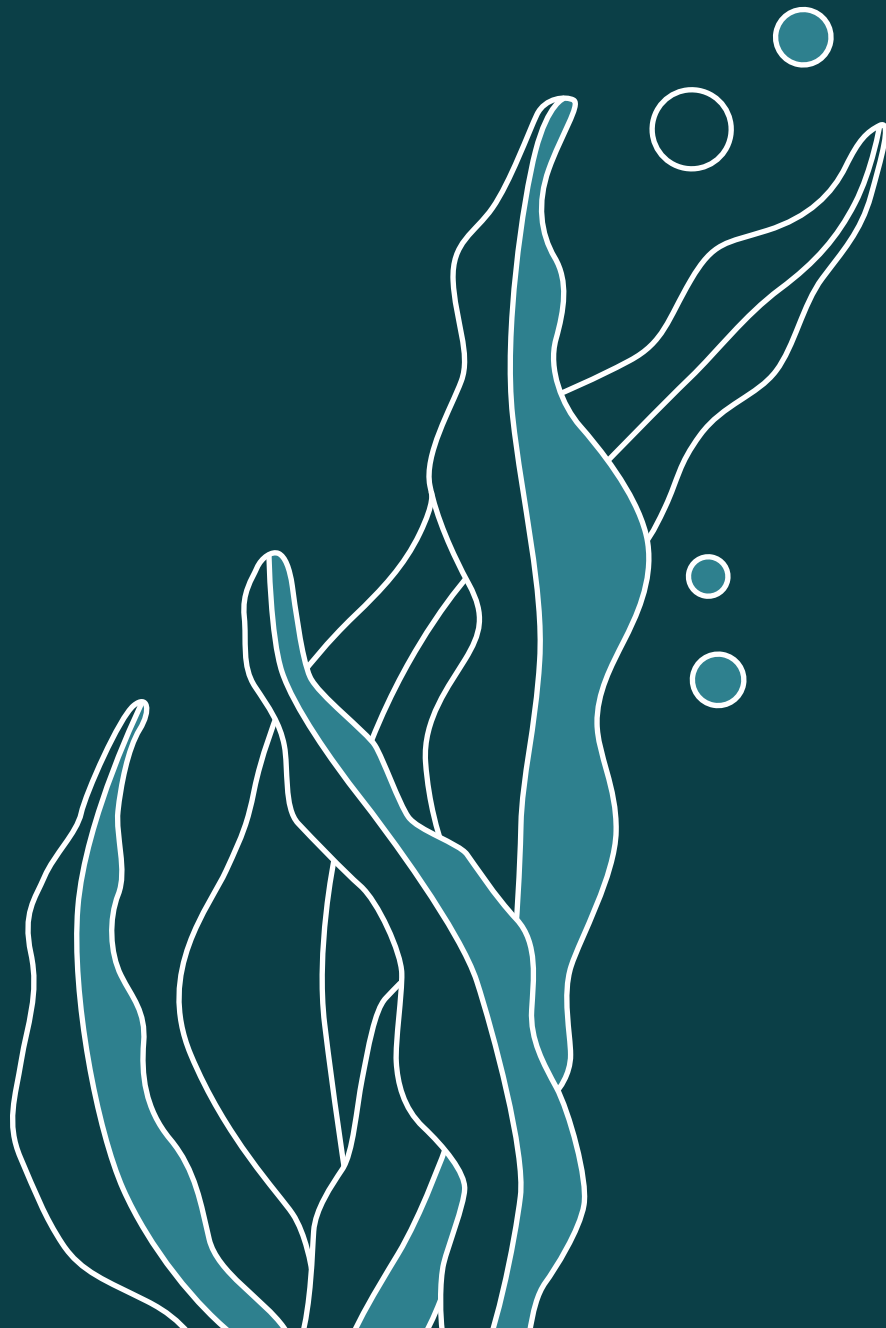

NSW Seaweed Prospectus

2024

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Acknowledgement of Country

The Department of Primary Industries and Regional Development acknowledges that it stands on Country which always was and always will be Aboriginal land. We acknowledge the Traditional Custodians of the land and waters, and we show our respect for Elders past, present and emerging.

We are committed to providing places in which Aboriginal people are included socially, culturally and economically through thoughtful and collaborative approaches to our work.

Artwork: 'On Country', Charmaine Mumbulla, 2022

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Executive summary

Under a modelled scenario, the global market opportunity for New South Wales (NSW) seaweed is estimated to be worth between A\$900 million and A\$2.3 billion¹. This represents NSW accessing 6-14% of the projected global market for future seaweed derived products².



NSW is positioned to grow a globally competitive seaweed industry, underpinned by comparative advantages in cultivation and strong adjacent workforce capabilities. Under different scenarios NSW-based seaweed production has the potential to supply to a variety of markets representing different values^{1,2}:

A\$1 billion	A\$320 million	A\$130 million	A\$105 million	A\$320 million
towards the global nutraceuticals market (A\$1,200b)	towards the global pet food market (A\$258b)	towards the global animal feed additives market (A\$79b)	towards the global methane-reducing supplements market (A\$2.6b)	towards the global alternative proteins market (A\$180b)
from <i>Ecklonia radiata</i>	from <i>Ulva spp</i>	from <i>Ulva spp</i>	from <i>Asparagopsis</i>	from <i>Ecklonia radiata</i>

* The scope of this document focuses on seaweed, or macroalgae, and does not explicitly consider microalgae and any of its derived products. Given the adjacencies of the two algae types, many promising opportunities for microalgae are available and are well-aligned to those presented in this document. However the opportunities in microalgae are not specifically addressed in this prospectus.

NSW’s competitive advantages in seaweed production and processing lies in:

Unique environment	NSW offers a clean and green environment, with diverse and unique seaweed species, abundant land, access to seawater and saline groundwater, and has extensive wastewater resources for cultivation.
Enabling infrastructure and co-location potential	NSW benefits from well-connected infrastructure, including roads, rail networks, ports and airports. NSW also provides opportunity for co-location with existing aquaculture, food and beverage manufacturing and renewable energy industries.
Complimentary workforce	NSW has a skilled workforce across aquaculture and manufacturing industries which are supported by the largest regional workforce in Australia. This provides ample support for the seaweed industry to grow over the long term.
Research and development capability	NSW has strong R&D capabilities in seaweed cultivation. The NSW Department of Primary Industries and research hubs are driving innovation and creating valuable partnerships.

