ReCFIT
Renewables, Climate and
Future Industries Tasmania

Tasmanian Green Hydrogen Hub

Information pack

Renewables, Climate and Future Industries Tasmania
Department of State Growth

Tasmanian Government

Tasmanian Green Hydrogen Hub

The Tasmanian Green Hydrogen Hub Project (TGHH) is a Tasmanian Government led initiative to support the development of a green hydrogen industry in Tasmania. It will be located at Bell Bay, in the state's north.

- The development of a hydrogen industry will stimulate economic growth, injecting an estimated $1.2 billion into the local economy and creating more than 700 jobs.
- The TGHH received $70m from the Australian Government via the Regional Hydrogen Hubs Program, and the Tasmanian Government has committed $11.3m in the 2024–25 financial year.
- The TGHH has proximity to renewable energy generation, with a project pipeline of ~7GW, with globally significant wind capacity factors.
- The TGHH will benefit from the multi-user port, water and transmission infrastructure, provided by a consortium of partners to support the establishment of renewables-based hydrogen and hydrogen derivative proponents.
- Since 2020 Tasmania has enough renewable electricity generation capacity installed to meet 100 percent of its annual electricity needs and has had negative emissions for nine years.
- No other place can match these renewable energy credentials.

Key features of Bell Bay

Location
45km north of Launceston

Existing industrial hub
Skilled workforce and well-developed supply chains

Infrastructure
Strategically located with access to energy, water, and export facilities

Transport links
Road, rail, and sea

Registration of Interest

Objectives of the ROI stage

The ROI stage offers hydrogen market participants an opportunity to provide an early indication of their capacity to work with Tasmanian Government to develop the TGHH. It is also an opportunity to identify potential barriers to commercial investment that could be addressed in any subsequent Expression of Interest (EOI) stage (refer page 11).

The ROI will also inform the identification of targeted sectors for the TGHH, including which hydrogen or hydrogen derivative products would represent the greatest value to market participants, investors and customers.

Registrations of interest will inform Tasmania's approach to the development of the TGHH.

If you would like further information, please email: **tghhenquiries@recfit.tas.gov.au**

Registration of Interest (ROI)

Registration of Interest stage dates

Start: 20 December 2024

End: 14 February 2025

Direct engagement with hydrogen market participants.

Participation in the ROI stage is not a prerequisite for any EOI stage. However, participation in the ROI will assist the Tasmanian Government in optimising any potential EOI process and where possible address any barriers to investment.

The Tasmanian Government will aim to review responses to the ROI and announce next steps early in 2025.

Tasmanian Green Hydrogen Hub

Port

- Deep water port access located in northern Tasmania with proximity to sites with potential for hydrogen industry development.
- The Tasmanian Government is considering upgrade works to support a green hydrogen export facility.
- The proponent will be required to separately secure its own parcel of land and negotiate leasing and berthing arrangements with TasPorts.

Water

- Options for water supply are being progressed. An augmented Tamar Irrigation Scheme (TIS) has been identified as the most likely project to meet demand. **tasmanianirrigation.com.au/news/funding-approved-for-tamar-scheme-business-case**
- The TIS will support the delivery of up to 26,000ML/yr of industrial and irrigation water to the Tamar region.
- The proponent will be required to separately negotiate a water connection.

Transmission

- Preliminary studies indicate a 300MW load could be accommodated at 220kV from the George Town substation.
- Investment is required to ensure network stability, with a Regulatory Investment Test for Transmission (RIT–T) currently underway to support this.
- The proponent will be required to separately complete a connection application to connect to the network.

Power

- Tasmania has a large renewable energy generation, storage and transmission project pipeline.
- Approximately 750MW of additional new renewable energy generation capacity is required to match firming, in support of a 300MW electrolyser.
- Negotiations to secure arrangements with renewable energy generation must be separately completed by the proponent.

Renewable energy

Overview

The Tasmanian energy supply makes it a unique in Australia, and one of the few jurisdictions globally to boast an entirely renewable energy grid.

The state's enviable hydro system means there are opportunities for large scale, new VRE projects, with Hydro Tasmania's pre-existing, approved firming already available.

While Australian mainland electricity supply is undergoing an energy transition with retirement of coal fired generation, Tasmania has the opportunity for existing and new renewable energy to support new industries.

