

## AGM CHAIRMAN'S ADDRESS & CEO PRESENTATION

**PERTH, AUSTRALIA; 30 NOVEMBER 2020:** is pleased to provide the following Chairman's address and CEO Presentation to be made at the Company's 2020 Annual General Meeting at 10.00am AWST today.

### Chairman's Address

Since we were together last year there has been dramatic change in the world, all of which was totally unexpected. Hazer was not without its own impact, however, I suspect the lasting impact of it will be on the positive side of the ledger as governments around the world consider focussing their recovery with a green energy tint.

But let me look back and note that when we met last year, we had planned the commercial demonstration plant ("CDP") for the Hazer process but we were some significant distance from being able to fund its construction and operations. This CDP will of course be the first fully integrated deployment of the Hazer process delivering 100 tonnes per annum of low emission hydrogen and is a fundamental stepping stone on the road to commercialising the Hazer process.

We had undertaken a small capital raising and had a share purchase plan open to all shareholders at 38.5c per share which closed after the AGM. I would like to thank those shareholders that took up their entitlement as these funds did enable us to move into 2020 with confidence that we would be able to achieve complete funding. I note that the SPP was slightly over our target and we accepted all amounts to ensure that any shareholder that wanted to invest further had their complete opportunity.

The advent of coronavirus and its impact on the world undoubtedly slowed our fund raising activities as uncertainty gripped the world and global stock markets. Thankfully that was short lived and we were able to undertake a further capital raising in June at a higher price than the SPP of last year (at 42c per share) and obtain the remaining equity that was needed.

As had been announced before last year's AGM, we had been offered a conditional grant of over \$9 million from the Australian Renewable Energy Agency ("ARENA") and through the fund raising activities and further design and implementation work during the year we were able to finalise the agreement and we have recently drawn down the first funds under this arrangement. We remain grateful and thankful for the excellent support we have obtained from ARENA and look forward to its continuation in the years ahead.

In addition to all of this we have also obtained a debt funding package from Mitchell Asset Management ("MAM") of \$6 million which again we have just drawn down the first tranche.

All of these events have culminated in the Hazer board being able to give the Final Investment Decision for the CDP in June and I am pleased this has now commenced and Geoff will give an update on where this is at in his Managing Directors address. Last year I also mentioned about the partnership with the Innovative Manufacturing CRC on our R&D activities and Geoff will also update our progress on this score.

More recently we have announced a pending investment from AP Ventures, a venture capital fund with a specific focus on hydrogen. The investment is not yet finalised and will require a shareholder vote which we envisage will occur in a further shareholder meeting in January 2021. This is an extremely exciting development as this brings us a global reach and credibility that is hard for a small team in Australia to obtain - although I should give extreme credit to our management team who remain in conversation with the best global names in the hydrogen sphere

Last week we noted that Mineral Resources have decided not to go forward with their collaboration agreement with Hazer. Mineral Resources have been an excellent relationship partner for Hazer and we wish them all the best in the years ahead as they power on in the iron ore, lithium and contract mining space.

We note that they decided to not go forward due to graphite dropping down their priorities rather than due to the results of what was achieved. This does mean that we can now consider new options and Geoff will start the discussion around this in his address.

So finally shareholders, let me thank you for your loyalty and support through this year and for many over a longer journey. I think we are at a very exciting stage for the company and the main task ahead of us is to make sure the CDP gets built and operates to de-risk the Hazer process. As the world looks increasingly towards a green future the mention of hydrogen only increases and for Hazer with a low emission hydrogen solution the future could be extremely bright

Authorised for release by the Board of the Company.

**[ENDS]**

### **Forward Looking Statements**

This announcement may contain certain “forward looking statements” which may not have been based solely on historical facts, but rather are based on the Company’s current expectations about future events and results.

Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions and other factors, which could cause actual results to differ materially to futures results expressed, projected or implied by such forward looking statements.

The Company does not undertake any obligation to release publicly any revisions to any “forward looking statements” to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under the applicable securities laws.

### **ABOUT HAZER GROUP LIMITED**

Hazer Group Limited (“Hazer” or “the Company”) is an ASX-listed technology development company undertaking the commercialisation of the Hazer Process, a low-emission hydrogen and graphite production process. The Hazer Process enables the effective conversion of natural gas and similar methane feedstocks, into hydrogen and high-quality graphite, using iron ore as a process catalyst.