Global



Seaweed farming in South Korea

NSW



Ecklonia radiata

Additional A\$16 billion

Global market for seaweed-derived products by 2030².

Production volume

Under a scenario of 2,800 hectares of onshore and offshore primary production, NSW could annually produce up to 2 million tonnes of wet seaweed from local species¹ (e.g. *Ulva spp.*, *Ecklonia radiata*, *Asparagopsis spp.*), unlocking significant value across seaweed-derived product markets.

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Demand

1

Global overview

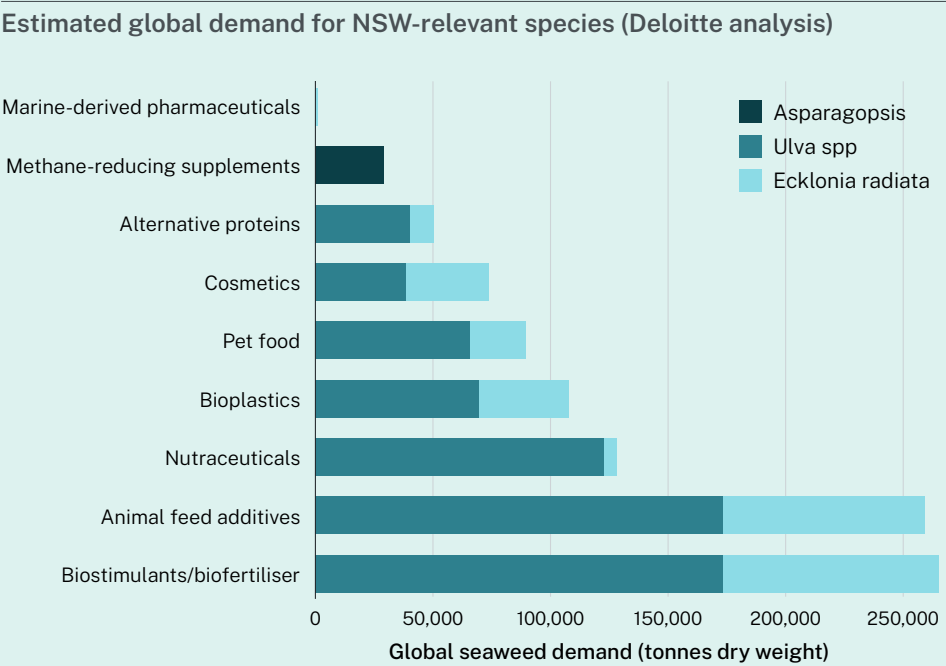
Spanning across 44 countries³, seaweed farming is one of the world’s fastest-growing industries. From 2022 to 2030, it is predicted that key global seaweed markets hold the potential to grow by an additional A\$16 billion², almost doubling in size. Despite approximately 12,000 seaweed species having been identified, only 27 species are currently used for commercial purposes¹. Commercial aquaculture practices account for 97% of global seaweed production³.

Of current seaweed volumes, 95% come from five species groups: brown seaweeds’ *Laminaria saccharina* and *Undaria*, and red seaweeds’ *Eucheumatoid*, *Gracilaria*, *Pyropia*. The commercial cultivation of these species groups has significantly increased in the past 20 years, almost doubling from 2010 to 2021³.

These product markets could be supplied by other seaweed and algae species. The three species analysed in this report could also access, and/or supply, other existing and new markets over time.

Key NSW seaweed species can feed into global supply chains at various levels.

Diverse market demand sources can provide alternative income streams and opportunities for NSW producers.



Seaweed farm in Nusa Penida, Indonesia












Deoksan-ri near Jangheung-gun, South Korea



Zanzibar Island, Africa

Global demand for seaweed is being spurred by a variety of established and emerging offtake sources, as this table from the World Bank shows. Market insights illustrate to industry stakeholders a future roadmap to a sustainable seaweed industry in NSW.

Table 1: Estimated additional value of global seaweed markets (Deloitte analysis, adapted from the World Bank²)

Market	2030 global market value (A\$)	Market insights
 Biostimulants / biofertilisers	\$2.7 billion	Short-term (before 2025) <ul style="list-style-type: none"> Local product developers are currently launching seaweed-derived products in premium markets. Products include bioplastics, fertilisers and animal feed additives. Initial production mostly relies on imported or recycled feedstock. There is increasing demand for competitively priced, locally sourced feedstock. Existing buyers favour local feedstock to reduce import costs, biosecurity risk and ensure product quality.
 Animal feed additives	\$1.7 billion	
 Pet food	\$1.6 billion	
 Methane-reducing supplements	\$0.46 billion	
 Nutraceuticals	\$5.9 billion	Medium-term (2025-2028) <ul style="list-style-type: none"> Scaling local seaweed cultivation (both onshore and offshore) to support expanded product ranges and higher feedstock prices. Enhancements in processing capacity to meet growing market needs. Development of industrial infrastructure and supply chains to improve cost efficiency and scalability. Enabling at-scale production and penetrating high-value markets such as nutraceuticals.
 Alternative proteins	\$0.67 billion	
 Bioplastics	\$1.1 billion	
 Pharmaceuticals	\$0.43 billion	Long-term (beyond 2028) <ul style="list-style-type: none"> Regulatory compliance and robust testing are crucial for market entry and will enhance product credibility and market acceptance, while also pushing out development timelines. Investment in advanced manufacturing techniques and technologies streamline production and reduce costs over time
 Cosmetics	\$1.5 billion	
Total	\$16 billion	

Potential NSW supply and market value

There is a significant investment opportunity in New South Wales seaweed-derived markets, estimated to be worth between A\$900 million and A\$2.3 billion by 2030¹. This represents 6-14% of the projected global market value for seaweed-derived products by 2030².

NSW has estimated primary production capacity for at least ~2 million tonnes (wet weight) of seaweed harvested per annum by 2030 under a scenario of ~2,800 hectares of new primary production¹.

