

Form 603
Corporations Act 2001
Section 671B

Notice of initial substantial holder

To Company Name/Scheme Rio Tinto Limited
ACN/ARSN 004 458 404

1. Details of substantial holder (1)

Name Vanguard Group (The Vanguard Group, Inc. and its controlled entities including those listed in Annexure A)
ACN/ARSN (if applicable) N/A
The holder became a substantial holder on 11 November 2021

2. Details of voting power

The total number of votes attached to all the voting shares in the company or voting interests in the scheme that the substantial holder or an associate (2) had a relevant interest (3) in on the date the substantial holder became a substantial holder are as follows:

Class of securities (4)	Number of securities	Person's votes (5)	Voting power (6)
Ordinary	18,565,990	18,565,990	5.001%

3. Details of relevant interests

The nature of the relevant interest the substantial holder or an associate had in the following voting securities on the date the substantial holder became a substantial holder are as follows:

Holder of relevant interest	Nature of relevant interest (7)	Class and number of securities
Vanguard Group	Vanguard Group is the manager of various Mutual funds and accounts and in that capacity has the power to dispose of the shares. The other members of Vanguard Group have a relevant interest under section 608(3) of the Corporations Act.	Ordinary – 18,565,990

4. Details of present registered holders

The persons registered as holders of the securities referred to in paragraph 3 above are as follows:

Holder of relevant interest	Registered holder of securities	Person entitled to be registered as holder (8)	Class and number of securities
Vanguard Group	Brown Brothers Harriman	Various funds and other accounts of Vanguard Group	Ordinary – 1,130,199
Vanguard Group	BNY Mellon	Various funds and other accounts of Vanguard Group	Ordinary – 1,188,174
Vanguard Group	Citibank	Various funds and other accounts of Vanguard Group	Ordinary – 7,915
Vanguard Group	JP Morgan Chase Bank, N.A.	Various funds and other accounts of Vanguard Group	Ordinary – 13,024,504
Vanguard Group	State Street Bank and Trust Company	Various funds and other accounts of Vanguard Group	Ordinary – 2,867,699
Vanguard Group	Various others	Various funds and other accounts of Vanguard Group	Ordinary – 347,499

5. Consideration

The consideration paid for each relevant interest referred to in paragraph 3 above, and acquired in the four months prior to the day that the substantial holder became a substantial holder is as follows:

Holder of relevant interest	Date of acquisition	Consideration (9)	Class and number of securities
See Annexure A			

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6. Associates

The reasons the persons named in paragraph 3 above are associates of the substantial holder are as follows:

Name and ACN/ARSN (if applicable)	Nature of association
N/A	N/A

7. Addresses

The addresses of persons named in this form are as follows:

Name	Address
Vanguard Group	P.O. Box 2600, V26 Valley Forge, PA 19482 USA

print name Shawn Acker capacity Compliance Manager

sign here  date 15 November 2021

DIRECTIONS

- (1) If there are a number of substantial holders with similar or related interests (eg. a corporation and its related corporations, or the manager and trustee of an equity trust), the names could be included in an annexure to the form. If the relevant interests of a group of persons are essentially similar, they may be referred to throughout the form as a specifically named group if the membership of each group, with the names and addresses of members is clearly set out in paragraph 7 of the form.
- (2) See the definition of "associate" in section 9 of the Corporations Act 2001.
- (3) See the definition of "relevant interest" in sections 608 and 671B(7) of the Corporations Act 2001.
- (4) The voting shares of a company constitute one class unless divided into separate classes.
- (5) The total number of votes attached to all the voting shares in the company or voting interests in the scheme (if any) that the person or an Associate has a relevant interest in.
- (6) The person's votes divided by the total votes in the body corporate or scheme multiplied by 100.
- (7) Include details of:
 - (a) any relevant agreement or other circumstances by which the relevant interest was acquired. If subsection 671B(4) applies, a copy of any document setting out the terms of any relevant agreement, and a statement by the person giving full and accurate details of any contract, scheme or arrangement, must accompany this form, together with a written statement certifying this contract, scheme or arrangement; and
 - (b) any qualification of the power of a person to exercise, control the exercise of, or influence the exercise of, the voting powers or disposal of the securities to which the relevant interest relates (indicating clearly the particular securities to which the qualification applies).See the definition of "relevant agreement" in section 9 of the Corporations Act 2001.
- (8) If the substantial holder is unable to determine the identity of the person (eg. if the relevant interest arises because of an option) write "unknown".
- (9) Details of the consideration must include any and all benefits, moneys and other, that any person from whom a relevant interest has acquired has, or may, become entitled to receive in relation to that acquisition. Details must be included even if the benefit is conditional on the happening or not of a contingency. Details must be included of any benefit paid on behalf of the substantial holder of its associate in relation to the acquisitions, even if they are not paid directly to the person from whom the relevant interest was acquired.

