

MEMORANDUM (DRAFT – VERSION 2)

To:	Brighton City Council and Department of State Growth
From:	Alexandra Faure, Sustainability Lead (Niche Planning Studio)
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RE: CIRCULAR ECONOMY & CLEAN ENERGY OPPORTUNITIES IN BRIGHTON HUB

Precinct design and supporting infrastructure play a critical role in delivering zero-carbon and climate-resilient built environments, enabling efficiencies and scaling up impact beyond what can be achieved at the individual building level. Decisions made at this stage can lock in both embodied and operational emissions for the lifetime of assets, while also shaping the precinct’s ability to respond to evolving climate risks over time. When approached strategically, precinct-scale planning enables shared systems, resource efficiencies and integrated solutions that are not feasible at smaller scales.

As part of the structure plan process, Brighton Council is seeking to safeguard strategically located land for freight, logistics and intermodal uses while enabling emerging industries – particularly clean energy, circular-economy enterprises and smart logistics—to locate, scale and operate within a resilient precinct. To inform this vision we have reviewed relevant federal, state and local policy to understand strategic alignment and funding/regulatory support; examined successful national examples to identify key success factors and transferable opportunities; and analysed the subject site’s structural and locational advantages to identify realistic planning and operational pathways.

This memorandum provides a concise summary of planning and operational opportunities to realise that vision, including early decisions around precinct layout, infrastructure provision and coordination models. It highlights opportunities to attract and support industries aligned with circular economy principles, recommends precinct design features and policy settings to enable clean energy enterprises, and identifies co-location benefits between complementary industries.

1.1 POLICY SETTINGS

As Australia strives to meet its emission reduction targets, the rapid roll out of both circular economy and clean energy initiatives has become increasingly essential. Support for these initiatives is evident at federal, state, regional, and local levels, reflecting a comprehensive commitment to a sustainable future. Key policies are summarised in this section.

1.1.1 Federal Policy

- **2035 National Emissions Reduction Target** – Australia has set a new 2035 National Emissions Reduction Target of 62–70% below 2005 levels, marking a critical milestone on the pathway to net zero by 2050 and significantly accelerating the pace of decarbonisation across the economy. For industrial precincts, this translates into a need for rapid, coordinated decarbonisation of energy-intensive activities, including a shift to renewable electricity, electrification of processes, and improved resource and energy efficiency. Strengthened policy settings—particularly in electricity decarbonisation, industrial efficiency, transport electrification, and the expansion of the Safeguard Mechanism and Australian Carbon Credit Unit (ACCU) Scheme—are expected to drive both compliance obligations and new opportunities for low-carbon innovation.
- The **Net Zero Plan (2025)** sets the national delivery pathway, prioritising clean electricity, electrification and efficiency, clean fuels, emerging technologies, and carbon removals. For industrial precincts, this means a growing expectation to function as integrated, low-carbon systems—leveraging shared infrastructure (e.g. renewable energy generation and storage), co-location of complementary industries, and circular resource flows. It also signals increased access to funding and facilitation mechanisms (e.g. Net Zero Fund, Investor Front Door), positioning well-planned precincts to attract investment, support innovation, and remain competitive in a decarbonising economy.
- Six **Sector Plans (2025)** have been developed to support the delivery of the Net Zero Plan. Of particular relevance to industrial precincts are the *Electricity and Energy, Industry, and the Built Environment Sector Plans*, which outline differentiated pathways reflecting sector-specific challenges and opportunities—from rapid grid decarbonisation to more gradual transitions in heavy industry. These plans collectively signal a shift towards precinct-scale decarbonisation, where industrial areas are expected to operate as integrated, low-carbon ecosystems rather than isolated assets.
 - The **Electricity and Energy Sector Plan** provides a pathway to affordable, reliable and secure energy, driven by three shifts, as technology, markets and energy demand evolves: improved energy efficiency, electrification and fuel-switching, and scaled-up clean energy supply. Industrial precincts will need to plan for electrification at scale, secure access to renewable energy (on-site or via grid), and accommodate emerging energy carriers (e.g. renewable gases, low-carbon fuels). This reinforces the importance of shared energy infrastructure, grid capacity planning, and future-proofing land for energy systems.
 - The **Industry Sector Plan** sets a pathway to net zero for manufacturing and waste sectors, including technology deployment, fuel-switching, and industrial symbiosis. Industrial precincts are positioned as key enablers of industrial decarbonisation, with opportunities to facilitate co-location of complementary industries, shared utilities, and resource exchange (e.g. heat, materials, by-products). This elevates the role of precinct design and governance in enabling circular economy outcomes and reducing emissions collectively rather than site-by-site. Highlighted opportunities for decarbonisation include integrating renewables and affordable renewable hydrogen and carbon feedstock at scale, and industrial symbiosis.
 - The **Built Environment Sector Plan** focuses on creating a low-emissions, energy-efficient and climate-resilient built environment, with strong emphasis on planning and design.

