TASMANIAN GREEN HYDROGEN INTERNATIONAL ENGAGEMENT AND EXPORT STRATEGY

Renewables, Climate and Future Industries Tasmania

Tasmanian Government

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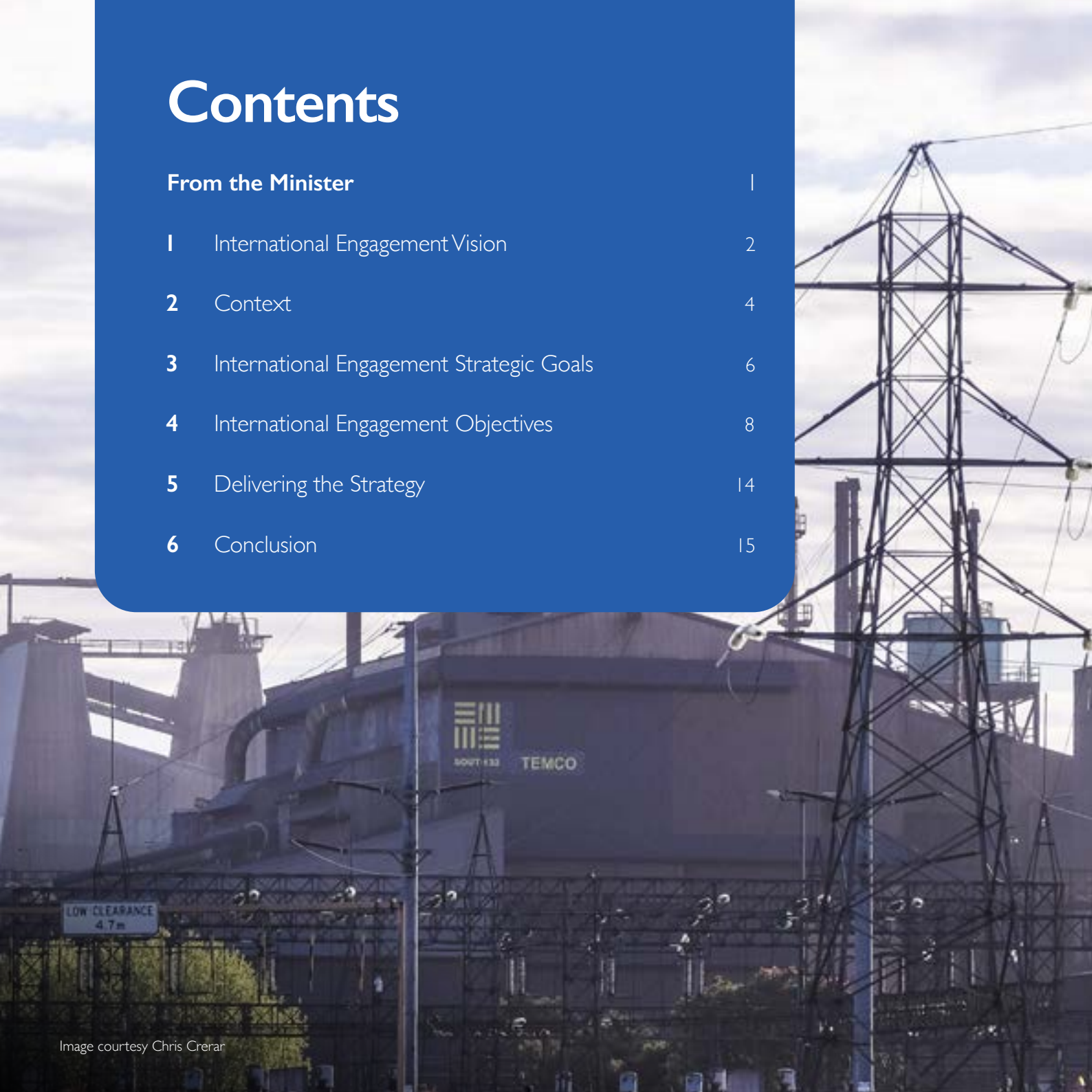


Image courtesy Chris Crerar

From the Minister

Tasmania is Australia's leading renewable energy state. With 100 per cent self-sufficiency in renewable electricity generation, Tasmania has outstanding potential to be a leading producer and exporter of green hydrogen.

Our existing, and potential, renewable energy resources and world leading expertise in hydro power and wind systems, uniquely positions Tasmania to harness the full opportunity of hydrogen across the entire value chain. This will support both the national energy transition as well as contribute to global emissions reduction efforts.

International demand for green hydrogen continues to grow and is forecast to increase more than eight-fold by 2050. To seize the opportunities offered by this emerging but competitive energy market, Tasmania must maximise its renewable energy attributes and act quickly and strategically to establish a green hydrogen industry.