To Company
ACN/ARSN

Rio Tinto Limited
004 458 404

Substantial Holder Name
ACN/ARSN

Vanguard Group
N/A

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
12-Jul-2021	The Vanguard Group, Inc.	BUY	127.60	Ordinary	181	181
12-Jul-2021	The Vanguard Group, Inc.	BUY	128.02	Ordinary	931	931
12-Jul-2021	The Vanguard Group, Inc.	BUY	128.43	Ordinary	8,402	8,402
13-Jul-2021	The Vanguard Group, Inc.	BUY	128.33	Ordinary	5,200	5,200
13-Jul-2021	The Vanguard Group, Inc.	BUY	129.26	Ordinary	4,263	4,263
14-Jul-2021	The Vanguard Group, Inc.	BUY	128.28	Ordinary	157	157
14-Jul-2021	The Vanguard Group, Inc.	BUY	128.28	Ordinary	314	314
14-Jul-2021	The Vanguard Group, Inc.	BUY	128.28	Ordinary	5,934	5,934
14-Jul-2021	The Vanguard Group, Inc.	BUY	128.18	Ordinary	624	624
14-Jul-2021	The Vanguard Group, Inc.	BUY	128.18	Ordinary	624	624
14-Jul-2021	The Vanguard Group, Inc.	BUY	128.18	Ordinary	1,872	1,872
15-Jul-2021	The Vanguard Group, Inc.	BUY	131.14	Ordinary	829	829
15-Jul-2021	The Vanguard Group, Inc.	BUY	131.14	Ordinary	4,585	4,585
15-Jul-2021	The Vanguard Group, Inc.	SELL	131.14	Ordinary	(1,778)	(1,778)
16-Jul-2021	The Vanguard Group, Inc.	BUY	131.00	Ordinary	5,227	5,227
19-Jul-2021	The Vanguard Group, Inc.	BUY	127.83	Ordinary	158	158
19-Jul-2021	The Vanguard Group, Inc.	BUY	127.83	Ordinary	205	205
20-Jul-2021	The Vanguard Group, Inc.	BUY	124.42	Ordinary	158	158
21-Jul-2021	The Vanguard Group, Inc.	BUY	125.87	Ordinary	157	157
21-Jul-2021	The Vanguard Group, Inc.	BUY	127.78	Ordinary	996	996
21-Jul-2021	The Vanguard Group, Inc.	BUY	127.78	Ordinary	4,788	4,788
21-Jul-2021	The Vanguard Group, Inc.	BUY	127.78	Ordinary	1,110	1,110
21-Jul-2021	The Vanguard Group, Inc.	BUY	126.04	Ordinary	10,004	10,004
22-Jul-2021	The Vanguard Group, Inc.	SELL	127.41	Ordinary	(1,650)	(1,650)
22-Jul-2021	The Vanguard Group, Inc.	BUY	127.12	Ordinary	798	798
22-Jul-2021	The Vanguard Group, Inc.	SELL	127.12	Ordinary	(1,655)	(1,655)
23-Jul-2021	The Vanguard Group, Inc.	BUY	127.10	Ordinary	449	449
26-Jul-2021	The Vanguard Group, Inc.	BUY	130.11	Ordinary	266	266
26-Jul-2021	The Vanguard Group, Inc.	BUY	130.88	Ordinary	6,783	6,783
26-Jul-2021	The Vanguard Group, Inc.	BUY	128.63	Ordinary	3,838	3,838
27-Jul-2021	The Vanguard Group, Inc.	BUY	132.47	Ordinary	521	521
27-Jul-2021	The Vanguard Group, Inc.	BUY	132.33	Ordinary	532	532
27-Jul-2021	The Vanguard Group, Inc.	BUY	132.10	Ordinary	4,437	4,437
28-Jul-2021	The Vanguard Group, Inc.	BUY	132.22	Ordinary	2,097	2,097
28-Jul-2021	The Vanguard Group, Inc.	BUY	132.69	Ordinary	3,458	3,458
28-Jul-2021	The Vanguard Group, Inc.	BUY	132.69	Ordinary	740	740
28-Jul-2021	The Vanguard Group, Inc.	BUY	132.69	Ordinary	740	740
29-Jul-2021	The Vanguard Group, Inc.	SELL	134.17	Ordinary	(1,444)	(1,444)
29-Jul-2021	The Vanguard Group, Inc.	BUY	134.49	Ordinary	2,648	2,648
29-Jul-2021	The Vanguard Group, Inc.	BUY	135.91	Ordinary	5,179	5,179
29-Jul-2021	The Vanguard Group, Inc.	SELL	135.86	Ordinary	(127)	(127)
29-Jul-2021	The Vanguard Group, Inc.	BUY	135.91	Ordinary	4,671	4,671
30-Jul-2021	The Vanguard Group, Inc.	BUY	133.42	Ordinary	699	699
30-Jul-2021	The Vanguard Group, Inc.	BUY	133.42	Ordinary	3,414	3,414
30-Jul-2021	The Vanguard Group, Inc.	BUY	133.56	Ordinary	1,110	1,110
30-Jul-2021	The Vanguard Group, Inc.	BUY	133.42	Ordinary	3,122	3,122
2-Aug-2021	The Vanguard Group, Inc.	BUY	132.75	Ordinary	1,655	1,655
2-Aug-2021	The Vanguard Group, Inc.	BUY	133.23	Ordinary	3,574	3,574
3-Aug-2021	The Vanguard Group, Inc.	BUY	132.39	Ordinary	151	151
3-Aug-2021	The Vanguard Group, Inc.	BUY	132.39	Ordinary	3,108	3,108
3-Aug-2021	The Vanguard Group, Inc.	BUY	133.57	Ordinary	5,363	5,363
4-Aug-2021	The Vanguard Group, Inc.	BUY	134.40	Ordinary	146	146
4-Aug-2021	The Vanguard Group, Inc.	BUY	134.40	Ordinary	808	808
5-Aug-2021	The Vanguard Group, Inc.	SELL	132.13	Ordinary	(882)	(882)
5-Aug-2021	The Vanguard Group, Inc.	BUY	132.13	Ordinary	400	400
5-Aug-2021	The Vanguard Group, Inc.	BUY	134.80	Ordinary	3,680	3,680
6-Aug-2021	The Vanguard Group, Inc.	SELL	130.05	Ordinary	(1,398)	(1,398)
9-Aug-2021	The Vanguard Group, Inc.	BUY	128.26	Ordinary	1,050	1,050
10-Aug-2021	The Vanguard Group, Inc.	BUY	127.50	Ordinary	3,843	3,843
11-Aug-2021	The Vanguard Group, Inc.	BUY	129.14	Ordinary	604	604
11-Aug-2021	The Vanguard Group, Inc.	BUY	129.14	Ordinary	247	247
11-Aug-2021	The Vanguard Group, Inc.	BUY	129.66	Ordinary	747	747

