

**INDEPENDENT PRICING AND REGULATORY TRIBUNAL**

**REVIEW OF PRICES FOR HUNTER WATER TO APPLY FROM 1 JULY 2020**

**Tribunal Members**

Ms Deborah Cope, Acting Chair  
Ms Anna Brakey, Tribunal Member

**Members of the Secretariat**

Ms Liz Livingstone, Mr Matthew Edgerton, Mr John Madden  
Mr Scott Chapman, Ms Nadja Daellenbach,  
Ms Sheridan Rapmund and Ms Kumi Cuthbertson

10:34:17

10:34:20

Held at Harbourview Function Centre,  
150 Wharf Road, Newcastle

On Tuesday, 19 November 2019, at 10.30am

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 21
- 22
- 23
- 24
- 25
- 26
- 27
- 28
- 29
- 30
- 31
- 32
- 33
- 34
- 35
- 36
- 37
- 38
- 39
- 40
- 41
- 42
- 43
- 44
- 45
- 46
- 47

10:33:19  
10:33:21  
10:33:26  
10:33:30  
10:33:30  
10:33:33  
10:33:36  
10:33:40  
10:33:44  
10:33:47  
10:33:52  
10:33:52  
10:33:54  
10:33:57  
10:34:00  
10:34:04  
10:34:10  
10:34:15  
10:34:18  
10:34:18  
10:34:24  
10:34:27  
10:34:30  
10:34:32  
10:34:35  
10:34:40  
10:34:45  
10:34:45  
10:34:48  
10:34:52  
10:34:56  
10:34:56  
10:34:56  
10:34:59  
10:35:01  
10:35:01  
10:35:05  
10:35:08  
10:35:12  
10:35:16  
10:35:18  
10:35:18  
10:35:23  
10:35:26  
10:35:31

10:33:33  
10:33:36  
10:33:40  
10:33:44  
10:33:47  
10:33:52  
10:33:52  
10:33:54  
10:33:57  
10:34:00  
10:34:04  
10:34:10  
10:34:15  
10:34:18  
10:34:18  
10:34:24  
10:34:27  
10:34:30  
10:34:32  
10:34:35  
10:34:40  
10:34:45  
10:34:45  
10:34:48  
10:34:52  
10:34:56  
10:34:56  
10:34:56  
10:34:59  
10:35:01  
10:35:01  
10:35:05  
10:35:08  
10:35:12  
10:35:16  
10:35:18  
10:35:18  
10:35:23  
10:35:26  
10:35:31

10:33:54  
10:33:57  
10:34:00  
10:34:04  
10:34:10  
10:34:15  
10:34:18  
10:34:18  
10:34:24  
10:34:27  
10:34:30  
10:34:32  
10:34:35  
10:34:40  
10:34:45  
10:34:45  
10:34:48  
10:34:52  
10:34:56  
10:34:56  
10:34:56  
10:34:59  
10:35:01  
10:35:01  
10:35:05  
10:35:08  
10:35:12  
10:35:16  
10:35:18  
10:35:18  
10:35:23  
10:35:26  
10:35:31

10:34:24  
10:34:27  
10:34:30  
10:34:32  
10:34:35  
10:34:40  
10:34:45  
10:34:45  
10:34:48  
10:34:52  
10:34:56  
10:34:56  
10:34:56  
~~10:34:59~~  
10:35:01  
10:35:01  
10:35:05  
10:35:08  
10:35:12  
10:35:16  
10:35:18  
10:35:18  
10:35:23  
10:35:26  
10:35:31

10:34:48  
10:34:52  
10:34:56  
10:34:56  
10:34:56  
~~10:34:59~~  
10:35:01  
10:35:01  
10:35:05  
10:35:08  
10:35:12  
10:35:16  
10:35:18  
10:35:18  
10:35:23  
10:35:26  
10:35:31

10:34:56  
~~10:34:59~~  
 10:35:01  
 10:35:01  
 10:35:05  
 10:35:08  
 10:35:12  
 10:35:16  
 10:35:18  
 10:35:18  
 10:35:23  
 10:35:26  
 10:35:31

```
10:35:05
10:35:08
10:35:12
10:35:16
10:35:18
10:35:18
10:35:23
10:35:26
10:35:31
```

```
10:35:23
10:35:26
10:35:31
```

1 posted question. When you go to slido.com, enter in the 10:35:35  
2 event code #H325 and we will seek to address these 10:35:41  
3 questions at the appropriate session throughout the hearing 10:35:47  
4 today. 10:35:51  
5 10:35:51  
6 We have two parts to today's hearing. We have 10:35:53  
7 extended our usual public hearing format to include an 10:35:57  
8 afternoon and evening drop-in feedback session from 2.30pm 10:36:01  
9 to 7pm to allow those who cannot attend during business 10:36:06  
10 hours to still have an opportunity to provide feedback and 10:36:09  
11 to talk directly to IPART's staff. 10:36:11  
12 10:36:11  
13 Following this public hearing, we will release a draft 10:36:14  
14 determination report for public comment in March 2020. 10:36:17  
15 People will then have about four weeks to make further 10:36:23  
16 written submissions for consideration by IPART, before we 10:36:26  
17 make our final decision on Hunter Water's prices and fees. 10:36:31  
18 10:36:31  
19 Our final report and determination will be released 10:36:35  
20 in June 2020 which will contain the maximum prices to apply 10:36:38  
21 from 1 July 2020. 10:36:42  
22 10:36:42  
23 In general terms, our price review will be seeking to 10:36:44  
24 determine: 10:36:47  
25 10:36:47  
26 What are Hunter Water's efficient costs of providing 10:36:48  
27 its water, wastewater and stormwater services, while 10:36:52  
28 complying with its environmental and other regulatory 10:36:56  
29 requirements; and 10:37:00  
30 How should these costs be recovered through prices - 10:37:01  
31 that is, how should we structure Hunter Water's fixed and 10:37:04  
32 usage charges to recover the efficient costs? 10:37:08  
33 10:37:11  
34 We therefore seek your views on these broad questions. 10:37:11  
35 10:37:11  
36 Before we commence the proceedings today, I would like 10:37:13  
37 to say a few words about the process of this hearing. We 10:37:16  
38 will commence with a presentation from Hunter Water, 10:37:20  
39 outlining its pricing proposal. The hearing will then be 10:37:23  
40 divided into three focused sessions and a final open 10:37:27  
41 session to address any further questions that you may wish 10:37:30  
42 to have addressed. 10:37:34  
43 10:37:34  
44 Throughout all sessions, we will request responses 10:37:35  
45 from those at the table and also invite questions from the 10:37:37  
46 floor and address any relevant questions posted on slido. 10:37:40  
47 10:37:40

1           The first session after Hunter Water's presentation 10:37:45  
2 will outline some key issues affecting Hunter Water's 10:37:48  
3 proposed prices for its water, wastewater and stormwater 10:37:51  
4 service. This includes considerations regarding its 10:37:56  
5 forecasts for demand, water sales and customer numbers, 10:37:58  
6 which are particularly important under drought conditions. 10:38:01  
7 10:38:01  
8           The second session will outline Hunter Water's 10:38:04  
9 proposed expenditure, the service levels and requirements 10:38:09  
10 that underpin the proposal and the key cost drivers it has 10:38:11  
11 outlined in its proposal. Hunter Water has proposed 10:38:15  
12 increasing both its operating costs and capital expenditure 10:38:18  
13 compared with its costs over the last four years. 10:38:22  
14 10:38:22  
15           The third session will consider several other issues 10:38:25  
16 outlined in Hunter Water's proposal, including 10:38:28  
17 discretionary spending on recycled water. We will also 10:38:32  
18 briefly discuss some other proposed fees and charges, 10:38:35  
19 including trade waste and miscellaneous charges and 10:38:39  
20 dishonoured and late payment fees. 10:38:42  
21 10:38:42  
22           Anna or I will introduce each session, and after the 10:38:45  
23 secretariat's presentation we will invite participants at 10:38:48  
24 the table to provide responses and comment on those topics 10:38:52  
25 Comments will then be invited from the floor and slido. 10:38:55  
26 10:38:55  
27           Today's hearing will be recorded by a transcriber. 10:39:00  
28 Therefore, to assist the transcriber, we ask that you 10:39:02  
29 briefly identify yourself and, where applicable, your 10:39:05  
30 organisation before speaking. I also ask that you please 10:39:09  
31 speak clearly and loudly. 10:39:12  
32 10:39:12  
33           A copy of the transcript will be available on our 10:39:14  
34 website soon after the public hearing. 10:39:17  
35 10:39:17  
36           We commence today with Hunter Water's presentation of 10:39:20  
37 its pricing proposal. Could the representative of Hunter 10:39:23  
38 Water please come forward and can you state your name and 10:39:27  
39 position for the record and then your presentation. 10:39:31  
40 10:39:31  
41 MR WOOD: Thank you very much. Good morning, everybody. 10:39:38  
42 My name is Graham Wood. I am the acting CEO of Hunter 10:39:40  
43 Water and it is my pleasure to introduce Hunter Water and 10:39:44  
44 to outline the pricing submission. 10:39:47  
45 10:39:47  
46           Just broadly I am going to provide an overview of the 10:39:53  
47 operating context for Hunter Water - what are the cost 10:39:56

1 drivers; the capital expenditure in terms of the elements 10:40:00  
2 that make up the overall submission; operating expenditure; 10:40:05  
3 our revenue requirements; demand prices; and bills. 10:40:11  
4 10:40:11  
5 A number of things have changed since our original 10:40:16  
6 submission and I will try to outline those as I go through 10:40:19  
7 the presentation. The first thing I will say is this will 10:40:23  
8 be for a four-year period - that is our proposal. 10:40:26  
9 10:40:26  
10 The reason we have changed from a five-year period to 10:40:29  
11 a four-year period is the drought. The drought has given 10:40:32  
12 us such a high level of uncertainty that we really don't 10:40:35  
13 know what the impact will be both on revenue, because we 10:40:38  
14 will have to restrict demand, and also on the expenditure 10:40:41  
15 if we have to build things like the desalination plant. So 10:40:44  
16 the broad outline of the proposal is a four-year price 10:40:48  
17 period to give us some flexibility and deal with 10:40:51  
18 uncertainty. 10:40:54  
19 10:40:54  
20 So who are we? What do we do? We have a very 10:40:58  
21 dispersed region of operation. We broadly provide water 10:41:02  
22 for six local government areas - Port Stephens, Maitland, 10:41:07  
23 Cessnock, Newcastle, Port Macquarie and Dungog. It is not 10:41:14  
24 exact, but that is almost exactly what our field of 10:41:18  
25 operation is. It is diverse, it is dispersed, and the 10:41:21  
26 reason we can deal with these areas of operation is that we 10:41:25  
27 are very efficient and we know how to operate in very small 10:41:34  
28 areas. 10:41:40  
29 10:41:40  
30 To give you some idea, we roughly cover about half the 10:41:41  
31 area of Sydney, but actually we only have about a tenth of 10:41:43  
32 the population, so that gives you some idea of the 10:41:48  
33 challenges. We have very small wastewater and water 10:41:51  
34 treatment plants out there that we have to maintain. 10:41:56  
35 10:41:56  
36 How do we focus the business? We have a strategy. We 10:41:59  
37 call it the 2017+3 strategy. It dictates the key assets of 10:42:03  
38 our business and outlines everything we do, and the price 10:42:09  
39 submission reflects those facets as we go forward. We use 10:42:12  
40 an enterprise risk management system to drive our 10:42:17  
41 investments. That is a facet of the 2017+3 strategy. 10:42:20  
42 10:42:20  
43 We know that we have to manage a finite resource, it 10:42:26  
44 is very precious. Water efficiency is very key to us and 10:42:31  
45 there are a number of elements within the strategy along 10:42:35  
46 those lines. 10:42:37  
47 10:42:37

1 We have an overall need to drive efficiency through 10:42:38  
2 the business year on year, and again that is an element of 10:42:44  
3 our pricing submission. 10:42:48  
4 10:42:48  
5 We do know that we need to catch up on our information 10:42:49  
6 technology. That will in turn drive efficiency. We are in 10:42:53  
7 catch-up there. We have had very low investments on ICT/IT 10:42:56  
8 in the past, and fundamentally we need to understand our 10:43:02  
9 customers. We have a high level of customer engagement, 10:43:04  
10 and I will outline that as well. 10:43:08  
11 10:43:08  
12 In terms of delivering value for those customers, 10:43:11  
13 there are four elements I would like to outline: 10:43:14  
14 10:43:14  
15 Water resilience and dependability of supply - even 10:43:18  
16 though we are in a drought, that is fundamental to what we 10:43:21  
17 do; 10:43:25  
18 Protecting the environment, making sure that we 10:43:26  
19 protect and sustain our environmental protection; 10:43:29  
20 Being easy to deal with. Again going back to our 10:43:35  
21 customer focus some of the investment in ICT allows us to 10:43:39  
22 be an open, transparent, trusted organisation; 10:43:43  
23 Finally, and probably fundamental to this hearing, no 10:43:48  
24 bill shock. We are trying desperately hard to make sure 10:43:51  
25 that we keep our prices broadly in line with inflation. 10:43:54  
26 10:43:54  
27 I can't possibly begin to outline every customer 10:44:02  
28 engagement, community engagement we go through. I have 10:44:05  
29 been personally involved in a number of these. We have 10:44:09  
30 deliberative forums, customer advisory groups - it just 10:44:13  
31 goes on and on and on. That is important to what we do and 10:44:17  
32 we don't take it as read either. We have a health check on 10:44:20  
33 those engagements. We do surveys on our reputation, our 10:44:24  
34 engagement, and we have things such as a mystery shopper 10:44:30  
35 initiative. We check with our customers that the message 10:44:34  
36 is getting through and they understand what we are trying 10:44:37  
37 to do as a business. There is a lot of customer and 10:44:41  
38 community engagement fundamental to our 2017+3 strategy. 10:44:44  
39 That is sort of the background. 10:44:49  
40 10:44:49  
41 So where are we with the drivers for our submission? 10:44:52  
42 If you look at our capital investment over time, you can 10:44:56  
43 see, if you look at the brown and the light blue areas 10:45:00  
44 there, that we had an area of what I would call 10:45:06  
45 under-investment. We had our credit metrics under 10:45:10  
46 pressure. We had to reduce our investment. We sweated the 10:45:13  
47 assets as much as we could, managing the risk accordingly. 10:45:16

1 So now in this price submission we are really in catch-up.10:45:20  
2 We are fortunate we can take advantage of a number of 10:45:24  
3 things in this catch-up period. Basically we are returning 10:45:28  
4 to a long-term average level of investment and catching up 10:45:32  
5 on some of the issues that we have created in the past, in 10:45:36  
6 particular dealing with risk. 10:45:40

7 10:45:40  
8 Going back to what I said before, our strategy 10:45:41  
9 includes an enterprise risk management matrix and we drive 10:45:46  
10 our investment off that. So we are seeing increasing risk 10:45:50  
11 as we go forward. Our pricing submission addresses that. 10:45:54

12 10:45:54  
13 We have an increased proposed capital expenditure for 10:46:00  
14 the business. Looking at the left-hand graph there, the 10:46:05  
15 bar chart, you will see that if you add up the mandatory 10:46:09  
16 requirements, it makes up over 70 per cent of our 10:46:13  
17 investment, so that is a significant piece of work that we 10:46:16  
18 have to do. 10:46:23

19 10:46:23  
20 We have some growth in there. The purple element on 10:46:24  
21 the top of those bars is really the efficiency elements of 10:46:27  
22 our business, and I have already mentioned the ICT elements 10:46:30  
23 of our investment which allow us to drive that efficiency, 10:46:35  
24 allow our field force to be efficient, allow us to manage 10:46:39  
25 our networks efficiently, and allow us to give good 10:46:46  
26 customer service as well. That's the key to this 10:46:48  
27 investment. 10:46:52

28 10:46:52  
29 Again on the right-hand side, the purple is the ICT. 10:46:53  
30 It broadly makes up about 10 per cent of our investment. 10:46:56  
31 It is really about those efficiency gains and our customer 10:46:59  
32 service. 10:47:03

33 10:47:03  
34 Let's look back at how efficient Hunter Water is and 10:47:04  
35 compare it with the other major water providers across 10:47:07  
36 Australia. If you look at the rankings on this slide, you 10:47:11  
37 will see we broadly come between third and first in terms 10:47:14  
38 of our costs. Our costs are third lowest out of the 15 in 10:47:18  
39 the cohort for the major water providers. When you add 10:47:24  
40 that to the diverse nature of our operations, it really 10:47:29  
41 outlines how efficient we are, and we intend to be more 10:47:33  
42 efficient going forward. That is an important part of our 10:47:36  
43 business. 10:47:39

44 10:47:39  
45 We are starting off from a very good base and we are 10:47:41  
46 proposing operating expenditure for the future that is 10:47:45  
47 0.3 per cent higher than it is this year. That is not a 10:47:49

1 huge increase at all and that is lower than the forecast 10:47:53  
2 growth increase as well. The forecast growth increase for 10:47:57  
3 our area is 1.2 per cent; our operating expense is going up 10:48:01  
4 0.3. Effectively, we are sucking up some of that growth 10:48:07  
5 and becoming more efficient. That is what we are doing; we 10:48:11  
6 are offsetting some of the growth costs through efficiency 10:48:14  
7 gains. 10:48:17

8 10:48:17  
9 Just quickly, if you look at the breakdown on the pie 10:48:18  
10 chart, and if you look at the regulatory expenditure, for 10:48:22  
11 instance, that is where our taxes, fees rest. If you look 10:48:26  
12 at the corporate expenditure, 21 per cent, that is where 10:48:30  
13 our ICT and safety initiatives and those things take place 10:48:34  
14 That is giving you a broad breakdown of the expenditure not 10:48:38  
15 only in terms of the amount but also in terms of the 10:48:41  
16 categories. 10:48:43  
17 10:48:43

18 Just quickly moving on to those revenue requirements, 10:48:48  
19 another thing that has changed since our submission, since 10:48:52  
20 we lodged our original submission on 1 July this year is 10:48:56  
21 that interest rates have reduced. That has lowered our 10:48:59  
22 need for our return on our assets and, therefore, that has 10:49:05  
23 lowered our revenue requirement. A number of things have 10:49:08  
24 worked in our favour. You can see from the original 10:49:11  
25 submission, I think it was on a weighted cost of capital of 10:49:17  
26 4.1 per cent. Given that the interest rates have reduced, 10:49:18  
27 we are now seeing a weighted average cost of capital of 10:49:21  
28 3.2 per cent. So that is another change that has happened 10:49:24  
29 since our submission. 10:49:28  
30 10:49:28

31 We have also had a look at our water demand forecasts 10:49:34  
32 Again there is a slight change since our original 10:49:39  
33 submission. We have produced a complete revised forecast 10:49:41  
34 and we have had that peer reviewed. We are now confident 10:49:46  
35 that we have the right demand forecast in our submission. 10:49:52  
36 So a combination of the demand forecast and the interest 10:49:54  
37 rates is effectively impacting on our revenue requirements 10:49:57  
38 10:49:57

39 What does that mean? It is a little bit complex to go 10:50:03  
40 through this, but broadly speaking, you can see in terms of 10:50:10  
41 houses that our fixed charges are going down. Our water 10:50:12  
42 usage charge is going slightly up. There is a slight rise 10:50:17  
43 in our fixed charges in wastewater. We intend to 10:50:22  
44 re-balance some of the equity in terms of charging on 10:50:28  
45 apartments. Again, their fixed charges are going down for 10:50:30  
46 water, usage charge is going up, but we are increasing the 10:50:34  
47 fixed charges slightly more for apartments on the 10:50:38



1 wastewater side. 10:50:43

2 10:50:43

3 If you look at what that means in terms of bill 10:50:44

4 impacts, for a stand-alone house, before inflation, 10:50:47

5 assuming 185 kilolitres of water usage per year, we 10:50:51

6 estimate the prices will go down broadly 1.6 per cent 10:50:56

7 per annum. 10:51:00

8 10:51:00

9 If you look at apartments, there is not quite as big a 10:51:03

10 reduction because of that re-balancing on the wastewater 10:51:08

11 charges. Again assuming 115 kilolitres of water usage per 10:51:11

12 year, we think apartment charges will go down 5 per cent 10:51:17

13 per annum. 10:51:22

14 10:51:22

15 Finally, if you look at the pensioner in a house, 10:51:23

16 using 100 kilolitres a year, we think again the impact of 10:51:27

17 our submission will mean a reduction, before inflation, of 10:51:32

18 1.6 per cent. 10:51:37

19 10:51:37

20 Let me reiterate that a number of things have changed. 10:51:37

21 We have a four-year pricing submission. We have lower 10:51:44

22 interest rates. We have changed our demand forecast. 10:51:46

23 Given all of that and given our submission both for capital 10:51:53

24 expenditure in terms of catch-up and our operating costs, 10:51:56

25 which are lower than the growth projections in terms of 10:51:59

26 increase, we think bills will go down. So that is the 10:52:02

27 background to our submission from Hunter Water. 10:52:06

28 10:52:06

29 I have a number of experts who can answer detailed 10:52:09

30 questions around the table, and I would like to introduce 10:52:12

31 them to you. David Cleary is our chief investment officer 10:52:17

32 Jen Hayes is our chief financial officer, and there are 10:52:23

33 other experts in the audience as well. 10:52:26

34 10:52:26

35 That is the background. Thank you very much for the 10:52:30

36 opportunity to speak and let's have a good open hearing. 10:52:33

37 Thank you very much. 10:52:35

38 10:52:35

39 THE ACTING CHAIR: Thank you, Graham. 10:52:35

40 10:52:35

41 Before we get on to the questions, is there anyone 10:52:40

42 from ORICA or the Business Chamber in the audience who 10:52:42

43 would like to join us at the table? We have a spot there 10:52:46

44 for ORICA and one for somebody from the Business Chamber. 10:52:50

45 Yes, thank you. 10:53:13

46 10:53:13

47 I will now ask participants around the table whether 10:53:13

1 there are any questions for Hunter on the presentation, and 10:53:16  
2 we'll start with you, David. 10:53:22  
3 10:53:22  
4 MR HAYES: David Hayes, ORICA. I note there was no 10:53:24  
5 mention of the location-based discount pricing changes. 10:53:25  
6 I would be interested to hear first-hand the reason why 10:53:29  
7 general public pricing is forecasting a reduction but there 10:53:36  
8 will be substantial increases for business, including our 10:53:38  
9 business. 10:53:41  
10 10:53:41  
11 THE ACTING CHAIR: We will definitely get to that today. 10:53:42  
12 Bob? 10:53:42  
13 10:53:42  
14 MR HAUES: Bob Haues, Hunter Business Chamber. I also 10:53:42  
15 noticed in that presentation the impact across residential 10:53:47  
16 and what would happen to the pensioner, but there wasn't 10:53:52  
17 any general application. I appreciate that the 10:53:55  
18 differentials across business can be difficult, but would 10:53:59  
19 businesses in normal circumstances expect the same 10:54:03  
20 reductions, apart from those location-based discounts? 10:54:06  
21 10:54:06  
22 THE ACTING CHAIR: Graham, did you want to make any 10:54:14  
23 comments about what's happening? Or, Peter, do you want to 10:54:16  
24 make any comments about the business impact? 10:54:19  
25 10:54:22  
26 MR SHIELDS: Peter Shields, Hunter Water. There are 10:54:24  
27 multiple different types of non-residential customers and 10:54:26  
28 is much harder to show indicative bills. In our pricing 10:54:28  
29 proposal, we had a list of 19 different customer types and 10:54:32  
30 some different non-residential customers, from corner 10:54:37  
31 stores up to bigger industrial customers. 10:54:40  
32 10:54:40  
33 As a generalisation, it would be a reasonable comment 10:54:44  
34 to make that, overall, we anticipate that bills for 10:54:49  
35 non-residential customers would go down in real terms 10:54:53  
36 before inflation, apart from possibly some of the customers 10:54:56  
37 who enjoy the location-based price. 10:55:00  
38 10:55:00  
39 THE ACTING CHAIR: Douglas? 10:55:09  
40 10:55:10  
41 MR McCLOSKEY: Douglas McCloskey, PIAC. I am happy to see 10:55:16  
42 the adjustments to the demand forecasts, but I have a 10:55:17  
43 question for clarification as to why the forecast start 10:55:20  
44 point has a downward adjustment from what appears like an 10:55:23  
45 actual that is higher. 10:55:26  
46 10:55:26  
47 MR CLEARY: The demand forecasts are meant to represent 10:55:29

1 average conditions. When we look at historic demand, that 10:55:36  
2 is actual demand, and that varies significantly with 10:55:38  
3 climate. That is why you see what looks like a slight dip 10:55:41  
4 because we have come off what was a relatively warm year 10:55:45  
5 last year and the new forecast is meant to represent what 10:55:48  
6 is an average climatic condition. 10:55:51  
7 10:55:51  
8 The change we have had in our demand forecast is a 10:55:53  
9 more robust method of estimating what demand is independent 10:55:57  
10 of climate, and what we have seen in going through that 10:56:00  
11 methodology is that residential demand is roughly pretty 10:56:05  
12 much the same as we had previously forecast, but the 10:56:09  
13 non-residential demand is slightly higher, and that's 10:56:13  
14 taking into account the potential climatic impacts under 10:56:16  
15 average conditions of hotter conditions on commercial and 10:56:20  
16 industrial operators, particularly on things like cooling 10:56:28  
17 towers. That is why we see the non-residential demand 10:56:30  
18 increase slightly. So our starting position for our overall 10:56:32  
19 demand is slightly higher than we had previously forecast. 10:56:36  
20 10:56:36  
21 THE ACTING CHAIR: Bob? 10:56:41  
22 10:56:41  
23 MR PYNSENT: Thank you. My name is Bob Pynsent. I am 10:56:41  
24 from Cessnock City Council. 10:56:41  
25 10:56:41  
26 My question revolves around the proposed wind-back of 10:56:44  
27 the environmental improvement charge. I speak, as our 10:56:48  
28 submission spoke, about villages that are unsewered. We 10:56:51  
29 are at a point where the village of North Rothbury is 10:56:57  
30 second on a priority list with Hunter Water and most likely 10:57:02  
31 would have been funded from the environmental improvement 10:57:09  
32 charge. How could the people of North Rothbury now have 10:57:12  
33 any belief that wastewater is going to be managed in an 10:57:18  
34 area which the EPA and other government agencies say does 10:57:26  
35 not meet the health standards in a normal time? 10:57:29  
36 10:57:29  
37 We have been going on this since 2002. We have been 10:57:33  
38 moving up a pecking order and were supposed to be getting 10:57:41  
39 to the top after Wyee is finished, but then the goalposts 10:57:43  
40 moved. So my question would be: how do those people look 10:57:48  
41 forward to the provision of sewerage, which doesn't entail 10:57:54  
42 a \$63,000 charge per residence? 10:57:57  
43 10:57:57  
44 MR SHIELDS: I am not sure, Acting Chair, whether we want 10:58:05  
45 to go into this one now or leave it for when we discuss the 10:58:08  
46 pricing issues in detail. 10:58:12  
47 10:58:12

1 THE ACTING CHAIR: It is on the agenda for later 10:58:20  
2 discussion. So, yes -- 10:58:22  
3 10:58:25  
4 MR CLEARY: We could provide a brief overview. 10:58:25  
5 10:58:25  
6 THE ACTING CHAIR: Yes, provide a brief overview now, and 10:58:28  
7 then we can get into the detail later. 10:58:29  
8 10:58:29  
9 MR CLEARY: The key points are the environmental 10:58:31  
10 improvement charge is one mechanism for recovering the 10:58:36  
11 costs for backlog sewerage services, but it is not the only 10:58:38  
12 mechanism. The key issue about the provision of those 10:58:42  
13 services is not the imposition or otherwise of that charge 10:58:45  
14 10:58:45  
15 There are two broad mechanisms in the provision of 10:58:57  
16 backlog sewer services. The first one is a methodology 10:58:55  
17 that has been set up by IPART about assessing who benefits 10:59:00  
18 from the provision of those services and those 10:59:06  
19 beneficiaries should pay. Where there are broader benefits 10:59:08  
20 to the community, those benefits are recovered by the 10:59:11  
21 broader rate base, and where the benefits are largely 10:59:13  
22 accruing to the residents, then those residents should be 10:59:16  
23 paying those costs. 10:59:19  
24 10:59:19  
25 As you have noted, these schemes are very expensive, 10:59:20  
26 and, as we have flagged previously, and the offer is still 10:59:23  
27 there, we continue to work with council to understand those 10:59:28  
28 benefits and where they accrue and therefore what is the 10:59:31  
29 business case around the provision of those services. 10:59:34  
30 Under that methodology, it is very likely that there will 10:59:35  
31 be some costs that would still have to be borne by the 10:59:38  
32 residents. 10:59:42  
33 10:59:42  
34 The other mechanism for the provision of backlog 10:59:42  
35 services, which is what has happened with Wyee, is that the 10:59:46  
36 government directs Hunter Water to provide those services, 10:59:49  
37 in essence, as a community service obligation. At this 10:59:52  
38 point in time with backlog sewer services, we have no 10:59:55  
39 further direction from government to provide additional 11:00:00  
40 services. That's our position. 11:00:02  
41 11:00:02  
42 As I said, we remain willing to continue to work with 11:00:05  
43 council and other regulators, including the EPA and 11:00:06  
44 Department of Health, to understand the issues in North 11:00:10  
45 Rothbury and quantify those in the economic sense to 11:00:12  
46 validate those benefits and therefore who should pay. We 11:00:15  
47 will also continue to work with government about its 11:00:18