For further information or investor enquiries, please contact:

#### **Geoff Ward**

Email: [contact@hazergroup.com.au](mailto:contact@hazergroup.com.au)

Phone: +61 8 9329 3358

For media enquiries, please contact:

#### **WE Communications – Arthur Chan**

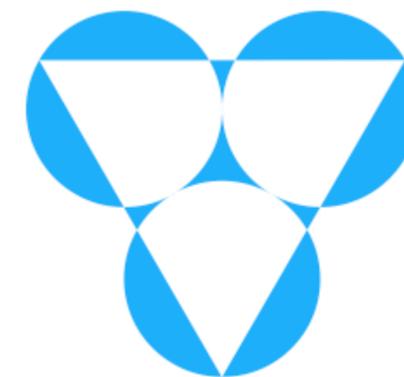
Email: [WE-AUHazer@we-worldwide.com](mailto:WE-AUHazer@we-worldwide.com)

Phone: +61 404 369 388

### **Hazer Group Limited - Social Media Policy**

Hazer Group Limited is committed to communicating with the investment community through all available channels. Whilst ASX remains the prime channel for market sensitive news, investors and other interested parties are encouraged to follow Hazer on Twitter (@hazergroupltd), LinkedIn, Facebook and YouTube.

Subscribe to HAZER NEWS ALERTS - visit our website at [www.hazergroup.com.au](http://www.hazergroup.com.au) and subscribe to receive HAZER NEWS ALERTS, our email alert service. HAZER NEWS ALERTS is the fastest way to receive breaking news about @hazergroupltd.



# **HAZER GROUP LTD**

## **ASX:HZR**

**CEO Presentation – Company Update & 2020 Review**  
**30 November 2020**

# 2020 – A YEAR OF SUBSTANTIAL PROGRESS

Hazer has made substantial progress in 2020 despite an extremely challenging operating environment; we have a strong platform from which to capitalise on the increased global interest in hydrogen in 2021 and beyond.

- ✓ Secured the **Hazer Commercial Demonstration Project**
- ✓ **Strengthened our financial position**; ensured that we were prepared to ride out the Covid-19 crash and now fully funded to deliver the Hazer CDP
- ✓ **Chiyoda MOU** - relationship proving positive; strong engagement through Chiyoda with Japanese market
- ✓ **Substantial increase in interest in Hazer technology** from potential long-term partners; actively engaged with potential international partners; look to convert to more formal arrangements (MOUs, Alliances) or Project Collaborations through 2021 and 2022 as our technology matures
- ✓ **Enhanced R&D platform** and a strong program of innovation and research in graphite applications and technology
- ✓ **Termination of Mineral Resources** agreement ends a key chapter in Hazer's development but opens-up new opportunities
- ✓ **\$4M Investment agreed with AP Ventures**, a leading global specialist hydrogen VC fund further strengthens balance sheet and adds hydrogen commercialisation depth to our Board

# 2020 – Key Achievements

Hazer achieved a significant number of key milestones in 2020.

- Nov 19 Capital Raising & well-supported SPP - \$6.05 M at \$0.385 per share
- Jan 20 WA Renewable Hydrogen Fund grant “Mandurah Renewable Hydrogen Refuelling Hub Feasibility Study”
- Jan 20 Chiyoda MOU – “Strategic Alliance to cooperate on the commercialisation of Hazer Technology in Japan”
- Mar 20 ARENA Funding Agreement executed
- May 20 Water Corp Binding Agreements; Gas Supply Agreement & Project Collaboration Agreement
- Jun 20 Successful Equity Capital Raising - \$8.4 million at \$0.42 / per share
- Jul 20 \$6 M Senior Secured R&D Loan Facility secured with Mitchell Asset Management
- Jul 20 Hazer CDP Financial Investment Decisions; ARENA CPs met & Award of Primero EPC Contract
- Oct 20 \$4 M Convertible Note investment agreed with AP Ventures
- Nov 20 First draw-downs from ARENA Grant & MAM Senior Secured Loan
- Nov 20 First successful repayment to MAM Senior Secured Loan

# Hazer Commercial Demonstration Project

Strong progress on the Hazer CDP since taking the FID decision in July 2020 despite a very challenging operating environment

