# Pure Hydrogen

## Mar 2021 Quarterly Report

## HIGHLIGHTS

- **Merge between Real Energy and Strata-X Energy completed on 17 March 2021 to become Pure Hydrogen. Now well-funded with multiple exciting energy projects and over 5,000 shareholders.**
- **Significant partnering opportunities secured with numerous Term Sheets and MOUs executed during the quarter with Hyzon Motors, Liberty Hydrogen, Wildfire Energy and and Port Anthony. A further Term Sheet signed post quarter-end with Synergen Met.**
- **Venus-1 flow testing commenced this week - the well intersected multiple gas saturated coal intervals with wireline log interpreted approximately 25 metres of net coal pay.**
- **Very well-funded with cash of $11.25 Million as at 31 March 2021 with a continuing focus on tight cost control.**

**Pure Hydrogen Corporation Limited**
**ASX: PH2**

Pure Hydrogen is an Australian east coast focused Energy Company with Hydrogen and Gas businesses. The Company has 5 Hydrogen projects under development and 3 gas projects. The gas projects are the Windorah Gas Project in the Cooper Basin, Australia's most prolific onshore producing petroleum basin, Project Venus CSG in the Surat Basin in Queensland and the Serowe Project CSG in Botswana.

Pure Hydrogen has Independently Certified 3C Contingent Gas Resources of 770 BCF within the Windorah Gas Project and Recoverable Prospective Gas Resources in Project Venus (100%) of 694PJ and 2.38 TCF of high-grade Recoverable Prospective Gas Resources in Project Serowe CSG, Botswana (farmed out)

**Directors**

Ron Prefontaine – Non Executive Chairman
Scott Brown – Managing Director
Lan Nguyen – Non Executive Director

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Pure Hydrogen Corporation Limited (ASX: PH2 and "Pure Hydrogen" or "The Company") is pleased to provide this report to shareholders for the quarter ended 31 March 2021 (Q3 FY2021). During the period, the Company completed the merge between Real Energy and Strata-X Energy to form Pure Hydrogen which is focused primarily on the growth and development of its Hydrogen businesses and advancing its three large gas projects with a combined 11.8 TCF of prospective gas resource.

**Pure Hydrogen Corporation:**

Hydrogen is high energy clean energy solution fuel that offers no CO2 emissions with only water as a by-product and no particulate matter. The hydrogen market is expected to grow rapidly as it can substitute fossils fuels used in transport particularly buses, trucks and cars, as well as to power industry generally. Recently Toyota, Hyundai, Honda, and Audi have released models or are planning to release models that are powered by hydrogen fuel cells. The Federal government recently announced new clean energy initiatives including for Hydrogen totalling $539 Million, which the Company welcomes.

During the quarter, the Company announced a MOU with Hyzon Motors to collaborate on the development of a network of hydrogen refuelling points in Australia and the integration of a 'wet hire' of HYZON's vehicles to customers. The Company is working on a number of opportunities with Hyzon for potential customers.


**Large scale Hydrogen Hubs:** As announced on 20 January 2021, Pure Hydrogen signed a term sheet with Liberty Hydrogen to establish a Joint Venture Company ('JV') to develop four large scale Hydrogen Hubs at ports on Australia's East Coast - two in Queensland, one in NSW and one in Victoria. Excellent progress was made during the quarter with a number of proposals submitted to relevant authorities.

During the quarter the Company executed a MOU with Wildfire Energy where Pure will supply Hydrogen to potential customers in Brisbane and surrounding areas. Wildfire Energy is a private Australian renewable energy company turning waste into renewable energy including hydrogen using its proprietary Moving Injection Horizontal Gasification (MIHG) process. The technology converts waste into hydrogen by loading waste into the MIHG tractor with raw syngas then conditioned to remove chars, sulphurs and other contaminants. Hydrogen is separated and purified for end use.

Also, after the quarter, a term sheet was signed with Synergen Met Pty Limited ('Synergen') where the parties will establish a 50/50 Joint Venture ('JV') to manufacture 'turquoise' hydrogen gas and value add carbon products from methane using Synergen's designed and built methane decomposition modules.

Synergen's modular plant technology uses a propriety plasma pyrolysis process which decomposes natural gas (methane) into hydrogen and solid carbon products. If the process uses electricity from renewable sources, there are essentially no greenhouse gas emissions produced to manufacture the hydrogen.


