15 July 2001

Form 604

Corporations Act 2001 Section 671B

Notice of change of interests of substantial holder

To Company Name/Scheme	Metcash Limited
ACN/ARSN _	112 073 480
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

There was a change in the interests of the

substantial holder on

25 November 2020

The previous notice was given to the company on

28 February 2019

The previous notice was dated

28 February 2019

2. Previous and present 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 when last required, and when now required, to give a substantial holding notice to the company or scheme, are as follows:

Class of securities (4)	Previous notice		Present notice		
	Person's votes	Voting power (5)	Person's votes	Voting power (5)	
Ordinary	45,474,228	5.001%	61,420,001	6.008%	

3. Changes in relevant interests

Particulars of each change in, or change in the nature of, a relevant interest of the substantial holder or an associate in voting securities of the company or scheme, since the substantial holder was last required to give a substantial holding notice to the company or scheme are as follows:

Date of change	Person whose relevant interest changed	Nature of change (6)	Consideration given in relation to change (7)	Class and number of securities affected	Person's votes affected
See Annexu	ire A				

4. Present relevant interests

Particulars of each relevant interest of the substantial holder in voting securities after the change are as follows:

Holder of	Registered	Person entitled	Nature of	Class and	Person's
relevant	holder of	to be registered	relevant	number of	votes
interest	securities	as holder (8)	interest (6)	securities	
Vanguard	Brown Brothers	Various funds	Vanguard Group is the manager of various Mutual funds and	Ordinary -	
Group	Harriman	and other	accounts and in that capacity has the power to dispose of the	915,662	915,662
		accounts of	shares. The other members of Vanguard Group have a		
		Vanguard Group	relevant interest under section 608(3) of the Corporations Act.		
Vanguard	BNY Mellon	Various funds	Vanguard Group is the manager of various Mutual funds and	Ordinary –	
Group		and other	accounts and in that capacity has the power to dispose of the	2,956,420	2,956,420
		accounts of	shares. The other members of Vanguard Group have a		
		Vanguard Group	relevant interest under section 608(3) of the Corporations Act.		
Vanguard	Citibank N.A	Various funds	Vanguard Group is the manager of various Mutual funds and	Ordinary –	
Group		and other	accounts and in that capacity has the power to dispose of the	18,507	18,507
		accounts of	shares. The other members of Vanguard Group have a		
		Vanguard Group	relevant interest under section 608(3) of the Corporations Act		
Vanguard	JP Morgan Chase	Various funds	Vanguard Group is the manager of various Mutual funds and	Ordinary –	
Group	Bank, N.A.	and other	accounts and in that capacity has the power to dispose of the	33,311,499	33,311,499
		accounts of	shares. The other members of Vanguard Group have a		
		Vanguard Group	relevant interest under section 608(3) of the Corporations Act.		
Vanguard	State Street Bank	Various funds	Vanguard Group is the manager of various Mutual funds and	Ordinary –	
Group	and Trust	and other	accounts and in that capacity has the power to dispose of the	7,943,228	7,943,228
	Company	accounts of	shares. The other members of Vanguard Group have a		
		Vanguard Group	relevant interest under section 608(3) of the Corporations Act.		
Vanguard	Various others	Various funds	Vanguard Group is the manager of various Mutual funds and	Ordinary –	
Group		and other	accounts and in that capacity has the power to dispose of the	16,274,685	16,274,685
		accounts of	shares. The other members of Vanguard Group have a		
		Vanguard Group	relevant interest under section 608(3) of the Corporations Act.		

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5. Changes in association

The persons who have become associates (2) of, ceased to be associates of, or have changed the nature of their association (9) with, the substantial holder in relation to voting interests in the company or scheme are as follows:

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

6. 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

Signature				
	print name	Shawn Acker	capacity	Compliance Manager
		StogON Leave		
	aign hara		data	20 November 2020

To Company ACN/ARSN

Metcash Limited 112 073 480

Substantial Holder Name ACN/ARSN

The Vanguard Group, Inc. N/A

Pate 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
26-Feb-19	The Vanguard Group, Inc.	BUY	2.55		7,965	7,965
27-Feb-19	The Vanguard Group, Inc.	BUY	2.61		651	651
1-Mar-19	The Vanguard Group, Inc.	BUY	2.60		14,355	14,355
5-Mar-19	The Vanguard Group, Inc.	BUY	2.80		9,558	9,558
8-Mar-19	The Vanguard Group, Inc.	BUY	2.65		7,965	7,965
11-Mar-19	The Vanguard Group, Inc.	BUY	2.61		651	651
15-Mar-19	The Vanguard Group, Inc.	SELL	2.64		(2,816)	(2,816
15-Mar-19	The Vanguard Group, Inc.	BUY	2.64		64	64
15 -M ar-19	The Vanguard Group, Inc.	BUY	2.64		970	970
19 -M ar-19	The Vanguard Group, Inc.	BUY	2.63		5,364	5,364
20-Mar-19	The Vanguard Group, Inc.	BUY	2.62		4,779	4,779
21-Mar-19	The Vanguard Group, Inc.	BUY	2.61		6,110	6,110
22-Mar-19	The Vanguard Group, Inc.	BUY	2.61		270,713	270,713
29-Mar-19	The Vanguard Group, Inc.	BUY	2.66		270,980	270,980
29-Mar-19	The Vanguard Group, Inc.	BUY	2.65		651	651
1-Apr-19	The Vanguard Group, Inc.	BUY	2.70		6,372	6,372
4-Apr-19	The Vanguard Group, Inc.	BUY	2.70		1,867	1,867
9-Apr-19	The Vanguard Group, Inc.	BUY	2.59		17,248	17,248
16-Apr-19	The Vanguard Group, Inc.	BUY	2.66		651	651
·	The Vanguard Group, Inc.	BUY	2.85		7,965	7,965
3-May-19	The Vanguard Group, Inc.	BUY	2.90		1,867	1,867
	The Vanguard Group, Inc.	SELL	2.88		(6,486)	(6,486
	The Vanguard Group, Inc.	BUY	2.86		1,867	1,867
•	The Vanguard Group, Inc.	SELL	2.85		(6,486)	(6,486
·	The Vanguard Group, Inc.	BUY	2.85		11,053	11,053
	The Vanguard Group, Inc.	BUY	2.85		9,558	9,558
	The Vanguard Group, Inc.	BUY	2.88		2,091	2,091
	The Vanguard Group, Inc.	SELL	2.95		(6,486)	(6,486
	The Vanguard Group, Inc.	BUY	2.90		651	651
•	The Vanguard Group, Inc.	BUY	3.03		2,774	2,774
•	The Vanguard Group, Inc.	BUY	3.10		4,341	4,341
	The Vanguard Group, Inc.	BUY	2.98		7,965	7,965
	The Vanguard Group, Inc.	SELL	3.00		(1,006)	(1,006
	The Vanguard Group, Inc.	BUY	2.96		12,385	12,385
	The Vanguard Group, Inc.	SELL	3.08		(4,324)	•
	The Vanguard Group, Inc.	SELL	3.08		(8,648)	(8,648
	The Vanguard Group, Inc.	SELL	3.07		(1,867)	
	The Vanguard Group, Inc.	BUY	3.08		651	651
	The Vanguard Group, Inc.	BUY	3.10		31,122	31,122
	The Vanguard Group, Inc.	BUY	3.10		12,683	'
	The Vanguard Group, Inc.	BUY	3.07		465	465
	The Vanguard Group, Inc.	SELL	3.17		(5,405)	(5,405
	The Vanguard Group, Inc.	BUY	3.17		1,775	1,775
	The Vanguard Group, Inc.	SELL	3.03		(16,808)	·
	The Vanguard Group, Inc.	SELL	3.06		(3,243)	• , ,
	The Vanguard Group, Inc.	BUY	3.00		651	651
	The Vanguard Group, Inc.	SELL	2.65		(3,243)	
	The Vanguard Group, Inc.	BUY	2.72		368,419	368,419
	The Vanguard Group, Inc.	BUY	2.59		1,867	1,867
	The Vanguard Group, Inc.	BUY	2.56		119,412	119,412
	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL	2.58		(3,247)	(3,247
	The Vanguard Group, Inc.	SELL	2.58	}		
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.57	ļ	(1,264) 8,301	(1,264 8,301

