
Volume 2

Chapter 4

Summary of environmental effects in Tasmania

4 Summary of environmental effects in the Tasmanian terrestrial environment

This chapter provides a summary of the potential effects of the project's construction, operation and decommissioning on the terrestrial environment of Tasmania. The terrestrial environment in Tasmania has been included in the EIS/EES for matters covered by Commonwealth legislation only. Separate EIS documentation has been prepared to address Tasmanian government requirements.

4.1 Project activities

Project activities in the Tasmanian terrestrial environment will involve construction of a converter station, and shore crossing. Detail on key project activities in Tasmania is provided in Volume 1, Chapter 6 – Project description. The converter station will facilitate the connection between the project subsea cables and the Tasmanian 220 kV transmission network.

Construction will involve drilling holes, via HDD, for the cables to pass from approximately 10 m water depth offshore into the converter station. The project is intended to operate 24 hours per day, 365 days per year over an anticipated minimum 40-year operational lifespan.

At the end of its operation, the project will either be decommissioned or upgraded to extend its operation. Requirements at the time will determine the scope of decommissioning activities and impacts. Decommissioning will be planned and carried out in accordance with regulatory and landholder requirements at the time. The key objective of decommissioning is to leave a safe, stable and non-polluting environment, and minimise impacts during the removal of infrastructure. A decommissioning plan in accordance with approvals conditions will be prepared and approved by the Minister for Planning at least six months prior to planned end of service and decommissioning of the project.

4.2 Method

This volume of the EIS/EES provides a summary of the assessment of the impacts of the project on the terrestrial environment to address Commonwealth requirements in Tasmania. This includes MNES and other matters considered by the Minister for the Environment and Water when making a decision under the EPBC Act (as set out in the Commonwealth EIS guidelines). For the Tasmanian terrestrial environment, these matters include ecology (threatened species and communities, migratory species) and social considerations. Tasmanian legislative requirements are assessed in separate EIS documentation.

Technical studies were completed to assess the impacts of the project during construction, operation and decommissioning, and documented in appendices to this EIS/EES. The technical studies adopted a range of methods to assess the project's potential impacts and were informed by applicable legislation, policy, guidelines, and community consultation to address the requirements under the Commonwealth EIS guidelines.

Technical studies were informed by characterising the existing conditions to identify values that could be impacted. Technical specialist completed a range of activities including field inspections, targeted surveys, research, and stakeholder and community engagement, and drew on their experience to assess project impacts and identify opportunities.

The outcomes of these technical studies have informed the development of the EPRs. EPRs define the outcomes and performance to be achieved regardless of the design or construction method adopted. This performance-based approach promotes the achievement of environmental outcomes based on effective site-specific design solutions and mitigation measures to be adopted during the design, construction and operation of the project.

To comply with EPRs, contractors must determine the most effective mitigation methods to avoid or minimise impacts and risks to human health and the environment, and demonstrate how the required outcome was achieved.

4.3 Existing environment

The terrestrial Tasmanian component of the project is located in Heybridge, on the north-western coast of Tasmania. The town of Heybridge is home to 442 people and is a small, rural, coastal town. The community is self-described as tight-knit. The local and regional study area has lower median household income than Tasmania as a whole and the region has rental and housing shortages. There is also an existing shortage of qualified and available workers in the construction industry in Tasmania.

The area of the Heybridge converter station is 10.8 ha and predominantly comprises highly modified land due to its history of being occupied with industrial uses, with a small area of native vegetation located on the southeastern corner of the site. The area surveyed for the shore crossing is 6.5 ha and comprises a narrow coastal strip of native vegetation with an area of sandy beach.

Terrestrial ecology field surveys found no record of threatened ecological communities or threatened flora occurring within the converter station site or shore crossing survey areas. There is the potential for fauna species, listed as threatened or migratory under the EPBC Act, to pass through the site or to occur within the broader study area.

The EPBC Act listed fauna species that may occur include:

- Tasmanian devil (*Sarcophilus harrisii*) (listed as endangered under the EPBC Act)
- Spotted-tail quoll (*Dasyurus maculatus* subsp. *maculatus*) (listed as vulnerable under the EPBC Act)
- Tasmanian wedge-tailed eagle (*Aquila audax* subsp. *fleayi*) (listed as endangered under the EPBC Act)

- White-throated needletail (*Hirundapus caudacutus*) (listed as vulnerable under the EPBC Act)
- Fork-tailed swift (*Apus pacificus*) (listed as migratory under the EPBC Act)

While there was no evidence of Tasmanian devil or Spotted-tail quoll denning within the survey area or surrounding study area, roadkill of both species has been recorded on Minna Road and Bass Highway adjacent to the converter station site, indicating that these species may pass through the project area or reside within the broader study area.

The Tasmanian wedge-tailed eagle is known to occur within 2 km of the survey area with the closest active nest recorded 1.7 km south of the survey area. Consequently, the wedge-tailed eagle may occasionally overfly the study area.

The white-throated needletail and fork-tailed swift both have no records within 5 km of the survey area however these are aerial species and are known to overfly coastal areas during summer, and therefore may pass over the project.

