Draft Economic Diversification and Investment Strategy
Response to Request for Feedback

Introduction

The Draft Economic Diversification and Investment Strategy provides a framework for guiding Tasmania's economic development over the coming decade. This submission addresses one question that is likely to become increasingly important during that period:

How should Tasmania manage its strategic comparative advantages in a world being reshaped by artificial intelligence, climate change, biodiversity decline, demographic change and geopolitical uncertainty?

These forces are reshaping the relative value of Tasmania's strategic natural and built assets, and therefore the sources of the State's future comparative advantage.

They are also changing the economics of production, investment and employment in ways that remain uncertain but are likely to be profound.

The central premise of this submission is that future prosperity will depend not only on attracting investment and improving productivity, but also on recognising that some of Tasmania's strategic assets are likely to become increasingly scarce and valuable.

Economic development should therefore focus not simply on expanding economic activity, but on allocating these assets in ways that maximise long-term public value, strengthen resilience and maintain opportunities for future generations.

The accompanying appendices explore how this perspective might be applied across 10 areas of strategic importance.

Looking Beyond Today's Comparative Advantage

The Strategy identifies Tasmania's existing comparative advantages. This submission suggests considering a second question: **which of those advantages are likely to become increasingly valuable over the next decade?**

The following table presents a qualitative assessment of Tasmania's natural assets and existing industrial ecosystems in terms of their current comparative advantages and their likely future strategic importance.

Strategic Asset	Current Comparative Advantage	Likely Future Strategic Importance
Firm renewable electricity	Moderate–High	Very High
Water resources	Moderate–High	Very High
Cool temperate climate	Moderate–High	High
Biodiversity and Natural Capital	Moderate	Very High
Biosecurity	Moderate–High	Very High
Mineral endowment	Moderate	High
Industrial ecosystems and infrastructure	Moderate	High

Note:

1. These ratings should be understood as relative to competing jurisdictions, not as assessments of intrinsic value.
2. Renewable electricity is not currently an unqualified high advantage because firm supply, transmission capacity, drought exposure, competing demands and the limited availability of additional low-cost energy constrain its deployability.
3. Water is relatively abundant at State scale but is unevenly distributed, seasonally constrained and already subject to competition and environmental pressure.
4. Cool climate is a real advantage, but not immune from warming, fire, drought, biosecurity and infrastructure risks.
5. Natural capital and biodiversity are potentially exceptional assets, but their current condition and continuing erosion do not justify a high present rating.
6. Industrial ecosystems are valuable platforms, but their scale, age, workforce depth, logistics and infrastructure constraints make “high” too generous.

The table shows that Tasmania has relatively few unequivocally strong present-day advantages, but several assets whose strategic importance is likely to rise sharply. That strengthens the case for stewardship without overstating Tasmania’s current position.

A More Dynamic Strategic Environment

The Strategy appropriately recognises accelerating technological change and the growing importance of artificial intelligence.

However, AI is likely to represent more than another wave of productivity improvement.

Like electricity, the internet and the steam engine before it, AI is emerging as a general-purpose technology capable of transforming almost every sector of the economy.

Over the life of this Strategy, it may fundamentally alter:

- business productivity;
- labour markets and workforce demand;
- industrial location decisions;
- research and innovation;
- education and skills;
- public administration; and
- global patterns of comparative advantage.

At the same time, climate change and biodiversity decline are progressively changing the relative value of strategic natural assets across the world.

Taken together, these forces suggest that future prosperity will depend less on extrapolating past trends and more on anticipating how comparative advantage is likely to evolve.

The purpose of the Strategy should therefore extend beyond supporting today's economy to preparing Tasmania for a fundamentally different one.

Stewardship of Strategic Assets

The draft Strategy proposes that major economic decisions should be guided by comparative advantage, strategic use of public resources, transparent assessment of trade-offs and measurable outcomes.

This submission suggests that this framework could be strengthened by considering one additional question when evaluating major investments and policy decisions:

Will this decision maintain, enhance or diminish the long-term value of Tasmania's strategic assets?

Tasmania's strategic assets comprise the natural and built capital that underpins the State's long-term prosperity. Together they include firm renewable energy capability,

water resources, a cool temperate climate, biodiversity and natural capital, biosecurity, mineral endowment and industrial ecosystem capability.

Many of these assets are finite, slow to replace or becoming increasingly scarce globally. The challenge is therefore not simply to maximise current production, but to steward these assets so they continue to generate enduring public value for future generations.

Common Principles Emerging from the Appendices

Although each appendix considers a different strategic asset or sector, they consistently point towards the same broad conclusions.

First, comparative advantage is dynamic rather than static. Decisions should recognise not only Tasmania's current strengths, but those likely to become increasingly valuable as technological, environmental and geopolitical conditions evolve.

Second, natural capital is productive capital. Water, climate, biodiversity and healthy ecosystems are not simply environmental values to be protected; they are economic assets that underpin long-term prosperity, resilience and Tasmania's international competitiveness.

Third, scarce strategic assets should be allocated to maximise enduring public value. Renewable energy, water, environmental capacity and other finite assets should be directed towards activities that generate the greatest long-term economic, social and environmental returns, rather than simply maximising production.

Fourth, existing industries remain the foundation of Tasmania's economy, but continual adaptation will be essential. Long-term success will depend on how effectively these industries respond to new technologies, changing markets and evolving comparative advantage.

Finally, the benefits of technological change should be broadly shared. Artificial intelligence and automation have the potential to transform productivity and living standards. Realising these benefits will require policies that strengthen communities, expand opportunity and support intergenerational equity.

