

Newsletter



Hydrogen
Society
of Australia

Looking backwards, looking forward!

Hydrogen is marching on – will you join us?

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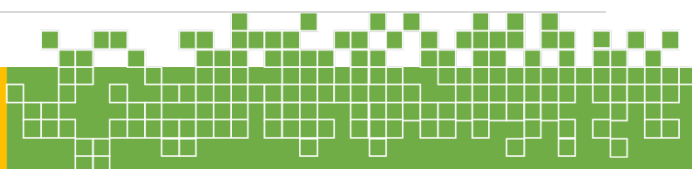
Message from the HSA President – Adam Osseiran

Since the last edition of this Newsletter, we have been busy working on several fronts. Our National Structure based on local Chapters WA is taking shape. We've invited our members to take a short survey so that we can provide better support in the future.

Andrew McCluskey, Executive GM for Hydrogen for Australia and New Zealand has now joined the HSA Board of Directors. We are in the process of adding two more Directors to the HSA Board that will eventually represent most of the nation.

In terms of education and knowledge sharing, I have recently met with Noel Chin, President of the **Hydrogen and Fuel Cell Association of Singapore** and we agreed to collaborate in several fields including training, conferences, and other events. We also discussed the celebration of the Hydrogen Day. The HSA is also collaborating with the **Australian Institute of Energy** on an event titled "*Hydrogen's Role in the Energy Ecosystem*". We have also partnered with the **Energy Resources Law** and negotiated a discount for the Melbourne Hydrogen Forum 2023 in mid-July. Discount coupons for HSA members are also available for other upcoming conferences.

If you are not yet a member of HSA, please consider joining us to get access to free or discounted events, training material and the latest information in the hydrogen space. [Click here to explore membership options](#)

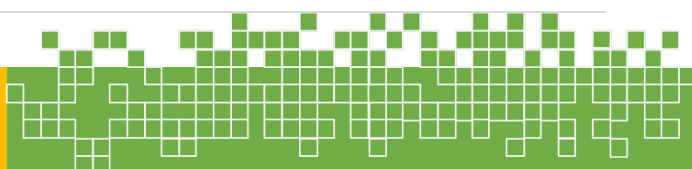


Member Insights – Membership Survey underway – Interim results

This year, the HSA is focused on strengthening our national outreach and building our footprint in regional areas. To achieve this, we have established state-based Chapter Committees and national Working Groups to address specific themes in the hydrogen space. The HSA is currently undertaking a survey of our existing members, to better understand the themes and activities that would increase membership value. Based on preliminary results, all of our members surveyed to date are supportive of the HSA setting up state-based Chapters, with national Working Groups focused on education and training; industry and academic collaboration; and standards and regulations. Some of the supportive comments included:

- There is a desire for more networking events, to facilitate collaboration between industry and academics. HSA could be a good intermediary to ensure that hydrogen-based university projects at the postgraduate level are industry-aligned.
- There is a need to share real lessons learnt around funding, setting up of projects etc. We can all read theory, but it is good to understand real life experience. It would also be good to have some guest presentations on 'what' people are doing. Also, it would be good if the chapter and the HSA in general could connect in the community with what is happening outside of Australia.
- With Engineers Australia understood to be considering an Australia wide EA Hydrogen technical series in each state, there may be a role for the HSA Chapters, but also the Australian Hydrogen Research Network (AHRN), to work together to offer some compelling technical content that would be of interest to those already involved in the hydrogen sector but also those who are new to the concept and need some help to understand 'how to begin'.
- The logical approach for establishing an Australian wide Hydrogen Society may be to align with likeminded groups who are already moving in similar directions and who could combine the limited resources of our volunteers who no doubt have many competing priorities for their time.
- The HSA could facilitate increased engagement with industry, with a focus on the various hydrogen initiatives in strategic industrial areas, such as the Western Trade Coast (ie. Kwinana), the Pilbara (ie. Karratha), Oakajee, etc. Set up and support local clusters and upcoming projects involving hydrogen and new technologies including wind, solar and ammonia. Focus on sharing “lessons learnt” including solving some of the industry challenges by utilising support workgroups (ie. Safety, Technical, Engineering, System Engineering, etc.).
- A forum to discuss the uptake of heavy-duty hydrogen trucks and/or earthmoving equipment in an industrial or mining environment should be established as associated with the various hydrogen hubs underway around Australia.
- Support local and National Hydrogen Day events. Hold and share events across different chapters so that “lessons learnt” are shared.

