

# December 2023 Quarterly Report

# HIGHLIGHTS

- US\$1.22m purchase order from a North American dealership for delivery of two hydrogen fuel cell electric vehicles (HFCEV), to be manufactured by Pure Hydrogen's majority-owned subsidiary, Hdrive.
- Advancement of Brisbane-based turquoise hydrogen commercial demonstration plant operated by the Turquoise Group, in which Pure Hydrogen owns a 40% stake, with delivery of key equipment from international suppliers
- Strategic shift to a capex-light hydrogen development strategy focused on a partnership approach for vehicle production and delivery, supported by hydrogen 'microhubs' at targeted infrastructure sites
- Extensive testing carried out for two flagship hydrogen vehicles; a waste removal truck for JJ's Waste & Recycling, and a prime mover for food & beverage conglomerate PepsiCo, ahead of pending regulatory approval in accordance with ADR (Australian Design Rules)
- Appointment of The Honourable Adam Giles, former Chief Minister of The Northern Territory, as Non-Executive Independent Chairman of the Board; and Mr Craig Beatton (CA) as group Financial Controller.
- 2 Mini EV Buses ordered in September 2023 on track for delivery shortly.
- Post balance date, final trials for PepsiCo and JJ's Waste & Recycling advanced through final stages of ADR testing and are scheduled for completion early in 2024.
- Pure Hydrogen remains well-funded with cash of \$8.564 million as at 31 December 2023, with an ongoing focus on its capital investment strategy.

# Pure Hydrogen Corporation Limited (ASX: PH2)

Pure Hydrogen is a clean energy focused company seeking to become the leader in the development of Hydrogen and Energy Projects through the use of cutting-edge technology. It plans to supply hydrogen fuel to Australian customers and regional Asia Pacific markets, through the production and wholesale purchase of Green, Emerald and Turquoise Hydrogen.

Strategically, Pure Hydrogen will also prioritise incubation for early-stage companies or projects within the clean energy sector, with the aim of realising profits from those investments.

Concurrently, the Company is developing natural gas projects directly in Australia and Botswana.

Pure Hydrogen has Independently Certified Contingent Methane Gas Resources in its three gas projects, net to the company of 326 BCF of 1C, 622 BCF of 2C and 1,130 BCF of 3C.

## Directors

Hon Adam Giles - Non-Exec Chairman Scott Brown – Managing Director Lan Nguyen – Non-Executive Director Ron Prefontaine – Non-Executive Director

#### **Corporate Office**

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Pure Hydrogen Corporation Limited (ASX: PH2 and "Pure Hydrogen" or "The Company") is pleased to provide this Activities Report to shareholders for the quarter ended 31 December 2023 (Q2 FY2024). The Company made key advancements on its stated strategy to scale an integrated hydrogen business with the manufacture of hydrogen fuel cell vehicles (HFCV) for a diversified client base, supported by innovative solutions for hydrogen production.

December quarter operations were highlighted by purchase orders for HFCV vehicles from a new North American client, adding to the global rollout of Pure Hydrogen's manufacturing and distribution strategy for hydrogen vehicles. Through its subsidiaries and investee companies, Pure Hydrogen now serves key addressable markets across Australia, the US and Europe via a strategic partnership approach that has consolidated its first-mover advantage in those jurisdictions. The Company also made key advancements with its targeted approach to effective hydrogen production solutions, underpinned by prudent capital management. This report provides a comprehensive overview of our financial position and operational highlights during the quarter.

#### Pure Hydrogen overview

Pure Hydrogen is a clean energy focused company developing a portfolio of hydrogen and energy projects using cutting edge technologies. Its objective is to become a leading supplier of Green, Emerald and Turquoise hydrogen fuel and hydrogen powered commercial vehicles and other infrastructure such as generators to customers in Australia and Asia-Pacific.

Concurrently, Pure Hydrogen is developing natural gas projects directly in Australia and Botswana, and through strategic investment holds an interest of approximately 16.49% equity in a Botswana focussed Botala Energy (ASX:BTE).