Suggested Refinements to the Draft Strategy

This submission suggests that the Draft Strategy could be strengthened by:

1. explicitly recognising that comparative advantage will continue to evolve under accelerating technological, environmental and geopolitical change;
2. considering how the relative strategic value of Tasmania's key assets is likely to change over the coming decade;

3. treating natural and built assets as strategic intergenerational capital to be stewarded for enduring public value; and
4. applying this perspective consistently when evaluating major investments and allocating scarce public resources.

Applying the Strategic Framework

The accompanying appendices illustrate how the proposed strategic framework can be applied across a range of Tasmania's principal strategic assets. Although each appendix addresses a different subject, they collectively support a common conclusion: long-term prosperity will increasingly depend on recognising, protecting and allocating Tasmania's strategic assets in ways that maximise enduring public value.

Appendix	Strategic Conclusion
1. Firm Renewable Energy	Firm renewable electricity should be allocated to maximise enduring public value rather than simply maximise energy production or consumption.
2. Water Resources	Water should be managed as a finite strategic asset whose value will increase as climate change and competing demands intensify.
3. Cool Temperate Climate	Tasmania's cool temperate climate is an emerging comparative advantage that should be protected by maintaining the natural systems that sustain it.
4. Biodiversity and Natural Capital	Biodiversity should be recognised as productive capital that underpins ecosystem resilience, economic performance and future comparative advantage.
5. Biosecurity	Biosecurity is a strategic economic asset whose value will increase as global movement of pests, diseases and invasive species intensifies.
9. Mineral Endowment	Individual mineral developments should demonstrate that they convert finite non-renewable natural capital into enduring public value for Tasmania.
10. Industrial Ecosystems and Capability	Existing industrial capability should be leveraged as a platform for future high-value industries rather than preserved as an end in itself.

Taken together, these appendices are not intended to provide alternative sector strategies. Rather, they illustrate how the Draft Strategy's existing decision-making framework could be strengthened by explicitly considering how Tasmania's comparative advantages are likely to evolve over the coming decade and by stewarding the strategic assets that will increasingly underpin the State's long-term prosperity.

Prepared by John Pitt 3 August 2026

E: jpitt@uhuru.com.au
M: 0417 310 490

Appendices:

1 – Firm Renewable Energy
2 – Water Resources
3 – Cool Temperate Climate
4 – Biodiversity and Natural Capital
5 – Biosecurity
6 – Agriculture
7 – Forestry
8 – Aquaculture
9 – Mineral Endowment
10 – Industrial Ecosystems and Capability

Appendix 1 – Firm Renewable Electricity

Tasmania’s firm renewable electricity is a major strategic asset, but it is finite.

The State possesses one of Australia's most valuable hydro systems. However, most economically attractive hydro resources have already been developed, and annual energy production remains constrained by water availability. The system's principal strengths are long-duration storage, dispatchable generation, system security services and statewide operational flexibility rather than significant future growth in annual energy production.

Tasmania also has high-quality wind resources, but theoretical potential is not the same as commercially deliverable electricity. New generation depends on wind farm projects proceeding in association with transmission infrastructure augmentation.

While no definitive maximum has been established, a practical long-term firm renewable system of approximately **25–30 TWh annually** appears to represent a reasonable order-of-magnitude planning assumption. After existing demand, electrification, system losses and drought reserves are allowed for, only around **10–15 TWh** may remain available for new economic activity.

These capabilities are likely to remain strategically important. Whilst increasingly abundant mainland wind and solar generation supported by batteries, pumped hydro and other storage technologies will progressively erode Tasmania's relative advantage, they are likely to increase the relative value of reliable, dispatchable low-carbon electricity available during evening peaks, renewable droughts and periods of sustained industrial demand.

Tasmania's future advantage will therefore depend less on producing renewable electricity than on providing long-duration storage, flexibility and reliability increasingly required by an interconnected national electricity system.

Tasmania’s comparative advantage lies not in maximising renewable electricity exports, but in maximising the value created from finite firm renewable electricity through hydro storage, dispatchable generation, local renewable supply and strategic interconnection.

Interconnectors should be viewed as strategic balancing assets: importing inexpensive mainland electricity when abundant, conserving hydro storages, supporting Tasmanian demand and exporting firm electricity when it commands a premium.

Because the available firm energy resource is finite, how it is allocated will materially shape Tasmania’s economic future. Bulk exports, hydrogen, data centres, advanced manufacturing, minerals processing and other industries create very different levels of employment, local value added, ownership, resilience and environmental impact.

Major electricity-consuming proposals should therefore be assessed against:

- Tasmanian value added per MWh
- enduring employment and local ownership
- opportunity cost relative to alternative future uses
- contribution to resilience and energy security
- natural capital impacts
- export competitiveness

The strategic objective should not be to maximise renewable electricity generation. It should be to maximise Tasmania's long-term prosperity, resilience and intergenerational capital from a finite supply of firm renewable electricity.

References

1. Australian Energy Market Operator. *Integrated System Plan (ISP) 2026)*.
2. Australian Energy Market Operator. *Electricity Statement of Opportunities (ESOO) 2025*.
3. Australian Energy Market Operator. *Quarterly Energy Dynamics* (2024–2026 editions).
4. Hydro Tasmania. *Annual Report 2024–25*.
5. Hydro Tasmania. *Tarraleah Redevelopment Business Case Overview*.
6. TasNetworks. *Tasmanian Renewable Energy Zones – Network Development Program*.
7. Marinus Link Pty Ltd. *Project Assessment Conclusions Report (PACR)* and supporting market modelling.
8. CSIRO. *GenCost 2025–26*.
9. Tasmanian Government. *Renewable Energy Coordination Framework (RECFIT)*.