The primary production of local seaweed species from 1,000 hectares marine-based and 1,800 hectares land-based could be equivalent to:

Table 2: Potential seaweed production volume in NSW (Deloitte analysis)

Species	Cultivation method	NSW potential supply (tonnes dry weight/year)	Total 2030 global demand across key markets (tonnes dry weight)	Potential supply contribution to global demand
Ulva spp	Land-based	108,000 -153,000	630,000	17-24%
Ecklonia radiata	Ocean-based	10,000	280,000	3.5%
Asparagopsis	Both land and ocean-based	7,000 -28,000	29,000	24-97%

Table 3: Potential market values for NSW local species for each seaweed-derived product market (Deloitte analysis)

Product category	Market(s)	Potential market value for NSW by species (A\$ millions)		
		Ulva spp	Ecklonia radiata	Asparagopsis
Lower-value products	Bioplastics OR animal feed additives OR biostimulants / biofertiliser	432	30	0
Mid-value products	Alternative proteins OR cosmetics OR pet food	1,080	70	0
	Methane-reducing supplements	0	0	105
Higher-value products	Nutraceuticals	1,620	3,400	0
	Pharmaceuticals	108,000	10,000	0

NSW market values in the above table represent the entire potential supply of each seaweed species in NSW being directed towards each specific market application, without any supply being diverted to other uses.

Snapshot of seaweed in Australia

2

Australian seaweed industry



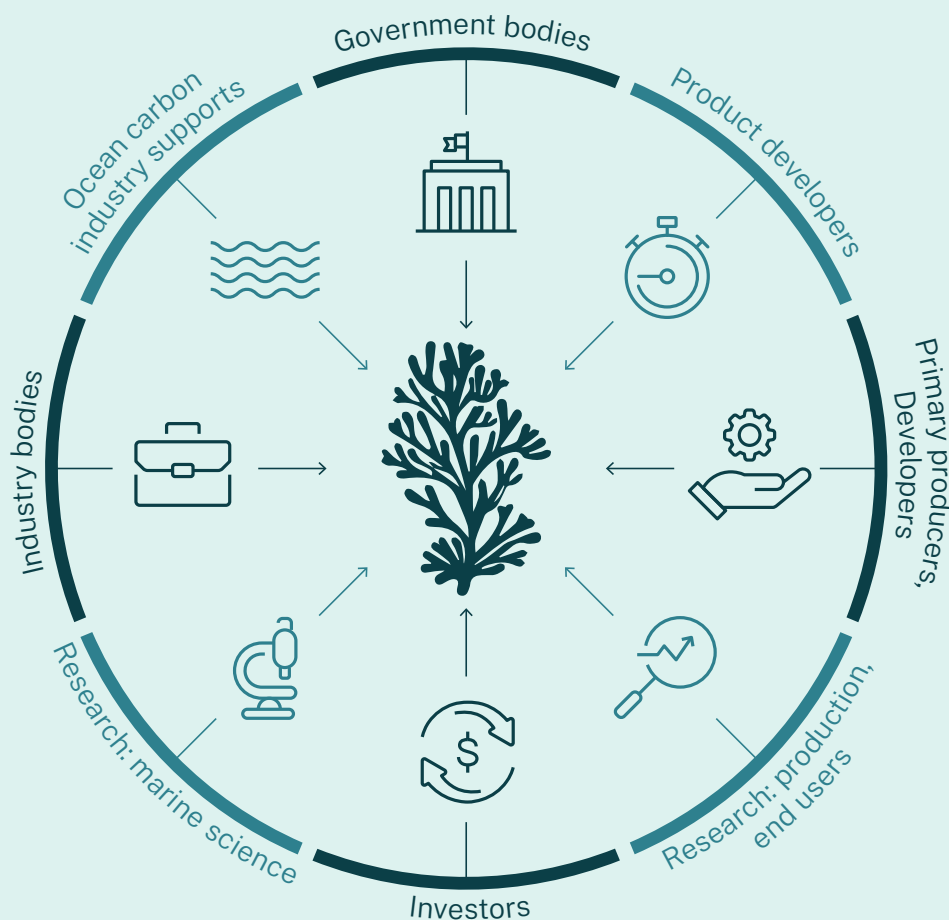
The Australian seaweed import trade is currently valued at over A\$40 million. While Australia continues to import seaweed, there is substantial opportunity to cultivate seaweed domestically at commercial scale.

Boasting 15% of global seaweed (known) species, with many native and unique only to Australia⁴, seaweed creates a unique value proposition and a high value export prospect. Analysis of current active seaweed markets, native species, and stakeholder consultations concluded that the three main species of interest to NSW are *Asparagopsis*, *Ecklonia radiata*, and *Ulva* spp.



NSW has a highly active stakeholder ecosystem across the seaweed industry's value chain, playing a leading role in the development and acceleration of the seaweed industry, demonstrating its applications and viability.

NSW creates a synergistic environment that fosters innovation, collaboration, and sustainable growth in the seaweed industry, positioning the State to be a future leader in this burgeoning sector.



Statement of opportunities

NSW's opportunities for a seaweed industry

NSW is primed to leverage global demand through an end-to-end seaweed supply chain. The following opportunities have been identified for NSW across three key areas of the seaweed value chain.

Cultivation of seaweed

→ ***Growing unique and highly desired native species for premium products***

NSW boasts approximately 230 out of Australia's 1,500 native seaweed species⁵. Many of these may be able to be leveraged for cultivation and commercialisation of premium products. By combining this native seaweed opportunity with the state's research capabilities in algae biology and bioproduct development, there is an opportunity to create niche markets and develop high-value products that differentiate NSW in the global aquaculture market.

Cultivation can be co-located with existing aquaculture systems

The opportunity exists to integrate seaweed cultivation with existing and disused aquaculture systems. Integration can optimise resource use, leading to reduced costs, increased productivity, and improved water quality.

Cultivators can utilise nutrient-rich waste streams

Regional NSW has significant food processing and wastewater treatment facilities. This offers potential to utilise nutrient-rich waste streams for seaweed cultivation. Seaweed species such as *Ulva* spp, currently grown on the South Coast of NSW, has demonstrated its ability to effectively remove nutrients (such as nitrogen) from wastewater and improve water quality.

Processing and manufacturing of value-added seaweed products

→ ***The opportunity exists to process locally cultivated seaweed into premium products***

There is an opportunity for seaweed cultivators to develop downstream, integrated businesses to value-add to local production. Businesses can take advantage of local premium product by manufacturing a variety of products (see table 3 for examples).