1 direction or otherwise about the provision of backlog 11:00:21  
2 services. 11:00:24  
3 11:00:24  
4 MR PYNSENT: Can I make another point? 11:00:27  
5 11:00:30  
6 THE ACTING CHAIR: Yes. 11:00:31  
7 11:00:31  
8 MR PYNSENT: Your response is disappointing. There are 11:00:31  
9 2,500 unsewered residences in the Hunter Water area. The 11:00:34  
10 cost of providing sewerage to those places is \$143 million. 11:00:38  
11 Yet Hunter Water gave back to the government in the last 11:00:45  
12 financial year \$144 million - the exact cost of providing 11:00:48  
13 sewerage to all of those residences. To me that is 11:00:55  
14 obscene. 11:01:02  
15 11:01:02  
16 MS HAYES: Jenny Hayes, Hunter Water. 11:01:04  
17 11:01:04  
18 I think it is really important to note that dividend 11:01:06  
19 policy is completely separate from customer pricing. In 11:01:08  
20 terms of our pricing proposal with IPART, there is no 11:01:12  
21 influence of a \$100 million special dividend paid to New 11:01:15  
22 South Wales Treasury, our shareholder, in the last 11:01:20  
23 financial year and customer prices proposed in this pricing 11:01:21  
24 proposal. 11:01:25  
25 11:01:25  
26 MR CLEARY: It is also important to note with respect to 11:01:26  
27 backlog sewer services that there is a broader question. 11:01:28  
28 The provision of sewer services to our customers and the 11:01:32  
29 expansion of our network is met by development largely. 11:01:35  
30 With regard to the extension of those service, the 11:01:40  
31 developers do pay, and that cost is then passed on to, 11:01:42  
32 obviously, the cost of the land. 11:01:47  
33 11:01:47  
34 There is a broader question, which is what we were 11:01:50  
35 alluding to earlier, around the provision of backlog 11:01:52  
36 services. There is a test that we need to go through that 11:01:57  
37 is an important test about what proportion of extending 11:01:57  
38 those services to an existing area should the remainder of 11:02:01  
39 Hunter Water's customers pay? How much should they 11:02:05  
40 contribute towards the provision of that service? How much 11:02:08  
41 should the residents who are benefiting from extension of 11:02:10  
42 that service also pay? 11:02:14  
43 11:02:15  
44 That is the test we need to go through and that is 11:02:15  
45 what we are saying we will continue to assess for places 11:02:18  
46 like North Rothbury. However, it is important that we ask 11:02:22  
47 that question because there is a broader question as to how 11:02:24

1 much should our existing customers pay towards the 11:02:26  
2 extension of those services? 11:02:30  
3 11:02:31  
4 MR PYNSENT: With due respect, the final comment would be 11:02:32  
5 that some of those people in North Rothbury paid less than 11:02:34  
6 \$63,000 for their house and land, and you expect them to 11:02:38  
7 contribute to have the sewer connected. I can't see it. 11:02:42  
8 11:02:42  
9 THE ACTING CHAIR: Perhaps we could pick up any additional 11:02:48  
10 issues on this in the later session. 11:02:51  
11 11:02:51  
12 Mark, did you have anything? 11:02:57  
13 11:02:57  
14 MR EDLER: Yes, thank you, Madam Chair, and thank you to 11:03:01  
15 Hunter Water for the presentation of their revised 11:03:03  
16 proposal. I am Mark Edler from Flow Systems. 11:03:06  
17 11:03:06  
18 We accept and agree that we are living through quite 11:03:10  
19 uncertain times, particularly with climate and demand 11:03:13  
20 forecasts. That has seen Hunter Water propose a shorter 11:03:16  
21 pricing period, with reference to things like, "We don't 11:03:24  
22 know whether we're building a desal". I would like to 11:03:27  
23 understand a little bit about whether there have been 11:03:33  
24 changes to the capital plan - ie, when the pricing period 11:03:37  
25 moves to a shorter period, are there capital works that 11:03:45  
26 were around water security that are falling out of even the 11:03:50  
27 four-year period or is it simply a timing change? 11:03:53  
28 11:03:56  
29 MR CLEARY: The major investment in the proposed capital 11:03:58  
30 program around water security is with respect to improving 11:04:03  
31 the efficiency of Hunter Water's system, so reducing 11:04:06  
32 leakage. There is a proposed investment now of around the 11:04:10  
33 \$30 million mark to continue to reduce the leakage in our 11:04:14  
34 distribution system. 11:04:18  
35 11:04:18  
36 We also have a strong focus on working with our 11:04:19  
37 community to reduce demand - that is, with both our 11:04:22  
38 non-residential and residential customers. Those are the 11:04:25  
39 key initiatives with respect to water security. 11:04:29  
40 11:04:29  
41 We are working with the DPIE on the review of the 11:04:34  
42 Lower Hunter Water Plan, which sets the long-term strategy 11:04:36  
43 for supply and demand balance, and ensuring that we can 11:04:44  
44 sustainably service growth and withstand drought. That 11:04:50  
45 investigative work is within the price path. There is no 11:04:50  
46 major investment in terms of new source augmentation, for 11:04:53  
47 example, because that is a question that still needs to be 11:04:57

1 answered as part of the Lower Hunter Water Plan review. 11:04:59  
2 11:04:59  
3 The other comment in the proposal, which is on the 11:05:03  
4 agenda for later this afternoon, is recycled water use for 11:05:07  
5 residential and open space use, in essence, contributing 11:05:10  
6 towards the liveability of the city. Those are the broad 11:05:16  
7 areas of investments with respect to water security that 11:05:20  
8 are definitely in the proposal. 11:05:24  
9 11:05:24  
10 MS HAYES: Could I also just add quickly to that that in 11:05:25  
11 terms of the change from five years to four, we have simply 11:05:25  
12 just dropped off the fifth year. Our capital investment 11:05:28  
13 proposal of \$871 million down to \$724 million is simply 11:05:36  
14 just dropping off the fifth year. There has been no 11:05:36  
15 reshuffling between years; it is purely just that the fifth 11:05:40  
16 year has dropped off. 11:05:44  
17 11:05:44  
18 MR EDLER: Thank you. 11:05:46  
19 11:05:46  
20 THE ACTING CHAIR: Are there any questions from the floor? 11:05:47  
21 Rick? 11:05:49  
22 11:05:50  
23 MR BANYARD: My name is Rick Banyard. I am a community 11:05:52  
24 member for lots of organisations in Newcastle, and I am 11:05:55  
25 also a long term member of the Property Owners Association 11:05:58  
26 of NSW. 11:06:02  
27 11:06:02  
28 You had a slide up on the screen there showing 11:06:02  
29 customer pensioner bill impacts. I would like to know how 11:06:06  
30 many customers does Hunter Water have who are pensioners? 11:06:16  
31 The pensioner customers who own properties therefore pay 11:06:19  
32 the full bill. The pensioners who are tenants therefore 11:06:23  
33 only pay the blue sections of that bill. How did Hunter 11:06:28  
34 Water determine that 100 kilolitres was the pensioner 11:06:33  
35 quantity? 11:06:38  
36 11:06:38  
37 THE ACTING CHAIR: I am not sure whether Hunter will have 11:06:39  
38 all of that information at their fingertips at the moment 11:06:41  
39 but to the extent that you can respond, perhaps you can do 11:06:45  
40 so. 11:06:45  
41 11:06:45  
42 MR SHIELDS: The 100 kilolitres is from an analysis of 11:06:49  
43 pensioner bills. In the past we have done a sample and 11:06:53  
44 looked at billing data, and that is a typical level of 11:06:55  
45 consumption by pensioners. Pensioners who own their own 11:07:02  
46 property are eligible for a pensioner rebate, which is 11:07:05  
47 26 per cent off the typical household bill. With regard to 11:07:09

1 pensioners who are not owners of a house, but who rent a 11:07:15  
2 property, we don't get to see what the billing relationship 11:07:18  
3 is there. 11:07:21  
4 11:07:21  
5 MR BANYARD: Can I just make a comment? The only people 11:07:26  
6 who can have customer contracts are the pensioners who own 11:07:30  
7 their own property. I don't believe, from the answer that 11:07:38  
8 we were just given, that Hunter Water would know how many 11:07:41  
9 pensioners are occupying houses that are owned by landlords 11:07:44  
10 and therefore the landlord is paying for the bill. I would 11:07:47  
11 like those questions put on notice and the answers supplied 11:07:50  
12 back to the tribunal and to the community. 11:07:55  
13 11:07:55  
14 THE ACTING CHAIR: I think as Peter said, because they 11:08:00  
15 have no contractual relationship with the pensioners who 11:08:04  
16 are tenants - which is not something that is their choice; 11:08:08  
17 it is set up in the way that the system is regulated - they 11:08:11  
18 cannot give that number because it's not known. 11:08:19  
19 11:08:19  
20 MR BANYARD: That's fair enough, but then how could they 11:08:25  
21 come up with the data on the chart that was on the screen? 11:08:27  
22 11:08:27  
23 MR SHIELDS: When we presented the data on a pensioner who 11:08:32  
24 owns their own house, we explained that on the graphics 11:08:34  
25 that we put in our proposal and our submissions. 11:08:38  
26 11:08:38  
27 THE ACTING CHAIR: I think probably the issue is that 11:08:41  
28 maybe that chart could have a better label which could be 11:08:43  
29 "Pensioner owner/occupiers", or something like that. 11:08:48  
30 11:08:48  
31 MS HAYES: Hunter Water will make that change. 11:08:59  
32 11:08:59  
33 THE ACTING CHAIR: Are there any further comments or 11:09:01  
34 questions from the floor? Was there anything on slido? 11:09:02  
35 No. Okay -- 11:09:02  
36 11:09:02  
37 MR HAUES: Excuse me, Madam Chair, the questions you have 11:09:16  
38 in session one, are we going to get to those to address 11:09:17  
39 them? 11:09:17  
40 11:09:17  
41 THE ACTING CHAIR: We are just about to start session one 11:09:20  
42 now. 11:09:20  
43 11:09:20  
44 MR HAUES: I just wasn't sure whether you were proposing - 11:09:20  
45 11:09:20  
46 THE ACTING CHAIR: We have done the general overview. We 11:09:23  
47 will now get into the detail. 11:09:26



1		11:09:26
2	MR HAUES: Excellent, thank you.	11:09:28
3		11:09:28
4	THE ACTING CHAIR: So you don't get to leave that early.	11:09:30
5		11:09:30
6	I'll now hand over to Anna.	11:09:36
7		11:09:36
8	<b>Session 1: Introduction, key issues and Hunter-Water's</b>	11:09:36
9	<b>prices</b>	11:09:36
10		11:09:36
11	MS BRAKEY: Hi. It's a real privilege to be here as a	11:09:39
12	tribunal member today and it is a delight to be here in	11:09:41
13	Newcastle as well.	11:09:44
14		11:09:44
15	In this first session, we will touch on some of the	11:09:46
16	issues that we have already started to discuss through	11:09:49
17	Hunter Water's presentation and that will include, for	11:09:53
18	example, the important consideration of the level of the	11:10:02
19	water usage charge and the amount of charge, which was a	11:10:05
20	concern in some of the submissions that we received.	11:10:08
21		11:10:08
22	The water usage price can signal the cost of water	11:10:15
23	consumption to customers and hence is important in ensuring	11:10:18
24	optimal levels of water conservation.	11:10:21
25		11:10:21
26	This session will also outline Hunter Water's forecast	11:10:24
27	demand and customer numbers, which are important	11:10:28
28	considerations in setting prices.	11:10:31
29		11:10:31
30	In order to assist the discussion at the end of the	11:10:33
31	presentation that the secretariat will provide, we will	11:10:36
32	pose some questions and you will be able to see them.	11:10:39
33	I will then invite comment on those questions from people	11:10:41
34	at the table and in the audience.	11:10:46
35		11:10:46
36	There is the provision to log questions using the	11:10:49
37	slido facility, and the event code is #H325.	11:10:56
38		11:10:56
39	I'll now call on Scott Chapman to introduce the	11:11:06
40	discussion on water charges.	11:11:10
41		11:11:10
42	MR CHAPMAN: Thanks, Anna. Welcome. My name is	11:11:15
43	Scott Chapman, as Anna mentioned.	11:11:18
44		11:11:18
45	I am just going to talk through briefly some of the	11:11:20
46	key issues from Hunter Water's proposal and submission to	11:11:23
47	us for the next pricing period in terms of prices, in terms	11:11:26

1 of bills and in terms of water demand. Also I'll briefly 11:11:30  
2 touch on the methodology or the approach that we take in 11:11:35  
3 assessing efficient costs and how we set prices with that 11:11:38  
4 in mind. 11:11:42

5 11:11:42  
6 As Graham mentioned in his presentation from Hunter 11:11:46  
7 Water's perspective, we received Hunter Water's original 11:11:52  
8 pricing proposal in July. We received an updated or a 11:11:54  
9 revised submission in October. What that submission 11:11:58  
10 essentially took into account were key issues such as the 11:12:01  
11 reduction in interest rates, which was quite critical in 11:12:06  
12 the reduction in the proposed bills that Hunter Water has, 11:12:08  
13 and also the reduction in the determination period. Where 11:12:12  
14 it previously set prices from five years, it is down to 11:12:17  
15 four years, which reflected Hunter's concerns and 11:12:21  
16 assessment of uncertainty and risk about what this ongoing 11:12:24  
17 drought may mean for their expenditure and revenue. 11:12:27

18 11:12:27  
19 When we set prices, typically what we do is try to set 11:12:33  
20 them to raise the revenue to cover Hunter Water's efficient 11:12:38  
21 costs year on year. When Graham gave his presentation, he 11:12:42  
22 talked about differences between operating costs and 11:12:47  
23 capital costs. As you can see from the building blocks on 11:12:50  
24 the screen there, operating costs seem to get passed 11:12:54  
25 straight through. Capital costs, where Hunter Water is 11:12:59  
26 investing in infrastructure or in assets, go into 11:13:02  
27 essentially a stock of assets, and the capital costs are 11:13:05  
28 recovered through depreciation and return on assets. 11:13:09

29 11:13:09  
30 This chart essentially shows that. If you have a look 11:13:11  
31 at the green box and the blue box there, the depreciation 11:13:15  
32 and return on assets, that's where some of the key changes 11:13:19  
33 are between the 2016-2020 period and their proposal for the 11:13:22  
34 coming period. 11:13:28

35 11:13:28  
36 There is quite a significant increase in depreciation 11:13:28  
37 which reflects Hunter Water's view that the rate at which 11:13:31  
38 its assets were being depreciated in our pricing proposal 11:13:34  
39 was not quick enough and they were not recovering enough 11:13:38  
40 money to cover that depreciation. 11:13:41

41 11:13:41  
42 The return on assets is essentially the effect of 11:13:42  
43 interest rates and return on capital. You can see that 11:13:47  
44 that is reduced from \$130 million a year to \$101 million in 11:13:49  
45 Hunter Water's revised submission for the coming period. 11:13:54  
46 Again it reflects that great and recent reduction in 11:13:56  
47 interest rates. 11:13:59

1 11:13:59  
2 Hunter Water proposes modest increases in most charges 11:14:05  
3 over the next five years and that's including inflation. 11:14:08  
4 It is proposing a higher water usage charge per kilolitre. 11:14:12  
5 So for every kilolitre of water that gets consumed by a 11:14:17  
6 customer, the price of that will go up marginally each 11:14:19  
7 year. That is offset by quite a significant percentage 11:14:23  
8 reduction at least in the fixed charge. That is a 11:14:26  
9 re-balancing, a redefining or a resetting, I guess, of the 11:14:30  
10 usage component off a customer's water bill and the fixed 11:14:35  
11 component. In fact, by the end of the fourth or fifth year 11:14:39  
12 Hunter Water proposes that the water service charge - 11:14:42  
13 I think it is in their fifth year if we extend it out - 11:14:45  
14 will be about \$8 a year. So almost all of the revenue 11:14:49  
15 raised for the water part of business at least will be 11:14:52  
16 raised through usage charges. This gives customers more 11:14:56  
17 control over their water bill and in some ways exposes 11:14:59  
18 Hunter Water to a little bit more revenue risk, but we will 11:15:02  
19 get to that in a moment. 11:15:06  
20 11:15:06  
21 On the wastewater side, Hunter is proposing to 11:15:08  
22 continually increase relatively the charges apartments pay 11:15:12  
23 compared with houses to try to bring them more in line with 11:15:18  
24 each other. Higher stormwater charges are proposed in line 11:15:24  
25 with greater expenditure, but they are coming off a 11:15:26  
26 relatively low base, though it is not insignificant. 11:15:29  
27 11:15:29  
28 Water usage charges is a critical issue at the moment. 11:15:33  
29 As I said, Hunter is proposing to increase its usage charge 11:15:38  
30 and reduce its fixed charge for its water business. We are 11:15:41  
31 looking at exploring and looking into the impact of water 11:15:47  
32 usage charges on consumption and the impact of drought on 11:15:52  
33 costs and the value of water, and the costs of supplying it 11:15:56  
34 in the long run. 11:16:01  
35 11:16:01  
36 One of the things we would like to touch on and get 11:16:03  
37 more feedback on, and perhaps explore a bit more, is: 11:16:06  
38 should water usage charges increase during periods of 11:16:12  
39 drought where water is scarcer? There is certainly the 11:16:17  
40 option of reducing the fixed charge in line with that so 11:16:21  
41 that revenue is not over-recovered. That is something that 11:16:24  
42 we would like some discussion around and some feedback on. 11:16:28  
43 11:16:28  
44 On the flip-side of that, given that during drought 11:16:33  
45 Hunter Water has gone into restrictions for the first time 11:16:38  
46 in a quarter of a century I believe - increasing the water 11:16:41  
47 usage charge will not necessarily have a great effect, or 11:16:45

1 it may even be an almost immeasurable effect in some cases, 11:16:50  
2 on the actual consumption of water potentially, given that 11:16:52  
3 water restrictions might do all that work in reducing 11:16:55  
4 consumption rather than price. 11:16:59

5 11:16:59  
6 Location-based pricing. Hunter Water had a 11:17:01  
7 long-standing pricing mechanism where very large industrial 11:17:04  
8 customers - they are typically industrial customers - pay a 11:17:11  
9 lower per kilolitre charge once they reach a very high 11:17:16  
10 threshold of usage, which is essentially above 50,000 11:17:21  
11 kilolitres of usage per annum. The usage charges for some 11:17:23  
12 customers would reduce, which potentially reflects perhaps 11:17:26  
13 lower costs, given the scale of the consumption of 11:17:30  
14 customers using it. 11:17:37  
15 11:17:37

16 Hunter Water has proposed to phase that out and to 11:17:37  
17 slowly, across the determination period, put all customers 11:17:43  
18 on the same basis essentially, so every customer will pay 11:17:46  
19 the same price per kilolitre of water consumed, regardless 11:17:50  
20 of what type of customer they are or how much they are 11:17:53  
21 using. 11:17:56  
22 11:17:56

23 The discount has been in place for about 20 years. 11:17:59  
24 There are 19 industrial customers who receive this 11:18:02  
25 discount. The scale of the discount they receive depends 11:18:07  
26 on where they are in the system and which system they are 11:18:09  
27 on. The impact of doing that for some of these large 11:18:13  
28 customers ranges from zero percent - so they were not 11:18:17  
29 receiving much of a discount at all - to potentially a 11:18:20  
30 27 per cent increase in their water bill over a five-year 11:18:22  
31 period. What that would do is raise a bit more money from 11:18:25  
32 those large customers, which would allow Hunter Water to 11:18:30  
33 reduce bills to some extent - they estimate around \$10 a 11:18:33  
34 year - for the broader customer base to offset that extra 11:18:37  
35 revenue. 11:18:40  
36 11:18:40

37 IPART indicated in 2016 that this was something that 11:18:41  
38 we were encouraging Hunter Water to investigate, and in 11:18:44  
39 principle our preliminary position is to support this. We 11:18:47  
40 are very interested in gaining stakeholder feedback, and 11:18:53  
41 particularly from those customers who are impacted by that 11:18:57  
42 proposed change. 11:19:00  
43 11:19:00

44 The environmental improvement charge has been 11:19:01  
45 discussed at some length, but I am sure we will explore 11:19:04  
46 that a bit further. Bob discussed this from Cessnock City 11:19:09  
47 Council's perspective and Hunter Water responded. The 11:19:13

1 environmental improvement charge is a pricing mechanism to 11:19:16  
2 fund backlog sewerage works in towns, communities or for 11:19:23  
3 small pockets of customers who have never had reticulated 11:19:27  
4 sewerage services before. The EIC has been in place for a 11:19:31  
5 very long time. In our 2016 determination it was extended 11:19:34  
6 to 2020 to fund, under the direction of the government, 11:19:39  
7 backlog services to the township of Wyee. 11:19:45

8 11:19:45  
9 Hunter Water has proposed that this environmental 11:19:48  
10 improvement charge be removed or abolished as of 1 July 11:19:51  
11 2020. Our preliminary position is to support Hunter Water's 11:19:55  
12 proposal, but we are again interested in getting feedback 11:20:01  
13 on some of the issues and the complexities and the 11:20:05  
14 permutations around that. 11:20:07

15 11:20:07  
16 Water demand forecasts. Hunter Water is proposing 11:20:11  
17 that, on a climate-corrected basis - so assuming average 11:20:15  
18 weather conditions - water demand will be a bit higher over 11:20:20  
19 the coming four or five-year period than it has been, but 11:20:23  
20 not as much of an increase as population is increasing by 11:20:28  
21 a small increase but not too great. 11:20:32

22 11:20:32  
23 That is kind of important because, in our 2016 11:20:35  
24 determination, we said, "Okay, if Hunter Water sells more 11:20:38  
25 than 5 per cent across the determination period than we 11:20:43  
26 allowed for in setting prices, we will consider giving some 11:20:46  
27 of that revenue back above 5 per cent to customers to 11:20:49  
28 offset essentially the over-recovery over that period." 11:20:53  
29 That is something that IPART is looking at at the moment. 11:20:57  
30 Again we would like feedback on how we might do that and 11:21:02  
31 the mechanism we might use to make that adjustment, if it 11:21:07  
32 should be done at all. 11:21:09

33 11:21:09  
34 That is a very brief run through of some of the 11:21:11  
35 pointed issues that IPART is considering and that Hunter 11:21:14  
36 Water has raised. There are some questions on the screen 11:21:16  
37 that we hope will prompt some discussion. We are very 11:21:21  
38 interested in receiving feedback from the room, from 11:21:24  
39 Hunter's perspective and from the roundtable. 11:21:27

40 11:21:27  
41 MS BRAKEY: Thanks, Scott. 11:21:30

42 11:21:30  
43 I think what we might do this session is talk about 11:21:31  
44 the residential prices first. I do note that we have some 11:21:33  
45 questions on foot that we do need to get to about the 11:21:37  
46 non-residential customers, but I wonder if it would make 11:21:43  
47 more sense to talk about the residential issues first and 11:21:45

1 then we can come to the non-residential issues afterwards. 11:21:48  
2 11:21:48  
3 Having said that, Douglas, do you have any comments? 11:21:52  
4 11:21:55  
5 MR McCLOSKEY: Without wanting to sort of go into it, we 11:21:58  
6 still have some questions about when you have actual demand 11:22:03  
7 figures that are above where your starting point for your 11:22:07  
8 forecasts are, how valid is it to adjust a forecast 11:22:11  
9 downwards, particularly when this is the basis on which we 11:22:15  
10 are setting revenue requirements? 11:22:22  
11 11:22:25  
12 We are probably at the stage of asking for more 11:22:25  
13 information in relation to that, but considering that this 11:22:28  
14 is one of the factors and inputs that goes into where we 11:22:30  
15 are setting these price points, and it adds into the 11:22:33  
16 questions about variations and how we deal with variations 11:22:39  
17 over time, and whether they are variations over and under 11:22:42  
18 5 per cent, we think that the strength of the forecasting 11:22:45  
19 is really important. Consumers need to have faith that the 11:22:49  
20 utilities have robust forecasting models that do actually 11:22:56  
21 get as close to the reality that we have. 11:23:02  
22 11:23:04  
23 I know that they are climate-adjusted averages now, 11:23:07  
24 but when we talk about average conditions, when we know 11:23:09  
25 that we are not in average conditions and we probably don't 11:23:12  
26 have the likelihood of being in average conditions any time 11:23:15  
27 in the near future, proposing a regulatory determination 11:23:18  
28 that is based upon an adjusted average is a point of 11:23:24  
29 concern for us. There may be very solid reasoning behind 11:23:28  
30 doing that, but we just want to tease that out a little bit 11:23:33  
31 more to understand. 11:23:37  
32 11:23:37  
33 MR CLEARY: In terms of some broad principles, our 11:23:38  
34 forecast is actually increasing, so our starting point is 11:23:41  
35 going up. That is because the climate-corrected approach 11:23:45  
36 that we have now adopted is showing that our previous 11:23:48  
37 method for forecasting the base demand actually should be 11:23:54  
38 slightly higher. The reason for that is that our previous 11:23:58  
39 methodology used an averaging process over a number of 11:24:00  
40 years to try to estimate the effects of climate, and that 11:24:04  
41 averaging process in the period we were looking at actually 11:24:06  
42 had a lot of very wet years, for example. If you think 11:24:10  
43 back to 2015 and 2016, they actually were very, very wet 11:24:11  
44 years. That was one of the weaknesses in our former method 11:24:16  
45 of forecasting. 11:24:19  
46 11:24:19  
47 Our new method uses a model which is well adopted 11:24:20

1 throughout the Australian water industry. It is a commonly:24:24  
2 accepted model. It has been independently peer reviewed by11:24:28  
3 the departments of primary industries and the environment,11:24:33  
4 and also by an expert. So it is a well-accepted 11:24:37  
5 methodology. It is independently peer reviewed. It is 11:24:41  
6 trying to set up, as best we can, a reasonable estimate of11:24:47  
7 what average conditions will be. Without a doubt, we will11:24:51  
8 get variances throughout our determination period. We will11:24:54  
9 have hot, hot years, and it's also quite possible, 11:24:55  
10 particularly over a four-year period, that we will have 11:24:58  
11 dryer years or wetter years. You are right, there is some11:25:02  
12 complexity in that, but those are the principles that we 11:25:04  
13 have applied and how we have approached the demand 11:25:07  
14 forecasting. 11:25:10  
15 11:25:10  
16 MR McCLOSKEY: We do understand that. I think this is 11:25:12  
17 probably leading into a bigger issue for us, which the 11:25:17  
18 people around the table probably already know about. We 11:25:24  
19 are concerned that seeing current situations through a very11:25:26  
20 narrow lens of "This is an exceptional circumstance" and 11:25:31  
21 then moving on to an average is somewhat problematic. That11:25:33  
22 goes into the question that we will probably deal with 11:25:37  
23 later about drought pricing or other exceptional 11:25:40  
24 circumstance pricing. 11:25:46  
25 11:25:46  
26 We are concerned about that because we think that it 11:25:47  
27 does not properly view the current circumstances in the 11:25:50  
28 framework of longer term downward variation, for want of a11:25:52  
29 better word, in certainty on rainfall, and all of the other11:25:58  
30 aspects on supply. Also looking particularly around 11:26:05  
31 scarcity and drought pricing, we are concerned that not 11:26:12  
32 having conservative, let's say, demand forecasts increases11:26:15  
33 the likelihood of having to implement adjustments for what11:26:20  
34 we would term extreme circumstances. We think that is less11:26:25  
35 efficient and less productive than having a stronger 11:26:30  
36 framework on a longer term basis that is probably less 11:26:33  
37 penalising than simply hitting people with higher charges 11:26:38  
38 when there is a drought circumstance. 11:26:42  
39 11:26:42  
40 I am aware that that is a much bigger conversation 11:26:44  
41 than simply the demand forecast. However, that is why we 11:26:47  
42 are really keen to have that conversation because we think11:26:52  
43 it does link to a lot of the other pricing discussions. 11:26:55  
44 11:26:55  
45 MR CLEARY: I'll just point out that Hunter Water is not 11:26:59  
46 proposing a scarcity pricing mechanism. That is not 11:26:59  
47 something we are putting forward. I think that is quite 11:27:04