**Image 2: modular hydrogen manufacturing container**

The Term Sheet contemplates 2 stages – the first stage will involve building a prototype - a shipping container sized module design is capable of producing about 1,400kg of hydrogen and 4200kg of value-add carbon product running 24/7. Stage 2 would piggy back on the first stage which would focus on the development of the carbon products, if feasible, which would include **synthetic graphite, graphene flakes and/or carbon nanotubes** and thereby potentially adding substantial value to Pure Hydrogen's 11.8 TCF of methane resources in Queensland and Botswana.

Each methane decomposition module will be housed in a standard 12 metre (40-foot) shipping container and therefore can be fully operational very quickly. Importantly, being standard shipping container size and design, the JV can build and install extra modules almost anywhere there is an adequate supply of methane to support the growing domestic and international hydrogen markets.

The Term Sheet is subject to customary Condition Precedents including both Pure Hydrogen and Synergen signing off on the module design and formalise agreements for the first module which is targeting 1,400 kg of Hydrogen per day starting in second half of 2022. The current plan is to install the first module immediately adjacent to Pure Hydrogen's 100% owned Venus CSG Pilot near Miles in Queensland. This project could be the first low to no emissions CSG-to-hydrogen hub in the world.

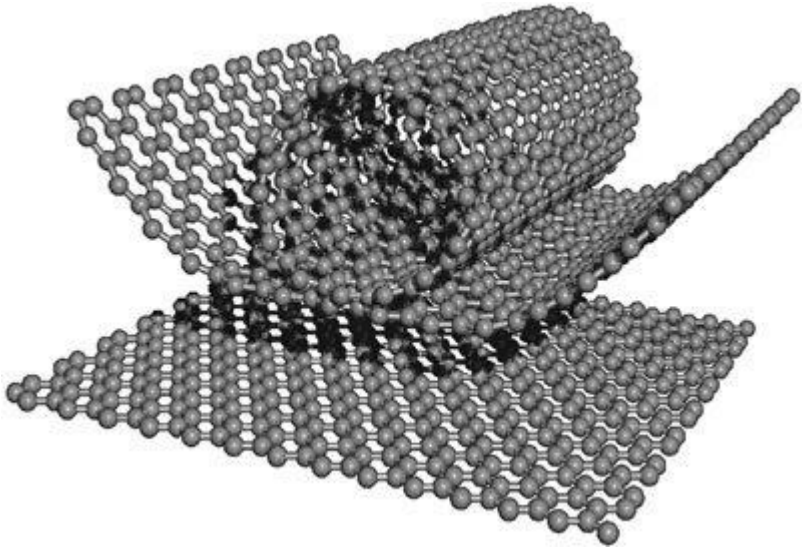


**Image 3: Carbon Nanotubes as by product**

Pure Hydrogen is focusing on hydrogen because it has the potential to be a complete game-changer for Australia's energy roadmap. The most exciting aspect about hydrogen is that it has many benefits for the environment – used in fuel cells it produces only water vapour and electricity, and as a fuel produces more energy per kilogram than natural gas. Pure Hydrogen's plan is to rapidly assemble all parts of the value chain during 2021 with the goal to build and develop a large-scale hydrogen business by:

- Seeking to lock in agreements with potential end users or partnerships with businesses that have shared goals similar to our MOU with HYZON reported in January 2021.
- Securing four east coast port Hydrogen Hubs in a JV with an experienced and well-connected partner in Liberty Hydrogen.
- Securing JVs with hydrogen manufacturing and distribution specialists to build pilot plants at the Hubs and transportation to customers.

**Pure Hydrogen's gas resource projects offer significant company growth potential:**

In addition to the Hydrogen business Pure Hydrogen will have 3 significant gas projects. Pure Hydrogen's Project Venus is located within the proven Walloon CSG Fairway and immediately adjacent to gas pipeline infrastructure in the Surat Basin. It offers relatively low risk and a lot of value with its 694 PJ of Prospective Gas Resources.

In addition, the merged entity's 100%-owned broader asset portfolio in Australia and Botswana presents a lot of opportunity for shareholders. Pure Hydrogen will have a total 11.8 TCF of Prospective Gas Resources, 770 BCF of 3C and 353 BCF of 2C Contingent Gas Resources[1].