4.4 Effects of construction

Constructing the converter station and shore crossing is the principal source of impacts to the environment in Tasmania. The full construction program in Tasmania is expected to take approximately 5 years, including civil works and bulk earthworks. The effects of construction on terrestrial ecology and social values are discussed below.

4.4.1 Terrestrial ecology

Construction activities will not require vegetation clearance in the coastal area between the Heybridge converter station site and the shoreline because of the use of HDD to drill under sensitive coastal areas through to an area offshore at approximately 10 m water depth. Some clearance of modified vegetation types, including up to 0.6 ha of tree plantings and up to 0.5 ha of weeds, will occur within the converter station site. The remnant patch (1.5 ha) of native vegetation that occurs in the south-east corner of the converter station site will not be cleared.

Commonwealth matters likely to be impacted by project activities are limited to threatened fauna species, as no threatened vegetation communities or threatened flora species were identified within the survey area. As part of the terrestrial ecology assessment in Technical Appendix E: Heybridge terrestrial ecology assessment, an assessment against criteria from the *Significant Impact Guidelines 1.1* (DoE 2013) was completed for each of the potentially impacted listed threatened fauna species. This assessment concluded there are no significant impacts on relevant MNES.

While there is no suitable habitat within the survey area or surrounding area, there is the potential for the project to impact on the Tasmanian devil and the Spotted-tail quoll from construction traffic movements on Minna Road. Entry to the converter station site off Minna Road is within 200 m of the Bass Highway intersection, therefore construction vehicles will not be travelling at high speed along Minna Road. Given the

nature of construction traffic and low populations of Tasmanian devils and Spotted-tail quolls in the area, the likelihood of roadkill incidents occurring is low, however due to the sensitivity of the species the pre-mitigated impact is rated as moderate. The key times of potential impact are one hour before dusk and one hour after sunrise. The pre-mitigated impact on Tasmanian devils and Spotted-tail quolls is assessed as moderate. EPRs require the implementation of measures to protect fauna, such as removing carrion, utilising workforce buses to reduce the number of vehicle movements or limiting construction vehicle speeds. With the implementation of measures to comply with EPRs, impact on the Tasmanian devil and Spotted-tail quoll during construction can be reduced from moderate to low.

The Tasmanian wedge-tailed eagle is unlikely to be impacted by construction activities for the project as there are no known nests located within 1 km of construction activities associated with the Heybridge converter station and shore crossing. While the pre-mitigated construction impacts on the wedge-tailed eagle is low, construction and operational EPRs have been included as a precaution and to address any potential new nests identified prior to construction works. With the implementation of measures to comply with EPRs, such as utilising recent data (within one year of construction commencing) to confirm there are no nests within a distance of 500 m, or within 1 km line-of-sight of construction activities, the impact on the Tasmanian wedge-tailed eagle remains low.

The white-throated needletail and fork-tailed swift are not expected to be disturbed by construction activities as they are aerial species and unlikely to utilise vegetation within the survey area. No EPRs are required or proposed to manage potential impacts on the fork-tailed swift or white-throated needletail during construction or operation of the project. The residual impact on these species remains low.

With the implementation of measures to comply with EPRs, the project is not likely to interfere with the recovery of threatened and/or migratory fauna species, and is not likely to result in a significant impact to relevant MNES.

4.4.2 Social

The project will deliver socio-economic benefits to North West Tasmania. The delivery of the project will provide employment and training opportunities for the region. The implementation of an industry participation plan will integrate First Peoples, females, youth and socially vulnerable groups into the project workforce. The project's construction will support local businesses through purchasing goods and services required to support the project's construction. The economic impacts and benefits associated with the project are detailed in Volume 1, Chapter 7 – Economics.

The project also has the potential to benefit to the health and wellbeing of residents in the study area through investments in community infrastructure, the potential for downward pressure to be placed on the market regarding energy prices, as well as greater telecommunication security through expansion of the supply-side infrastructure.

A detailed SIA has been completed, assessing the impacts and benefits of the project on people's community identity, economy and livelihoods, infrastructure and services and people's productive capacity. Many of the social impacts identified have been discussed in the discipline specific studies, such as impacts

to native vegetation, amenity, and cultural heritage. However, the SIA considers the same impacts in the context of what the community values, resulting in different impact ratings in some cases. The SIA identified 13 moderate residual impacts (five positives) and 11 high residual impacts (including three positive residual impacts) in North West Tasmania from the project.