1 important to note. 11:27:06  
2 11:27:06  
3 The other important point in terms of our planning and 11:27:07  
4 our response is we absolutely are planning for variable 11:27:12  
5 climates and for responding to drought, and we are very 11:27:18  
6 much investing to ensure that we have the ability to 11:27:22  
7 respond under those circumstances. 11:27:25  
8 11:27:25  
9 Your link to pricing is an important one, and 11:27:28  
10 obviously it is something we have to discuss. We are not 11:27:30  
11 proposing scarcity pricing, but we are also very conscious 11:27:36  
12 that there is a fine balance here. If our demand forecasts 11:27:40  
13 are higher and we are building in costs that we may not 11:27:47  
14 incur, then there is also a potential impact on the 11:27:50  
15 community now. There is a difference between the ability 11:27:52  
16 to respond and manage a variable climate and how we price 11:27:55  
17 those services. Yes, that is a much bigger topic for 11:27:58  
18 debate, but we are not proposing scarcity prices. 11:28:00  
19 11:28:00  
20 MR McCLOSKEY: As soon as I said that, I was aware I was 11:28:04  
21 using the wrong term, and it matters. But I suppose that 11:28:09  
22 is an important discussion to have about timing, and there 11:28:10  
23 has been a conversation about drought-related pricing or 11:28:13  
24 the passing through of drought-related costs. The point we 11:28:16  
25 raise is that we are not a fan of those types of mechanisms 11:28:20  
26 because we think they are somewhat punitive and do not 11:28:25  
27 necessarily have a productive impact upon usage that is 11:28:28  
28 signalling the longer term value of the resource or the 11:28:34  
29 longer term scarcity, for want of a better word, of water. 11:28:37  
30 11:28:37  
31 Again I realise this is a bigger conversation than 11:28:42  
32 what the specific pricing proposal is looking at, but it 11:28:46  
33 does relates to drought pricing and other things. 11:28:50  
34 11:28:50  
35 MR CLEARY: The only thing I would like to add is that the 11:28:53  
36 Lower Hunter Water Plan process that we are currently going 11:28:55  
37 through, including the community engagement running through 11:28:58  
38 that, is getting community views and then stakeholder views 11:29:01  
39 to answer our longer term water supply demand balance 11:29:05  
40 question. So what is the right mix of acting early, versus 11:29:09  
41 responding to extreme circumstances? That is a much bigger 11:29:14  
42 question that we are currently engaged with our community 11:29:17  
43 on as part of the Lower Hunter Water Plan process, and that 11:29:21  
44 will set that long-term plan and really provide the 11:29:25  
45 strategic direction on that issue. 11:29:28  
46 11:29:28  
47 MR McCLOSKEY: Thanks. 11:29:31



1 11:29:31  
2 MS BRAKEY: Did you want to raise any other issues, 11:29:32  
3 Douglas? 11:29:34  
4 11:29:34  
5 MR McCLOSKEY: I think I've probably dominated enough of 11:29:35  
6 time at the moment. As I say, a lot of these are 11:29:38  
7 interconnected issues. If there are some unanswered 11:29:41  
8 questions I am sure there will be an opportunity to raise 11:29:46  
9 them later. 11:29:50  
10 11:29:50  
11 MS BRAKEY: Bob, did you have any residential pricing 11:29:51  
12 related issue that you would like to raise? 11:29:53  
13 11:29:53  
14 MR PYNSENT: No, only to make the general statement that 11:29:58  
15 water is a resource and we need to be careful about the way 11:29:59  
16 we use it and plan for the future. I fully support the 11:30:05  
17 plan over a number of years to safeguard the water to our 11:30:09  
18 communities. 11:30:13  
19 11:30:13  
20 MS BRAKEY: Mark, did you want to make any comments? 11:30:14  
21 11:30:17  
22 MR EDLER: Yes, thank you, Anna, and thank you, Madam 11:30:18  
23 Chair, and Hunter Water. When we are talking about 11:30:20  
24 residential pricing, we have a real opportunity through 11:30:22  
25 this price review, and in future pricing reviews, to make 11:30:27  
26 sure that we are getting the settings right in terms of 11:30:30  
27 intergenerational or at least inter-price period equity. 11:30:34  
28 11:30:34  
29 That picks up a little bit on what Douglas was talking 11:30:38  
30 about with regard to making sure we are getting that 11:30:41  
31 balance right around what we are doing right now for water 11:30:44  
32 security and what the longer term plans are. We would hate 11:30:49  
33 to see a situation where we are kicking the can down the 11:30:57  
34 road, if you like, on some things that really do need to be 11:31:00  
35 done. 11:31:03  
36 11:31:03  
37 We really welcome Hunter Water's approach in going 11:31:04  
38 back to first principles of their risk-based approach and 11:31:07  
39 looking at how they will comply with some of their 11:31:12  
40 environmental and other responsibilities, and building up 11:31:17  
41 from there. We support that as something that needs to be 11:31:21  
42 done and needs to be reflected in their allowed revenue. 11:31:25  
43 11:31:25  
44 We do ask the question, as has Douglas, with regard to 11:31:30  
45 whether we have the right settings in terms of our view on 11:31:34  
46 the long run marginal cost of water, particularly whether 11:31:39  
47 we are choosing kind of an end of that range that really 11:31:46

1 adds risk into the system that could be treated by picking 11:31:51  
2 slightly more of a mid-point in the long run marginal cost 11:31:59  
3 estimate and using those funds around water security and 11:32:04  
4 making sure that that not only compliance but also the 11:32:10  
5 future situation will be well cared for and we don't get 11:32:15  
6 price shocks in future periods. 11:32:21  
7 11:32:21  
8 MS BRAKEY: I want to clarify that when we set the prices 11:32:25  
9 we set the usage price, we figure out how much revenue 11:32:29  
10 Hunter Water will need. We set the usage price and then, 11:32:33  
11 if you like, the residual is set as the fixed price, so 11:32:37  
12 that in itself will not get you differences in overall 11:32:43  
13 expenditure. 11:32:47  
14 11:32:47  
15 MR EDLER: Possibly again I was a little bit confusing 11:32:50  
16 around the RLMC that sets your usage price and then the 11:32:53  
17 allowed revenue, that you then set your total prices, 11:32:58  
18 essentially. I guess what I am saying is that, as Douglas 11:33:04  
19 has said, we need to think really hard about what revenue 11:33:08  
20 should be spent now to make sure that we're not kicking 11:33:13  
21 those risks down the road. 11:33:17  
22 11:33:17  
23 We talked a little bit about price signalling through 11:33:22  
24 drought and the balance between the fixed charge and the 11:33:28  
25 usage charge in periods of drought. What we would say is 11:33:31  
26 that we really welcome the approach that Hunter Water has 11:33:36  
27 taken to community engagement and really understanding, 11:33:39  
28 I guess, what the drivers of usage are and what sorts of 11:33:43  
29 things will help communities manage through periods of 11:33:47  
30 drought or water stress. 11:33:53  
31 11:33:53  
32 We do think water restrictions have a role to play but 11:33:56  
33 we would also like to see real credence put to price 11:34:01  
34 effects and making sure that the price signals are right so 11:34:07  
35 that people are encouraged to reduce their use of potable 11:34:10  
36 water in periods of drought. 11:34:14  
37 11:34:14  
38 Thank you. I think we will probably get through a 11:34:19  
39 couple of other things later in the program. 11:34:21  
40  
41 MR McCLOSKEY: Might I respond to that, Anna?  
42  
43 MS BRAKEY: Yes.  
44  
45 MR McCLOSKEY: It's good that Mark has raised the issue of 11:34:28  
46 cost signalling and the way that it interacts with things 11:34:31  
47 like restrictions. To reiterate something we put in our 11:34:37

1 submission, and something that we have been prosecuting for 11:34:41  
2 a while as an organisation, we think there should be 11:34:44  
3 consideration of a change to the way that tariffs are 11:34:46  
4 structured, particularly around usage. To implement an 11:34:49  
5 inclining block structure is probably something that moves 11:34:54  
6 towards a more integrated structure that signals the scarce 11:34:57  
7 value of water over time, that reduces the need to 11:35:08  
8 implement things like short-term drought pricing and does 11:35:11  
9 match the signalling for restrictions. It basically sets 11:35:18  
10 up a more integrated framework that puts consumers and 11:35:22  
11 households in a position of choosing and having the ability 11:35:28  
12 to either pay to use more and pay an excess charge to use 11:35:32  
13 more above a point that is deemed acceptable in the 11:35:37  
14 community - and there is a lot of consultation that would 11:35:43  
15 need to be had around where those points are set - or they 11:35:46  
16 can control their usage. 11:35:50

17 11:35:50  
18 That sets up a consistent message that we feel is in 11:35:51  
19 the community - that is, that the resource has a value and 11:35:55  
20 that they want to protect that value. They can either do 11:36:01  
21 that by controlling their usage or paying extra. There is 11:36:04  
22 a framework of other questions which needs to be put around 11:36:07  
23 that, but we feel that the genuine long run marginal cost 11:36:10  
24 of the resource is better signalled through an inclining 11:36:17  
25 block structure. 11:36:20

26 11:36:20  
27 We are well aware that there has been lots of debate 11:36:21  
28 over the last 20 years about whether that is so, but a 11:36:24  
29 significant number of major urban water utilities have 11:36:27  
30 adopted an inclining block structure, and that has been in 11:36:31  
31 support of strong messages for efficiency and conservation 11:36:36  
32 We think that that should be seriously considered by Hunter 11:36:41  
33 Water. 11:36:45

34 11:36:45  
35 MR CLEARY: I can respond briefly to that as an overview, 11:36:45  
36 just in terms of the broad options. 11:36:48

37 11:36:48  
38 In terms of the water security issues and issues of 11:36:50  
39 intergenerational equity, our current proposal is based on 11:36:53  
40 our current Lower Hunter Water Plan, which was a whole of 11:36:58  
41 government plan which was based on extensive community 11:37:03  
42 consultation, so it did reflect the views of the community 11:37:05  
43 at that time on how best to manage the water security for 11:37:09  
44 the region. 11:37:12

45 11:37:12  
46 That is the basis on which our current pricing 11:37:13  
47 proposal has been put together, and the revenue 11:37:15

1 requirements reflect that. We are doing a major review of 11:37:17  
2 that proposal. Again as we have already flagged, that's in 11:37:20  
3 our current proposal. 11:37:21  
4 11:37:21

5 The issues which you have raised with respect to the 11:37:22  
6 role that pricing plays in that broader supply and demand 11:37:25  
7 balance is a set of options which are being explored as 11:37:29  
8 part of that review. We acknowledge that they are viable 11:37:34  
9 options. They are used throughout the country and they 11:37:37  
10 certainly do have utility. It is something we are seeking 11:37:40  
11 feedback from our stakeholders and the community on at the 11:37:43  
12 moment about what role they should play as part of our 11:37:47  
13 long-term sustainable provision of water services and 11:37:50  
14 drought security. 11:37:54  
15 11:37:54

16 Our initial feedback, for what it is worth, as part of 11:37:56  
17 our deliberative forum process, is that our community 11:37:58  
18 strongly indicated they supported broad-scale restrictions 11:38:00  
19 and were not in favour of any additional price signals or 11:38:04  
20 inclining tariff structures or drought scarcity pricing. 11:38:07  
21 That needs to be explored further, but that is certainly 11:38:12  
22 the initial feedback we have had as part of our 11:38:15  
23 deliberative forum process. 11:38:15  
24 11:38:15

25 MR SHIELDS: Peter Shields, Hunter Water. 11:38:15  
26 11:38:15

27 I might just add to that. IPART has tariff structures 11:38:24  
28 principles. The water usage price is set with reference to 11:38:26  
29 long run marginal costs. A lot of other regulators are 11:38:30  
30 moving that way, in water and other utility sectors. With 11:38:34  
31 inclining block tariffs, you are making arbitrary decisions 11:38:39  
32 about where the blocks are and what the price levels are, 11:38:41  
33 but I might let IPART have a say on LPMC versus inclining 11:38:47  
34 block tariffs. 11:38:47  
35 11:38:47

36 We are going through this Lower Hunter Water planning 11:38:50  
37 exercise. We still do not have a known supply 11:38:51  
38 augmentation. We have calculated some hypothetical 11:38:54  
39 indicative numbers off the back of some desal cost 11:38:59  
40 estimates. There are different methods to calculate the 11:39:02  
41 long run marginal cost. There different time horizons that 11:39:06  
42 produce a range of numbers. 11:39:10  
43 11:39:10

44 In our pricing proposal, we proposed to increase the 11:39:11  
45 existing water usage price by 1 per cent, which was the 11:39:19  
46 increase in the revenue requirement at that time. In the 11:39:22  
47 current period, for typical customers, with the balance 11:39:26

1 between usage and service charges, we get about 83 per cent 11:39:29  
2 of our water revenue requirement through the usage charge. 11:39:34  
3 With our revised estimates of the revenue requirement, 11:39:39  
4 again, as Anna has pointed out, the service charges are 11:39:46  
5 residual, so if we leave the usage price where it is, that 11:39:48  
6 usage charge would drop from \$100 by about \$20 a year, 11:39:53  
7 possibly down to \$20 or \$10, which would mean 98 per cent 11:39:56  
8 of our usage revenue would come back via the usage charge. 11:40:03  
9 11:40:03  
10 There are still various elements of this review to 11:40:03  
11 play out. IPART are doing some of their own work on 11:40:08  
12 calculating long run marginal cost of water. There is an 11:40:10  
13 expenditure review underway. I guess there is more 11:40:15  
14 discussion to be had about the right balance between usage 11:40:16  
15 and service charge, but as an organisation we have had a 11:40:21  
16 long history, amongst all the utilities, of having pretty 11:40:26  
17 much the highest usage component. We think that our 11:40:27  
18 customers support that and we think it sends an important 11:40:31  
19 conservation signal. 11:40:36  
20 11:40:39  
21 MR McCLOSKEY: Broadly we are very supportive of that. 11:40:40  
22 All of the consultation and the work that we do in engaging 11:40:42  
23 with the community - and it is reflected in the engagement 11:40:46  
24 that yourselves and Sydney Water do too - shows that 11:40:50  
25 consumers support a higher usage charge and the ability to 11:40:52  
26 control their own costs and their own usage. We definitely 11:40:57  
27 support that. We feel that it is a separate discussion 11:41:01  
28 about how you structure that recovery of usage and how that 11:41:04  
29 interacts with things like long run marginal costs and the 11:41:10  
30 community messaging. 11:41:15  
31 11:41:15  
32 I note that in your own proposal the range of long run 11:41:17  
33 marginal costs presented was between approximately \$2.50 11:41:20  
34 and \$4. We think that is probably a recognition of the 11:41:24  
35 fact that your future costs are reflecting the cost of 11:41:27  
36 desalinated water and other recycled water that is a much 11:41:33  
37 higher value. We think there is an option to have that 11:41:36  
38 reflected in the way that tariffs at the household level 11:41:40  
39 are presented. 11:41:44  
40 11:41:44  
41 We very much understand that that is part of bigger a 11:41:46  
42 broader review process and it is a discussion that has been 11:41:48  
43 had over many years, but it is something that is a high 11:41:52  
44 priority for us and we would be remiss if we were not to 11:41:56  
45 raise it again. 11:41:59  
46 11:41:59  
47 MS BRAKEY: I would like to go to the floor now to see if 11:42:03

1 we have any questions about residential pricing. 11:42:07  
2 11:42:07  
3 Yes, Mr Banyard? 11:42:10  
4 11:42:12  
5 MR BANYARD: Thank you. I would like to make a couple of 11:42:13  
6 comments. First of all, we are making a lot of noise about 11:42:15  
7 being in drought. Are we in drought? OEH has said that 11:42:19  
8 our rainfall in the winter months this year was above 11:42:26  
9 average. We have had rain in this quarter, and we don't 11:42:31  
10 know the answer to that, so perhaps we are not quite in 11:42:35  
11 drought. 11:42:38  
12 11:42:38  
13 Three of the four main water storages for Hunter Water 11:42:40  
14 are in the immediate coastal strip - Anna Bay, Tomago and 11:42:42  
15 Grahamstown Dam. They are in the catchment area of the 11:42:47  
16 coastal influence rather than further up the valley, and 11:42:51  
17 certainly it is very dry further up the valley. 11:42:54  
18 11:42:54  
19 One of the biggest problems as I see it for Hunter 11:42:59  
20 Water's water supply is the evaporation rates. We have had 11:43:04  
21 extremely high evaporation rates in recent months and that 11:43:07  
22 has been drawing huge amounts of water out of our supply. 11:43:09  
23 It is not being consumed by anybody; it's just going up in 11:43:12  
24 the air. 11:43:16  
25 11:43:16  
26 The waste out of our water is excessive and needs to 11:43:17  
27 be really addressed big time. Spraying potable water to 11:43:22  
28 reduce the dust on coal stockpiles is not really a very 11:43:26  
29 good way to go. 11:43:29  
30 11:43:29  
31 The non-revenue water share of Hunter Water is very 11:43:31  
32 large and it is not counted in their consumption figures. 11:43:35  
33 The figures on their storage level chart show the amount of 11:43:40  
34 water consumed, but that does not include their non-revenue 11:43:45  
35 water. I think from memory their non-revenue water is 11:43:48  
36 about 13 per cent. That is a pretty high figure, and that 11:43:51  
37 needs to be addressed as well as saving water from treating 11:43:55  
38 it to the potable level. 11:43:59  
39 11:43:59  
40 You talked about having an even pricing across the 11:44:01  
41 board. Will that also include even pricing for the water 11:44:05  
42 that is transferred down to the Central Coast? IPART has 11:44:09  
43 only just recently - in July this year - set the figures 11:44:13  
44 for that transfer, and that is only 70 cents a kilolitre. 11:44:17  
45 I would suggest that whatever water goes to the Central 11:44:20  
46 Coast or we buy back is paid for at exactly the same rate 11:44:26  
47 as everyone else pays. 11:44:29

1 11:44:29  
2 The Lower Hunter Water Plan specified that drought 11:44:31  
3 restrictions would come into place at the time we got to 11:44:35  
4 60 per cent water level. I think we made 60 per cent 11:44:40  
5 yesterday. 60 per cent for the Hunter is not a 11:44:43  
6 particularly low figure anyway because water evaporates and 11:44:47  
7 goes out of our system quite quickly, but it comes back 11:44:52  
8 very fast when we get significant rains and run-off 11:44:57  
9 periods. Summertime is often the time when we get massive 11:45:01  
10 storms and a lot of run-off. 11:45:04  
11 11:45:04  
12 Our organisation believes, as do I and a lot of other 11:45:07  
13 people I talk to, in having 100 per cent user pays for 11:45:10  
14 water. You use it, you pay for it. That includes no fixed 11:45:14  
15 charge - 100 per cent user pays. I am pretty sure our 11:45:18  
16 minister, who has just come back from Israel, will be 11:45:23  
17 starting to talk about 100 per cent user pays because 11:45:27  
18 that's what happens over there. Thank you. 11:45:31  
19 11:45:31  
20 MR CLEARY: With respect to are we in drought, the answer 11:45:36  
21 is yes, we are. We have had below average rainfall, not 11:45:38  
22 just below average rainfall, but below average stream flow 11:45:42  
23 into our storages. DPIE publishes drought maps for the 11:45:45  
24 state. Drought is a function of not just rainfall but more 11:45:49  
25 importantly soil moisture. That is on the internet. The 11:45:53  
26 Hunter, including the Lower Hunter, is in drought and 11:45:59  
27 that's reflective of our storage position. We are at the 11:46:01  
28 lowest storage level we have had for 25 years. 11:46:05  
29 11:46:05  
30 You are correct in that our storages do respond very 11:46:10  
31 rapidly to rainfall, but they can also empty very quickly. 11:46:13  
32 They are very responsive to climatic conditions, and they 11:46:18  
33 are relatively small in comparison to the demand that is 11:46:22  
34 exerted on them. Hence the restrictions policy that we 11:46:25  
35 have that is reflective of the need to conserve water when 11:46:28  
36 we do get to positions where we can actually deplete very 11:46:32  
37 quickly. 11:46:36  
38 11:46:36  
39 With respect to non-revenue water we agree - and this 11:46:36  
40 has been discussed at length - that our non-revenue water 11:46:39  
41 performance was at the upper end of all the utilities and 11:46:43  
42 that was unacceptable. That is why in the last three 11:46:46  
43 years, we have reduced our non-revenue water by 20 per 11:46:50  
44 cent. 11:46:50  
45 11:46:50  
46 As I have outlined, our pricing proposal included an 11:46:53  
47 investment of just over \$30 million to continue to reduce 11:46:54

1 that non-revenue water to a level that would be leading for 11:46:59  
2 Australia - so getting it down to around 5 or 6 per cent is 11:47:01  
3 what we are targeting. 11:47:02  
4 11:47:02  
5 We absolutely acknowledge that it is critical for 11:47:05  
6 Hunter Water to ensure that our system is as efficient as 11:47:08  
7 it can be. 11:47:11  
8 11:47:11  
9 The issue of evaporation is also a very pertinent and 11:47:12  
10 valid issue. We acknowledge that our systems do experience 11:47:16  
11 very high natural losses. That is a characteristic of our 11:47:19  
12 water supply, and is one of the reasons why they deplete 11:47:22  
13 quickly. It is an area of ongoing research and development 11:47:26  
14 for us. There is no technically feasible option right now 11:47:30  
15 to reduce evaporation, particularly out of somewhere like 11:47:33  
16 Grahamstown Dam, which is a very large water body, or 11:47:37  
17 indeed the Tomago sandpits. The reason we have large 11:47:37  
18 losses from Tomago is because it has a very important 11:47:41  
19 vegetation community, a very important ecological 11:47:46  
20 community. Its trees use a lot of water, and that is a 11:47:46  
21 function of having a protected catchment. 11:47:47  
22 11:47:47  
23 Having said that, we are continuing to look at 11:47:51  
24 research and development, particularly with Grahamstown, 11:47:53  
25 about what could be done to reduce evaporation on that 11:47:56  
26 storage. That's our broad issue in response in terms of 11:47:58  
27 the current drought. 11:48:02  
28 11:48:02  
29 MS BRAKEY: Are there any further questions from the 11:48:04  
30 audience? 11:48:07  
31 11:48:07  
32 Nadja, are there questions on slido? 11:48:11  
33 11:48:15  
34 MS DAELLENBACH: There is one from slido: 11:48:15  
35 11:48:15  
36 *Does PIAC propose that an inclining block* 11:48:18  
37 *water usage price apply to all customers or* 11:48:22  
38 *just residential customers?* 11:48:26  
39 11:48:28  
40 MR McCLOSKEY: We would suggest that it is the principle 11:48:28  
41 that is important, so it would be our proposal to apply 11:48:32  
42 that to all users, yes, that's correct. 11:48:36  
43 11:48:36  
44 MS BRAKEY: Is that the only question on slido, Nadja? 11:48:42  
45 11:48:46  
46 MS DAELLENBACH: There are two questions on the 11:48:46  
47 environmental improvement charge. 11:48:47



1 11:48:47  
2 MS BRAKEY: Are there any further questions on residential 11:48:49  
3 prices? 11:48:52  
4 11:48:52  
5 Thank you for your patience in waiting for your 11:48:56  
6 opportunity to talk about the non-residential prices. 11:48:58  
7 David, could I invite you to make comment. 11:49:03  
8 11:49:07  
9 MR HAYES: It was acknowledged that the cost to supply to 11:49:11  
10 very large users per kilolitre is less than the cost to 11:49:16  
11 supply to smaller users. In removal of the discount 11:49:22  
12 pricing, is there any consideration of the actual cost of 11:49:30  
13 supply to large users such as ourselves? 11:49:34  
14 11:49:34  
15 MR SHIELDS: I can provide the history. The concept of the 11:49:43  
16 location-based discount goes back to 2000. It was a 11:49:46  
17 quasi-form of access regime back then. There was a 11:49:55  
18 calculation that goes in behind the discount, so those 11:50:03  
19 users are located next to our bulk system and our trunk 11:50:06  
20 infrastructure. 11:50:11  
21 11:50:11  
22 The rationale over time became more about keeping 11:50:15  
23 those big customers as part of our customer base. If you 11:50:18  
24 have storages and reserves, you are better off having as 11:50:22  
25 many customers spreading the water revenue requirement 11:50:27  
26 across. IPART has justified the retention of the location 11:50:32  
27 discount on that basis. 11:50:37  
28 11:50:37  
29 At the last price review, IPART, in their final 11:50:40  
30 report, encouraged Hunter Water to do some engagement and 11:50:42  
31 to have a harder look at location-based pricing. At the 11:50:46  
32 end of last year, the board deliberated over this question 11:50:51  
33 We had engaged a tariff survey of both residential and 11:50:54  
34 non-residential customers, which satisfied IPART's request 11:51:02  
35 11:51:02  
36 There were mixed views on whether the location-based 11:51:08  
37 pricing should be retained or ended. A decision was made 11:51:12  
38 after looking at the full list of 20 customers and noting 11:51:20  
39 that for 13 of those 20, the discount is less than 10 per 11:51:23  
40 cent. There was a judgment call made that we would phase 11:51:30  
41 out the location-based price over the course of the next 11:51:34  
42 regulatory period. It would send a stronger signal to all 11:51:40  
43 water customers, noting that we are the only water utility 11:51:44  
44 in Australia which does offer a declining block tariff, a 11:51:47  
45 discount for large water users. It is asymmetric in that 11:51:50  
46 it only applies one way and it is an arbitrary threshold in 11:51:55  
47 a sense. 11:51:58

1 11:51:58  
2 The idea was to phase it out over time to moderate the 11:51:59  
3 impact on customers. At the same time we would work with 11:52:02  
4 customers to look at other water efficiency measures that 11:52:05  
5 they could apply within their operations and potentially 11:52:08  
6 look at other alternate water sources. That is a history 11:52:11  
7 of the thinking up to our price submission. 11:52:17  
8 11:52:17  
9 MR HAYES: Can I ask if those seven customers that have a 11:52:24  
10 large percentage current discount have all been consulted, 11:52:28  
11 given there's only seven?. 11:52:34  
12 11:52:34  
13 MR SHIELDS: We engaged a residential and a 11:52:36  
14 non-residential tariff survey. We asked questions across 11:52:39  
15 all of our tariff structures. We did not include those 11:52:42  
16 20 customers in the sample for the non-residential 11:52:50  
17 customers. We understood what the view of those customers 11:52:54  
18 would be - they would want to minimise their bill. We did 11:52:58  
19 not want to bias the sample. 11:53:01  
20 11:53:01  
21 There has been consultation post our pricing proposal 11:53:04  
22 and work between Hunter Water and each of those customers 11:53:09  
23 on water efficiency management plans. There have been some 11:53:15  
24 internal audits and a discussion about what we can do 11:53:18  
25 potentially with recycling. 11:53:21  
26 11:53:21  
27 MR HAYES: Just on recycling, as you are aware, ORICA is 11:53:26  
28 virtually a 100 per cent consumer of the advanced water 11:53:30  
29 treatment plant at Steel River. Is there any consideration 11:53:33  
30 that that long-term agreement that is in place in fact 11:53:41  
31 reduces Hunter Water's infrastructure costs for mainstream 11:53:46  
32 potable water and could that be considered in overview as a 11:53:52  
33 sign that ORICA is in fact very much supportive of 11:54:02  
34 efficiency and recycling water? 11:54:06  
35 11:54:10  
36 MR SHIELDS: When we first developed the business case for 11:54:11  
37 the Kooragang industrial water scheme, we went to IPART and 11:54:16  
38 sought guidance on whether we could claim a deferral 11:54:22  
39 benefit. IPART did allow a deferral benefit of 11:54:25  
40 \$10 million. That was in place for one price period. In 11:54:29  
41 the last price review, IPART withdrew that deferral period 11:54:32  
42 They have since changed their recycled water pricing 11:54:36  
43 guidelines. So there is no avenue for us to claim a broad 11:54:41  
44 benefit under the current arrangements. 11:54:44  
45 11:54:44  
46 MS BRAKEY: Do you have any further issues you would like 11:54:56  
47 to raise, David? 11:54:59

