25-3		
25.4 Roles and responsibilities	25-5		
25.5 Statutory approvals and consents	25-7		
25.6 Risk and impact assessments	25-10		
25.7 Mitigation measures	25-10		
25.8 Environmental management documentation	25-56		
25.9 Complaints management	25-60		
25.10 Contingency measures	25-61		