



**PORT** of  
**NEWCASTLE**

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**CLEAN ENERGY PRECINCT**

ENABLING THE  
**PORT OF THE FUTURE**  
IN NEWCASTLE

## PORT OF NEWCASTLE: AUSTRALIA'S DEEPWATER GLOBAL GATEWAY

### WHO WE ARE:

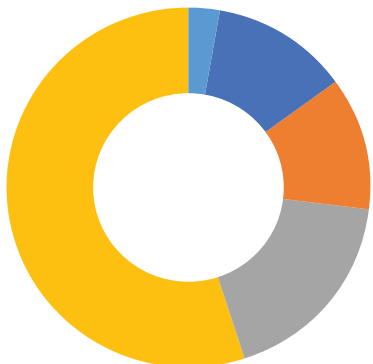
- The largest port on Australia's east coast
- The world's largest coal export port
- Australia's energy port, enabling businesses to successfully compete in international markets.

### WHAT WE DO:

- Contribute tens of billions of dollars' worth of trade annually to the Australian economy
- Manage capacity for more than 10,000 ship movements and over 200 million tonnes of cargo per year
- Handle over 25 different types of trade, from grains and coal to fuels and energy infrastructure equipment, and everything in between.

### OUR POTENTIAL:

- Significant land available with enviable access to national rail and road infrastructure
- 50% of available deepwater shipping channel capacity
- Clear diversification strategy underpinned by:
  - » our Deepwater Container Terminal
  - » our Environmental, Social, Governance (ESG) commitments; and
  - » our Clean Energy Precinct.



PON's Income Mix 2024

- 12% Coal Property
- 12% Non-Coal Property
- 18% Diversified Trade
- 55% Coal
- 3% Other