Industrial precincts will need to embed climate-responsive design and infrastructure upfront, including heat mitigation, energy-efficient buildings, and integrated landscape and water systems, to reduce operational demand and improve resilience over time.

- The ***National Waste Policy and National Waste Policy Action Plan*** provide a national framework to accelerate Australia's transition to a circular economy and improve waste and resource recovery. Key targets relevant to industrial precincts include achieving an 80% average resource recovery rate across all waste streams—particularly for commercial and industrial (C&I) and construction and demolition (C&D) waste—and significantly increasing the use of recycled content by governments and industry. Central to both is scaling up circular economy initiatives that design waste and pollution out of the system.
- The ***National Hydrogen Strategy (2024)*** provides a framework to position Australia as a global hydrogen leader by 2030 and identifies the most prospective hydrogen use cases that will be the focus for ongoing government economic incentives and policy support. Importantly, it flags that Tasmania is uniquely placed to assist in the transitioning energy landscape in the export and local use of green hydrogen and its derivatives, such as green methanol and green ammonia.

1.1.2 State Policy

- Tasmania's ***Emissions Reduction and Resilience Roadmap 2024–29*** provides an overarching framework that links the State's six sectoral plans (including energy, waste and industrial processes) with the statewide climate risk assessment, establishing a coordinated pathway to reduce emissions and build resilience across the economy. The roadmap focuses on maintaining Tasmania's net zero emissions position through to 2030 and beyond, while supporting industries and businesses to transition to a low-emissions, climate-resilient economy through targeted actions, enabling infrastructure, and cross-sector programs. For industrial precincts, the roadmap highlights opportunities to integrate renewable energy, improve energy efficiency, support circular economy outcomes (particularly in waste and resource recovery), and enable low-emissions industrial processes, while also responding to cross-cutting risks such as supply chain disruption, infrastructure resilience, and evolving market and regulatory conditions.
- The ***Tasmanian Waste and Resource Recovery Strategy 2023–2026*** provides a statewide framework to support the transition to a circular, low-emissions economy by reducing waste generation, increasing resource recovery, and retaining the value of materials within the economy. The strategy focuses on integrated planning, strategic investment, circular economy market development, and strong partnerships to enable reuse, repair, recycling and remanufacturing, while establishing the infrastructure, data systems and skills required to scale these outcomes across Tasmania. For industrial precincts, it highlights opportunities to develop circular economy precincts, invest in resource recovery infrastructure (including through programs such as the Waste and Resource Recovery High Priority Infrastructure Grant Program), and support new business models that reduce waste and create value from materials—particularly in priority streams such as construction and demolition waste, organics and plastics.
- The ***Statewide Industrial Land Study – Strategic Framework for the Southern Region (2025)*** provides a strategic assessment of current and future industrial land needs across Tasmania, identifying supply, demand and infrastructure constraints, and establishing a framework to ensure sufficient, well-located and serviced industrial land is available to support economic growth. The study identifies key

challenges including an overall shortfall of industrial land supply (with only around 20 years of suitable vacant land remaining), a qualitative mismatch in lot sizes and locations, and infrastructure constraints—particularly in Regionally Significant Industrial Precincts (RSIPs) such as Brighton Hub, where power, wastewater and transport limitations are restricting development and investment. For industrial precincts such as the Brighton Hub, the study highlights the need to protect and plan for strategically located land that supports intermodal logistics, freight and export-oriented industries, including the provision of larger lot sizes suited to warehousing and heavy industry. It also emphasises the importance of coordinated infrastructure upgrades and proactive planning—such as rezoning additional land, aligning lot configurations with precinct intent, and working with service providers—to unlock capacity, attract investment and accommodate future ‘overflow’ demand from constrained urban areas. Importantly, the Study recognises the Brighton Hub is Southern Tasmania’s primary intermodal logistics hub and as such plays a critical role in regional supply chains, accommodating warehousing, construction, and logistics businesses.