Existing industrial and agricultural facilities could be converted for seaweed processing. This transformation of existing infrastructure can repurpose underutilised facilities, including decommissioned processing plants or underutilised manufacturing sites. New revenue streams are possible by tapping into the potential of seaweed processing, contributing to the economic growth of NSW.

Leverage the R&D economy

→ ***NSW has a thriving research and development ecosystem and is a testing ground for emerging applications and cultivation practices***

Investors have the opportunity to set up algae biorefineries to process various seaweed species. NSW's leading R&D sector, including universities and research institutions, are looking for collaborative partners to continue research and development into new and emerging seaweed applications, cultivation practices and more. Institutions are looking at ways to enhance the competitiveness and productivity of both local and imported seaweed varieties and further fuel the uptake of seaweed in multiple sectors.

Competitive advantages

NSW's competitive advantages

NSW offers a strong competitive advantage for growing a seaweed industry. Its unique environmental resources, top-tier research capabilities, enabling infrastructure, existing industrial ecosystem and regional workforce make NSW an ideal location.

Unique environmental resources

- NSW is home to approximately 230 of Australia's 1500 seaweed species⁵, offering significant genetic diversity that can be harnessed for innovative products.
- Ample land availability enables scalability while avoiding agricultural competition.
- Access to both seawater and saline groundwater.
- Extensive wastewater resource (>2bn litres daily in NSW⁶), utilising nutrients and remediating via cultivation.



Complementary workforce

- Tapping into skilled workforces from local aquaculture, agriculture and manufacturing industries brings valuable expertise and knowledge to the growing seaweed industry, ensuring efficient operations and high-quality production.
- Regional NSW has Australia's largest employed population of approximately 1.48 million⁸. This abundant labour market has a strong constituency of skilled workers thanks to a diverse talent pool across adjacent industries with a range of transferrable skills.



Existing capabilities and co-location potential

- Established industrial ecosystems and renewable energy zones in NSW offer co-location opportunities that reduce production costs for seaweed cultivation.
- Unused aquaculture ponds and other existing sites can be repurposed for seaweed cultivation, providing ready-made infrastructure and accelerating project implementation.
- Air and sea freight exports (underpinned by extensive road and rail networks) in NSW are the highest in Australia at A\$46 billion in 2022⁶, demonstrating strong trade capabilities and ability to connect businesses to global markets.

Research and development capability

- Leading research supporting optimised gene selection, seaweed growth and environmental benefits.
- Providing a strong foundation to develop the industry, the NSW Department of Primary Industries (DPI) is ranked in the top 1% globally⁷ for agriculture, fisheries, forestry, biosecurity, environment, and ecology research.
- Growing research ecosystem driving advancement and attracting investment. UTS Deep Green Biotech Hub, University of Newcastle, University of NSW, and University of Wollongong are at the forefront of developing a bioeconomy. This concentration of expertise and collaborative research creates a fertile environment for innovation and commercialisation in the seaweed sector.

Unique environmental resources

Seaweed production thrives on a perfect balance of key inputs. With a wide range of advantages, investing in the seaweed industry in NSW presents a unique opportunity for growth and success.

1

Seaweed genetic diversity

Of the 1,500 native Australian seaweed species, 230 grow in NSW. This includes *Ulva spp*, *Ecklonia radiata*, and *Asparagopsis*.

2

Potentially underutilised land

NSW's vast coastline and ample regional land offers ideal conditions for onshore seaweed cultivation, particularly for species such as *Ulva spp* and *Asparagopsis*. This onshore cultivation does not compete with prime agricultural land.

3

Prime ocean conditions

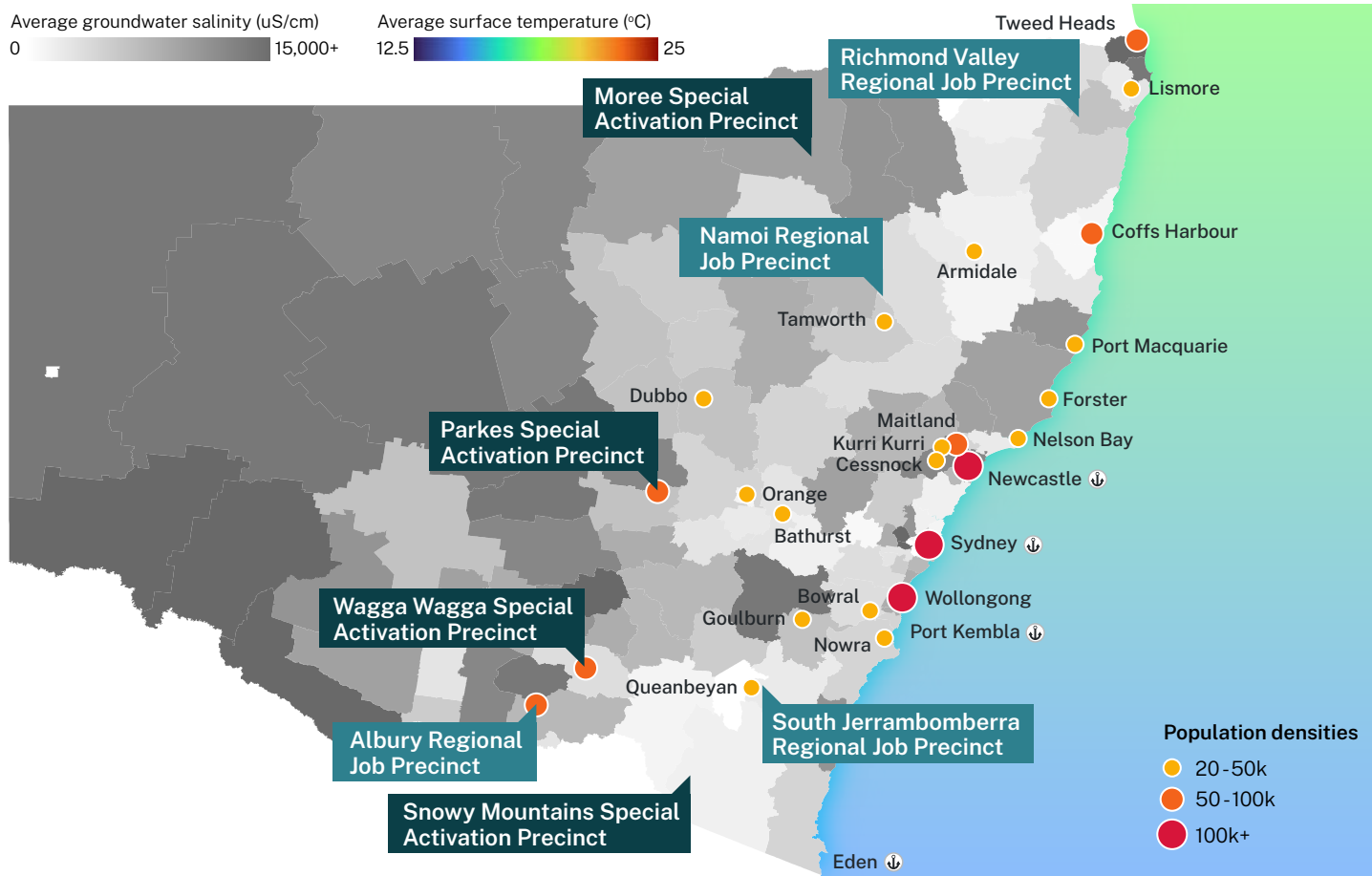
NSW boasts a variety of ocean temperatures and nutrient dense waters, creating an excellent environment for seaweed cultivation.