During the quarter and up to the date of this report, Pure Hydrogen has the following updates and commenced a number of initiatives including:

## Entry to North American hydrogen market: Purchase order for hydrogen fuel cell electric vehicles (HFCEV)

As part of the ongoing development of its HFCEV manufacturing capacity and the distribution of its vehicle fleet, Pure Hydrogen's majority owned subsidiary, Hdrive International (Hdrive) confirmed its entry into the North American market during the quarter with a two-vehicle purchase order from a California-based dealership.

The deal, worth approximately US\$1.22 million, will see Hdrive supply a 6x4 50T prime mover and 54-seater coach (subject to conditions precedent) to hydrogen-specialist North American dealership, Nutcher Hydrogen.

The order is the first of its type for Hdrive in the North American market and represents a significant expansion opportunity. As a first-mover in the North American HFCEV industry, Nutcher Hydrogen's strategy is based on the hydrogen use-case for heavy commercial vehicles, where the weight requirements of electric battery vehicles become a hindrance to performance.

The vehicles manufactured by Hdrive will be custom-designed and made in accordance with United States Federal Motor Vehicle Safety Standards – the national regulations for design, construction, performance and safety.

The vehicles are slated for delivery to Nutcher Hydrogen following the completion of compliance testing. Due to importation compliance measures, the purchase order is subject to finalisation of the vehicle specifications to US-standards, homologation timeframes and acceptance at the final inspection.



Following delivery and regulatory clearance, Nutcher will use the two HFCEV's as demonstration vehicles to complement the ongoing development of its hydrogen refueling infrastructure.



Image of the hydrogen-powered 'Taurus' truck which has been ordered by California-based Nutcher Hydrogen

The Company, majority owned Hdrive International received a further order of 2 Mini Buses (see photo below) in Sept 2023 (see ASX announcement 12 September 2023) and is on track to delivery these Buses shortly. The Buses are currently undergoing testing and will then have the signage of the Operator added before they go into service.





Image: Hdrive Mini Bus which is being tested before delivery to Sapphire Coast Buslines

## Turquoise Group enters construction phase for its commercial demonstration plant

During the quarter, Pure Hydrogen confirmed that the Turquoise Group (TG) had taken delivery of key equipment for the construction of its commercial demonstration plant (CDP), targeting conversion of methane gas into hydrogen gas as a clean fuel and synthetic graphene products. Pure Hydrogen holds a strategic 40% stake in the TG, with exclusive long-term acquisition rights for hydrogen produced by TG in Australia.

Located in Brisbane, Queensland, the CDP is being developed by TG Group in collaboration with Plenesys, who has designed the HyPlasma technology process – a plasma-based technique used to convert methane gas into clean hydrogen and solid carbon products

The international delivery of plasma-based methane pyrolysis equipment manufactured by Plenesys marks a major step forward in TG's stated plan to develop and construct a commercial demonstration plant at its Brisbane facility and establish its position as a first mover in the emerging field of turquoise hydrogen production.

Since taking receipt of the pyrolysis equipment, the TG has advanced construction and commissioning of the project, which is targeted for completion in Q2 CY2024. The construction phase will be followed by a six-month intensive test program with the aim of optimising hydrogen production and advancing graphene production capabilities

The TG's hydrogen production facility in Brisbane is in line with Pure Hydrogen's stated strategy to develop an interconnected hydrogen ecosystem supplying net-zero hydrogen fuel sources at scale. To-date, the



Company has prioritised a partnership approach with companies, such as TG and Plenesys, who have the technology and expertise to develop commercially viable solutions which are complemented by Pure Hydrogen's advantage in selling and distribution.



Image: State-of-the-art pyrolysis technology from Plenesys arriving at Turquoise Group's facility in Brisbane

## Strategic shift to a Capex-light hydrogen production development strategy

During the quarter, Pure Hydrogen also announced a strategic pivot with respect to its development strategy to build out a hydrogen infrastructure network to complement its first-mover advantage in vehicle manufacturing.