- The **Future Gas Strategy (2023)** sets out the State’s vision for the role of gas in a transitioning energy system, recognising the need to balance energy security, affordability and emissions reduction while supporting an industry-led shift away from fossil gas. The strategy identifies a suite of decarbonisation pathways—including electrification, bioenergy, renewable hydrogen and other synthetic renewable gases—acknowledging that no single solution will meet all energy needs and that a mix of technologies will be required as alternatives mature and become commercially viable. For industrial precincts, the strategy highlights the ongoing role of gas (particularly for high-heat industrial processes) in the short to medium term, while emphasising the importance of enabling infrastructure, energy efficiency, and planning for the integration of renewable gases over time. This creates opportunities to support emerging industries (e.g. hydrogen and bioenergy), leverage existing gas infrastructure, and facilitate a staged transition to low-emissions energy systems at precinct scale.
- The **Renewable Hydrogen Strategy and Action Plan (2020)** establish a framework for Tasmania to become a leader in large-scale renewable hydrogen production, supporting both domestic use and export markets by 2030. The Strategy promotes a hub-based approach, focusing on locations that can leverage existing infrastructure (energy, water, ports and transport) to enable cost-effective, large-scale deployment, with Bell Bay identified as the State’s primary export-oriented hydrogen hub. For industrial precincts, the Strategy supports a distributed network of hydrogen-ready locations, including regionally significant precincts beyond Bell Bay. In particular, the Brighton Hub is recognised as well-positioned to support domestic hydrogen applications—such as transport, gas blending and industrial use—due to its access to transmission, gas infrastructure and major transport corridors, highlighting its role in enabling precinct-scale energy transition.
- The **Tasmanian Planning Policies (TPPs)**, which guide Tasmania’s land use planning system and come into effect on 1 July 2026, support the development of strategically located and well-serviced employment precincts that contribute to a resilient and sustainable economy. Relevant policies, including Renewable Energy (4.5), Industry (4.6), Innovation and Research (4.8) and Provision of Services (5.1), promote renewable energy development, protect and provide sufficient industrial land, encourage emerging industries and innovation, and support the coordinated delivery of essential infrastructure, including digital infrastructure, telecommunications, energy, recycling and waste management services. Together, these policies reinforce the importance of infrastructure-enabled

industrial precincts that can support economic diversification, emerging industries and long-term regional growth.

1.1.3 Local Policy

- The **Brighton Council Strategy 2023–2033** sets a long-term vision to create “a thriving place with opportunities for all,” underpinned by strong community values and a commitment to sustainable, evidence-based decision-making. Of particular relevance to the precinct, the Strategy embeds environmental sustainability as a core priority through Goal 2: Ensure a sustainable environment, which includes acknowledging and responding to the climate and biodiversity emergency, demonstrating environmental stewardship, and ensuring long-term, evidence-based asset planning.
- The **Brighton Structure Plan (2018)** provides a strategic framework to guide land use, infrastructure and growth across the municipality, with a focus on accommodating population growth, strengthening employment, and improving connectivity, amenity and service provision over the short to long term. The Plan reinforces Brighton’s role as a key employment and logistics node within Greater Hobart, centred on the Transport Hub and Industrial Estate, while identifying the need to improve infrastructure efficiency, connectivity and presentation, and to protect industrial land for future demand. It also emphasises environmental protection, urban greening, and improved walking/cycling networks, but has limited explicit focus on energy systems, renewables or circular economy, reflecting its pre-net zero policy context. For the Brighton Industrial Hub, the Plan confirms its strategic importance as a state-significant freight and logistics precinct with growing demand and long-term industrial land supply. It highlights opportunities to enhance efficiency, coordination and infrastructure servicing, while improving integration with surrounding uses and protecting buffers. While sustainability is not a primary framing, the Plan identifies early foundations for precinct-scale approaches—including industrial clustering, infrastructure coordination and improved resource efficiency—which can support future energy transition and circular economy initiatives.
- The **Brighton Climate Change and Resilience Strategy (2023)** provides a framework for Council and community climate action, focused on emissions reduction, adaptation and enabling a transition to a low carbon, resource-efficient economy, including opportunities in emerging technologies, markets and systems. The Strategy positions Council as both an operator and facilitator, with targets for net zero emissions, increased renewable energy uptake, and improved resource efficiency, supported by demonstrated progress (e.g. ~70% emissions reduction driven largely by landfill methane capture). While not framed explicitly as an “industrial decarbonisation” or “circular economy precinct” strategy, the document establishes clear enabling conditions—policy alignment, emissions data, partnerships, infrastructure investment, and behaviour change programs—that can support: Precinct-scale energy systems (renewables, electrification, waste-to-energy); Industrial symbiosis and material/resource efficiency; Low-carbon logistics and freight transition; and integration of climate risk into infrastructure and asset planning.