High residual impacts

- Construction activity undertaken outside of regular working hours to complete shore crossing works, may generate noise levels exceeding sleep disturbance measures.
- Construction may contribute to the demand for construction workers and attract employees away from local businesses. This may reduce the availability of these workers for other industries, and result in increased lead times for other types of construction or workforce shortages for local businesses.
- Construction workforce may increase demand for childcare providers, compromising service provision to the existing local and regional community.
- Increased rental demand during construction in the regional study area would negatively impact housing affordability and availability.
- Community members in the study area may experience stress, anxiety or frustration during the construction phase of the project, due to a lack of understanding of the project's scope, the cumulative impacts of projects in the area and the lack of perceived local benefits.
- Community members may experience impacts to physical and mental health due to construction fatigue and ongoing after hours works.
- The project's construction will support local businesses through the goods and services required to support the project's development contributing to a positive outcome for the community.
- Once operational, the project is expected to result in large taxation receipts (\$762 million over 25 years), which will flow to local, state and the Commonwealth government to positively impact the 'economy and livelihood' attribute.
- Concern about the project's potential impacts during operation (e.g. EMF, operational noise) may result in feelings of stress, anxiety and frustration for surrounding residents and communities.
- Once operational, converter station will be visible from the southern edge of the Bass Highway during operation and from the exit of the tioxide beach foreshore reserve until screening planting is established, which may impact the community's strong values linked to character and amenity.
- Potential benefit to the health and wellbeing of residents in the study area through investments in community infrastructure. The delivery of the project may exert potential for downward pressure to be placed on the market regarding energy prices, as well as greater telecommunication security through expansion of the supply-side infrastructure.

Impacts associated with construction of the Heybridge converter station and shore crossing will be temporary and short-term in duration. The social EPRs require the development of plans and strategies to be implemented prior to and during construction and through operations, addressing potential impacts such as

workforce and accommodation, and developing a community benefits sharing scheme. Many of the social impacts of the project will be avoided or minimised through the implementation of measures to comply with EPRs from other technical studies prepared for the EIS/EES and to support the two separate EISs. This is outlined further in Technical Appendix F: Heybridge social assessment.

After the implementation of measures to comply with EPRs, there are no major impacts to social values from the project. Seven impacts remain rated high after mitigation, one of which is positive. After the implementation of measures to comply with EPRs, there remains a potential major negative cumulative impact on rental housing, childcare providers, and health and emergency services. Collaborative efforts between government and industry will be needed to manage accommodation for the regional workforce and mitigate the cumulative impact on rental housing, as well as the demand for childcare providers and health and emergency services.

4.5 Effects of operation

The project will operate 24 hours per day, 365 days per year over an anticipated minimum 40-year operational lifespan. The only visible component of the project during operation will be the converter station. The visibility of the converter station from the exit of the tiioxide beach foreshore reserve may impact on the community's strong values linked to character and amenity until such a time as planted screening establishes to minimise visual impacts.

Concern about the project's potential impacts during operation (e.g. EMF, operational noise) may result in feelings of stress, anxiety and frustration for surrounding residents and communities. Without mitigation, this could impact the health and wellbeing of local residents. Measures to comply with noise and EMF EPRs will mitigate these impacts.

The project is expected to have positive impacts on the economy and livelihoods during operation. These positive impacts include:

- The flow-on of an estimated \$762 million in taxation receipts, generated by the project, to local, state and Commonwealth jurisdictions.
- Potential benefit to the health and wellbeing of residents in the study area through investments in community infrastructure, the potential for downward pressure to be placed on the market regarding energy prices, as well as greater telecommunication security through expansion of the supply-side infrastructure.

4.6 Effects of decommissioning

The current operational lifespan of the project is a minimum 40 years. At this time, the project will either be decommissioned or upgraded to extend its operational lifespan.

Requirements at the time will determine the scope of decommissioning activities and impacts. The key objective of decommissioning will be to leave a safe, stable and non-polluting environment, and minimise impacts during the removal of infrastructure.

In the event that the project is decommissioned, all above-ground infrastructure will be removed, and associated land returned to the previous land use or as agreed with the landholder. All underground infrastructure will be decommissioned in accordance with the requirements of the time. This may include removal of infrastructure or some components remaining underground where safe to do so.

A decommissioning management plan will be prepared to outline how activities will be undertaken and potential impacts managed.

4.7 Conclusion

This volume of the EIS/EES provides a summary of the assessment of the impacts of the project on the terrestrial environment to address Commonwealth requirements in Tasmania, as set out in the Commonwealth EIS guidelines. For the Tasmanian terrestrial environment, these matters include ecology (threatened species and communities, migratory species) and social considerations.

The ecological assessment identified five EPBC Act listed threatened or migratory fauna species that may occur in the survey area. None of these species were found to currently occur in the study area and are expected to only pass through it. Consequently, the assessment found no significant impacts to terrestrial ecology from the project. The EPRs developed are additional precautionary measures to minimise potential impacts.

The social assessment incorporated the outcomes of extensive consultation with the local community to support its findings and help develop the EPRs. The assessment found that the project has the potential to both negatively and positively impact several social values during construction and operation.

Negative impacts largely relate to added pressure on existing infrastructure, accommodation and services, and amenity. Positive impacts are related to impacts on the local economy and community livelihood following increased investment in local businesses and community infrastructure, and training opportunities. The technical specialist developed EPRs to mitigate the negative impacts and enhance the positive outcomes.

Following effective implementation of the EPRs, the project will result in cumulative impacts which will require collaborative efforts between government and industry to mitigate the cumulative impact on rental housing, childcare availability, and health and emergency services.