



Table of contents

KENTBRUCK GREEN POWER HUB

TABLE OF CONTENTS

Chapter 1

| | |
|---|------------|
| 1 INTRODUCTION..... | 1-1 |
| 1.1 Purpose of this document..... | 1-1 |
| 1.2 Background to the Project | 1-1 |
| 1.3 Project overview | 1-3 |
| 1.3.1 How wind energy works | 1-5 |
| 1.4 The Proponent | 1-6 |
| 1.5 Environment effects statement | 1-7 |
| 1.5.1 Requirement for an EES | 1-7 |
| 1.5.2 Scoping requirements | 1-8 |
| 1.5.3 Structure of this EES | 1-9 |
| 1.6 Project timeline..... | 1-12 |

Chapter 2

| | |
|--|------------|
| 2 PROJECT RATIONALE..... | 2-1 |
| 2.1 Background and policy context..... | 2-1 |
| 2.1.1 National policy | 2-1 |
| 2.1.2 State policy | 2-2 |
| 2.2 Project objectives..... | 2-2 |
| 2.3 Project location | 2-3 |
| 2.3.1 Wind resource | 2-3 |
| 2.3.2 Site context | 2-4 |
| 2.4 Benefits of the Project | 2-5 |
| 2.4.1 Environmental benefits | 2-5 |
| 2.4.2 Socioeconomic benefits | 2-5 |
| 2.4.3 Community benefits | 2-6 |
| 2.4.4 Energy security benefits | 2-6 |
| 2.4.5 Benefits of wind energy | 2-6 |

Chapter 3

| | |
|---|------------|
| 3 PROJECT DESCRIPTION | 3-1 |
| 3.1 Project overview | 3-1 |
| 3.2 Site description | 3-1 |
| 3.2.1 Region | 3-1 |
| 3.2.2 Project Area | 3-2 |
| 3.3 Project components and layout..... | 3-8 |
| 3.3.1 Wind turbines | 3-8 |
| 3.3.2 Electrical reticulation | 3-10 |
| 3.3.3 Transmission line | 3-11 |
| 3.3.4 Site access | 3-11 |
| 3.3.5 Onsite quarry | 3-13 |
| 3.3.6 Meteorological monitoring masts | 3-16 |
| 3.3.7 Permanent site compound | 3-16 |
| 3.3.8 Temporary ancillary infrastructure | 3-16 |
| 3.3.9 Offsite works | 3-16 |
| 3.4 Pre-construction | 3-19 |
| 3.4.1 Geotechnical investigations | 3-19 |
| 3.4.2 Management plans | 3-19 |
| 3.5 Construction..... | 3-20 |
| 3.5.1 Wind farm | 3-21 |
| 3.5.2 Transmission line construction within the Parks | 3-22 |
| 3.5.3 Transmission line construction outside of the Parks | 3-29 |
| 3.6 Operation and monitoring | 3-30 |
| 3.7 Decommissioning..... | 3-30 |
| 3.8 Waste management..... | 3-31 |
| 3.9 Safety and security..... | 3-31 |

Chapter 4

| | |
|------------------------------------|------------|
| 4 PROJECT DEVELOPMENT | 4-1 |
| 4.1 Site selection rationale | 4-1 |
| 4.2 Key Project alternatives | 4-2 |
| 4.3 Wind turbines | 4-5 |

| | | |
|-------|--|------|
| 4.3.1 | Layout | 4-5 |
| 4.3.2 | Minimum blade tip height | 4-20 |
| 4.4 | High voltage powerline | 4-20 |
| 4.5 | Other wind farm infrastructure | 4-21 |
| 4.6 | Battery storage facility | 4-23 |
| 4.7 | Transmission line | 4-23 |
| 4.7.1 | Location of transmission line corridor | 4-23 |
| 4.7.2 | Location of transmission line through the Parks | 4-28 |
| 4.7.3 | Location of transmission line at approach to the Heywood Terminal Station | 4-28 |
| 4.7.4 | Underground construction methodology for transmission line through the Parks | 4-31 |
| 4.8 | Supply of raw materials | 4-32 |
| 4.9 | Wind farm site access points | 4-34 |
| 4.10 | Transport routes..... | 4-36 |
| 4.11 | 'No Project' alternative | 4-36 |
| 4.12 | Summary..... | 4-37 |

Chapter 5

| | | |
|----------|---|------------|
| 5 | ASSESSMENT AND APPROVALS FRAMEWORK | 5-1 |
| 5.1 | Introduction..... | 5-1 |
| 5.2 | Key approvals..... | 5-4 |
| 5.3 | Assessment framework..... | 5-7 |

Chapter 6

| | | |
|----------|--|------------|
| 6 | COMMUNITY AND STAKEHOLDER ENGAGEMENT..... | 6-1 |
| 6.1 | Introduction | 6-1 |
| 6.2 | EES scoping requirements..... | 6-1 |
| 6.3 | Consultation approach..... | 6-2 |
| 6.3.1 | Consultation and engagement principles | 6-2 |
| 6.3.2 | Engagement phases and communication channels | 6-3 |
| 6.4 | Stakeholders | 6-5 |
| 6.4.1 | Government and authorities | 6-5 |
| 6.4.2 | Aboriginal and cultural heritage | 6-7 |
| 6.4.3 | Business and industry | 6-7 |

| | | |
|-------|---|------|
| 6.4.4 | Near neighbours or landholders | 6-9 |
| 6.4.5 | Special interest or community groups | 6-10 |
| 6.4.6 | Recreational or seasonal visitors | 6-10 |
| 6.5 | Overview of engagement..... | 6-11 |
| 6.5.1 | Phase 1: Site selection (June 2018 – September 2019) | 6-12 |
| 6.5.2 | Phase 2: Feasibility (scoping requirements period) (October 2019 – January 2020) | 6-12 |
| 6.5.3 | Phase 3: Planning and approvals (early 2020 to present) | 6-12 |
| 6.5.4 | Phase 4: Post EES lodgement (public exhibition and panel hearings) (mid to late 2024 onwards) | 6-12 |
| 6.5.5 | Phase 5 to 7: Pre-construction, construction and operations (future) | 6-13 |
| 6.6 | Feedback responses..... | 6-17 |
| 6.6.1 | Collection of feedback | 6-17 |
| 6.6.2 | Themes from community feedback and responses | 6-17 |
| 6.7 | Consultation outcomes and benefit sharing..... | 6-21 |
| 6.7.1 | Neighbour Benefit Program | 6-21 |
| 6.7.2 | Community Benefit Fund | 6-21 |
| 6.7.3 | Ecology Fund | 6-22 |
| 6.7.4 | Support for local jobseekers and businesses | 6-22 |
| 6.7.5 | Working with Indigenous stakeholders | 6-23 |
| 6.7.6 | Indigenous participation and long-term benefit-sharing | 6-23 |
| 6.8 | Monitoring and evaluation | 6-23 |
| 6.8.1 | Conclusion | 6-25 |