If you haven't yet completed the survey, we would greatly appreciate it if you could set aside some time to answer a few short questions. It won't take more than 5 minutes and will help the HSA support hydrogen in your state the best we can. [Login to your membership portal and click here complete the survey.](#)



Career Opportunities:

There are a number of academic and employment opportunities highlighted in our Knowledge Portal including the most recent listed below:

UNSW PhD Candidate

The University of New South Wales (Sydney, Australia) is looking for a PhD candidate to work on an Australian Research Council-funded project in Electrochemical Nitrogen Reduction in the School of Chemistry. Please apply if you have a passion for research and wish to pursue a career in the fields of clean energy and sustainability such as: Energy storage and conversion; Hydrogen economy; and Decarbonisation technologies. [Click here for further information.](#)

UNSW Engineering Position

Prof Chuan Zhao and Dr Quentin Meyer are looking to recruit a PhD and a postdoc with a solid mechanical/chemical engineering background to join the School of Chemistry UNSW. We are looking to scale up our green electrolyzer and hydrogen fuelcell testing capability in the NanoElectrochemistry group led by Prof Chuan Zhao. The candidates will work on large-scale stack design, prototyping and testing for innovative electrodes and membranes. [Click here for further information.](#)

For the full list of opportunities currently advertised on the HSA website, [click on this link](#)

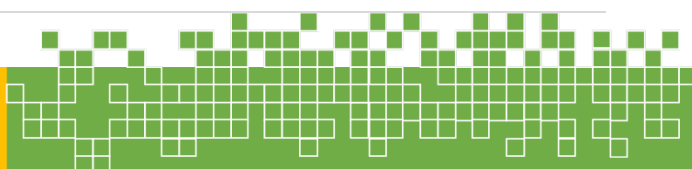
Member Benefit – WA Business News Subscription (free guest access and discount)

The Hydrogen Society of Australia (HSA) has an established relationship with Business News (BN), to explore and collaborate on opportunities to promote hydrogen initiatives to professionals and the broader community.

Business News is a respected, trusted, and credible independent news source for WA businesses and for any Australian with an interest in commerce, politics, and industry. Business News would like to offer HSA members guest access for 4 weeks to explore our full content and features so that key individuals can gain a better insight into why Business leaders choose to engage with us year on year.

The Hydrogen Society of Australia arranged for a tailored demonstration of the Business News website features for our HSA members, which has been rescheduled to 16th May [10:00am AWST].

If you are interested to have free guest access for 4 weeks to explore Business News, [click here and select the WABN subscription product within our HSA Members Only portal.](#)



Member Benefit – Hydrogen Standard subscription (HSA members discount)

The Hydrogen Society of Australia (HSA) has partnered with The **Hydrogen Standard** to offer HSA members a significant discount to gain access to the **Global Government Hydrogen Platform**, a renowned source of hydrogen policy data. [Access benefit registration here.](#)

The Hydrogen Standard provides market insights, research and news for the hydrogen community to stay up to date with the latest developments. One of the flagship products is the hydrogen global governance platform that provides insights into government commitments to hydrogen on a country, regional and global scale. If you can't keep up with all the developments governments across the globe are providing on their hydrogen roadmaps, you are not alone. More than 50 countries worldwide have now a strategic hydrogen document and another two dozen or so are actively considering or preparing one. As such, Hydrogen Standard has developed the Hydrogen Global Governance Platform, which keeps track of all those individual developments daily. Subscribers will have access to a global, regional and country specific overview on a host of topics outlined in various government hydrogen roadmap strategies, such as funding arrangements, R&D interests, infrastructure commitments, fuel cell vehicle targets, electrolyser capacity commitments, trade agreements and more. The Hydrogen Society of Australia arranged for a demonstration of the Global Hydrogen Platform on **Wednesday 26 April, from 5:00pm to 5:30pm AWST. The recordings of the April update will be available soon.**