1 11:54:59  
2 MR HAYES: No, that's it, thanks. 11:55:03  
3 11:55:03  
4 MS BRAKEY: Bob? 11:55:07  
5 11:55:07  
6 MR HAUES: Thank you. I will probably talk a bit more 11:55:07  
7 generally. I think businesses across this region in 11:55:10  
8 context - and we are not expecting Hunter Water to take a 11:55:12  
9 burden independently - are at a threshold point really in 11:55:17  
10 respect of the costs to business across energy, and a whole 11:55:22  
11 bunch of other input charges involved in running a 11:55:26  
12 business. It is in that context that we raise some of 11:55:29  
13 these issues today. 11:55:32  
14 11:55:32  
15 I would like to think - and this is important in the 11:55:34  
16 consultation period, particularly with the big water users 11:55:36  
17 who are probably big businesses; I don't know them all 11:55:38  
18 individually - that Hunter Water will consult with each of 11:55:41  
19 those businesses individually, and perhaps collectively, to 11:55:45  
20 truly understand what the incidence of the cost of these 11:55:50  
21 changes will be so that they are not put into a situation 11:55:54  
22 where their viability is impaired. At the end of the day, 11:55:57  
23 if people don't have jobs, they can do what they like with 11:56:01  
24 their household bills because they won't be able to pay 11:56:04  
25 them anyway because they don't have the employment to earn 11:56:07  
26 an income. 11:56:10  
27 11:56:10  
28 I am not suggesting that Hunter Water is the only 11:56:11  
29 issue here. Energy costs up here, and right across 11:56:15  
30 Australia for that matter, are an issue. We have a lot of 11:56:18  
31 industries up here which are particularly prone. We have 11:56:20  
32 large water and we have large energy users. I would like 11:56:23  
33 to understand or to be assured about this because, from 11:56:27  
34 some of the dialogue with our members at the moment, we are 11:56:30  
35 not getting the impression that that consultation with them 11:56:34  
36 has been very deep. Hunter Water might want to comment on 11:56:37  
37 that before I go on, perhaps. 11:56:40  
38 11:56:40  
39 MR CLEARY: Yes, consultation with those customers has 11:56:43  
40 commenced and will continue. That is about understanding 11:56:47  
41 not only the impact but also how we can work with those 11:56:52  
42 customers to reduce water usage, become more efficient and 11:56:55  
43 look for alternate water sources. It is across that broad 11:57:03  
44 range of issues of looking at not only what is the impact 11:57:05  
45 but, more broadly, beyond a price impact how can business 11:57:08  
46 also be more efficient in its water use and contribute 11:57:11  
47 towards the overall water conservation message and 11:57:14

1 requirement across the whole community? The conversation 11:57:16  
2 has commenced and we certainly commit to continuing that 11:57:20  
3 conversation and ensuring that it is meaningful and 11:57:24  
4 ongoing. 11:57:27  
5 11:57:27  
6 MR HAUES: In relation to that, if you did, through that 11:57:27  
7 consultation, discover, for example, that it was going to 11:57:30  
8 be a serious impediment to a business, what scope or 11:57:33  
9 opportunity do you have to either park the nature of that 11:57:39  
10 claw-back over the five years, or defer it, or do something 11:57:41  
11 else in the case of an individual circumstance as opposed 11:57:45  
12 to just saying, "We have consulted. Yes, we hear what you 11:57:48  
13 are saying, but we really can't do anything about it so we 11:57:53  
14 have to move on"? 11:57:56  
15 11:57:59  
16 MS HAYES: I think there are two matters here. This is 11:58:03  
17 about providing a discount for the more water that you use 11:58:01  
18 We need to consider this in the context of the discussion 11:58:05  
19 we have just had with PIAC as well, where they are talking 11:58:08  
20 about inclining block tariffs for the more water that you 11:58:08  
21 use versus offering a discount for the more water that you 11:58:13  
22 use. That discount is the issue that we are proposing to 11:58:16  
23 phase out over time. 11:58:19  
24 11:58:19  
25 We have been very active to trying to work with our 11:58:21  
26 customers, and the commitment is increasingly to work with 11:58:25  
27 our customers in terms of water efficiency plans and 11:58:27  
28 further initiatives, and we will work with those customers 11:58:31  
29 on a case-by-case basis. However, I think it is important 11:58:32  
30 to separate the matters of water conservation initiatives, 11:58:34  
31 and what is on the table here is about phasing out a 11:58:39  
32 discount for the more water you use, and that's what Hunter 11:58:42  
33 Water is proposing here. 11:58:44  
34 11:58:44  
35 MR HAUES: I understand that, and I have not confused the 11:58:47  
36 conservation, and I agree 100 per cent. Some businesses 11:58:51  
37 up here in the Hunter Water are doing extraordinary things 11:58:53  
38 in relation to conservation that go unpublished. 11:58:55  
39 11:59:00  
40 I understand the cost structure. I think that 11:59:00  
41 contained model that you have is not based on the cost of 11:59:02  
42 getting water to those customers, it is based on your 11:59:05  
43 overall operations. I think that has been explained very 11:59:09  
44 clearly and we are supportive of equity across that regime 11:59:13  
45 All we are saying is that we just want you to be very 11:59:16  
46 concerned about the impact individually but also 11:59:19  
47 collectively in relation to those businesses. 11:59:22

1 11:59:22  
2 As far as the conservation measures are concerned, we 11:59:26  
3 are aware that most of the big users have been sent 11:59:28  
4 correspondence from Hunter Water which says, "You supply us 11:59:32  
5 an efficiency plan", which is fantastic. We would like to 11:59:34  
6 see the opportunity where that can go further. There are 11:59:38  
7 quite a number of initiatives, for example, now in the 11:59:40  
8 energy sector where active consultation can be provided to 11:59:44  
9 businesses, and other users, for that matter. 11:59:48  
10 11:59:48  
11 Hunter Water had a great scheme some 10 years ago 11:59:50  
12 where you could get a household item. You could pay a few 11:59:53  
13 bucks and get a water-saving shower head, or a new hose, or 11:59:58  
14 an instruction sheet on not washing down your path. We 12:00:02  
15 would like to see a similar proposal in business because we 12:00:06  
16 think there would be enthusiasm about saving water and also 12:00:10  
17 saving money, but more particularly because of the 12:00:14  
18 sustainability bent that I think is moving across industry 12:00:16  
19 12:00:16  
20 We would be interested to hear your comments on what 12:00:21  
21 might be out there now and how we can help broadcast that 12:00:25  
22 message to make sure that the aspirations and imperatives 12:00:29  
23 you are trying to drive in that area can more effectively 12:00:33  
24 hit the ground and have an impact on what you are trying to 12:00:36  
25 achieve. 12:00:38  
26 12:00:38  
27 MR CLEARY: The program that we are looking to engage with 12:00:39  
28 business, and we have been engaged in, is us working with 12:00:44  
29 our major non-residential customers about how they can be 12:00:46  
30 more water efficient. 12:00:51  
31 12:00:51  
32 You mentioned the water efficiency management plans. 12:00:53  
33 We have a program that we are rolling out and we are 12:00:56  
34 getting across to all of our non-residential customers to 12:00:57  
35 work with them on how to become more water efficient. 12:01:01  
36 12:01:01  
37 We have already been out to speak to our major users 12:01:05  
38 those who use over 50 megalitres a year - and have been 12:01:06  
39 working with them to prepare water efficiency management 12:01:08  
40 plans. Hunter Water does provide expertise and resources 12:01:11  
41 to prepare those plans, so we have that program in place. 12:01:13  
42 12:01:13  
43 We are now at the phase, as you have mentioned, Bob, 12:01:17  
44 where we are rolling that program out to our large users, 12:01:19  
45 being those who use more than 10 megalitres of water in a 12:01:21  
46 year. It is the same program. We will be offering the 12:01:25  
47 resources to go to those businesses to work with them to 12:01:29

1 look at how they can become more water efficient. In 12:01:32  
2 essence, we are rolling out a program that is, in 12:01:35  
3 principle, what you mentioned. 12:01:38  
4 12:01:38  
5 MR HAUES: That is fantastic, thank you. 12:01:39  
6 12:01:39  
7 There is one other thing I would like to mention. 12:01:43  
8 I appreciate the paradox Hunter Water is in, the less water 12:01:47  
9 people use, the less money you get, so then that model that 12:01:50  
10 you have becomes fraught and then there is the idea that 12:01:55  
11 inclined charging could offset. There is a possibility in 12:01:57  
12 that instance, particularly where customers would relate 12:02:03  
13 that directly to an aspiration of water saving and water 12:02:08  
14 efficiency and water conservation. Perhaps some of that 12:02:13  
15 could be hypothecated and applied directly to measures that 12:02:17  
16 would assist businesses or assist households to then go on 12:02:21  
17 and do more. 12:02:25  
18 12:02:25  
19 I think at the moment there is a lot pushed back to 12:02:26  
20 the customer and that's understandable. It's not your 12:02:28  
21 individual responsibility to go around and look after 12:02:32  
22 everybody, but once again I use this energy thing, and it 12:02:35  
23 is the same thing. 12:02:39  
24 12:02:39  
25 Some of these programs will cost money and they are 12:02:40  
26 not all on the other side of the meter. Some of this stuff 12:02:42  
27 goes both ways in looking at capital costs and doing 12:02:46  
28 certain infrastructure works that would help that 12:02:49  
29 situation. In businesses, for example, are they all on the 12:02:52  
30 right meter size? Are they all on the right server size? 12:02:55  
31 There are a lot of questions around hypothecating some of 12:02:58  
32 that money that Hunter Water could then use to be better 12:03:02  
33 resourced to help in that situation. You may have already 12:03:06  
34 done it, and it would be interesting to know whether you 12:03:08  
35 have. Once again, if you have, we would be interested in 12:03:08  
36 getting details so we can help get that message out there. 12:03:12  
37 12:03:12  
38 MR CLEARY: We have a range of programs for both 12:03:17  
39 residential and non-residential customers. The best thing 12:03:19  
40 we can do is we can run through what they are looking like 12:03:22  
41 I would be happy to show you those details. There is a 12:03:24  
42 range that we are looking at implementing, particularly as 12:03:26  
43 we come into summer, and potentially going to level 2 12:03:28  
44 restrictions, so there is a range of additional programs 12:03:31  
45 that we will be looking at rolling out. I would be happy 12:03:32  
46 to provide those details. 12:03:35  
47 12:03:35

1 MR HAUES: Thank you. 12:03:38  
2 12:03:38  
3 MS BRAKEY: Did Cessnock City Council want to raise any 12:03:42  
4 additional issues in relation to the environmental impact 12:03:45  
5 charge? 12:03:50  
6 12:03:50  
7 MR PYNSENT: I think I have clearly articulated my view in 12:03:53  
8 that regard, and I thank the Chair for giving me that 12:03:57  
9 licence. 12:04:01  
10 12:04:01  
11 MS BRAKEY: Thank you. 12:04:03  
12 12:04:03  
13 Nadja, there were some questions on slido. 12:04:03  
14 12:04:03  
15 MS DAELLENBACH: Yes. There is one about the discounts to 12:04:08  
16 the large customers: 12:04:11  
17 12:04:11  
18 *Is it fair that residential customers fund* 12:04:13  
19 *discounts to large commercial profit-driven* 12:04:16  
20 *businesses for using excessive amounts of* 12:04:18  
21 *water?* 12:04:20  
22 12:04:20  
23 MS BRAKEY: Hunter Water, would you like to respond? 12:04:24  
24 Actually, I think you've probably responded, to be fair, 12:04:26  
25 yes. 12:04:28  
26 12:04:28  
27 And another question, Nadja? 12:04:30  
28 12:04:31  
29 MS DAELLENBACH: There are two on the environmental 12:04:32  
30 improvement charge. The first one is: 12:04:33  
31 12:04:33  
32 *What mechanisms are there to equitably fund* 12:04:35  
33 *across the full customer base backlog sewer* 12:04:39  
34 *to places like North Rothbury? It's not* 12:04:41  
35 *clear in the proposal.* 12:04:44  
36 12:04:44  
37 The second asks: 12:04:46  
38 12:04:46  
39 *The EIC is proposed to be removed from* 12:04:47  
40 *1 July 2020, currently \$41.20. There are* 12:04:52  
41 *still 2,500 residential properties without* 12:04:55  
42 *sewer. What alternative model exists?* 12:04:58  
43 12:05:03  
44 MS BRAKEY: I might invite Matt Edgerton, the executive 12:05:03  
45 director of our water pricing area, to respond. 12:05:07  
46 12:05:07  
47 MR EDGERTON: Just talking about the environmental 12:05:10

1 improvement charge, I suppose what is at play for this 12:05:11  
2 price determination is not whether these areas should be 12:05:18  
3 sewered. That is not something that IPART is involved in 12:05:20  
4 for this price determination. I guess what is really at 12:05:25  
5 play is how they should be funded - who should pay for 12:05:28  
6 sewerage these areas. 12:05:32  
7 12:05:32  
8 IPART updated its developer charges and backlog 12:05:36  
9 charges determinations about a year ago. In that 12:05:40  
10 determination, we included basically a formula that would 12:05:43  
11 determine how much properties would have to pay to receive 12:05:47  
12 such sewerage services - how much backlog properties would 12:05:55  
13 have to pay to be connected to Hunter Water's sewerage 12:05:58  
14 network. 12:06:01  
15 12:06:01  
16 The formula basically said these properties should pay 12:06:03  
17 effectively the efficient costs of providing the network to 12:06:07  
18 them. However, it did say there was scope to deviate from 12:06:12  
19 that methodology or from that formula if Hunter Water, for 12:06:17  
20 example, came to us and made a case that the costs should 12:06:23  
21 be funded from the broader customer base to the extent that 12:06:25  
22 there were broader benefits to the customer base from 12:06:29  
23 providing such sewerage services. 12:06:33  
24 12:06:33  
25 Another way they could potentially be funded is if, 12:06:37  
26 obviously, the government decided to provide a subsidy to 12:06:41  
27 fund those services. 12:06:44  
28 12:06:44  
29 When we look at whether or not they should be funded 12:06:51  
30 through the broader customer base through prices, it really 12:06:54  
31 comes down to this: if Hunter Water came to us and made a 12:06:57  
32 case that at least some should be funded because of the 12:07:00  
33 external benefits they generated to the broader customer 12:07:04  
34 base, as evidenced by the customer base's willingness to 12:07:07  
35 pay. So if the broader customers base is willing to pay 12:07:10  
36 and there are external benefits generated to that customer 12:07:13  
37 base, there is a case for the broader customer base to fund 12:07:18  
38 some of these services. 12:07:21  
39 12:07:21  
40 If government directed Hunter Water to deliver those 12:07:22  
41 services, and effectively it became a regulatory 12:07:26  
42 obligation, then again there would be a case for the 12:07:29  
43 broader customer base to pay. 12:07:32  
44 12:07:32  
45 If government directed IPART to include those costs in 12:07:33  
46 the broader customer base, which government can do, then we 12:07:37  
47 would include that in the broader customer base. 12:07:41



1 12:07:41  
2 The logic is basically that these are services 12:07:43  
3 provided to these particular customers and therefore those 12:07:46  
4 particular customers who are benefiting should pay for 12:07:49  
5 them, unless there is some other logic put forward as to 12:07:53  
6 why the broader customer should pay. We need to bear in 12:07:57  
7 mind that a lot of the broader customer base have already 12:07:59  
8 paid for these sewerage connection services, either through 12:08:03  
9 developer charges up-front or through the property prices 12:08:07  
10 they initially paid when they bought properties within 12:08:11  
11 Hunter Water's existing network. 12:08:14  
12 12:08:14  
13 MS BRAKEY: Are there any further questions from the 12:08:19  
14 audience? Sorry, Bob, go ahead. 12:08:20  
15 12:08:20  
16 MR HAUES: Thank you. I wanted to clarify something 12:08:28  
17 about the recycling scheme. A lot of residential things 12:08:31  
18 are set up to do water recycling, but the scheme at 12:08:36  
19 Kooragang Island was referred to. Does Hunter Water have 12:08:41  
20 plans to expand that or to be involved in any other 12:08:43  
21 projects that might give us some hope? 12:08:47  
22 12:08:47  
23 As I understand it, recycled water is charged at a 12:08:51  
24 very similar rate to potable water, there is probably not a 12:08:56  
25 lot of incentive at the moment for people to run around 12:08:59  
26 looking for opportunities or to switch. I am interested in 12:09:02  
27 how that might figure in some of the forward thinking or 12:09:04  
28 forward project work you might be considering in terms of 12:09:08  
29 utilising more recycled water opportunities. 12:09:11  
30 12:09:11  
31 MR CLEARY: Yes, we are looking at a range of recycled 12:09:15  
32 water opportunities, with both our large non-residential 12:09:18  
33 customers and with our residential customers. That is also 12:09:26  
34 a focus and a key component of the Lower Hunter Water Plan 12:09:29  
35 review. 12:09:34  
36 12:09:34  
37 That is quite important because, under the current 12:09:35  
38 broad regulatory pricing models, often - not always but 12:09:38  
39 often - recycled water is more expensive than potable 12:09:46  
40 water, and that is one of the barriers. The Lower Hunter 12:09:49  
41 Water Plan review may provide an additional justification 12:09:53  
42 for recycled water schemes due to their contribution to 12:09:59  
43 meeting the long-term water security. That is part of the 12:10:04  
44 work that we are currently undertaking. 12:10:06  
45 12:10:06  
46 MR HAUES: Thank you. 12:10:09  
47 12:10:09

1 MR SHIELDS: Just a few further comments. IPART, in the 12:10:10  
2 last 12 months, undertook a review of the recycled water 12:10:14  
3 pricing guidelines. Again if recycled water is part of a 12:10:18  
4 least cost portfolio of options to provide long-term water 12:10:23  
5 security, there is an argument that those schemes should 12:10:28  
6 just go into our water regulatory asset base. 12:10:32  
7 12:10:32  
8 IPART's new hierarchy of funding also allows us -- 12:10:34  
9 12:10:38  
10 THE ACTING CHAIR: Excuse me, Peter. I am sorry to 12:10:39  
11 interrupt. I wanted to let people know that the TV channel 12:10:39  
12 is here and they are taking some footage of the public 12:10:42  
13 hearing, as long as there is nobody here who has an 12:10:46  
14 objection to that. 12:10:49  
15 12:10:49  
16 MR SHIELDS: IPART's funding model also allows us to claim 12:10:53  
17 cost offsets, which are deferral benefits from the broader 12:10:57  
18 customer base. Also if we conduct a willingness to pay 12:11:04  
19 survey, and we have robust evidence that our customers are 12:11:11  
20 willing to pay more for the benefits of recycled water 12:11:14  
21 schemes, then IPART's guidance allows us to claim those 12:11:19  
22 amounts, and we have done that. In this pricing proposal, 12:11:22  
23 we have a \$6 million claim in support of some recycling 12:11:26  
24 schemes to irrigate public parks and sporting fields, so we 12:11:31  
25 are testing IPART's new guidance issued this year. 12:11:35  
26 12:11:35  
27 There have been developments in the recycled water 12:11:40  
28 space. There is scope now to claim low cost recycling 12:11:44  
29 schemes as a least cost solution and there are avenues to 12:11:50  
30 recover costs from the broader customer base for the higher 12:11:53  
31 cost schemes. 12:11:57  
32  
33 MR PYNSENT: May I say something?  
34  
35 MS BRAKEY: Yes, certainly.  
36  
37 MR PYNSENT: I want to comment on Matthew's presentation. 12:12:00  
38 Thanks for the answer to that question. 12:12:05  
39 12:12:05  
40 Cessnock City Council is only about a solution to 12:12:07  
41 the problem. You take away the environmental improvement 12:12:10  
42 charge. We want a solution to the sewerage issues at 12:12:14  
43 North Rothbury. Thank you. 12:12:19  
44 12:12:19  
45 MS BRAKEY: Were there any other questions or issues from 12:12:22  
46 the audience? Yes, Mr Banyard? 12:12:25  
47 12:12:29

1 MR BANYARD: There is a real problem with the basics of 12:12:30  
2 the pricing arrangement in that a very large number of 12:12:33  
3 people who are frequently termed "customers" are actually 12:12:38  
4 not customers. 12:12:44  
5 12:12:44  
6 The Hunter Water Act has a customer contract attached 12:12:45  
7 to it. To be a Hunter Water customer and have a customer 12:12:47  
8 account, you have to be a property owner - in other words 12:12:53  
9 your name has to be on the property deed. That means that 12:12:58  
10 about 75 per cent of the consumers out there, who are 12:13:01  
11 customers, do not have customer contracts. 12:13:04  
12 12:13:04  
13 Sometimes those people's opinions are taken into 12:13:09  
14 account when surveys and other things are done, but the 12:13:12  
15 people who don't have contracts don't get a say, and that 12:13:16  
16 includes spouses and other household members who are not on 12:13:22  
17 the contract deed. It also includes tenants in houses, who 12:13:27  
18 have a landlord who owns the property. In that case, the 12:13:33  
19 landlord picks up the bill for all of the services provided 12:13:37  
20 by Hunter Water to the house. 12:13:42  
21 12:13:42  
22 Under a few minor circumstances the landlord is able 12:13:46  
23 to transfer the water usage component to the tenant, but 12:13:49  
24 that is only for very small things under certain 12:13:53  
25 circumstances. The owner is just not allowed to pass the 12:13:56  
26 cost of that water on. That issue has been brought up time 12:14:00  
27 and again and seriously needs addressing. That is another 12:14:03  
28 reason why we should have 100 per cent user pays prices 12:14:07  
29 with no fixed costs because then tenants and others will 12:14:12  
30 pick them up. They will not necessarily pay any more. The 12:14:15  
31 only people who will pay more are the people in the system 12:14:19  
32 who are wasting water. 12:14:24  
33 12:14:24  
34 The issue of a 100 per cent customer contracts and 12:14:25  
35 100 per cent user pays is the way forward with water. It 12:14:30  
36 is not put down as one of the options in the Lower Hunter 12:14:35  
37 Water Plan, and that is disgraceful. 12:14:39  
38 12:14:39  
39 MR SHIELDS: Could I reiterate that on the water side 12:14:45  
40 where tenants do pay the water bill, currently mid 80 per 12:14:46  
41 cent of the water revenue requirement is recovered through 12:14:51  
42 the volumetric price. That is likely to go up in the next 12:14:54  
43 price path. That is the component of the bills that 12:14:58  
44 landlords are able legally to pass through to tenants. The 12:15:00  
45 volumetric charge is the dominant way that we recover our 12:15:06  
46 water revenue requirement. 12:15:11  
47 12:15:11

1 MR BANYARD: There is another little aspect to this as 12:15:12  
2 well. When the landlord charges the tenant for the water, 12:15:15  
3 the landlord pays the cost of the debt, if the tenant 12:15:19  
4 doesn't pay it, and pays the cost of actually recovering 12:15:26  
5 that user component from the tenant. They pay commission 12:15:29  
6 to the agent to collect that money. The landlords don't 12:15:34  
7 get any discount on that rate. The landlords are not 12:15:38  
8 allowed to add the extra piece on, and the real pleasure is 12:15:42  
9 that the tenant does not pay the bill, and if the landlord 12:15:47  
10 does not give the money over to Hunter Water, Hunter Water 12:15:52  
11 cuts the landlord's water off. 12:15:55  
12 12:15:55  
13 MR SHIELDS: This issue is enshrined in the Hunter Water 12:15:58  
14 Act. The customer contract is a creature of the operating 12:16:00  
15 licence review; it is not really a pricing matter. It is 12:16:03  
16 more a pricing matter for the operating licence review than 12:16:06  
17 a price review. 12:16:10  
18 12:16:10  
19 MS BRAKEY: That has been a really constructive debate 12:16:12  
20 and discussion. I thank all the participants. Thank you, 12:16:14  
21 Hunter Water, for engaging so meaningfully, and the 12:16:20  
22 customers and customer representatives. That was a really 12:16:24  
23 valuable session. We have gone slightly over time on 12:16:29  
24 that, but I do think it was worth taking the time and 12:16:31  
25 exploring those issues. 12:16:34  
26 12:16:34  
27 I will pass back to Deborah, who will kick off the 12:16:36  
28 next session. 12:16:41  
29 12:16:41  
30 **Session 2: Hunter Water's expenditure and service levels** 12:16:41  
31 12:16:41  
32 THE ACTING CHAIR: The second section will focus on Hunter 12:16:42  
33 Water's proposed expenditure and service levels. A member 12:16:42  
34 of the IPART secretariat will give an overview of Hunter 12:16:47  
35 Water's proposed levels of capital and operating 12:16:51  
36 expenditure and the service levels, standards and 12:16:53  
37 requirements that drive the proposed expenditure. 12:16:55  
38 12:16:55  
39 Similar to the first session, at the end of the 12:16:58  
40 presentation, the secretariat will put up some preliminary 12:17:00  
41 questions and we will invite participants at the table, and 12:17:04  
42 then members of the audience, to provide comment. We will 12:17:07  
43 also seek to address any questions that come through slides 12:17:10  
44 The code is #H325 if anybody needs it. 12:17:17  
45 12:17:17  
46 I will now call Nadja Daellenbach to present on the 12:17:23  
47 next session. 12:17:28

1		12:17:28
2	MS DAELLENBACH: Thanks, Deborah.	12:17:28
3		12:17:28
4	I will start with a brief overview of the service	12:17:33
5	standards.	12:17:39
6		12:17:39
7	Hunter Water is subject to a number of regulatory	12:17:39
8	requirements and it should plan its expenditure to ensure	12:17:42
9	that it can meet mandated service standards and other	12:17:45
10	regulatory requirements.	12:17:48
11		12:17:48
12	The two main sources of these requirements are Hunter	12:17:49
13	Water's operating licence and environmental protection	12:17:52
14	licences. The operating licence includes standards for	12:17:55
15	things like water quality and number of sewer blockages and	12:17:59
16	overflows. The environmental protection licenses are	12:18:03
17	linked to the wastewater treatment plants and cover things	12:18:08
18	like the levels of discharge to the environment and odour	12:18:12
19	from the sewage treatment plants. Hunter Water also	12:18:18
20	engages with its customers and it accounts for customer	12:18:21
21	preferences in setting its service levels.	12:18:25
22		12:18:25
23	Hunter Water states that it needs to increase its	12:18:30
24	expenditure to reduce the risk of non-compliance. In its	12:18:33
25	proposal, Hunter Water stated broadly that lower	12:18:38
26	expenditure levels in recent years has increased the risk	12:18:41
27	of breaching standards in the future and it noted	12:18:43
28	deteriorating performance with environmental protection	12:18:46
29	licences.	12:18:49
30		12:18:49
31	We are looking at performance against a number of	12:18:51
32	service standard measures and other performance measures to	12:18:54
33	assess this. We found in many cases that the trend in	12:18:57
34	historical performance does not appear to have changed much	12:19:03
35	and we are continuing our assessment of Hunter Water's	12:19:06
36	forecasts against these standards.	12:19:09
37		12:19:09
38	I will move on to expenditure. As Scott noted	12:19:15
39	earlier, there are two major components to our expenditure	12:19:22
40	review. There is operating expenditure which covers the	12:19:25
41	day-to-day running of the network, and capital expenditure	12:19:29
42	which covers built assets - new assets, renewals and	12:19:33
43	upgrades.	12:19:42
44		12:19:42
45	On operating costs, Hunter Water has proposed higher	12:19:43
46	operating expenditure in the coming price path compared	12:19:46
47	with the current price path. Operating expenditure is the	12:19:51

1 biggest of the building blocks. It makes up about 45 per 12:19:55  
2 cent of the total revenue requirement. 12:19:58

3 12:19:58  
4 You can see in that graph the blue line is the 12:20:00  
5 expenditure that IPART used to set prices in the current 12:20:05  
6 price path, the orange line is Hunter Water's actual 12:20:09  
7 expenditure, and the broken orange line is Hunter's 12:20:14  
8 proposed expenditure for the next five years. 12:20:17

9 12:20:17  
10 In the current period Hunter Water spent more than we 12:20:21  
11 had used to set prices, and that is from a balance of some 12:20:25  
12 higher expenditure in some areas, offset by some lower 12:20:28  
13 expenditure in other areas. The proposed expenditure is 12:20:33  
14 based on its expenditure for 2019-20 - so this year - with 12:20:37  
15 some increases to corporate costs and some decreases to 12:20:45  
16 labour and maintenance costs. 12:20:51

17 12:20:51  
18 This chart shows the capital expenditure. Similar to 12:20:57  
19 the last one, the blue line is what IPART used to set 12:21:00  
20 prices in the current price path, the orange line shows 12:21:04  
21 Hunter Water's actual expenditure, and the broken orange 12:21:09  
22 line shows Hunter Water's proposed capital expenditure. 12:21:11  
23 Again Hunter Water proposes higher capital expenditure 12:21:17  
24 compared with the 2016 determination. 12:21:20

25 12:21:20  
26 In the current period Hunter Water spent more than 12:21:22  
27 what we had used to set prices. This arose for a number of 12:21:26  
28 reasons - so changes to the scope of projects, the timing 12:21:30  
29 of projects and the costs of projects compared with what 12:21:34  
30 was forecast, and the proposed expenditure remains higher. 12:21:38  
31 Hunter Water has given a number of reasons for that. There 12:21:43  
32 is some major expenditure on wastewater treatment plant 12:21:45  
33 upgrades to meet growth and some investment in information 12:21:50  
34 and communications technologies. 12:21:52

35 12:21:52  
36 We are assessing the expenditure for efficiency, and 12:22:00  
37 the expenditure becomes the base for prices. We are 12:22:04  
38 looking into whether the expenditure was based on the right 12:22:07  
39 decision, whether it was the right time to invest and 12:22:11  
40 whether it was done at the right price. 12:22:14

41 12:22:14  
42 Just briefly, for capital expenditure, as Scott 12:22:20  
43 touched on earlier, we do not provide the up-front costs of 12:22:26  
44 expenditure, but Hunter Water receives a return on the cost 12:22:30  
45 of the asset. For capital expenditure, we are assessing 12:22:34  
46 both the past expenditure over the last four years as well 12:22:39  
47 as the proposed expenditure. 12:22:42

1		12:22:42
2	At our next review, we will look back and assess what	12:22:45
3	Hunter Water has actually spent and we will make	12:22:49
4	adjustments to ensure that only the efficient expenditure	12:22:51
5	is included in the revenue calculations. We have also	12:22:55
6	engaged some expert consultants to look into Hunter Water's	12:22:58
7	expenditure in greater detail.	12:23:02
8		12:23:02
9	Thank you. We have a few questions on the screen to	12:23:08
10	get the discussion started.	12:23:09
11		12:23:09
12	THE ACTING CHAIR: Thank you, Nadja.	12:23:12
13		12:23:12
14	Is there anybody around the table who would like to	12:23:14
15	raise any questions or make any comments? Anyone from the	12:23:18
16	floor? Matt, yes.	12:23:27
17		12:23:27
18	MR EDGERTON: I have a question for Hunter Water. In	12:23:40
19	Graham's opening presentation, there was a slide that	12:23:43
20	showed, I guess, lower than historic expenditure for a	12:23:48
21	period of time, and there was a view that that needed to	12:23:55
22	change and expenditure needed to be increased to manage	12:23:59
23	risk.	12:24:03
24		12:24:03
25	Was there any evidence of adverse implications during	12:24:08
26	that period of lower expenditure, for example, on	12:24:12
27	performance standards, or any other outcomes that you're	12:24:15
28	able to point to that showed that expenditure was less than	12:24:20
29	ideal and there is a real case to increase expenditure to	12:24:26
30	manage risk?	12:24:29
31		12:24:32
32	MR CLEARY: Yes, there was some evidence, and that is	12:24:32
33	largely why the expenditure within the current	12:24:36
34	determination period is greater than was originally allowed	12:24:40
35	for in the determination. It cuts across a number of	12:24:44
36	different areas.	12:24:47
37		12:24:47
38	If we look at our water network - part of the	12:24:48
39	challenge for these areas is that a single failure could	12:24:52
40	lead to licence non compliance - and if you look at the	12:24:56
41	chart that we showed earlier, it had our water	12:25:01
42	discontinuity standard. Three years ago we did fail that	12:25:05
43	standard, and that failure was as the result of a single	12:25:15
44	large trunk main failure. So a single event - a large	12:25:17
45	event on a critical asset - can lead to failure in some of	12:25:23
46	these key performance standards.	12:25:27
47		12:25:27

1 We are doing significant condition assessment on those  
2 critical assets and performance monitoring. What we have  
3 seen in that area is evidence of the need to increase  
4 investment. So we have had an event where we failed. If  
5 we look at the performance of those assets, there is clear  
6 evidence that there is deterioration in a significant  
7 number of those assets and given their critical nature  
8 operating to failure is a very high-risk strategy. We do  
9 assess our assets and classify them into critical or  
10 non-critical. With non-critical assets, we can operate to  
11 failure and replace them efficiently and stay well within  
12 our operating service standards. Non-critical assets  
13 require proactive management.