Pure Hydrogen's gas projects have several things in common:

1. There are significant gas resources including third party certifications.
2. The primary technical risk is finding completion methods to prove commercial gas flows.
3. Proving commercial gas flows is the precursor to predictable reserves increases and substantial company growth.
4. Over the next 12 months, Pure Hydrogen plans to use innovative well completion and enhancement methods on the Venus-1 well which are designed to prove and deliver commercial gas flows.
5. All three gas projects have ready gas markets.

1. Please see page 10 –Contingent Resources

**Exploration and Evaluation:**

Exploration initiatives centred on the newly-secured Project Venus opportunity in the Surat Basin. The Company also progressed activities at the Windorah Gas Project in the Cooper Basin. In addition, Pure Hydrogen is continuously reviewing project opportunities that will be accretive and complementary to the Company's skillset and that build shareholder value.

**Project Venus:**

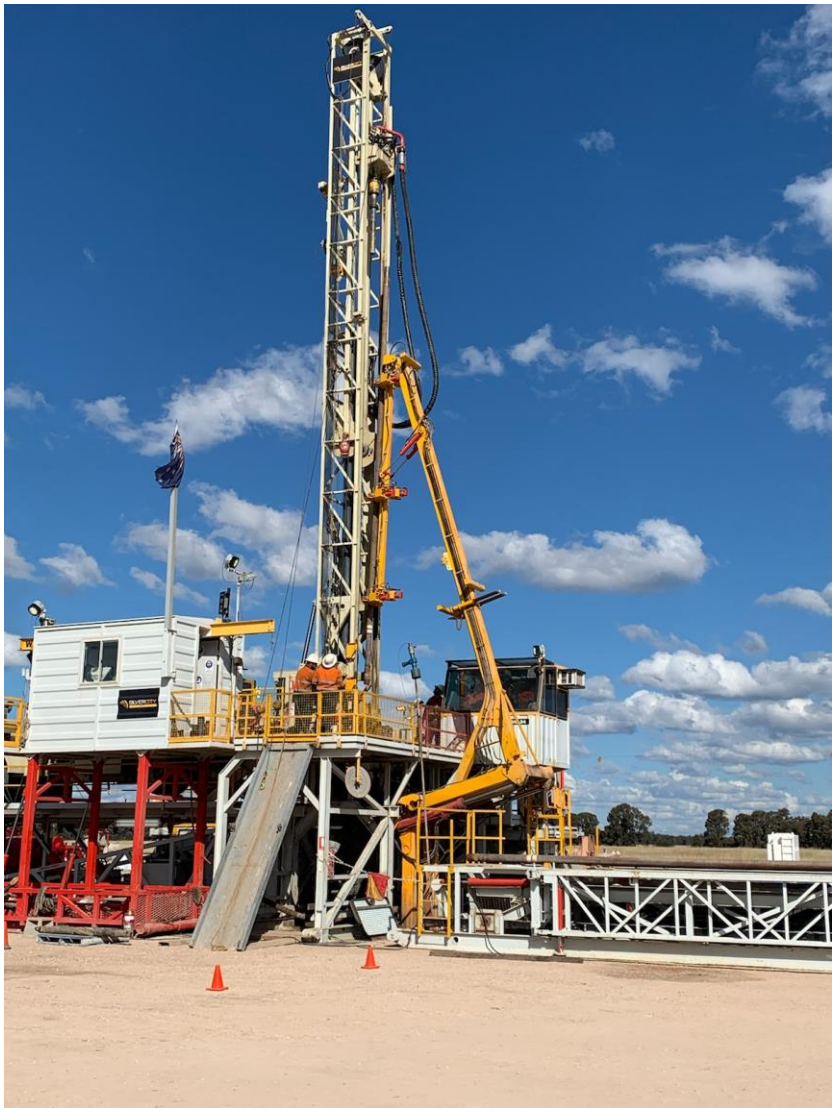
Project Venus permit ATP2051 is 100% owed by Pure Hydrogen. Work progressed during the quarter on the design and preparation for completion and flow test Venus-1 – the first well drilled on Project Venus. The upper Juandah coal seams were stimulated in early March with innovative abrasive perforating technique using coiled tubing. Subsequent to end of the quarter, the well was completed and set up for de-watering operations and pilot test program in late April after some delays due to unseasonal rains.

Project Venus contains high quality and very prospective acreage covering 154km$^2$ within the main Walloon Coal Seam Gas Fairway and close to gas infrastructure including gas pipelines. There is significant coal in this permit and the Company believes it can turn these into significant gas resources.