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
	The Vanguard Group, Inc.	BUY	2.60	Glass	5,473	5,473
	The Vanguard Group, Inc.	BUY	2.60		2,856	2.856
	The Vanguard Group, Inc.	BUY	2.77		6,372	6,372
	The Vanguard Group, Inc.	BUY	2.74		651	651
	The Vanguard Group, Inc.	BUY	2.81		2,531	2,531
12-Jul-19	The Vanguard Group, Inc.	BUY	2.83		8,545	8,545
15-Jul-19	The Vanguard Group, Inc.	BUY	2.83		9,558	9,558
17-Jul-19	The Vanguard Group, Inc.	BUY	2.87		22,392	22,392
22-Jul-19	The Vanguard Group, Inc.	BUY	2.88		7,965	7,965
22-Jul-19	The Vanguard Group, Inc.	BUY	2.88		7,965	7,965
30-Jul-19	The Vanguard Group, Inc.	SELL	2.79		(4,324)	(4,324)
30-Jul-19	The Vanguard Group, Inc.	BUY	2.79		1,867	1,867
1-Aug-19	The Vanguard Group, Inc.	BUY	2.80		14,337	14,337
7-Aug-19	The Vanguard Group, Inc.	BUY	2.82		50,472	50,472
8-Aug-19	The Vanguard Group, Inc.	SELL	2.88		(5,405)	(5,405)
	The Vanguard Group, Inc.	BUY	2.88		215,916	215,916
	The Vanguard Group, Inc.	SELL	2.89		(7,567)	(7,567)
	The Vanguard Group, Inc.	BUY	2.90		651	651
	The Vanguard Group, Inc.	SELL	2.87		(6,486)	(6,486)
4-Sep-19	The Vanguard Group, Inc.	SELL	2.86		(9,773)	(9,773)
6-Sep-19	The Vanguard Group, Inc.	BUY	2.93		651	651
	The Vanguard Group, Inc.	BUY	3.04		201,443	201,443
	The Vanguard Group, Inc.	BUY	3.06		3,243	3,243
	The Vanguard Group, Inc.	BUY	3.00		10,732	10,732
·	The Vanguard Group, Inc.	BUY	3.00		7,195	7,195
· · · · · · · · · · · · · · · · · · ·	The Vanguard Group, Inc.	BUY	3.00		204	204
· · · · · · · · · · · · · · · · · · ·	The Vanguard Group, Inc.	BUY	3.03		31,288	31,288
	The Vanguard Group, Inc.	BUY	2.99		1,747	1,747
	The Vanguard Group, Inc.	BUY	2.81		32,751	32,751
	The Vanguard Group, Inc.	BUY	2.85		666	666
	The Vanguard Group, Inc.	BUY	2.89		4186	
	The Vanguard Group, Inc.	BUY	2.83		4,091	4,091
	The Vanguard Group, Inc.	SELL	2.82		(12,972)	(12,972)
	The Vanguard Group, Inc.	BUY	2.82		354	354
	The Vanguard Group, Inc.	BUY	2.82		666	666
	The Vanguard Group, Inc.	BUY	2.82		13,045	13,045
	The Vanguard Group, Inc.	BUY	2.97		666	666
	The Vanguard Group, Inc.	BUY	3.02		1,167	1,167
	The Vanguard Group, Inc.	BUY	3.03		666	666
	The Vanguard Group, Inc.	BUY	2.85		8,914	8,914
	The Vanguard Group, Inc.	BUY	3.06		395	395
	The Vanguard Group, Inc.	BUY	3.06		1,747	1,747
	The Vanguard Group, Inc.	BUY	3.00		666	666
	The Vanguard Group, Inc.	BUY	2.92		22,302	22,302
	The Vanguard Group, Inc.	BUY	2.90 2.91		1,580	1,580
	The Vanguard Group, Inc.	BUY		-		666
	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL	2.91	-	1,332	1,332
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.88		(1,068)	(1,068) 200
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.77	 		
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.74	-	5,428	5,428 666
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.63	-	790	790
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.60	 	22,302	22,302
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.60	 	4,779	4,779
	The Vanguard Group, Inc.	BUY	2.60	 	1,653	1,653
	The Vanguard Group, Inc.	BUY	2.63		9,558	9,558
	The Vanguard Group, Inc.	BUY	2.63	1	23,895	23,895
	The Vanguard Group, Inc.	BUY	2.57	1	25,893	25,893
	The Vanguard Group, Inc.	BUY	2.57		666	666
21-060-13	The Vanguard Group, Inc.	BUY	2.51	1	54,548	54,548

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
•	The Vanguard Group, Inc.	BUY	2.53		4,767	4,767
	The Vanguard Group, Inc.	BUY	2.54		666	666
9-Jan-20	The Vanguard Group, Inc.	BUY	2.56		28,674	28,674
9-Jan-20	The Vanguard Group, Inc.	SELL	2.54		(11,243)	(11,243)
10-Jan-20	The Vanguard Group, Inc.	BUY	2.52		833	833
13-Jan-20	The Vanguard Group, Inc.	BUY	2.59		833	833
13-Jan-20	The Vanguard Group, Inc.	BUY	2.59		1,747	1,747
15-Jan-20	The Vanguard Group, Inc.	BUY	2.59		12,744	12,744
15-Jan-20	The Vanguard Group, Inc.	SELL	2.59		(44,734)	(44,734)
15-Jan-20	The Vanguard Group, Inc.	BUY	2.59		833	833
16-Jan-20	The Vanguard Group, Inc.	BUY	2.63		14,337	14,337
	The Vanguard Group, Inc.	BUY	2.61		12,744	12,744
	The Vanguard Group, Inc.	BUY	2.61		14,337	14,337
	The Vanguard Group, Inc.	BUY	2.64		9,558	9,558
	The Vanguard Group, Inc.	BUY	2.65		1,747	1,747
	The Vanguard Group, Inc.	BUY	2.66		7,965	7,965
	The Vanguard Group, Inc.	BUY	2.61		670	670
	The Vanguard Group, Inc.	BUY	2.59		10,092	10,092
	The Vanguard Group, Inc.	BUY	2.59		10,092	10,092
	The Vanguard Group, Inc.	BUY	2.62		6,505	6,505
	The Vanguard Group, Inc.	BUY	2.57		5,241	5,241
	The Vanguard Group, Inc.	BUY	2.61		240,335	240,335
	The Vanguard Group, Inc.	BUY	2.61		14,254	14,254
	The Vanguard Group, Inc.	BUY	2.62		670	670
	The Vanguard Group, Inc.	BUY	2.62		1,388	1,388
	The Vanguard Group, Inc.	BUY	2.64		35,321	35,321
	The Vanguard Group, Inc.	BUY	2.64		13,013	13,013
	The Vanguard Group, Inc.	BUY	2.68		16,731	16,731
	The Vanguard Group, Inc.	BUY	2.66		1,747	1,747
	The Vanguard Group, Inc.	BUY	2.70		11,166	11,166
	The Vanguard Group, Inc.	BUY	2.70		670	670
	The Vanguard Group, Inc.	BUY	2.70		670	670
	The Vanguard Group, Inc.	BUY	2.78		24,193	24,193
	The Vanguard Group, Inc.	BUY	2.78		670	670
	The Vanguard Group, Inc.	BUY	2.75		11,166	11,166
	The Vanguard Group, Inc.	BUY	2.76		6,828	6,828
	The Vanguard Group, Inc.	BUY	2.79		9,305	9,305
	The Vanguard Group, Inc.	BUY	2.82		12,229	12,229
	The Vanguard Group, Inc.	SELL	2.81		14,888	14,888
	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL	2.74		(5,405)	(5,405)
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.64	 	(2,162) 213,896	(2,162) 213,896
	The Vanguard Group, Inc.	BUY	2.64		11,166	11,166
	The Vanguard Group, Inc.	SELL	2.74		(15,746)	·
	The Vanguard Group, Inc.	SELL	2.74		(14,888)	(14,888)
	The Vanguard Group, Inc.	BUY	2.59		491,450	491,450
	The Vanguard Group, Inc.	BUY	2.55	 	15,533	15,533
	The Vanguard Group, Inc.	BUY	2.55	 	2,121	
	The Vanguard Group, Inc.	SELL	2.63	 	(11,166)	
	The Vanguard Group, Inc.	BUY	2.64	 	(11,100)	(11,100)
	The Vanguard Group, Inc.	SELL	2.61	1	(9,305)	
	The Vanguard Group, Inc.	SELL	2.50	 	(5,583)	
	The Vanguard Group, Inc.	SELL	2.29	 	(20,471)	
	The Vanguard Group, Inc.	BUY	2.43	 	670	670
	The Vanguard Group, Inc.	BUY	2.43	 	38,860	38,860
	The Vanguard Group, Inc.	SELL	2.37		(3,243)	·
	The Vanguard Group, Inc.	BUY	2.41	 	1,747	1,747
	The Vanguard Group, Inc.	SELL	3.14		(4,324)	·
	The Vanguard Group, Inc.	SELL	3.14		(14,888)	
	The Vanguard Group, Inc.	SELL	3.14	t	(18,610)	