Energy market transition planning, through the Australian Energy Market Operator's (AEMO) Integrated System Plan (ISP), indicates that Tasmania has and will continue to have reliable and secure renewable energy electricity, ideal for green hydrogen production and exports.

There is a strong investment pipeline of up to 18 wind and grid-scale solar developments being pursued by the private sector.

Many of these projects are being progressed by global-scale developers, with longstanding experience in project development, commercialisation and delivery.

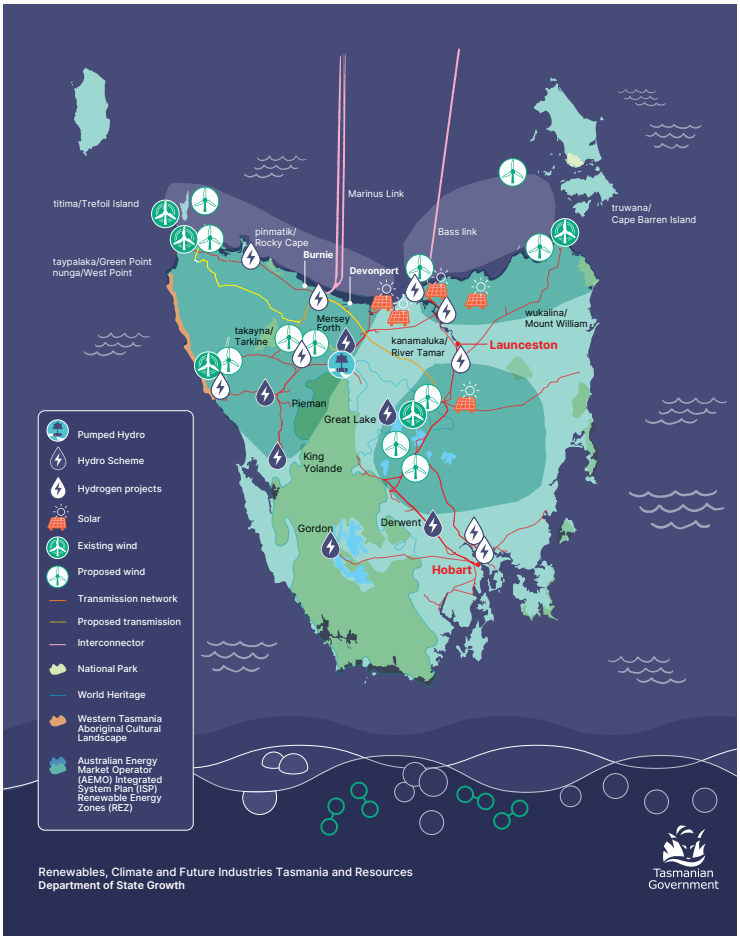
The Australian Government's Capacity Investment Scheme (CIS) provides a path for underwriting new generation, and Tasmania has secured a state-based allocation of 4000 GWh for tenders under the scheme.

Complementing these arrangements, the Australian Government has recently declared the Bass Strait off-shore renewable zone, and the state has existing MoUs with internationally-based experienced off-shore wind developers.

Marinus Link, a new interconnector between Tasmania and Victoria, will provide additional 1,500MW capacity across two stages.

Stage one (750MW) is expected to be completed in 2030, and will be a game changer for progressing new generation and new large loads in Tasmania.

The Final Investment Decision for Marinus stage one will be made in mid-2025.



Transmission infrastructure

Overview

TasNetworks is a state Government owned business that owns and operates the Tasmanian transmission and distribution network.

The Bell Bay Precinct is supplied from TasNetworks' George Town Substation. George Town Substation is a major 220kV transmission node in the Tasmanian network and provides connection to several industrial customers, as well as the Basslink HVDC interconnector.

ReCFIT, in partnership with TasNetworks has explored network and transmission options available for a green hydrogen facility.

Preliminary studies have indicated that a 300MW load could be accommodated within the Bell Bay precinct at 220kV with further investment to meet minimum network performance requirements (irrespective of the location, i.e. north or south of George Town substation).

A Regulatory Investment Test for Transmission (RIT–T) is currently underway to support this.