14  
15 The other example, and one of the major projects that  
16 had an increase in expenditure within this determination  
17 was the replacement of a section of our major trunk main,  
18 that brings water down from Chichester Dam - the  
19 Chichester trunk gravity main. We were sweating that  
20 asset. There was a nine-kilometre section of the main with  
21 regard to which we had a condition assessment saying that  
22 this asset was in poor condition. We planned to increase  
23 our maintenance on that main and push that expenditure to  
24 the next price determination.

25  
26 Two years ago there were a number of major failures in  
27 summer which were affecting our customers who were serviced  
28 by that main. We had to bring tankers to provide alternate  
29 water supply to those customers who were experiencing  
30 excessive outages, and it also presented a much greater  
31 risk of discontinuity. If that main were to fail in  
32 summer, most of Cessnock and Maitland would be out of water  
33 - a fairly significant consequence. That is why we brought  
34 the replacement of that section of main forward to this  
35 price determination period.

36  
37 Those are some of the examples of the evidence of  
38 deteriorating asset performance. Clearly in those cases we  
39 do not think it is appropriate that we should be waiting  
40 for failure to be evidence of the fact that we need to  
41 invest.

42  
43 Graham also mentioned that our enterprise risk  
44 management framework has been refined to target investment  
45 What we are looking at is bringing in a clear targeting of  
46 risk appetite to ensure that we are investing in the areas  
47 which are the highest we can require that investment, but



1 allowing us to prioritise and mitigate the overall price 12:27:43  
2 impacts to the community. 12:27:46  
3 12:27:46  
4 The areas where we have the lowest appetite are with 12:27:48  
5 respect to community safety and the safety of our workers. 12:27:51  
6 We have a very low risk appetite and, therefore, we will 12:27:54  
7 invest to ensure the safety of the community and the safety 12:27:58  
8 of our workers, and the risk of running out of the water. 12:28:00  
9 If we look at our investment in this price period, we have 12:28:03  
10 found that a number of our stormwater assets, on condition 12:28:06  
11 assessment, have shown that they have significantly 12:28:11  
12 deteriorated and they are at risk of collapse. That does 12:28:12  
13 present a risk to the community, so we are proactively 12:28:14  
14 going and renewing those assets. Therefore we have seen an 12:28:18  
15 increase in the stormwater charge due to that program of 12:28:20  
16 work, for example. 12:28:23  
17 12:28:23  
18 We also have a low risk appetite for breaching our 12:28:23  
19 operating licence requirements with respect to water 12:28:28  
20 continuity. We have potential assets, which if they were 12:28:30  
21 to fail would put thousands of customers out of water. We 12:28:33  
22 think that is an unacceptable circumstances and we need to 12:28:35  
23 invest to avoid that sort of outcome. 12:28:40  
24 12:28:40  
25 We also have a low appetite for not complying with our 12:28:42  
26 environmental obligations under our environmental 12:28:47  
27 protection licences with the EPA. So that is our 12:28:49  
28 wastewater program. 12:28:49  
29 12:28:49  
30 Those are the areas where we are focusing our 12:28:49  
31 investment. We are saying where we have minor 12:28:53  
32 non-compliances or there is the potential for minor 12:28:53  
33 deviations against some of our performance standards, we 12:28:55  
34 will accept a higher level of risks. So we believe we are 12:28:59  
35 appropriately targeting our investment. 12:29:03  
36 12:29:03  
37 MS HAYES: From an operating cost point of view, I think 12:29:06  
38 there are a few more important points to note. We are 12:29:06  
39 learning from our customers that they want different ways 12:29:11  
40 to engage and interact with us. At the moment we still 12:29:13  
41 provide paper bills to our customers, which is 12:29:16  
42 significantly behind the market. It is significantly 12:29:19  
43 behind other water utilities and it is significantly behind 12:29:22  
44 other local councils. 12:29:24  
45 12:29:24  
46 We have under-invested in IT over the previous price 12:29:25  
47 periods. The only way our customers can interact with us 12:29:29

1 is by coming into the counter or by receiving a hard copy 12:29:32  
2 newsletter or a hard copy bill. Some of our investment in 12:29:36  
3 this next price period will be to enable greater choice and 12:29:38  
4 to move to electronic billing options. We can't currently 12:29:43  
5 SMS customers in the event of a water main break. That is 12:29:48  
6 an example of where we have carried risk and our customers 12:29:53  
7 are breaking the burden of that risk as well as a result of 12:29:56  
8 previous under-investment. 12:29:58

9 12:29:58  
10 To give other examples, we have been at the liberty of 12:30:00  
11 higher energy prices. We have not invested in renewables. 12:30:02  
12 In our next price period, we will be looking at doing 12:30:05  
13 things around how we can better manage our demand or our 12:30:09  
14 load in electricity and renewable energy projects, which we 12:30:12  
15 have not done in the past. 12:30:16  
16 12:30:16

17 We heard from a speaker in the audience about our high 12:30:17  
18 non-revenue water. We have not done a lot in terms of 12:30:21  
19 active leak detection in the past. That is something we 12:30:25  
20 have started to ramp up in the last two years and it is 12:30:28  
21 something that we want to continue to do so that our 12:30:31  
22 non-revenue water is not at historic level levels of 13 to 12:30:34  
23 15 per cent but closer to 5 percent. We think that is a 12:30:38  
24 really important conservation message that we need to work 12:30:41  
25 with internally as well with our customers, about driving 12:30:45  
26 those longer term source augmentation decisions. 12:30:47  
27

28 THE ACTING CHAIR: I think we have another comment here.  
29 Yes, Mark?

30  
31 MR EDLER: Thank you, Madam Chair.

32  
33 Thanks for that update, particularly around the 12:30:56  
34 operating costs and also around maintaining your existing 12:30:59  
35 assets. 12:31:02  
36 12:31:02

37 When it comes to growth, what are you proposing over 12:31:03  
38 the next pricing period in terms of looking for 12:31:08  
39 opportunities for avoided costs and engaging with others to 12:31:11  
40 explore those opportunities? 12:31:15  
41 12:31:17

42 MR CLEARY: With respect to growth, we spend a lot of time 12:31:24  
43 collaborating with local government and planning and with 12:31:25  
44 the development community to understand where growth is. 12:31:28  
45 It is not so much just the overall growth for the region, 12:31:32  
46 that number, particularly over the period we're talking 12:31:36  
47 about, is relatively easy to estimate; the real challenge 12:31:37

1 is where will the growth occur, therefore where do we best 12:31:43  
2 target our investment? 12:31:46  
3 12:31:46  
4 We do spend a lot of time working with those various 12:31:47  
5 stakeholders to understand where that will be. We do spend 12:31:51  
6 a lot of time talking to the development community to 12:31:54  
7 understand where they believe development should occur and 12:31:58  
8 then looking at how we can most efficiently service that in 12:32:00  
9 the infrastructure provision that we make. 12:32:04  
10 12:32:04  
11 MR EDLER: Thank you for that. I understand that you do a 12:32:07  
12 lot of work with planning around understanding where the 12:32:09  
13 growth will be, but then when you get to that decision 12:32:12  
14 around your investment choices, what are you proposing to 12:32:15  
15 do in terms of opening those investment choices to 12:32:20  
16 alternative providers and looking for opportunities to 12:32:24  
17 avoid your otherwise planned costs? 12:32:30  
18 12:32:30  
19 MR CLEARY: I think that is an area where, in essence, if 12:32:35  
20 we are talking about new development areas, that's a 12:32:43  
21 decision for those customers. We are open to working with 12:32:44  
22 those people and those customers, obviously, and we have a 12:32:48  
23 number of examples now where we are working with Flow 12:32:51  
24 around areas that they are servicing. That is about 12:32:54  
25 understanding where that development is and talking to 12:32:59  
26 those customers about what is the way that they wish their 12:32:59  
27 development to be serviced. 12:33:03  
28 12:33:03  
29 It is not for us to be making that decision about 12:33:04  
30 whether they will go with us or go with Flow, for example; 12:33:07  
31 it's up to the developer and therefore ultimately the 12:33:12  
32 customer to make that decision. 12:33:14  
33 12:33:15  
34 MR EDLER: I completely agree with that. It is all about 12:33:16  
35 customer choice, but it is also about provision of 12:33:19  
36 information to be able to make that choice. 12:33:23  
37 12:33:23  
38 From a broader perspective, we have seen IPART dealing 12:33:25  
39 with the Sydney Water operating water licence around better 12:33:35  
40 disclosure of information. I guess my question really is 12:33:38  
41 directed at that: how do people interacting with Hunter 12:33:41  
42 Water, whether they are developers, planning or alternative 12:33:45  
43 providers, better understand those opportunities? At the 12:33:49  
44 moment it seems like it's a little bit opaque. 12:33:55  
45 12:33:55  
46 MR SHIELDS: Sydney Water, in its most recent operating 12:34:04  
47 licence - the review finished mid-year and the licence has 12:34:05

1 taken effect or is about to take effect - has new reporting obligations to identify limits and new investment in the wastewater system. Our licence is silent on those, but we anticipate that we will pick up similar requirements, and we are talking internally already about how we would go about compiling that information.

2 We do publish Hunter Water growth plans which collate all of the information that we get from local councils, from planning and our own intelligence which shows the likely pattern of development across our entire area of operations.

3 I guess this is ultimately a question for policymakers, and in part for IPART, about what obligations they put on us to disclose information about where we will need to make material capital investments in our wastewater system and whether that can help utilities to identify areas that they may want to focus on.

4 THE ACTING CHAIR: That is an important issue, but I think probably more critical in the next licence review than in the pricing review at the moment.

5 We are getting close to lunch. I think there was one more question from the floor. Rick Banyard? If we can make this one a little bit quick because you are standing now between people and a sandwich.

6 MR BANYARD: I would like to say that I think Hunter Water has a great team of enthusiastic, well-qualified and expert people, who work extremely hard to try and do the right thing for their customers. They do a number of consultations and other things. We could always argue that they could be better, but the reality is they do work very hard.

7 The weak link in the whole thing that I can see is in the area of metering. Because, for example, we don't have metering on the discharges from our properties, we are forced to have a block tariff for that. Metering is an area that should really be worked on. Smart meters measure more things, and maybe there should be analysis of the discharge that is occurring so that we can better handle it, better treat it and even divert some of the stuff from treatment plants.

1 THE ACTING CHAIR: Thank you very much. I think I'll now12:36:41  
2 draw this session to a close for lunch. Can we please come12:36:44  
3 back at about 1.05, if that's possible, for the final 12:36:47  
4 couple of sessions for the afternoon. Thank you very much12:36:53  
5

## 6 LUNCHEON ADJOURNMENT

7

### 8 Session 3: Other issues

9

10 MS BRAKEY: Thank you and welcome back. After this 13:06:01  
11 morning's session, where we had some really meaningful 13:06:02  
12 discussions, we are now going into a more open session 13:06:05  
13 about other issues in Hunter Water's proposal. 13:06:10  
14 13:06:10

15 Our issues paper identified a range of questions on a 13:06:11  
16 variety of issues. If you have particular views on a topic 13:06:14  
17 that we don't get to cover in the sessions now, there is 13:06:17  
18 the drop-in session after the close of the formal 13:06:22  
19 proceedings this afternoon, and you are welcome to stay 13:06:26  
20 back and talk to the IPART staff about any of those issues13:06:30  
21 13:06:30

22 In this session, we will briefly discuss some of the 13:06:34  
23 important topics included in Hunter Water's proposed 13:06:37  
24 discretionary spending on recycled water and its proposed 13:06:41  
25 changes to trade waste and miscellaneous charges. We will 13:06:45  
26 also consider the appropriateness of Hunter Water's 13:06:47  
27 proposed level of declined and dishonoured payment fees. 13:06:49  
28 13:06:49

29 At the end of the presentation, I will lead the 13:06:53  
30 discussion on the preliminary questions that the 13:07:02  
31 secretariat will put up. And as with our previous 13:07:03  
32 sessions, we will have discussions round the table, through 13:07:07  
33 the audience and also through slido. 13:07:07  
34 13:07:07

35 I would like to call on Sheridan to start the 13:07:10  
36 presentation. 13:07:18  
37 13:07:18

38 MS RAPMUND: Thanks, Anna. 13:07:18  
39 13:07:18

40 In this session, I will address discretionary 13:07:18  
41 expenditure. This is a fairly new part of our pricing 13:07:19  
42 review and if we accept Hunter Water's proposal, it will 13:07:22  
43 mean increases in water bills for all customers. 13:07:26  
44 13:07:26

45 The second part of this session will be presented by 13:07:29  
46 Kumi Cuthbertson. It will cover trade waste, miscellaneous 13:07:32  
47 charges and declined and dishonoured payment fees. These 13:07:36

1 are specific charges paid only by some customers. 13:07:37  
2 13:07:37  
3 Discretionary expenditure is expenditure that is not 13:07:37  
4 required to deliver the utility's monopoly services. It 13:07:48  
5 includes expenditure to provide services or achieve 13:07:49  
6 outcomes that are above the level required in the utility's 13:07:52  
7 operating licence or by other standards. 13:07:55  
8 13:07:55  
9 Discretionary expenditure might involve projects that 13:07:58  
10 aim to improve liveability or improve the environment. 13:08:01  
11 13:08:01  
12 As part of this review and our concurrent Sydney Water 13:08:05  
13 review, we will be developing a formal approach to 13:08:09  
14 considering discretionary expenditure for the first time. 13:08:12  
15 13:08:12  
16 Hunter Water, in its proposal, has proposed two 13:08:15  
17 projects that it classifies as discretionary in nature. 13:08:18  
18 The first is the naturalisation of stormwater channels, 13:08:22  
19 which would increase the typical customer's bill by around 13:08:24  
20 \$2 per year. The second is the irrigation of public spaces 13:08:28  
21 with recycled water, and this would add around \$1 to a 13:08:34  
22 typical household's bill per year. 13:08:38  
23 13:08:38  
24 We may allow discretionary expenditure to be recovered 13:08:40  
25 from water bills where the proposal best fits with the 13:08:43  
26 utility's responsibilities and the utility's customers have 13:08:46  
27 the capacity and willingness to pay. 13:08:49  
28 13:08:49  
29 As part of our assessment, we require the utility to 13:08:53  
30 demonstrate that there is customer willingness to pay for 13:08:55  
31 any discretionary expenditure proposed. We have developed 13:08:58  
32 some best practice principles for demonstrating willingness 13:09:03  
33 to pay and we will consider these when assessing the 13:09:05  
34 evidence provided by Hunter Water. 13:09:08  
35 13:09:08  
36 We also use these best practice willingness to pay 13:09:09  
37 principles as part of our recycled water framework, which 13:09:12  
38 allows the cost of higher cost recycled water schemes to be 13:09:15  
39 recovered from the broader customer base where there is 13:09:19  
40 demonstrated willingness to pay. As with other 13:09:21  
41 expenditure, we will also consider whether the 13:09:24  
42 discretionary expenditure is efficient. 13:09:27  
43 13:09:27  
44 Finally, we will make a decision on from which 13:09:29  
45 customers, and how, the cost of any allowed discretionary 13:09:32  
46 expenditure should be recovered. Our view is that a single 13:09:35  
47 separate charge on customer bills will ensure 13:09:39

1 accountability and transparency over time. 13:09:42  
2 13:09:42  
3 MS CUTHBERTSON: Hi, I am Kumi Cuthbertson from IPART. 13:09:53  
4 13:09:53  
5 Today I will be covering trade waste charges, 13:09:55  
6 miscellaneous charges and declined and dishonoured payment 13:09:59  
7 fees. 13:10:03  
8 13:10:03  
9 As a bit of background to trade waste charges, these 13:10:03  
10 are charges that apply mostly to industrial and commercial 13:10:07  
11 customers because their higher strength waste places a 13:10:09  
12 greater load on wastewater treatment facilities. The 13:10:14  
13 charges aim to recover variable costs of treating 13:10:19  
14 wastewater that exceeds domestic strength wastewater. 13:10:20  
15 13:10:20  
16 As you can see on the slide, there are probably about 13:10:25  
17 2,500 industrial and commercial customers that pay trade 13:10:28  
18 waste charges in the Hunter Water region. They represent 13:10:32  
19 about 20 per cent of non-residential customers, or about 13:10:35  
20 1 per cent of all of Hunter Water's customers. So the 13:10:38  
21 revenue that comes from trade waste charges for Hunter 13:10:43  
22 Water is around 1 per cent of its total revenue. 13:10:46  
23 13:10:46  
24 Hunter Water has reviewed its trade waste charges, 13:10:50  
25 leading up to this regulatory period and the revenue that 13:10:56  
26 the trade waste charges will now recover will increase to 13:11:00  
27 about \$3 million from about \$2.3 million per annum 13:11:04  
28 previously. 13:11:11  
29 13:11:11  
30 In terms of assessing Hunter Water's trade waste 13:11:11  
31 charges, we have established some pricing principles and 13:11:13  
32 you can see those on this slide. Hunter Water has informed 13:11:16  
33 us that they have taken these into consideration in setting 13:11:19  
34 their trade waste charges. For example, the charges that 13:11:22  
35 they now propose for admin fees better reflect the time 13:11:27  
36 spent with different categories of customers. In terms of 13:11:27  
37 its high strength charges, Hunter Water tells us that these 13:11:37  
38 now reflect the cost drivers of treating these additional 13:11:40  
39 pollutants at treatment facilities. 13:11:45  
40 13:11:45  
41 In terms of the bill impacts from these new 13:11:50  
42 restructured charges, they are going to be quite varied 13:11:55  
43 between moderate, major and minor customer categories. For 13:11:59  
44 moderate customers, there might be some increases and some 13:12:02  
45 decreases. For major customers, they will mostly see bill 13:12:06  
46 increases up to about 890 per cent in the trade waste 13:12:13  
47 component of the bill. These are largely industrial firms 13:12:18

1 and shopping centres with high-strength trade waste. 13:12:22  
2 13:12:22  
3 For minor customers, such as service stations, 13:12:25  
4 medium-sized hotels and some shopping centres, there will 13:12:29  
5 only be some marginal increases of around 3 to 4 per cent. 13:12:32  
6 13:12:32  
7 Looking at miscellaneous charges, Hunter Water also 13:12:37  
8 provides other services related to its water services where 13:12:41  
9 no alternative exists, including, for example, services 13:12:45  
10 related to new developments and other customer services 13:12:47  
11 such as meter replacement services. 13:12:50  
12 13:12:50  
13 The cost component of miscellaneous charges usually 13:12:53  
14 includes labour, other direct costs, such as materials, 13:12:56  
15 contractor costs and so forth, and overheads. 13:12:59  
16 13:12:59  
17 Again Hunter Water has reviewed its miscellaneous 13:13:02  
18 charges, resulting in a reduction in the number of charges 13:13:05  
19 from about 55 charges to 45 charges. Most of these charges 13:13:09  
20 have reduced in price, some have been discontinued, and a 13:13:13  
21 small number will increase in price. 13:13:24  
22 13:13:24  
23 Around six charges will increase. For example, a 13:13:24  
24 building plan certificate, which costs \$16 today, will cost 13:13:24  
25 \$19.50 - a 3 per cent increase in 2024-2025. Some of these 13:13:39  
26 new charges represent a consolidation of previous three to 13:13:41  
27 four charges. 13:13:47  
28 13:13:47  
29 We are required to hold a public hearing on declined 13:13:49  
30 and dishonoured payment fees, as part of this hearing. The 13:13:53  
31 fees relate to payments via credit card, direct debit or 13:14:01  
32 cheque which have been declined or returned. This charge 13:14:06  
33 is made up of two components. One component is the charge 13:14:09  
34 to Hunter Water by a third party, such as banks, direct 13:14:13  
35 debit providers, or Australia Post. The other component is 13:14:15  
36 Hunter Water's labour and admin costs associated with the 13:14:17  
37 declined payments. 13:14:19  
38 13:14:19  
39 Hunter Water proposes to reduce its declined and 13:14:21  
40 dishonoured payment fee from \$30.15 to \$27.85. This is 13:14:27  
41 because it has adopted the lowest of the three charges 13:14:34  
42 imposed on it, as well as some cost savings in labour 13:14:39  
43 costs. 13:14:41  
44 13:14:41  
45 That is the end of this presentation. I will go now 13:14:41  
46 to the questions, and I'll hand back to Anna to discuss 13:14:41  
47 them. 13:14:48



1		13:14:48
2	MS BRAKEY: Thank you, Kumi.	13:14:50
3		13:14:51
4	Douglas, you're looking a little solo sitting over	13:14:51
5	there by yourself. I'd like to invite you to raise any	13:14:54
6	issues or ask any questions.	13:15:03
7		13:15:03
8	MR McCLOSKEY: This is just more for the record for	13:15:06
9	clarity around the discretionary expenditure. First of	13:15:08
10	all, I would like to reiterate that in our submission we	13:15:13
11	were sort of, I suppose, neutral to supportive to those	13:15:16
12	proceeding if they were deemed to be appropriate.	13:15:20
13		13:15:20
14	When you say that the preference would be to have a	13:15:28
15	single separate charge, we did want some clarity as to	13:15:31
16	whether you intend for that to be indicated separately on a	13:15:32
17	bill. Generally speaking, unless a charge is something	13:15:41
18	that provides information that a consumer can use to change	13:15:44
19	their usage or informs them in a productive way, we are not	13:15:47
20	sure that it adds any value in the information, and that	13:15:54
21	particularly being called a discretionary expenditure	13:15:58
22	charge might confuse consumers to the point of actually	13:16:00
23	being a detrimental addition of information, should it be	13:16:04
24	deemed to be something that proceeds.	13:16:09
25		13:16:09
26	We did raise the question as to whether there was an	13:16:12
27	ability to have a consultation that included	13:16:17
28	non-residential consumers in assessment of the	13:16:20
29	discretionary expenditure, notwithstanding the ability to	13:16:24
30	have a consultation and engagement with them around whether	13:16:28
31	non-residential customers would like to see that proceed.	13:16:35
32	If it does proceed, we think that it should be a charge	13:16:38
33	that is smeared across the entire customer base on the	13:16:42
34	grounds that what benefits it confers to the community are	13:16:50
35	to the whole community, and that includes non-residential	13:16:55
36	customers.	13:16:58
37		13:16:58
38	I suppose that is a series of statements more than a	13:17:00
39	question, but we need some clarity from Hunter Water around	13:17:02
40	the preference on indicating the charge and a little bit	13:17:05
41	more around, potentially for the benefit of people	13:17:10
42	attending, how it was determined that that discretionary	13:17:15
43	expenditure should proceed and that it was determined that	13:17:19
44	consumers agreed with that. That would be great. Thank	13:17:23
45	you.	13:17:28
46		13:17:28
47	MS TURNER: Emma Turner, Hunter Water.	13:17:28

1 13:17:28  
2 Hopefully I can provide some of that clarity and also 13:17:30  
3 explain why we did not include non-residential customers in 13:17:34  
4 the willingness to pay survey. 13:17:38  
5 13:17:38  
6 I would like to start by reiterating a point that 13:17:41  
7 Graham made in his opening presentation, and that is that 13:17:44  
8 Hunter Water is genuinely trying to move more towards a 13:17:49  
9 customer-centric business that can incorporate our 13:17:53  
10 customers' values in their business planning and through 13:17:58  
11 pricing and licensing. It was with that in mind that we 13:18:02  
12 designed a willingness to pay survey. 13:18:06  
13 13:18:06  
14 We asked seven questions. We drew those questions 13:18:09  
15 from feedback that we had received formally, informally, 13:18:13  
16 from submissions to previous IPART hearings, in reviewing 13:18:17  
17 other surveys, and also looking at what our role would be 13:18:22  
18 in liveability, and that was to contribute to that 2017+3 13:18:27  
19 strategy and our longer term plan. That is how we arrived 13:18:32  
20 at those seven questions. 13:18:37  
21 13:18:37  
22 It is probably fair to say that practical application 13:18:38  
23 of willingness to pay surveys in the water industry in 13:18:41  
24 Australia is relatively at its infancy, so there were some 13:18:46  
25 challenges in trying to design a best practice survey. We 13:18:51  
26 feel that we have done the best that we can. We employed 13:18:56  
27 some economic experts to make sure that we did it in a 13:19:00  
28 robust manner. We targeted bill payers - so Hunter Water 13:19:04  
29 customers. We had screening questions to ensure that they 13:19:12  
30 were from within our area of operations. We made sure the 13:19:15  
31 questions that we asked put the responses within the 13:19:20  
32 context of the overall bill. 13:19:25  
33 13:19:27  
34 Through some of the initial parts of the survey, 13:19:28  
35 people were asked whether they wanted to see their 13:19:30  
36 responses relative to an average household bill or an 13:19:32  
37 estimate of their household bill. We went through the 13:19:35  
38 seven questions, offered for each question a "do nothing 13:19:40  
39 more than we do now", and for most of them three increased 13:19:43  
40 levels. 13:19:49  
41 13:19:49  
42 We would normally include a reduction to service as an 13:19:49  
43 option for people to select, but because these are 13:19:54  
44 discretionary services they are things that we don't 13:19:57  
45 provide now, so it was status quo as the lowest option. 13:20:00  
46 Then, at the end, it showed them each of the charges, what 13:20:05  
47 they said they would be willing to pay for each of the 13:20:08