1.2 CASE STUDIES AND TRANSFERABLE SUCCESS FACTORS

1.2.1 Kwinana Strategic Industrial Area, Western Australia

The Kwinana Strategic Industrial Area (WA) is a mature heavy industrial precinct and globally recognised example of industrial symbiosis at scale, demonstrating how coordinated governance, infrastructure and

tenant collaboration can unlock significant resource, energy and cost efficiencies over time. Located within a major freight and port network, Kwinana has evolved from traditional heavy industry into a highly integrated industrial ecosystem, with over 150 active synergy exchanges across water, energy and material flows.

A key success factor is the establishment of the Kwinana Industrial Council (KIC)—an industry-led governance entity that coordinates precinct-wide performance, facilitates collaboration between tenants, and acts as a conduit between industry, government and research institutions. This governance model has enabled transparent data sharing, improved understanding of industrial inputs/outputs, and actively supported the identification and implementation of symbiotic opportunities, including co-location of complementary industries and attraction of supporting businesses.

Kwinana also demonstrates the importance of enabling infrastructure to support circular systems, particularly in water. Investment in alternative water sources—such as desalination and water recycling—has reduced reliance on potable supply and enabled industrial processes to operate more efficiently and resiliently. More broadly, the precinct highlights how shared infrastructure systems (water, energy, waste) can underpin circular economy outcomes at precinct scale.

For the Brighton HUB Industrial Precinct, Kwinana provides several directly relevant insights:

- The importance of establishing a precinct governance and operating model to coordinate energy, water and material flows over time.
- The value of undertaking material flow analysis and data sharing to enable industrial symbiosis and inform tenant curation.
- The need to safeguard land and plan infrastructure early (e.g. for resource recovery, water systems and energy assets) to avoid retrofits.
- Kwinana also highlights the role of partnerships with industry, government and research institutions in driving innovation, supporting new circular industries, and building a resilient, low-carbon industrial ecosystem.

1.2.2 Neerabup Resource Recovery Precinct, Western Australia

The Neerabup Resource Recovery Precinct (NRRP) is a planned 30-hectare regional waste and resource recovery precinct being developed by the City of Wanneroo in Perth's northern corridor. Located adjacent to the Neerabup Power Station within the Neerabup Industrial Area, the precinct is intended to consolidate waste management and resource recovery functions within a single purpose-built location and support the City's transition away from landfill dependence. The masterplan includes a Waste Transfer Station (WTS), Community Recycling Centre (CRC) and Materials Recovery Facility (MRF), with land also safeguarded for potential future energy recovery technologies, subject to future demand, feasibility and approvals.

A key feature of the precinct is its staged delivery model. Stage 1 focuses on establishing core waste transfer, recycling and materials recovery infrastructure, while preserving flexibility for future expansion as waste volumes, technology and market conditions evolve. The approach enables infrastructure investment to be aligned with demonstrated demand, reducing the risk of underutilised assets while ensuring sufficient land is available for longer-term resource recovery opportunities. The Materials Recovery Facility is also intended to be delivered through private investment, highlighting the role of partnerships between local government and industry in supporting resource recovery outcomes.

The precinct also demonstrates a partnership-based delivery model. While the City of Wanneroo is leading the development of the precinct and associated public waste infrastructure, the Materials Recovery Facility is intended to be delivered through private investment. This recognises the role of local government in safeguarding land and providing enabling infrastructure, while leveraging private sector expertise and capital to deliver resource recovery and processing facilities. The precinct is explicitly intended to act as a catalyst for broader private investment, innovation and value-adding industries associated with the circular economy.

For the Brighton Hub Industrial Precinct, Neerabup highlights several key success factors:

- The value of adopting a staged approach to resource recovery infrastructure that aligns investment with demonstrated demand and allows circular economy functions to expand over time.
- The importance of safeguarding appropriately located and buffered land for future resource recovery technologies, even where market demand or business cases have not yet been established.
- The opportunity to co-locate waste transfer, recycling and resource recovery infrastructure to improve operational efficiency and support future expansion.
- The role of local government in enabling circular economy outcomes through land-use planning and foundational infrastructure, while creating the conditions for private sector-led investment and innovation over time.

1.2.3 Bell Bay Advanced Manufacturing Zone (BBAMZ), Tasmania

The Bell Bay Advanced Manufacturing Zone (BBAMZ) (Tasmania, Australia) is a regionally significant industrial precinct and economic development initiative that demonstrates the role of coordinated governance, industry collaboration and strategic positioning in supporting industrial diversification, investment and the transition toward lower-carbon industries. Located within the George Town and Tamar Valley regions, Bell Bay benefits from proximity to port infrastructure, renewable energy resources and established heavy industry.

