

# UPDATE #22

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2 November 2023

Busy times continue at Port Kembla. This **Port Kembla Hydrogen Hub Update #22** contains information on the following key projects and initiatives:

- **H2 Training + Safety Day #3**: 16 November 2023 - Register Now
- **Port Kembla** hosts APAC Hydrogen Summit delegations
- Proposed **Illawarra Offshore Wind Zone** images released
- **Remondis** hydrogen powered garbage truck enters service
- **Lord Ian Botham** visits Port Kembla to learn about decarbonisation
- **Hysata** wins the trifecta at the Illawarra Business Awards

Previous editions of the **Port Kembla Hydrogen Hub Update** newsletter are available [here](#).

## H2 Training + Safety Day #3: 16 November 2023 – Register Now



The purpose of this one hour virtual event is on **training + safety** aspects of using **hydrogen refuelling stations** and **operating hydrogen powered heavy vehicles**.

Australia's first **Hydrogen Refuelling Station** for heavy vehicles - the \$2m [Coregas H2Station](#) is now operational at **Port Kembla**.

[Remondis](#) has recently put into service Australia's first **hydrogen powered refuse truck** that is now using the Coregas facility on a regular basis.

**Training + safety** are especially important topics as **FCEV** and **H2ICE heavy vehicles** are to be deployed at scale. [BOC](#) has announced plans for **40 FCEV heavy vehicles** to be deployed in 2026 in partnership with [IVECO](#) and [Foton Mobility](#).

Hear from [TAFE NSW](#), [Fire & Rescue NSW](#), [HDrive International](#) and [Coregas](#) representatives as they present on **training + safety** issues concerning the practical aspects of **operating** and **refuelling hydrogen powered heavy vehicles**.

There is no restriction on numbers for this **virtual event**.

Register for this important event [here](#).

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## Port Kembla hosts APAC Hydrogen Summit international delegations

Date: 23 & 24 October 2023

The [APAC Hydrogen Summit](#) held in Sydney on the 26 and 27 October 2023 attracted a large number of international visitors. Two groups of international delegates visited Port Kembla prior to the Hydrogen Summit. The NSW Government delegation on Monday 23 October were welcomed by Alison Byrnes, Federal Member for Cunningham, who gave an overview of the region's key role in the transition to renewable energy.

Members of the Belgium Economic Mission toured Port Kembla on Tuesday 24 October. The purpose of these delegations was to showcase the superiority of Port Kembla for large scale green hydrogen production and renewable energy generation. Members of the delegations represented industry, government and research organisations.



NSW Government APAC Hydrogen Summit delegation – Port Kembla Monday 23 October 2023

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## Artist's images of proposed offshore Illawarra wind farm released by federal government

Date: 24 October 2023

<https://www.abc.net.au/news/2023-10-24/visualisation-for-illawarra-offshore-wind-farm-zone-released/103013280>

Images of what a proposed offshore Illawarra wind zone could look like from land have been released by the federal government.

Key points:

- Four visualisations of a potential offshore Illawarra wind zone have been shared
- A series of community meetings has heard concerns about environmental and visual impact
- The government says the images are for reference only and any actual wind farm could look different

The four pictures show how the turbines would look from 10 and 20 kilometres out from Bulli Lookout and Bulli Beach on the New South Wales coast, about an hour south of Sydney. The project has attracted intense community interest and the government's [consultation period](#) has been extended for another month until mid-November.

The Department of Climate Change, Energy, the Environment and Water said the images were for reference only, and did not represent the turbine layout, size, orientation, spacing or any other particulars. The images depict a grid of turbines with 2km by 2km spacing and are based on the United States National Renewable Energy Laboratory's 15 megawatt offshore wind turbine reference model. The turbines in the visualisation have a total tip height (to the top of a vertical blade) of 268 metres, a hub height (to the turbine nacelle) of 150m, a blade length of 118m and minimum blade height above sea level of 30m.