Chapter 7

| | | |
|----------|--|------------|
| 7 | BIODIVERSITY | 7-1 |
| 7.1 | Terminology | 7-1 |
| 7.2 | Overview | 7-1 |
| 7.2.1 | Methodology | 7-1 |
| 7.2.2 | Existing conditions | 7-2 |
| 7.2.3 | Construction impact assessment | 7-3 |
| 7.2.4 | Operation impact assessment | 7-4 |
| 7.3 | EES evaluation objective | 7-5 |
| 7.4 | Environment effects statement scoping requirements | 7-5 |
| 7.5 | Independent peer reviews..... | 7-6 |

| | |
|---|-------|
| 7.6 Assessment methodology | 7-6 |
| 7.6.1 Likelihood of occurrence | 7-6 |
| 7.6.2 Database and literature review | 7-6 |
| 7.6.3 Stakeholder and community consultation | 7-7 |
| 7.6.4 Site investigations | 7-7 |
| 7.6.5 Impact assessment methodology | 7-28 |
| 7.6.6 Limitations of the biodiversity assessment | 7-28 |
| 7.7 Existing conditions | 7-28 |
| 7.7.1 Land use and landscape context | 7-28 |
| 7.7.2 Wetlands | 7-32 |
| 7.7.3 Threatened ecological communities | 7-38 |
| 7.7.4 Ecological vegetation classes | 7-38 |
| 7.7.5 Threatened flora species | 7-43 |
| 7.7.6 Threatened fauna species | 7-51 |
| 7.7.7 Listed migratory species | 7-54 |
| 7.7.8 Bird utilisation surveys | 7-56 |
| 7.7.9 Bat species | 7-57 |
| 7.7.10 Southern bent-wing bat | 7-57 |
| 7.8 Avoidance and minimisation through design | 7-62 |
| 7.8.1 Site selection | 7-62 |
| 7.8.2 Project design and development | 7-62 |
| 7.9 Construction impacts | 7-63 |
| 7.9.1 Native vegetation | 7-63 |
| 7.9.2 Threatened flora | 7-89 |
| 7.9.3 Wetlands | 7-96 |
| 7.9.4 Threatened ecological communities | 7-99 |
| 7.9.5 Habitat removal for threatened species | 7-99 |
| 7.9.6 Noise and vibration | 7-105 |
| 7.9.7 Operational noise and lighting | 7-105 |
| 7.10 Operation impacts | 7-105 |
| 7.10.1 Potential bird and bat collisions | 7-105 |
| 7.10.2 Glenelg estuary and discovery bay Ramsar site impact assessment | 7-123 |
| 7.11 Cumulative impacts | 7-126 |

| | |
|-------------------------------|-------|
| 7.12 Mitigation measures..... | 7-127 |
| 7.13 Conclusion | 7-136 |

Chapter 8

| | |
|--|------------|
| 8 BROLGA..... | 8-1 |
| 8.1 Overview | 8-1 |
| 8.2 EES evaluation objective | 8-1 |
| 8.3 Assessment methodology..... | 8-2 |
| 8.3.1 Level one assessment | 8-2 |
| 8.3.2 Level two assessment | 8-2 |
| 8.3.3 Level three assessment | 8-3 |
| 8.4 Existing conditions | 8-3 |
| 8.5 Avoidance and minimisation of impacts..... | 8-6 |
| 8.5.1 Removal and relocation of turbines | 8-6 |
| 8.5.2 Relocation and reconfiguration of overline transmission lines | 8-6 |
| 8.5.3 Increase in minimum blade tip height | 8-6 |
| 8.6 Construction impacts | 8-9 |
| 8.6.1 Disturbance to breeding habitat | 8-9 |
| 8.6.2 Unmanaged groundwater and surface water | 8-9 |
| 8.7 Operation impacts | 8-9 |
| 8.7.1 Turbine collision risk | 8-10 |
| 8.7.2 Population viability | 8-10 |
| 8.8 Mitigation measures | 8-11 |
| 8.9 Conclusion..... | 8-14 |

Chapter 9

| | |
|--|------------|
| 9 SURFACE WATER, GROUNDWATER, AND GROUNDWATER DEPENDENT ECOSYSTEMS..... | 9-1 |
| 9.1 Overview | 9-1 |
| 9.2 EES evaluation objective | 9-2 |
| 9.3 Assessment methodology..... | 9-2 |
| 9.4 Study areas..... | 9-3 |
| 9.5 Regional existing conditions | 9-5 |
| 9.5.1 Climate | 9-5 |

| | | |
|-------|--|------|
| 9.5.2 | Regional catchment overview | 9-5 |
| 9.5.3 | Topography | 9-7 |
| 9.5.4 | Glenelg Estuary and Discovery Bay Ramsar site | 9-7 |
| 9.5.5 | Karst Springs and Associated Alkaline Fens of the Naracoorte Coastal Plain Bioregion | 9-11 |
| 9.5.6 | Environmental values | 9-11 |
| 9.6 | Surface water | 9-12 |
| 9.6.1 | Existing conditions | 9-12 |
| 9.6.2 | Construction impacts | 9-17 |
| 9.6.3 | Operation impacts | 9-20 |
| 9.7 | Groundwater..... | 9-21 |
| 9.7.1 | Existing conditions | 9-21 |
| 9.7.2 | Construction impacts | 9-30 |
| 9.7.1 | Operation impacts | 9-33 |
| 9.8 | Groundwater Dependent Ecosystems | 9-33 |
| 9.8.1 | Existing conditions | 9-33 |
| 9.8.2 | Construction impacts | 9-39 |
| 9.8.3 | Operation impacts | 9-40 |
| 9.9 | Mitigation measures | 9-41 |
| 9.10 | Conclusion | 9-49 |

