



23 May 2022

ASX Limited  
Level 10  
20 Bridge Street  
Sydney, NSW 2000

### **ASX Market Release – Proposed Hydrogen Investment**

BPH Energy Ltd (**BPH** or **Company**) (ASX: BPH) is pleased to advise the market that it, subject to shareholder approval, intends to pursue an investment in a hydrogen technology company, Clean Hydrogen Technologies Corporation (**Clean Carbon**).

The general meeting of the Company is scheduled to be held at 15 View Street, North Perth, WA 6006 on 21<sup>st</sup> June 2022, at 10 am (WST)(**Meeting**).

#### **Opportunity**

The Company has been assessing new investment opportunities, where there are ever increasing obligations to provide energy solutions with a responsible management and protection against carbon emissions. The transitioning from hydrocarbons such as coal and oil to hydrogen, produced with no emissions is now presenting real economies and growth globally. Although natural gas also presents continued growth and will play a role for many years to come, it too will need to become a source of energy with no CO2 emissions.

#### **Clean Carbon**

At a proof-of-concept scale, Clean Carbon has developed and tested its processing capabilities which have successfully produced hydrogen, with no CO2 emissions achieving on average a 92% cracking efficiency. Clean Carbon's development activities have shown that, by processing (not burning) methane using their patented catalyst and a modified fluidised bed reactor, producing hydrogen with no CO2 emissions. This is referred to as turquoise hydrogen. In addition, Clean Carbon also produces a second product, used for battery manufacturing, called conductive carbon.

#### **Overview of Clean Carbon and its Solution**

Clean Carbon uses methane as its current feedstock and in the future plans to consume natural gas. It does not burn the methane, it processes it, using its own patented catalyst and a bespoke designed fluidised bed reactor. The process it uses is called pyrolysis which is not new and has been used by the oil industry for many years. What is new is Clean Carbon Technologies success in the efficiency of its cracking the methane into turquoise hydrogen with non-CO2

emissions and the quality of the carbon black produced being majority conductive carbon with some carbon nano tubes.

This process requires similar energy needs as SMR and at scale can be produced at a similar price, in their view. Also, it requires no water as part of its process to produce hydrogen.

Importantly, Clean Carbon solution is being built with flexibility to work downstream at heavy transport fuelling hubs currently in use in the USA, mid-stream at steel plants replacing coking coal and upstream where the natural gas is processed into hydrogen, a much higher energy source which can be piped for all uses including the production of electricity. As such the technology being developed by Clean Carbon Technologies solution requires very little change and impact to existing infrastructures and supply chains unlike other solutions.

Although Clean Carbon consider that electrolysis and other solutions will have their role in the future of hydrogen, they believe the majority of hydrogen will require the advancement of other technologies that can be more ubiquitous, cheaper to produce, use less electricity and operate within existing supply chains.

#### Term Sheet

The Company and Advent (together, the **Purchaser**) have entered into a binding term sheet (**Term Sheet**) with Clean Carbon, pursuant to which and subject to shareholder approval, the Purchasers have agreed to subscribe for fully paid shares in Clean Carbon (**Subscription Shares**), representing a total of 10% of the total issued share capital of clean Carbon after the issue of the Subscription Shares (**Subscription Shares Tranche 1**) (**Proposed Transaction**).

#### Term Sheet

The material terms of the Term Sheet are as follows:

- (a) **(Deposit):** on 26<sup>th</sup> November 2021 the Purchaser paid a non-refundable deposit of AU\$25,000 (\$20,000 was paid by BPH and \$5,000 by Advent) to the Vendor (which will be offset against any subscription amount).
  - (b) **(Consideration):** in consideration for the issue of the Subscription Shares Tranche 1:
    - (i) subject to Shareholder approval (the subject of Resolution 1), the Purchaser shall pay to the Vendor US\$1,000,000 (less the Deposit and any Outstanding Amounts) (**Cash Consideration**), specifically:
      - (A) BPH shall pay to the Vendor (or its nominee) US\$800,000; and
      - (B) Advent to pay to the Vendor (or its nominee) US\$200,000,
- upon which, 8% of the Subscription Shares Tranche 1 shall be issued to BPH and the remaining 2% issued to Advent.

The Cash Consideration will be reduced and adjusted to reflect the amounts outstanding relating to:

- (A) any outstanding loan or convertible notes provided by BPH to the Vendor; or
  - (B) the Advent Loan,
- (together, the **Outstanding Amounts**).