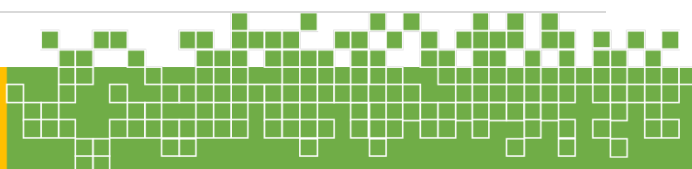
Due to the collaboration between the Hydrogen Standard and the Hydrogen Society of Australia, HSA members will get a significant discount on the initial subscription to the platform (75% for students; 52% for individuals and 80% for Enterprise members). If you are interested in subscribing to the **Hydrogen Global Governance Platform** at a significant discount, please select the Hydrogen Standard subscription product within our HSA Members Only portal: [Click here for further information.](#)

Education and Knowledge Sharing – Past Events and Presentation Material

Login to your password protected HSA members portal and you can access the videos and PowerPoint presentations from past events in the [Knowledge Centre, Videos and Presentation Materials tab](#). You can also view the event proceedings and find the links to the various presenters on our [Past Events page](#).

World Hydrogen Mobility: The Future of Low-Emission Transport? – online webinar on 29 March 2023

On the 29th of March the World Hydrogen Mobility webinar, organised by the **World Hydrogen Leaders**, discussed hydrogen's huge potential to decarbonise the hard to abate sector of mobility. Heavy duty vehicles, shipping, and rail are all exploring hydrogen as a solution to decarbonising operations and supply chains. This does not come without its challenges and this webinar addressed these challenges and discussed potential solutions and opportunities for the mobility sector when it comes to hydrogen. The webinar was moderated by **Adam Osseiran – President – Hydrogen Society of Australia**. Recordings of this webinar are now available at the following link. [Click here to access the recordings](#)



Hydrogen Industry technical series – Melbourne – 15 February to 19 April 2023 (5:30pm to 8:30pm AEST)

The **Australian Institute of Energy** and **Engineers Australia** presented a hydrogen technical series in Melbourne. Delivered by leading hydrogen industry practitioners, the program covered integral topics required by engineers to commence practising in the hydrogen industry. The objective of the program was to provide detailed information on the technical and practical aspects of hydrogen plant design, operation and product development. [Click here for further information](#)

Prioritising Policies for the Energy Transition – Perth/Hybrid - 27 April 2023 (5:30pm to 7:30pm AWST)

This collaborative workshop was held to address the climate change challenges of achieving net zero by 2050. We are currently in an energy transition, needing to understand the ecosystem and its interlinks with industry, regulators and government to determine how to achieve this energy transition, prioritising actions and policies.

A series of keynote speakers informed participants about:

- the current state of the energy transition
- current policy changes
- the ecosystem and its interlinks with industry, regulators and government
- policy priorities to achieve effective energy transition, and
- how hydrogen contributes to the energy transition.

This was an **Engineers Australia** event facilitated by the College of Leadership and Management. The **Hydrogen Society of Australia** was approached to provide a hydrogen perspective, and we nominated our HSA Steering Committee member **Andrew McCluskey** (Executive GM Hydrogen AU/NZ, Siemens Ltd) as one of the keynote speakers. A series of follow-up events are expected to build upon the learnings from this workshop.

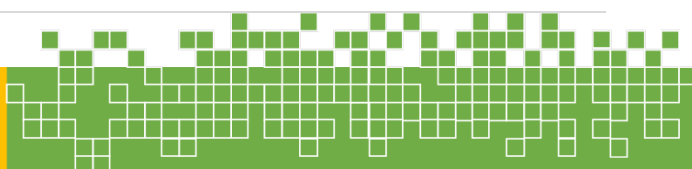
Upcoming Hydrogen Events

Sustainable Aviation Futures APAC Congress – Singapore – 09 to 11 May 2023

The APAC region is home to some of the world's most advanced economies and leading countries when it comes to clean energy initiatives. With regional SAF production facilities emerging and airlines continuing to increase sustainable strategies, Asia Pacific continues to lead developments to decarbonise the aviation industry. This 3-day, high-level networking event will feature over 60 expert speakers sharing insights into the development of sustainable solutions, showcasing policies, strategies and the challenges and opportunities the Asia Pacific aviation market faces in the bid to become carbon neutral by 2050. [Click here for more information](#)