Chapter 10

| | | |
|--|------------------------------|------|
| 10 SOIL CONTAMINATION AND ACID SULFATE SOILS..... | 10-1 | |
| 10.1 Overview..... | 10-1 | |
| 10.2 EES evaluation objective..... | 10-1 | |
| 10.3 Assessment methodology | 10-2 | |
| 10.4 Existing conditions..... | 10-2 | |
| 10.4.1 | Study area | 10-2 |
| 10.4.2 | Topography and local geology | 10-3 |
| 10.4.3 | Land uses | 10-3 |
| 10.4.4 | Contamination | 10-3 |
| 10.4.5 | Acid sulfate soils | 10-6 |
| 10.4.6 | Peat | 10-7 |
| 10.4.7 | Environmental values | 10-7 |

| | |
|-----------------------------------|-------|
| 10.5 Construction impacts..... | 10-7 |
| 10.5.1 Contamination | 10-7 |
| 10.5.2 Acid sulfate soils | 10-8 |
| 10.5.3 Spoil management | 10-8 |
| 10.6 Operation impacts..... | 10-8 |
| 10.7 Decommissioning impacts..... | 10-9 |
| 10.8 Mitigation measures..... | 10-9 |
| 10.9 Conclusion | 10-13 |

Chapter 11

| | |
|---|-------------|
| 11 CULTURAL HERITAGE..... | 11-4 |
| 11.1 Overview..... | 11-4 |
| 11.2 EES evaluation objective..... | 11-4 |
| 11.3 Assessment methodology | 11-5 |
| 11.3.1 Study areas | 11-6 |
| 11.4 Assumptions and limitations | 11-6 |
| 11.5 Aboriginal cultural heritage | 11-8 |
| 11.5.1 Existing conditions | 11-8 |
| 11.5.2 Construction impacts | 11-15 |
| 11.5.3 Operation impacts | 11-17 |
| 11.5.4 Decommissioning impacts | 11-17 |
| 11.6 Historical heritage | 11-17 |
| 11.6.1 Existing conditions | 11-17 |
| 11.6.2 Construction impacts | 11-22 |
| 11.6.3 Operation impacts | 11-23 |
| 11.6.4 Decommissioning impacts | 11-23 |
| 11.7 Mitigation measures..... | 11-23 |
| 11.8 Conclusion | 11-27 |

Chapter 12

| | |
|--|-------------|
| 12 LANDSCAPE CHARACTER AND VISUAL AMENITY | 12-1 |
| 12.1 Overview..... | 12-1 |
| 12.2 EES evaluation objective..... | 12-2 |

| | |
|--|-------|
| 12.3 Assessment methodology | 12-2 |
| 12.3.1 Landscape and visual | 12-2 |
| 12.3.2 Shadow flicker and blade glint | 12-5 |
| 12.4 Existing conditions..... | 12-5 |
| 12.4.1 Study area | 12-5 |
| 12.4.2 Significant Landscape Overlays | 12-7 |
| 12.4.3 Landscape character areas | 12-7 |
| 12.4.4 Landscape sensitivity | 12-8 |
| 12.4.5 Landscape values | 12-8 |
| 12.4.6 Key locations | 12-12 |
| 12.4.7 Dwellings | 12-12 |
| 12.4.8 Nearby wind farms | 12-12 |
| 12.5 Construction impacts..... | 12-16 |
| 12.6 Operation impacts | 12-16 |
| 12.6.1 Landscape character effects | 12-16 |
| 12.6.2 Visual effects of wind turbines | 12-18 |
| 12.6.3 Landscape character and visual effects of ancillary infrastructure | 12-31 |
| 12.6.4 Night lighting effects | 12-31 |
| 12.6.5 Cumulative landscape character and visual effects | 12-31 |
| 12.6.6 Shadow flicker and blade glint | 12-33 |
| 12.7 Decommissioning impacts..... | 12-34 |
| 12.8 Mitigation measures..... | 12-34 |
| 12.9 Conclusion | 12-35 |

Chapter 13

| | |
|---|-------------|
| 13 AIR QUALITY | 13-1 |
| 13.1 Overview..... | 13-1 |
| 13.2 EES evaluation objective..... | 13-1 |
| 13.3 Assessment methodology | 13-1 |
| 13.3.1 Impact assessment methodology | 13-2 |
| 13.3.2 Assessment of the onsite quarry | 13-3 |
| 13.4 Existing conditions | 13-3 |
| 13.4.1 Study area | 13-3 |

| | | |
|--------|------------------------------|-------|
| 13.4.2 | Meteorology | 13-3 |
| 13.4.3 | Background air quality | 13-6 |
| 13.4.4 | Sensitive receptors | 13-8 |
| 13.5 | Construction impacts..... | 13-8 |
| 13.5.1 | Dust impacts | 13-8 |
| 13.5.2 | Other air quality impacts | 13-10 |
| 13.6 | Operation impacts | 13-10 |
| 13.7 | Decommissioning impacts..... | 13-10 |
| 13.8 | Mitigation measures..... | 13-10 |
| 13.9 | Conclusion | 13-12 |

Chapter 14

| | | |
|-----------|--|-------------|
| 14 | NOISE AND VIBRATION | 14-1 |
| 14.1 | Overview..... | 14-1 |
| 14.2 | EES evaluation objective..... | 14-1 |
| 14.3 | Assessment methodology | 14-2 |
| 14.4 | Existing conditions..... | 14-2 |
| 14.4.1 | Study area | 14-2 |
| 14.4.2 | Noise sensitive locations | 14-2 |
| 14.4.3 | Background noise monitoring | 14-5 |
| 14.4.4 | Applicable noise limits | 14-5 |
| 14.5 | Construction impacts..... | 14-7 |
| 14.5.1 | Predicted construction noise levels | 14-7 |
| 14.5.2 | Predicted construction traffic noise levels | 14-9 |
| 14.5.3 | Predicted construction vibration levels | 14-9 |
| 14.5.4 | Predicted quarry and concrete batching plant noise levels | 14-9 |
| 14.6 | Operation impacts | 14-10 |
| 14.6.1 | Predicted operational noise levels | 14-10 |
| 14.6.2 | Predicted substation noise levels | 14-13 |
| 14.6.3 | Cumulative impacts | 14-13 |
| 14.7 | Environmental Reference Standard | 14-13 |
| 14.7.1 | Natural areas | 14-13 |
| 14.7.2 | Potential effects on natural areas from construction noise | 14-14 |

| | | |
|--------|---|-------|
| 14.7.3 | Potential effects on natural areas from operational noise | 14-15 |
| 14.8 | Mitigation measures..... | 14-17 |
| 14.9 | Conclusion | 14-20 |