Appendix 2 – Water Resources

Prior to European settlement, Tasmania possessed an intact freshwater system. Healthy catchments, rivers, wetlands and groundwater provided abundant, high-quality water that supported resilient ecosystems and represented a significant natural competitive advantage.

Today that advantage remains substantial, but it has diminished. Many developed catchments have experienced declining river health, modification of wetlands and riparian vegetation, increasing water extraction and deteriorating water quality. At the same time, climate change is increasing rainfall variability, extending drought risk and placing greater pressure on reliable water supplies.

Tasmania's future competitive advantage will depend on both the quantity of reliable freshwater that can be sustainably supplied and the condition of the natural systems that sustain it. Healthy catchments, wetlands, native vegetation and environmental flows are productive natural infrastructure that maintain water quality, regulate runoff, recharge groundwater, moderate floods and droughts, and support agriculture, renewable energy, industry, tourism and biodiversity. Restoring and protecting this natural capital is therefore an investment in long-term economic resilience as much as environmental stewardship.

As reliable, high-quality freshwater becomes increasingly scarce elsewhere in Australia, Tasmania has the opportunity to strengthen its comparative advantage. However, that opportunity will depend on allocating finite reliable water to activities that generate enduring public value while maintaining or enhancing the natural systems on which future water security depends.

The strategic asset is not total rainfall or runoff. It is reliable, high-quality water that can be supplied where and when it is needed while maintaining healthy freshwater ecosystems.

Strategic assets should not be managed simply to maximise production. They should be governed to maximise their long-term contribution to Tasmania's prosperity, resilience and intergenerational wellbeing.

References

1. CSIRO & Department of Primary Industries, Parks, Water and Environment. (2010). *Climate Futures for Tasmania: Water and Catchments Technical Report*. Hobart, Tasmania.
2. Department of Natural Resources and Environment Tasmania. (2021). *Rural Water Use Strategy*. Hobart, Tasmania.
3. Department of Natural Resources and Environment Tasmania. (2025). *Rural Water Use Strategy 2025–27 Implementation Plan*. Hobart, Tasmania.

4. Department of Natural Resources and Environment Tasmania. (2025). *Catchment Yield Science Update – Phase 1 Report*. Hobart, Tasmania.
5. Department of Natural Resources and Environment Tasmania. (2025). *Hydrological Modelling of Tasmanian Catchments*. Hobart, Tasmania.
6. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 1: Overview*. Hobart, Tasmania.
7. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 2.1: Environmental Indicators*. Hobart, Tasmania.
8. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 2.2: Technical Report*. Hobart, Tasmania.

Appendix 3 — Cool Temperate Climate

Why this Strategic Asset Matters

Tasmania's comparatively temperate maritime climate is more than a natural characteristic. It is a form of strategic natural capital that enhances the productivity and value of many other strategic assets, including agriculture, water resources, renewable energy, tourism, liveability and environmental quality. As other regions become hotter and experience more frequent climate extremes, this comparative advantage is likely to become increasingly valuable.

The recent Tasmanian Climate Risk Assessment and Government Response support this conclusion, although they emphasise that Tasmania will also experience significant climate change and that future advantage depends upon successful adaptation.

The Strategic Advantage is Relative

The reports do not suggest Tasmania will remain unchanged.

Rather, Tasmania is projected to become warmer, experience changing rainfall, increased bushfire danger, more extreme rainfall, coastal impacts and warming marine waters. The strategic opportunity arises because many competing regions are expected to become substantially hotter and less resilient.

Accordingly, Tasmania's advantage should be understood as a **r**elative temperate-climate advantage, not simply a "cool climate".

Why the Importance is Likely to Increase

The assessment identifies opportunities for agriculture, forestry and other climate-dependent industries as climatic suitability shifts.

More broadly, a comparatively temperate climate is likely to become increasingly valuable for premium food production, liveability and workforce attraction, tourism, cooling-intensive industries such as AI infrastructure and advanced manufacturing, ecosystem services, and long-term climate resilience.

Importantly, the reports recognise that adaptation can create economic opportunities as well as reduce climate risks.

The Advantage is not Guaranteed

The reports also demonstrate that this strategic asset is vulnerable.

Its value depends upon maintaining water security, protecting natural ecosystems and climate refugia, adapting agriculture and infrastructure, managing bushfire, flood and

coastal risks, responding to marine warming, and preserving the environmental quality that underpins Tasmania's reputation.

Climate alone does not create competitive advantage; it must be supported by sound environmental and economic management.

Strategic Implication

Recognising Tasmania's relative temperate climate as a strategic asset has implications beyond climate adaptation.

Because this comparative advantage is finite, location-specific and likely to appreciate as climate change progresses, public policy should seek to maximise its long-term contribution to Tasmania's prosperity, resilience and intergenerational capital.

Accordingly, decisions affecting land use, water allocation, infrastructure, environmental management and major investment should not be assessed solely on their short-term economic output, but on whether they enhance or diminish the long-term value created from this strategic asset.

Assessment

Current strategic importance: Moderate - High

Tasmania's temperate climate already underpins several of the State's most important economic and social advantages.