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
11-Aug-2021	The Vanguard Group, Inc.	BUY	129.14	Ordinary	2,981	2,981
11-Aug-2021	The Vanguard Group, Inc.	BUY	129.14	Ordinary	5,962	5,962
11-Aug-2021	The Vanguard Group, Inc.	BUY	129.66	Ordinary	416	416
12-Aug-2021	The Vanguard Group, Inc.	BUY	121.60	Ordinary	1,116	1,116
12-Aug-2021	The Vanguard Group, Inc.	BUY	121.60	Ordinary	534	534
13-Aug-2021	The Vanguard Group, Inc.	BUY	120.64	Ordinary	1,184	1,184
13-Aug-2021	The Vanguard Group, Inc.	BUY	120.64	Ordinary	1,850	1,850
13-Aug-2021	The Vanguard Group, Inc.	BUY	120.64	Ordinary	888	888
13-Aug-2021	The Vanguard Group, Inc.	BUY	120.64	Ordinary	1,332	1,332
16-Aug-2021	The Vanguard Group, Inc.	BUY	118.58	Ordinary	1,592	1,592
16-Aug-2021	The Vanguard Group, Inc.	BUY	118.58	Ordinary	3,980	3,980
17-Aug-2021	The Vanguard Group, Inc.	BUY	116.37	Ordinary	3,405	3,405
17-Aug-2021	The Vanguard Group, Inc.	BUY	115.38	Ordinary	2,080	2,080
18-Aug-2021	The Vanguard Group, Inc.	SELL	113.69	Ordinary	(180)	(180)
18-Aug-2021	The Vanguard Group, Inc.	BUY	113.69	Ordinary	2,580	2,580
18-Aug-2021	The Vanguard Group, Inc.	BUY	113.69	Ordinary	243	243
18-Aug-2021	The Vanguard Group, Inc.	BUY	112.67	Ordinary	2,442	2,442
18-Aug-2021	The Vanguard Group, Inc.	BUY	115.19	Ordinary	3,843	3,843
19-Aug-2021	The Vanguard Group, Inc.	BUY	107.17	Ordinary	312	312
19-Aug-2021	The Vanguard Group, Inc.	SELL	107.17	Ordinary	(850)	(850)
19-Aug-2021	The Vanguard Group, Inc.	BUY	107.17	Ordinary	3,300	3,300
20-Aug-2021	The Vanguard Group, Inc.	BUY	107.23	Ordinary	243	243
20-Aug-2021	The Vanguard Group, Inc.	BUY	107.74	Ordinary	1,990	1,990
20-Aug-2021	The Vanguard Group, Inc.	BUY	107.23	Ordinary	3,799	3,799
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	747	747
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	1,592	1,592
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	2,388	2,388
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	1,320	1,320
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	1,980	1,980
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	1,110	1,110
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.43	Ordinary	1,110	1,110
23-Aug-2021	The Vanguard Group, Inc.	BUY	107.90	Ordinary	11,012	11,012
23-Aug-2021	The Vanguard Group, Inc.	BUY	106.69	Ordinary	5,744	5,744
24-Aug-2021	The Vanguard Group, Inc.	BUY	108.10	Ordinary	491	491
24-Aug-2021	The Vanguard Group, Inc.	BUY	108.00	Ordinary	7,455	7,455
25-Aug-2021	The Vanguard Group, Inc.	BUY	110.93	Ordinary	888	888
25-Aug-2021	The Vanguard Group, Inc.	BUY	111.56	Ordinary	8,716	8,716
25-Aug-2021	The Vanguard Group, Inc.	SELL	111.56	Ordinary	(91)	(91)
26-Aug-2021	The Vanguard Group, Inc.	BUY	111.59	Ordinary	5,139	5,139
26-Aug-2021	The Vanguard Group, Inc.	BUY	111.59	Ordinary	2,546	2,546
27-Aug-2021	The Vanguard Group, Inc.	BUY	109.70	Ordinary	398	398
27-Aug-2021	The Vanguard Group, Inc.	BUY	110.71	Ordinary	747	747
27-Aug-2021	The Vanguard Group, Inc.	BUY	110.71	Ordinary	1,245	1,245
27-Aug-2021	The Vanguard Group, Inc.	BUY	110.71	Ordinary	1,592	1,592
27-Aug-2021	The Vanguard Group, Inc.	BUY	109.75	Ordinary	5,597	5,597
27-Aug-2021	The Vanguard Group, Inc.	BUY	110.71	Ordinary	1,110	1,110
27-Aug-2021	The Vanguard Group, Inc.	BUY	109.75	Ordinary	3,855	3,855
30-Aug-2021	The Vanguard Group, Inc.	BUY	112.34	Ordinary	5,690	5,690
30-Aug-2021	The Vanguard Group, Inc.	BUY	112.34	Ordinary	2,524	2,524
31-Aug-2021	The Vanguard Group, Inc.	BUY	112.06	Ordinary	3,474	3,474
31-Aug-2021	The Vanguard Group, Inc.	SELL	112.08	Ordinary	(8,897)	(8,897)
31-Aug-2021	The Vanguard Group, Inc.	SELL	112.08	Ordinary	(137)	(137)
1-Sep-2021	The Vanguard Group, Inc.	BUY	109.39	Ordinary	3,357	3,357
1-Sep-2021	The Vanguard Group, Inc.	BUY	110.40	Ordinary	4,855	4,855
1-Sep-2021	The Vanguard Group, Inc.	BUY	110.40	Ordinary	4,588	4,588
2-Sep-2021	The Vanguard Group, Inc.	BUY	108.65	Ordinary	2,234	2,234
2-Sep-2021	The Vanguard Group, Inc.	BUY	109.46	Ordinary	3,980	3,980
3-Sep-2021	The Vanguard Group, Inc.	BUY	111.37	Ordinary	372	372
3-Sep-2021	The Vanguard Group, Inc.	SELL	109.22	Ordinary	(7,965)	(7,965)
3-Sep-2021	The Vanguard Group, Inc.	BUY	111.37	Ordinary	275	275
3-Sep-2021	The Vanguard Group, Inc.	BUY	111.33	Ordinary	520	520
3-Sep-2021	The Vanguard Group, Inc.	BUY	111.33	Ordinary	624	624
7-Sep-2021	The Vanguard Group, Inc.	BUY	108.70	Ordinary	179	179
7-Sep-2021	The Vanguard Group, Inc.	BUY	108.70	Ordinary	3,239	3,239
8-Sep-2021	The Vanguard Group, Inc.	BUY	108.17	Ordinary	3,358	3,358
10-Sep-2021	The Vanguard Group, Inc.	BUY	106.22	Ordinary	181	181
10-Sep-2021	The Vanguard Group, Inc.	BUY	106.22	Ordinary	3,650	3,650
13-Sep-2021	The Vanguard Group, Inc.	SELL	106.02	Ordinary	(2,112)	(2,112)