[ASEAN Green Hydrogen Conference 2023](#) – Kuala Lumpur – 23 to 24 May 2023

The Hydrogen Society of Australia is confirmed as one of the conference 'Association Partner' in this regional event, which will **provide our members with a 15% discount** on the delegate registration fee. This private and exclusive conference will act as a regional roadmap and aim as the catalyst for the regional's green hydrogen developments, assisting governments, leading energy companies, academics and service providers within the Hydrogen domain across South East Asian countries. Among the conference highlights for this edition including Green Hydrogen Policy and Regulations, Green Hydrogen Ecosystem & Value Chain, Technologies, Research and Developments and Green Hydrogen Financing. [Access discount code here](#)



[Hydrogen Links - Industry Focused Academic Research – webinar series](#) – 25 May onwards

The Hydrogen Society of Australia (HSA) has grown considerably over the past year, with successful initiatives which have engaged junior researchers, such as our poster competition on the Australian Hydrogen Day (2022 10 08). This year, we wish to further bridge the gap between industry and academia, launching the Academics webinar series, on a monthly basis from May onwards. The objective of this initiative is both to raise the level of industry awareness and expertise, and deepen the relationships between industry and academia within the HSA. Prominent Australian academics will be invited to provide a short overview of their research areas (20-30 mins), across the hydrogen ecosystem (ie. hydrogen production, storage, and utilization), followed by an industry focussed Q&A (30 mins). The first webinar will be presented by **Dr Quentin Meyer, Fuel Cell Cluster Leader, University of New South Wales (UNSW)** on the topic of ***How to make hydrogen fuel cells cheaper and more efficient***. [Click here for further details and to register.](#)

AIE/HSA Event – The Energy Ecosystem and Hydrogen’s Role in Decarbonisation – Perth [12:00 to 14:00 AWST] – 30 May

The Hydrogen Society of Australia is collaborating with the Australian Institute of Energy to deliver a face-to-face networking event in Perth, to be held over lunch at the Parmelia Hilton Perth (14 Mill Street). A series of presentations followed by a facilitated panel discussion will provide an overview of hydrogen’s role in the energy ecosystem and how hydrogen will assist in achieving our net zero target by 2050. Spaces will be limited, [register your interest here to be informed of final event and registration details as they are released](#). Further details regarding keynote speakers will be forthcoming.

ErLaw event - Melbourne Hydrogen Forum 2023 [face to face 10:30am to 4:30pm AEST] – mid July

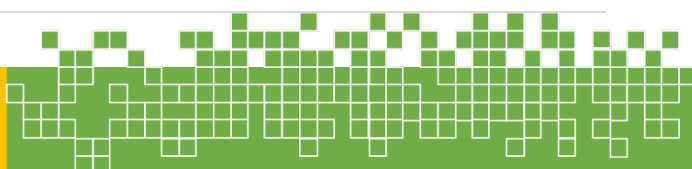
The Hydrogen Society of Australia is collaborating with Energy Resources Law (ErLaw) and has arranged a 20% discount for our members to participate in the Melbourne Hydrogen Forum 2023 to be held at Norton Rose Fulbright, L38 477 Collins Street, Melbourne. Key items of discussion will include:

- skills development, industry collaboration and best prospective use cases for Hydrogen in Australia;
- new adapted planning, environmental and permitting regimes that will be needed to accelerate hydrogen projects in Australia;
- key commercial, legal and risk issues in structuring hydrogen projects and developing contract terms for this novel market; and
- proposed Australian certification and accreditation arrangements, including the Guarantee of Origin work.

The Forum has been rescheduled to mid-July, with date still to be confirmed.

[Connecting Green Hydrogen APAC 2023](#) – Melbourne – 25 to 26 July 2023

CGHA 2023 will bring together industry live and in person to discuss the green hydrogen agenda in Australia and the APAC region. CGHA creates a unique set-up where the policymakers as well as domestic and international developers, investors, experts and solution/product providers, meet, learn and debate. HSA was a supporting partner for this event in July 2022, and is pleased to be a supporter for this year’s event in July 2023. **HSA members will have access to an exclusive 20% discount off the conference registration.** Log into your members portal and [access the HSA discount code here](#), and then log into the conference website below to register for the event.