A defining feature of BBAMZ is its role as an industry-led economic development group, working collaboratively with government, industry and the local community to attract investment, support business growth and facilitate new industrial opportunities. This coordinated approach has enabled a shared vision for the precinct, improved alignment between stakeholders, and strengthened the region's ability to respond to emerging opportunities, particularly in advanced manufacturing and clean energy.

The precinct is increasingly positioned to support energy-intensive and emerging low-carbon industries, including those linked to renewable energy, hydrogen and advanced processing. Its access to relatively low-cost renewable electricity in Tasmania provides a strong competitive advantage, supporting both decarbonisation and the attraction of new industries aligned with the energy transition.

BBAMZ highlights the importance of governance, partnerships and strategic coordination in unlocking precinct-scale opportunities, particularly in regional areas where market signals alone may not be sufficient to drive investment.

For the Brighton Hub Industrial Precinct, BBAMZ provides several directly relevant insights:

- The importance of establishing a coordinated governance and industry engagement model to attract investment and support precinct growth over time.

- The value of leveraging regional competitive advantages (e.g. energy, location, infrastructure) to position the precinct for emerging industries.
- The role of partnerships between industry, government and community in enabling new economic opportunities and supporting diversification.
- The opportunity to align precinct development with the energy transition, attracting industries that benefit from access to renewable energy and low-carbon infrastructure.

1.2.4 Ballarat West Employment Zone, Victoria

The Ballarat West Employment Zone (BWEZ) (Victoria, Australia) is a large-scale, masterplanned industrial precinct demonstrating how early investment in enabling infrastructure and strategic land allocation can support industrial growth, decentralisation and the development of circular economy industries in regional contexts. Located on the western edge of Ballarat, the precinct has been progressively developed to attract industry relocation and new investment, with a strong focus on long-term economic and environmental outcomes.

A key feature of BWEZ is the provision of trunk infrastructure ahead of development, including water, sewerage, drainage and road connections across previously undeveloped land. This upfront investment has significantly reduced barriers to entry for industry, enabling faster development timelines and improving the attractiveness of the precinct for a range of industrial users. Importantly, it has also allowed infrastructure to be designed in a coordinated manner, supporting efficient servicing and future scalability.

The precinct also demonstrates a proactive approach to circular economy development through the allocation of a dedicated 5.2-hectare Circular Economy Precinct, intended to support resource recovery, recycling and related industries. By safeguarding land for these uses early, BWEZ avoids potential land use conflicts and ensures that circular economy activities can be integrated into the broader industrial ecosystem over time.

BWEZ highlights the importance of aligning infrastructure delivery, land use planning and economic development objectives, particularly in regional areas seeking to attract new industries and diversify their economic base.

For the Brighton Hub Industrial Precinct, BWEZ provides several directly relevant insights:

- The importance of early provision of trunk infrastructure to unlock development and attract industry, particularly on greenfield sites.
- The value of safeguarding land for circular economy uses (e.g. resource recovery, recycling) to enable future industry clustering and avoid displacement.
- The opportunity to use infrastructure planning to support coordinated and efficient servicing, reducing long-term costs and enabling scalability.
- The role of industrial precincts in supporting regional economic development and industry relocation, particularly when combined with strong infrastructure and strategic positioning.

1.3 OPPORTUNITIES FOR BRIGHTON HUB

Opportunities for the Brighton Hub Precinct are summarised below. The implications for the Precinct Structure Plan have been identified across four categories to reflect the different types of requirements and delivery mechanisms through which these opportunities can be realised—from on-ground outcomes to supporting systems and ongoing governance. These include:

- Spatial (on-plan outcomes)
- Infrastructure (physical systems and servicing)
- Enabling (analysis, sequencing and conditions)
- Governance / operations (mechanisms to support implementation, coordination and ongoing performance)

1.3.1 Circular Economy Opportunities

The precinct is well positioned to support the transition to a circular economy, with a number of structural advantages that can underpin long-term value creation. Its strategic location as an intermodal hub—with integrated road and rail access, proximity to major highways, Hobart and Hobart Airport, and strong freight connectivity—enables efficient movement of materials across regional and state supply chains. This is complemented by an established transport, logistics and warehousing sector, supported by key operators, as well as a significant supply of industrial land, including large, serviced and development-ready lots suited to medium- and large-scale uses. Together, these characteristics create a strong foundation for attracting and co-locating industries involved in resource recovery, recycling, remanufacturing and logistics, enabling the precinct to evolve into a coordinated circular ecosystem where materials and resources are kept in use for longer.