As part of the shift, the Company announced it will refocus its development efforts on capex-light hydrogen 'micro-hubs' that will have the capacity to effectively supply its growing fleet of vehicles with hydrogen in proximity to where the fuel is required. This marks a shift away from its previous strategy to deploy significant capital investment to build large-scale production capacity for emerald and turquoise hydrogen.

As result, the Company took the prudent decision not to proceed with the option to acquire the 21-hectare Bracalba site in South East Queensland, being the 'Moreton Bay Hydrogen Hub' (*refer ASX announcements: 10 November 2022 and 8 February 2023*).

The decision by Pure Hydrogen not to proceed with the Moreton Bay project taken in response to ongoing delays in the approval process. Strategically, it also removes a material near-term capex burden which allows Pure Hydrogen to maintain its strong cash position and deploy capital to projects with a clear near-term value-add, including HFC vehicle supply opportunities and the conversion of vehicle trials into commercial agreements.



Along with its partners and investee companies, including the Turquoise Group, Pure Hydrogen remains committed to advancing emerald and turquoise hydrogen production and will advance its efforts in this regard in a manner that is aligned with its 'capex-light' commitment.

#### Development update - Hydrogen vehicle fleet

In connection with its multi-channel development strategy for hydrogen vehicles, Pure Hydrogen provided an update on advanced testing for its hydrogen powered waste removal truck for one of Australia's leading waste management businesses, JJ's Waste & Recycling.

#### Appointment of new Chairman and Financial Controller

During the quarter, Pure Hydrogen announced the appointment of The Honourable Adam Giles as Non-Executive Independent Chairman of the Board. Mr Giles initially joined the Pure Hydrogen Board in May as a Non-Executive Director. His appointment as Non-Executive Chairman formed part of an orderly transition in which Mr Ron Prefontaine elected to step down from the Chairman role and remain with the Company as a Non-Executive Director.

As the former Chief Minister of The Northern Territory, Mr Giles brings a wealth of experience with major infrastructure projects and an intricate knowledge of the regulatory approvals process. With a long career managing major portfolios in energy, resources and infrastructure, Mr Giles is well-placed to guide the strategic direction of Pure Hydrogen's development pathway at the forefront of Australia's hydrogen industry.

Also during the quarter, Pure Hydrogen announced the appointment of Mr Craig Beatton to the position of Financial Controller, effective from 15 January 2024. Craig is a Chartered Accountant with over 25 years' experience across a diverse range of senior commercial and financial roles. Craig has worked for several listed companies in the financial, legal and data centre sectors. He was Chief Financial Officer for Shaw and Partners Limited.

#### Activities post quarter-end

Following the end of the December quarter, Pure Hydrogen continued to advance trials with commercial partners across its hydrogen vehicle development suite. Trials are currently ongoing with the Taurus truck, Australia's first Hydrogen Fuel Cell Prime Mover, which has been developed in conjunction with PepsiCo Australia and Hdrive (*refer ASX Announcement 18 April 2023*).

Concurrently, the Company is also in the final stages of testing for the hydrogen fuel cell (HFC) powered waste removal truck commissioned by JJ's Waste and Recycling (*refer ASX Announcement 20 October 2023*). Both vehicles are nearing completion of their respective performance and testing program, which are being carried out in strict accordance with Australian Design Rules (ADR) – the national standards for road vehicle safety, anti-theft and emissions.

#### **Pure Hydrogen Gas Projects**

In addition to its hydrogen business, Pure Hydrogen has three significant gas-based energy projects which represent significant value for shareholders. Pure Hydrogen has a net total 12.4 TCF of Prospective Gas Resources, 1,038 BCF of 3C and 548 BCF of 2C Contingent Gas Resources across its asset suite in Queensland and Botswana.



#### **Serowe Gas Project**

During the quarter, ASX-listed Botala Energy Limited (ASX: BTE) provided an update on flow testing at its Serowe-3 gas wells in Botswana. Pure Hydrogen has a 30% interest in the Serowe Gas Project together with a 16.49% interest in Botala Energy Limited (*refer ASX Announcement 17 January 2024*), the operator and owner of 70% interest in the Serowe Project.