Global Clean Energy Conference – Perth – 29 August 2023

Mark McGowan has announced a high-level international meeting linked to the high-profile Boao forum for Asia will be coming to Perth on August 20. Mr McGowan said: “There is no bigger issue than clean energy. All countries need to embrace it. We are, and we want to help countries like China to embrace it and use the opportunities that are available in WA to improve their outcomes. Opportunities for hydrogen, renewable hydrogen, renewable ammonia, solar and wind are available in WA”. Further details will be forthcoming.

Second Annual Hydrogen Connect Summit – Brisbane – 06 to 07 September 2023

The HSA was proud to have supported the first Hydrogen Connect Summit in Brisbane as an Endorsing Association. Following the Summit there have been myriad State, Federal and private sector initiatives to provide funding, stimulate investment, accelerate off take and address the skills challenge. [Click here to view the White Paper](#). Dates are locked and loaded for the 2nd Annual Hydrogen Connect Summit 2023 (6-7 Sept 2023) at the Brisbane Convention & Exhibition Centre) and planning is already well underway. [HSA members will have access to an exclusive 20% discount off Summit registration.](#)

Snippets of Hydrogen making moves around the world

2023 03 30_ Labor’s climate safeguard laws clear Senate_BN

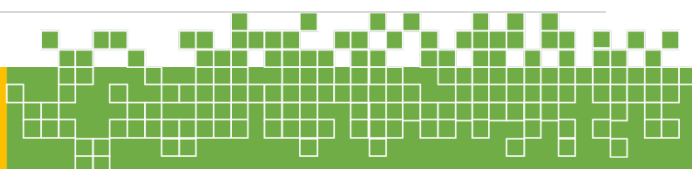
A new carbon pollution cap on big emitters will apply from July 1 after laws cleared the Senate. Changes to the safeguard mechanism, which was initially brought in by the coalition government, will force the nation's 215 biggest emitters to reduce their emissions by 4.9 per cent each year. This is expected to reduce emissions by 205 million tonnes by 2030. The legislation passed the Senate on Thursday and will be rubber-stamped in the government-controlled lower house. Assistant Climate Change and Energy Minister Jenny McAllister said it will make an important change to reducing emissions and boost investment during the transition to renewables. Senator McAllister said a fund under the government's energy transition plan would also ensure businesses aren't left high and dry. [Click here for full article](#)

2023 04 06_Subscribe to the Accelerate Hydrogen newsletter for the following articles:

- More generous than the US | EU plans to offer green hydrogen subsidies of up to €4/kg at competitive auctions
- Indian green hydrogen subsidies set to be about 90% lower than US tax credits:
- Hydrogen heating | Germany sets 2035 date for fossil-gas networks to switch to clean H2 or switch off

2023 04 06_What Australia must do to not miss out on the green steel boom_EA Create

Emerging steelmaking technologies are well along the path to development. Sweden produced the first batch of steel made without coal in 2021. This steel was made using a direct reduced iron-electric arc furnace process, which can be powered with renewable energy and green hydrogen. While the pilot schemes are promising, this technology could take until the late 2030s to be available at scale.



The problem for Australia is this approach needs high purity ore. At present, the bulk of our iron ore exports would simply not be compatible, as there are too many impurities. Other emerging steelmaking techniques, such as electrolytic steelmaking, should also be developed to ensure there are plenty of options for the use of hematite in zero emissions steelmaking in the future. Fortescue Future Industries recently announced they have succeeded in producing zero carbon iron using an electrolyser and a membrane, but so far have not provided details of the process. It's hard to give concrete timelines for these changes, as a transformation at this scale will require coordinated effort. Each of these technologies requires significant investment and a massive build-up of reliable, cost-competitive renewable energy and green hydrogen production. [Click here for full article](#)

2023 04 07_GOT GAS: Hydrogen, wherefore art thou (policy)_Stockhead

Hydrogen is widely recognised as a key component in the world's transition towards net zero emissions, so it should be no surprise that interest in the industry has been growing. From the South Australian government flagging in late March strong global interest in its Hydrogen Jobs Plan with 29 proposals received, to motorcycle manufacturer Kawasaki dropping hints that hydrogen fuel cell motorcycles could be appearing on its line-up, it is clear that the momentum is building.