Chapter 15

| | | |
|------------------------------------|---|-------|
| 15 TRANSPORT..... | 15-1 | |
| 15.1 Overview..... | 15-1 | |
| 15.2 EES evaluation objective..... | 15-2 | |
| 15.3 Assessment methodology | 15-2 | |
| 15.4 Existing conditions | 15-3 | |
| 15.4.1 | Study area | 15-3 |
| 15.4.2 | Local road network | 15-3 |
| 15.4.3 | Traffic conditions | 15-8 |
| 15.5 Construction impacts..... | 15-11 | |
| 15.5.1 | Construction traffic generation | 15-11 |
| 15.5.2 | Site access and intersection upgrades | 15-12 |
| 15.5.3 | Traffic generation at site entrances | 15-16 |
| 15.5.4 | Over-dimensional and oversize overmass vehicles | 15-18 |
| 15.5.5 | Plantation operations | 15-18 |
| 15.5.6 | Road upgrades | 15-18 |
| 15.5.7 | Pedestrian and bicycle routes | 15-18 |
| 15.5.8 | Public / school bus routes | 15-19 |
| 15.5.9 | Dust and debris on roads | 15-19 |
| 15.5.10 | Emergency vehicle access | 15-19 |
| 15.6 Operation impacts | 15-20 | |
| 15.6.1 | Operation traffic generation | 15-20 |
| 15.6.2 | Traffic impacts | 15-20 |
| 15.6.3 | Emergency vehicle access | 15-20 |
| 15.7 Decommissioning impacts..... | 15-20 | |
| 15.8 Mitigation measures..... | 15-22 | |
| 15.9 Conclusion | 15-26 | |

Chapter 16

| | |
|--|-------------|
| 16 LAND USE AND PLANNING..... | 16-1 |
| 16.1 Overview..... | 16-1 |
| 16.2 EES evaluation objective..... | 16-1 |
| 16.3 Assessment methodology | 16-2 |
| 16.4 Existing conditions..... | 16-2 |
| 16.4.1 Study area | 16-2 |
| 16.4.2 Glenelg Planning Scheme | 16-2 |
| 16.4.3 Regional land use | 16-2 |
| 16.4.4 Land use within the Project Area | 16-8 |
| 16.5 Strategic impact assessment | 16-11 |
| 16.6 Construction impacts..... | 16-11 |
| 16.6.1 Agricultural activities | 16-11 |
| 16.6.2 Public land and recreational infrastructure | 16-12 |
| 16.6.3 Amenity of natural areas | 16-13 |
| 16.6.4 Housing | 16-14 |
| 16.6.5 Other infrastructure | 16-14 |
| 16.7 Operation impacts..... | 16-14 |
| 16.8 Decommissioning impacts..... | 16-15 |
| 16.9 Mitigation measures..... | 16-15 |
| 16.10 Conclusion | 16-16 |

Chapter 17

| | |
|---|-------------|
| 17 SOCIO-ECONOMIC..... | 17-1 |
| 17.1 Overview..... | 17-1 |
| 17.2 EES evaluation objective..... | 17-2 |
| 17.3 Assessment methodology | 17-3 |
| 17.4 Existing conditions..... | 17-4 |
| 17.4.1 Study area | 17-4 |
| 17.4.2 Great South Coast Region | 17-5 |
| 17.4.3 Glenelg Shire | 17-8 |
| 17.4.4 City of Mount Gambier | 17-9 |
| 17.5 Consultation and information provision | 17-9 |

| | |
|--|-------|
| 17.6 Construction impacts..... | 17-10 |
| 17.6.1 Changes to sense of place, community relations and social cohesion due to population increase | 17-13 |
| 17.6.2 Disruption to existing land uses | 17-13 |
| 17.6.3 Amenity, recreation and visual impacts | 17-14 |
| 17.6.4 Disruption to environmental values | 17-14 |
| 17.6.5 Access to infrastructure and services | 17-15 |
| 17.6.6 Aboriginal cultural values and land rights | 17-15 |
| 17.6.7 Community engagement and information sharing | 17-16 |
| 17.7 Operation impacts | 17-16 |
| 17.7.1 Property values and livelihoods | 17-17 |
| 17.7.2 Tourism | 17-18 |
| 17.7.3 Community health and public safety | 17-18 |
| 17.7.4 Sense of place and amenity | 17-18 |
| 17.8 Decommissioning impacts..... | 17-19 |
| 17.9 Project benefits | 17-19 |
| 17.9.1 Economic output | 17-20 |
| 17.9.2 Local employment and procurement | 17-21 |
| 17.9.3 Affordable clean energy | 17-22 |
| 17.9.4 Neighbour agreements and income generation | 17-22 |
| 17.10 Mitigation measures..... | 17-22 |
| 17.11 Conclusion | 17-26 |
| 17.12 References | 17-27 |

Chapter 18

| | |
|---|-------------|
| 18 SAFETY, HAZARD, AND RISK..... | 18-1 |
| 18.1 Overview..... | 18-1 |
| 18.1.1 Electromagnetic interference | 18-1 |
| 18.1.2 Aviation | 18-1 |
| 18.1.3 Bushfire risk | 18-2 |
| 18.2 EES evaluation objective..... | 18-2 |
| 18.3 Electromagnetic interference..... | 18-2 |
| 18.3.1 Assessment methodology | 18-4 |
| 18.3.2 Existing conditions | 18-4 |

| | | |
|--------|---|-------|
| 18.3.3 | Construction impacts | 18-9 |
| 18.3.4 | Operation impacts | 18-9 |
| 18.4 | Aviation..... | 18-12 |
| 18.4.1 | Assessment methodology | 18-12 |
| 18.4.2 | Existing conditions | 18-12 |
| 18.4.3 | Construction impacts | 18-16 |
| 18.4.4 | Operation impacts | 18-17 |
| 18.4.5 | Qualitative risk assessment | 18-18 |
| 18.5 | Bushfire risk | 18-18 |
| 18.5.1 | Assessment methodology | 18-18 |
| 18.5.2 | Existing conditions | 18-19 |
| 18.5.3 | Bushfire risk assessment | 18-20 |
| 18.5.4 | Impacts on fire bombing and firefighting operations | 18-22 |
| 18.6 | Mitigation measures..... | 18-22 |
| 18.7 | Conclusion | 18-28 |

Chapter 19

| | | |
|-----------|---|-------------|
| 19 | ENVIRONMENTAL MANAGEMENT FRAMEWORK | 19-1 |
| 19.1 | Introduction..... | 19-1 |
| 19.1.1 | EES scoping requirements | 19-1 |
| 19.2 | Statutory approvals and consents | 19-2 |
| 19.2.1 | Incorporated document | 19-3 |
| 19.2.2 | Governance framework | 19-4 |
| 19.3 | Roles and responsibilities | 19-4 |
| 19.4 | Environmental assessment and management | 19-6 |
| 19.4.1 | Baseline data | 19-6 |
| 19.4.2 | Risk assessment | 19-6 |
| 19.4.3 | Mitigation measures | 19-6 |
| 19.5 | Environmental management documentation | 19-61 |
| 19.6 | Environmental management system | 19-65 |
| 19.6.1 | Change management | 19-65 |
| 19.7 | Evaluating performance and compliance..... | 19-65 |
| 19.7.1 | Compliance | 19-65 |

| | | |
|--------|------------------------|-------|
| 19.7.2 | Complaints management | 19-65 |
| 19.7.3 | Auditing and reporting | 19-66 |