Future strategic importance: Very High

As climate change accelerates elsewhere, Tasmania's comparatively temperate climate is likely to become an increasingly valuable source of competitive advantage. Realising that advantage will depend not simply on protecting the climate itself, but on protecting the water, ecosystems and natural assets that sustain it, and directing investment towards activities that generate the greatest long-term benefit for Tasmania.

Strategic assets should be managed to maximise their long-term contribution to Tasmania's prosperity, resilience and intergenerational wellbeing, rather than simply to maximise short-term production or economic output.

References

1. Department of Premier and Cabinet (Tasmania). (2024). *Tasmania's Risk Assessment for Climate Change 2024: Technical Report*.
2. Department of Premier and Cabinet (Tasmania). (2024). *Tasmania's Risk Assessment for Climate Change 2024: High-level Summary Report*.

3. Department of Premier and Cabinet (Tasmania). (2025). *Managing Tasmania's Climate Risks and Opportunities: Tasmanian Government Response to the 2024 Tasmania's Risk Assessment for Climate Change*.

Appendix 4 – Biodiversity and Natural Capital

Prior to European settlement, Tasmania supported some of the most intact terrestrial, freshwater and marine ecosystems in the Southern Hemisphere. High levels of endemism, extensive native vegetation, relatively intact ecological processes and long geographic isolation created biodiversity of national and international significance. These natural assets have long underpinned agriculture, forestry, fisheries, aquaculture, tourism, water security and Tasmania's reputation as a clean, natural place.

Today that advantage remains substantial but has diminished. The 2024 *State of the Environment* reports identify continuing decline in ecosystem condition driven by habitat fragmentation, invasive species, altered fire regimes, degradation of freshwater and marine environments, and climate change. At the same time, international policy and economic thinking have shifted from viewing biodiversity principally as a conservation objective towards recognising healthy ecosystems as productive natural capital that underpins long-term prosperity and resilience.

Tasmania's future comparative advantage will increasingly depend not simply on retaining native vegetation, but on maintaining healthy, functioning ecosystems that continue to provide clean water, fertile soils, pollination, carbon storage, flood mitigation, biosecurity, climate resilience and nature-based tourism. As these ecosystem services become scarcer globally, Tasmania's relatively intact natural systems are likely to become increasingly valuable, creating opportunities to strengthen premium food production, tourism, emerging natural capital markets and investment attracted by demonstrably healthy environmental assets.

The strategic asset is therefore not simply biodiversity or the reserve system. It is the condition, resilience and productive capacity of Tasmania's terrestrial, freshwater and marine ecosystems. Healthy ecosystems are productive natural infrastructure that supports water security, agriculture, forestry, fisheries,aquaculture, tourism and community wellbeing. Maintaining and restoring ecosystem condition should therefore be regarded as investment in long-term productive capacity rather than solely an environmental objective.

The Draft Strategy would be strengthened by explicitly recognising biodiversity as strategic natural capital and by supporting measurement of ecosystem condition alongside conventional economic indicators. Australia is progressively implementing environmental-economic accounting through the United Nations System of Environmental-Economic Accounting – Ecosystem Accounting (SEEA EA) and the development of National Ecosystem Accounts under *Australia's Strategy for Nature 2024–2030*. Tasmania has yet to establish a comparable statewide framework. Aligning with the national approach would enable the State to quantify changes in ecosystem extent, condition and services, identify restoration priorities, monitor progress towards

the Kunming–Montreal Global Biodiversity Framework, and better evaluate whether economic development is enhancing or diminishing long-term public wealth.

Together with water resources, renewable energy, productive land, forests and Tasmania's cool climate, healthy ecosystems form part of Tasmania's strategic natural capital portfolio. Managing these assets as an integrated portfolio to maximise their long-term productive capacity provides a coherent framework for achieving enduring prosperity, resilience, enhancement of natural capital and broad sharing of economic benefits.

References

1. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 1: Overview*.
2. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 2.1: Environmental Indicators*.
3. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 2.2: Technical Report*.
4. Department of Natural Resources and Environment Tasmania. (2024). *Tasmania's Nature Strategy 2024–2030*.
5. Department of Natural Resources and Environment Tasmania. (2024). *Implementation Plan – Tasmania's Nature Strategy 2024–2030*.
6. Department of Natural Resources and Environment Tasmania. (2013). *Tasmania's Natural Heritage Strategy*.
7. Australian Government. (2024). *Australia's Strategy for Nature 2024–2030*.
8. Australian Government. (2024). *Australia's Strategy for Nature 2024–2030: Implementation Plan*.
9. Convention on Biological Diversity. (2022). *Kunming–Montreal Global Biodiversity Framework*.
10. HM Treasury. (2021). *The Economics of Biodiversity: The Dasgupta Review*.

Appendix 5 – Biosecurity

Tasmania's relative freedom from many pests, diseases and invasive species is one of the State's most valuable but often overlooked strategic assets. Supported by island geography, effective border controls and comparatively healthy terrestrial, freshwater and marine ecosystems, this biological integrity underpins agricultural productivity, aquaculture, fisheries, forestry, tourism, export market access, biodiversity and Tasmania's reputation for premium, trusted products.

Today that advantage remains substantial, but it is under increasing pressure. The 2024 State of the Environment Reports (Volumes 1, 2.1 and 2.2) identify expanding invasive species, declining condition in many freshwater systems, increasing marine ecosystem pressures and significant knowledge gaps in environmental monitoring. At the same time, climate change, increasing trade, tourism, freight movements and changing species distributions are increasing the likelihood of new pest, disease and invasive species incursions.