**Image 4: Work over rig on site of Venus 1**

During this week, the well commenced a controlled drawdown production pilot flow test which will continue over the next several months.

The Venus-1 production pilot test is designed to prove initial gas breakout and increasing gas flows over the controlled draw down period as required to model and predict future gas flow rates and potentially commercial gas flow rates.



Picture: Silver City Rig used to drill Venus-1.

Nearby 'small' operators include:

- ✓ The Ironbark Project was reported sold at $231M with reported reserves of 129PJ[1];
- ✓ Senex Energy is developing Project Atlas – reported 2P reserves 234 PJ[2];
- ✓ Central Petroleum is developing Project Range – reported 2C contingent resources of 270 PJ[2].

1. Australian Financial Review 19 February 2019
2. Source Company ASX Reports and Company websites

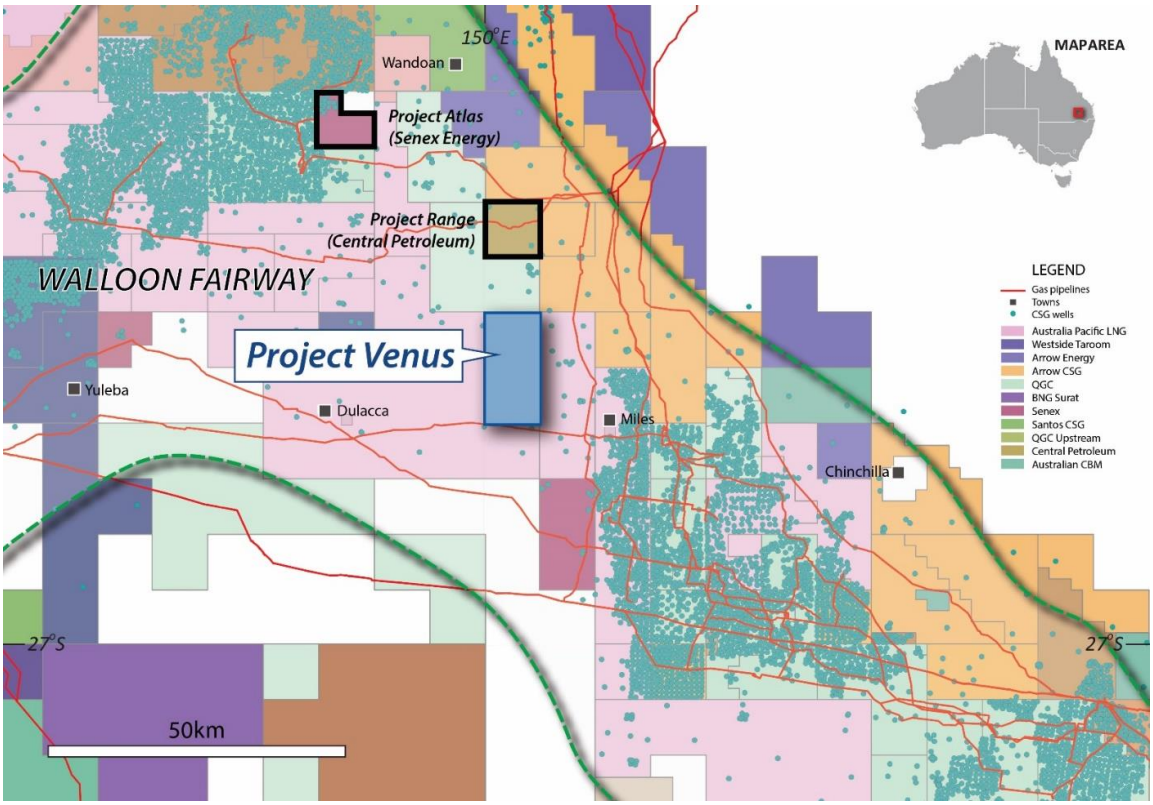
The independent review of the data for Project Venus (ATP2051) has the following Recoverable Prospective Gas Resources:

| | Estimates Gross (100%) Prospective Gas Resource (PJ) | | |
|---|---|---|---|
| Project Venus ATP2051 | Low 555 | Best 694 | High 833 |