- Initial activities have focussed on detailed design, procurement and permitting.
- Detailed Design now approximately 65% complete
  - major HAZOP & LOPA reviews completed
- Procurement activities progressing well with 75% of main package contracts placed
  - delays due to Covid-19 through slower vendor response times and technical clarifications slowing design finalisation causing knock-on effects to schedule
- Permitting activities progressed well;
  - Clearing Permit received (Dept. of Water & Environmental Regulation)
  - Development Permit received (City of Cockburn)
  - Works Approval received (Dept. of Water & Environmental Regulation)
  - Section 18 (Aboriginal Heritage) (Dept. of Planning, Lands & Heritage) - waiting approval
  - Dangerous Goods Licence (Department of Mines, Industry Regulation and Safety) - application in progress
- Targeting commencement of site works (clearing & civil prep) by February 2021



# Hazer Commercial Demonstration Project

We have made strong progress on the Hazer CDP since taking the FID decision in July 2020 despite a very challenging operating environment



# Hazer Commercial Demonstration Project

We have made strong progress on the Hazer CDP since taking the FID decision in July 2020 despite a very challenging operating environment



# Hazer CDP – Revised Timelines

Covid-19 disruption has slowed project activities with Vendors resulting in approx. 10-week delay to schedule; budget remains within estimates with some cost growth projected.

- **COVID-19 impact on timeline**
  - Slower project ramp-up as vendor enquiries and clarifications slower than expected
  - Now targeting commissioning in Oct 2021, ~12 weeks later than the original commencement of commissioning date targeted at FID.
- **Project remains within budget estimate range**
  - Projecting \$17.5M cost to complete including \$1.8M of un-drawn contingency allowance (variance versus budget <5%)
  - Reviewing compressor supply arrangements due to underperformance of chosen vendor; will likely change to a lower risk option which will incur additional cost estimated at ~\$0.5M (will be absorbed within contingency allowance)
  - With continued good progress on procurement expect to deliver within overall budget range of \$17.2 - \$17.6M
  - Project team continues to monitor potential risks to schedule and budget and increased competition for resources in WA market

***CDP remains fully funded with good capital margins to protect against uncertain operating environment***

# Global Hydrogen Market Gathering Pace

Favourable macro-environment: national roadmaps and strategies are now translating into investment targets, funding programs and regulatory changes

- Many of **targets are still medium to long term (2030+)**
- **Acceleration of trial programs, pilot and demonstrations**
- **Emphasis is on kick-starting deployment of technologies** knowing they still need to come down in cost
- **Emphasis on building supply chains** and capability to seize new employment and investment opportunities
- **Most options still above the required cost** and have to make significant progress to get to the stated H2 price targets

## New programs/targets<sup>1</sup>

- **USA** – Intends re-join Paris Agreement
- **Australia** – Low Emission Technology Roadmap
- **Japan** – Net zero emission by 2050
- **South Korea** – Net zero emission by 2050 - \$37B investment plan
- **China** – Net zero emission by 2060
- **Germany** – EUR 9B National Hydrogen Strategy
- **France** – EUR 7B National Hydrogen Strategy
- **Netherlands** – EUR 9B investment plan
- **UK** – Phase out of new ICE vehicles by 2030

***Bank of America notes the hydrogen market will be “a \$2.5 trillion market and \$11 trillion of investment in hydrogen by 2050”***

<sup>1</sup> For references see Slide 19

# Business Development

Significant increase in interest in the Hazer technology from international companies across a wide range of applications

- **Strong relationship with Chiyoda** provides excellent engagement with potential Japanese customers; hope to see this translate to first Feasibility Studies in 2021
- **Interest in Hazer Process is coming from a diverse range of end-users** driven by a desire to de-carbonise operations
- Potential applications/collaborations include:
  - Supply of hydrogen for transport
  - Waste to hydrogen
  - Low-emission hydrogen to de-carbonise heavy industry
  - Use of low-emission hydrogen to create “green” products
- Hydrogen market is still emerging with no clear, deep price signals yet for clean H2
- **Key focuses in 2021:**
  - Taking knowledge gained from the CDP design to larger scale Hazer Plants
  - Target a range of capacities to suit various end-use scenarios (indicatively 1,000 – 2,500 – 5,000 tpa H2 capacity)
  - Collaborate with range of engineering specialists to pursue optimisation and cost outs

# Hazer R&D program

R&D remains a core activity for Hazer with potential high impact programs developed in 2020, which will continue into 2021