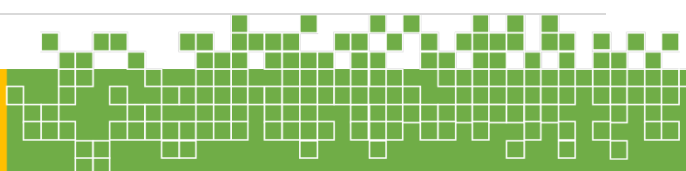
Deloitte Access Economics head Dr Pradeep Philip believes that while Australia has a wealth of comparative advantages in green industries like hydrogen, it is at the risk of falling behind, and our global competitiveness is declining with the US Inflation Reduction Act looking to set to "cut Australia's renewable hydrogen lunch".

Without taking state governments into account, the single largest commitment to date is the \$3bn of the \$15bn National Reconstruction Fund which has been committed towards the manufacture of low- or zero-emissions technology for use in Australia. A review is also underway on the National Hydrogen Strategy to ensure that Australia remains on a path to be a global hydrogen leader by 2030 for both exports and to decarbonise Australian industries.

A well-developed hydrogen industry could also go a long way towards easing East Coast natural gas supply, particularly when it is blended into the domestic pipeline gas for heating and cooking. [Click here for the full article](#).

2023 04 10_Clean Energy Investment gets Boost from Labor – WAToday

Clean energy projects are being approved at twice the rate of previous years after federal action to speed up decisions in the hope of adding more wind farms and solar projects to the electricity grid. The federal government is claiming a boost to investment in renewable energy after it increased spending in last year's budget to clear backlogs and issue faster environmental approvals. The projects span from the 90-megawatt Port Hedland solar project in Western Australia to 540 kilometres of transmission line in the EnergyConnect eastern section project in NSW, projects to connect renewables to the energy grid in Queensland and NSW, a large-scale 445-megawatt Aldoga solar farm in Queensland, and the Goyder South wind farms, which will produce a combined 412 megawatts. "We're reforming our laws to deliver even clearer, faster decisions while better protecting our environment too," said Plibersek.



2023 04 11_Hazer signs MOU for Japanese hydrogen project_BN

ASX-listed chemical engineering business Hazer Group will partner with Chubu Electric and Chiyoda to draw up plans for a commercial scale hydrogen facility in central Japan. It's expected that the plan to outline a pathway for a clean hydrogen and graphitic carbon production hub in Japan's Chubu region will be completed in the first half of 2024. Initial start-up of the facility has been loosely targeted before the end of this decade, with a starting hydrogen production capacity of between 2,500 and 10,000 tonnes per annum (tpa) and between 50,000tpa and 100,000tpa at its peak. The hydrogen would then be used as fuel for power generation and for industrial use. [Click here for full article](#)

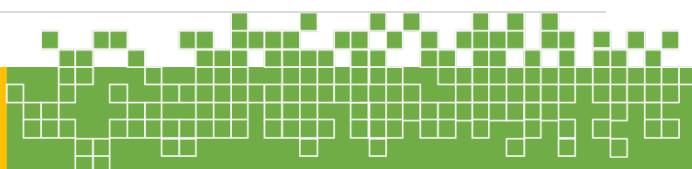
2023 04 13_Hydrogen could pump hundreds of billions into economy_BN

Climate Change and Energy Minister Chris Bowen has seized on the government's **State of Hydrogen** report, saying Australia needs to do more to secure the opportunities. "The world's climate emergency is Australia's jobs opportunity, and the Albanese government is moving quickly to make sure we seize that opportunity in green hydrogen," he said. The push to become a world leader in clean energy exports isn't just hot air, with almost half of worldwide hydrogen projects being in Australia. About 40 per cent of announced hydrogen projects around the world are in Australia's pipeline, with a total value of between \$230 billion and \$300 billion. But the report warns that as of December 2022, only one project with a 10 megawatt capacity or higher has passed final investment decision from this pipeline of investment. [Click here for the full article](#)