## PORT OF NEWCASTLE: 2023 AT A GLANCE

 **TOTAL TRADE VOLUME**  
**152 MILLION TONNES**

 **TOTAL TRADE VALUE**  
**\$48 BILLION**

 **4,426 SHIP MOVEMENTS**

**WORLD'S LARGEST COAL PORT**

**777**  
HECTARE SITE

**50%** AVAILABLE CHANNEL CAPACITY

**388ha**  
VACANT LAND

AUSTRALIA'S LARGEST EAST COAST PORT

UNDERPIN ALMOST **9,000 JOBS**

**5** ★ **GRESB RATING**

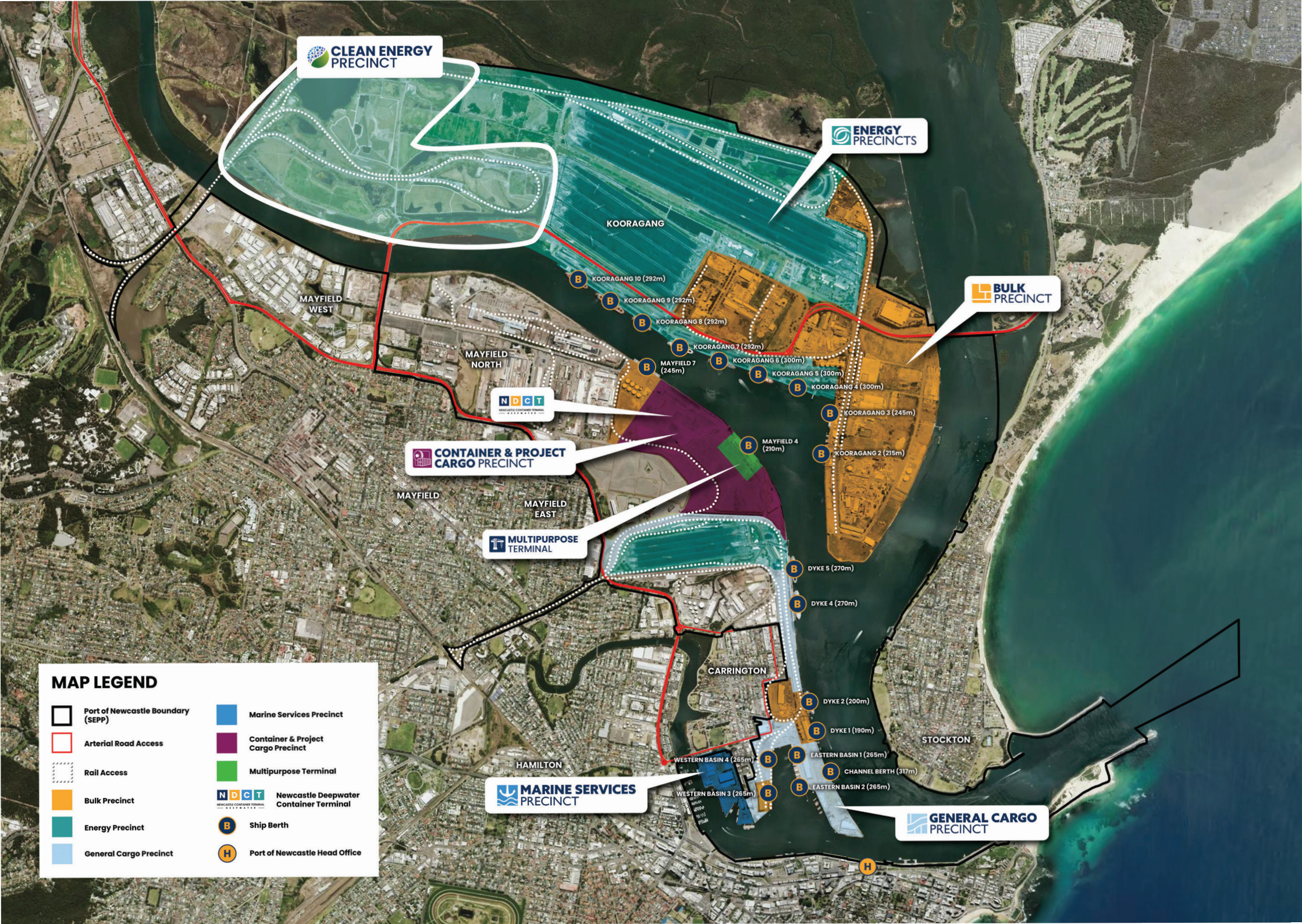
 **ECOPORTS CERTIFIED**

**25** DIFFERENT CARGOES

 **MEALS AND GRAIN EXPORTS**  
**163,841**  
MASS TONNES

 **COAL EXPORTS**  
**144,493,142**  
MASS TONNES

 **FERTILISER IMPORTS**  
**163,841**  
MASS TONNES



**CLEAN ENERGY  
PRECINCT**

**ENERGY  
PRECINCTS**

**BULK  
PRECINCT**

**CONTAINER & PROJECT  
CARGO  
PRECINCT**













**MULTIPURPOSE  
TERMINAL**

**MARINE SERVICES  
PRECINCT**

**GENERAL CARGO  
PRECINCT**

**NDCT  
NEWCASTLE DEEPWATER  
CONTAINER TERMINAL**

**MAP LEGEND**

-  Port of Newcastle Boundary (SEPP)
-  Arterial Road Access
-  Rail Access
-  Bulk Precinct
-  Energy Precinct
-  General Cargo Precinct
-  Marine Services Precinct
-  Container & Project Cargo Precinct
-  Multipurpose Terminal
-  Newcastle Deepwater Container Terminal
-  Ship Berth
-  Port of Newcastle Head Office

KOORAGANG

MAYFIELD WEST

MAYFIELD NORTH

MAYFIELD

MAYFIELD EAST

CARRINGTON

HAMILTON

STOCKTON

KOORAGANG 10 (292m)

KOORAGANG 9 (292m)

KOORAGANG 8 (292m)

KOORAGANG 7 (292m)

MAYFIELD 7 (245m)

KOORAGANG 6 (300m)

KOORAGANG 5 (300m)

KOORAGANG 4 (300m)

KOORAGANG 3 (245m)

KOORAGANG 2 (215m)

MAYFIELD 4 (210m)

DYKE 5 (270m)

DYKE 4 (270m)

DYKE 2 (200m)

DYKE 1 (190m)

EASTERN BASIN 1 (265m)

CHANNEL BERTH (317m)

EASTERN BASIN 2 (265m)

WESTERN BASIN 4 (265m)

WESTERN BASIN 3 (265m)

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## CLEAN ENERGY PRECINCT: BRINGING THE ENERGY FUTURE INTO NEWCASTLE

Port of Newcastle's Clean Energy Precinct will enable the production, storage, domestic distribution, transmission, and international export of clean energy, including hydrogen and green ammonia.

Located on a 220-hectare parcel of land on Kooragang Island, the Clean Energy Precinct aims to position Australia as a major global player in hydrogen production and exports, and that the Hunter Region is considered a clean energy powerhouse by 2030.

Port of Newcastle's Clean Energy Precinct has received a \$100 million funding grant for hydrogen readiness from the Australian Government, administered by the NSW Government.

With the Clean Energy Precinct, Port of Newcastle will be a catalyst for employment, growth, and diversification, including energy to support future growth and reduce reliance on coal.