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
	The Vanguard Group, Inc.	BUY	3.06		35,510	35,510
	The Vanguard Group, Inc.	BUY	3.21		268,814	268,814
18-Mar-20	The Vanguard Group, Inc.	BUY	3.13		17,600	17,600
19-Mar-20	The Vanguard Group, Inc.	BUY	3.30		640	640
19-Mar-20	The Vanguard Group, Inc.	BUY	3.25		5,212	5,212
20-Mar-20	The Vanguard Group, Inc.	SELL	3.15		(5,405)	(5,405)
20-Mar-20	The Vanguard Group, Inc.	SELL	3.20		(21,482)	(21,482)
20-Mar-20	The Vanguard Group, Inc.	BUY	3.15		1,731	1,731
20-Mar-20	The Vanguard Group, Inc.	BUY	3.20		18,841	18,841
20-Mar-20	The Vanguard Group, Inc.	BUY	3.15		640	640
20-Mar-20	The Vanguard Group, Inc.	SELL	3.20		(24,853)	(24,853)
20-Mar-20	The Vanguard Group, Inc.	BUY	3.20		42,582	42,582
20-Mar-20	The Vanguard Group, Inc.	BUY	3.20		5,536	5,536
20-Mar-20	The Vanguard Group, Inc.	BUY	3.20		1,393	1,393
23-Mar-20	The Vanguard Group, Inc.	SELL	3.28		(4,324)	(4,324)
23-Mar-20	The Vanguard Group, Inc.	BUY	3.29		1,761	1,761
	The Vanguard Group, Inc.	SELL	3.15		(13,118)	(13,118)
	The Vanguard Group, Inc.	SELL	3.15		(7,871)	(7,871)
	The Vanguard Group, Inc.	BUY	3.35		40,102	40,102
	The Vanguard Group, Inc.	BUY	3.35		3,740	3,740
	The Vanguard Group, Inc.	SELL	3.36		(1,064)	(1,064)
	The Vanguard Group, Inc.	SELL	3.25		(3,243)	(3,243)
	The Vanguard Group, Inc.	SELL	3.24		(33,837)	(33,837)
	The Vanguard Group, Inc.	SELL	3.24		(8,024)	
	The Vanguard Group, Inc.	SELL	3.31		(4,228)	(4,228)
	The Vanguard Group, Inc.	BUY	3.27		1,744	1,744
· · · · · · · · · · · · · · · · · · ·	The Vanguard Group, Inc.	SELL	3.12		(1,220)	(1,220)
	The Vanguard Group, Inc.	SELL	3.12		(1,220)	(1,220)
•	The Vanguard Group, Inc.	BUY	3.16		3,488	3,488
	The Vanguard Group, Inc.	SELL	3.10		(18,822)	(18,822)
•	The Vanguard Group, Inc.	SELL	3.10		(1,791)	(1,791)
•	The Vanguard Group, Inc.	BUY	3.04		1,000	1,000
· · · · · · · · · · · · · · · · · · ·	The Vanguard Group, Inc.	BUY	3.04		1,677	1,677
•	The Vanguard Group, Inc.	SELL	2.83		(5,430)	
•	The Vanguard Group, Inc.	SELL	2.83		(734)	(734)
· · · · · · · · · · · · · · · · · · ·	The Vanguard Group, Inc.	BUY	2.83		5,232	5,232
·	The Vanguard Group, Inc.	BUY	2.83		1,300	1,300
	The Vanguard Group, Inc.	BUY	2.84		1,824	1,824
	The Vanguard Group, Inc.	BUY	2.84		608	608
	The Vanguard Group, Inc.	BUY	2.93		1,824	1,824
•	The Vanguard Group, Inc.	SELL	2.94		(5,200)	
	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL SELL	2.94		(11,700)	, , ,
·	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.94	-	(10,400)	, , ,
·	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.94	-	1,824	1,824 813
	The Vanguard Group, Inc.	SELL	2.95	 	(2,839)	
•	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL	3.04	 	(25,873)	
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	3.04		1,742	1,742
	The Vanguard Group, Inc.	BUY	3.05	 	700	700
•	The Vanguard Group, Inc.	BUY	3.05		2,625	2,625
	The Vanguard Group, Inc.	BUY	2.80	-	880	880
	The Vanguard Group, Inc.	BUY	2.80		9,413	9,413
	The Vanguard Group, Inc.	BUY	2.80	 	16,785	16,785
	The Vanguard Group, Inc.	BUY	2.80		2,869	2,869
	The Vanguard Group, Inc.	BUY	2.80	1	2,036	2,036
	The Vanguard Group, Inc.	BUY	2.80	 	75,100	75,100
	The Vanguard Group, Inc.	BUY	2.80	 	4,001	4,001
	The Vanguard Group, Inc.	BUY	2.80	 	7,383	7,383
	The Vanguard Group, Inc.	BUY	2.80		42,971	42,971
	The Vanguard Group, Inc.	BUY	2.80	1	1,144	1,144