2023 04 14_Accelerate Hydrogen Newsletter_Rechargenews.com

- Differing national clean hydrogen standards being developed around the world "risk becoming a barrier for the development of international hydrogen trade", according to a new report by the International Energy Agency (IEA). The Paris-based organisation says that different rules on carbon intensity, regulatory frameworks and certification systems defining the "sustainability attributes" of hydrogen may lead to "market fragmentation".
- Japanese auto maker Toyota is to launch a new hydrogen fuel cell car (FCEV) this autumn, adding to the company's flagship FCEV (the Mirai), one of only two FCEVs currently on the market, alongside the Hyundai Nexa. Nevertheless, the company may be subtly refocusing its hydrogen future away from passenger vehicles towards heavy duty trucking, despite remaining "firmly committed to [Toyota's] multi-pathway approach". "For FCEVs we will pursue mass production centred on commercial vehicles," said Hiroki Nakajima, Toyota's chief technology officer. "One feature of FCEVs is that the energy source, hydrogen, is lightweight so even when travelling longer distances the vehicle is not as heavy as a battery EV and less space is required. Refuelling is also much quicker.
- Luxury hydrogen auto maker Hopium puts development of its only car on the backburner as share price slumps. The company has been marketing its high-performance hydrogen-powered Machina car since 2020, which is available for pre-order at a cost of €120,000 (\$131,000) and is said to have a range of 1,000km. But after its share price tumbled from a high of €37.80 in June 2021 to €3 in early April, the loss-making company announced that it would switch focus to developing its fuel cell system (including its fluid management subsystems) and selling it to third parties, perhaps along with its hydrogen tanks and electric motors.

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2023 04 14_State of Hydrogen 2022 and National Hydrogen Infrastructure Assessment now available_SEC

The Department of Climate Change, Energy, the Environment and Water (DCCEEW) has published the [State of Hydrogen Report](#) as part of delivering [Australia's National Hydrogen Strategy](#).

The 2022 State of Hydrogen Report covers:

- Australia's pathway for a clean hydrogen future
- the development of Australia's hydrogen industry so far, and how it compares to the rest of the world
- what governments around Australia are doing to advance the industry
- the path ahead for the hydrogen industry in Australia.

DCCEEW has also completed Australia's first assessment of infrastructure requirements for hydrogen through to 2050. The National Hydrogen Infrastructure Assessment aims to support targeted and coordinated infrastructure investment by identifying infrastructure needs and gaps. It also identifies where investments could be best prioritised to achieve maximum impact. Learn more in the [National Hydrogen Infrastructure Assessment report](#)

2023 04 15-16_U.S. Subsidies: If you can't beat them, Join them – The Australian Financial Review

Australia now faces a bigger challenge to building a profitable and competitive renewable and manufacturing sector, following the Biden Administration's decision to pump \$US360 billion (\$530 billion) of subsidies into mostly US-based clean energy manufacturing via the Inflation Reduction Act (IRA). The boss of the US Department of Energy's \$US100 billion (\$149 billion) Loans Program Office (Jigar Shah) knows how tough manufacturing renewable energy can get in Australia. Within its energy and climate provisions, the IRA has set aside an extra \$US11 billion for the Loans Program Office to support issuing new loans for companies wanting to build projects in the US, and Shah said that Australia is perfectly poised to slot into the program. But it not just critical minerals where Australia can play a role. Fortescue Future Industries plans to take five hydrogen related projects to final investment decision this year, and is aiming for at least one of those to be in the US, largely because the IRA has created a very strong investment environment. Opportunities beckon under the IRA theory, but converting them is another story. So far, only 5% of total funding out of the IRA and BIL has gone out the door.