- Joined **Innovative Manufacturing CRC** in Oct 2019; a continuation of our previous USyd research collaboration
- **R&D activities focussed on two pathways:**
  - **Catalyst & reaction development**
    - Test and optimise different catalyst materials (both natural and synthetic iron oxides)
  - **Graphite characterisation, functionalisation, application testing and purification**
    - Test potential applications for Hazer graphite
    - Develop methods to functionalise graphite to enhance various properties
- **Key emerging R&D themes:**
  - Trialling a process to purify Hazer graphite to 99%+ purity without thermal or acid-based method; achieved at small-scale in lab - now assessing how to scale to pilot stage
  - Investigating methods to separate the different graphite morphologies to optimise value of carbon product
- R&D, by its nature, is uncertain and long-term undertaking; Hazer has developed a strong platform to support the long-term growth of our business and add value to technology



# Termination of Mineral Resources Agreement

Termination of the Collaboration Agreement with Mineral Resources ends a key chapter in Hazer's development but opens-up new opportunities

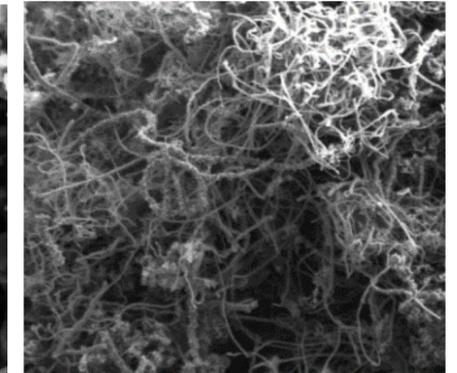
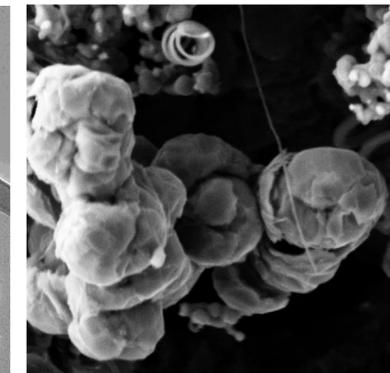
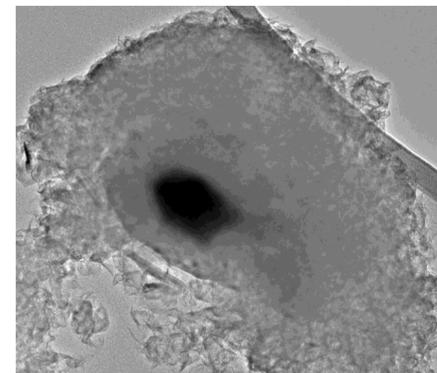
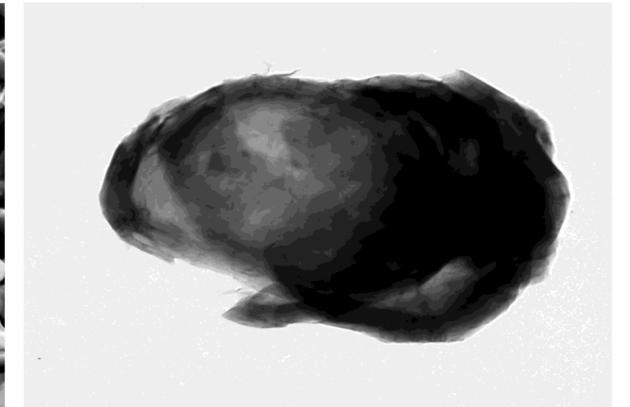
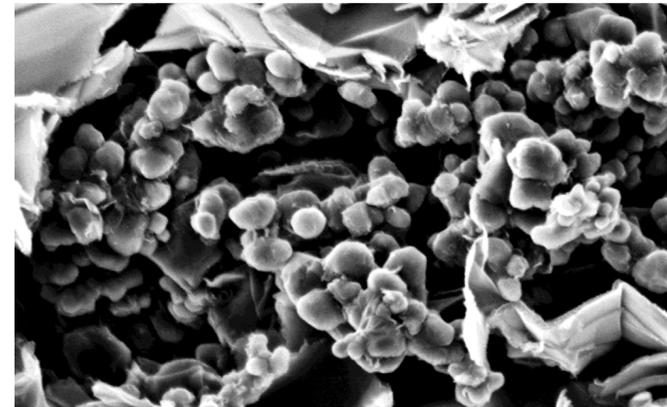
- Stage 1 (Pilot Plant) of the Collaboration was successfully completed in August 2019 exceeding operational targets Stage 2 will not proceed.
- Graphite no longer a strategic commodity for MIN; does not fit with portfolio of high-volume bulk commodities opportunities in iron-ore and lithium which have grown very rapidly over the last 3 years
- Agreement termination has no financial impact on Hazer Group
- **New opportunities for Hazer:**
  - ✓ All rights accruing to MIN under the agreement cease; this includes the exclusive global licence to apply the Hazer Technology in graphite applications and right to buy graphite from future Hazer Hydrogen projects
  - ✓ Can now pursue graphite marketing and licensing deals independently of any right to MIN
  - ✓ Opportunities to use our process innovation to develop more integrated hydrogen and graphite opportunities