To date, the Company does not intend to loan or issue any convertible notes to Clean Carbon.

(c) **(Conditions):** The Proposed Transaction is conditional upon:

- (i) the shareholders of the Company's approving the Proposed Transaction pursuant to Listing Rule 11.1.2 (the subject of Resolution 1);
- (ii) completion of satisfactory due diligence by the Purchaser of the Vendors business and operations to the absolute satisfaction of the Purchaser;
- (iii) execution of key staff employment agreements; and
- (iv) The receipt and acceptance of tax and structuring advice by the Vendor to its reasonable satisfaction,

(together, the Conditions),

The Company confirms that it has completed and is satisfied with its internal legal and technical due diligence review of the Vendor's business and operations, comprising of the Vendors:

- (i) legal investigations relating to its corporate structure, current and historical agreements and reviews of contract of employment agreements for key staff;
- (ii) intellectual property and associated patents, the Technology and its potential capabilities; and
- (iii) financial plans, budget and funding strategies.

(d) **(First Right of Refusal):** where the Vendor (at its sole and absolute discretion) proposes to seek additional funding for the development and operations of the Technology, on or before 31 December 2022 (**Additional Funding**), it must first offer the right to subscribe for additional Subscription Shares representing an additional 10% (**Subscription Shares Tranche 2**) to the Purchaser and on the same terms and conditions as the Subscription Shares Tranche 1 (**Right**).

In the event that the Vendor secures additional investments in excess of \$US3,000,000 (on or before 31 December 2022), the Right is relinquished.

Subject to the above, should the Purchaser exercise the Right, it must do so within 1 month of the Vendors request for the Additional Funding. The consideration payable, being an aggregate of US\$1,000,000, comprising of \$US800,000 by BPH and US\$200,000 by Advent (**Additional Cash Consideration**).

In consideration for the Additional Cash Consideration:

- (i) BPH shall acquire an additional 1,510 Clean Carbon Shares, equating to a total 16% interest in Clean Carbon; and
- (ii) Advent shall hold an additional 377 Clean Carbon Shares, equating to a total 4% interest in Clean Carbon,

following which Clean Carbon's capital structure shall comprise of 16,960 Clean Carbon Shares (based on the assumption that Clean Carbon has not issued any additional Clean Carbon Shares prior to the Right being exercised).

Should Advent elect to not invest its proportion of the Additional Funding, BPH has the right to subscribe for Advent's portion (US\$200,000) of the Subscription Shares Tranche 2.

- (e) (**Purpose**): the parties acknowledge and agree that the Cash Consideration and Additional Cash Consideration (if applicable), shall be used by the Vendor to design, build, produce and test a reactor that can produce a minimum of 3.2 and as high as 15kgs per hour of hydrogen per hour and to submit at least 2 new patents in an agreed geography, relevant to the production of hydrogen from proprietary technology.
- (f) (**Board**): Anthony Huston to be appointed as a director to the Board of the Vendor.

The Term Sheet otherwise contained customary terms.

#### Advent

In addition, Advent has also recently announced that through its subsidiary, Aotearoa Offshore Limited (**AOLNZ**), it has the right to acquire a 30% participating interest in Petroleum Exploration Permits (PEP) 57075, 60092 and 60093 covering an area of 5,180 km2 in the Taranaki Basin from OMV New Zealand Limited (**OMV NZ**).

The three permits are governed by individual (but identical) Joint Venture Operating Agreements (**JVOA's**) and, as such, each intersects in the same fashion with the Farm Out Agreement (**FOA**). The FOA covers all three permits. Mitsui E&P withdrew from the PEP 60092 and PEP 60093 JVOA's in April 2021 with OMV NZ being assigned their 30% participating interest. Following this assignment, the joint venture for PEP 57075, 60092 and 60093 consisted of OMV NZ with a 70% participating interest and Sapura OMV Upstream (NZ) SDN.BHD having a 30% participating interest (**Joint Venture**).

The Company presently has a direct shareholding of 36.1% in Advent. Further details on this transaction are detailed in the ASX release of 4<sup>th</sup> April 2022.

The board is pleased to provide to you the attached Notice to approve the Hydrogen Technology investment.

Authorised for release by

A handwritten signature in black ink, appearing to read 'D. Breeze'.

David Breeze  
Executive Director

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