Tasmania's future competitive advantage will therefore depend less on its island geography alone than on its ability to maintain the biological integrity that geography has helped preserve. Effective biosecurity now extends beyond traditional quarantine to encompass healthy terrestrial ecosystems, resilient freshwater systems, marine biosecurity, surveillance, rapid response and long-term environmental stewardship.

As healthy ecosystems and verified pest and disease freedom become increasingly scarce elsewhere, Tasmania's biosecurity advantage is likely to appreciate. Premium food production, export market access, trusted provenance, nature-based tourism, biodiversity and ecosystem resilience will increasingly depend upon maintaining this biological capital.

Recent events affecting Tasmania's salmon industry also demonstrate that biosecurity risks do not respect industry boundaries. Disease outbreaks and treatment responses can affect wild fisheries, market access and public confidence well beyond the industry directly involved. Similarly, climate-driven marine changes such as the expansion of long spined sea urchins illustrate that future biosecurity must address ecological change as well as traditional border incursions.

The strategic asset is therefore not simply Tasmania's biosecurity system. It is the biological integrity that the system protects.

Strategic assets should not be managed simply to minimise biosecurity risk. They should be governed to maximise their long-term contribution to Tasmania's prosperity, resilience and intergenerational natural capital.

References

1. Department of Natural Resources and Environment Tasmania. (2023). *Tasmanian Biosecurity Strategy 2023–2027*. Hobart, Tasmania.
2. Department of Natural Resources and Environment Tasmania. (2022). *Tasmanian Biosecurity Policy*. Hobart, Tasmania.
3. Australian Government, National Biosecurity Committee. (2022). *National Biosecurity Strategy 2022–2032*. Canberra, ACT.
4. Department of Agriculture, Fisheries and Forestry. (2025). *National Biosecurity Strategy 2022–2032: Annual Report 2025*. Canberra, ACT.
5. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 1: Overview*. Hobart, Tasmania.
6. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 2.1: Environmental Indicators*. Hobart, Tasmania.
7. Tasmanian Planning Commission. (2024). *State of the Environment Tasmania 2024 – Volume 2.2: Technical Report*. Hobart, Tasmania.

Appendix 6 – Agriculture

Historically, Tasmania's agriculture has been built on a combination of favourable climate, productive soils, reliable freshwater resources, comparatively strong biosecurity and access to premium domestic and export markets. These advantages have enabled the State to develop internationally competitive dairy, livestock, horticultural, viticultural, cropping and seed industries that contribute substantially to regional employment, exports and economic activity.

Government policy has appropriately focused on improving productivity, expanding irrigation, strengthening biosecurity, supporting research and innovation, increasing value-adding and growing farm gate value. More recently, this approach has evolved to place greater emphasis on resilience, natural capital, climate adaptation, digital transformation and sustainable resource management.

These priorities remain well founded. However, Tasmania's future prosperity is likely to depend less on continually increasing agricultural production than on maintaining and enhancing the finite natural systems upon which agricultural production depends.

Agricultural land, productive soils, freshwater resources, favourable climate and biosecurity are forms of intergenerational natural capital. They underpin not only agricultural production, but also water quality, biodiversity, carbon storage, landscape resilience, regional communities and Tasmania's reputation for producing trusted premium food. Unlike manufactured assets, these strategic advantages cannot readily be recreated once substantially degraded.

Climate change is increasing both the value and the vulnerability of these assets. More variable rainfall, increasing drought risk, emerging pests and diseases, changing market expectations, evolving environmental standards and greater global competition will increasingly reward agricultural systems that are productive, resilient and capable of maintaining environmental performance over the long term.

The Government's aspiration to increase annual farm gate value to $10 billion remains an appropriate long-term objective. Farm gate value is an important indicator of agricultural performance and competitiveness. However, it is not, by itself, a complete measure of the value agriculture creates for Tasmania. Long-term prosperity will increasingly depend on generating greater value beyond the farm gate through processing, innovation, intellectual property, branding, premium markets and ecosystem services, while simultaneously maintaining and enhancing the natural capital upon which future agricultural production depends.

Consequently, the principal strategic challenge is no longer simply how to produce more food, but how to maximise the enduring economic, social and environmental

value created from Tasmania's finite agricultural land, water, soils and natural ecosystems.

This suggests a gradual evolution in policy emphasis.

Rather than viewing soil, water, biodiversity and native vegetation principally as inputs to agricultural production, or as constraints requiring management, they should increasingly be recognised as productive natural infrastructure. Healthy soils improve water retention, nutrient cycling and drought resilience. Healthy catchments maintain reliable water supplies and water quality. Native vegetation, wetlands and pollinator habitat provide ecosystem services that support agricultural productivity while strengthening landscape resilience and reducing long-term production costs.

Future investment decisions should increasingly seek to maximise enduring value created per hectare, per megalitre of water, per unit of energy and per unit of environmental impact, rather than simply maximising physical production or short-term farm gate returns. Tasmania's relatively small domestic market, transport costs and premium market positioning suggest that long-term competitiveness is more likely to arise from knowledge-intensive production, premium food and fibre, precision agriculture, value-added processing, provenance, innovation and quality than from competing in high-volume commodity markets.

Artificial intelligence, robotics, advanced sensing, genomics and digital agriculture are likely to accelerate this transition. These technologies have the potential to improve productivity while simultaneously reducing fertiliser, chemical, water and energy inputs through increasingly precise management. Rather than representing an end in themselves, they provide powerful tools for producing greater economic value while enhancing the natural capital upon which future agricultural production depends.