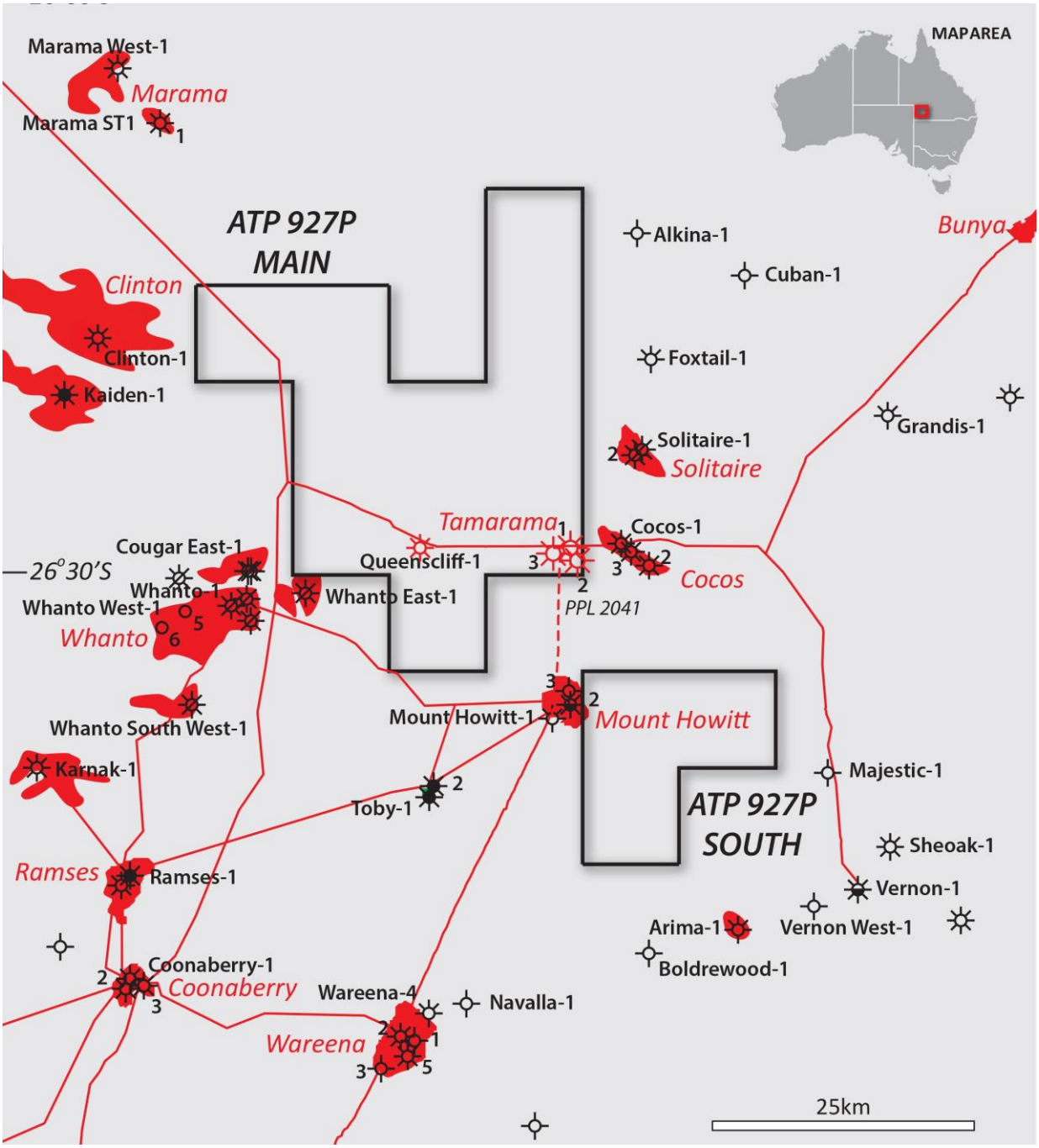
The independent review of the Prospective Gas Resources was completed by MHA Petroleum Consultants (refer ASX announcement: 12 December 2019) and confirmed that Project Venus contains high quality and very prospective acreage covering 154km2, which is within the main Walloon Coal Seam Gas Fairway and close to gas infrastructure.

Given Project Venus is located immediately adjacent to gas infrastructure, work undertaken through the JV aims to expedite the progressive conversion of gas resources to gas reserves with the goal being to fast-track development of the project and therefore potentially deliver early cash flows.