Tasmania is well placed to make the most of the opportunities available which will underpin our economy, attract investment, create jobs, and deliver a cleaner world. Our abundance of fresh water, deep ports, skilled labour force and quality industrial precincts contribute to Tasmania's capacity to be a global green hydrogen leader.

Tasmania's Renewable Hydrogen Action Plan clearly demonstrates that we have the opportunity to develop a world class green hydrogen industry, with the aim of becoming a leader in large-scale green hydrogen production and export.

Our Action Plan sets out three ambitious goals:

- By 2022 to 2024 we will have commenced both production and use of green hydrogen, with export based production projects well advanced.
- By 2025 to 2027 we will have commenced export of green hydrogen.
- From 2030 we will be a significant global supplier of green hydrogen for export and domestic use.

Tasmania is on course to achieve these goals and is already developing international partnerships to secure export supply chains and open up collaboration pathways for green hydrogen research, development, and technology innovation.

This strategy sets out Tasmania's international engagement and export agenda in relation to green hydrogen, underlining our State's commitment to realise the full extent of green hydrogen export opportunities and the important benefits this offers to the long-term economic prosperity of Tasmania.

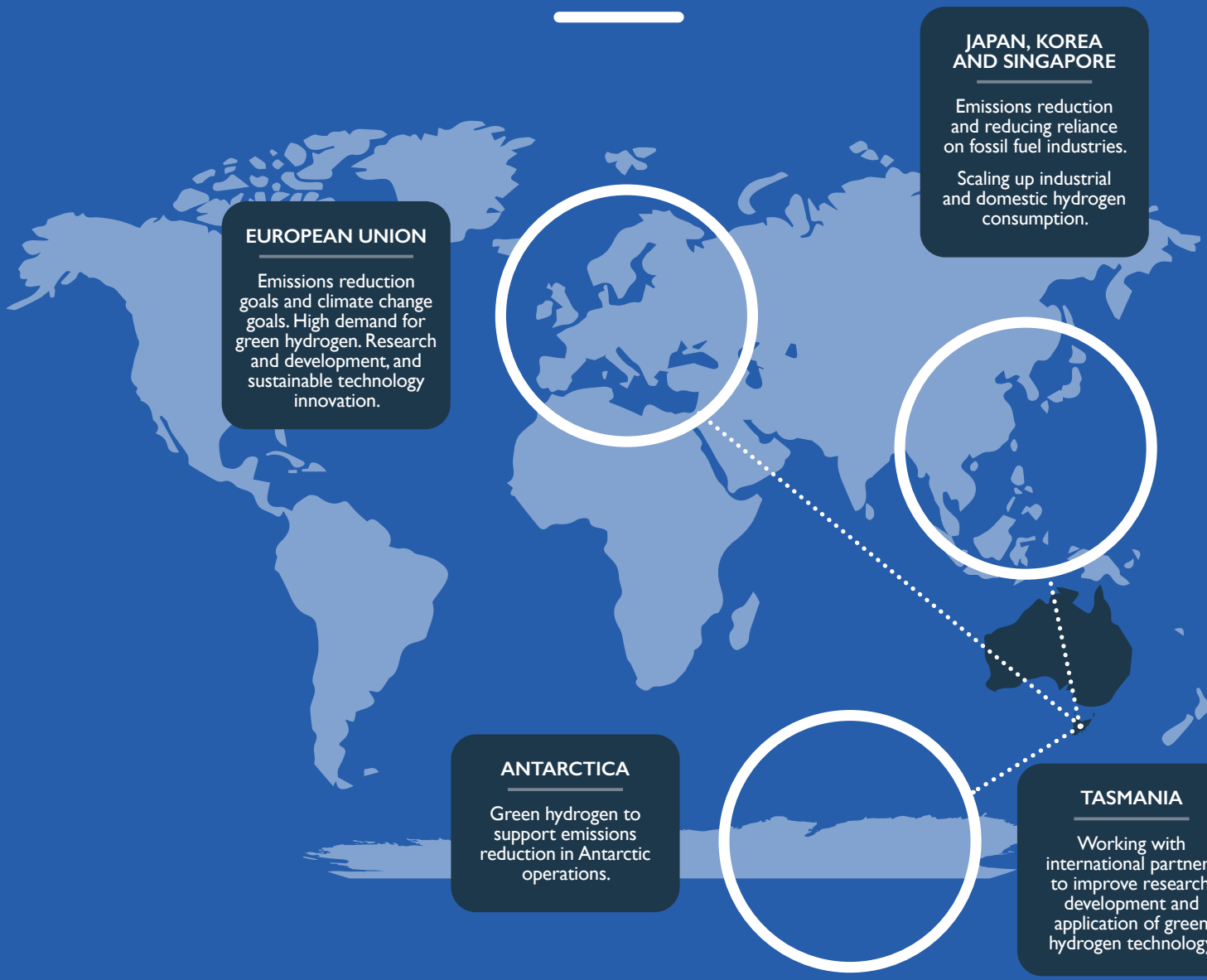
I look forward to continuing to work with industry and the community to help realise our green hydrogen vision.