What the wind turbines could look 20 kilometres from Bulli Lookout. (Supplied: Department of Climate Change, Energy, the Environment and Water)

The nacelle is the box that sits at the top of the tower and contains the gearbox, low and high-speed shafts, a generator, and brake. The new information also provides a link to the [coordinates](#) modelled for the zone. One of six areas earmarked for wind power. The department said any prospective

developer that received a feasibility licence would need to undertake "a range of scientific studies to determine the optimal location, size and arrangement of turbines".



What the offshore wind farm might look like 10 kilometres out from Bulli beach. (Supplied: Department of Climate Change, Energy, the Environment and Water)

The zone is [one of six coastal areas prioritised by the federal government](#) for the development of wind power. It will cover a 1,461 square kilometre area, stretching from the Royal National Park to Kiama. The federal government has already hosted a series of community consultations and two town hall forums on the proposal, during which repeated [concerns about environmental and visual impact were raised](#). At a fiery meeting in Thirroul this month, some attendees heckled panel members and yelled abuse, resulting in more intense moderation at a subsequent meeting held at the University of Wollongong.

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## Hydrogen-powered garbage truck on the streets of the Illawarra

Date: 17 October 2023

<https://www.illawarramercury.com.au/story/8388296/hydrogen-powered-garbage-truck-now-picking-up-bins-in-illawarra/>

In an Australian first, a [hydrogen-powered garbage truck will begin picking up bins in the Illawarra](#) from today. The truck, which emits no more than water vapour, has been trialled for the past few months, and can operate at the same level as its diesel-fuelled counterparts, Remondis NSW south coast region manager Chris Wade said.

"The ultimate aim is to have the hydrogen truck matching our current diesel trucks in all facets," he said. "That includes completing about 1,000 bin lifts over about eight hours."

The hydrogen garbage truck follows the opening of [Port Kembla's hydrogen refuelling station](#) in July, which was essential for the garbage truck to operate in the region.

The truck, developed in Australia and built by vehicle manufacturer Hyzon, can travel 200 kilometres without refuelling, and would only need to refuel once a day, putting it on par with diesel trucks.



Remondis NSW South Coast Region Manager Chris Wade with the hydrogen-powered garbage truck. Picture supplied

So far, only one hydrogen truck will operate in the Illawarra, however based on how the truck performs Remondis hopes to introduce further zero-emissions vehicles to its fleet. The truck was paid for by Remondis with no government subsidy, however a final cost is commercial in confidence.

Remondis Australia CEO Bjorn Becker said other jurisdictions around the country and the globe would be looking at how the Illawarra trial progressed. "We're demonstrating that carbon-free transport can and does work in industrial settings," he said. "We're hopeful that this is the start of a bigger journey whereby companies around the world follow Remondis' lead and turn to fleet decarbonisation."

Only a handful of councils around the world have implemented zero emissions garbage trucks. Trials have been conducted in Europe, Korea and the United States with hydrogen-powered garbage trucks, while electric-powered vehicles are in operation around Australia.

Not only do the trucks produce no emissions, they are much quieter than diesel trucks. The hydrogen supplied to the Remondis fleet in the Illawarra will be 'grey hydrogen', being produced from natural gas, with greenhouse gases emitted in the production process. Running the hydrogen truck through the Illawarra will avoid 25,000 litres of diesel fuel being used each year, cutting carbon emissions by up to 75 tonnes a year.

Transport emissions account for 19 per cent of Australia's greenhouse gas emissions and have been growing, even as emissions from other sectors have reduced. Both Wollongong and Shellharbour City councils have set a 2050 target for net zero across the LGA and 2030 and 2035 for net zero from council operations, respectively.



The hydrogen-powered garbage truck is one of only a handful that have entered operations around the globe. Picture supplied

"This is a really exciting development and is a proactive step forward in adapting to new technologies that can help reduce our city's emissions," Wollongong Lord Mayor Gordon Bradbery said.

