

## H<sub>2</sub> PORT KEMBLA HYDROGEN HUB



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### H2 Future Mobility Strategy



AN INITIATIVE OF THE PORT KEMBLA HYDROGEN HUB

## Global Centre of Excellence for Hydrogen Heavy Vehicles

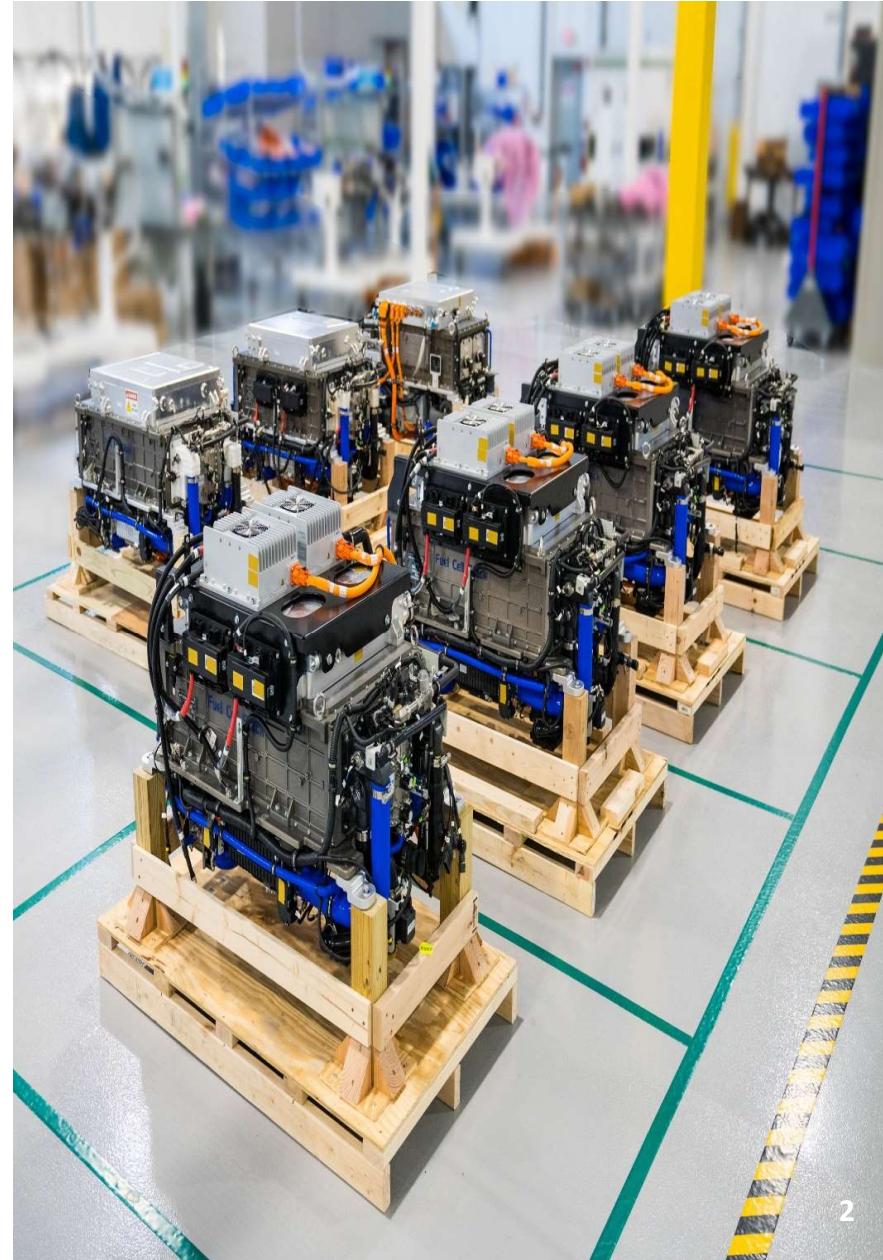
**Fuel cell and hydrogen combustion engine** technologies can decarbonise diesel powered **heavy transport** - a major source of carbon emissions.

The **Vision** of creating a **globally recognised Centre of Excellence** for **Hydrogen Heavy Vehicles** in the **Illawarra Shoalhaven** region is already well advanced.