Hon Guy Barnett MP
Minister for Energy and Emissions Reduction

INTERNATIONAL ENGAGEMENT VISION

To be a significant exporter of green hydrogen to supply emerging global demand and deliver benefits to all Tasmanians.

TASMANIAN GREEN HYDROGEN
A GLOBAL FOCUS



Context

Tasmania values and seeks to strengthen international partnerships in the field of green hydrogen development in line with the Tasmanian Renewable Hydrogen Action Plan (TRHAP).

Renewables, Climate and Future Industries Tasmania (ReCFIT) leads the Government's work agenda to develop, manage and grow Tasmania's green hydrogen industry – both domestically and for future export.

ReCFIT works closely with the Trade Unit of Department of State Growth to facilitate investment in green hydrogen production and support the development of hydrogen hubs across the State.

The Tasmanian Government is working with a range of prominent international proponents and consortia to facilitate investment in major green hydrogen projects.

An initial focus for a green hydrogen hub establishment is in the Bell Bay Advanced Manufacturing Zone. Locations such as this reduce the cost of green hydrogen pathways. It will allow the building of efficient supply chains to facilitate the export of hydrogen to global markets.

WHY NOW?

As the world transitions to low carbon energy, fossil fuel dependent countries are looking to hydrogen to help decarbonise their economies.

The demand for hydrogen is being accelerated by countries around the world committing to becoming large-scale customers for hydrogen, and by the dramatic reduction in the price of wind and solar power.

The International Energy Agency projects that the global demand for hydrogen is expected to increase between now and 2050, and rise significantly beyond 2050.

Hydrogen is leading Europe's clean energy transition. By 2050, it is expected hydrogen will represent around one quarter of the EU's total energy demand. Similarly, in the Asian region, Japan, South Korea and Singapore will become significant hydrogen importers, with Australia the leading hydrogen exporter.

Tasmania's green hydrogen could also provide a transition away from fossil fuel usage in Antarctica, contributing to decarbonisation of the continent.

WHY TASMANIA?

Tasmania is Australia's leading renewable energy state. We are 100 per cent self-sufficient in renewable electricity and have legislated a world-leading target to double our renewable generation to 200 per cent of our current needs by 2040.

Tasmania is also in a prime position to utilise its abundant renewable energy resources; low-cost and reliable hydropower and wind energy, vast amounts of fresh water and access to industrial zones with high quality infrastructure. In addition to Tasmania's green hydrogen ambitions, major renewable energy projects, Marinus Link and Battery of the Nation promote Tasmania's competitive renewable energy advantage.

Building upon Australia's proven track record of exporting energy, Tasmania is ideally placed to lead the country in this transitioning energy landscape and become a major player in exporting green hydrogen around the globe. Importantly, developing a green hydrogen economy is consistent with Tasmania's clean and green reputation.

Goals

Renewables, Climate and Future Industries Tasmania is engaging internationally to achieve three strategic goals:

1. Leverage Tasmania's 100 per cent renewable energy resources to achieve our three goals under the Tasmanian Renewable Hydrogen Action Plan

2. Facilitate and support research and development, innovation and knowledge sharing across the entire green hydrogen value chain

3. Build capability and learn from international experience to develop and grow Tasmania's green hydrogen economy.

King Island - Curry Power Station
Image courtesy
Hydro Tasmania

Objectives

To deliver the Tasmanian Government's green hydrogen goals, three key objectives are set out:

Identify international engagement opportunities for the export of green hydrogen and hydrogen derivatives.

Implement strategic international engagement activities to facilitate at scale export-focused green hydrogen supply chains.

Promote internationally Tasmania's competitive advantage in renewable energy to provide benefit to the Tasmanian economy and community.

Mackintosh Dam
Image courtesy
Hydro Tasmania

OBJECTIVE 1

Identify international engagement opportunities for the export of green hydrogen and hydrogen derivatives.

A key element of effective international engagement on hydrogen export is establishing long-term relationships to capture new and emerging opportunities. ReCFIT will use its expertise to prioritise these opportunities focusing on target markets.

Engagement with international partners, particularly those with ambitious decarbonisation agenda and advanced in hydrogen development, is key to realising Tasmania's full potential as a green hydrogen exporter. Strong international engagement will future proof the State's energy industry.