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## Lord Ian Botham visits Port Kembla to learn about decarbonisation

Date: 18 October 2023



Former test cricketer, Lord Ian Botham in his capacity as the UK Prime Minister's Trade Envoy to Australia visited Port Kembla on Wednesday 18 October 2023. Tania Archibald, Chief Executive of

BlueScope Australian Steel Products and Michael Reay, Head of Corporate Affairs, gave Lord Botham a presentation about BlueScope's decarbonisation journey and challenges. Lord Botham was then given a tour of the Port Kembla Steelworks. The Tour also featured some of the \$700m in major energy projects that are transforming the region's energy ecosystem.

The visit to Port Kembla followed a luncheon hosted by University of Wollongong and chaired by Adam Zarth from Business Illawarra. Several companies with trade links to the UK market were in attendance. The Coregas Hydrogen Refuelling Station at Port Kembla utilises Haskel technology and was manufactured in the UK.

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## **From Hysata's hat-trick to a first for Business of the Year, the 2023 Illawarra Business Awards night was rich in highlights**

Date: 17 October 2023

<https://regionillawarra.com.au/from-hysatas-hat-trick-to-a-first-for-business-of-the-year-the-2023-illawarra-business-awards-night-was-rich-in-highlights/12046/>

The theme was "Glitz & Glamour", and while the business community certainly brought their A-game to the 2023 IMB Bank Illawarra Business Awards, it was green energy that ultimately stole the show. More than 740 people flocked to WIN Entertainment Centre on Friday (13 October) to celebrate the incredible efforts and achievements of local businesses. Accolades were showered on Wollongong-based company Hysata, which claimed the Excellence in Tech and Excellence in Innovation awards before also taking out top gong – Business of the Year.

Hysata is set to accelerate the world's shift away from fossil fuels by delivering the world's lowest-cost green hydrogen thanks to its revolutionary high-efficiency electrolyser. In an enormous warehouse space in the iconic location directly opposite Port Kembla's MM Beach, the team of 60 is tipped to double in size within the year and will soon bring online a high-tech manufacturing line, allowing it to commercially scale its revolutionary product.

Hysata CEO Paul Barrett said the Illawarra was the ideal location for the operation. "We have really strong roots in the Illawarra. The technology that formed the nucleus of this company years ago was born at the lab benches of the University of Wollongong and many of the staff went to the University," he said. "We're also in a fantastic geographic location. Not only does it have easy access to Sydney, but it's a truly beautiful part of the world ... it's a magnet for talent."

Mr Barrett said the team was surprised and humbled by its multiple wins, particularly the final one.

"This was our first time entering the Illawarra Business Awards and I didn't even know there was a Business of the Year Award," he said. "There was such a great range of companies present, from tech companies to older businesses, big brands around tourism and social enterprises. To be among that calibre of finalists and win three awards was very humbling."



The Hysata team took out three awards on the night including the top gong – Business of the Year. Photo: Business Illawarra.

The remarkable hat-trick was just one highlight of the night, as business after business took to the stage to showcase the region’s remarkable growth across a diverse spectrum of industries. In a first for the Illawarra Business Awards, the company crowned Business of the Year was not entirely alone on the throne. Judges said there was a hair’s breadth between Hysata and Greenacres Disability Services, which was awarded the first-ever “Highly Commended” in the category.

The established business with a mission to enhance the quality of life for individuals with disabilities in the Illawarra and Shoalhaven regions was also highly commended in the Outstanding Business Leader category and won the hotly contested Outstanding Community Organisation award.

Further showcasing the region’s advancements in the environmental sector, Green Gravity – a company that uses disused mines to store renewable energy – was recognised in the Outstanding Start-up category.

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## FURTHER INFORMATION

The **Port Kembla Hydrogen Hub** is facilitated by the [Department of Regional NSW](#) in partnership with the [Illawarra Shoalhaven Joint Organisation](#) (ISJO). For further information about the **Port Kembla Hydrogen Hub**, please visit the [webpage](#) or contact **Nigel McKinnon, Deputy Director, Department of Regional NSW** by email [nigel.mckinnon@regional.nsw.hov.au](mailto:nigel.mckinnon@regional.nsw.hov.au).