- ✓ Walloon CSG Fairway is prolific gas producing region with over 10,000 wells drilled – see green dots on Map




**Windorah Gas Project:**
The Company continues to review development options for the Windorah Gas Project. We are also likely to apply for a PCA or retention licence for large parts of the Project. We remain committed to securing funding for this project and are exploring all available options. The current map outline is shown on the next page:




**Corporate**:

As at 31 March 2021, Pure Hydrogen had $11.255 million cash at bank and is very well-funded to execute its current works program. During the Quarter the Company raised $9.6 Million through a placement at 29 cents and the exercising of options. Cash outflows for the Windorah Gas Project and the Project Venus for the quarter were $683.000.

**Effects of COVID-19 on operations:**

Pure Hydrogen has continued to implement its response to the COVID-19 pandemic to ensure that the Company is well positioned in the current environment and as any future complications arise from the spread of the virus. This response will leave Pure Hydrogen well place once markets and business conditions stabilise. The Company's first priority is to ensure the safety of its staff and contractors. Management is pleased to advise that at this time no employee or contractor has been diagnosed with COVID-19.

**Tenement Schedule at End of Quarter:**

| Permit | RLE ownership % | Location |
|---|---|---|
| ATP927P | 100 | Cooper Basin, South West Queensland |
| ATP2051P | 100 | Surat Basin, Southern Queensland |
| Serowe CSG | 51[1] | Botswana |
| ATP1194PA | 100 | Cooper Basin, South West Queensland |

1. Subject to completion of a farm out

**Contingent Resources**:

The estimates of contingent resources are based gas wells located within the exploration permit ATP927P, Windorah Trough, Cooper Basin. Discovery status is based on definition under the SPE/WPC Petroleum Resource Management System (PRMS) 2007 and 2018. A summary of the gross estimates of contingent gas resources for ATP927P is provided below:

| Resources Category | Bcf (Billion Cubic Feet) |
|---|---|
| 1C | 118 |
| 2C | 330 |
| 3C | 770 |

Contingent Resources is based on the summation of 2 reports for the Windorah Gas Project. One estimate prepared by DeGolyer and MacNaughton, a leading international petroleum industry consulting firm in June 2015 in respect of the Queenscliff Area and one estimate prepared by Aeon Petroleum Consultants in respect of the Tamarama area completed in August 2019.
Bcf (Billions Cubic Feet) is equal to 1,000 MMcf

*The geological information in this report relating to geological information and resources is based on information compiled by Mr Lan Nguyen, who is a Member of Petroleum Exploration Society of Australia and the Society of the Petroleum Engineers and has sufficient experience to qualify as a Competent Person. Mr Nguyen consents to the inclusion of the matters based on his information in the form and context in which they appear. The information related to the results of drilled petroleum wells has been sourced from the publicly available well completion reports.*

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Or visit our website at www.purehydrogencom.au
On our website you can register for email alerts.

Pure Hydrogen Corporation Limited *+Rule 5.5*

# Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

**Name of entity**

| Pure Hydrogen Corporation Limited | |
|---|---|
| **ARBN** | **Quarter ended ("current quarter")** |
| 160 885 343 | 31 March 2021 |

| **Consolidated statement of cash flows** | | **Current quarter $A'000** | **Year to date (9 months) $A'000** |
|---|---|---|---|
| **1.** | **Cash flows from operating activities** | | |
| 1.1 | Receipts from customers | - | - |
| 1.2 | Payments for | | |
| | (a) exploration & evaluation | - | - |
| | (b) development | - | - |
| | (c) production | - | - |
| | (d) staff costs | (124) | (273) |
| | (e) administration and corporate costs | (83) | (202) |
| 1.3 | Dividends received (see note 3) | - | - |
| 1.4 | Interest received | 1 | 2 |
| 1.5 | Interest and other costs of finance paid | - | - |
| 1.6 | Income taxes paid | - | - |
| 1.7 | Research and development refunds | - | - |
| 1.8 | Government funds received | 15 | 67 |
| **1.9** | **Net cash from / (used in) operating activities** | **(191)** | **(406)** |

| Consolidated statement of cash flows | | Current quarter $A'000 | Year to date (9 months) $A'000 |
|---|---|---|---|
| **2.** | **Cash flows from investing activities** | | |
| 2.1 | Payments to acquire: | | |
| | (a) property, plant and equipment | (2) | (2) |
| | (b) tenements (see item 10) | - | - |
| | (c) investments | - | - |
| | (d) other exploration assets | (683) | (920) |
| 2.2 | Proceeds from the disposal of: | - | - |
| | (a) property, plant and equipment | | |
| | (b) tenements (see item 10) | - | - |
| | (c) investments | - | - |
| | (d) other non-current assets | - | - |
| 2.3 | Cash flows from loans to other entities | - | - |
| 2.4 | Dividends received (see note 3) | - | - |
| 2.5 | Other (provide details if material) | - | - |
| 2.6 | Net cash from / (used in) investing activities | (685) | (922) |