4

Abundant water sources

Access to alternative water sources such as saline groundwater and nutrient-rich wastewaters, ensures a consistent, dependable supply for seaweed production.

NSW average ground water salinity and surface sea temperatures



Input	Enabler for seaweed production and processing	
Groundwater salinity⁹	Higher levels of groundwater salinity can unlock new sites and support more efficient seaweed production	Access to saline water when combined with nutrients and industrial hubs and logistics can support establishment of land-based cultivation and associated processing capacity. Quality and properties of saline groundwater require investigation to ensure sites are suitable for cultivation.
Surface sea temperatures¹⁰	Different ocean temperatures and nutrient loads support different species	Ecklonia radiata prefers cooler sea temperatures (e.g. southern marine regions) to support its growth however temperature tolerances vary between species of algae. Nutrient-rich marine environments are required for successful cultivation and are present all along NSW's coastline.
Wastewater resources (population centres¹¹)	Higher populations have higher commercial, industrial and sewage wastewater volumes	Nutrient-rich waste streams can be remediated and provide essential nutrients for cultivating seaweed. Wastewater treatment facilities (commercial and industrial, sewage) can provide such nutrients when organic waste streams are present. Wastewater treatment facilities are situated extensively throughout the state. More densely populated location centres will hold greater flows.

Existing capabilities and co-location potential

Development of appropriate infrastructure and capabilities across the whole value chain is crucial for the establishment of a successful seaweed industry. Investors can leverage extensive existing infrastructure which cross over with seaweed related resource areas. Seaweed projects can be co-located with low-cost renewable energy production, further supporting an investment case.



Industry co-location

NSW's established industrial ecosystems and renewable energy zones offer co-location opportunities that reduce production costs for seaweed cultivation, leveraging existing infrastructure.



Existing aquaculture ecosystem

Sizeable shellfish and aquaculture sectors exist across the North, Central and South Coast. Co-location with existing aquaculture has been shown to help improve water quality whilst providing nutrients for seaweed growth.



Advanced airport facilities

Sydney Kingsford Smith Airport is Australia's busiest, with world-class cargo facilities supporting rapid air freight services to global markets. The planned Western Sydney International Airport will further enhance air freight for the state.



Integrated rail system

The state's rail network spans over 10,000 km, offering robust links between regional production hubs and major urban centres, enhancing the movement of goods⁴. The Inland Rail Project will provide a further boost to regional and interstate connectivity.



Extensive road network

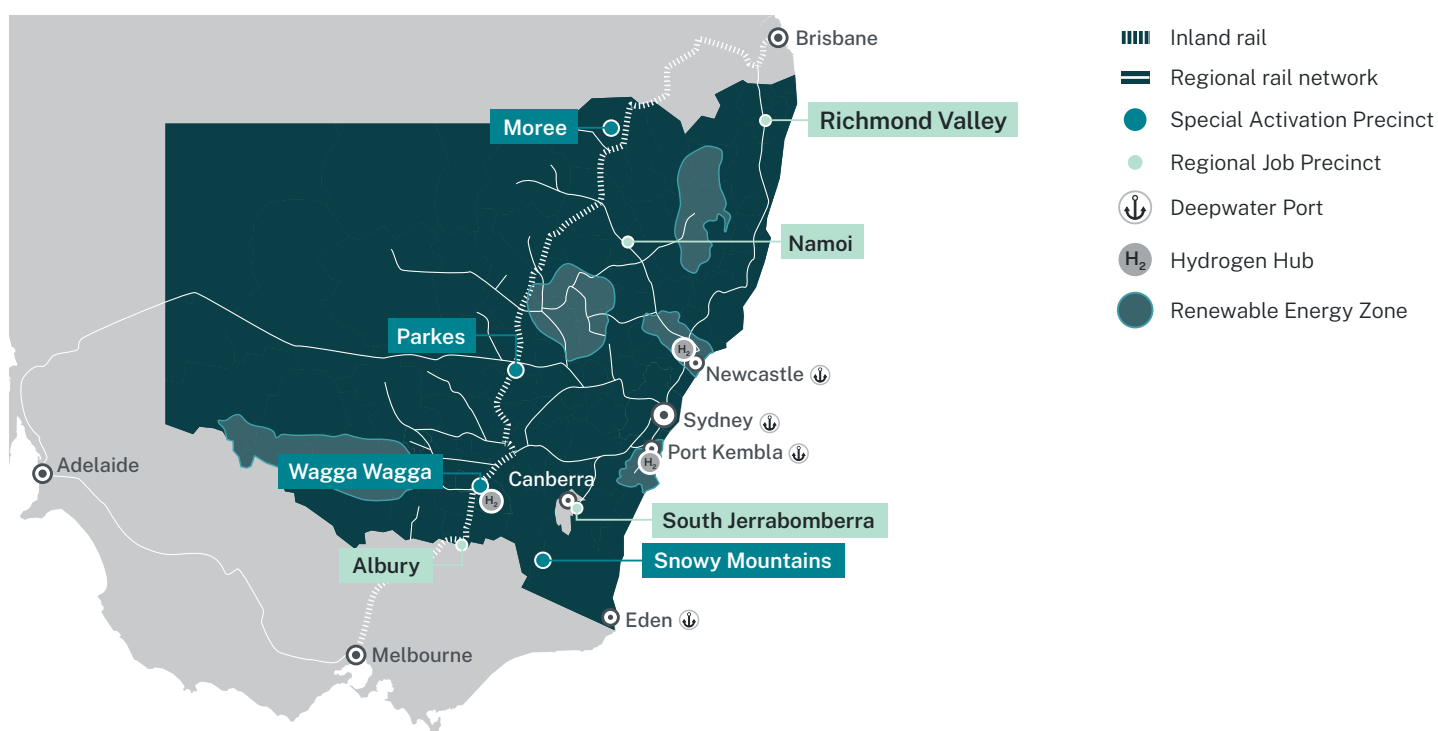
NSW boasts over 200,000km of roadways, providing comprehensive connectivity across the state and facilitating efficient domestic distribution⁴. Major roads, such as the Pacific Highway and Hume Highway, provide convenient transport links to other states and territories.