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
14-Sep-2021	The Vanguard Group, Inc.	BUY	105.95	Ordinary	624	624
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(1,557)	(1,557)
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(1,836)	(1,836)
17-Sep-2021	The Vanguard Group, Inc.	BUY	98.80	Ordinary	491	491
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.80	Ordinary	(3,491)	(3,491)
17-Sep-2021	The Vanguard Group, Inc.	BUY	98.80	Ordinary	84	84
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(2,379)	(2,379)
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(13,012)	(13,012)
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(16,947)	(16,947)
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(47,419)	(47,419)
17-Sep-2021	The Vanguard Group, Inc.	SELL	98.84	Ordinary	(10,508)	(10,508)
20-Sep-2021	The Vanguard Group, Inc.	BUY	94.07	Ordinary	2,080	2,080
21-Sep-2021	The Vanguard Group, Inc.	BUY	95.71	Ordinary	330	330
21-Sep-2021	The Vanguard Group, Inc.	BUY	95.31	Ordinary	416	416
23-Sep-2021	The Vanguard Group, Inc.	BUY	98.86	Ordinary	171	171
23-Sep-2021	The Vanguard Group, Inc.	BUY	99.50	Ordinary	2,322	2,322
23-Sep-2021	The Vanguard Group, Inc.	BUY	99.50	Ordinary	416	416
24-Sep-2021	The Vanguard Group, Inc.	BUY	99.33	Ordinary	350	350
24-Sep-2021	The Vanguard Group, Inc.	BUY	99.33	Ordinary	7,078	7,078
24-Sep-2021	The Vanguard Group, Inc.	SELL	99.00	Ordinary	(68)	(68)
24-Sep-2021	The Vanguard Group, Inc.	BUY	99.33	Ordinary	101	101
24-Sep-2021	The Vanguard Group, Inc.	BUY	99.33	Ordinary	10,107	10,107
28-Sep-2021	The Vanguard Group, Inc.	BUY	97.47	Ordinary	1,306	1,306
28-Sep-2021	The Vanguard Group, Inc.	BUY	95.72	Ordinary	568	568
28-Sep-2021	The Vanguard Group, Inc.	BUY	97.47	Ordinary	8,540	8,540
28-Sep-2021	The Vanguard Group, Inc.	BUY	95.72	Ordinary	416	416
29-Sep-2021	The Vanguard Group, Inc.	BUY	96.89	Ordinary	384	384
29-Sep-2021	The Vanguard Group, Inc.	BUY	96.58	Ordinary	750	750
29-Sep-2021	The Vanguard Group, Inc.	BUY	96.45	Ordinary	5,468	5,468
30-Sep-2021	The Vanguard Group, Inc.	BUY	98.47	Ordinary	6,256	6,256
30-Sep-2021	The Vanguard Group, Inc.	BUY	98.52	Ordinary	10,815	10,815
30-Sep-2021	The Vanguard Group, Inc.	BUY	100.18	Ordinary	16,329	16,329
30-Sep-2021	The Vanguard Group, Inc.	BUY	100.18	Ordinary	8,115	8,115
1-Oct-2021	The Vanguard Group, Inc.	BUY	98.07	Ordinary	627	627
1-Oct-2021	The Vanguard Group, Inc.	BUY	97.28	Ordinary	7,239	7,239
4-Oct-2021	The Vanguard Group, Inc.	BUY	97.50	Ordinary	352	352
4-Oct-2021	The Vanguard Group, Inc.	BUY	97.50	Ordinary	6,157	6,157
4-Oct-2021	The Vanguard Group, Inc.	BUY	98.30	Ordinary	3,809	3,809
5-Oct-2021	The Vanguard Group, Inc.	BUY	97.13	Ordinary	163	163
5-Oct-2021	The Vanguard Group, Inc.	SELL	97.13	Ordinary	(12,349)	(12,349)
5-Oct-2021	The Vanguard Group, Inc.	BUY	97.13	Ordinary	388	388
5-Oct-2021	The Vanguard Group, Inc.	BUY	97.48	Ordinary	11,905	11,905
5-Oct-2021	The Vanguard Group, Inc.	BUY	97.93	Ordinary	416	416
6-Oct-2021	The Vanguard Group, Inc.	BUY	96.55	Ordinary	180	180
6-Oct-2021	The Vanguard Group, Inc.	BUY	96.79	Ordinary	9,114	9,114
6-Oct-2021	The Vanguard Group, Inc.	SELL	97.30	Ordinary	(36)	(36)
7-Oct-2021	The Vanguard Group, Inc.	SELL	96.54	Ordinary	(2,804)	(2,804)
7-Oct-2021	The Vanguard Group, Inc.	SELL	97.30	Ordinary	(492)	(492)
7-Oct-2021	The Vanguard Group, Inc.	BUY	97.01	Ordinary	6,867	6,867
8-Oct-2021	The Vanguard Group, Inc.	BUY	100.42	Ordinary	1,064	1,064
8-Oct-2021	The Vanguard Group, Inc.	BUY	100.42	Ordinary	2,346	2,346
8-Oct-2021	The Vanguard Group, Inc.	BUY	98.90	Ordinary	6,692	6,692
11-Oct-2021	The Vanguard Group, Inc.	BUY	102.26	Ordinary	160	160
11-Oct-2021	The Vanguard Group, Inc.	BUY	102.11	Ordinary	836	836
12-Oct-2021	The Vanguard Group, Inc.	BUY	102.99	Ordinary	27	27
12-Oct-2021	The Vanguard Group, Inc.	BUY	102.83	Ordinary	456	456
12-Oct-2021	The Vanguard Group, Inc.	BUY	102.99	Ordinary	3,270	3,270
13-Oct-2021	The Vanguard Group, Inc.	BUY	100.38	Ordinary	836	836
13-Oct-2021	The Vanguard Group, Inc.	BUY	100.38	Ordinary	1,564	1,564
13-Oct-2021	The Vanguard Group, Inc.	BUY	100.38	Ordinary	3,128	3,128
13-Oct-2021	The Vanguard Group, Inc.	BUY	100.38	Ordinary	1,050	1,050
13-Oct-2021	The Vanguard Group, Inc.	BUY	100.38	Ordinary	416	416
14-Oct-2021	The Vanguard Group, Inc.	BUY	100.51	Ordinary	491	491
15-Oct-2021	The Vanguard Group, Inc.	BUY	100.08	Ordinary	627	627
15-Oct-2021	The Vanguard Group, Inc.	SELL	100.40	Ordinary	(59)	(59)
19-Oct-2021	The Vanguard Group, Inc.	BUY	98.15	Ordinary	178	178
19-Oct-2021	The Vanguard Group, Inc.	BUY	98.80	Ordinary	1,050	1,050
19-Oct-2021	The Vanguard Group, Inc.	BUY	98.80	Ordinary	624	624