For further information go to:
tasnetworks.com.au/Connections/Connections-content/Renewable-Hydrogen

Transmission capacity

300MW
Potential new load connection into Bell Bay as part of Stage one

1,500MW
Proposed capacity of Marinus Link

2,173MW
Total Tas Network Maximum Demand (2023) incl. Basslink

500MW
Capacity of Basslink

Water Infrastructure

Overview

TasWater and Tasmanian Irrigation are responsible for the management of the state's drinking water, wastewater and water for public irrigation schemes, and associated infrastructure.

The Bell Bay Precinct is currently serviced by TasWater with industrial and potable water. The precinct also contains the George Town Wastewater Treatment Plant, which subject to approvals, may be suitable for the disposal of wastewater.

Given the amount of water required for hydrogen industry development, additional water supply will be required to service a green hydrogen facility. Options to provide additional water supply are being progressed by the Tasmanian Government and Tasmanian Irrigation, with adaptation of the proposed Tamar Irrigation Scheme (TIS) identified as the most likely project to meet demand.
tasmanianirrigation.com.au/news/funding-approved-for-tamar-scheme-business-case

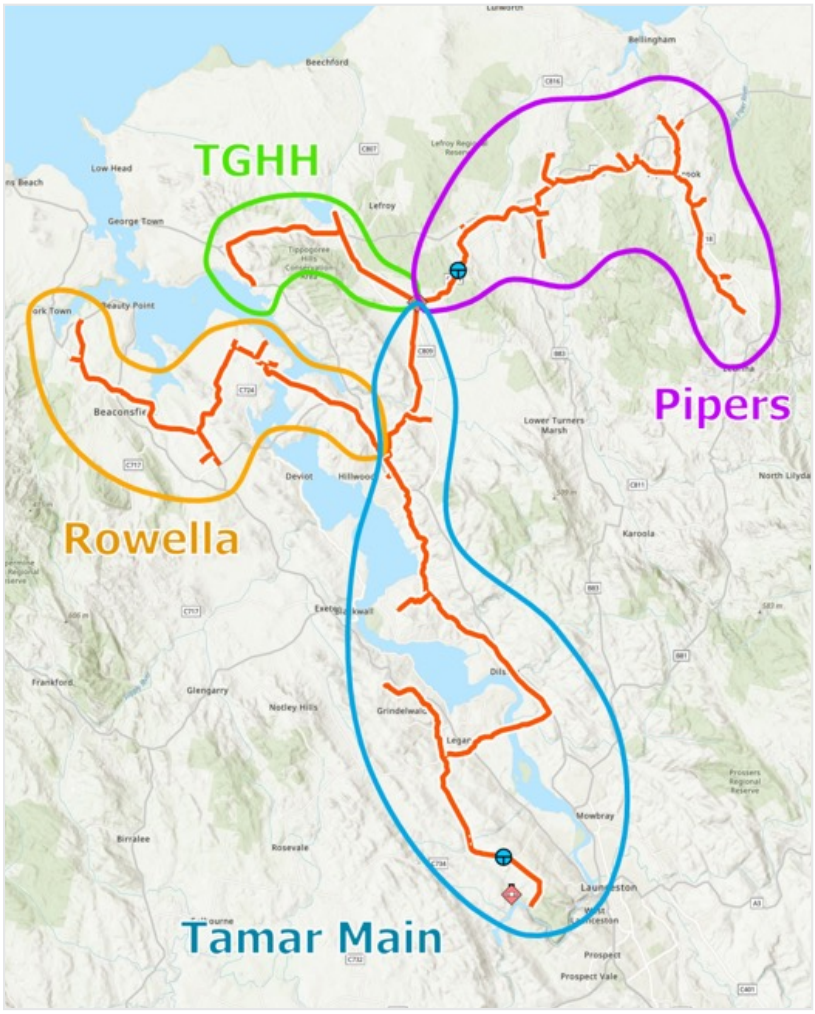
A combined agricultural / industrial TIS would support the delivery of up to 26,000ML/yr of water to the Tamar region, providing water security and reliability to existing and new customers.

For further information go to:
tasmanianirrigation.com.au/schemes/tamar-irrigation-scheme

Key features

154km
of irrigation and industrial pipelines across the Tamar region

26,000ML/yr
Additional capacity



Port infrastructure

Overview

The Port of Bell Bay is a deep-water port located in northern Tasmania occupying approximately 70 hectares. It is the state's principal hub for both domestic and international freight. Offering accessibility by road and rail, the port features all-weather access and a navigable harbour equipped with a multi-user wharf and comprehensive landside infrastructure.