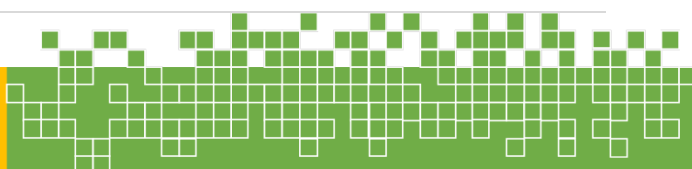
2023 04 15_Hydrogen Monitor Updates_Hydrogen Standard newsletter

China Hydrogen Monitor - March Recap:

- Components VS Capital: Fuzhou Snowman's Fuel Cell Investments
- Methanol Fuel Cell Development at CHEM Hydrogen
- The Sea as a Hydrogen Mine: Latest Efforts in Direct Seawater Electrolysis in China
- Liquid Sunshine: Methanol as a Hydrogen Carrier in China
- China's Hydrogen Energy Industry: Balancing Development Goals with Resource Realities

Global Hydrogen Monitor - March Recap:

- Canada Updates its Hydrogen Plans Through Budget23
- Dutch Government Decided Location on Off-shore Wind-to-H2 Project
- BP Launches Plans for Low-Carbon Green Hydrogen Cluster in Spain's Valencia Region
- UK Urged to Approve Hydrogen Blending in Domestic Gas Network



- Hypersonic Hydrogen Jet in the Making
- Flagship EU Hydrogen Truck Project Kicks off in Brussels

On the 26th of April 10am BST (5:00pm AWST) The Hydrogen Standard hosted a webinar providing an update on the various hydrogen plans governments have made throughout the world in the last 6 weeks.

2023 04 18_The resilience of steel: Navigating the crossroads_McKinsey

Over the next ten years, three key trends could shape the steel industry. First, forecasts show an unevenly distributed slowdown in global steel demand across regions and industries. The “normalization” of demand in China—which would effectively end decades-long rapid growth—could be partially offset by growth in Southeast Asia and India, and slowdown in construction could be offset by growth in energy and transportation, leading to regional overcapacities and imbalances. Second, decarbonization is expected to ramp up at varying paces across regions. Finally, economies will likely continue to experience supply chain disruptions, including those resulting from COVID-19 outbreaks, the low-cost-gas shortage, and the continuing war in Ukraine and sanctions on Russia. Production of green steel will require significantly more power. In ironmaking, reductants such as coke, coal, and natural gas will likely be replaced by hydrogen (H₂), which requires significant amounts of power to produce using electrolysis. In steelmaking, BOFs will either be replaced by electric-arc furnaces (EAF) or accompanied by pre-melters, also leading to higher electricity consumption. As a result, production of one metric ton of green steel using the H₂-based DRI and EAF route will require more than 3.0 megawatt hours (MWh) of renewable power, while production of one metric ton of steel using a fully integrated blast furnace–basic oxygen furnace (BF-BOF) route currently requires about 0.1 MWh. [Click here for the full article.](#)

2023 04 20_World Electrolysis Congress – Post Event Report_World Hydrogen Leaders

From 14 - 16 March, [World Electrolysis Congress](#) brought together 500 hydrogen professionals from across the globe with a primary focus on scaling-up electrolyser technology to meet the increasing demand for clean hydrogen. The post event report is now available - [Download it today](#) to discover:

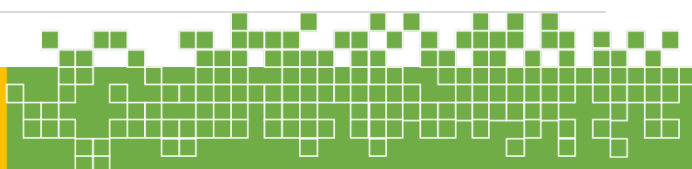
- Event highlights and numbers
- Who attended?
- Key takeaways from the industry during the conference programme,
- Top rated speakers
- And best moments taking place during the congress!

2023 04 21_A fuel efficiency standard is coming, but there may be a delay in driving cheaper electric vehicles to Australia_ABC News

Yesterday, the government released its EV strategy and it makes the implementation of fuel efficiency standards explicit government policy.

Australia has lagged the world by not introducing fuel efficiency standards, with the government saying Australia and Russia are the only advanced economies without them. And it's left us as the dumping ground for old and dirty tech from global car makers.

The government's strategy pointed out that EVs account for just 3.8 per cent of Australian new car sales - far behind the share of 15 per cent in the UK and 17 per cent in the EU. Globally, EVs make up 9 per cent of new car sales. [Click here for full article.](#)



We acknowledge the support of our corporate members!

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Please share this newsletter with your network, as they may be interested in joining the HSA.

Together we can foster a hydrogen society for Australia and a global renewable energy future.

Hydrogen is marching on - will you march with us?

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Contacts



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