# Hazer Graphite

## Unique and versatile graphitic product

- **Graphite market is a complex, technical and opaque market;** product qualification and acceptance processes typically 2-4 years (especially for higher value products)
- **Customers typically want to evidence of production in larger volumes** before engaging to co-develop graphite products under long term supply agreements
- **Actively engaged with a range of potential customers** across multiple uses; executed [20+] Material Transfer Agreements to allow testing of Hazer materials by end users
- **Potential to produce unique products** for specialty applications being investigated by R& D Team
- **Range of potential value for Hazer graphite product is very wide** – ~\$200 - \$1,000+ per tonne
- **Producing a larger quantity of consistent graphite via the Hazer CDP** (est. 375 tpa graphite production) is key to taking customer engagement to the next step



### Applications being considered:

- Energy storage (Li-ion battery anodes, conductive additives etc)
- Refractory additives
- Composite additives (concrete, polymers etc)
- Water purification medium (various contaminants)

# Strong Financial Position

Fully funded to deliver the Hazer CDP, accelerate the development of commercial scale options and pursue innovative R&D through a diverse range of funding sources

- Strengthened balance sheet and diversified funding sources over the last 12 months
- Funded grants (State & Federal), debt, equity and strategic investment
- **\$20.5M cash balance at 30 Nov 2020 plus;**
  - \$7.7M undrawn ARENA Grant Funding <sup>1</sup>
  - \$4M undrawn senior secured debt <sup>1</sup>
  - \$4M investment from AP Ventures to be received in 2021 post FIRB approval
- **Forecast to be fully funded to deliver the CDP and all other planned activities through CY 2021 & 2022**
- **Will use financial strength to build company capability;** reduce risk in the execution of our project and deepen our engineering capability to work with customer enquiries and develop commercial scale plant designs
- Strong financial position allows us to invest in R&D such as pilot trials of innovative graphite purification techniques

Note: 1. Subject to achievement of agreed milestones and conditions precedent.

# AP Ventures Investment

Hazer and APV have executed binding documentation for a \$4M investment by APV in Hazer

- **AP Ventures is a leading global VC fund** focussed on investment in the hydrogen sector, with their investments supporting their portfolio companies through the commercialisation and scale up phases
- **Investment is by the issue of Convertible Notes**
  - Notes will have a 5-year term and carry 0% interest rate
  - Notes will be convertible at market price (5-day VWAP) subject to a floor price of \$0.20 per share
  - Conversion of Notes subject to a 12-month non-conversion period
  - Hazer can elect to re-pay notes (which will incur an interest charge of 8%)
  - Investment remains subject to FIRB approval
- Upon FIRB approval, a **APV representative will be asked to join Hazer's Board**; the Board believes APV's expertise in hydrogen and commercialisation of technology in this area will be valuable as Hazer enters the next stage of development.
- **Execution of binding documentation** announced today (30 Nov 2020); summary of key terms in ASX release
- Shareholder meeting to approve the issue of the securities outside of placement capacity scheduled for mid-January 2021; Notice of Meeting expected to be dispatched next week

# Outlook

Hazer is strongly positioned to capture the huge opportunities offered by the growth in the hydrogen economy and rapid push to de-carbonise heavy industry and transport



First larger-scale, fully integrated deployment of the Hazer Process underway with the Hazer Commercial Demonstration Project to be delivered in 2021



Development of plans for Commercial Scale Hazer Projects a key focus in 2021 in collaboration with potential international partners as global focus on starting a hydrogen eco-system accelerates



Strong R&D platform aimed at supporting process development and optimising value of Hazer graphite



Strong balance sheet able to fund the Hazer CDP, our R&D program and accelerate international business development



Investors and governments world-wide mobilising resources to support low-carbon transition as part of a green recovery from Covid-19 economic shock – opportunity to access these funding sources to support commercial scale Hazer plant



Alan Finkel, Australian Chief Scientist, advice on hydrogen: “be ambitious and be patient” (November 2020)