Major ports

Sydney's Port Botany and Wollongong's Port Kembla handle a significant volume of Australia's containerised and bulk freight, streamlining international export processes. Port Kembla is the largest port for grain export on Australia's east coast. Port of Newcastle has plans for a large container terminal further enhancing export potential.

NSW enabling infrastructure and renewable energy zones



NSW is a manufacturing powerhouse

NSW also possesses strong existing manufacturing capabilities for the development of biorefinery hubs¹²:



Manufacturing

NSW holds the majority of establishments for manufacturing nutraceuticals, fuels, pharmaceuticals, cosmetics and animal feed. It is the second highest in the country for fertiliser and plastics.



Employment

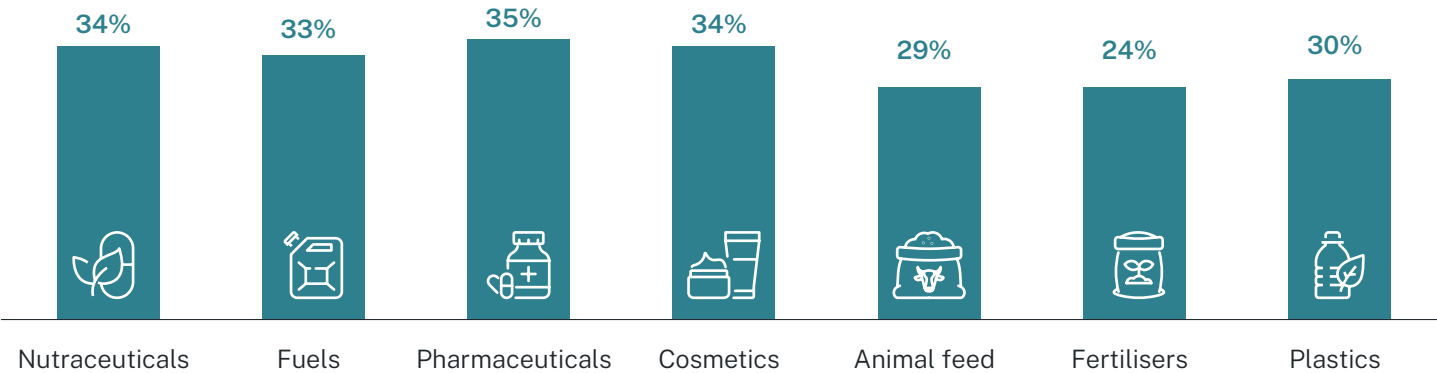
The state has 288,000 people employed in this industry, contributing to an A\$33B market.



Market

NSW contributes 25% to the Australian manufacturing market.

Seaweed related manufacturing sectors in Australia – NSW market share (source: IBIS World)



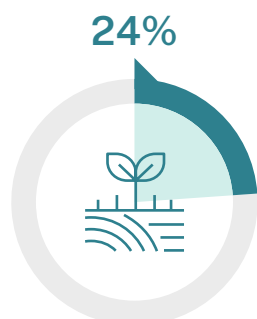
Courtesy of Circular Plastics Australia



Australian pharmaceutical industry

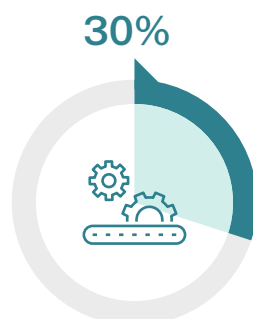
Complementary workforce

The following employment sectors can provide the skills and capabilities to support growth and advancement in the NSW seaweed industry.



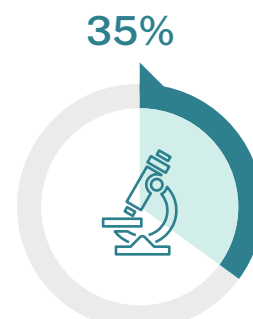
Agriculture, Forestry and Fishing

Knowledge of farming practices, environmental management, and biotechnology can be directly applied to seaweed cultivation and harvesting. NSW employs 24% of Australia's agriculture, forestry and fishing workforce.



Manufacturing

Expertise in production processes, quality control, and industrial operations can support bio-refinery and bioproduct manufacturing. NSW employs Australia's largest manufacturing workforce.



Professional, Scientific and Technical Services

Skills in research, scientific analysis, and technical problem-solving can drive innovation in seaweed aquaculture and bioproduct development. NSW employs Australia's largest professional services workforce.

NSW has a strong workforce across key regions in the state. Each region represented below has its own unique character and potential strength as an investment destination.

Complementary workforce in NSW regions (source: Jobs and Skills Australia)

	Agriculture, Forestry & Fishing	Manufacturing	Professional, Scientific & Technical Services	Total
Hunter, Central Coast, New England and North West	21,100	38,900	41,000	101,000
Central West and Orana Far West	13,500	8,500	4,700	26,700
Illawarra, South Coast, South East and Tablelands	4,900	24,600	28,800	58,300
Mid North Coast and North Coast	12,100	14,900	17,100	44,100
Riverina Murray	13,500	10,500	6,800	30,800

Research and development capability

NSW boasts a diverse array of research and development capabilities advancing the seaweed value chain.