## CLEAN ENERGY PRECINCT: OUR COMPETITIVE ADVANTAGE

Port of Newcastle's ambition to deliver the Clean Energy Precinct is underpinned by three pillars:



**1. Power and water access and existing infrastructure.**



**2. Unrivalled Port capability, supply chain access, and demand from an existing customer base.**



**3. Skilled people to support a centre of excellence for a new energy economy in the Hunter.**

Three of NSW's top five electricity and gas users are within 20km of the Port.

The Precinct will integrate clean energy production and storage with the Hunter's Hydrogen Hub gateway projects, the State's Renewable Energy Zones, and offshore wind developments.

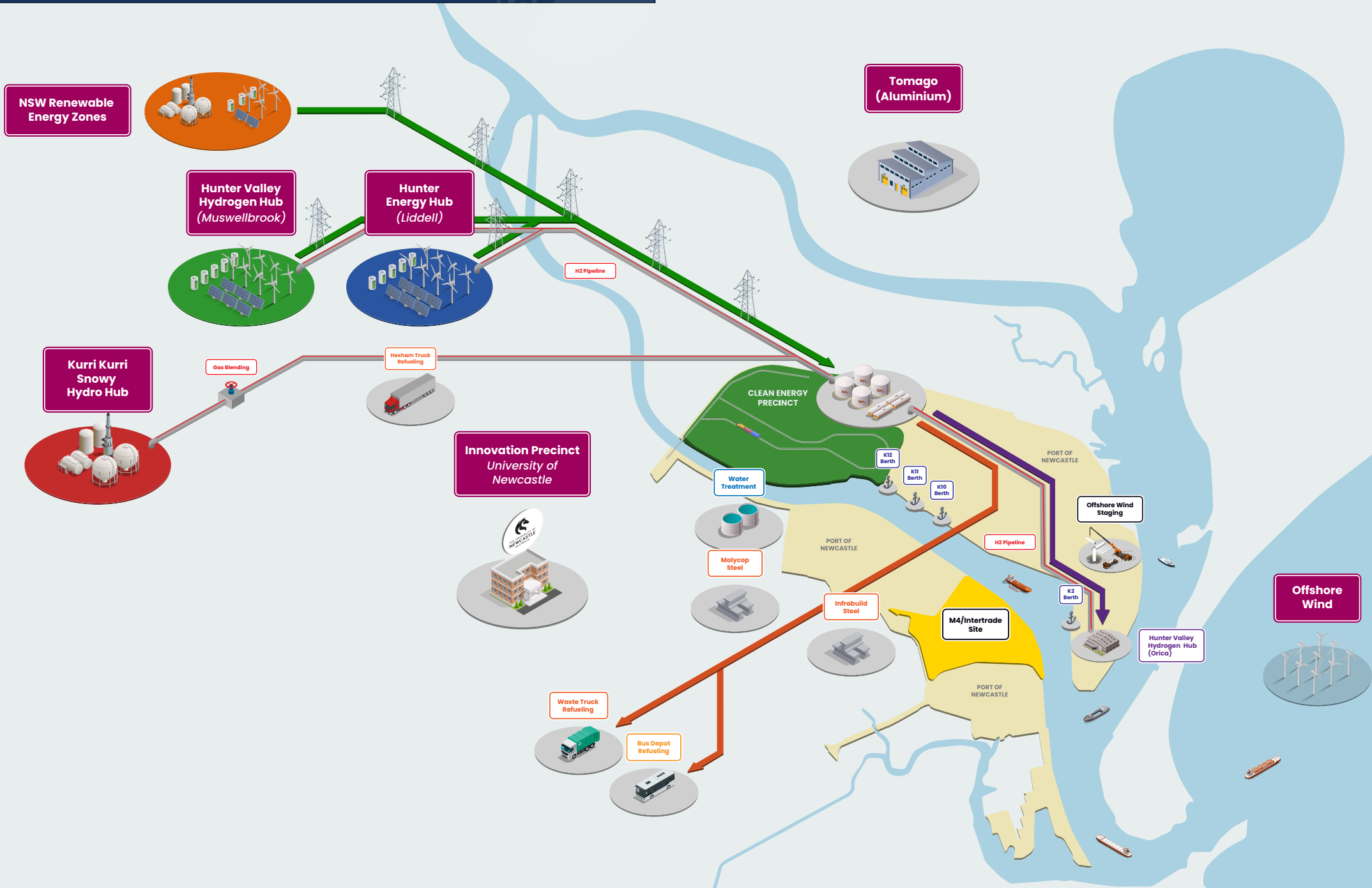


*Through the Clean Energy Precinct, Port of Newcastle will support all hydrogen and clean energy projects in the Hunter by providing land, utilities, storage, transport and export infrastructure and services – in turn generating over 5,800 jobs, new educational pathways and expanded economic growth.*

**Craig Carmody – CEO Port of Newcastle**

# PORT OF NEWCASTLE

DRIVING A CLEAN ENERGY ECONOMY



## CLEAN ENERGY PRECINCT: EXPECTED BENEFITS

The Clean Energy Precinct will make a significant contribution towards the energy future of the Hunter Region, with positive impacts to its economy, environment, and skills market.