The **H2 Future Mobility Strategy** will generate the following outcomes:

- Up to **1,000 new jobs**
- Significant investment in **new industry capacity and capabilities**
- Potential for **exports**
- Import replacement and **supply chain opportunities** for local industry
- **Skills + technology transfer**

The **Vision** of creating a **Global Centre of Excellence** for **Hydrogen Heavy Vehicles** will be achieved through **implementation** of the following **Action Plan**.



# H2 Future Mobility Strategy - Action Plan



# Investment Attraction

1

**1.1 Promote the region to attract **heavy vehicle + powertrain OEMs** and **suppliers** to establish in the following key areas:**

- **Hydrogen Heavy Vehicle** assembly
- **Fuel cell** assembly and testing
- **Hydrogen tank manufacturing** and testing
- **Component manufacturing**
- Conversion of **LHD vehicles**
- **H2ICE** vehicle conversions
- **heavy vehicle maintenance** facilities.

**1.2 Facilitate** major enquiries, provide tailored assistance based on **individual project needs**.

## Heavy Vehicle Manufacturing

- Australian owned **Foton Mobility Distribution** is building a new heavy vehicle manufacturing facility in Nowra
- Facility to build **hydrogen and electric powered trucks** and buses
- Assemble and test **hydrogen fuel cells**
- Up to **100 new jobs** will be created
- **Tailored assistance** included site selection and planning pathway advice, **key local introductions**, training and future workforce planning advice and **supply chain** procurement opportunities



## Component Manufacturing

- **City Coast Services** now build the dealer optioned tipper body for the **Foton T5 EV** - Australia's best selling light electric truck
- **ICN NSW** are identifying other supply chain opportunities for local procurement outcomes



## Business & Industry Development

2

### 2.1 Support new trials to showcase hydrogen powered technologies:

- **H2 Future Mobility is Now** - provides details on **Heavy Vehicle Trials** deployed in the region

### 2.2 Build a collaborative ecosystem through regular industry events that include:

- **H2 Future Mobility Day** events (8)
- **H2 Training + Safety Day** events (3)
- National **Hydrogen Truck Show**

## Remondis Hydrogen Truck Trial

Fleet Operator: [Remondis](#)

Commence: October 2023

Vehicle OEM: [Hyzon](#)

Model: [Hyzon Refuse Truck](#)

Vehicles: 1

Powertrain: Fuel Cell Electric

Fuel Cell OEM: [Hyzon](#)

Configuration: 6 x 4

H2 Storage: 25kg

Bin Lifts: 1,200/shift

Range: 200kms

FC Power: 110kw

Tank Pressure: 350 bar

HRS: [Coregas H2Station](#)

Refuelling: 15 minutes

GVM: 22.5 tonnes



# Skills Development

# 3

**3.1 Support TAFE NSW Shellharbour Automotive Workshops** in providing **electric vehicle training** for apprentices, an important **springboard to fuel cell technology** given the common **systems and components**.

**3.2 Promote TAFE NSW Microskills** to train workers the **skills** to safely operate **hydrogen vehicles** and equipment.

Developed with industry input from **BOC**, **Coregas** and **Foton Mobility Distribution**. Courses include:

- **Hydrogen Energy Fundamentals**
- **Introduction to Fuel Cell Electric Vehicles**
- **Refuelling a Hydrogen Vehicle**
- **Foton FTH12 Hydrogen City Bus**

# TAFE SHELLHARBOUR

- **Remondis Hydrogen Refuse Truck** has been in service since October 2023, the longest of any **FCEV heavy vehicle** in Australia
- **Vehicle** provides access to FCEV technology for students at **TAFE Shellharbour** that are undertaking **trade qualifications in electric vehicle** service, maintenance and repair
- This supports future demand for suitably qualified people from **fleet operators** who transition to **hydrogen powered heavy vehicles**



## Enabling Infrastructure

# 4

**4.1 Develop additional hydrogen refuelling capacity. Coregas H2Station has daily capacity of 400kg. Proposed refuellers will increase this capacity to 2,700kg/day,**

This **enabling infrastructure** will support **Australia's** largest deployment of FCEV and H2ICE **hydrogen powered** heavy vehicles.

**4.2 Support co-location of heavy vehicle capabilities and key support industries where possible.**



A white HYZON fuel cell electric truck is shown at a Coregas hydrogen (h2) refueling station. The truck is connected to a blue and orange fueling unit. The unit has "COREGAS h2 station" branding. The truck itself has "HYZON" and "FUEL CELL ELECTRIC VEHICLE" branding. The background shows a modern building and trees.