| | | | |
|---|---|---|---|
| **3.** | **Cash flows from financing activities** | | |
| 3.1 | Proceeds from issues of shares | 9,606 | 11,056 |
| 3.2 | Proceeds from issue of convertible notes | - | - |
| 3.3 | Proceeds from exercise of share options | - | - |
| 3.4 | Transaction costs related to issues of shares, convertible notes or options | (446) | (520) |
| 3.5 | Proceeds from borrowings | - | 300 |
| 3.6 | Repayment of borrowings | (300) | (800) |
| 3.7 | Transaction costs related to loans and borrowings | - | (1) |
| 3.8 | Dividends paid | - | - |
| 3.9 | Other (deposit for option exercises & cash received due to merge) | 907 | 932 |
| **3.10** | **Net cash from / (used in) financing activities** | **9,767** | **10,967** |

| | | | |
|---|---|---|---|
| **4.** | **Net increase / (decrease) in cash and cash equivalents for the period** | | |
| 4.1 | Cash and cash equivalents at beginning of period | 2,364 | 1,616 |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above) | (191) | (406) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above) | (685) | (922) |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above) | 9,767 | 10,967 |
| 4.5 | Effect of movement in exchange rates on cash held | - | - |
| **4.6** | **Cash and cash equivalents at end of period** | **11,255** | **11,255** |

| **5.** | **Reconciliation of cash and cash equivalents** at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | **Current quarter $A'000** | **Previous quarter $A'000** |
|---|---|---|---|
| 5.1 | Bank balances | 10,513 | 1,478 |
| 5.2 | Call deposits | 742 | 886 |
| 5.3 | Bank overdrafts | - | - |
| 5.4 | Other (provide details) | - | - |
| **5.5** | **Cash and cash equivalents at end of quarter (should equal item 4.6 above)** | **11,255** | **2,364** |

| 6. | Payments to related parties of the entity and their associates | Current quarter $A'000 |
|---|---|---|
| 6.1 | Aggregate amount of payments to related parties and their associates included in item 1 | 40 |
| 6.2 | Aggregate amount of payment to related parties and their associates included in item 2 | - |

Note: If any amounts are shown in items 6.1 & 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

Payment of Director fees/Salaries and consultant fees

| 7. | Financing facilities available<br>*Note: the term "facility' includes all forms of financing arrangements available to the entity.*<br>*Add notes as necessary for an understanding of the sources of finance available to the entity.* | Total facility amount at quarter end $A'000 | Amount drawn at quarter end $A'000 |
|---|---|---|---|
| 7.1 | Loan facilities | - | - |
| 7.2 | Credit standby arrangements | - | - |
| 7.3 | Other (please specify) | - | - |
| **7.4** | **Total financing facilities** | **-** | **-** |

| | | |
|---|---|---|
| 7.5 | **Unused financing facilities available at quarter end** | - |
| 7.6 | Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well. | |

| 8. | Estimated cash available for future operating activities | $A'000 |
|---|---|---|
| 8.1 | Net cash from / (used in) operating activities | (327) |
| 8.2 | Capitalised exploration & evaluation | (295) |
| 8.3 | Total relevant outgoings (Item 8.1 + Item 8.2) | (622) |
| 8.4 | Cash and cash equivalents at quarter end (Item 4.6) | 11,255 |
| 8.5 | Unused finance facilities available at quarter end (Item 7.5) | - |
| 8.6 | Total available funding (Item 8.4 + Item 8.5) | 11,255 |
| **8.7** | **Estimated quarters of funding available (Item 8.6 divided by Item 8.3)** | **18.09** |

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

| Answer: |
|---|

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

| Answer: |
|---|

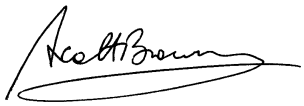
3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

| Answer: |
|---|

## Compliance statement

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Sign here:  Date: 30/04/2021

Director/~~Company secretary)~~

Print name: Scott Brown

**Notes**

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".