> **\$4.2 BILLION**

added to the gross regional product in the Hunter Region by 2040<sup>(1)</sup>

**+5,800**

NEW HUNTER REGION JOBS BY 2040<sup>(1)</sup>

~1 million tonnes annual reduction in export carbon emissions<sup>(2)</sup>, equivalent to taking about 217,391 petrol-fuelled cars off the road for a year

**PRODUCTION OF AND EXPORT DEMAND FOR GREEN AMMONIA >600,000 KTPA FROM 2030 ONWARDS**

Use of 1.6 gigawatts of electricity and 22 megalitres of recycled water with no impact on utilities or our community

**660,000** TONNES

ANNUAL REDUCTION IN DOMESTIC CARBON EMISSIONS<sup>(2)</sup>, EQUIVALENT TO TAKING ABOUT 143,478 PETROL-FUELLED CARS OFF THE ROAD FOR A YEAR

**Support ~1.6 gigawatts in renewable energy generation (2), equivalent to powering about 1.7 million average Australian households for a year**

**RE-SKILLING  
16,000  
EXISTING MINING  
EQUIPMENT  
TECHNOLOGY  
SERVICES  
(METS) WORKERS**

<sup>(1)</sup> Based on the number of full-time equivalent job years created during ramp up to 2031. Source: Port of Newcastle Green – Economic Impact Assessment 2022.

<sup>(2)</sup> Based on indicative demand profiles and volumes figures received from partners by way of Letters of Support. These demand profiles contemplate scaled increments as technology and the industry at large mature.

## CLEAN ENERGY PRECINCT: ENVISIONED

### WHAT THE CLEAN ENERGY PRECINCT WILL DO:



Production, storage and export, all in one precinct



Provide common use, open access, and shared infrastructure, reducing costs



Drive decarbonisation



Propel diversification



Create new low carbon job pathways



Capture export opportunities



Support Australia's clean energy economy and the Hunter Region's future prosperity.

## CLEAN ENERGY PRECINCT: VISION OF THE PROJECT



### PROPOSED PROJECT DEVELOPMENT



#### Ancillary and civil works

- Site buildings
- Offices and administration facilities
- Internal roads
- Car parking
- Warehousing
- Laydown areas
- Storage yards
- Clean energy storage facility
- Staging areas
- Associated pipeline infrastructure
- Hydrogen production
- Ammonia production



#### Electrical

- Grid connection
- Transmission infrastructure
- Substation
- Switchyard



#### Water and recycled water

- Network connection
- Supply corridors
- Recycled water plant
- Wastewater plant

## CLEAN ENERGY PRECINCT BECOMING A REALITY



Federal Member for Newcastle, Sharon Claydon; NSW Minister for the Hunter, Yasmin Catley; State Member for Newcastle, Tim Crakanthorp; CEO of Port of Newcastle, Craig Carmody; and representatives from Lumea, coNEXA, GHD, Mitsubishi Heavy Industries, and the Clean Energy Precinct team.

On 14 October 2024, the Clean Energy Precinct reached a major milestone, signing agreements for Front End Engineering Designs (FEED) and Environmental Impact Statements (EIS) covering electrical infrastructure, water services, general infrastructure, storage, berth infrastructure, and pipelines to berth.

The FEED and EIS studies will be completed by successful tenderers Lumea (electrical), coNEXA (water) and GHD (general infrastructure), informing future site enablement, site layout, and land platform design, which

will be used to prepare environmental planning approvals.

This puts the project well on its way, as various elements are complete or being completed, such as:

- Project Management Plans
- Site inductions and activity protocols
- Traffic and noise monitoring
- Workshops for site layout
- Engagement with current and prospective partners

### GOVERNMENT PARTNERS



Department of Climate Change, Energy, the Environment and Water



Department of Planning, Housing and Infrastructure



## CLEAN ENERGY PRECINCT PROJECT PARTNERS

### TECHNOLOGY



### WATER



### CLEAN ENERGY PRODUCERS



### ELECTRICITY



### SKILLS AND TRAINING



### INTERNATIONAL PARTNERS







## AUSTRALIA'S DEEPWATER GLOBAL GATEWAY:

**DIVERSIFYING** FOR THE FUTURE AND **INVESTING** TO SUPPORT THRIVING COMMUNITIES, **LOCAL** JOBS AND A **PROSPEROUS** HUNTER REGION



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