While many circular economy outcomes are ultimately realised during the operational phase—through material flows, waste and resource management, and industrial symbiosis—there are important actions that can be taken now to enable these outcomes over time. This includes safeguarding space for shared infrastructure and resource transfer and recovery which could be scaled over time (i.e. from limited material recovery and waste transfer facility to regional resource recovery hub), and embedding governance mechanisms to coordinate shared infrastructure, staging future circular economy initiatives, facilitating tenant collaboration and supporting ongoing optimisation.

Early decisions around precinct layout, infrastructure provision and coordination models will be critical to enabling future collaboration between tenants, supporting efficient resource use, and avoiding the need for costly retrofits. Taken together, these steps can position the precinct to deliver both economic and environmental benefits through a scalable and integrated circular economy approach.

Building upon the Circular Economy Strategy prepared for the precinct by KPMG in 2022, the table below includes key considerations and implications for the precinct design and development.

Opportunity	Implication for Precinct Structure Plan
Precinct governance and operating entity Establish a dedicated entity to actively manage precinct performance, coordinate shared services and infrastructure, and facilitate industrial symbiosis and tenant collaboration over time.	Governance / Operations – Encourage through a guideline the establishment of a precinct management entity responsible for coordinating shared infrastructure, facilitating tenant collaboration, supporting future circular economy initiatives and optimising precinct performance over time. Representation should evolve alongside the precinct and may include landowners, local and State Government, utility and infrastructure providers, industry representatives, research institutions and other relevant stakeholders.
Material flow analysis & industrial symbiosis Undertake precinct-wide material flow analysis and regional waste demand assessment to inform precinct growth and enable co-location of complementary industries, supporting by-product exchange and shared resource use.	Governance / Operations – Require or strongly encourage a material flow analysis and regional waste demand assessment be undertaken to inform development staging, tenant mix, co-location opportunities and the appropriate scale, location and staging of resource recovery and circular economy infrastructure as the precinct evolves.
Target circular industries Attract industries that are complementary and/or focused on remanufacturing, repair, refurbishment and product life extension to anchor circular activity and create local value chains.	Governance / Operations – Encourage the prioritisation of circular economy industries within designated areas and supporting clustering of complementary uses via guideline and tenant attraction strategies.
Data, tracking and optimisation Implement systems to track material flows, waste streams and resource use to support optimisation, reporting and continuous improvement.	Governance / Operations – Encourage through a guideline the implementation of precinct-wide data and monitoring systems to support long-term optimisation, infrastructure planning and industrial symbiosis opportunities.
Regional resource recovery and recycling hub Identify and safeguard suitable land to progressively develop resource recovery infrastructure, leveraging freight access and economies of scale, and transitioning from foundational waste transfer and material recovery functions toward a larger integrated circular economy hub.	Spatial + Infrastructure – Identify and safeguard sufficient land to enable staged expansion of recovery and processing activities over time. Early stages may focus on waste transfer, drop-off, sorting and consolidation functions (~2–5ha), with potential expansion toward larger regional-scale recovery, processing and circular manufacturing activities (15–30ha+) as demand evolves. Consider centrally located sites with good accessibility, sufficient area for future expansion, and proximity to intermodal and logistics areas to support efficient material aggregation, transfer and redistribution across regional and state supply chains.

Opportunity	Implication for Precinct Structure Plan
Organics processing Consider future organics processing and recovery opportunities, including composting, soil and organic products and biogas/energy generation opportunities, subject to feedstock availability, tenant mix, regional demand, further feasibility assessment, and alignment with long term circular economy goals.	Spatial + Infrastructure – Identify and protect suitably buffered land capable of accommodating future organics processing infrastructure if sufficient feedstock and demand emerge over time. Consider co-location with future resource recovery and recycling areas to leverage shared infrastructure and logistics.
End-of-life renewable energy infrastructure recovery and recycling Support future industries associated with the collection, disassembly, recovery, recycling and repurposing of renewable energy infrastructure, including solar panels, batteries and wind energy components.	Spatial + Governance / Operations – Safeguard land within future resource recovery and recycling areas capable of accommodating renewable infrastructure recovery, storage and processing activities over time. Consider co-location with future recycling and resource recovery areas to leverage shared access, servicing, logistics and operational efficiencies
Circular water systems Integrate recycled water networks, stormwater capture and treatment systems to enable water reuse across industrial processes and reduce potable demand.	Spatial + infrastructure – Integrate recycled water and stormwater systems within / near non-developable areas (i.e. retarding basin only), drainage corridors and open space networks, enabling precinct-wide reuse.
Construction waste diversion from landfill Set a target for construction waste diversion from landfill in alignment with State and Local Policy	Enabling – Embed construction waste diversion targets aligned with State and Local policy as a planning requirement or guideline. A minimum of 70% is recommended. Note that this may require land to be temporarily set aside for construction waste separation (Approx. 0.8ha – 1ha recommended, centrally located).
Low-carbon and recycled precinct infrastructure Embed requirements for recycled and low embodied carbon materials in precinct infrastructure to stimulate demand for circular products and support local markets.	Enabling – Embed as a requirement or guideline within precinct infrastructure standards (e.g. roads, utilities, public realm) to prioritise recycled and low embodied carbon materials. A minimum of 30% reduction in embodied carbon associated with the top 4-6 carbon intensive materials used for civil infrastructure is recommended (i.e. asphalt, concrete, steel, aggregates and pipes).
Design for adaptability and disassembly Encourage flexible, modular building design to extend asset life, enable reuse, and reduce future demolition waste.	Spatial – Encourage through built form controls and/or design guidelines, promoting adaptable, modular buildings that support long-term reuse and reduced waste.