Data of shower	Person whose relevant interest changed	Nature of	Consideration given in relation	Class	Number of securities affected	Person's votes
- att or or and	The Vanguard Group, Inc.	Change(6) BUY	to change(7)	Class	2,851	2,851
	The Vanguard Group, Inc.	BUY	2.80		2,831	2,831
	The Vanguard Group, Inc.	SELL	2.54		(20,508)	(20,508)
· · · · · · · · · · · · · · · · · · ·	The Vanguard Group, Inc.	BUY	2.80		3,807	3,807
24-Apr-20	The Vanguard Group, Inc.	BUY	2.80		165	165
24-Apr-20	The Vanguard Group, Inc.	BUY	2.80		2,706	2,706
24-Apr-20	The Vanguard Group, Inc.	BUY	2.80		30,488	30,488
	The Vanguard Group, Inc.	BUY	2.80		3,515	3,515
	The Vanguard Group, Inc.	BUY	2.80		9,593	,
	The Vanguard Group, Inc.	SELL	2.48		(12,186)	(12,186)
	The Vanguard Group, Inc.	SELL	2.43		(3,432)	(3,432)
	The Vanguard Group, Inc.	SELL	2.43		(16,476)	(16,476)
	The Vanguard Group, Inc.	SELL	2.32		(6,006)	(6,006)
	The Vanguard Group, Inc.	BUY	2.37		1,740	1,740
	The Vanguard Group, Inc.	BUY	2.42		1,740	1,740
	The Vanguard Group, Inc.	BUY	2.49		1,742	1,742
	The Vanguard Group, Inc.	SELL	2.49		(8,449)	(8,449)
·	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.52	 	1,707 8,857	1,707 8,857
	The Vanguard Group, Inc.	BUY	2.66		1,138	1,138
	The Vanguard Group, Inc.	BUY	2.70		10,296	10,296
	The Vanguard Group, Inc.	BUY	2.71		4,290	4,290
	The Vanguard Group, Inc.	BUY	2.72		12,870	12,870
	The Vanguard Group, Inc.	BUY	2.76		1,707	1,707
	The Vanguard Group, Inc.	BUY	2.73		4,290	4,290
	The Vanguard Group, Inc.	BUY	2.75		1,138	1,138
	The Vanguard Group, Inc.	SELL	2.83		(208,332)	(208,332)
	The Vanguard Group, Inc.	SELL	2.77		(13,730)	
9-Jun-20	The Vanguard Group, Inc.	BUY	2.82		1,138	1,138
9-Jun-20	The Vanguard Group, Inc.	BUY	2.83		1,743	1,743
9-Jun-20	The Vanguard Group, Inc.	BUY	2.83		550	550
10-Jun-20	The Vanguard Group, Inc.	SELL	2.84		(25,164)	(25,164)
11-Jun-20	The Vanguard Group, Inc.	BUY	2.84		4,290	4,290
	The Vanguard Group, Inc.	SELL	2.84		(5,492)	(5,492)
	The Vanguard Group, Inc.	SELL	2.84		(13,730)	
	The Vanguard Group, Inc.	SELL	2.84		(8,238)	(8,238)
	The Vanguard Group, Inc.	SELL	2.72		(8,238)	
	The Vanguard Group, Inc.	SELL	2.86		(22,434)	• • • • • • • • • • • • • • • • • • • •
	The Vanguard Group, Inc.	BUY	2.84		160,900	160,900
	The Vanguard Group, Inc.	BUY	2.84		678,797	678,797
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.84		195,608	195,608
	The Vanguard Group, Inc.	BUY	2.81		13,093 1,138	13,093 1,138
	The Vanguard Group, Inc.	SELL	2.84		(25,868)	
	The Vanguard Group, Inc.	BUY	2.84		26,401	26,401
	The Vanguard Group, Inc.	BUY	2.84	1	9,027	9,027
	The Vanguard Group, Inc.	SELL	2.83		(33)	
	The Vanguard Group, Inc.	SELL	2.86		(25,739)	
	The Vanguard Group, Inc.	SELL	2.88		(33,628)	
	The Vanguard Group, Inc.	SELL	2.88		(32,117)	
24-Jun-20	The Vanguard Group, Inc.	SELL	2.76		(8,238)	
24-Jun-20	The Vanguard Group, Inc.	BUY	2.79		795	795
	The Vanguard Group, Inc.	BUY	2.71		1,707	1,707
29-Jun-20	The Vanguard Group, Inc.	BUY	2.70		1,580	1,580
30-Jun-20	The Vanguard Group, Inc.	SELL	2.73		(6,865)	(6,865)
	The Vanguard Group, Inc.	BUY	2.76		58,096	58,096
	The Vanguard Group, Inc.	BUY	2.80		800	800
	The Vanguard Group, Inc.	BUY	2.82		38,694	38,694
	The Vanguard Group, Inc.	BUY	2.77		3,414	3,414
8-Jul-20	The Vanguard Group, Inc.	BUY	2.75		11,540	11,540

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
	The Vanguard Group, Inc.	BUY	2.78		11,619	11,619
	The Vanguard Group, Inc.	SELL	2.77		(76,475)	(76,475)
15-Jul-20	The Vanguard Group, Inc.	SELL	2.81		(10,740)	(10,740)
15-Jul-20	The Vanguard Group, Inc.	SELL	2.81		(3,580)	(3,580)
30-Jul-20	The Vanguard Group, Inc.	BUY	2.80		1,138	1,138
30-Jul-20	The Vanguard Group, Inc.	BUY	2.79		1,270	1,270
3-Aug-20	The Vanguard Group, Inc.	BUY	2.77		5,838	5,838
4-Aug-20	The Vanguard Group, Inc.	BUY	2.86		1,707	1,707
6-Aug-20	The Vanguard Group, Inc.	BUY	2.83		1,138	1,138
10-Aug-20	The Vanguard Group, Inc.	SELL	2.86		(27,821)	(27,821)
12-Aug-20	The Vanguard Group, Inc.	BUY	2.97		20,413	20,413
13-Aug-20	The Vanguard Group, Inc.	SELL	2.98		(3,580)	(3,580)
13-Aug-20	The Vanguard Group, Inc.	BUY	2.99		1,210	1,210
17-Aug-20	The Vanguard Group, Inc.	BUY	3.01		12,357	12,357
	The Vanguard Group, Inc.	BUY	3.01		16,476	16,476
	The Vanguard Group, Inc.	BUY	3.01		1,138	1,138
	The Vanguard Group, Inc.	SELL	2.96		(40,706)	(40,706)
	The Vanguard Group, Inc.	BUY	2.96		40,706	,
-	The Vanguard Group, Inc.	BUY	2.96		1,138	, , , , , , , , , , , , , , , , , , ,
-	The Vanguard Group, Inc.	SELL	2.95		(1,743)	, , ,
	The Vanguard Group, Inc.	SELL	3.01		(25,281)	(25,281)
	The Vanguard Group, Inc.	BUY	3.00		6,865	6,865
	The Vanguard Group, Inc.	SELL	2.85		(406,865)	(406,865)
	The Vanguard Group, Inc.	BUY	2.85		406,865	406,865
	The Vanguard Group, Inc.	BUY	2.94		1,707	1,707
	The Vanguard Group, Inc.	BUY	2.97		425,071	425,071
	The Vanguard Group, Inc.	BUY	2.97		90,000	, , , , , , , , , , , , , , , , , , ,
	The Vanguard Group, Inc.	BUY	2.93		166,572	166,572
	The Vanguard Group, Inc.	BUY	2.93		390	390
	The Vanguard Group, Inc.	BUY	2.87		101	101
	The Vanguard Group, Inc.	BUY	2.85		1,138	,
'	The Vanguard Group, Inc.	SELL	2.85		(7,752)	(7,752)
	The Vanguard Group, Inc.	SELL	2.85		(2,527)	(2,527)
	The Vanguard Group, Inc.	BUY	2.88		1,707	1,707
	The Vanguard Group, Inc.	SELL	2.80		(436,002)	(436,002)
•	The Vanguard Group, Inc.	BUY	2.80		436,002	436,002
	The Vanguard Group, Inc.	BUY	2.76		682	682
	The Vanguard Group, Inc.	BUY	2.72		8,712	8,712
	The Vanguard Group, Inc.	BUY	2.78		1,138	· ·
	The Vanguard Group, Inc.	BUY	2.77		3,866	3,866
	The Vanguard Group, Inc.	BUY	2.75		1,707	1,707
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.91	-	18,876	18,876
	J 17	BUY	2.91	-	7,260	7,260
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.91	-	1,138 1,707	1,138 1,707
	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL	2.91	 	(406,073)	(406,073)
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	2.99		406,073	406,073
	The Vanguard Group, Inc. The Vanguard Group, Inc.	BUY	3.10		688	688
	The Vanguard Group, Inc. The Vanguard Group, Inc.	SELL	3.05	 	(404,025)	(404,025)
	The Vanguard Group, Inc.	BUY	3.06		3,874	3,874
	The Vanguard Group, Inc.	BUY	3.05	1	404,025	
	The Vanguard Group, Inc.	BUY	2.95		569	
	The Vanguard Group, Inc.	BUY	2.95	 	25,396	25,396
	The Vanguard Group, Inc.	BUY	2.94		1,138	
	The Vanguard Group, Inc.	BUY	2.93	1	654	654
	The Vanguard Group, Inc.	BUY	2.94	 	1,118	1,118
	The Vanguard Group, Inc.	BUY	3.05	 	3,414	
	The Vanguard Group, Inc.	BUY	3.01	 	1,138	·
	The Vanguard Group, Inc.	BUY	3.17	 	9,221	9,221
	The Vanguard Group, Inc.	SELL	2.97	1	(391,178)	