Chapter 20

| | | |
|-----------|--|-------------|
| 20 | CONCLUSION | 20-1 |
| 20.1 | Overview..... | 20-1 |
| 20.2 | Integrated assessment | 20-1 |
| 20.2.1 | Biodiversity and habitat | 20-1 |
| 20.2.2 | Cultural heritage | 20-5 |
| 20.2.3 | Catchment values and hydrology | 20-6 |
| 20.2.4 | Landscape and visual | 20-7 |
| 20.2.5 | Land use and socioeconomic | 20-8 |
| 20.2.6 | Community amenity, safety, roads and transport | 20-10 |
| 20.3 | Environmental Management Framework and mitigation measures | 20-13 |
| 20.4 | Next steps..... | 20-17 |

LIST OF FIGURES

Chapter 1

| | |
|---|------|
| Figure 1.1: Site context and Project Area | 1-4 |
| Figure 1.2: Project timeline | 1-13 |

Chapter 2

| | |
|--|-----|
| Figure 2.1: Wind speed patterns at the BoM Portland (Cashmore airport) weather station between 1982 and 2021 (BoM, 2021) | 2-4 |
|--|-----|

Chapter 3

| | |
|--|------|
| Figure 3.1: Land tenure in the region | 3-3 |
| Figure 3.2: Wind farm layout | 3-6 |
| Figure 3.3: Transmission line corridor details | 3-7 |
| Figure 3.4: Proposed quarry site layout | 3-15 |
| Figure 3.5: Proposed transport routes from the port of portland to the wind farm site | 3-18 |
| Figure 3.6: Indicative number of construction workers throughout the project's construction period | 3-20 |

Chapter 4

| | |
|--|------|
| Figure 4.1: Original turbine layout (July 2019) | 4-6 |
| Figure 4.2: Original turbine locations affected by environmental constraints | 4-7 |
| Figure 4.3: Changes made to the original turbine layout due to biodiversity constraints | 4-13 |
| Figure 4.4: Changes made to the turbine layout due to groundwater-related constraints | 4-16 |
| Figure 4.5: Land use zoning and changes made to the original turbine layout | 4-18 |
| Figure 4.6: Significant landscape overlay and changes made to the original turbine layout | 4-19 |
| Figure 4.7: Original versus revised alignment of the 275 kV powerline | 4-22 |
| Figure 4.8: High level transmission corridor options | 4-25 |
| Figure 4.9: Preliminary transmission line routes | 4-26 |
| Figure 4.10: Feasible transmission line options | 4-27 |
| Figure 4.11: Route options for the transmission line near the Parks | 4-29 |
| Figure 4.12: Route options for the transmission line upon approach to the Heywood terminal station | 4-30 |
| Figure 4.13 Proposed quarry site and existing GTFP and HVP quarries | 4-33 |
| Figure 4.14: Original and revised site access points and potential transport routes | 4-35 |
| Figure 4.15: Original and final turbine layouts | 4-38 |

Chapter 5

| | |
|--|------|
| Figure 5.1: EES process and key approvals required | 5-3 |
| Figure 5.2: Native Title Determination and areas of cultural heritage sensitivity near the Project Area..... | 5-6 |
| Figure 5.3: The Project's impact assessment approach | 5-9 |
| Figure 5.4 Avoidance, minimise and Offset hierarchy..... | 5-11 |

Chapter 6

| | |
|---|------|
| Figure 6.1: Values of the Proponent's consultation approach | 6-2 |
| Figure 6.2: Engagement phases and communication channels of the Proponent's consultation approach | 6-4 |
| Figure 6.3: Summary of the Proponent's community engagement activities and timeline for the Project | 6-11 |

Chapter 7

| | |
|--|------|
| Figure 7.2: Australasian bittern survey locations | 7-15 |
| Figure 7.3: Orange-bellied parrot survey locations | 7-16 |
| Figure 7.4: Owl survey locations | 7-17 |
| Figure 7.5: Mammal camera trap locations | 7-18 |

| | |
|---|-------|
| Figure 7.6: Reptile and growling grass survey locations | 7-19 |
| Figure 7.7: Eastern Ground Parrot survey locations | 7-20 |
| Figure 7.8: Bird utilisation survey locations | 7-23 |
| Figure 7.9: Migratory shorebird survey locations | 7-24 |
| Figure 7.10: Bat detector locations | 7-27 |
| Figure 7.11: Public reserves near the project area | 7-31 |
| Figure 7.12: Wetlands within the project area and surrounds | 7-34 |
| Figure 7.13: EVCs located within the project area. | 7-40 |
| Figure 7.14: Threatened flora within the wind farm site | 7-44 |
| Figure 7.15: Threatened flora along the transmission line | 7-45 |
| Figure 7.16: Total number of confirmed SBWB calls recorded from mast mounted detector locations | 7-59 |
| Figure 7.17: Temporal distribution of SBWB calls | 7-60 |
| Figure 7.18: Southern bent-wing bat distribution | 7-61 |
| Figure 7.19 Native vegetation losses within the Project Area | 7-66 |
| Figure 7.20 Indicative tree protection zone | 7-87 |
| Figure 7.21: Avoidance of Apple Jacks along the transmission line | 7-90 |
| Figure 7.22: Wetlands and australasian bittern records in the north-east of the wind farm site | 7-97 |
| Figure 7.23: Wetlands and australasian bittern records in the south of the wind farm site adjacent to the Ramsar site | 7-98 |
| Figure 7.24: Terrestrial mammal records in the wind farm site | 7-101 |
| Figure 7.25: Southern brown bandicoot record near the transmission line | 7-102 |
| Figure 7.26: Threatened reptile records within the project area and investigation area | 7-104 |
| Figure 7.27: Population curve for Portland population. The mean and standard deviation are shown. | 7-109 |
| Figure 7.28: Records of White-throated Needletail from Project surveys | 7-113 |
| Figure 7.29: South-eastern red-tailed black cockatoo range | 7-116 |
| Figure 7.30: South-eastern red-tailed black cockatoo habitat and previous existing records | 7-117 |
| Figure 7.31: Orange-bellied parrot records from project surveys | 7-119 |