During the quarter, Botala announced that the second pilot well of Project Pitse had been completed ahead of time and on budget. The Serowe-3.3 well was drilled to a Target Depth of 440m pursuing the highly prospective upper two coal seams with 24m of net coal in the Serowe and Upper Morupule seams.

Coals were first encountered at 342m, which is 21m higher than Serowe-3.1 located 700m to the NNE and Serowe-3.2 located 95m to the NE (see Figure 1). The height difference was determined to be due to a localised fault identified during geophysical surveys prior to drilling.

Project Pitse is Botala's first Commercial Pilot Project within the Serowe Coal Bed Methane gas project of 317bcf of independently certified 2C contingent resource. Methane gas was first flared on 4 September 2023, demonstrating the presence of methane gas brought to the surface from simple vertical wells.

Following completion of the 3.3 well, the drill rig was then relocated to Serowe-3.5 site. During the quarter, the Serowe-3.5 was drilled to a Target Depth of 476m, and intercepted 25m of net coal in the two highly prospective upper coal seams of the Serowe (13m) and Upper Morupule (12m) Formations and a further 11m of net coal in the Lower Morupule Formation.

Coals were first encountered at 344m, which is 17m higher than in Serowe-3.1 which is located 350m to the North (Figure 1). The height difference is due to a localised fault identified during geophysical surveys prior to drilling. Serowe-3.5 is the central well of the five-well system and should become Project Pitse's first production well.

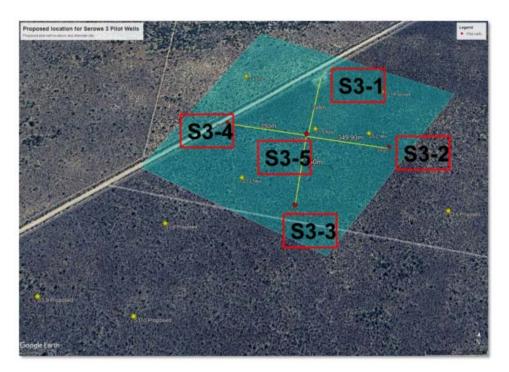


Figure 1 - Serowe-3 Pilot Well Locations.



As at quarter-end, Botala was finalising drilling of the pilot cluster of 5 wells (Project Pitse) to accurately observe and measure gas flows and confirm commercial viability, along with a concept study for Project Pitse to progress to revenue generating gas production. If gas flows confirm economic viability, Botala is also undertaking planning works for the establishment of a 20MW hybrid gas/solar plant, to generate electricity for the Botswana power grid.

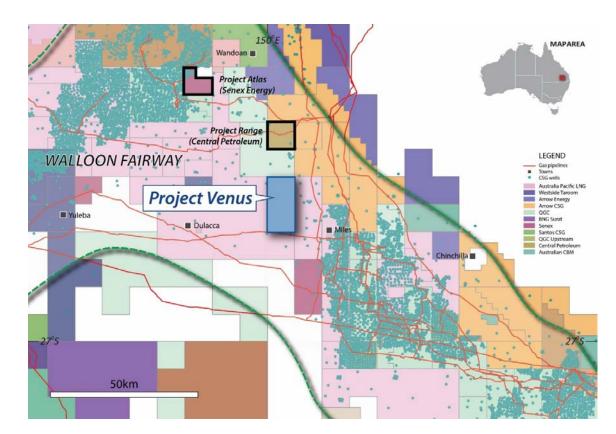
#### Windorah Gas Project

During the quarter, the Company lodged with the Queensland Government a renewal of the exploration 927 and a PCA application in respect of Windorah Project which covered a significant proportion of the current ATP927 acreage. The Company has spent significant amount defining a contingent gas resource on the Project of 330 Bcf 2C Continent Gas resource.