This transition also reinforces the importance of Tasmania's broader strategic advantages. Healthy soils, secure freshwater resources, strong biosecurity, a cool temperate climate and trusted environmental standards increasingly reinforce one another. Their combined value to the State's future prosperity may be substantially greater than the contribution of any individual asset considered in isolation.

Accordingly, future agricultural policy should seek to maximise the total long-term value generated from Tasmania's finite agricultural resource base. This includes farm gate production, but also downstream processing, knowledge and innovation, premium branding, regional employment, export resilience, ecosystem services and the appreciation of natural capital itself. Supporting agricultural systems that strengthen prosperity, resilience and natural capital will ultimately generate greater and more enduring benefits for both the agricultural sector and the wider Tasmanian community.

References

- *Developing a New Tasmanian Agriculture Strategy – Discussion Paper* (Department of Natural Resources and Environment Tasmania, 2025).
- *Competitiveness of Tasmanian Agriculture for 2050 (AgriVision 2050 White Paper)* (Department of Primary Industries, Parks, Water and Environment, 2020).
- *National Soil Strategy 2021–2041* (Australian Government).
- *National Soil Action Plan 2023–2028* (Department of Agriculture, Fisheries and Forestry, 2023).
- *Tasmania State of the Environment Report 2024*.
- *Australia State of the Environment 2021*.
- *Tasmanian Biosecurity Strategy*.
- *Tasmanian Rural Water Use Strategy and Implementation Plan*.

Appendix 7 – Forestry

Tasmania's forests are among the State's most important strategic assets.

They support a forest economy now centred predominantly on plantation forestry, together with a relatively small native forest sector that has progressively declined over recent decades and appears likely to become a smaller component of the industry over time.

Collectively, Tasmania's forests provide renewable materials, carbon storage, water security, biodiversity, recreation, tourism, cultural values and regional employment.

Together, public and private forests underpin significant economic activity while also providing ecosystem services that benefit the entire State.

Historically, Tasmania's forest economy was largely organised around the production of commodity forest products including logs, woodchips, pulp, paper and sawn timber. While this generated employment, exports and regional economic activity, much of the highest-value manufacturing, technology development and intellectual property occurred elsewhere. Economic performance therefore depended largely on production volumes, while many environmental values were treated principally as constraints on production rather than productive assets capable of generating long-term economic value.

Today that foundation remains important, but the context is changing. Artificial intelligence and other advanced digital technologies are increasing the ability to understand, monitor and optimise complex forest landscapes. At the same time, climate change, growing demand for low-carbon materials, emerging natural capital markets and increasing recognition of ecosystem services are broadening the economic value that healthy forests can provide.

Tasmania's future competitive advantage may therefore depend less on increasing the volume of forest products than on increasing the value created from every hectare of forest. Healthy, well-managed landscapes can simultaneously support timber production, renewable materials, carbon storage, biodiversity, water security, recreation, climate resilience and regional employment. Emerging technologies will increasingly enable these multiple values to be measured, managed and optimised together rather than treated as competing objectives.

This creates an opportunity to reposition Tasmania's forest economy. Rather than competing primarily through the export of commodity products, the State can progressively capture greater value through advanced timber processing, renewable forest products, natural capital markets, environmental services and knowledge-intensive forest management. Existing institutions—including Sustainable Timber Tasmania, Private Forests Tasmania and the Forest Practices Authority—provide strong

foundations for this transition through their combined expertise in forest stewardship, private forestry, environmental regulation and sustainable management.

As healthy forest landscapes and verified environmental performance become increasingly scarce globally, Tasmania's forest advantage is likely to appreciate. Long-term prosperity will increasingly depend upon maintaining forests that simultaneously support productive industries, resilient regional communities, biodiversity conservation, climate adaptation and high-quality natural capital.

The strategic asset is therefore not simply Tasmania's forestry industry. It is the forest landscapes and natural capital that the industry helps to steward.

Strategic assets should not be managed simply to maximise timber production. They should be governed to maximise their long-term contribution to Tasmania's prosperity, resilience and intergenerational natural capital.

References

1. Sustainable Timber Tasmania. *Statement of Corporate Intent 2026–27*.
2. Sustainable Timber Tasmania. *Three Year Wood Production Plan*.
3. Private Forests Tasmania. *Strategic Plan* (current edition).
4. Forest Practices Authority. *Forest Practices Code* (current edition).
5. Tasmanian Planning Commission. *State of the Environment Tasmania 2024 – Volume 1: Overview*.
6. Tasmanian Planning Commission. *State of the Environment Tasmania 2024 – Volume 2.1: Environmental Indicators*.
7. Tasmanian Planning Commission. *State of the Environment Tasmania 2024 – Volume 2.2: Technical Report*.

Appendix 8 – Aquaculture

Tasmania's marine and freshwater environments are among the State's most important strategic assets. They support agriculture, aquaculture, commercial and recreational fisheries, tourism, biodiversity, cultural values, regional and rural communities and a wide range of ecosystem services. Together, these natural systems underpin significant economic activity while providing environmental benefits that extend well beyond the aquaculture industry itself.

Historically, Tasmania's aquaculture industry was built around the efficient production of high-quality seafood, particularly salmonids, together with shellfish and other marine products. Favourable environmental conditions, accumulated expertise and strong biosecurity enabled the industry to become a major exporter, regional employer and contributor to the State's economy. As production expanded, however, increasing pressure was placed on the marine and freshwater environments that underpin the industry's success. Community expectations regarding environmental stewardship, fish welfare and transparency also evolved, while climate change, declining ecosystem resilience, harmful algal blooms, disease risks and increasingly frequent large-scale mortality events exposed the growing vulnerability of production systems that remain closely dependent on natural ecosystem processes. As a consequence, social licence has become increasingly contested, environmental regulation more demanding, and long-term industry growth increasingly linked to demonstrating that economic performance and ecosystem health can be improved together rather than traded against one another.