Organisations in the research sector such as University of Technology Sydney, NSW Department of Primary Industries (NSW DPI), Fisheries Research Development Centre, University of NSW and University of Wollongong, conduct research and engineering activities on native species, genomics, cultivation technologies and processing and manufacturing technologies. This multifaceted approach aims to unlock Australia's seaweed industry potential, fostering sustainable coastal economies.

Marine biology, algae production, aquaculture



- Regenerative farming in South Coast NSW
- Chemical profiles of Australian seaweeds
- Identifying new seaweed molecules for clinical applications



- Climate change impacts and coastal management
- Integrated micro/macro-biology and ecology
- Marine biotechnology aquaculture



- Climate change impacts and coastal management
- Integrated micro/macro-biology and ecology
- Marine biotechnology aquaculture



Department of Primary Industries and Regional Development:

- Supporting NSW's aquaculture sectors
- Undertaking research on species, diet development, bio-products and breeding programs
- Regenerative aquaculture and restocking programs

Bioeconomy and marine bioproducts



- Algae biotechnology, developing innovative green and clean technologies
- Promoting and supporting innovation in the algae biotech space across NSW and Australia
- Ocean microbiology
- Investigating algal antioxidants for functional foods



- Microalgal biotechnology and bioremediation
- Production process development of bioproducts and biofuels
- Use of algae in green nanotechnology
- Extraction and utilisation of high-value algal compounds

NSW research supporting seaweed sector development

NSW universities have experience and capacity across the spectrum of seaweed aquaculture and associated technology development. This capability delivers new and emerging opportunities and ensures the training of a strong workforce for the industry. Targeted R&D and studies undertaken through NSW research institutions include:

- 1 **Cultivation**
 - Causes and consequences of disease in habitat forming seaweed *Ecklonia radiata* (UNSW)
 - The effect of microbial diversity vs function on marine holobionts (UNSW)
 - The effects of climate change and disease in temperate seaweeds (UNSW)
 - Population growth, genetic variation and adaptation of seaweed species (University of Wollongong)
- 2 **Processing**
 - Innovative bioplastics processing and product development with supply chain solutions (University of Newcastle)
 - Examining seaweed molecules for clinical/functional food applications (University of Wollongong, UTS)
 - Seaweed to bioplastics (UTS)
 - Deep Green Biotech Hub (UTS)
 - Biotechnologies – Macroalgae assessment, plant juice processing (UTS)
- 3 **Industry development**
 - Regenerative aquaculture practices (NSW Department of Primary Industries, University of Wollongong (UoW))
 - Exploring Opportunities for Regenerative Aquaculture on the NSW South Coast (UoW)



Seaweed packing production

Complementary policy

Complementary NSW policy



NSW Aquaculture Vision Statement

To grow aquaculture farmgate production to \$300 million by 2030 for food security, bioproducts and climate change solutions.

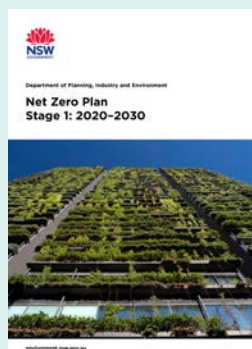
- De-risk marine aquaculture investment -zone NSW marine waters for regenerative and restorative aquaculture and other businesses.
- Address closing the gap targets -increase the number of Aboriginal aquaculture businesses.
- Facilitate institutional investment -increase aquaculture lease tenure from 15 to 30 years.
- Industry expansion -cultivate new native species using existing leases and land-bases.
- Social licence –engage communities with aquaculture information.
- Innovative research –facilitate industry growth.



NSW Closing the Gap

Investment in and growth of a NSW seaweed industry supports the NSW Closing the Gap Action Plan across:

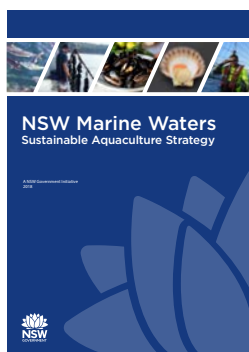
- Priority Reform 1: Formal partnerships and shared decision-making
- Priority Reform 4: Shared access to data and information at a regional level
- Priority Reform 5 & Socio-Economic Outcome 8: Employment, Business Growth and Economic Prosperity (NSW-specific)
- Socio-Economic Outcome 15: Aboriginal people maintain a distinctive cultural, spiritual, physical and economic relationship with their land and waters.



Net Zero Plan

Investing in the growth of a multi-faceted NSW seaweed industry supports the NSW Net Zero Plan by driving economic growth, reducing emissions, and promoting sustainable practices.

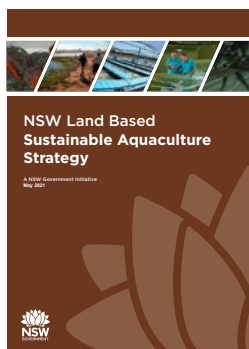
- Achieving emissions reduction while driving economic growth and job creation.
- Delivering low carbon, sustainable products.
- Enabling innovation and future-proofing the economy.
- Driving NSW Government and providing policy support.



NSW Marine Waters Sustainable Aquaculture Strategy, 2018

The NSW Marine Waters Sustainable Aquaculture Strategy provides a framework for sustainable marine aquaculture. Key elements relevant to seaweed cultivation include:

- establishes clear guidelines and best practices for sustainable aquaculture development
- emphasises ecological sustainability
- identifies suitable locations for aquaculture to avoid unsuitable areas.



NSW Land Based Aquaculture Strategy, 2021

The NSW Land-Based Sustainable Aquaculture Strategy details the whole of government approach to establishing pond or tank-based algae aquaculture facilities. The strategy:

- outlines guidelines for site selection, design, operation, and management of land-based aquaculture facilities
- emphasises minimising environmental impacts, efficient use of resources, and integration with natural ecosystems
- provides a regulatory pathway to support industry development while protecting biodiversity and water quality.



Marine Estate Management Blue Economy Program

The NSW Government's Blue Economy program delivered under the Marine Estate Management Strategy, explores opportunities for coordinated, innovative, long-term, sustainable development of the marine estate with a focus on those current and emerging activities which provide the greatest opportunity for sustainable growth for NSW. For NSW's growing blue economy, seaweed can assist with:

- diversifying the aquaculture industry
- supporting environmental restoration through bioremediation
- driving technology development and supporting emerging industries (e.g. providing a sustainable feedstock for low carbon fuels).