1 services, and a revised total bill. 13:20:12  
2 13:20:12  
3 If they had selected to see the impacts relative to an 13:20:15  
4 estimate of their own bill, it could tell whether they were 13:20:21  
5 in a house, a flat or a unit, whether they were eligible 13:20:24  
6 for things like pensioner rebates. It would reflect those 13:20:28  
7 and take them off their bill as well and then ask people to 13:20:32  
8 confirm that they were happy with the overall total bill 13:20:36  
9 impact, noting that they have other demands on their 13:20:42  
10 budget, so then they could go back and revise their 13:20:45  
11 responses to any of the seven questions. 13:20:48  
12 13:20:48  
13 We also asked for some demographic information so that 13:20:49  
14 we could look for any correlations in responses to their 13:20:53  
15 willingness to pay with things like income, gender, whether 13:20:57  
16 they have been in receipt of a pensioner rebate or other 13:21:01  
17 account assistance. 13:21:08  
18 13:21:08  
19 For, I think, five out of the seven questions, we 13:21:11  
20 found support or willingness to pay more than zero for the 13:21:13  
21 provision of those services. 13:21:21  
22 13:21:21  
23 There were two services people were not willing to pay 13:21:22  
24 for. One of them was recycling for business and industry. 13:21:25  
25 Looking at the informal comments at the end of the survey, 13:21:29  
26 it appeared that people tended to think that was more of a 13:21:33  
27 private good and they were indicating that businesses 13:21:37  
28 should pay for that themselves. 13:21:39  
29 13:21:39  
30 A question was also asked about addressing flooding in 13:21:42  
31 Wallsend, which is not strictly a Hunter Water 13:21:46  
32 responsibility, and more than 50 per cent said they were 13:21:51  
33 not willing to contribute to that. 13:21:53  
34 13:21:53  
35 Hunter Water then looked at all of those responses and 13:21:56  
36 looked at what we could reasonably deliver as part of the 13:21:58  
37 pricing submission. Over that four-year period, for some 13:22:02  
38 of these projects, we could deliver them at lower cost or 13:22:07  
39 we could deliver operating savings, so we didn't propose 13:22:10  
40 any additional works. 13:22:16  
41 13:22:16  
42 For the two that we have actually proposed, we had 13:22:18  
43 over 70 per cent support for improvements to the amenity of 13:22:21  
44 stormwater channels and also for the use of recycled water 13:22:25  
45 for irrigation of parks and gardens. 13:22:30  
46 13:22:30  
47 From the responses we got for that different form of 13:22:33

1 recycled water use, it seemed more that people thought it 13:22:35  
2 was a public good, a bit like contributing to a library; 13:22:42  
3 even if you're not going to use it, you feel that is the 13:22:46  
4 right thing to do for the community. 13:22:50  
5 13:22:50  
6 We have re-run all of our models based on all of the 13:22:53  
7 latest information that went into our proposal. While 13:22:58  
8 customers were willing to pay significantly more, we think 13:23:01  
9 the \$2 impact for the stormwater amenity and the \$1 impact 13:23:06  
10 for the recycled water are relatively modest proposals. 13:23:11  
11 They only come to about 2 per cent of our overall proposed 13:23:16  
12 capital expenditure, but we think that this represents a 13:23:20  
13 significant shift in the organisation's mentality more 13:23:23  
14 towards delivering what customers want us to deliver. 13:23:28  
15 13:23:28  
16 We did not survey non-residential customers for a 13:23:33  
17 number of reasons. One was that showing bill impacts would 13:23:36  
18 be much more complicated, given different metering 13:23:41  
19 arrangements, et cetera. I am sure they are not 13:23:45  
20 insurmountable. The bigger challenge for us was finding 13:23:47  
21 the right person within a business to actually respond to 13:23:54  
22 the survey - is it the bill payer? Is it the person who is 13:23:57  
23 responsible for finances? 13:24:01  
24 13:24:01  
25 We later ran a price structure survey and we made a 13:24:02  
26 concerted effort to engage with non-residential customers. 13:24:05  
27 We note that in places like Sydney, you can use online 13:24:09  
28 survey panels and they can provide around 200 to 250 13:24:13  
29 non-residential customer responses. Usually around 400 13:24:17  
30 responses is statistically significant. We could only get 13:24:21  
31 15 responses from survey panels for our area. 13:24:26  
32 13:24:26  
33 We sent out 4,000 emails to businesses that we 13:24:29  
34 believed were operating in our area for which we had an 13:24:33  
35 email address. We also advertised on social media. We 13:24:37  
36 used Hunter Business Chamber to do some advertising for 13:24:41  
37 us. We advertised through our website. We had over 13:24:46  
38 1,000 impressions. Overall we only got an additional 13:24:50  
39 50 responses. It's a very challenging thing, but it is 13:24:55  
40 something we would like to work it. Stakeholders were keen 13:24:58  
41 to understand some other ideas where we can better engage 13:25:01  
42 with those non-residential customers, but we do face some 13:25:07  
43 challenges. 13:25:11  
44 13:25:11  
45 However, we agree with you that the entire customer 13:25:12  
46 base should contribute to the cost of the discretionary 13:25:15  
47 projects, and there are a couple of reasons for that. One 13:25:18

1 reason is that we believe that they would be beneficiaries13:25:21  
2 of the projects. If you take, for example, improvements to13:25:24  
3 stormwater amenity around the channels, the surrounding13:25:27  
4 businesses would possibly see increased patronage in their13:25:31  
5 shops, or whatever their business is, if it provides13:25:36  
6 recreational opportunities or better connectivity to13:25:39  
7 surrounding buildings.13:25:41  
813:25:41

9 We have also looked at some willingness to pay surveys13:25:43  
10 for other goods and services and compared residential and13:25:47  
11 non-residential preferences and they don't tend to differ13:25:52  
12 significantly. We think that also further supports13:25:55  
13 non-residential customers contributing.13:25:59  
1413:25:59

15 We have some concerns about listing the discretionary13:26:02  
16 expenditure as a separate charge. While we are fully13:26:08  
17 supportive of transparency, we are not clear that a13:26:12  
18 separate charge is the best way to achieve that13:26:15  
19 transparency. We think there are other mechanisms that can13:26:17  
20 be looked at, including through price reviews, where there13:26:20  
21 is an ex post review on what is actually being delivered13:26:24  
22 for the money that people have paid - social media,13:26:28  
23 customer newsletters, for example. We are sure the13:26:31  
24 community will hold us to account and we hope they do.13:26:36  
2513:26:36

26 The other thing is I think Sheridan mentioned that13:26:39  
27 there is discretionary expenditure that is not recycled13:26:46  
28 water and there is discretionary expenditure that is13:26:50  
29 recycled water. My reading of the latest review for13:26:53  
30 pricing arrangements for recycled water indicates that the13:26:56  
31 cost offsets would be put in the regulatory asset base, and13:27:01  
32 therefore the additional charges would be just embedded13:27:03  
33 into normal wastewater, stormwater prices. I would be13:27:07  
34 concerned if we drove a further wedge between recycled13:27:12  
35 water discretionary expenditure and other discretionary13:27:15  
36 expenditure by having one listed separately and the other13:27:18  
37 not listed.13:27:20  
3813:27:20

39 MR McCLOSKEY: To reiterate, we would generally agree with13:27:25  
40 that on that basis, and particularly looking at the13:27:28  
41 projects that are listed, should they proceed. Although13:27:31  
42 they are listed as discretionary due to a whole lot of13:27:37  
43 economic assessments, the delineation between them and13:27:41  
44 other normal projects which are business as usual is not13:27:43  
45 incredibly clear. There is not necessarily a strong13:27:48  
46 intellectual case to say they should be operated as a13:27:50  
47 charge, in that they are, broadly speaking, similar to the13:27:53

1 same business as usual projects that would be included in 13:27:57  
2 the charge which is recovered through usage. We would 13:28:02  
3 definitely support that. 13:28:05  
4 13:28:05  
5 MS TURNER: Just to address that question, we have 13:28:07  
6 considered expenditure to be discretionary if it is not 13:28:11  
7 required through some legal or regulatory mandate. If it 13:28:17  
8 is a requirement to comply with an environmental licence or 13:28:22  
9 a water extraction licence, the operating licence, 13:28:26  
10 et cetera, then that forms part of business as usual. 13:28:29  
11 Things like recycled water and improving the amenity of 13:28:33  
12 stormwater do not fall within Hunter Water's normal 13:28:38  
13 responsibilities as set out in the Act or in other 13:28:41  
14 regulations. 13:28:44  
15 13:28:44  
16 MR EDGERTON: Sorry, may I clarify that point, though, 13:28:47  
17 Emma. Is it fair to say that if recycled water was the 13:28:50  
18 least cost means of providing water or sewerage services, 13:28:54  
19 then it would be business as usual? 13:28:58  
20 13:28:58  
21 MS TURNER: Yes, it would be, sorry, Matt. And we made 13:29:02  
22 clear in our survey the circumstances under which it would 13:29:05  
23 be considered least cost and we would do it anyway. For 13:29:08  
24 example, we had a question on reducing our carbon footprint 13:29:11  
25 and we said we would spend that money anyway if it also 13:29:14  
26 reduced our electricity bills. Similarly for recycled 13:29:18  
27 water, we said we would do that if it was cheaper than 13:29:21  
28 producing water in the long run. 13:29:24  
29 13:29:24  
30 MS BRAKEY: Thank you. Douglas, did you have any other 13:29:30  
31 issues that you wanted to raise? 13:29:33  
32 13:29:36  
33 MR McCLOSKEY: It's down to the end there, but we did 13:29:36  
34 raise it probably a little more strongly than it deserved. 13:29:42  
35 In looking at the declined and dishonoured fees just a 13:29:46  
36 little bit more clarity is needed around that. The 13:29:50  
37 information behind it suggests that the bulk of the people 13:29:52  
38 who have been charged is in response to direct debit 13:29:55  
39 failures. 13:29:59  
40 13:29:59  
41 There is a question as to how much that is actually 13:30:03  
42 representative of the cost, bearing in mind that it is 13:30:05  
43 likely that those customers would have already been charged 13:30:09  
44 by their financial institution as well. We need to be able 13:30:12  
45 to see the justification for that charge. 13:30:17  
46 13:30:17  
47 Historically it makes more sense if people are going 13:30:23

1 into a post office and presenting a cheque and there is a 13:30:26  
2 significant administrative burden and potentially costs 13:30:30  
3 involved in having to re-present those cheques and go 13:30:34  
4 through that financial process, those sorts of fees make 13:30:37  
5 sense. Increasingly on an electronic basis, and where 13:30:41  
6 people may be having multiple fees taken out at the same 13:30:45  
7 time, we would like to question it as continuing to be a 13:30:49  
8 valid extra charge and, if it is, just to, in a sense, test 13:30:56  
9 the quantum of that fee. We are more sort of asking a 13:31:03  
10 broad question about that. 13:31:08  
11 13:31:08  
12 MR PRASAD: Hi, Victor Prasad from Hunter Water. In terms 13:31:10  
13 of the volume and the quantity, there's just about 1,000 13:31:13  
14 touch points to have some failures in a given year. You 13:31:17  
15 are absolutely right; the direct debit dishonour fee is the 13:31:22  
16 lowest of the fees, and it's probably the highest failure 13:31:26  
17 point as well. There are a few other charges. There was a 13:31:29  
18 slide that showed a few other charges. We have chosen not 13:31:35  
19 to pass them on to our customers. 13:31:38  
20 13:31:38  
21 There is a conversation to be had here so we would 13:31:40  
22 rather that a customer would actually contact us and 13:31:43  
23 indicate they are in hardship. I would be surprised if we 13:31:45  
24 don't know, but if a customer is in hardship, then our 13:31:48  
25 intent is not to make it any worse for them, so we do 13:31:52  
26 reverse that charge immediately. The issue about an 13:31:56  
27 institution charging them and Hunter Water charging them 13:32:00  
28 would actually be eliminated if the customer identifies 13:32:02  
29 themselves to be in hardship or had some sort of payment 13:32:06  
30 plan with us and so the intent then is to get rid of that 13:32:10  
31 charge. 13:32:15  
32 13:32:15  
33 In terms of the total administrative costs, besides 13:32:15  
34 those 1,000 failures, we get up to 2,500 additional 13:32:20  
35 failures in a given year that we don't charge and there is 13:32:24  
36 an administrative burden caused, particularly when it comes 13:32:29  
37 to dealing with daily interfaces with banking institutions 13:32:32  
38 as well. The intent is certainly not to create any more 13:32:38  
39 financial burden on the community. 13:32:44  
40 13:32:44  
41 MS BRAKEY: Are there any questions from the audience? 13:32:48  
42 13:32:53  
43 Yes, Mr Banyard? 13:32:53  
44 13:32:55  
45 MR BANYARD: What happens to all those five expenses if 13:32:58  
46 they are incurred by a non-customer - in other words, 13:33:01  
47 somebody who is not a customer contract holder which, as 13:33:04

1 I said before, is about 75 per cent of the community? They 13:33:13  
2 may pay for something and get their payment declined. Is 13:33:18  
3 the non-customer going to pay the \$2.70? It will all show 13:33:22  
4 on one bill. Whose bill? Is it the customer's bill or the 13:33:28  
5 client's bill? It seems to me that that has not been 13:33:32  
6 addressed at all. 13:33:33  
7 13:33:33  
8 MR PRASAD: These charges will certainly impact a customer 13:33:44  
9 and will appear on customer bills. The conversation we had 13:33:47  
10 before, Rick, was really about our relationship with the 13:33:53  
11 customers, so a lot of these charges would appear on 13:33:56  
12 customer bills only. 13:33:59  
13 13:33:59  
14 MS TURNER: At the moment, our legislation does not allow 13:34:03  
15 us to tenant bill. The way that it is set out is that the 13:34:06  
16 charge actually rests with the property. There is nothing 13:34:12  
17 to stop landlords from passing through those costs to their 13:34:17  
18 tenants if that option is available within an agreement. 13:34:23  
19 13:34:23  
20 MR BANYARD: I was not necessarily referring to landlords 13:34:23  
21 and tenants. What about somebody who has trade waste, for 13:34:28  
22 example, and they incur an expense in trade waste, they 13:34:30  
23 will not necessarily be a formal customer of Hunter Water. 13:34:35  
24 You may offer your trade waste service to them to use. 13:34:38  
25 13:34:38  
26 MS TURNER: Just on the trade waste issue -- 13:34:38  
27 13:34:38  
28 MR BANYARD: A broken or a damaged water meter, or 13:34:44  
29 whatever, may not be the responsibility of the landlord or 13:34:47  
30 the property owner or the customer. It may be a cost to 13:34:50  
31 the third party, as in a motor vehicle accident. There are 13:34:55  
32 all sorts of things. 13:34:59  
33 13:34:59  
34 Back to my fundamental question: what happens to 13:35:01  
35 those expenses that are incurred in those five categories 13:35:03  
36 for non-customers? 13:35:07  
37 13:35:07  
38 MS TURNER: In most of those circumstances, they become 13:35:09  
39 our customer, even if it is just fleetingly. Some of those 13:35:11  
40 charges are incurred before an actual connection, in which 13:35:16  
41 case they are a customer for whatever service it is that 13:35:20  
42 they are paying for - for example, a building plan stamp. 13:35:23  
43 13:35:23  
44 In relation to trade waste, we have two separate types 13:35:26  
45 of customers. One is the trade waste customers that are 13:35:29  
46 connected to the wastewater system; they're covered as 13:35:33  
47 normal customers are. We also have trade waste customers 13:35:36



1 that discharge concentrated wastewater from tankers. Both 13:35:40  
2 types of trade waste customers enter into separate 13:35:48  
3 agreements. They are not covered by a deemed customer 13:35:52  
4 contract; they actually have an individual contract with 13:35:56  
5 us. 13:35:58  
6 13:35:58  
7 In relation to the damaged meter, if it is not willful 13:35:58  
8 damage, then we will generally replace it at our cost. 13:36:02  
9 13:36:02  
10 MS BRAKEY: Are there any further questions from the 13:36:10  
11 audience? 13:36:12  
12 13:36:12  
13 MR PORTER: G'day. My name is Mark Porter from Fire and 13:36:18  
14 Rescue NSW. 13:36:19  
15 13:36:19  
16 As a result of the MOU in Hunter Water's last 13:36:20  
17 operating licence, we have now met with Hunter Water a 13:36:23  
18 couple of times. They have had the opportunity to give us 13:36:26  
19 an overview of their pricing proposal. They have also 13:36:33  
20 highlighted areas where they can improve the provision of 13:36:36  
21 fire-fighting water to the community in a cost-efficient 13:36:38  
22 manner. 13:36:42  
23 13:36:42  
24 As we have been sort of chipping away at IPART for a 13:36:43  
25 few years in this space, we think over the longer term this 13:36:47  
26 will reduce costs to the community and also improve 13:36:52  
27 community resilience more broadly. We would, therefore, be 13:36:58  
28 supportive of Hunter Water spending additional coin on 13:37:02  
29 improvements in capital, if that is the outcome that can be 13:37:06  
30 achieved. Thank you. 13:37:10  
31 13:37:10  
32 MR SHIELDS: We did include an allowance for fire-fighting 13:37:15  
33 in our capital program. IPART engages independent 13:37:19  
34 expenditure reviewers, and we are currently going through 13:37:27  
35 that review process, and that spend has not been a focus of 13:37:29  
36 the review. 13:37:33  
37 13:37:33  
38 MR EDGERTON: Sorry, just to confirm, so you do basically 13:37:40  
39 support their proposed levels of expenditure? 13:37:44  
40 13:37:47  
41 MR PORTER: Yes. 13:37:47  
42 13:37:47  
43 MR EDGERTON: I understand, thank you. 13:37:47  
44 13:37:47  
45 MR PORTER: We support their plan, based on our 13:37:47  
46 understanding of our meetings with Hunter Water. They are 13:37:50  
47 saying they can improve some areas of their networks in a 13:37:53

1 cost-efficient manner, and in view of the fact we believe 13:37:56  
2 that will reduce costs over the longer term, particularly 13:37:59  
3 as the community grows and as zoning changes in different 13:38:04  
4 areas, we think you will get increased resilience and 13:38:10  
5 possibly reduced outcomes over the longer term. 13:38:13  
6 13:38:13  
7 MR EDGERTON: Noted, thank you. 13:38:19  
8 13:38:19  
9 Just to confirm, our process from here is that, yes, 13:38:19  
10 we do have expert expenditure consultants who will review 13:38:21  
11 everything that is put on the table. 13:38:24  
12 13:38:24  
13 MS BRAKEY: Are there any other questions from the floor? 13:38:26  
14 Mark, did you want to raise anything? 13:38:32  
15 13:38:32  
16 MR EDLER: No, thank you. 13:38:35  
17 13:38:37  
18 MS BRAKEY: Nadja, are there questions on slido? 13:38:37  
19 13:38:40  
20 MS DAELLENBACH: No. 13:38:40  
21 13:38:40  
22 MS BRAKEY: It looks like we have exhausted those issues 13:38:40  
23 We might move on to the final session. 13:38:43  
24 13:38:43  
25 **Session 4: Open session** 13:38:43  
26 13:38:43  
27 THE ACTING CHAIR: We are now up to the final session, 13:38:46  
28 which again is: are there any other questions? We now 13:38:48  
29 invite questions from the floor. If there is anything else 13:38:53  
30 that has not been covered so far that somebody would like 13:38:55  
31 to raise, please do so now. 13:38:57  
32 13:38:57  
33 MR MASSEY: Good afternoon. Simon Massey, City of 13:39:08  
34 Newcastle. 13:39:09  
35 13:39:09  
36 I think this question is probably more relevant for 13:39:12  
37 session one. I am here as a spokesperson today, and I am 13:39:14  
38 sorry I missed the opportunity this morning. 13:39:17  
39 13:39:19  
40 We want to ask a question around the environmental 13:39:19  
41 improvement charge and the changes proposed there. We want 13:39:22  
42 to talk about the township of Hexham, which is currently 13:39:24  
43 serviced by 100 onsite sewage management systems. We note 13:39:28  
44 the proximity of these systems to the Hunter River and 13:39:33  
45 surrounding wetlands represents a significant pollution 13:39:36  
46 risk. The former Minister for Lands and Water advised that 13:39:39  
47 backlog sewer services would be provided using the EIC 13:39:45

1 following the completion of the Wyee backlog project. 13:39:52  
2 13:39:52  
3 It is the view of the City of Newcastle that the 13:39:58  
4 connection of Hexham is an environmental and public health 13:39:59  
5 priority and it therefore supports the minister's 13:40:00  
6 commitment. The primary beneficiary of these backlog sewer 13:40:02  
7 services to Hexham is the environment. 13:40:06  
8 13:40:06  
9 We note that Hunter Water proposes to remove the EIC 13:40:08  
10 from July 2020 and that IPART's preliminary view is to 13:40:13  
11 support the proposal. The question is around: has there 13:40:16  
12 been a change in government policy regarding the provision 13:40:19  
13 of sewer services to Hexham; if not, is there an 13:40:23  
14 alternative financing mechanism that would be proposed? 13:40:26  
15 13:40:26  
16 THE ACTING CHAIR: Do you want to answer that, Matt? 13:40:26  
17 13:40:26  
18 MR EDGERTON: To reiterate a little of what we mentioned 13:40:34  
19 in the earlier session, as part of this price review, IPART 13:40:38  
20 does not make a call in terms of whether or not these areas 13:40:41  
21 should be sewered. What is really at play for us in this 13:40:44  
22 price review is the question of if they were sewered, how 13:40:47  
23 should they be funded - that is, should the broader 13:40:51  
24 customer base pay for sewerage these areas? 13:40:54  
25 13:40:54  
26 Our baseline position is that we have established a 13:40:57  
27 separate determination or methodology for how sewerage 13:41:05  
28 these areas should be funded. It is basically a 13:41:13  
29 methodology that says that the properties that are being 13:41:16  
30 serviced should pay the efficient costs of providing the 13:41:20  
31 sewerage services to them. That is the baseline position. 13:41:22  
32 13:41:22  
33 However, Hunter Water can come to us and make a case 13:41:27  
34 that the broader customer base should contribute to funding 13:41:31  
35 sewerage of these areas. In doing so, Hunter Water would 13:41:37  
36 have to make a case that basically there are broader 13:41:42  
37 benefits, there are external benefits, and that the broader 13:41:45  
38 customer base would benefit and is willing to pay to sewer 13:41:48  
39 these other areas. If they can make that case, then there 13:41:52  
40 is a case for the broader customer base to pay for them. 13:41:56  
41 13:41:56  
42 Above and beyond that, other options are any other 13:41:59  
43 funding arrangements Hunter Water may have determined 13:42:03  
44 outside our price determination - for example, if it was to 13:42:06  
45 get a government grant or if the government were to decide 13:42:10  
46 to pay for or subsidise sewerage these areas, rather than 13:42:13  
47 the broader customer base, that is a funding opportunity. 13:42:17

1 13:42:17  
2 The other way it could be included in this price 13:42:21  
3 determination is if, effectively, a regulatory requirement 13:42:24  
4 was imposed on Hunter Water by the government and/or if 13:42:28  
5 IPART received a direction from the government saying, "The 13:42:32  
6 costs of sewerage these areas should be funded from other 13:42:36  
7 customers." 13:42:39  
8 13:42:39  
9 MR SHIELDS: I'd like to make clear that the environmental 13:42:44  
10 improvement charge - the \$41 per year charged on wastewater 13:42:49  
11 customers - is one way of funding backlog sewers. The fact 13:42:52  
12 that we propose to end the EIC does not mean that we cannot 13:42:58  
13 progress and fund backlog sewerage schemes in the manner 13:43:04  
14 that Matt has just outlined. 13:43:07  
15 13:43:07  
16 Our focus to date has been on the Wyee scheme, which 13:43:08  
17 is effectively a \$30 million scheme to connect 450 lots. 13:43:13  
18 It is due for completion at the end of next year. 13:43:19  
19 13:43:19  
20 We will go back out to councils and talk about 13:43:21  
21 potential mechanisms to progress schemes. The starting 13:43:24  
22 point will be can we work together to try and measure and 13:43:29  
23 monetise those broader external benefits - so the 13:43:34  
24 environmental and health impacts - and potentially make a 13:43:37  
25 case to IPART, which we could do within the regulatory 13:43:42  
26 period, seeking guidance on whether they would allow a 13:43:45  
27 claim at the next price review. 13:43:49  
28 13:43:49  
29 THE ACTING CHAIR: Any other questions? 13:43:55  
30 13:43:55  
31 MS BOWDEN: Hi, Linda Bowden, from Save the Williams River 13:44:06  
32 Coalition. 13:44:08  
33 13:44:08  
34 I note that Hunter Water will only spend \$2.3 to \$4.7 13:44:08  
35 million to 2020 on stormwater harvesting. This is despite 13:44:15  
36 the Lower Hunter water community consultation demonstrating 13:44:20  
37 a wish for Hunter Water to spend much more on stormwater 13:44:24  
38 harvesting and it being articulated as a preference in 13:44:27  
39 future water strategies to assist with drought strategies, 13:44:31  
40 I won't say security. Why is this so? 13:44:35  
41 13:44:38  
42 MR SHIELDS: I might throw that to Darren Cleary. 13:44:39  
43 13:44:49  
44 MR CLEARY: In setting up our capital program for the 13:44:49  
45 determination, we have looked at the schemes that 13:44:52  
46 potentially will be implemented so we know about them now. 13:44:58  
47 The allowance in there for stormwater harvesting is on the 13:45:01

1 investigation of schemes that we think have a potential 13:45:05  
2 under the current regulatory framework and importantly the 13:45:07  
3 current Lower Hunter Water Plan to be delivered. 13:45:12  
4 13:45:12  
5 As we have discussed already today, there is a broader 13:45:14  
6 review happening of that plan and we will continue to 13:45:16  
7 explore recycled water opportunities including under the 13:45:19  
8 revised guidelines that IPART has put out with respect to 13:45:22  
9 recycled water. Should a scheme be found to be the least 13:45:26  
10 cost way of meeting our broader obligations, including 13:45:30  
11 managing drought and water security, then there is nothing 13:45:32  
12 preventing us from including those schemes in our forward 13:45:36  
13 capital works program and indeed delivering them. 13:45:40  
14 13:45:40  
15 It is by no means an indication that we will not 13:45:43  
16 continue to explore stormwater harvesting opportunities 13:45:45  
17 and, if it is warranted and justified, we will spend more 13:45:49  
18 on those opportunities should they arise over the price 13:45:51  
19 determination period. 13:45:55  
20 13:45:55  
21 MS BOWDEN: I guess my point there is that this has been 13:45:58  
22 going on since Tillegra Dam was rejected. There was almost 13:46:03  
23 two years of community consultation and I think that ended 13:46:11  
24 in 2014. Hunter Water has had considerable time to look 13:46:13  
25 into this. Recycled water was a priority in both the 13:46:19  
26 Hunter and Lower Hunter Water plans. The community would 13:46:27  
27 see being involved in community consultation as a waste of 13:46:30  
28 time if Hunter Water is not seeing recycled water as a 13:46:31  
29 future priority. 13:46:38  
30 13:46:40  
31 MR CLEARY: We believe it is a future priority. We are 13:46:40  
32 actually in the process of commissioning our first two 13:46:43  
33 residential recycled water schemes using recycled water for 13:46:46  
34 non-potable purposes - so for garden watering at Gillieston 13:46:53  
35 Height and Chisholm. Those schemes will be commissioned 13:46:56  
36 over the coming weeks. 13:46:58  
37 13:46:58  
38 We are pursuing stormwater recycling opportunities, 13:47:01  
39 including working with Lake Macquarie City Council and Port 13:47:03  
40 Stephens Council on opportunities in their particular 13:47:09  
41 areas. Where the schemes are viable and they stack up, 13:47:10  
42 then we are pursuing them, and that is what is demonstrated 13:47:13  
43 by the recycled water opportunities we are commissioning at 13:47:17  
44 the moment. 13:47:21  
45 13:47:21  
46 MS BOWDEN: Forgive me, I've come in late. I was not able 13:47:28  
47 to attend this morning's session, so I am not sure whether 13:47:28

1 this question has been asked. 13:47:28  
2 13:47:28  
3 Hunter Water charges its customers a fixed service 13:47:32  
4 charge and a usage charge for drinking water. It also 13:47:35  
5 provides some customers with unfiltered water. Current 13:47:36  
6 high levels of fixed charges provide a disincentive for 13:47:39  
7 customers to reduce water use or invest in water-efficient 13:47:43  
8 appliances. 13:47:47  
9 13:47:47  
10 User pay is another area that has been brought forward 13:47:49  
11 to IPART over a number of years. Many groups in the 13:47:52  
12 community believe that user pay should be reinstated to add 13:47:58  
13 incentives to reduce water. I would like a comment on 13:48:03  
14 that. 13:48:08  
15 13:48:08  
16 MR SHIELDS: Hunter Water, in its pricing proposal, quoted 13:48:12  
17 a section on user pays out of a 1983 document by the then 13:48:15  
18 board. I think we trailed Perth, but we were one of the 13:48:18  
19 first utilities in the country to introduce user pays. We 13:48:22  
20 have collected the majority of our water revenue 13:48:27  
21 requirement through a volumetric charge. In the current 13:48:32  
22 price period, it is 83 per cent. Our pricing proposal 13:48:36  
23 would see that go up into the 90s. 13:48:39  
24 13:48:39  
25 It has long been within the ethos of the business to 13:48:41  
26 rely on a high usage charge to send a conservation signal. 13:48:45  
27 The typical water bill is paid made up of wastewater, water 13:48:52  
28 and maybe stormwater charges. The water usage price is the 13:48:57  
29 only part of that that is variable, but on the water side, 13:49:03  
30 we collect the bulk of our revenue through a usage 13:49:06  
31 component. 13:49:11  
32 13:49:11  
33 MS BRAKEY: Did you have any other questions? 13:49:15  
34 13:49:16  
35 MS BOWDEN: Just another one. I would like a comment 13:49:17  
36 around the fact that recycled water perhaps should be 13:49:22  
37 incentivised rather than based on willingness to pay to try 13:49:27  
38 and promote recycled water and more use for it. 13:49:32  
39 13:49:32  
40 THE ACTING CHAIR: I will ask Matt to answer that. 13:49:42  
41 13:49:42  
42 MR EDGERTON: In response to that, I will give a brief 13:49:44  
43 overview of how IPART views pricing and cost recovery in 13:49:46  
44 terms of recycled water. In general terms our aim is to 13:49:52  
45 set prices to reflect the efficient costs of Hunter Water 13:49:56  
46 delivering its monopoly services. The starting point is to 13:50:03  
47 the extent that recycled water is the least cost or most 13:50:07

1 efficient means of delivering a water service or wastewater service, then that should be in Hunter Water's proposal and  
2 it would be recovered via normal water and sewerage prices  
3 from all customers.