1.3.2 Energy Opportunities

The integration of renewable energy generation and storage within the precinct presents a significant opportunity to enhance energy affordability, resilience and competitiveness for industrial users. On-site generation—such as solar—combined with battery storage or other firming solutions, can reduce exposure to energy price volatility, support reliable operations, and enable existing manufacturing and industrial activities to transition to lower-emissions energy sources without compromising productivity. This is particularly important in protecting local jobs and strengthening the long-term viability of energy-intensive industries. Beyond the precinct, there is also potential to contribute to the broader energy system by supplying low-cost, firmed renewable energy to surrounding communities, supporting electrification of transport, and alleviating pressure on the wider grid.

Realising this opportunity will require further investigation and careful system design, particularly in relation to energy demand, grid capacity, infrastructure staging, and system governance (including potential models such as embedded networks or microgrids). However, even at this early stage, there is a clear case for safeguarding space for future energy infrastructure—including distribution corridors, substations and shared energy assets—through easements and planning controls. Embedding this flexibility within the precinct layout will enable multiple future pathways to be explored without costly retrofits, and support the development of a coordinated, scalable energy system aligned with the precinct’s long-term growth.

Opportunity	Implication for precinct design
Precinct energy governance and operating model Establish or enable a coordinated governance model to manage shared energy infrastructure, optimise system performance, and facilitate energy sharing across tenants.	Governance / Operations – Encourage via guideline to establish a precinct-level energy governance/operating entity.
Grid connection and capacity assessment Assess existing network capacity early and plan for upgrades, new substations or alternative models, noting that grid constraints may limit development capacity if not addressed.	Enabling + Infrastructure – Require or strongly encourage early assessment to inform land for substations, easements and network upgrades. <i>We note TasNetworks have been commissioned to undertake a ‘Connection Capability Report’ for the Brighton HUB which will provide this information.</i>
Energy demand and load profile analysis Undertake detailed analysis of current and future energy demand to inform sizing of generation, storage and network infrastructure, and identify anchor users.	Enabling – Require or strongly encourage analysis to inform land for substations, easements and network upgrades. <i>We note TasNetworks have been commissioned to undertake a ‘Connection Capability Report’ for the Brighton HUB which will provide this information.</i>
Generation strategy (on-site and off-site) Safeguard and optimise space for on-site renewables (e.g. rooftops, carparks, surplus land)	Enabling – Safeguard solar access and enable renewables across rooftops, carparks and surplus land; support integration with off-site supply.