References

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- 5 Aquaculture Facts and Figures 2024, NSW Department of Primary Industries website (extracted July 2024)
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- 7 DPI Research Impact Summary 2020, NSW Department of Primary Industries website (extracted June 2024)
- 8 2021 Australian census, Australian Bureau of Statistics
- 9 National Groundwater Information System, Bureau of Meteorology (extracted June 2024)
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- 11 Water Account, Australia 2021-2022, Australian Bureau of Statistics
- 12 IBIS World (extracted June 2024)

Glossary

Term	Definition
Mariculture or marine aquaculture	Mariculture is the cultivation and farming of marine organisms for commercial purposes, such as food production and aquaculture.
Regenerative aquaculture	Regenerative aquaculture is an approach to farming aquatic organisms that aims to restore and enhance ecosystem health while producing food. It focuses on practices that improve water quality, increase biodiversity, sequester carbon, and create resilient marine environments.
Biorefinery	A biorefinery is a facility that converts biomass (e.g. seaweed) into bio-based feedstocks for identified products.
Hatchery	A seaweed hatchery is a facility designed for the controlled cultivation and reproduction of seaweed species, where spores or seedlings are nurtured in optimal conditions before being transferred to open-water farms for further growth and harvesting.
Cultivation	The process of growing and cultivating seaweed in controlled environments, such as seaweed farms or aquaculture facilities.
Harvesting	The act of collecting mature seaweed from its cultivation site or natural habitat, typically done by using specialised equipment or by hand.
Processing	The series of steps involved in transforming harvested seaweed into various forms, such as drying, grinding, extracting, or refining.
Value-added products	Seaweed products that have undergone additional processing or modifications or enhance their value, functionality, or market attractiveness.
Wet weight	The weight of seaweed when it is fresh and contains its natural moisture content. It includes the weight of the seaweed itself as well as the water present within it (~70-90%).
Dry weight	The weight of seaweed after all moisture and water content have been removed, providing a measure of the solid biomass.

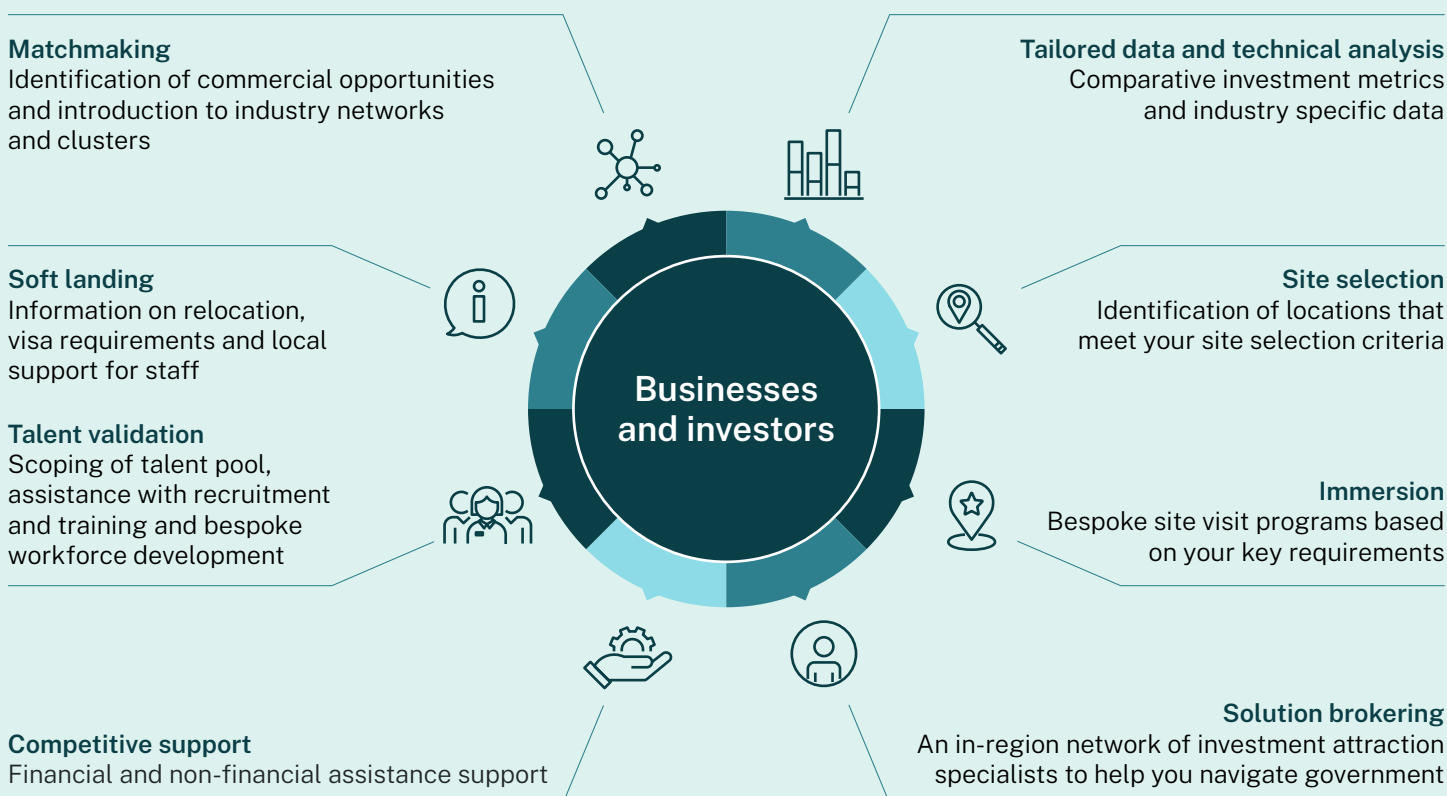
Dedicated team to further your business

We are Australia's only investment promotion agency dedicated entirely to regional areas. We combine deep local knowledge and connections to deliver exciting investment opportunities across New South Wales.

Working collaboratively with our partners in local, state and federal government, as well as the business, training and research ecosystem, we provide all the support you need to be successful in Australia's most dynamic state.

Why are we so well-placed to get the results you need? Because we live in the regional communities we represent and intimately understand the investment opportunities available.

Talk to one of our expert advisors to explore the potential of doing business in Australia's most exciting and innovative investment destination.





→ For more information about seaweed opportunities within regional NSW please contact the team
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