4  
5  
6 To the extent, however, that a recycled water scheme  
7 is higher cost, then we really don't have a licence to  
8 include those costs in all customer prices unless Hunter  
9 Water can show us that its broader customer base is willing  
10 to pay, or Hunter Water can also show that it would result  
11 in an avoided cost to its broader customer base.

12  
13 Generally our framework says that the cost of recycled  
14 water schemes should be recovered through all prices if,  
15 first of all, it is the least cost means of delivering  
16 services; secondly, if there are avoided costs to the  
17 broader customer base; and, thirdly, if there is evidence  
18 that the broader customer base is willing to pay. That is  
19 how we look at that.

20  
21 Having said all of that, one thing we are very keen to  
22 ensure and promote is the idea that when Hunter Water is  
23 looking at different servicing solutions and technologies,  
24 it is not being just too narrowly focused, that it is  
25 thinking of all viable options, so it is not just stuck  
26 looking at traditional servicing solutions.

27  
28 We are certainly keen to create an environment where  
29 there is a strong incentive for Hunter Water to consider  
30 all viable options and to make sure that it is always  
31 considering recycled water as one of the options it should  
32 be looking at.

33  
34 THE ACTING CHAIR: We do, going forward, have the option  
35 of other questions being discussed during the drop-in  
36 session, but are there any other final questions before we  
37 close this part of the hearing?

38  
39 MS BOWDEN: I would like to make probably just one more  
40 comment.

41  
42 With regard to your comment about looking at all  
43 viable options, we know currently that over 90 per cent of  
44 water supply to the urban area is from one main catchment.  
45 This shows that really Hunter Water has put all its eggs in  
46 one basket. I guess the comment is that the community, and  
47 particularly our group, are looking to more of a balance of

1 portfolio options. That is where we think recycled water, 13:52:41  
2 et cetera, does need to be incentivised. 13:52:47  
3 13:52:47  
4 THE ACTING CHAIR: Thank you very much. 13:52:52  
5 13:52:52  
6 Are there any other final questions? 13:52:57  
7 13:52:57  
8 **Final comments** 13:52:57  
9 13:52:57  
10 THE ACTING CHAIR: On behalf of IPART, I would like to 13:53:05  
11 thank everybody very much for your participation today and 13:53:08  
12 for the very constructive discussion that we have had. It 13:53:13  
13 has been great benefit to us to hear your views first-hand 13:53:17  
14 and we really appreciate the efforts and the contributions 13:53:22  
15 made by everyone here today. 13:53:25  
16 13:53:25  
17 The transcript of today's hearing will be available on 13:53:27  
18 our website in a few days. We will consider all that has 13:53:30  
19 been said today in making our decisions on Hunter Water's 13:53:35  
20 prices to apply from 1 July 2020. 13:53:40  
21 13:53:40  
22 While this part of the hearing has concluded, please 13:53:45  
23 feel free to stay if you want to discuss things further 13:53:49  
24 because there is a drop-in session that will run until 9pm 13:53:52  
25 tonight. 13:53:56  
26 13:53:56  
27 MS BRAKEY: It's 7pm. 13:54:01  
28 13:54:01  
29 MS CUTHBERTSON: Seven. 13:54:01  
30 13:54:01  
31 THE ACTING CHAIR: The staff just got very, very nervous. 13:54:04  
32 It will run till 7pm today. There will be people here 13:54:07  
33 available to get further feedback and to talk through any 13:54:12  
34 other questions or issues that people have. 13:54:14  
35 13:54:14  
36 We have decided to do that to allow potentially more 13:54:18  
37 members of the community, who perhaps are not available 13:54:24  
38 during business hours, to also contribute. If anybody has 13:54:27  
39 any feedback on that process or other ways of improving the 13:54:31  
40 hearings, we would be really happy to hear them, so please 13:54:36  
41 let us know. 13:54:40  
42 13:54:40  
43 As mentioned before, we plan to release the draft 13:54:41  
44 report for public comment in March 2020. People will then 13:54:44  
45 have about four weeks to make further written submissions 13:54:50  
46 and we will post their feedback online. We will then look 13:54:53  
47 at all of that information, combined with what we have 13:54:58



1 heard today, and make our final decision following that. 13:55:00  
2 13:55:00  
3 The final determination and final report will be 13:55:03  
4 released in June 2020, and the maximum prices in that 13:55:06  
5 report will apply from 1 July 2020. 13:55:11  
6 13:55:11  
7 Finally, I encourage you to monitor IPART's website 13:55:14  
8 for updates and further information on the timetable, 13:55:18  
9 including the release of the draft report and the date for 13:55:21  
10 which submissions will be due following the draft report. 13:55:24  
11 13:55:24  
12 Thank you again. 13:55:28  
13 13:55:28  
14 **AT 1.55PM, THE TRIBUNAL WAS ADJOURNED ACCORDINGLY** 13:55:29  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47

#	115 [1] - 9:11 12 [1] - 42:2 13 [3] - 30:36, 33:39, 50:22 15 [3] - 7:38, 50:23, 60:31 150 [1] - 1:29 185 [1] - 9:5 19 [3] - 1:31, 10:29, 20:24 1983 [1] - 70:17	4.7 [1] - 68:34 400 [1] - 60:29 45 [2] - 46:1, 56:19 450 [1] - 68:17	accepted [2] - 23:2, 23:4 access [1] - 33:17 accident [1] - 64:31 ACCORDINGLY [1] - 73:14 accordingly [1] - 6:47 account [6] - 11:14, 18:10, 43:8, 43:14, 59:17, 61:24 accountability [1] - 55:1 accounts [1] - 45:20 accrue [1] - 12:28 accruing [1] - 12:22 achieve [3] - 37:25, 54:5, 61:18 achieved [1] - 65:30 acknowledge [3] - 28:8, 32:5, 32:10 acknowledged [1] - 33:9 acknowledging [1] - 2:4 Act [3] - 43:6, 44:14, 62:13 acting [2] - 4:42, 24:40 Acting [3] - 1:19, 2:15, 11:44 ACTING [32] - 2:3, 9:39, 10:11, 10:22, 10:39, 11:21, 12:1, 12:6, 13:6, 14:9, 15:20, 15:37, 16:14, 16:27, 16:33, 16:41, 16:46, 17:4, 42:10, 44:32, 47:12, 50:28, 52:21, 53:1, 66:27, 67:16, 68:29, 70:40, 71:34, 72:4, 72:10, 72:31 active [3] - 36:25, 37:8, 50:19 actual [8] - 10:45, 11:2, 20:2, 22:6, 33:12, 46:6, 46:21, 64:40 add [8] - 7:15, 7:39, 15:10, 24:35, 28:27, 44:8, 54:21, 70:12 addition [2] - 2:40, 57:23 additional [12] - 12:39, 14:9, 28:19, 38:44, 39:4, 41:41, 55:38, 59:40, 60:38, 61:32, 63:34, 65:28 address [8] - 3:2, 3:41, 3:46, 16:38,	44:43, 53:40, 60:35, 62:5 addressed [4] - 3:42, 30:27, 30:37, 64:6 addresses [1] - 7:11 addressing [2] - 43:27, 59:30 adds [3] - 22:15, 26:1, 57:20 ADJOURNED [1] - 73:14 ADJOURNMENT [1] - 53:6 adjust [1] - 22:8 adjusted [2] - 22:23, 22:28 adjustment [2] - 10:44, 21:31 adjustments [3] - 10:42, 23:33, 47:4 admin [2] - 55:35, 56:36 administrative [3] - 63:2, 63:33, 63:36 adopted [4] - 22:36, 22:47, 27:30, 56:41 advanced [1] - 34:28 advantage [1] - 7:2 adverse [1] - 47:25 advertised [2] - 60:35, 60:37 advertising [1] - 60:36 advised [1] - 66:46 advisory [1] - 6:30 affecting [2] - 4:2, 48:27 afternoon [5] - 3:8, 15:4, 53:4, 53:19, 66:33 afterwards [1] - 22:1 agencies [1] - 11:34 agenda [2] - 12:1, 15:4 agent [1] - 44:6 ago [4] - 37:11, 40:9, 47:42, 48:26 agree [6] - 14:18, 31:39, 36:36, 51:34, 60:45, 61:39 agreed [1] - 57:44 agreement [2] - 34:30, 64:18 agreements [1] - 65:3 ahead [1] - 41:14 aim [3] - 54:10, 55:13, 70:44 air [1] - 30:24 allow [11] - 3:9, 7:23, 7:24, 7:25, 20:32, 34:39, 54:24, 64:14,
\$	\$10 [3] - 20:33, 29:7, 34:40 \$100 [2] - 13:21, 29:6 \$101 [1] - 18:44 \$130 [1] - 18:44 \$143 [1] - 13:10 \$144 [1] - 13:12 \$16 [1] - 56:24 \$19.50 [1] - 56:25 \$2.50 [1] - 29:33 \$2.70 [1] - 64:3 \$20 [2] - 29:6, 29:7 \$27.85 [1] - 56:40 \$30 [3] - 14:33, 31:47, 68:17 \$30.15 [1] - 56:40 \$4 [1] - 29:34 \$41 [1] - 68:10 \$41.20 [1] - 39:40 \$63,000 [2] - 11:42, 14:6 \$724 [1] - 15:13 \$871 [1] - 15:13	5 5 [6] - 9:12, 21:25, 21:27, 22:18, 32:2, 50:23 50 [3] - 37:38, 59:32, 60:39 50,000 [1] - 20:10 55 [1] - 56:19	6 6 [2] - 32:2, 42:23 60 [3] - 31:4, 31:5	7 70 [3] - 7:16, 30:44, 59:43 75 [2] - 43:10, 64:1 7pm [3] - 3:9, 72:27, 72:32
0	2 2 [5] - 38:43, 44:30, 54:20, 60:9, 60:11 2,500 [4] - 13:9, 39:41, 55:17, 63:34 2.3 [2] - 55:27, 68:34 2.30pm [1] - 3:8 20 [7] - 20:23, 27:28, 31:43, 33:38, 33:39, 34:16, 55:19 200 [1] - 60:28 2000 [1] - 33:16 2002 [1] - 11:37 2014 [1] - 69:24 2015 [1] - 22:43 2016 [5] - 20:37, 21:5, 21:23, 22:43, 46:24 2016-2020 [1] - 18:33 2017+3 [4] - 5:37, 5:41, 6:38, 58:18 2019 [2] - 1:31, 2:28 2019-20 [1] - 46:14 2020 [14] - 1:14, 2:11, 3:14, 3:20, 3:21, 21:6, 21:11, 39:40, 67:10, 68:35, 72:20, 72:44, 73:4, 73:5 2024-2025 [1] - 56:25 21 [1] - 8:12 25 [1] - 31:28 250 [1] - 60:28 26 [1] - 15:47 27 [1] - 20:30	8 8 [1] - 19:14 80 [1] - 43:40 83 [2] - 29:1, 70:22 890 [1] - 55:46	8 8 [1] - 19:14 80 [1] - 43:40 83 [2] - 29:1, 70:22 890 [1] - 55:46	9 90 [1] - 71:43 90s [1] - 70:23 98 [1] - 29:7 9pm [1] - 72:24
0.3 [2] - 7:47, 8:4	3 3 [4] - 53:8, 55:27, 56:5, 56:25 3.2 [1] - 8:28	A ability [6] - 24:6, 24:15, 27:11, 29:25, 57:27, 57:29 able [8] - 17:32, 35:24, 43:22, 43:44, 47:28, 51:36, 62:44, 69:46 abolished [1] - 21:10 absolutely [3] - 24:4, 32:5, 63:15 accept [3] - 14:18, 49:34, 53:42 acceptable [1] - 27:13	A ability [6] - 24:6, 24:15, 27:11, 29:25, 57:27, 57:29 able [8] - 17:32, 35:24, 43:22, 43:44, 47:28, 51:36, 62:44, 69:46 abolished [1] - 21:10 absolutely [3] - 24:4, 32:5, 63:15 accept [3] - 14:18, 49:34, 53:42 acceptable [1] - 27:13	
1	4 4 [2] - 56:5, 66:25 4,000 [1] - 60:33 4.1 [1] - 8:26			

<p>68:26, 72:36  <b>allowance</b> [2] - 65:32, 68:47  <b>allowed</b> [7] - 21:26, 25:42, 26:17, 43:25, 44:8, 47:34, 54:45  <b>allowing</b> [1] - 49:1  <b>allows</b> [5] - 6:21, 42:8, 42:16, 42:21, 54:38  <b>alluding</b> [1] - 13:35  <b>almost</b> [4] - 5:24, 19:14, 20:1, 69:22  <b>alone</b> [1] - 9:4  <b>alternate</b> [3] - 34:6, 35:43, 48:28  <b>alternative</b> [5] - 39:42, 51:16, 51:42, 56:9, 67:14  <b>amenity</b> [4] - 59:43, 60:9, 61:3, 62:11  <b>amount</b> [3] - 8:15, 17:19, 30:33  <b>amounts</b> [3] - 30:22, 39:20, 42:22  <b>analysis</b> [2] - 15:42, 52:43  <b>AND</b> [1] - 1:11  <b>Anna</b> [12] - 1:20, 2:17, 4:22, 17:6, 17:42, 17:43, 25:22, 26:41, 29:4, 30:14, 53:38, 56:46  <b>annum</b> [4] - 9:7, 9:13, 20:11, 55:27  <b>answer</b> [8] - 9:29, 16:7, 24:39, 30:10, 31:20, 42:38, 67:16, 70:40  <b>answered</b> [1] - 15:1  <b>answers</b> [1] - 16:11  <b>anticipate</b> [2] - 10:34, 52:4  <b>anyway</b> [4] - 31:6, 35:25, 62:23, 62:25  <b>apart</b> [2] - 10:20, 10:36  <b>apartment</b> [1] - 9:12  <b>apartments</b> [4] - 8:45, 8:47, 9:9, 19:22  <b>appear</b> [3] - 45:34, 64:9, 64:11  <b>appeared</b> [1] - 59:26  <b>appetite</b> [5] - 48:46, 49:4, 49:6, 49:18, 49:25  <b>appliances</b> [1] - 70:8  <b>applicable</b> [1] - 4:29  <b>application</b> [2] - 10:17, 58:22  <b>applied</b> [2] - 23:13,</p>	<p>38:15  <b>applies</b> [1] - 33:46  <b>apply</b> [7] - 3:20, 32:37, 32:41, 34:5, 55:10, 72:20, 73:5  <b>APPLY</b> [1] - 1:14  <b>appreciate</b> [3] - 10:17, 38:8, 72:14  <b>approach</b> [6] - 18:2, 22:35, 25:37, 25:38, 26:26, 54:13  <b>approached</b> [1] - 23:13  <b>appropriate</b> [3] - 3:3, 48:39, 57:12  <b>appropriately</b> [1] - 49:35  <b>appropriateness</b> [1] - 53:26  <b>arbitrary</b> [2] - 28:31, 33:46  <b>area</b> [20] - 5:31, 6:44, 8:3, 11:34, 13:9, 13:38, 30:15, 32:13, 37:23, 39:45, 48:3, 51:19, 52:11, 52:39, 52:42, 58:30, 60:31, 60:34, 70:10, 71:44  <b>areas</b> [28] - 5:22, 5:26, 5:28, 6:43, 15:7, 40:2, 40:6, 46:12, 46:13, 47:36, 47:39, 48:46, 49:4, 49:30, 51:20, 51:24, 52:19, 65:20, 65:47, 66:4, 67:20, 67:24, 67:28, 67:35, 67:39, 67:46, 68:6, 69:41  <b>argue</b> [1] - 52:34  <b>argument</b> [1] - 42:5  <b>arise</b> [1] - 69:18  <b>arose</b> [1] - 46:27  <b>arrangement</b> [1] - 43:2  <b>arrangements</b> [4] - 34:44, 60:19, 61:30, 67:43  <b>arrived</b> [1] - 58:19  <b>articulated</b> [2] - 39:7, 68:38  <b>aspect</b> [1] - 44:1  <b>aspects</b> [1] - 23:30  <b>aspiration</b> [1] - 38:13  <b>aspirations</b> [1] - 37:22  <b>assess</b> [4] - 13:45, 45:33, 47:2, 48:9  <b>assessing</b> [6] - 12:17, 18:3, 46:36, 46:45, 54:33, 55:30  <b>assessment</b> [7] -</p>	<p>18:16, 45:35, 48:1, 48:21, 49:11, 54:29, 57:28  <b>assessments</b> [1] - 61:43  <b>asset</b> [7] - 42:6, 46:45, 47:45, 48:20, 48:22, 48:38, 61:31  <b>assets</b> [21] - 5:37, 6:47, 8:22, 18:26, 18:27, 18:28, 18:32, 18:38, 18:42, 45:42, 48:2, 48:5, 48:7, 48:9, 48:10, 48:12, 49:10, 49:14, 49:20, 50:35  <b>assist</b> [5] - 4:28, 17:30, 38:16, 68:39  <b>assistance</b> [1] - 59:17  <b>assisting</b> [1] - 2:18  <b>associated</b> [1] - 56:36  <b>Association</b> [1] - 15:25  <b>assuming</b> [3] - 9:5, 9:11, 21:17  <b>assured</b> [1] - 35:33  <b>asymmetric</b> [1] - 33:45  <b>AT</b> [1] - 73:14  <b>attached</b> [1] - 43:6  <b>attend</b> [2] - 3:9, 69:47  <b>attending</b> [1] - 57:42  <b>audience</b> [11] - 9:33, 9:42, 17:34, 32:30, 41:14, 42:46, 44:42, 50:17, 53:33, 63:41, 65:11  <b>audits</b> [1] - 34:24  <b>augmentation</b> [3] - 14:46, 28:38, 50:26  <b>Australia</b> [6] - 7:36, 32:2, 33:44, 35:30, 56:35, 58:24  <b>Australian</b> [1] - 23:1  <b>available</b> [6] - 2:37, 4:33, 64:18, 72:17, 72:33, 72:37  <b>avenue</b> [1] - 34:43  <b>avenues</b> [1] - 42:29  <b>average</b> [17] - 7:4, 8:27, 11:1, 11:6, 11:15, 21:17, 22:24, 22:25, 22:26, 22:28, 23:7, 23:21, 30:9, 31:21, 31:22, 58:36  <b>averages</b> [1] - 22:23  <b>averaging</b> [2] - 22:39, 22:41  <b>avoid</b> [2] - 49:23, 51:17</p>	<p><b>avoided</b> [3] - 50:39, 71:11, 71:16  <b>Awakabal</b> [1] - 2:5  <b>aware</b> [5] - 23:40, 24:20, 27:27, 34:27, 37:3</p> <p><b>B</b></p> <p><b>background</b> [4] - 6:39, 9:27, 9:35, 55:9  <b>backlog</b> [17] - 12:11, 12:16, 12:34, 12:38, 13:1, 13:27, 13:35, 21:2, 21:7, 39:33, 40:8, 40:12, 66:47, 67:1, 67:6, 68:11, 68:13  <b>balance</b> [11] - 8:44, 14:43, 24:12, 24:39, 25:31, 26:24, 28:7, 28:47, 29:14, 46:11, 71:47  <b>balancing</b> [2] - 9:10, 19:9  <b>banking</b> [1] - 63:37  <b>banks</b> [1] - 56:34  <b>BANYARD</b> [10] - 15:23, 16:5, 16:20, 30:5, 43:1, 44:1, 52:30, 63:45, 64:20, 64:28  <b>Banyard</b> [5] - 15:23, 30:3, 42:46, 52:26, 63:43  <b>bar</b> [1] - 7:15  <b>barriers</b> [1] - 41:40  <b>bars</b> [1] - 7:21  <b>base</b> [35] - 7:45, 12:21, 19:26, 20:34, 22:37, 33:23, 39:33, 40:21, 40:22, 40:30, 40:34, 40:35, 40:37, 40:43, 40:46, 40:47, 41:7, 42:6, 42:18, 42:30, 46:37, 54:39, 57:33, 60:46, 61:31, 67:24, 67:34, 67:38, 67:40, 67:47, 71:9, 71:11, 71:17, 71:18  <b>base's</b> [1] - 40:34  <b>based</b> [19] - 10:5, 10:20, 10:37, 20:6, 22:28, 25:38, 27:39, 27:41, 33:16, 33:31, 33:36, 33:41, 36:41, 36:42, 46:14, 46:38, 60:6, 65:45, 70:37</p>	<p><b>baseline</b> [2] - 67:26, 67:31  <b>basically</b> [8] - 7:3, 27:9, 40:10, 40:16, 41:2, 65:38, 67:28, 67:36  <b>basics</b> [1] - 43:1  <b>basis</b> [9] - 20:18, 21:17, 22:9, 23:36, 27:46, 33:27, 36:29, 61:40, 63:5  <b>basket</b> [1] - 71:46  <b>Bay</b> [1] - 30:14  <b>bear</b> [1] - 41:6  <b>bearing</b> [1] - 62:42  <b>became</b> [2] - 33:22, 40:41  <b>become</b> [4] - 35:42, 37:35, 38:1, 64:38  <b>becomes</b> [2] - 38:10, 46:37  <b>becoming</b> [1] - 8:5  <b>begin</b> [2] - 2:4, 6:27  <b>behalf</b> [1] - 72:10  <b>behind</b> [6] - 22:29, 33:18, 49:42, 49:43, 62:37  <b>belief</b> [1] - 11:33  <b>believes</b> [1] - 31:12  <b>below</b> [3] - 31:21, 31:22  <b>beneficiaries</b> [2] - 12:19, 61:1  <b>beneficiary</b> [1] - 67:6  <b>benefit</b> [6] - 34:39, 34:44, 57:41, 67:38, 72:13  <b>benefiting</b> [2] - 13:41, 41:4  <b>benefits</b> [15] - 12:17, 12:19, 12:20, 12:21, 12:28, 12:46, 40:22, 40:33, 40:36, 42:17, 42:20, 57:34, 67:37, 68:23  <b>bent</b> [1] - 37:18  <b>best</b> [10] - 23:6, 27:43, 38:39, 51:1, 54:25, 54:32, 54:36, 58:25, 58:26, 61:18  <b>better</b> [15] - 16:28, 23:29, 24:29, 27:24, 33:24, 38:32, 50:13, 51:39, 51:43, 52:35, 52:44, 52:45, 55:35, 60:41, 61:6  <b>between</b> [14] - 7:37, 15:15, 18:22, 18:33, 24:15, 26:24, 29:1, 29:14, 29:33, 34:22,</p>
---	---	---	---	--