# DISCLAIMER

## Important information

This presentation has been prepared by Hazer Group Limited (“Hazer” or “the Company”)

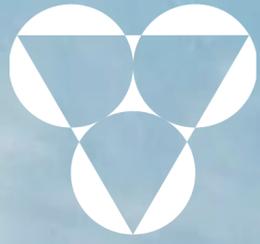
This presentation is not a financial product or investment advice or recommendation, offer or invitation by any person or to any person to sell or purchase securities in Hazer in any jurisdiction. This presentation contains general information only and does not consider the investment objectives, financial situation and needs of individual investors. Investors should make their own independent assessment of the information in this presentation and obtain their own independent advice from a qualified financial adviser having regard to their personal objectives, financial situation and needs before taking any action.

No representation or warranty, express or implied, is made as to the accuracy, completeness, reliability or adequacy of any statements, estimates, opinions or other information, or the reasonableness of any assumption or other statement, contained in this presentation. Nor is any representation or warranty (express or implied) given as to the accuracy, completeness, likelihood of achievement or reasonableness of any forecasts, prospective statements or returns contained in this presentation. Such forecasts, prospective statements or returns are by their nature subject to significant uncertainties and contingencies, many of which are outside the control of Hazer.

To the maximum extent permitted by law, Hazer and its related bodies corporate, directors, officers, employees, advisers and agents disclaim all liability and responsibility (including without limitation any liability arising from fault or negligence) for any direct or indirect loss or damage which may arise or be suffered through use or reliance on anything contained in, or omitted from, this presentation. An investment in Hazer securities should be considered speculative and is subject to investment and other known and unknown risks, some of which are beyond the control of Hazer. Hazer does not guarantee any rate of return or the absolute or relative investment performance of Hazer securities. The distribution of this presentation including in jurisdictions outside Australia, may be restricted by law. Any person who receives this presentation must seek advice on and observe any such restrictions.

# REFERENCES

1. Fuel Cell & Hydrogen Energy Association, 'Roadmap to a US Hydrogen Economy' <http://www.fchea.org/us-hydrogen-study>
2. CBS News, 'Joe Biden vows to rejoin the Paris climate deal on first day of office if elected', Nov 2020 <https://www.cbsnews.com/news/paris-climate-accord-biden-rejoin-president/>
3. Euractiv, 'South Korea mirrors European Green Deal with Net Zero Pledge for 2050' <https://www.euractiv.com/section/energy/news/south-korea-mirrors-european-green-deal-with-net-zero-pledge-for-2050/>
4. European Commission, 'Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions: A Hydrogen strategy for a climate-neutral Europe, July 2020' [https://ec.europa.eu/energy/sites/ener/files/hydrogen\\_strategy.pdf](https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf)
5. Hydrogen Europe, 'Hydrogen in the EU's Economic Recovery Plans' [https://hydrogeneurope.eu/sites/default/files/Hydrogen%20Europe\\_EU%20Recovery%20Plan%20Analysis\\_FINAL.pdf](https://hydrogeneurope.eu/sites/default/files/Hydrogen%20Europe_EU%20Recovery%20Plan%20Analysis_FINAL.pdf)
6. Fuel Cells Works, 'European Commission Unveils its Hydrogen Strategy', July 2020 <https://fuelcellworks.com/news/european-commission-unveils-its-hydrogen-strategy/>
7. German Federal Ministry for Economic Affairs and Energy, 'The National Hydrogen Strategy', June 2020 <https://www.bmwi.de/Redaktion/EN/Publikationen/Energie/the-national-hydrogen-strategy.html>
8. Embassy of France in Canberra, 'French strategy for the development of low-carbon hydrogen #ST25', <https://au.ambafrance.org/French-strategy-for-the-development-of-low-carbon-hydrogen-ST25>
9. [April 2020: National Hydrogen Strategy released](#)
10. Government of Netherlands, 'Government Strategy on Hydrogen', April 2020 <https://www.government.nl/documents/publications/2020/04/06/government-strategy-on-hydrogen>
11. 'The Northern Netherlands Hydrogen Investment Plan 2020' <https://www.mijntoekomstiswaterstof.nl/app/uploads/2020/10/investment-plan-hydrogen-northern-netherlands-2020.pdf>



**HAZER GROUP LTD ASX:HZR**

**Follow Hazer on Twitter, LinkedIn, Facebook,  
Instagram and YouTube**

**Hydrogen**