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
19-Oct-2021	The Vanguard Group, Inc.	BUY	98.80	Ordinary	208	208
20-Oct-2021	The Vanguard Group, Inc.	BUY	98.08	Ordinary	476	476
20-Oct-2021	The Vanguard Group, Inc.	BUY	98.08	Ordinary	374	374
20-Oct-2021	The Vanguard Group, Inc.	BUY	99.99	Ordinary	1,743	1,743
20-Oct-2021	The Vanguard Group, Inc.	BUY	98.28	Ordinary	416	416
21-Oct-2021	The Vanguard Group, Inc.	BUY	97.05	Ordinary	3,700	3,700
21-Oct-2021	The Vanguard Group, Inc.	BUY	96.47	Ordinary	1,664	1,664
22-Oct-2021	The Vanguard Group, Inc.	BUY	95.03	Ordinary	534	534
22-Oct-2021	The Vanguard Group, Inc.	SELL	95.03	Ordinary	(1,507)	(1,507)
25-Oct-2021	The Vanguard Group, Inc.	BUY	96.44	Ordinary	164	164
25-Oct-2021	The Vanguard Group, Inc.	BUY	96.88	Ordinary	2,346	2,346
26-Oct-2021	The Vanguard Group, Inc.	BUY	96.41	Ordinary	2,810	2,810
27-Oct-2021	The Vanguard Group, Inc.	BUY	93.54	Ordinary	770	770
27-Oct-2021	The Vanguard Group, Inc.	BUY	93.54	Ordinary	1,400	1,400
27-Oct-2021	The Vanguard Group, Inc.	SELL	95.30	Ordinary	(94)	(94)
28-Oct-2021	The Vanguard Group, Inc.	BUY	92.76	Ordinary	179	179
28-Oct-2021	The Vanguard Group, Inc.	BUY	93.19	Ordinary	630	630
29-Oct-2021	The Vanguard Group, Inc.	BUY	90.29	Ordinary	178	178
29-Oct-2021	The Vanguard Group, Inc.	BUY	90.29	Ordinary	651	651
29-Oct-2021	The Vanguard Group, Inc.	SELL	91.08	Ordinary	(1,695)	(1,695)
1-Nov-2021	The Vanguard Group, Inc.	BUY	90.30	Ordinary	7,480	7,480
1-Nov-2021	The Vanguard Group, Inc.	BUY	91.33	Ordinary	2,346	2,346
1-Nov-2021	The Vanguard Group, Inc.	BUY	91.33	Ordinary	1,564	1,564
1-Nov-2021	The Vanguard Group, Inc.	BUY	91.33	Ordinary	1,050	1,050
2-Nov-2021	The Vanguard Group, Inc.	BUY	90.80	Ordinary	4,424	4,424
3-Nov-2021	The Vanguard Group, Inc.	BUY	90.27	Ordinary	760	760
3-Nov-2021	The Vanguard Group, Inc.	BUY	90.27	Ordinary	1,955	1,955
4-Nov-2021	The Vanguard Group, Inc.	SELL	89.50	Ordinary	(77)	(77)
5-Nov-2021	The Vanguard Group, Inc.	BUY	88.32	Ordinary	7,725	7,725
5-Nov-2021	The Vanguard Group, Inc.	BUY	89.10	Ordinary	1,120	1,120
8-Nov-2021	The Vanguard Group, Inc.	BUY	89.59	Ordinary	760	760
8-Nov-2021	The Vanguard Group, Inc.	BUY	89.59	Ordinary	2,346	2,346
8-Nov-2021	The Vanguard Group, Inc.	BUY	89.59	Ordinary	4,301	4,301
8-Nov-2021	The Vanguard Group, Inc.	BUY	89.59	Ordinary	1,050	1,050
9-Nov-2021	The Vanguard Group, Inc.	BUY	90.44	Ordinary	8,718	8,718
9-Nov-2021	The Vanguard Group, Inc.	BUY	90.44	Ordinary	6,868	6,868
10-Nov-2021	The Vanguard Group, Inc.	SELL	88.50	Ordinary	(67)	(67)
10-Nov-2021	The Vanguard Group, Inc.	BUY	87.16	Ordinary	624	624
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.14	Ordinary	5,129	5,129
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	627	627
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	3,128	3,128
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	1,564	1,564
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	2,373	2,373
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	6,102	6,102
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	1,017	1,017
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	3,051	3,051
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	1,400	1,400
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	416	416
11-Nov-2021	The Vanguard Group, Inc.	BUY	89.61	Ordinary	416	416
12-Jul-2021	Vanguard Investments Australia Ltd.	BUY	127.60	Ordinary	492	492
15-Jul-2021	Vanguard Investments Australia Ltd.	BUY	131.14	Ordinary	18,804	18,804
15-Jul-2021	Vanguard Investments Australia Ltd.	BUY	131.14	Ordinary	9,870	9,870
16-Jul-2021	Vanguard Investments Australia Ltd.	BUY	130.60	Ordinary	2,512	2,512
19-Jul-2021	Vanguard Investments Australia Ltd.	SELL	127.83	Ordinary	(424)	(424)
19-Jul-2021	Vanguard Investments Australia Ltd.	BUY	127.83	Ordinary	1,660	1,660
20-Jul-2021	Vanguard Investments Australia Ltd.	SELL	124.42	Ordinary	(574)	(574)
20-Jul-2021	Vanguard Investments Australia Ltd.	BUY	124.42	Ordinary	3,984	3,984
20-Jul-2021	Vanguard Investments Australia Ltd.	BUY	124.42	Ordinary	9,983	9,983
21-Jul-2021	Vanguard Investments Australia Ltd.	BUY	125.87	Ordinary	2,540	2,540
23-Jul-2021	Vanguard Investments Australia Ltd.	BUY	127.10	Ordinary	3,972	3,972
26-Jul-2021	Vanguard Investments Australia Ltd.	SELL	130.11	Ordinary	(1,680)	(1,680)
27-Jul-2021	Vanguard Investments Australia Ltd.	IN SPECIE	132.47	Ordinary	(326,941)	(326,941)
29-Jul-2021	Vanguard Investments Australia Ltd.	BUY	134.17	Ordinary	454	454
3-Aug-2021	Vanguard Investments Australia Ltd.	BUY	132.39	Ordinary	1,469	1,469
3-Aug-2021	Vanguard Investments Australia Ltd.	BUY	132.39	Ordinary	4,620	4,620
3-Aug-2021	Vanguard Investments Australia Ltd.	BUY	132.39	Ordinary	7,613	7,613
6-Aug-2021	Vanguard Investments Australia Ltd.	BUY	130.05	Ordinary	353	353
6-Aug-2021	Vanguard Investments Australia Ltd.	BUY	130.05	Ordinary	4,715	4,715