**Now Operational**  
**Daily capacity = 400kg**

[WWW.COREGAS.COM.AU](http://WWW.COREGAS.COM.AU)





## Future Opportunities

### Vehicle Incentives

Financial incentives to help offset the higher total cost of ownership (TCO) of adopting **hydrogen** powered zero emissions technologies are not considered feasible at this time due to the lack of **refuelling infrastructure** and **vehicles** to support **fleet scale** adoption.

### Electric Aviation

Electric aviation powered by **hydrogen** has enormous potential and shares many **synergies** with the individual actions articulated in this **H2 Future Mobility Strategy**. A decision will be made about its **inclusion** in this **Strategy** at some stage.

# Next Steps

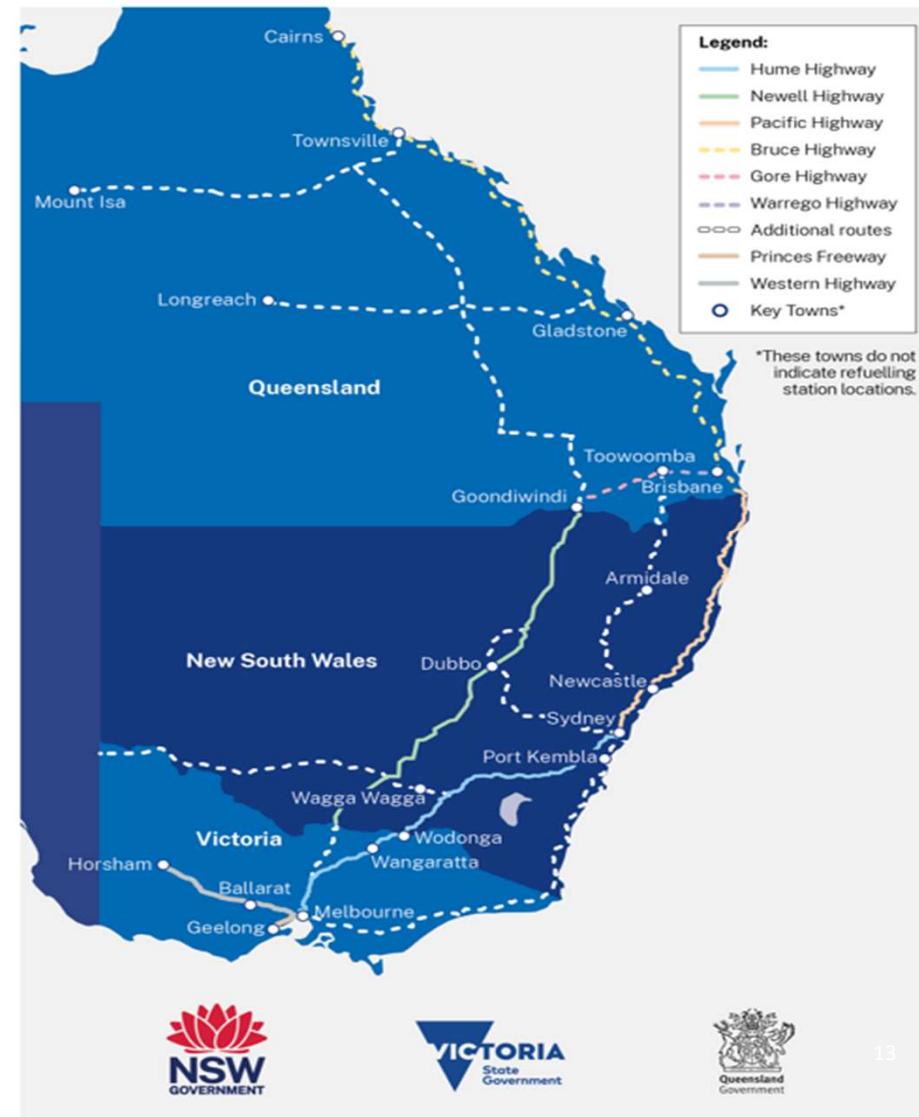
## Working Group

A **working group** will be established to provide **governance, guidance** and **strategic alignment** with existing government **policies and programs**.

## Funding

A total of **\$29 million** of **NSW Government funding** has already been committed to the **H2 Future Mobility Strategy** related projects. This includes the **Coregas H2Station (\$500,000)** and the **BOC Illawarra Hydrogen Technology Hub (\$28,500,000)** initiatives.

## East Coast Hydrogen Refuelling Network





# Contacts

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