The port is state-owned by TasPorts and has proximity to a diverse range of operational industrial activities.

Key existing industries at the Port include minerals, forestry, fuel, containers and project cargoes.

For further information on TasPorts Bass Strait Renewable Energy Terminal to support the development of offshore wind projects refer to **tasports.com.au/news**

Unique opportunity

The port has been selected as the site for the TGHH and is one of the few Australian ports with large flat parcels of industrial land adjacent to port facilities.

For further information go to:
tasports.com.au/bell-bay

Key Features

~70 ha
Area of port land

11.5m
Maximum draft

6
Berths within port

3.3 M
Tonnes per annum of freight

Proximity

14km
Inland from heads

356km
From Australasia's largest maritime hub for containerised cargo (Melbourne)

7,271km
From Port of Singapore

Bell Bay Precinct

Overview

The TGHH will be located at Bell Bay and is supported by the Bell Bay Advanced Manufacturing Zone (BBAMZ).

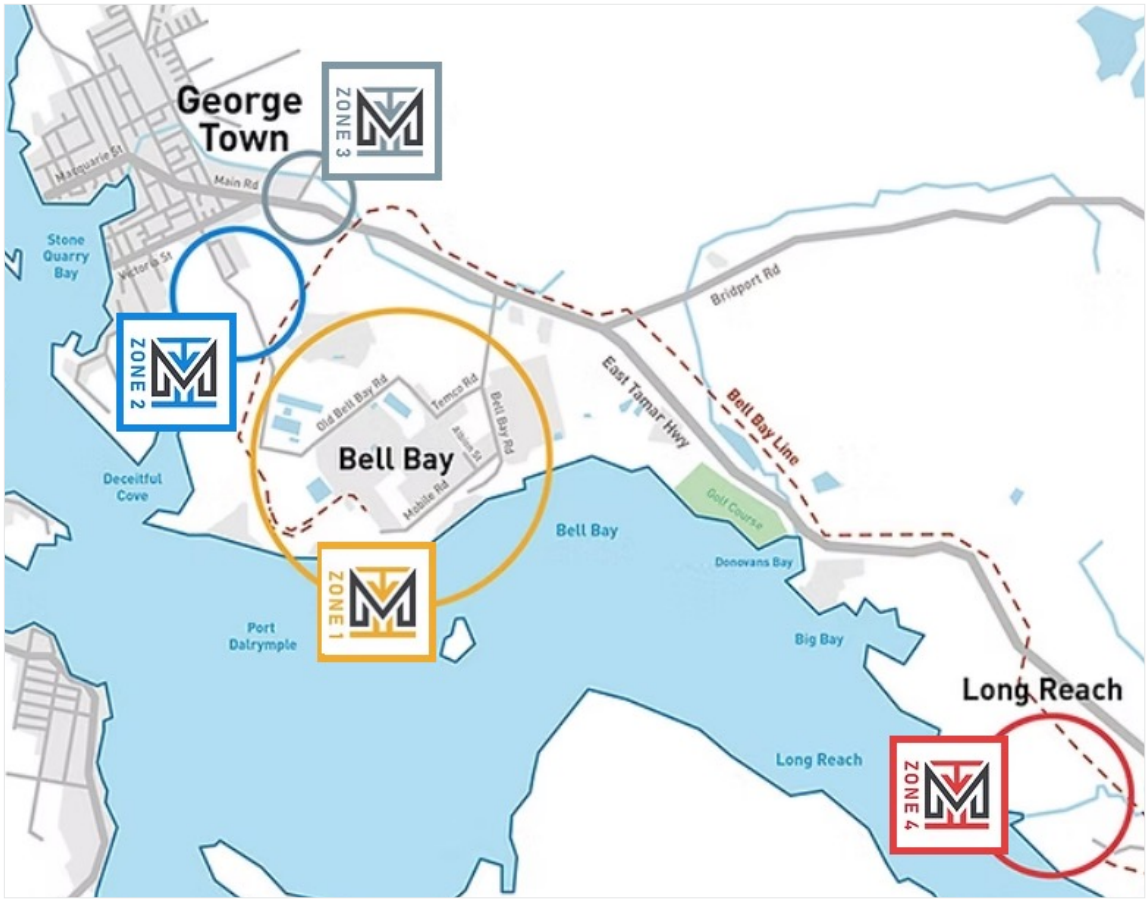
The BBAMZ is Tasmania's leading manufacturing hub, responsible for producing 59 percent of the state's manufactured exports.