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
	The Vanguard Group, Inc.	BUY	2.98	Oluss	673	673
	The Vanguard Group, Inc.	BUY	2.97		391,178	
	The Vanguard Group, Inc.	BUY	3.05		13,506	13,506
	The Vanguard Group, Inc.	BUY	3.08		725	725
	The Vanguard Group, Inc.	BUY	3.02		30,653	
	The Vanguard Group, Inc.	BUY	3.02		8,578	
	Vanguard Investments Australia Ltd.	BUY	2.55		12,948	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.55		101,787	101,787
	Vanguard Investments Australia Ltd.	BUY	2.55		9,620	9,620
5-Mar-19	Vanguard Investments Australia Ltd.	BUY	2.80		61,568	61,568
15-Mar-19	Vanguard Investments Australia Ltd.	BUY	2.64		2,752	2,752
15-Mar-19	Vanguard Investments Australia Ltd.	BUY	2.64		41,696	41,696
29-Mar-19	Vanguard Investments Australia Ltd.	SELL	2.65		(79,353)	(79,353)
1-Apr-19	Vanguard Investments Australia Ltd.	SELL	2.69		(50,671)	(50,671)
1-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.69		59,898	59,898
	Vanguard Investments Australia Ltd.	BUY	2.69		46,600	46,600
2-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.71		9,065	9,065
2-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.71		6,580	6,580
8-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.62		7,520	7,520
9-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.59		284,760	284,760
16-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.66		59,621	59,621
26-Apr-19	Vanguard Investments Australia Ltd.	SELL	2.83		(53,673)	(53,673)
30-Apr-19	Vanguard Investments Australia Ltd.	BUY	2.87		10,512	10,512
1-May-19	Vanguard Investments Australia Ltd.	BUY	2.90		2,989	2,989
1-May-19	Vanguard Investments Australia Ltd.	BUY	2.90		48,018	48,018
6-May-19	Vanguard Investments Australia Ltd.	BUY	2.89		31,808	31,808
10-May-19	Vanguard Investments Australia Ltd.	BUY	2.87		13,199	13,199
10-May-19	Vanguard Investments Australia Ltd.	BUY	2.88		7,884	7,884
16-May-19	Vanguard Investments Australia Ltd.	BUY	2.99		48,917	48,917
•	Vanguard Investments Australia Ltd.	BUY	3.02		71,369	71,369
	Vanguard Investments Australia Ltd.	BUY	3.02		9,030	, , , , , , , , , , , , , , , , , , ,
	Vanguard Investments Australia Ltd.	BUY	3.04		9,030	,
	Vanguard Investments Australia Ltd.	SELL	3.02		(22,790)	, , ,
	Vanguard Investments Australia Ltd.	SELL	3.00		(23,917)	
	Vanguard Investments Australia Ltd.	BUY	3.00		9,030	, , , , , , , , , , , , , , , , , , ,
	Vanguard Investments Australia Ltd.	SELL	3.00		(30,498)	
	Vanguard Investments Australia Ltd.	BUY	3.00		8,270	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.96		48,427	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	3.06		76,772	
	Vanguard Investments Australia Ltd.	BUY	3.06		9,030	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	3.07		3,782	3,782
	Vanguard Investments Australia Ltd.	BUY	3.08		3,782	
	Vanguard Investments Australia Ltd.	BUY	3.08		10,836	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	3.17		5,673	
	Vanguard Investments Australia Ltd.	BUY	3.17		31,546	
	Vanguard Investments Australia Ltd.	BUY	3.03		3,782	3,782
	Vanguard Investments Australia Ltd.	BUY	3.00		8,266	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	3.00		7,224	
	Vanguard Investments Australia Ltd.	SELL	3.04	ļ	(51,838)	
	Vanguard Investments Australia Ltd.	SELL	3.11		(46,654)	· ' ' '
	Vanguard Investments Australia Ltd.	SELL	3.14		(41,988)	
	Vanguard Investments Australia Ltd.	BUY	3.15		5,670	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	SELL	3.15		(377,901)	
	Vanguard Investments Australia Ltd.	BUY	3.15		61,472	· ·
	Vanguard Investments Australia Ltd.	BUY	3.15		5,418	
	Vanguard Investments Australia Ltd.	SELL	2.66		(38,189)	
	Vanguard Investments Australia Ltd.	BUY	2.66		8,310	
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.59 2.58		4,809	· · · · · · · · · · · · · · · · · · ·
	vanguaru mvesimenis Australia Llu.	וטסן	2.58	I	6,424	6,424

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
	Vanguard Investments Australia Ltd.	SELL	2.57	Oluss	(14,604)	(14,604)
	Vanguard Investments Australia Ltd.	BUY	2.64		4,758	
	Vanguard Investments Australia Ltd.	BUY	2.64		10,488	10,488
	Vanguard Investments Australia Ltd.	BUY	2.76		9,516	9,516
	Vanguard Investments Australia Ltd.	BUY	2.76		5,244	,
	Vanguard Investments Australia Ltd.	BUY	2.74		5,244	5,244
	Vanguard Investments Australia Ltd.	BUY	2.83		5,142	5,142
	Vanguard Investments Australia Ltd.	BUY	2.84		52,454	52,454
	Vanguard Investments Australia Ltd.	BUY	2.83		4,758	4,758
	Vanguard Investments Australia Ltd.	BUY	2.84		10,224	10,224
	Vanguard Investments Australia Ltd.	SELL	2.87		(35,211)	(35,211)
	Vanguard Investments Australia Ltd.	BUY	2.85		12,261	12,261
	Vanguard Investments Australia Ltd.	BUY	2.88		4,758	4,758
	Vanguard Investments Australia Ltd.	BUY	2.79		9,273	9,273
	Vanguard Investments Australia Ltd.	BUY	2.82		4,758	
	Vanguard Investments Australia Ltd.	BUY	2.83		8,162	8,162
	Vanguard Investments Australia Ltd.	BUY	2.76		15,694	15,694
<u> </u>	Vanguard Investments Australia Ltd.	BUY	2.76		6,344	6,344
	Vanguard Investments Australia Ltd.	BUY	2.76		56,326	,
	Vanguard Investments Australia Ltd.	BUY	2.76		7,614	7,614
-	Vanguard Investments Australia Ltd.	BUY	2.76		7,614	7,614
	Vanguard Investments Australia Ltd.	BUY	2.87		11,102	11,102
	Vanguard Investments Australia Ltd.	BUY	2.86		9,328	9,328
	Vanguard Investments Australia Ltd.	BUY	2.87		20,700	, , , , , , , , , , , , , , , , , , ,
	Vanguard Investments Australia Ltd.	BUY	2.87		9,262	9,262
	Vanguard Investments Australia Ltd.	BUY	2.90		6,368	6,368
	Vanguard Investments Australia Ltd.	BUY	2.90		6,364	6,364
	Vanguard Investments Australia Ltd.	BUY	2.85	-	54,251	54,251
	Vanguard Investments Australia Ltd.	SELL	2.83		(24,306)	(24,306)
	Vanguard Investments Australia Ltd.	BUY	2.90	-	4,779	4,779
	Vanguard Investments Australia Ltd.	BUY	2.90		359,704	359,704
	Vanguard Investments Australia Ltd.	BUY	2.84	-	10,587	10,587
	Vanguard Investments Australia Ltd.	BUY	2.84		55,642	55,642
		BUY	2.64			,
	Vanguard Investments Australia Ltd.				33,721	33,721
	Vanguard Investments Australia Ltd.	BUY SELL	2.74		38,672	38,672
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY			(16,800)	(16,800)
	<u> </u>	BUY	2.83		4,797 8.404	4,797 8.404
	Vanguard Investments Australia Ltd.				-,	-,
	Vanguard Investments Australia Ltd.	BUY	2.84		18,810	
	Vanguard Investments Australia Ltd.	BUY	2.83		76,692	76,692
	Vanguard Investments Australia Ltd.	BUY	2.93	 	36,167	36,167
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.93	 	6,412	6,412
	<u> </u>		2.97	 	6,436 38,441	·
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.97	 		38,441
	<u> </u>				6,436	
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.95	 	12,654	,
	<u> </u>	SELL	3.02		(14,431)	(14,431)
	Vanguard Investments Australia Ltd.	BUY	3.04	1	16,682	·
	Vanguard Investments Australia Ltd.	BUY	3.00	1	4,827	4,827
'	Vanguard Investments Australia Ltd.	BUY	3.00	1	8,770	
	Vanguard Investments Australia Ltd.	BUY	3.02	ļ	12,555	
	Vanguard Investments Australia Ltd.	BUY	3.03	1	14,953	14,953
	Vanguard Investments Australia Ltd.	BUY	3.03	ļ	11,788	•
	Vanguard Investments Australia Ltd.	BUY	3.00	ļ	12,663	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	3.00	ļ	11,235	11,235
'	Vanguard Investments Australia Ltd.	BUY	3.00	1	6,420	•
	Vanguard Investments Australia Ltd.	BUY	3.00	1	10,128	•
•	Vanguard Investments Australia Ltd.	SELL	2.99		(48,991)	
	Vanguard Investments Australia Ltd.	BUY	2.93	1	15,789	
2-Oct-19	Vanguard Investments Australia Ltd.	SELL	2.93	I	(19,944)	(19,944)