Global attention has been drawn to identifying and securing cost effective supply chains in politically stable locations with favourable investment conditions. Tasmania has been identified as a highly ranked potential hydrogen export supply chain by a number of regions around the world.

Identification of potential new and emerging investment and export opportunities through proactive engagement with interested foreign delegations is also essential for Tasmania to reach its export goals.

Achieved by:

- Strengthening current, key bilateral partnerships to enhance cooperation, guided by identified strategic goals and priorities
- Fostering institutional engagement to exchange expertise and assess any existing or emerging barriers and bottlenecks affecting pathways to export
- Undertaking targeted discussions with potential new international partners consistent with broader objectives
- Supporting pilot projects and research and development initiatives to minimise production and transport costs for export
- Establishing high level strategic agreements with identified foreign partners
- Identifying potential partners for future supply chain development
- Securing Tasmania's position as a competitive producer and exporter of green hydrogen by assisting with relevant international forums where hydrogen is a subject of discussion.

Aerial view of the Port of Bell Bay, image courtesy of TasPorts

Formalising ongoing cooperation with international partners is of key benefit to the successful development of Tasmania's hydrogen industry

OBJECTIVE 2

Implement strategic international engagement activities to facilitate at scale export-focused green hydrogen supply chains.

High quality international engagement activities that focus on research and development, technology innovation, certification, safety, environmental regulatory issues, and other identified areas of benefit will accelerate the supply chain of hydrogen from Tasmania to the rest of the world. It can also lead to the consideration of co-investment with Tasmania's hydrogen hubs.

Formalising ongoing cooperation with international partners is of key benefit to the successful development of Tasmania's hydrogen industry and broader economy. Promoting the deployment of hydrogen technologies, enhancing skills, education and employment opportunities and opening up future export markets will position Tasmania at the forefront of the global green energy transition.

Achieved by:

- Supporting international hydrogen partners and investors with the provision of high-quality information on a range of technical matters, including infrastructure planning and export supply chains
- Facilitating off-take agreements for hydrogen export with identified partners
- Implementing appropriate regulatory frameworks for hydrogen production, storage, and shipping
- Establishing a certificate of origin scheme to best position Tasmania's green hydrogen, including working with the Commonwealth to achieve a national hydrogen certification scheme
- Supporting efforts to lower the cost of production and at scale supply through research and development technology/approaches
- Identifying and pursuing new and emerging hydrogen export opportunities
- Continuing community engagement on potential for hydrogen as a new low emissions export commodity.

OBJECTIVE 3

Promote internationally Tasmania's competitive advantage in renewable energy to provide benefit to the Tasmanian economy and community.

Increased demand for green hydrogen is likely to occur after its use for energy has grown. Monitoring new and emerging international developments is important to ensure Tasmania is a key player in the international advancement of the hydrogen market.

ReCFIT will also work closely with the Trade Unit of the Department of State Growth to incorporate renewable energy and green hydrogen into trade missions and engagement with trade ambassadors.

Achieved by:

- Leveraging existing international partnerships and trade links to support the growth of a green hydrogen industry
- Collaborating with experts in AusTrade and other Commonwealth Government agencies to ensure best practice when promoting Tasmania's competitive advantage
- Integrating Tasmanian green hydrogen opportunities into broader Tasmanian trade promotion
- Pursuing international industry advancement opportunities, such as at trade fairs, conferences and other forums.

Delivering the Strategy

Renewables, Climate and Future Industries Tasmania will implement and deliver this strategy through the following activities:

- Focusing resources to strengthen cooperation with key international partners
- Maintaining ongoing international dialogue to provide insight into the global hydrogen industry
- Targeting research, development, and demonstration activities with new partners to accelerate and expand the development of hydrogen technologies
- Considering a variety of mechanisms to work multi-laterally and with foreign non-governmental entities (i.e., universities and research institutions).

Conclusion

This strategy explains how Renewables, Climate and Future Industries Tasmania sets out its international engagement efforts in the emerging global hydrogen industry and provides a vision for future engagement activities in the long term.

It focuses on identifying and evaluating opportunities for engagement; developing and implementing those engagements through strategic partnerships, and supporting research that make those engagements productive and beneficial for Tasmania.

The Tasmanian Government welcomes the opportunity to collaborate with prospective international partners on hydrogen matters that are mutually beneficial to both parties.

To register your interest in green hydrogen opportunities in Tasmania:

Hydrogen Development Team

For information on Green hydrogen investment, download our Tasmanian Renewable Hydrogen Prospectus:

Download

Penstock Lagoon
Image courtesy
Hydro Tasmania

Tasmanian Government

Renewables, Climate and Future Industries Tasmania