Chapter 8

| | |
|--|-----|
| Figure 8.1: Brolga records within 10 km of the project area | 8-5 |
| Figure 8.2: Turbine-free buffers on brolga breeding habitat and movement corridors | 8-7 |
| Figure 8.3: Project design changes to minimise impacts on brolga | 8-8 |

Chapter 9

| | |
|---|------|
| Figure 9.1: Study areas used in the surface water, groundwater and GDE impact assessments | 9-4 |
| Figure 9.2: Key drainage basins | 9-6 |
| Figure 9.3: Topography of the study area | 9-8 |
| Figure 9.4: Waterbodies within the Glenelg Estuary and Discovery Bay Ramsar site | 9-9 |
| Figure 9.5: Waterbodies in the wind farm sub-area | 9-14 |
| Figure 9.6: Waterbodies in the wind farm north-east sub-area | 9-15 |
| Figure 9.7: Waterbodies in the transmission line sub-area | 9-16 |
| Figure 9.8: Geology of the Study Area | 9-24 |
| Figure 9.9: Regional depth to groundwater across the Study Area | 9-26 |
| Figure 9.10: Inferred Depth to Groundwater in the Plantation Sub-Area | 9-27 |
| Figure 9.11: Inferred groundwater depth and flow direction in the north-east sub-area | 9-28 |
| Figure 9.12 GDEs within the Wind Farm Sub-areas | 9-36 |
| Figure 9.13 GDEs within the Transmission Line Sub-areas | 9-38 |

Chapter 10

| | |
|--|------|
| Figure 10.1: Surface geology, contamination and ASS IA study area and test pit and groundwater monitoring well locations | 10-5 |
|--|------|

Chapter 11

| | |
|---|-------|
| Figure 11.1: Cultural heritage study area | 11-7 |
| Figure 11.2: Geomorphology and registered Aboriginal places in the study area | 11-9 |
| Figure 11.3: Areas of cultural heritage sensitivity | 11-11 |
| Figure 11.4: Registered Aboriginal places in the wind farm site | 11-12 |
| Figure 11.5: Historical heritage sites within Study Area 1 | 11-19 |
| Figure 11.6 Historical heritage sites within Study Area 2 | 11-20 |

Chapter 12

| | |
|--|-------|
| Figure 12.1 Project viewshed and locality features | 12-6 |
| Figure 12.2: Key landscape features and significant landscape overlays | 12-10 |
| Figure 12.3 Landscape character areas | 12-11 |
| Figure 12.4: Key Viewpoints | 12-14 |
| Figure 12.5 Key Dwelling View Locations | 12-15 |

| | |
|--|-------|
| Figure 12.6: Approximate 90° field of view north-north west to east-north east from Lake Mombeong campsite | 12-20 |
| Figure 12.7: Approximate 90° field of view north to east from sand dunes at Swan Lake | 12-21 |
| Figure 12.8: Approximate 90° field of view north to east from Lake Mombeong inland track | 12-22 |
| Figure 12.9: Approximate 90° field of view south to west from Hedditch Hill | 12-23 |
| Figure 12.10: Cumulative visual impacts | 12-32 |

Chapter 13

| | |
|---|------|
| Figure 13.1: AQIA study area | 13-4 |
| Figure 13.2: Average monthly temperature and rainfall at Portland Airport (BoM, 2021) | 13-5 |
| Figure 13.3: Average monthly 9 am and 3 pm relative humidity and wind speed at Portland Airport (BoM, 2021) | 13-5 |
| Figure 13.4: Seasonal wind roses for Portland Airport (adapted from the AQIA (Appendix N)) | 13-6 |
| Figure 13.5: Point sources of air pollution and sensitive receptors near the Project Area | 13-7 |

Chapter 14

| | |
|--|-------|
| Figure 14.1: Wind farm operation noise and vibration study area | 14-3 |
| Figure 14.2: Transmission line construction noise and vibration study area | 14-4 |
| Figure 14.3: Highest predicted noise levels | 14-12 |
| Figure 14.4: Natural areas in the vicinity of the Project with predicted operational wind turbine noise levels | 14-16 |

Chapter 15

| | |
|--|-------|
| Figure 15.1: Transport impact assessment study area | 15-4 |
| Figure 15.2: Sustainable modes of transport near the Project Area | 15-9 |
| Figure 15.3: Crash locations 2013–2020 | 15-10 |
| Figure 15.4: Pinch points and intersection upgrade requirements | 15-15 |
| Figure 15.5: Roads to be used for detours during construction of the underground transmission line | 15-21 |

Chapter 16

| | |
|--|-------|
| Figure 16.1: Public land sites and recreational infrastructure near the Project Area | 16-7 |
| Figure 16.2: Planning zones in the Project Area and surrounds | 16-9 |
| Figure 16.3: Planning overlays in the Project Area and surrounds | 16-10 |

Chapter 17

| | |
|--|------|
| Figure 17.1: Social impact assessment study area | 17-6 |
| Figure 17.2: Economic impact assessment study area | 17-7 |

Chapter 18

| | |
|--|-------|
| Figure 18.1 Types of electromagnetic interference caused by wind turbines | 18-3 |
| Figure 18.2: Electromagnetic interference impact assessment study area | 18-6 |
| Figure 18.3: Radio systems within the study area | 18-7 |
| Figure 18.4: Narrowcast/broadcast transmitters and weather stations | 18-8 |
| Figure 18.5 Dwellings with digital television signals potentially affected | 18-11 |
| Figure 18.6: Aeronautical impact assessment study area | 18-14 |
| Figure 18.7: Aerodromes within the study area | 18-15 |

Chapter 19

| | |
|--|-------|
| Figure 19.1 Key environmental management documentation | 19-61 |
|--|-------|

Chapter 20

| | |
|---|------|
| Figure 20.1: Changes made to the turbine layout due to the adoption of biodiversity buffers | 20-5 |
|---|------|

LIST OF TABLES**Chapter 1**

| | |
|--|-----|
| Table 1.1 Project terminology | 1-5 |
| Table 1.2: EES draft evaluation objectives | 1-8 |
| Table 1.3: Structure of this EES | 1-9 |

Chapter 3

| | |
|---|------|
| Table 3.1: Area and number of land parcels in the wind farm site and transmission line corridor | 3-4 |
| Table 3.2: Site access points and upgrade requirements | 3-12 |
| Table 3.3: Intersection upgrade requirements along OSOM route | 3-17 |

Chapter 4

| | |
|--|------|
| Table 4.1: Summary of Project alternatives considered throughout the EES process | 4-2 |
| Table 4.2: Rationale for changes to the turbine layout | 4-8 |
| Table 4.3: Summary of original turbines removed or relocated due to biodiversity constraints | 4-12 |