	D	Nature of	Consideration given in relation		Number of	Person's votes
Date of change	Person whose relevant interest changed	Change(6)	to change(7)	Class	securities affected	affected
	Vanguard Investments Australia Ltd.	BUY	2.89	<u> </u>	9,474	,
	Vanguard Investments Australia Ltd.	BUY	2.90 2.90		34,602 14,161	34,602
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.90		69,714	14,161 69,714
	Vanguard Investments Australia Ltd.	BUY	2.90		7,895	,
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.79		16,868	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.79		16,868	,
	Vanguard Investments Australia Ltd.	BUY	2.79		6,648	•
	Vanguard Investments Australia Ltd.	BUY	2.81		116,573	116,573
	Vanguard Investments Australia Ltd.	BUY	2.89		138,144	,
	Vanguard Investments Australia Ltd.	BUY	2.89		6,316	
	Vanguard Investments Australia Ltd.	BUY	2.86		59,038	
18-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.86		4,737	4,737
18-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.86		8,310	8,310
21-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.85		34,965	34,965
	Vanguard Investments Australia Ltd.	BUY	2.84		58,765	58,765
22-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.84		8,360	8,360
28-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.83		8,400	8,400
29-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.83		3,194	3,194
30-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.80		27,937	27,937
30-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.80		4,737	4,737
30-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.80		6,316	6,316
31-Oct-19	Vanguard Investments Australia Ltd.	BUY	2.82		23,165	23,165
	Vanguard Investments Australia Ltd.	BUY	2.82		20,232	20,232
	Vanguard Investments Australia Ltd.	SELL	2.82		(10,116)	
	Vanguard Investments Australia Ltd.	SELL	2.84		(21,359)	(21,359)
	Vanguard Investments Australia Ltd.	BUY	2.84		6,316	,
	Vanguard Investments Australia Ltd.	BUY	2.84		4,737	4,737
	Vanguard Investments Australia Ltd.	BUY	2.80		6,316	,
	Vanguard Investments Australia Ltd.	BUY	2.80		10,248	, , , , , , , , , , , , , , , , , , ,
	Vanguard Investments Australia Ltd.	SELL	2.95		(54,686)	(54,686)
	Vanguard Investments Australia Ltd.	BUY	2.95		6,304	6,304
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	3.04		33,696 16,848	,
	Vanguard Investments Australia Ltd.	BUY	3.04		29,484	16,848 29,484
	Vanguard Investments Australia Ltd.	BUY	3.03		4,752	4,752
	Vanguard Investments Australia Ltd.	BUY	3.03		9,482	9,482
	Vanguard Investments Australia Ltd.	BUY	3.07		12,675	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	3.07		2,658	
	Vanguard Investments Australia Ltd.	BUY	3.02		6,348	
	Vanguard Investments Australia Ltd.	BUY	3.03		33,744	
	Vanguard Investments Australia Ltd.	BUY	3.03	1	21,090	
	Vanguard Investments Australia Ltd.	BUY	3.03		11,609	
20-Nov-19	Vanguard Investments Australia Ltd.	SELL	2.97		(66,195)	·
20-Nov-19	Vanguard Investments Australia Ltd.	BUY	2.97		6,265	6,265
21-Nov-19	Vanguard Investments Australia Ltd.	BUY	3.04		6,352	6,352
21-Nov-19	Vanguard Investments Australia Ltd.	BUY	3.04		18,795	18,795
22-Nov-19	Vanguard Investments Australia Ltd.	BUY	2.83		4,764	4,764
	Vanguard Investments Australia Ltd.	BUY	2.83		33,347	33,347
	Vanguard Investments Australia Ltd.	BUY	2.85		21,025	
	Vanguard Investments Australia Ltd.	BUY	2.85		37,845	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.85		17,346	, , , , , , , , , , , , , , , , , , ,
	Vanguard Investments Australia Ltd.	SELL	2.93		(43,149)	
	Vanguard Investments Australia Ltd.	SELL	3.04		(3,194)	
	Vanguard Investments Australia Ltd.	BUY	3.05		4,764	
	Vanguard Investments Australia Ltd.	BUY	3.00	ļ	10,860	
	Vanguard Investments Australia Ltd.	BUY	2.95	1	44,518	
	Vanguard Investments Australia Ltd.	BUY	2.91		9,528	
	Vanguard Investments Australia Ltd.	BUY	2.77	ļ	7,940	
4-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.77	I	20,130	20,130

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
<u>*</u>	Vanguard Investments Australia Ltd.	BUY	2.77		32,167	32,167
	Vanguard Investments Australia Ltd.	BUY	2.74		6,352	6,352
	Vanguard Investments Australia Ltd.	BUY	2.74		10,944	10,944
	Vanguard Investments Australia Ltd.	BUY	2.64		18,552	18,552
11-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.64		33,254	33,254
13-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.65		6,352	6,352
13-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.65		8,830	8,830
16-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.69		12,168	12,168
18-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.67		12,194	12,194
20-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.60		6,344	6,344
20-Dec-19	Vanguard Investments Australia Ltd.	SELL	2.60		(241,825)	(241,825)
27-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.63		8,098	,
27-Dec-19	9 Vanguard Investments Australia Ltd.	BUY	2.63		4,308	, , , , , , , , , , , , , , , , , , ,
	9 Vanguard Investments Australia Ltd.	BUY	2.64		44,370	44,370
30-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.64		26,291	26,291
30-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.65		6,880	6,880
	Vanguard Investments Australia Ltd.	SELL	2.57		(17,734)	(17,734)
	Vanguard Investments Australia Ltd.	SELL	2.57		(26,415)	(26,415)
31-Dec-19	Vanguard Investments Australia Ltd.	BUY	2.57		4,260	4,260
	Vanguard Investments Australia Ltd.	BUY	2.55		5,696	5,696
	Vanguard Investments Australia Ltd.	BUY	2.55		10,092	10,092
	Vanguard Investments Australia Ltd.	BUY	2.59		4,980	4,980
	Vanguard Investments Australia Ltd.	BUY	2.54		12,390	12,390
	Vanguard Investments Australia Ltd.	SELL	2.55		(6,616)	, , ,
	Vanguard Investments Australia Ltd.	BUY	2.59		11,940	·
	Vanguard Investments Australia Ltd.	BUY	2.59		12,315	
	Vanguard Investments Australia Ltd.	BUY	2.62		11,940	,
	Vanguard Investments Australia Ltd.	BUY	2.60		46,833	46,833
	Vanguard Investments Australia Ltd.	BUY	2.60		4,272	4,272
	Vanguard Investments Australia Ltd.	BUY	2.65		12,360	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.65		4,272	4,272
	Vanguard Investments Australia Ltd.	BUY	2.64		5,696	
	Vanguard Investments Australia Ltd.	BUY	2.56		12,135	12,135
	Vanguard Investments Australia Ltd.	BUY	2.62		8,060	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.71		31,391	31,391
	Vanguard Investments Australia Ltd.	BUY	2.70		16,240	, , , , , , , , , , , , , , , , , , ,
	O Vanguard Investments Australia Ltd.	SELL	2.72		(46,198)	, , ,
	Vanguard Investments Australia Ltd.	SELL	2.78		(7,115)	
	Vanguard Investments Australia Ltd.	SELL	2.75		(32,362)	
	Vanguard Investments Australia Ltd.	SELL	2.64		(14,461)	
	D Vanguard Investments Australia Ltd. D Vanguard Investments Australia Ltd.	BUY	2.62	-	13,440 52,596	
	Vanguard Investments Australia Ltd.	SELL	2.36	 	(15,677)	
	Vanguard Investments Australia Ltd.	BUY	2.47		12,600	
	Vanguard Investments Australia Ltd.	BUY	2.47		11,829	,
	Vanguard Investments Australia Ltd.	BUY	2.47		4,308	
	Vanguard Investments Australia Ltd.	BUY	2.60		22,788	
	Vanguard Investments Australia Ltd.	BUY	2.67		5,744	
	Vanguard Investments Australia Ltd.	BUY	2.67		14,365	
	Vanguard Investments Australia Ltd.	BUY	2.67		5,776	
	Vanguard Investments Australia Ltd.	BUY	2.50		10,678	
	Vanguard Investments Australia Ltd.	BUY	2.50		8,664	·
	Vanguard Investments Australia Ltd.	BUY	2.50		7,220	
	Vanguard Investments Australia Ltd.	BUY	2.50		35,931	·
	Vanguard Investments Australia Ltd.	BUY	2.50		29,750	
	Vanguard Investments Australia Ltd.	BUY	2.58		44,846	
	Vanguard Investments Australia Ltd.	BUY	2.55		9,496	
	Vanguard Investments Australia Ltd.	BUY	2.54		8,664	
	O Vanguard Investments Australia Ltd.	BUY	2.54		12,996	,
	Vanguard Investments Australia Ltd.	BUY	2.54	1	17,060	