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
6-Aug-2021	Vanguard Investments Australia Ltd.	BUY	130.05	Ordinary	2,540	2,540
6-Aug-2021	Vanguard Investments Australia Ltd.	BUY	130.05	Ordinary	11,012	11,012
9-Aug-2021	Vanguard Investments Australia Ltd.	BUY	128.26	Ordinary	454	454
9-Aug-2021	Vanguard Investments Australia Ltd.	BUY	128.26	Ordinary	3,972	3,972
11-Aug-2021	Vanguard Investments Australia Ltd.	SELL	129.14	Ordinary	(1,302)	(1,302)
12-Aug-2021	Vanguard Investments Australia Ltd.	BUY	120.26	Ordinary	96	96
12-Aug-2021	Vanguard Investments Australia Ltd.	BUY	120.26	Ordinary	454	454
12-Aug-2021	Vanguard Investments Australia Ltd.	SELL	120.26	Ordinary	(404)	(404)
12-Aug-2021	Vanguard Investments Australia Ltd.	BUY	120.26	Ordinary	5,608	5,608
13-Aug-2021	Vanguard Investments Australia Ltd.	SELL	120.36	Ordinary	(301)	(301)
16-Aug-2021	Vanguard Investments Australia Ltd.	BUY	118.49	Ordinary	3,185	3,185
16-Aug-2021	Vanguard Investments Australia Ltd.	BUY	118.49	Ordinary	6,580	6,580
18-Aug-2021	Vanguard Investments Australia Ltd.	BUY	113.69	Ordinary	2,556	2,556
18-Aug-2021	Vanguard Investments Australia Ltd.	BUY	113.69	Ordinary	2,632	2,632
18-Aug-2021	Vanguard Investments Australia Ltd.	BUY	113.69	Ordinary	6,580	6,580
19-Aug-2021	Vanguard Investments Australia Ltd.	BUY	107.17	Ordinary	4,277	4,277
19-Aug-2021	Vanguard Investments Australia Ltd.	BUY	107.17	Ordinary	8,840	8,840
20-Aug-2021	Vanguard Investments Australia Ltd.	BUY	107.23	Ordinary	1,917	1,917
20-Aug-2021	Vanguard Investments Australia Ltd.	BUY	107.23	Ordinary	1,645	1,645
23-Aug-2021	Vanguard Investments Australia Ltd.	BUY	106.69	Ordinary	1,810	1,810
23-Aug-2021	Vanguard Investments Australia Ltd.	BUY	106.69	Ordinary	10,002	10,002
24-Aug-2021	Vanguard Investments Australia Ltd.	BUY	108.10	Ordinary	456	456
24-Aug-2021	Vanguard Investments Australia Ltd.	BUY	108.10	Ordinary	1,917	1,917
25-Aug-2021	Vanguard Investments Australia Ltd.	BUY	110.91	Ordinary	49	49
25-Aug-2021	Vanguard Investments Australia Ltd.	SELL	110.91	Ordinary	(1,068)	(1,068)
25-Aug-2021	Vanguard Investments Australia Ltd.	BUY	110.91	Ordinary	4,277	4,277
25-Aug-2021	Vanguard Investments Australia Ltd.	BUY	110.91	Ordinary	6,967	6,967
26-Aug-2021	Vanguard Investments Australia Ltd.	BUY	109.37	Ordinary	679	679
26-Aug-2021	Vanguard Investments Australia Ltd.	BUY	109.37	Ordinary	3,290	3,290
30-Aug-2021	Vanguard Investments Australia Ltd.	BUY	113.12	Ordinary	3,205	3,205
30-Aug-2021	Vanguard Investments Australia Ltd.	BUY	113.12	Ordinary	4,606	4,606
1-Sep-2021	Vanguard Investments Australia Ltd.	BUY	109.39	Ordinary	85	85
1-Sep-2021	Vanguard Investments Australia Ltd.	BUY	109.39	Ordinary	5,036	5,036
1-Sep-2021	Vanguard Investments Australia Ltd.	BUY	109.39	Ordinary	2,568	2,568