Chapter 5

| | |
|--|-----|
| Table 5.1: Draft evaluation objectives and corresponding key legislation | 5-8 |
|--|-----|

Chapter 6

| | |
|---|------|
| Table 6.1: Principles and practice of the Proponent's consultation approach | 6-3 |
| Table 6.2: Government stakeholder groups and engagement objectives identified for the Project | 6-5 |
| Table 6.3: Aboriginal and cultural heritage stakeholder groups and engagement objectives identified for the Project | 6-7 |
| Table 6.4: Business and industry stakeholder groups and engagement objectives identified for the Project | 6-7 |
| Table 6.5: landholder stakeholder groups and engagement objectives identified for the Project | 6-9 |
| Table 6.6: Special interest and community groups and engagement objectives identified for the Project | 6-10 |
| Table 6.7: Regional visitor stakeholder groups and engagement objectives identified for the Project | 6-10 |
| Table 6.8: Overview of construction phase engagement activities to be undertaken for the Project | 6-13 |
| Table 6.9: Overview of operation phase engagement activities to be undertaken for the Project | 6-15 |
| Table 6.10: Near neighbour social benefits | 6-21 |
| Table 6.11: Community social benefits | 6-21 |
| Table 6.12: Biodiversity benefits | 6-22 |
| Table 6.13: Monitoring and evaluation methods | 6-24 |

Chapter 7

| | |
|--|------|
| Table 7.2: Targeted flora survey species | 7-9 |
| Table 7.3: Summary of southern bent-wing bat acoustic surveys undertaken for the project | 7-25 |
| Table 7.4: Summary of vegetation and habitat types within the project area | 7-29 |
| Table 7.5: Wetlands within and adjacent to the project area | 7-32 |
| Table 7.6: EVCs in the project area | 7-38 |
| Table 7.7: Threatened flora species recorded in the Project Area | 7-43 |
| Table 7.8: Threatened fauna species recorded during project surveys | 7-51 |
| Table 7.9: Listed migratory shorebirds recorded during targeted surveys | 7-55 |

| | |
|--|-------|
| Table 7.10: Threatened species identified during the BUS within the project area | 7-56 |
| Table 7.11: Manual checking of SBWB calls | 7-58 |
| Table 7.12: Offsets required for the project | 7-64 |
| Table 7.13: Potential encroachment on TPZs or structural root zones (SRZs) | 7-88 |
| Table 7.14: Mean numbers of mature SBWB at the three known sub-populations as at 2019 (TSSC, 2021) | 7-108 |
| Table 7.15: Portland population size and percentage decline by year | 7-109 |
| Table 7.16: Probability of SBWB population reaching zero for Portland sub-population by year with varying number of wind farm mortalities (Symbolix, 2021) | 7-109 |
| Table 7.17: Low wind speed curtailment parameters | 7-110 |
| Table 7.18: Assessment of the project against resource condition targets for the Ramsar Site | 7-124 |
| Table 7.19: Biodiversity mitigation measures | 7-128 |
| Table 7.20: Summary of flora and fauna impacts | 7-137 |

Chapter 8

| | |
|---|------|
| Table 8.1: Projected number of Brolga collisions with turbines per annum (60m blade clearance) | 8-10 |
| Table 8.2: Expected minimum population size of the south-west Victorian Brolga population for each of the three different turbine avoidance rates used in the CRM | 8-11 |
| Table 8.3: Mitigation measures for Brolga | 8-12 |

Chapter 9

| | |
|---|------|
| Table 9.1: Surface water environmental values from the ERS | 9-11 |
| Table 9.2 Waterways and wetlands intersecting with the wind farm site | 9-19 |
| Table 9.3 Waterways intersecting the underground transmission line | 9-20 |
| Table 9.4: Aquifers of the study area | 9-23 |
| Table 9.5: Registered groundwater bores within the study area | 9-25 |
| Table 9.6: Potential GDEs in the plantation sub-area | 9-34 |
| Table 9.7: Potential GDEs in the north-eastern sub-area | 9-35 |
| Table 9.8: Potential GDEs mapped in the transmission line corridor | 9-37 |
| Table 9.9: Surface water, groundwater and GDE mitigation measures | 9-41 |

Chapter 10

| | |
|---|------|
| Table 10.1: Land environmental values | 10-7 |
| Table 10.2: Contamination and ASS mitigation measures | 10-9 |

Chapter 11

| | |
|---|-------|
| Table 11.1: Geomorphology of the study area | 11-8 |
| Table 11.2: Registered Aboriginal places within the Project Area | 11-13 |
| Table 11.3: VHI listed and delisted historical heritage sites in the study area | 11-18 |
| Table 11.4: Aboriginal cultural heritage mitigation measures | 11-25 |

Chapter 12

| | |
|--|-------|
| Table 12.1 Landscape sensitivity ratings | 12-3 |
| Table 12.2: Level of sensitivity criteria | 12-4 |
| Table 12.3: Magnitude of visual effects criteria | 12-4 |
| Table 12.4: Visual effect grading matrix | 12-4 |
| Table 12.5 Landscape character areas | 12-7 |
| Table 12.6 Key viewing locations and assigned sensitivity and magnitude | 12-12 |
| Table 12.7 Nearby wind farms | 12-13 |
| Table 12.8: Assessment of the Project against the SLO1 Decision Guidelines | 12-17 |
| Table 12.9: Visual effect from key viewing locations | 12-18 |
| Table 12.10: Potential visual effects at non-involved dwellings within 10 km of Project Turbines | 12-25 |
| Table 12.11: Wind turbine model dimensions | 12-33 |
| Table 12.12: Calculated shadow flicker exceedances | 12-33 |
| Table 12.13: Landscape and visual mitigation measures | 12-34 |

Chapter 13

| | |
|--|-------|
| Table 13.1 Potential unmitigated dust impacts | 13-2 |
| Table 13.2: Sensitive human receptors in the AQIA study area | 13-8 |
| Table 13.3: Summary of potential unmitigated dust impacts of Project construction activities | 13-9 |
| Table 13.4: Mitigation measures for air quality | 13-11 |

Chapter 14

| | |
|--|------|
| Table 14.1: Background noise levels, dB L _{A90} – all-time period | 14-5 |
| Table 14.2: Background noise levels (dB L _{A90}) – night period | 14-5 |
| Table 14.3: Noise limits adopted for the Project | 14-6 |
| Table 14.4: Noise Protocol time periods and noise limits | 14-7 |
| Table 14.5: Noise limits applicable to quarry operations | 14-7 |

| | |
|--|-------|
| Table 14.6: Indicative range of construction noise predictions for non-involved and involved receivers | 14-8 |
| Table 14.7: Predicted substation noise levels at the nearest receivers | 14-13 |
| Table 14.8: Noise and vibration mitigation measures | 14-17 |