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
	0 Vanguard Investments Australia Ltd.	BUY	2.54		21,325	21,325
	0 Vanguard Investments Australia Ltd.	BUY	2.35		5,776	, , , , , , , , , , , , , , , , , , ,
12-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	2.35		90,907	90,907
12-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	2.35		25,620	25,620
12-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	2.35		14,518	14,518
13-Mar-2	0 Vanguard Investments Australia Ltd.	SELL	2.43		(20,651)	(20,651)
13-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	2.43		11,552	11,552
13-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	2.43		55,147	55,147
13-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	2.43		25,800	25,800
	0 Vanguard Investments Australia Ltd.	BUY	2.41		30,100	· · · · · · · · · · · · · · · · · · ·
	O Vanguard Investments Australia Ltd.	BUY	3.06		8,226	· · · · · · · · · · · · · · · · · · ·
	0 Vanguard Investments Australia Ltd.	BUY	3.06		11,552	11,552
	0 Vanguard Investments Australia Ltd.	BUY	3.06		8,664	
	O Vanguard Investments Australia Ltd.	BUY	3.06		21,400	· · · · · · · · · · · · · · · · · · ·
	0 Vanguard Investments Australia Ltd.	SELL	3.13		(27,599)	, , ,
	O Vanguard Investments Australia Ltd.	BUY	3.13	ļ	36,640	
	O Vanguard Investments Australia Ltd.	BUY	3.13	ļ	25,800	,
	O Vanguard Investments Australia Ltd. O Vanguard Investments Australia Ltd.	BUY	3.25	-	4,335 19,665	4,335 19,665
	O Vanguard Investments Australia Ltd.	SELL	3.25		(10,159)	· · · · · · · · · · · · · · · · · · ·
	O Vanguard Investments Australia Ltd.	BUY	3.20		26,846	, , ,
	O Vanguard Investments Australia Ltd.	BUY	3.29		14,063	14,063
	O Vanguard Investments Australia Ltd.	BUY	3.29		12,096	·
	O Vanguard Investments Australia Ltd.	BUY	3.17		13,005	,
	O Vanguard Investments Australia Ltd.	BUY	3.18		5,931	5,931
	0 Vanguard Investments Australia Ltd.	BUY	3.18		5,962	5,962
	0 Vanguard Investments Australia Ltd.	BUY	3.18		39,405	39,405
	0 Vanguard Investments Australia Ltd.	BUY	3.18		18,762	18,762
27-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	3.18		32,946	32,946
27-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	3.11		21,650	21,650
27-Mar-2	0 Vanguard Investments Australia Ltd.	SELL	3.11		(23,382)	(23,382)
31-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	3.15		108,626	108,626
31-Mar-2	0 Vanguard Investments Australia Ltd.	SELL	3.15		(31,069)	(31,069)
31-Mar-2	0 Vanguard Investments Australia Ltd.	BUY	3.15		17,320	17,320
	0 Vanguard Investments Australia Ltd.	BUY	3.16		30,750	,
	0 Vanguard Investments Australia Ltd.	BUY	3.16		11,076	· · · · · · · · · · · · · · · · · · ·
	0 Vanguard Investments Australia Ltd.	BUY	3.01		5,680	
	0 Vanguard Investments Australia Ltd.	BUY	3.01		12,870	,
	0 Vanguard Investments Australia Ltd.	BUY	2.86		6,832	
	0 Vanguard Investments Australia Ltd.	SELL	2.83		(11,844)	
	O Vanguard Investments Australia Ltd.	BUY	2.83		5,680 29.855	· ·
· ·	O Vanguard Investments Australia Ltd. O Vanguard Investments Australia Ltd.	BUY SELL	2.83			
	O Vanguard Investments Australia Ltd.	BUY	2.81		(47,381)	
	O Vanguard Investments Australia Ltd.	BUY	2.81	 	5,680 28,900	· ·
·	O Vanguard Investments Australia Ltd.	SELL	2.81	 	(49,485)	
	O Vanguard Investments Australia Ltd.	BUY	2.95		17,020	
	O Vanguard Investments Australia Ltd.	BUY	3.04	 	5,668	,
	O Vanguard Investments Australia Ltd.	BUY	3.04	<u> </u>	4,251	4,251
	O Vanguard Investments Australia Ltd.	BUY	2.78		6,213	6,213
•	0 Vanguard Investments Australia Ltd.	BUY	2.63		14,620	
	0 Vanguard Investments Australia Ltd.	BUY	2.63	<u> </u>	17,200	
	0 Vanguard Investments Australia Ltd.	BUY	2.54	İ	5,668	,
	0 Vanguard Investments Australia Ltd.	BUY	2.49	İ	5,668	
	0 Vanguard Investments Australia Ltd.	BUY	2.49	İ	12,885	
24-Apr-2	0 Vanguard Investments Australia Ltd.	BUY	2.80		62,680	
24-Apr-2	0 Vanguard Investments Australia Ltd.	BUY	2.80	<u></u>	102,182	102,182
24-Apr-2	0 Vanguard Investments Australia Ltd.	BUY	2.80		35,136	35,136
24-Apr-2	0 Vanguard Investments Australia Ltd.	BUY	2.80		49,682	49,682
24-Apr-2	0 Vanguard Investments Australia Ltd.	BUY	2.80		37,276	37,276