2-Sep-2021	Vanguard Investments Australia Ltd.	BUY	108.65	Ordinary	5,296	5,296
2-Sep-2021	Vanguard Investments Australia Ltd.	BUY	108.65	Ordinary	15,983	15,983
3-Sep-2021	Vanguard Investments Australia Ltd.	BUY	111.37	Ordinary	462	462
3-Sep-2021	Vanguard Investments Australia Ltd.	BUY	111.37	Ordinary	12,484	12,484
6-Sep-2021	Vanguard Investments Australia Ltd.	BUY	110.69	Ordinary	5,673	5,673
6-Sep-2021	Vanguard Investments Australia Ltd.	BUY	110.69	Ordinary	3,984	3,984
7-Sep-2021	Vanguard Investments Australia Ltd.	BUY	108.70	Ordinary	2,596	2,596
8-Sep-2021	Vanguard Investments Australia Ltd.	BUY	108.17	Ordinary	1,298	1,298
8-Sep-2021	Vanguard Investments Australia Ltd.	BUY	108.17	Ordinary	9,943	9,943
9-Sep-2021	Vanguard Investments Australia Ltd.	SELL	105.50	Ordinary	(555)	(555)
9-Sep-2021	Vanguard Investments Australia Ltd.	BUY	105.50	Ordinary	2,596	2,596
9-Sep-2021	Vanguard Investments Australia Ltd.	BUY	105.50	Ordinary	4,662	4,662
9-Sep-2021	Vanguard Investments Australia Ltd.	BUY	105.50	Ordinary	5,713	5,713
15-Sep-2021	Vanguard Investments Australia Ltd.	SELL	104.63	Ordinary	(1,078)	(1,078)
15-Sep-2021	Vanguard Investments Australia Ltd.	BUY	104.63	Ordinary	3,996	3,996
16-Sep-2021	Vanguard Investments Australia Ltd.	BUY	103.67	Ordinary	3,245	3,245
17-Sep-2021	Vanguard Investments Australia Ltd.	SELL	98.84	Ordinary	(410)	(410)
17-Sep-2021	Vanguard Investments Australia Ltd.	SELL	98.84	Ordinary	(754)	(754)
17-Sep-2021	Vanguard Investments Australia Ltd.	BUY	98.80	Ordinary	1,730	1,730
20-Sep-2021	Vanguard Investments Australia Ltd.	BUY	95.24	Ordinary	3,245	3,245
20-Sep-2021	Vanguard Investments Australia Ltd.	BUY	95.24	Ordinary	4,648	4,648
21-Sep-2021	Vanguard Investments Australia Ltd.	BUY	95.71	Ordinary	1,938	1,938
23-Sep-2021	Vanguard Investments Australia Ltd.	BUY	98.86	Ordinary	5,610	5,610
28-Sep-2021	Vanguard Investments Australia Ltd.	BUY	97.47	Ordinary	3,972	3,972
29-Sep-2021	Vanguard Investments Australia Ltd.	BUY	96.89	Ordinary	5,814	5,814
29-Sep-2021	Vanguard Investments Australia Ltd.	BUY	96.89	Ordinary	1,650	1,650
30-Sep-2021	Vanguard Investments Australia Ltd.	SELL	100.18	Ordinary	(21,016)	(21,016)
1-Oct-2021	Vanguard Investments Australia Ltd.	BUY	97.28	Ordinary	5,184	5,184
1-Oct-2021	Vanguard Investments Australia Ltd.	BUY	97.28	Ordinary	4,860	4,860
4-Oct-2021	Vanguard Investments Australia Ltd.	BUY	97.50	Ordinary	1,620	1,620
7-Oct-2021	Vanguard Investments Australia Ltd.	BUY	96.54	Ordinary	3,436	3,436
8-Oct-2021	Vanguard Investments Australia Ltd.	BUY	100.40	Ordinary	785	785
8-Oct-2021	Vanguard Investments Australia Ltd.	BUY	100.40	Ordinary	1,069	1,069
8-Oct-2021	Vanguard Investments Australia Ltd.	BUY	100.40	Ordinary	5,216	5,216