Today that foundation remains important, but the context is changing. Artificial intelligence, automation and advanced environmental monitoring are transforming the ability to understand, predict and optimise complex aquatic ecosystems. At the same time, climate change, increasing community expectations, fish welfare, biosecurity, natural capital accounting and more demanding environmental standards are changing how aquaculture competitiveness is likely to be assessed.

Tasmania's future competitive advantage may therefore depend less on increasing seafood production than on increasing the value created from every unit of natural capital utilised. AI increasingly enables environmental performance, fish welfare, ecosystem condition and commercial production to be optimised together rather than treated as competing objectives. It also creates opportunities to progressively transition production from environmentally dependent systems towards more intelligent, closed-loop production where this improves long-term economic and environmental outcomes.

This creates an opportunity to reposition Tasmania's aquaculture industry. Rather than competing primarily through increasing production volumes, the State can

progressively create greater value through premium products, trusted environmental performance, advanced recirculating aquaculture systems, intelligent marine management and nature-positive production systems. Existing institutions—including the Department of Natural Resources and Environment Tasmania, the Environment Protection Authority, the Institute for Marine and Antarctic Studies, CSIRO and industry—provide strong foundations for this transition through their combined expertise in aquatic science, environmental regulation, fish health, biosecurity and sustainable production.

As healthy marine ecosystems, high-quality freshwater resources and verified environmental performance become increasingly scarce globally, Tasmania's comparative advantage is likely to appreciate. Artificial intelligence also creates the possibility of progressively decoupling aquaculture production from some of the State's most environmentally sensitive marine ecosystems through expansion of advanced land-based production systems powered by renewable energy and supported by intelligent water management. Long-term prosperity will increasingly depend upon maintaining aquatic ecosystems that simultaneously support premium food production, resilient regional communities, biodiversity conservation, climate adaptation and high-quality natural capital.

The strategic asset is therefore not simply Tasmania's aquaculture industry. It is the marine and freshwater ecosystems, renewable energy resources and natural capital that the industry depends upon and helps to steward.

Strategic assets should not be managed simply to maximise seafood production. They should be governed to maximise their long-term contribution to Tasmania's prosperity, resilience and intergenerational natural capital.

References

1. Department of Natural Resources and Environment Tasmania. *Sustainable Marine Research Collaboration Agreement* (current edition).
2. Environment Protection Authority Tasmania. *Environmental Standards for Marine Finfish Aquaculture* and associated regulatory framework (current edition).
3. Institute for Marine and Antarctic Studies. Research publications relating to Tasmanian aquaculture, fish health and marine ecosystem management.
4. CSIRO. Research relating to aquaculture, marine ecosystems and digital technologies (current publications).
5. Tasmanian Planning Commission. *State of the Environment Tasmania 2024 – Volume 1: Overview*.

6. Tasmanian Planning Commission. *State of the Environment Tasmania 2024 – Volume 2.1: Environmental Indicators*.
7. Tasmanian Planning Commission. *State of the Environment Tasmania 2024 – Volume 2.2: Technical Report*.

Appendix 9 – Mineral Endowment

Tasmania possesses one of Australia's most diverse and highly mineralised geological provinces. Multiple episodes of mineral formation over hundreds of millions of years have produced a compact but unusually varied mineral endowment containing significant resources of tin, tungsten, copper, zinc, lead, gold, iron ore, silica and numerous minerals now recognised as critical to advanced manufacturing, defence, renewable energy and digital technologies.

This geological endowment has supported more than 150 years of exploration and mining, contributing substantially to regional employment, exports, engineering capability and scientific knowledge. It has also established an extensive public geoscience database, specialist research capability, operating mines, mineral processing infrastructure and a highly skilled workforce that continue to provide important competitive advantages.

Historically, exploration and development have been driven principally by the discovery and commercial extraction of economically recoverable mineral deposits. Success has largely been measured through exploration expenditure, new mine development, production and exports. This approach reflected both the economic realities of the time and the limited opportunities for higher-value downstream processing within a relatively small and geographically isolated economy.

Today, Tasmania's mineral endowment is recognised in both State and Commonwealth policy as an increasingly important strategic asset. Growing demand for critical minerals, combined with advances in exploration technology, digital geoscience, artificial intelligence and mineral processing, creates opportunities to identify new deposits, recover additional value from existing operations, selectively expand downstream processing and strengthen Tasmania's role within emerging critical mineral supply chains.

These opportunities should continue to be actively pursued.

However, unlike renewable natural assets, mineral resources are finite. Extraction permanently converts one form of natural capital into financial, manufactured, human and institutional capital. The long-term success of Tasmania's mining sector should therefore not be judged solely by the number of mines developed or the volume of material extracted, but by the extent to which this conversion creates enduring public value.

Future policy should therefore continue to encourage responsible exploration and investment while recognising that the assessment of individual mining proposals is necessarily project specific. Decisions regarding new mines, mine expansions and downstream processing should continue to balance economic opportunity with

environmental protection, community expectations and alternative land uses through established planning and environmental assessment processes.

Accordingly, individual projects should be assessed not simply on their commercial viability, but on the extent to which they:

- generate enduring economic value for Tasmania;
- develop local capability, skills and knowledge;
- retain an appropriate share of value within the State;
- minimise irreversible impacts on natural capital;
- responsibly manage rehabilitation and long-term environmental liabilities; and
- leave future generations better off than would otherwise have been the case.