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
Ü	Vanguard Investments Australia Ltd.	BUY	2.80		77,073	77,073
·	Vanguard Investments Australia Ltd.	BUY	2.80		423,293	· · · · · · · · · · · · · · · · · · ·
24-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.80		208,215	208,215
24-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.80		467,031	467,031
24-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.80		103,871	103,871
24-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.80		1,192,710	1,192,710
27-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.55		38,366	38,366
28-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.48		5,668	5,668
28-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.48		17,136	17,136
29-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.46		13,110	13,110
30-Apr-20	Vanguard Investments Australia Ltd.	BUY	2.49		17,480	17,480
30-Apr-20	Vanguard Investments Australia Ltd.	SELL	2.49		(12,501)	(12,501)
1-May-20	Vanguard Investments Australia Ltd.	BUY	2.44		18,980	18,980
1-May-20	Vanguard Investments Australia Ltd.	BUY	2.44		14,235	14,235
4-May-20	Vanguard Investments Australia Ltd.	BUY	2.47		5,652	5,652
4-May-20	Vanguard Investments Australia Ltd.	BUY	2.47		26,516	26,516
,	Vanguard Investments Australia Ltd.	SELL	2.44		(7,647)	(7,647)
,	Vanguard Investments Australia Ltd.	BUY	2.37		5,652	
,	Vanguard Investments Australia Ltd.	BUY	2.32		928	928
12-May-20	Vanguard Investments Australia Ltd.	BUY	2.32		5,652	5,652
12-May-20	Vanguard Investments Australia Ltd.	BUY	2.32		12,922	12,922
	Vanguard Investments Australia Ltd.	BUY	2.37		13,845	13,845
	Vanguard Investments Australia Ltd.	BUY	2.49		18,160	· · · · · · · · · · · · · · · · · · ·
,	Vanguard Investments Australia Ltd.	BUY	2.48		13,011	13,011
	Vanguard Investments Australia Ltd.	BUY	2.48		14,464	
	Vanguard Investments Australia Ltd.	BUY	2.51		21,210	21,210
·	Vanguard Investments Australia Ltd.	BUY	2.51		10,800	10,800
	Vanguard Investments Australia Ltd.	BUY	2.58		5,656	
•	Vanguard Investments Australia Ltd.	BUY	2.58		9,000	· · · · · · · · · · · · · · · · · · ·
•	Vanguard Investments Australia Ltd.	BUY	2.64		114,818	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.64		13,500	
	Vanguard Investments Australia Ltd.	BUY	2.66		111,808	· · · · · · · · · · · · · · · · · · ·
<i>'</i>	Vanguard Investments Australia Ltd.	BUY	2.70		13,455	13,455
	Vanguard Investments Australia Ltd.	BUY	2.69		13,441	13,441
	Vanguard Investments Australia Ltd.	BUY	2.75		5,656	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	SELL	2.73		(58,182)	(58,182)
	Vanguard Investments Australia Ltd.	BUY	2.75		13,395	,
	Vanguard Investments Australia Ltd.	BUY	2.75		10,716	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.83		5,656	
	Vanguard Investments Australia Ltd.	SELL	2.84		(67,138)	
	Vanguard Investments Australia Ltd.	BUY	2.89		13,440	•
	Vanguard Investments Australia Ltd.	BUY	2.68		18,140	· · ·
	Vanguard Investments Australia Ltd.	BUY	2.79		9,100	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY BUY	2.88		13,740	
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.83		251,820	
	,				1,858	
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	SELL BUY	2.87		(16,371)	, , ,
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.74		12,248	
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	SELL	2.74	-	22,172 (61,802)	22,172 (61,802)
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	SELL	2.72	 	(7,630)	
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	SELL	2.84	-	(9,000)	
	Vanguard Investments Australia Ltd.	BUY	2.84		12,909	
	Vanguard Investments Australia Ltd.	SELL	2.79	 	(35,088)	·
	Vanguard Investments Australia Ltd.	BUY	2.80	 	14,760	
ŭ	Vanguard Investments Australia Ltd.	BUY	2.80	 	19,740	· · · · · · · · · · · · · · · · · · ·
•	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.84	-	19,740	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.97	 	16,604	
	Vanguard Investments Australia Ltd.	BUY	2.95	 	14,835	
	vanguaru mvesimenis Australia Liu.	1001	2.92	1	14,033	14,000

		Nature of	Consideration given in relation		Number of	Person's votes
Date of change	Person whose relevant interest changed	Change(6)	to change(7)	Class	securities affected	affected
·	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.85		6,152 15,696	6,152 15,696
	Vanguard Investments Australia Ltd.	BUY	2.85		4,109	
· ·	Vanguard Investments Australia Ltd.	BUY	2.93		5,076	
	Vanguard Investments Australia Ltd.	BUY	2.94		12,688	· · · · · · · · · · · · · · · · · · ·
•	Vanguard Investments Australia Ltd.	BUY	2.86		17,568	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	BUY	2.81		6,164	6,164
	Vanguard Investments Australia Ltd.	BUY	2.86		4,915	,
17-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.85		6,164	
	Vanguard Investments Australia Ltd.	BUY	2.85		4,925	4,925
18-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.85		7,880	7,880
18-Sep-20	Vanguard Investments Australia Ltd.	SELL	2.85		(81,110)	(81,110)
21-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.86		2,988	2,988
24-Sep-20	Vanguard Investments Australia Ltd.	SELL	2.93		(16,628)	(16,628)
24-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.93		4,326	4,326
25-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.87		9,940	9,940
28-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.85		12,471	12,471
	Vanguard Investments Australia Ltd.	BUY	2.85		6,144	· · · · · · · · · · · · · · · · · · ·
29-Sep-20	Vanguard Investments Australia Ltd.	BUY	2.80		2,988	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd.	SELL	2.76		(41,905)	(41,905)
	Vanguard Investments Australia Ltd.	BUY	2.76		9,970	,
	Vanguard Investments Australia Ltd.	BUY	2.77		14,820	
	Vanguard Investments Australia Ltd.	BUY	2.77		9,860	,
	Vanguard Investments Australia Ltd.	BUY	2.86		12,471	12,471
	Vanguard Investments Australia Ltd.	BUY	2.90		6,076	,
	Vanguard Investments Australia Ltd.	BUY	2.90		1,626	
	Vanguard Investments Australia Ltd.	BUY	2.97		9,800	9,800
	Vanguard Investments Australia Ltd.	SELL BUY	3.06		(60,474)	` ' '
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	SELL	3.05		6,076 (32,680)	,
	Vanguard Investments Australia Ltd.	BUY	3.05		55,062	55,062
	Vanguard Investments Australia Ltd.	BUY	3.12		9,630	,
	Vanguard Investments Australia Ltd.	BUY	3.06		80,407	80,407
	Vanguard Investments Australia Ltd.	BUY	3.06		16,640	16,640
	Vanguard Investments Australia Ltd.	BUY	3.08		455,953	455,953
	Vanguard Investments Australia Ltd.	BUY	3.08		8,094	8,094
	Vanguard Investments Australia Ltd.	BUY	3.08		5,439	·
28-Oct-20	Vanguard Investments Australia Ltd.	SELL	3.09		(53,382)	
28-Oct-20	Vanguard Investments Australia Ltd.	BUY	3.09		9,580	9,580
29-Oct-20	Vanguard Investments Australia Ltd.	BUY	3.05		852,477	852,477
29-Oct-20	Vanguard Investments Australia Ltd.	BUY	3.05		15,133	15,133
29-Oct-20	Vanguard Investments Australia Ltd.	BUY	3.05		10,168	·
29-Oct-20	Vanguard Investments Australia Ltd.	BUY	3.00		6,076	6,076
	Vanguard Investments Australia Ltd.	BUY	3.00		8,220	
	Vanguard Investments Australia Ltd.	BUY	2.98		709,399	
	Vanguard Investments Australia Ltd.	BUY	2.98		12,594	
	Vanguard Investments Australia Ltd.	BUY	2.98	ļ	8,461	
	Vanguard Investments Australia Ltd.	BUY	2.95		12,477	12,477
	Vanguard Investments Australia Ltd.	BUY	2.95		71,720	
	Vanguard Investments Australia Ltd.	BUY	3.03		9,610	·
	Vanguard Investments Australia Ltd.	BUY	3.00		14,445	·
	Vanguard Investments Australia Ltd.	BUY	3.07	1	1,924	
	Vanguard Investments Australia Ltd.	BUY	2.95		16,524	
	Vanguard Investments Australia Ltd.	BUY	2.94		12,480	
	Vanguard Investments Australia Ltd.	BUY	2.98		6,096	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	2.99		16,830 52,470	· · · · · · · · · · · · · · · · · · ·
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	3.01	-	8,322	8,322
	Vanguard Investments Australia Ltd. Vanguard Investments Australia Ltd.	BUY	3.01		9,920	
	Vanguard Investments Australia Ltd.	BUY	3.04		51,386	
13-1104-50	vanguaru mvestments Australia Ltu.	וטטו	5.04		31,380	31,380

Date of change	Person whose relevant interest changed		Consideration given in relation to change(7)	Class	Number of securities affected	Person's votes affected
20-Nov-2	0 Vanguard Investments Australia Ltd.	BUY	3.05		3,296	3,296
20-Nov-2	0 Vanguard Investments Australia Ltd.	BUY	3.05		1,648	1,648
23-Nov-2	0 Vanguard Investments Australia Ltd.	BUY	3.06		12,024	12,024
25-Nov-2	0 Vanguard Investments Australia Ltd.	BUY	3.02		29,000	29,000

This is Annexure A of 14 pages referred to in Form 604, Notice of change of interests of substantial holder.

Signature:

Name: Shawn Acker

Capacity: Compliance Manager

Date: 30 November 2020