BBAMZ is an industry based economic development group that works with government and community to support growth, investment and business diversification in the George Town and Tamar Valley regions.

The Bell Bay Precinct offers large areas of flat, accessible land with buffers from residential areas. The size of land parcels vary significantly and there is potential to create larger contiguous blocks subject to suitable commercial arrangements.

The area is comprised of four different zonings, these include:

- **Zone 1** – Heavy and general industrial.
- **Zone 2** – Light and general industrial.
- **Zone 3** – General and heavy industrial.
- **Zone 4** – General and heavy industrial.



Policy framework

Tasmanian Renewable Hydrogen Action Plan

The Tasmanian Renewable Hydrogen Action Plan sets out a vision for how to harness the opportunity to develop a world class hydrogen industry.

The vision is to become a leader in large scale green hydrogen production and domestic use and exports.

For further information go to:
recfit.tas.gov.au/__data/assets/pdf_file

Future Made in Australia

Guided by the updated 2024 National Hydrogen Strategy, the Future Made in Australia initiative provides a 10-year Hydrogen Production Tax Incentive for eligible Australian resident corporations. The incentive is a time-limited, uncapped refundable tax offset of $2 per kg of clean, renewable hydrogen produced. It can apply for up to 10 years between 1 July 2027 and 30 June 2040, for projects reaching Final Investment Decision (FID) by 2030.

Future Made in Australia also allocates $4 billion to the Hydrogen HeadStart Program which supports large-scale renewable hydrogen production projects, to accelerate scaling of the industry and develop local workforce expertise and capacity.

In December 2024, the Future Made in Australia (Guarantee of Origin) Act 2024 and the Future Made in Australia (Guarantee of Origin Charges) Act 2024 received assent.

These laws implement Australia's internationally-aligned Guarantee of Origin scheme, and will progressively expand its scope so Australian projects making, using and exporting hydrogen, as well as green metals and low carbon liquid fuels, can attract international investment and access global markets.

The bill implementing the Hydrogen Production Tax Incentive, the Future Made in Australia (Production Tax Credits and Other Measures) Bill 2024, has also been passed by the House of Representatives and is currently before the Senate.

Improved approvals processes and services

Work is underway to deliver Tasmania's Renewable Energy Approval Pathway, with an improved pathway for projects through the Major Projects Assessment process.

The Tasmanian Government has also announced a commitment to establish a Renewable Energy Services Hub at Bell Bay.

See also **recfit.tas.gov.au/grants_programs/reap_case_management_service**

International cooperation and investment

Australia aims to attract investment and develop international supply chains to support hydrogen projects through bilateral agreements with major investor nations including Japan, the Republic of Korea, the USA and Germany.

Australia also participates in multilateral initiatives including the Clean Energy Ministerial Hydrogen Initiative, the QUAD Clean Hydrogen Partnership the International Partnership for Hydrogen and Fuel Cells in the Economy.

In addition, the Tasmanian Government has signed MOU's with European counterparts to facilitate hydrogen development and knowledge sharing.

Expression of Interest (EOI)

Objectives of any EOI stage

The Tasmanian Government reserves its rights to conduct an expression of interest (EOI) process following the ROI process, a different process, or no process, or not to proceed with part or all the TGHH, in its absolute discretion.

The Tasmanian Government may:

- select one or more respondents to Participate in negotiations in respect of the TGHH; or
- undertake a competitive process to best facilitate the achievement of the development of the TGHH, with a view to engaging one or more preferred respondent(s).

However, through feedback to the ROI, we want to understand what information participants require, and their views on how key technical, commercial, and operational risks can be avoided, mitigated, or managed during development and operation of the TGHH.

Interactive sessions may be held to test technical, commercial, and legal issues, facilitating constructive communication and frank feedback.

We therefore strongly encourage any potential developers interested in the TGHH process to register their interest during this ROI stage.

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Department of State Growth

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