Opportunity	Implication for precinct design
while enabling integration with off-site procurement to meet energy objectives.	
Renewable Energy Precinct (generation + storage) Identify and safeguard suitable land for renewable energy generation and storage, enabling staged deployment to manage peak demand, improve resilience, support renewable integration and avoid costly retrofits.	Spatial + Infrastructure – Identify and safeguard land near grid connections; protect energy corridors, easements and sites for substations, storage and shared energy assets. <i>Refer to Pitts and Sherry’s Memorandum, dated 1 April 2026 – Figure 19 (TasNetwork assets Map) and the ‘Connection Capability Report’ by TasNetworks once finalised.</i>
Precinct energy system (microgrid / embedded network) Plan for a coordinated energy system (e.g. embedded network or microgrid) to enable energy sharing, centralised infrastructure and improved efficiency across tenants.	Spatial + Infrastructure + Governance / Operations – Co-locate with renewable energy precinct; enable via guideline, subject to landowner / operator model.
Resilience and energy security Incorporate backup power, islanding capability and system redundancy to ensure continuity of operations for industrial users.	Governance / Operations – Embed into Structure Plan as an objective rather than spatial requirement.
Electrification of freight and industrial operations Support EV charging infrastructure for heavy and light vehicles, leveraging proximity to major transport routes.	Spatial + Infrastructure – Co-locate charging infrastructure with substations and renewable energy precinct.
Energy-intensive industry attraction (aligned with renewables) Once energy demand and load profiles have been established, attract industries that can utilise renewable energy supply (e.g. advanced manufacturing, cold storage), contingent on infrastructure upgrades.	Governance / Operations – Encourage via guideline, aligned with infrastructure capacity and energy availability.
Green hydrogen production and logistics Explore hydrogen production using renewable energy, with potential to supply heavy transport, industrial users, or export via existing freight links.	Spatial + Infrastructure + Enabling – Consider identifying a hydrogen precinct (near energy and freight infrastructure); otherwise enable through inclusion of guideline and future investigation.

ADDENDUM – CIRCULAR ECONOMY HUB PROPOSED STAGING

Australian examples indicate that smaller transfer and resource recovery facilities serving localised area can operate within relatively compact areas of approximately 1–5ha, while larger regional resource recovery hubs integrating transfer, sorting, organics and recovery infrastructure may require 10–30ha+ to accommodate a broader range of services, material storage areas, buffer requirements and future expansion.

Given the long-term aspirations for the precinct and uncertainty regarding future tenant mix, waste streams and regional demand, a staged approach to resource recovery infrastructure is recommended. This would enable the precinct to progressively scale circular economy functions over time while avoiding significant upfront investment or underutilised infrastructure in the early stages of development. Co-location with future Council waste transfer infrastructure is recommended as it would create operational efficiencies through shared access, logistics, staffing, servicing and infrastructure.

This staged approach aligns with the broader structure planning objective of safeguarding land and enabling infrastructure early, while maintaining flexibility to respond to evolving technologies, market conditions and industry demand. It also supports progressive transition from basic waste management functions toward a more integrated circular economy ecosystem as the precinct matures.

Progression between stages would ultimately depend on further assessment of waste generation volumes, tenant demand, regional servicing gaps and infrastructure feasibility. As such, **a detailed waste demand and resource flow assessment** should be undertaken to better understand the types, volumes and sources of waste streams likely to be generated within the precinct and broader regional catchment over time, and to inform the appropriate scale, location and staging of future resource recovery infrastructure.

While a Council-operated waste transfer facility could act as an important catalyst and demonstrate early commitment to circular economy outcomes within the precinct, it is anticipated that many complementary resource recovery, recycling, reuse and processing activities would ultimately be delivered by private sector operators in response to market demand. Over time, this could support the development of a broader circular economy ecosystem without requiring all functions to be established or operated by Council.

The following table provides an example of staging, potential function and key considerations.

Table 1. Proposed Staging of Circular Economy HUB

STAGE	POTENTIAL FUNCTION	KEY CONSIDERATION
Stage 1 – Foundational Material Recovery & Waste Transfer <i>Approx. 2-5ha required</i>	- Waste Transfer Station (WTS) - Temporary construction waste management (~1ha) - Basic sorting, storage and consolidation	- Establishes foundational waste and logistics infrastructure early in precinct development. - Could support construction-phase waste management and basic operational waste streams from early tenants. - Land should be selected to allow for easy access and future expansion.
Stage 2 – Expanded Material Recovery and Circular Economy initiatives <i>Approx. 5-15ha required</i>	- Material Recovery Facility - Construction and demolition waste processing - Construction and industry waste sorting and resource recovery - Organics processing (if viable) - Reuse and repair activities - Emerging industrial symbiosis opportunities - Community recycling functions (if desired)	- Expansion would depend on tenant mix, waste generation volumes and broader regional demand. - Opportunities for industrial symbiosis and co-location with compatible industries may emerge over time. - Shared logistics and infrastructure with the WTS could improve operational efficiency.
Stage 3 – Integrated Regional Resource Recovery and Circular Economy Hub <i>Approx. 15-30+ha required</i>	- Advanced recycling and reprocessing, including of renewable infrastructure - Circular manufacturing and remanufacturing industries - Integrated resource, energy and logistics systems - Regional-scale coordination of material flows	- Represents a longer-term regional-scale circular economy precinct supporting multiple recovery and processing streams. - Potential to integrate with broader freight, energy and industrial systems across the precinct. - Governance, tenant coordination and digital systems would become increasingly important to optimise material flows and precinct performance over time.