Chapter 15

| | |
|--|-------|
| Table 15.1: Road network associated with the wind farm site | 15-5 |
| Table 15.2: Transmission line corridor road network conditions | 15-7 |
| Table 15.3: Portland-Nelson Road and Henty Highway AADT volumes | 15-8 |
| Table 15.4: Estimate of external traffic volumes generated during wind farm construction | 15-11 |
| Table 15.5: Estimate of internal traffic volumes generated during wind farm construction | 15-11 |
| Table 15.6: Wind farm site access point upgrade requirements | 15-12 |
| Table 15.7: Intersection upgrade requirements | 15-13 |
| Table 15.8: Sight distance checks at wind farm site entrances | 15-16 |
| Table 15.9: Predicted worst-case construction traffic impacts during the morning peak hour | 15-17 |
| Table 15.10: Transport mitigation measures | 15-22 |

Chapter 16

| | |
|---|------|
| Table 16.1: Public land sites and associated recreational infrastructure | 16-3 |
| Table 16.2: Key transport, power, energy, education and health infrastructure near the Project Area | 16-5 |
| Table 16.3: Wind farm site and transmission line corridor land uses | 16-8 |

Chapter 17

| | |
|---|-------|
| Table 17.1: Social impact ranking | 17-3 |
| Table 17.2: Area of social influence | 17-5 |
| Table 17.3: Key townships in the Great South Coast Region | 17-8 |
| Table 17.4: Economic and social construction impacts | 17-10 |
| Table 17.5: Construction workforce scenarios | 17-13 |
| Table 17.6: Social and economic operation impacts | 17-16 |
| Table 17.7: Project benefits impacts | 17-19 |
| Table 17.8: Socio-economic mitigation measures | 17-23 |

Chapter 18

| | |
|--|-------|
| Table 18.1: Radio systems operating within the study area | 18-5 |
| Table 18.2 :Published air routes and lowest safe altitudes | 18-13 |
| Table 18.3: Bushfire risk assessment table | 18-19 |
| Table 18.4: Safety, hazard and risk mitigation measures | 18-23 |

Chapter 19

| | |
|---|-------|
| Table 19.1: Statutory approvals and consents required for the Project | 19-2 |
| Table 19.2: Environmental management roles and responsibilities | 19-4 |
| Table 19.3: Mitigation measures | 19-7 |
| Table 19.4: Environmental management documentation | 19-62 |

Chapter 20

| | |
|--|-------|
| Table 20.1: Environmental management documentation | 20-14 |
|--|-------|

LIST OF PLATES**Chapter 1**

| | |
|--|-----|
| Plate 1.1: Expected unreserved energy (%) in the NEM (AEMO, 2024). | 1-2 |
| Plate 1.2: Diagram of a wind turbine (Badurek, 2015) | 1-6 |

Chapter 3

| | |
|---|------|
| Plate 3-1: Indicative wind turbine dimensions | 3-9 |
| Plate 3-2: Integrated Trenching Wheel | 3-23 |
| Plate 3-3: HDD Installation (reference) | 3-24 |
| Plate 3-4: Major Intersections Along Boiler Swamp Road, such as with Fish Hole Road, are Proposed to be Used for Construction Vehicle Turnaround and Daily Storage of any Spoil | 3-27 |
| Plate 3-5: Minimum Vehicle Turnaround Dimensions for an 8 m-long Rural Fire Trucks (Downer, 2022) | 3-27 |
| Plate 3-6: Indicative design of the underground section of the transmission line, comprising three trenches underneath an existing road with space for construction and emergency vehicles to pass alongside the trenches | 3-28 |
| Plate 3-7: Indicative design of the transmission line along boiler swamp road (modified from (Downer, 2022)) | 3-29 |
| Plate 3-8: Traditional excavator bucket (Downer, 2022) | 3-30 |

Chapter 4

| | |
|---|------|
| Plate 4.1: Average wind velocity in Australia (BoM, 2011) | 4-2 |
| Plate 4.2: View towards Discovery Bay from the Hedditch Hill lookout (Umwelt, May 2022) | 4-15 |
| Plate 4.3: Traditional excavator bucket (Downer, 2022) | 4-31 |
| Plate 4.4: Chainsaw trencher (Downer, 2022) | 4-31 |
| Plate 4.5: Integrated trenching wheel | 4-32 |

Chapter 8

| | |
|---|-----|
| Plate 8.1: Brolga pair on a nest in farmland within the eastern section of the wind farm site, 9 July 2021 (Biosis) | 8-4 |
|---|-----|

Chapter 9

| | |
|---|------|
| Plate 9.1: Mean monthly rainfall (Nelson) and evaporation (Mount Gambier) (1940-2014 BoM data) (DELWP, 2017 a) | 9-5 |
| Plate 9.2: Glenelg Estuary | 9-10 |
| Plate 9.3: Wetland ID 20532 located at the northern boundary of the wind farm site (AECOM, 2023) | 9-12 |
| Plate 9.4: Isolated depression with standing water in Wetland 20522, close to the underground cable alignment (AECOM, 2023) | 9-12 |
| Plate 9.5: Dry riverbed in Surrey River at Boiler Swamp Road in April 2023 (AECOM, 2023) | 9-13 |
| Plate 9.6: Generalised landform cross-section of the wind farm site (adapted from (AECOM, 2021a)) | 9-22 |
| Plate 9.7: Ribbon grass in Surrey River indicative of perennial flow (CDM Smith, October 2022) | 9-40 |

Chapter 11

| | |
|---|-------|
| Plate 11.1: Photo looking west to Portland-Nelson Road showing the approximate location of the Former Kentbruck School (Biosis, 2020) | 11-21 |
| Plate 11.2: Photo of c.1850s blue and white ceramic found in Study Area 1 (Biosis, 2020) | 11-21 |
| Plate 11.3: Photo of the steam boiler on Boiler Swamp Road, which is part of the Boiler Swamp Sawmill delisted heritage site (Biosis, 2020) | 11-22 |

Chapter 18

| | |
|---|-------|
| Plate 18.1: The ‘scan bands’ of the BoM radar at Mount Gambier (from the EMI Impact Assessment) | 18-10 |
|---|-------|

NEOEN

Melbourne

Level 7
99 King Street
Melbourne, VIC 3000

P. 1800 966 206
E. contact@kentbruckgreenpowerhub.com.au



Melbourne

Suite 2, Level 27
530 Collins Street
Melbourne 3000

P. 1300 793 267
E. info@umwelt.com.au
W. umwelt.com.au