#### Project Venus Surat Basin Walloon CSG:

Project Venus, permit ATP2051 is 100% owned by Pure Hydrogen. Project Venus contains high quality and very prospective acreage covering 154km<sup>2</sup> 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.

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 130PJ of 2C Contingent Gas Resources and 536 PJ of Prospective Gas Resources.



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



Project Venus	<b>Contingent Resources PJ</b>		
	1C	2C	3C
Walloon Subgroup			
Upper Junandah Coal Measures	87.7	130.3	157.9

### Tenement schedule at end of quarter:

Permit	PH2 ownership %	Location
ATP927P	100	Cooper Basin, South West Queensland
ATP2051P	100	Surat Basin, Southern Queensland
Serowe CSG	30 <sup>1</sup>	Botswana
ATP1194P	100 <sup>2</sup>	Cooper Basin, South West Queensland
1. Subject to completion of farm out		

2. Subject to agreement to sell the permit

#### Corporate

As at 31 December 2023, Pure Hydrogen held \$8.564 million cash at bank and no debt. During the quarter the Company net cash flow for investing activities was \$0.2 Million and its operating cash outflow was \$601,000, which includes \$118,000 on directors' fees and related party consulting remuneration. The company had 356,249,721 shares outstanding and over 12,000 shareholders on its register. The Company had 8,650,000 unlisted options as at the end of the reporting period.

#### For further information, please contact:

#### Mr Scott Brown

Managing Director

Telephone +61 (0) 2 9955 4008 or <u>admin@purehydrogen.com.au</u> Or visit our website at <u>www.purehydrogen.com.au</u> On our website you can register for email alerts.

# Appendix 5B

# Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity			
Pure Hydrogen Corporation Limited			
ABN	Quarter ended ("current quarter")		
27 160 885 343	31 December 2023		

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	202	279
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	(1)	(4)
	(d) staff costs	(530)	(1,113)
	(e) administration and corporate costs	(310)	(714)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	72	209
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and R & D tax incentives	-	-
1.8	Other – costs in relation to R & D tax incentive	(33)	(89)
1.9	Net cash from / (used in) operating activities	(601)	(1,433)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(242)	(998)

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
	(d) exploration & evaluation	(39)	(124)
	(e) investments	(121)	(1,497)
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	200	200
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (deposit received for sales of a tenement)	-	-
2.6	Net cash from / (used in) investing activities	(202)	(2,419)
3.	Cash flows from financing activities		
<b>3</b> .1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-

3.5

3.6

3.7

3.8

3.9

3.10

Proceeds from borrowings

Repayment of borrowings

borrowings

activities

Dividends paid

Transaction costs related to loans and

Other (provide details if material)

Net cash from / (used in) financing

-

-

-

-

-

Соі	nsolidated statement of cash flows	Current quarter \$A'000	
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	9,577	
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(601)	
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(202)	
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	
4.5	Effect of movement in exchange rates on cash held	(211)	
4.6	Cash and cash equivalents at end of period	8,564	
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	
5.1	Bank balances	1,869	
5.2	Call deposits	6,695	
5.3	Bank overdrafts	-	
54	Other (provide details)	-	

5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	8,564	9,577

Year to date

(6 months) \$A'000

12,626

(1,433)

(2,419)

-

(211)

8,564

5,279 4,298 -

**Previous quarter** \$A'000

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	118
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includ ation for, such payments.	e a description of, and an

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. 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 qu	arter 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 (item 1.9)	(601)			
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(39)			
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(640)			
8.4	Cash and cash equivalents at quarter end (item 4.6)	8,564			
8.5	Unused finance facilities available at quarter end (item 7.5)	-			
8.6	Total available funding (item 8.4 + item 8.5)	8,564			
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	13.38			
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.				
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:				
	8.8.1 Does the entity expect that it will continue to have the cur cash flows for the time being and, if not, why not?	rent level of net operating			
	Answer:				
	8.8.2 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:				
	8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?				
	Answer:				
	Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3	a bove must be answered			

# **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: 31/01/2024 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.
- 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.
- 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."