Viewed in this way, Tasmania's rich mineral endowment remains an important strategic asset. The challenge is not simply to extract more mineral wealth, but to ensure that each conversion of finite natural capital contributes to long-term prosperity, resilience and intergenerational wellbeing.

References

1. Tasmanian Critical Minerals Strategy (2024), Mineral Resources Tasmania.
2. Tasmanian Critical Minerals Prospectus (2025), Mineral Resources Tasmania.
3. Critical Minerals Initiative, Mineral Resources Tasmania.
4. Mining (Strategic Prospectivity Zones) Act 1993.
5. Mineral Resources Development Act 1995.
6. Recent Mineral Resources Tasmania publications on prospectivity mapping, mineral systems and geoscience.

Appendix 10 - Industrial Ecosystem

Strategic Importance

Current Position – Moderate – Tasmania possesses important industrial assets, several internationally competitive specialist firms and strategically located industrial precincts. However, its industrial ecosystem remains relatively small, fragmented and characterised by below-average productivity, uneven technology adoption and limited commercialisation compared with Australia's leading industrial regions.

Future Strategic Importance – Very High – As artificial intelligence, automation, advanced manufacturing and low-carbon production reshape global competitiveness, the value of established industrial capability is likely to increase. Tasmania's future advantage will depend less on creating entirely new industries than on transforming existing ones.

Strategic Rationale

Recent Government strategies collectively point to a significant shift in Tasmania's economic development model. Rather than promoting individual industries in isolation, they increasingly recognise that long-term competitiveness will depend upon integrating industrial capability, enabling infrastructure and advanced technologies into productive industrial ecosystems.

An important implication, although not explicitly stated in any single strategy, is that Tasmania's existing industrial capability should be viewed as strategic enabling capital. Its greatest value lies not in its current contribution to output, but in the engineering capability, industrial knowledge, skilled workforces, research partnerships, infrastructure and supply chains that lower the cost, risk and time required to develop future industries.

Tasmania does not currently possess one of Australia's strongest industrial ecosystems. Productivity remains below the national average, technology adoption is uneven and many firms operate below the scale needed to compete internationally. These characteristics explain why existing industrial capability should be regarded as a foundation for transformation rather than evidence of current competitive strength.

At the same time, Tasmania possesses many of the ingredients required to build a more competitive industrial economy, including established industrial precincts, specialist engineering capability, renewable electricity, strategic ports, research institutions, growing technology firms and internationally recognised niche manufacturers. Individually these assets provide only limited competitive advantage. Collectively they create a credible platform for industrial transformation.

Technology Changes Comparative Advantage

The most significant insight emerging from recent Government strategies is that advanced technologies are expected to transform every productive sector rather than create a separate technology industry. Artificial intelligence, robotics, advanced sensing and digital engineering reduce many of the traditional disadvantages associated with distance, labour availability and business scale, allowing established industries to compete in fundamentally different ways.

This suggests Tasmania's future prosperity is more likely to arise from transforming existing industries than replacing them. Bell Bay illustrates this principle. Its combination of renewable electricity, strategic infrastructure and established industry provides Tasmania's strongest platform for future technology-enabled industrial investment.

The same principle extends across agriculture, aquaculture, forestry, manufacturing, logistics, health and environmental management. Existing industries become valuable not simply for what they produce today, but because they provide real-world platforms on which new technologies can be developed, demonstrated and commercialised.

A Strategic Opportunity

The Advanced Technology Strategy introduces another important proposition: Tasmania's relatively small scale may become a competitive advantage. An island economy offers unusual opportunities to trial integrated technologies across complete systems—including renewable energy, biosecurity, environmental monitoring and digital services—before scaling successful solutions to national and international markets.

This shifts the focus from exporting larger volumes of commodities towards exporting knowledge embedded in engineering services, software, industrial systems, advanced manufacturing and intellectual property.

Risks and Counterfactual

This opportunity is not assured.

Without sustained investment in technology adoption, engineering capability, research commercialisation, digital infrastructure and industrial collaboration, Tasmania risks remaining primarily an importer of advanced technologies while continuing to compete in relatively low-value commodity markets.

Conversely, successful integration of advanced technologies across existing industries could transform today's industrial capability into tomorrow's competitive advantage. The opportunity lies not in preserving the current industrial structure, but in increasing

the productivity, sophistication and global competitiveness of industries that already exist.

Strategic Implications

Industrial policy should therefore focus less on creating entirely new industries and more on strengthening the capability of existing industries to adopt, develop and commercialise advanced technologies. Existing industrial capability should be managed as strategic enabling capital—an intergenerational asset whose value lies in its capacity to support future economic transformation.

Accordingly, this strategic asset is assessed as **Moderate** in its current condition but **Very High** in its future strategic importance. Its long-term value will depend on Tasmania's ability to convert existing industrial capability into globally competitive, technology-enabled industrial ecosystems capable of generating higher productivity, greater resilience and more diverse sources of prosperity.

References

1. Department of State Growth (2025). Statewide.Industrial.Land.Study¡ Tasmanian Government, Hobart.
2. Department of State Growth (2026). Advanced.Technology.Strategy¿Embracing.the.Future?.Today¡ Tasmanian Government, Hobart.
3. Department of State Growth (2024). Tasmanian.Advanced.Manufacturing.Action.Plan.868❹¡ Tasmanian Government, Hobart.