Date of change	Person whose relevant interest changed	Nature of Change(6)	Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
12-Oct-2021	Vanguard Investments Australia Ltd.	BUY	102.64	Ordinary	148	148
12-Oct-2021	Vanguard Investments Australia Ltd.	BUY	102.64	Ordinary	1,596	1,596
14-Oct-2021	Vanguard Investments Australia Ltd.	BUY	100.51	Ordinary	3,792	3,792
15-Oct-2021	Vanguard Investments Australia Ltd.	BUY	99.60	Ordinary	4,238	4,238
18-Oct-2021	Vanguard Investments Australia Ltd.	SELL	101.45	Ordinary	(2,194)	(2,194)
18-Oct-2021	Vanguard Investments Australia Ltd.	SELL	101.45	Ordinary	(4,714)	(4,714)
21-Oct-2021	Vanguard Investments Australia Ltd.	BUY	96.79	Ordinary	4,251	4,251
22-Oct-2021	Vanguard Investments Australia Ltd.	BUY	95.03	Ordinary	3,792	3,792
27-Oct-2021	Vanguard Investments Australia Ltd.	IN SPECIE	94.14	Ordinary	(178,097)	(178,097)
27-Oct-2021	Vanguard Investments Australia Ltd.	BUY	94.14	Ordinary	8,216	8,216
28-Oct-2021	Vanguard Investments Australia Ltd.	BUY	93.39	Ordinary	28,576	28,576
29-Oct-2021	Vanguard Investments Australia Ltd.	BUY	90.29	Ordinary	4,920	4,920
1-Nov-2021	Vanguard Investments Australia Ltd.	BUY	90.97	Ordinary	1,640	1,640
2-Nov-2021	Vanguard Investments Australia Ltd.	SELL	88.66	Ordinary	(18,226)	(18,226)
3-Nov-2021	Vanguard Investments Australia Ltd.	BUY	89.70	Ordinary	459	459
3-Nov-2021	Vanguard Investments Australia Ltd.	BUY	89.70	Ordinary	3,160	3,160
4-Nov-2021	Vanguard Investments Australia Ltd.	BUY	88.32	Ordinary	3,924	3,924
5-Nov-2021	Vanguard Investments Australia Ltd.	IN SPECIE	89.47	Ordinary	(1,736,815)	(1,736,815)
5-Nov-2021	Vanguard Investments Australia Ltd.	BUY	88.81	Ordinary	13,545	13,545
8-Nov-2021	Vanguard Investments Australia Ltd.	Buy	89.15	Ordinary	160	160
8-Nov-2021	Vanguard Investments Australia Ltd.	Buy	89.15	Ordinary	456	456
9-Nov-2021	Vanguard Investments Australia Ltd.	BUY	88.98	Ordinary	3,575	3,575
10-Nov-2021	Vanguard Investments Australia Ltd.	BUY	87.51	Ordinary	3,810	3,810
10-Nov-2021	Vanguard Investments Australia Ltd.	BUY	87.51	Ordinary	23,274	23,274
11-Nov-2021	Vanguard Investments Australia Ltd.	Sell	89.14	Ordinary	(305)	(305)

This is Annexure A of 6 pages referred to in Form 603, Notice of initial substantial holder.

Signature:



Name: Shawn Acker

Capacity: Compliance Manager

Date: 15 November 2021