<p>52:28, 55:43, 61:34, 61:43</p> <p><b>beyond</b> [2] - 35:45, 67:42</p> <p><b>bias</b> [1] - 34:19</p> <p><b>big</b> [6] - 9:9, 30:27, 33:23, 35:16, 35:17, 37:3</p> <p><b>bigger</b> [8] - 10:31, 23:17, 23:40, 24:17, 24:31, 24:41, 29:41, 60:20</p> <p><b>biggest</b> [2] - 30:19, 46:1</p> <p><b>bill</b> [37] - 6:24, 9:3, 15:29, 15:32, 15:33, 15:47, 16:10, 19:10, 19:17, 20:30, 34:18, 43:19, 43:40, 44:9, 50:2, 54:19, 54:22, 55:41, 55:45, 55:47, 57:17, 58:28, 58:32, 58:36, 58:37, 59:1, 59:4, 59:7, 59:8, 60:17, 60:22, 64:4, 64:5, 64:15, 70:27</p> <p><b>billing</b> [3] - 15:44, 16:2, 50:4</p> <p><b>bills</b> [17] - 5:3, 9:26, 10:28, 10:34, 15:43, 18:1, 18:12, 20:33, 35:24, 43:43, 49:41, 53:43, 54:25, 54:47, 62:26, 64:9, 64:12</p> <p><b>bit</b> [18] - 8:39, 14:23, 19:18, 19:37, 20:31, 20:46, 21:18, 22:30, 25:29, 26:15, 26:23, 35:6, 51:44, 52:27, 55:9, 57:40, 60:2, 62:36</p> <p><b>block</b> [9] - 27:5, 27:25, 27:30, 28:31, 28:34, 32:36, 33:44, 36:20, 52:41</p> <p><b>blockages</b> [1] - 45:15</p> <p><b>blocks</b> [3] - 18:23, 28:32, 46:1</p> <p><b>blue</b> [5] - 6:43, 15:33, 18:31, 46:4, 46:19</p> <p><b>board</b> [3] - 30:41, 33:32, 70:18</p> <p><b>bob</b> [4] - 10:12, 11:21, 25:11, 35:4</p> <p><b>Bob</b> [5] - 10:14, 11:23, 20:46, 37:43, 41:14</p> <p><b>body</b> [1] - 32:16</p> <p><b>borne</b> [1] - 12:31</p> <p><b>bought</b> [1] - 41:10</p> <p><b>BOWDEN</b> [5] - 68:31,</p>	<p>69:21, 69:46, 70:35, 71:39</p> <p><b>Bowden</b> [1] - 68:31</p> <p><b>box</b> [2] - 18:31</p> <p><b>Brakey</b> [2] - 1:20, 2:17</p> <p><b>BRAKEY</b> [31] - 17:11, 21:41, 25:2, 25:11, 25:20, 26:8, 26:43, 29:47, 32:29, 32:44, 33:2, 34:46, 35:4, 39:3, 39:11, 39:23, 39:44, 41:13, 42:35, 42:45, 44:19, 53:10, 57:2, 62:30, 63:41, 65:10, 66:13, 66:18, 66:22, 70:33, 72:27</p> <p><b>breaching</b> [2] - 45:27, 49:18</p> <p><b>break</b> [1] - 50:5</p> <p><b>breakdown</b> [2] - 8:9, 8:14</p> <p><b>breaking</b> [1] - 50:7</p> <p><b>brief</b> [5] - 12:4, 12:6, 21:34, 45:4, 70:42</p> <p><b>briefly</b> [7] - 4:18, 4:29, 17:45, 18:1, 27:35, 46:42, 53:22</p> <p><b>bring</b> [2] - 19:23, 48:28</p> <p><b>bringing</b> [1] - 48:45</p> <p><b>brings</b> [1] - 48:18</p> <p><b>broad</b> [13] - 3:34, 5:16, 8:14, 12:15, 15:6, 22:33, 27:36, 28:18, 32:26, 34:43, 35:43, 41:38, 63:10</p> <p><b>broad-scale</b> [1] - 28:18</p> <p><b>broadcast</b> [1] - 37:21</p> <p><b>broader</b> [36] - 12:19, 12:21, 13:27, 13:34, 13:47, 20:34, 28:6, 29:42, 40:21, 40:22, 40:30, 40:33, 40:35, 40:37, 40:43, 40:46, 40:47, 41:6, 41:7, 42:17, 42:30, 51:38, 54:39, 67:23, 67:34, 67:36, 67:37, 67:40, 67:47, 68:23, 69:5, 69:10, 71:9, 71:11, 71:17, 71:18</p> <p><b>broadly</b> [12] - 4:46, 5:21, 6:25, 7:30, 7:37, 8:40, 9:6, 29:21, 35:45, 45:25, 61:47, 65:27</p> <p><b>broken</b> [3] - 46:7, 46:21, 64:28</p> <p><b>brought</b> [3] - 43:26,</p>	<p>48:33, 70:10</p> <p><b>brown</b> [1] - 6:43</p> <p><b>bucks</b> [1] - 37:13</p> <p><b>budget</b> [1] - 59:10</p> <p><b>build</b> [1] - 5:15</p> <p><b>building</b> [7] - 14:22, 18:23, 24:13, 25:40, 46:1, 56:24, 64:42</p> <p><b>buildings</b> [1] - 61:7</p> <p><b>built</b> [1] - 45:42</p> <p><b>bulk</b> [3] - 33:19, 62:37, 70:30</p> <p><b>bunch</b> [1] - 35:11</p> <p><b>burden</b> [5] - 35:9, 50:7, 63:2, 63:36, 63:39</p> <p><b>business</b> [33] - 3:9, 5:36, 5:38, 6:2, 6:37, 7:14, 7:22, 7:43, 10:8, 10:9, 10:18, 10:24, 12:29, 19:15, 19:30, 34:36, 35:10, 35:12, 35:45, 36:8, 37:15, 37:28, 58:9, 58:10, 59:24, 60:21, 61:5, 61:44, 62:1, 62:10, 62:19, 70:25, 72:38</p> <p><b>Business</b> [4] - 9:42, 9:44, 10:14, 60:36</p> <p><b>businesses</b> [14] - 10:19, 35:7, 35:17, 35:19, 36:36, 36:47, 37:9, 37:47, 38:16, 38:29, 39:20, 59:27, 60:33, 61:4</p> <p><b>buy</b> [1] - 30:46</p>	<p><b>card</b> [1] - 56:31</p> <p><b>cared</b> [1] - 26:5</p> <p><b>careful</b> [1] - 25:15</p> <p><b>carried</b> [1] - 50:6</p> <p><b>case</b> [18] - 12:29, 34:36, 36:11, 36:29, 40:20, 40:32, 40:37, 40:42, 43:18, 47:29, 61:46, 64:41, 67:33, 67:36, 67:39, 67:40, 68:25</p> <p><b>case-by-case</b> [1] - 36:29</p> <p><b>cases</b> [3] - 20:1, 45:33, 48:38</p> <p><b>catch</b> [5] - 6:5, 6:7, 7:1, 7:3, 9:24</p> <p><b>catch-up</b> [4] - 6:7, 7:1, 7:3, 9:24</p> <p><b>catching</b> [1] - 7:4</p> <p><b>catchment</b> [3] - 30:15, 32:21, 71:44</p> <p><b>categories</b> [4] - 8:16, 55:36, 55:43, 64:35</p> <p><b>caused</b> [1] - 63:36</p> <p><b>cent</b> [49] - 7:16, 7:30, 7:47, 8:3, 8:12, 8:26, 8:28, 9:6, 9:12, 9:18, 15:47, 20:30, 21:25, 21:27, 22:18, 28:45, 29:1, 29:7, 30:36, 31:4, 31:5, 31:13, 31:15, 31:17, 31:44, 32:2, 33:40, 34:28, 36:36, 43:10, 43:28, 43:34, 43:35, 43:41, 46:2, 50:23, 55:19, 55:20, 55:22, 55:46, 56:5, 56:25, 59:32, 59:43, 60:11, 64:1, 70:22, 71:43</p> <p><b>Central</b> [2] - 30:42, 30:45</p> <p><b>Centre</b> [1] - 1:28</p> <p><b>centres</b> [2] - 56:1, 56:4</p> <p><b>centric</b> [1] - 58:9</p> <p><b>cents</b> [1] - 30:44</p> <p><b>century</b> [1] - 19:46</p> <p><b>CEO</b> [1] - 4:42</p> <p><b>certain</b> [2] - 38:28, 43:24</p> <p><b>certainly</b> [9] - 19:39, 28:10, 28:21, 30:17, 36:2, 42:35, 63:38, 64:8, 71:28</p> <p><b>certainty</b> [1] - 23:29</p> <p><b>certificate</b> [1] - 56:24</p> <p><b>Cessnock</b> [6] - 5:23, 11:24, 20:46, 39:3,</p>	<p>42:40, 48:32</p> <p><b>cetera</b> [3] - 60:19, 62:10, 72:2</p> <p><b>Chair</b> [8] - 1:19, 2:15, 11:44, 14:14, 16:37, 25:23, 39:8, 50:31</p> <p><b>CHAIR</b> [32] - 2:3, 9:39, 10:11, 10:22, 10:39, 11:21, 12:1, 12:6, 13:6, 14:9, 15:20, 15:37, 16:14, 16:27, 16:33, 16:41, 16:46, 17:4, 42:10, 44:32, 47:12, 50:28, 52:21, 53:1, 66:27, 67:16, 68:29, 70:40, 71:34, 72:4, 72:10, 72:31</p> <p><b>challenge</b> [3] - 47:39, 50:47, 60:20</p> <p><b>challenges</b> [3] - 5:33, 58:25, 60:43</p> <p><b>challenging</b> [1] - 60:39</p> <p><b>Chamber</b> [4] - 9:42, 9:44, 10:14, 60:36</p> <p><b>change</b> [11] - 8:28, 8:32, 11:8, 14:27, 15:11, 16:31, 20:42, 27:3, 47:22, 57:18, 67:12</p> <p><b>changed</b> [7] - 5:5, 5:10, 8:19, 9:20, 9:22, 34:42, 45:34</p> <p><b>changes</b> [8] - 10:5, 14:24, 18:32, 35:21, 46:28, 53:25, 66:3, 66:41</p> <p><b>channel</b> [1] - 42:11</p> <p><b>channels</b> [3] - 54:18, 59:44, 61:3</p> <p><b>CHAPMAN</b> [1] - 17:42</p> <p><b>Chapman</b> [4] - 1:25, 2:20, 17:39, 17:43</p> <p><b>characteristic</b> [1] - 32:11</p> <p><b>charge</b> [61] - 2:10, 8:42, 8:46, 11:27, 11:32, 11:42, 12:10, 12:13, 17:19, 19:4, 19:8, 19:12, 19:29, 19:30, 19:40, 19:47, 20:9, 20:44, 21:1, 21:10, 26:24, 26:25, 27:12, 29:2, 29:6, 29:8, 29:15, 29:25, 31:15, 32:47, 39:5, 39:30, 40:1, 42:42, 43:45, 49:15, 54:47, 56:32, 56:33, 57:15, 57:17, 57:22, 57:32,</p>
---	--	--	--	--

<p>57:40, 61:16, 61:18, 61:47, 62:2, 62:45, 63:8, 63:26, 63:31, 63:35, 64:16, 66:41, 68:10, 70:4, 70:21, 70:26</p> <p><b>charged</b> [4] - 41:23, 62:38, 62:43, 68:10</p> <p><b>charges</b> [64] - 3:32, 4:18, 4:19, 8:41, 8:43, 8:45, 8:47, 9:11, 9:12, 17:40, 19:2, 19:16, 19:22, 19:24, 19:28, 19:32, 19:38, 20:11, 23:37, 29:1, 29:4, 35:11, 40:8, 40:9, 41:9, 44:2, 53:25, 53:47, 54:1, 55:5, 55:6, 55:9, 55:10, 55:13, 55:18, 55:21, 55:24, 55:26, 55:31, 55:34, 55:37, 55:42, 56:7, 56:13, 56:18, 56:19, 56:23, 56:26, 56:27, 56:41, 58:46, 61:32, 63:17, 63:18, 64:8, 64:11, 64:40, 70:3, 70:6, 70:28</p> <p><b>charging</b> [4] - 8:44, 38:11, 63:27</p> <p><b>chart</b> [8] - 7:15, 8:10, 16:21, 16:28, 18:30, 30:33, 46:18, 47:41</p> <p><b>cheaper</b> [1] - 62:27</p> <p><b>check</b> [2] - 6:32, 6:35</p> <p><b>cheque</b> [2] - 56:32, 63:1</p> <p><b>cheques</b> [1] - 63:3</p> <p><b>Chichester</b> [2] - 48:18, 48:19</p> <p><b>chief</b> [3] - 2:19, 9:31, 9:32</p> <p><b>chipping</b> [1] - 65:24</p> <p><b>Chisholm</b> [1] - 69:35</p> <p><b>choice</b> [4] - 16:16, 50:3, 51:35, 51:36</p> <p><b>choices</b> [2] - 51:14, 51:15</p> <p><b>choosing</b> [2] - 25:47, 27:11</p> <p><b>chosen</b> [1] - 63:18</p> <p><b>circumstance</b> [4] - 23:20, 23:24, 23:38, 36:11</p> <p><b>circumstances</b> [10] - 10:19, 23:27, 23:34, 24:7, 24:41, 43:22, 43:25, 49:22, 62:22, 64:38</p>	<p><b>City</b> [7] - 11:24, 20:46, 39:3, 42:40, 66:33, 67:3, 69:39</p> <p><b>city</b> [1] - 15:6</p> <p><b>claim</b> [7] - 34:38, 34:43, 42:16, 42:21, 42:23, 42:28, 68:27</p> <p><b>clarification</b> [1] - 10:43</p> <p><b>clarify</b> [3] - 26:8, 41:16, 62:16</p> <p><b>clarity</b> [5] - 57:9, 57:15, 57:39, 58:2, 62:36</p> <p><b>classifies</b> [1] - 54:17</p> <p><b>classify</b> [1] - 48:9</p> <p><b>claw</b> [1] - 36:10</p> <p><b>claw-back</b> [1] - 36:10</p> <p><b>clear</b> [7] - 39:35, 48:5, 48:45, 61:17, 61:45, 62:22, 68:9</p> <p><b>clearly</b> [4] - 4:31, 36:44, 39:7, 48:38</p> <p><b>CLEARY</b> [19] - 10:47, 12:4, 12:9, 13:26, 14:29, 22:33, 23:45, 24:35, 27:35, 31:20, 35:39, 37:27, 38:38, 41:31, 47:32, 50:42, 51:19, 68:44, 69:31</p> <p><b>Cleary</b> [2] - 9:31, 68:42</p> <p><b>client's</b> [1] - 64:5</p> <p><b>climate</b> [8] - 11:3, 11:10, 14:19, 21:17, 22:23, 22:35, 22:40, 24:16</p> <p><b>climate-adjusted</b> [1] - 22:23</p> <p><b>climate-corrected</b> [2] - 21:17, 22:35</p> <p><b>climates</b> [1] - 24:5</p> <p><b>climatic</b> [3] - 11:6, 11:14, 31:32</p> <p><b>close</b> [5] - 22:21, 52:25, 53:2, 53:18, 71:37</p> <p><b>closer</b> [1] - 50:23</p> <p><b>coal</b> [1] - 30:28</p> <p><b>Coalition</b> [1] - 68:32</p> <p><b>Coast</b> [2] - 30:42, 30:46</p> <p><b>coastal</b> [2] - 30:14, 30:16</p> <p><b>code</b> [3] - 3:2, 17:37, 44:44</p> <p><b>cohort</b> [1] - 7:39</p> <p><b>coin</b> [1] - 65:28</p> <p><b>collaborating</b> [1] - 50:43</p>	<p><b>collapse</b> [1] - 49:12</p> <p><b>collate</b> [1] - 52:8</p> <p><b>collect</b> [2] - 44:6, 70:30</p> <p><b>collected</b> [1] - 70:20</p> <p><b>collectively</b> [2] - 35:19, 36:47</p> <p><b>combination</b> [1] - 8:36</p> <p><b>combined</b> [1] - 72:47</p> <p><b>coming</b> [7] - 18:34, 18:45, 19:25, 21:19, 45:46, 50:1, 69:36</p> <p><b>commence</b> [3] - 3:36, 3:38, 4:36</p> <p><b>commenced</b> [2] - 35:40, 36:2</p> <p><b>comment</b> [18] - 3:14, 4:24, 10:33, 14:4, 15:3, 16:5, 17:33, 33:7, 35:36, 42:37, 44:42, 50:28, 70:13, 70:35, 71:40, 71:42, 71:46, 72:44</p> <p><b>comments</b> [12] - 4:25, 10:23, 10:24, 16:33, 22:3, 25:20, 30:6, 37:20, 42:1, 47:15, 59:25, 72:8</p> <p><b>commercial</b> [4] - 11:15, 39:19, 55:10, 55:17</p> <p><b>commission</b> [1] - 44:5</p> <p><b>commissioned</b> [1] - 69:35</p> <p><b>commissioning</b> [2] - 69:32, 69:43</p> <p><b>commit</b> [1] - 36:2</p> <p><b>commitment</b> [2] - 36:26, 67:6</p> <p><b>commonly</b> [1] - 23:1</p> <p><b>communications</b> [1] - 46:34</p> <p><b>communities</b> [3] - 21:2, 25:18, 26:29</p> <p><b>community</b> [46] - 6:28, 6:38, 12:20, 12:37, 14:37, 15:23, 16:12, 24:15, 24:37, 24:38, 24:42, 26:27, 27:14, 27:19, 27:41, 27:42, 28:11, 28:17, 29:23, 29:30, 32:19, 32:20, 36:1, 49:2, 49:5, 49:7, 49:13, 50:44, 51:6, 57:34, 57:35, 60:4, 61:24, 63:39, 64:1, 65:21, 65:26, 65:27, 66:3, 68:36, 69:23, 69:26, 69:27, 70:12, 71:46,</p>	<p>72:37</p> <p><b>compare</b> [1] - 7:35</p> <p><b>compared</b> [6] - 4:13, 19:23, 45:46, 46:24, 46:29, 61:10</p> <p><b>comparison</b> [1] - 31:33</p> <p><b>compiling</b> [1] - 52:6</p> <p><b>complete</b> [1] - 8:33</p> <p><b>completely</b> [2] - 13:19, 51:34</p> <p><b>completion</b> [2] - 67:1, 68:18</p> <p><b>complex</b> [1] - 8:39</p> <p><b>complexities</b> [1] - 21:13</p> <p><b>complexity</b> [1] - 23:12</p> <p><b>compliance</b> [3] - 26:4, 45:24, 47:40</p> <p><b>compliances</b> [1] - 49:32</p> <p><b>complicated</b> [1] - 60:18</p> <p><b>comply</b> [2] - 25:39, 62:8</p> <p><b>complying</b> [2] - 3:28, 49:25</p> <p><b>component</b> [12] - 19:10, 19:11, 29:17, 41:34, 43:23, 43:43, 44:5, 55:47, 56:13, 56:33, 56:35, 70:31</p> <p><b>components</b> [2] - 45:39, 56:33</p> <p><b>concentrated</b> [1] - 65:1</p> <p><b>concept</b> [1] - 33:15</p> <p><b>concern</b> [2] - 17:20, 22:29</p> <p><b>concerned</b> [6] - 23:19, 23:26, 23:31, 36:46, 37:2, 61:34</p> <p><b>concerns</b> [2] - 18:15, 61:15</p> <p><b>concerted</b> [1] - 60:26</p> <p><b>concluded</b> [1] - 72:22</p> <p><b>concurrent</b> [1] - 54:12</p> <p><b>condition</b> [5] - 11:6, 48:1, 48:21, 48:22, 49:10</p> <p><b>conditions</b> [10] - 4:6, 11:1, 11:15, 21:18, 22:24, 22:25, 22:26, 23:7, 31:32</p> <p><b>conduct</b> [1] - 42:18</p> <p><b>confers</b> [1] - 57:34</p> <p><b>confident</b> [1] - 8:34</p> <p><b>confirm</b> [3] - 59:8, 65:38, 66:9</p> <p><b>confuse</b> [1] - 57:22</p>	<p><b>confused</b> [1] - 36:35</p> <p><b>confusing</b> [1] - 26:15</p> <p><b>connect</b> [1] - 68:17</p> <p><b>connected</b> [3] - 14:7, 40:13, 64:46</p> <p><b>connection</b> [3] - 41:8, 64:40, 67:4</p> <p><b>connectively</b> [1] - 61:6</p> <p><b>conscious</b> [1] - 24:11</p> <p><b>consequence</b> [1] - 48:33</p> <p><b>conservation</b> [11] - 17:24, 27:31, 29:19, 35:47, 36:30, 36:36, 36:38, 37:2, 38:14, 50:24, 70:26</p> <p><b>conservative</b> [1] - 23:32</p> <p><b>conserve</b> [1] - 31:35</p> <p><b>consider</b> [9] - 2:42, 4:15, 21:26, 36:18, 53:26, 54:33, 54:41, 71:29, 72:18</p> <p><b>considerable</b> [1] - 69:24</p> <p><b>consideration</b> [6] - 3:16, 17:18, 27:3, 33:12, 34:29, 55:33</p> <p><b>considerations</b> [2] - 4:4, 17:28</p> <p><b>considered</b> [5] - 2:26, 27:32, 34:32, 62:6, 62:23</p> <p><b>considering</b> [5] - 21:35, 22:13, 41:28, 54:14, 71:31</p> <p><b>consistent</b> [1] - 27:18</p> <p><b>consolidation</b> [1] - 56:26</p> <p><b>constructive</b> [2] - 44:19, 72:12</p> <p><b>consult</b> [1] - 35:18</p> <p><b>consultants</b> [2] - 47:6, 66:10</p> <p><b>consultation</b> [15] - 2:40, 27:14, 27:42, 29:22, 34:21, 35:16, 35:35, 35:39, 36:7, 37:8, 57:27, 57:30, 68:36, 69:23, 69:27</p> <p><b>consultations</b> [1] - 52:34</p> <p><b>consulted</b> [2] - 34:10, 36:12</p> <p><b>consumed</b> [4] - 19:5, 20:19, 30:23, 30:34</p> <p><b>consumer</b> [2] - 34:28, 57:18</p> <p><b>consumers</b> [7] -</p>
--	--	--	---	---

22:19, 27:10, 29:25, 43:10, 57:22, 57:28, 57:44 <b>consumption</b> [7] - 15:45, 17:23, 19:32, 20:2, 20:4, 20:13, 30:32 <b>contact</b> [1] - 63:22 <b>contain</b> [1] - 3:20 <b>contained</b> [1] - 36:41 <b>context</b> [5] - 4:47, 35:8, 35:12, 36:18, 58:32 <b>continually</b> [1] - 19:22 <b>continue</b> [10] - 12:27, 12:42, 12:47, 13:45, 14:33, 31:47, 35:40, 50:21, 69:6, 69:16 <b>continuing</b> [4] - 32:23, 36:2, 45:35, 63:7 <b>continuity</b> [1] - 49:20 <b>contract</b> [6] - 43:6, 43:17, 44:14, 63:47, 65:4 <b>contractor</b> [1] - 56:15 <b>contracts</b> [4] - 16:6, 43:11, 43:15, 43:34 <b>contractual</b> [1] - 16:15 <b>contribute</b> [8] - 13:40, 14:7, 35:46, 58:18, 59:33, 60:46, 67:34, 72:38 <b>contributing</b> [3] - 15:5, 60:2, 61:13 <b>contribution</b> [1] - 41:42 <b>contributions</b> [1] - 72:14 <b>control</b> [3] - 19:17, 27:16, 29:26 <b>controlling</b> [1] - 27:21 <b>conversation</b> [8] - 23:40, 23:42, 24:23, 24:31, 36:1, 36:3, 63:21, 64:9 <b>cooling</b> [1] - 11:16 <b>Cope</b> [2] - 1:19, 2:15 <b>copy</b> [3] - 4:33, 50:1, 50:2 <b>corner</b> [1] - 10:30 <b>corporate</b> [2] - 8:12, 46:15 <b>correct</b> [2] - 31:30, 32:42 <b>corrected</b> [2] - 21:17, 22:35 <b>correlations</b> [1] - 59:14 <b>correspondence</b> [1] - 37:4	<b>cost</b> [58] - 4:10, 4:47, 8:25, 8:27, 13:10, 13:12, 13:31, 13:32, 17:22, 25:46, 26:2, 26:46, 27:23, 28:39, 28:41, 29:12, 29:35, 33:9, 33:10, 33:12, 35:20, 36:40, 36:41, 38:25, 42:4, 42:17, 42:28, 42:29, 42:31, 43:26, 44:3, 44:4, 46:44, 49:37, 54:38, 54:45, 55:38, 56:13, 56:24, 56:42, 59:38, 60:46, 61:31, 62:18, 62:23, 62:42, 64:30, 65:8, 65:21, 66:1, 69:10, 70:43, 70:47, 71:7, 71:11, 71:13, 71:15 <b>cost-efficient</b> [2] - 65:21, 66:1 <b>costs</b> [62] - 3:26, 3:30, 3:32, 4:12, 4:13, 7:38, 8:6, 9:24, 12:11, 12:23, 12:31, 18:3, 18:21, 18:22, 18:23, 18:24, 18:25, 18:27, 19:33, 20:13, 24:13, 24:24, 28:29, 29:26, 29:29, 29:33, 29:35, 34:31, 35:10, 35:29, 38:27, 40:17, 40:20, 40:45, 42:30, 43:29, 45:45, 46:15, 46:16, 46:29, 46:43, 50:34, 50:39, 51:17, 55:13, 56:14, 56:15, 56:24, 56:36, 56:43, 63:2, 63:33, 64:17, 65:26, 66:2, 67:30, 68:6, 70:45, 71:8, 71:16 <b>council</b> [2] - 12:27, 12:43 <b>Council</b> [5] - 11:24, 39:3, 42:40, 69:39, 69:40 <b>Council's</b> [1] - 20:47 <b>councils</b> [3] - 49:44, 52:9, 68:20 <b>counted</b> [1] - 30:32 <b>counter</b> [1] - 50:1 <b>country</b> [2] - 28:9, 70:19 <b>couple</b> [5] - 26:39, 30:5, 53:4, 60:47, 65:18 <b>course</b> [1] - 33:41 <b>cover</b> [6] - 5:30, 18:20,	18:40, 45:17, 53:17, 53:46 <b>covered</b> [3] - 64:46, 65:3, 66:30 <b>covering</b> [1] - 55:5 <b>covers</b> [2] - 45:40, 45:42 <b>create</b> [2] - 63:38, 71:28 <b>created</b> [1] - 7:5 <b>creature</b> [1] - 44:14 <b>credence</b> [1] - 26:33 <b>credit</b> [2] - 6:45, 56:31 <b>critical</b> [11] - 18:11, 19:28, 32:5, 47:45, 48:2, 48:7, 48:9, 48:10, 48:12, 52:22 <b>current</b> [21] - 23:19, 23:27, 27:39, 27:40, 27:46, 28:3, 28:47, 32:27, 34:10, 34:44, 41:37, 45:47, 46:5, 46:10, 46:20, 46:26, 47:33, 69:2, 69:3, 70:5, 70:21 <b>customer</b> [79] - 4:5, 6:9, 6:21, 6:27, 6:30, 6:37, 7:26, 7:31, 10:29, 13:19, 13:23, 15:29, 16:6, 17:27, 19:6, 20:18, 20:20, 20:34, 33:23, 38:20, 39:33, 40:21, 40:22, 40:30, 40:33, 40:34, 40:36, 40:37, 40:43, 40:46, 40:47, 41:6, 41:7, 42:18, 42:30, 43:6, 43:7, 43:11, 43:34, 44:14, 44:22, 45:20, 51:32, 51:35, 54:30, 54:39, 54:47, 55:43, 56:10, 57:33, 58:9, 60:29, 60:45, 61:23, 63:22, 63:24, 63:28, 63:46, 63:47, 64:3, 64:8, 64:9, 64:12, 64:23, 64:30, 64:39, 64:41, 65:3, 67:24, 67:34, 67:38, 67:40, 67:47, 71:8, 71:9, 71:11, 71:17, 71:18 <b>customer's</b> [3] - 19:10, 54:19, 64:4 <b>customer-centric</b> [1] - 58:9 <b>customers</b> [118] - 2:10, 6:9, 6:12, 6:35, 10:27, 10:30, 10:31, 10:35, 10:36, 13:28,	13:39, 14:1, 14:38, 15:30, 15:31, 17:23, 19:16, 20:8, 20:12, 20:14, 20:17, 20:24, 20:28, 20:32, 20:41, 21:3, 21:27, 21:46, 28:47, 29:18, 32:37, 32:38, 33:23, 33:25, 33:34, 33:38, 33:43, 34:3, 34:4, 34:9, 34:16, 34:17, 34:22, 35:39, 35:42, 36:26, 36:27, 36:28, 36:42, 37:29, 37:34, 38:12, 38:39, 39:16, 39:18, 40:35, 41:3, 41:4, 41:33, 42:19, 43:3, 43:4, 43:11, 44:22, 45:20, 48:27, 48:29, 49:21, 49:39, 49:41, 49:47, 50:5, 50:6, 50:25, 51:21, 51:22, 51:26, 52:33, 53:43, 54:1, 54:26, 54:45, 55:11, 55:17, 55:19, 55:20, 55:36, 55:44, 55:45, 56:3, 57:31, 57:36, 58:3, 58:29, 60:8, 60:14, 60:16, 60:26, 60:42, 61:13, 62:43, 63:19, 64:11, 64:36, 64:45, 64:47, 65:2, 68:7, 68:11, 70:3, 70:5, 70:7, 71:4 <b>customers'</b> [1] - 58:10 <b>Cuthbertson</b> [4] - 1:26, 2:21, 53:46, 55:3 <b>CUTHBERTSON</b> [2] - 55:3, 72:29 <b>cuts</b> [2] - 44:11, 47:35	<b>David</b> [5] - 9:31, 10:2, 10:4, 33:7, 34:47 <b>day-to-day</b> [1] - 45:41 <b>days</b> [1] - 72:18 <b>deal</b> [5] - 5:17, 5:26, 6:20, 22:16, 23:22 <b>dealing</b> [3] - 7:6, 51:38, 63:37 <b>debate</b> [3] - 24:18, 27:27, 44:19 <b>debit</b> [4] - 56:31, 56:35, 62:38, 63:15 <b>Deborah</b> [4] - 1:19, 2:15, 44:27, 45:2 <b>debt</b> [1] - 44:3 <b>decide</b> [1] - 67:45 <b>decided</b> [2] - 40:26, 72:36 <b>decision</b> [9] - 3:17, 33:37, 46:39, 51:13, 51:21, 51:29, 51:32, 54:44, 73:1 <b>decisions</b> [4] - 2:43, 28:31, 50:26, 72:19 <b>declined</b> [10] - 2:12, 53:27, 53:47, 55:6, 56:29, 56:32, 56:37, 56:39, 62:35, 64:2 <b>declining</b> [1] - 33:44 <b>decreases</b> [2] - 46:15, 55:45 <b>deed</b> [2] - 43:9, 43:17 <b>deemed</b> [4] - 27:13, 57:12, 57:24, 65:3 <b>deep</b> [1] - 35:36 <b>defer</b> [1] - 36:10 <b>deferral</b> [4] - 34:38, 34:39, 34:41, 42:17 <b>definitely</b> [4] - 10:11, 15:8, 29:26, 62:3 <b>deliberated</b> [1] - 33:32 <b>deliberative</b> [3] - 6:30, 28:17, 28:23 <b>delight</b> [1] - 17:12 <b>delineation</b> [1] - 61:43 <b>deliver</b> [6] - 40:40, 54:4, 59:36, 59:38, 59:39, 60:14 <b>delivered</b> [2] - 61:21, 69:3 <b>delivering</b> [6] - 6:12, 60:14, 69:13, 70:46, 71:1, 71:15 <b>demand</b> [34] - 4:5, 5:3, 5:14, 8:31, 8:35, 8:36, 9:22, 10:42, 10:47, 11:1, 11:2, 11:8, 11:9, 11:11, 11:13, 11:17, 11:19, 14:19, 14:37, 14:43,
---	--	---	---	--

17:27, 18:1, 21:16, 21:18, 22:6, 22:37, 23:13, 23:32, 23:41, 24:12, 24:39, 28:6, 31:33, 50:13 <b>demands</b> [1] - 59:9 <b>demographic</b> [1] - 59:13 <b>demonstrate</b> [1] - 54:30 <b>demonstrated</b> [2] - 54:40, 69:42 <b>demonstrating</b> [2] - 54:32, 68:36 <b>Department</b> [1] - 12:44 <b>departments</b> [1] - 23:3 <b>dependability</b> [1] - 6:15 <b>deplete</b> [2] - 31:36, 32:12 <b>depreciated</b> [1] - 18:38 <b>depreciation</b> [4] - 18:28, 18:31, 18:36, 18:40 <b>desal</b> [1] - 28:39 <b>desal</b> [1] - 14:22 <b>desalinated</b> [1] - 29:36 <b>desalination</b> [1] - 5:15 <b>deserved</b> [1] - 62:34 <b>design</b> [1] - 58:25 <b>designed</b> [1] - 58:12 <b>desperately</b> [1] - 6:24 <b>despite</b> [1] - 68:35 <b>detail</b> [4] - 11:46, 12:7, 16:47, 47:7 <b>detailed</b> [1] - 9:29 <b>details</b> [3] - 38:36, 38:41, 38:46 <b>detection</b> [1] - 50:19 <b>deteriorated</b> [1] - 49:12 <b>deteriorating</b> [2] - 45:28, 48:38 <b>deterioration</b> [1] - 48:6 <b>determination</b> [24] - 3:14, 3:19, 18:13, 20:17, 21:5, 21:24, 21:25, 22:27, 23:8, 40:2, 40:4, 40:10, 46:24, 47:34, 47:35, 48:16, 48:24, 48:35, 67:27, 67:44, 68:3, 68:45, 69:19, 73:3 <b>determinations</b> [1] - 40:9 <b>determine</b> [3] - 3:24, 15:34, 40:11 <b>determined</b> [3] - 57:42, 57:43, 67:43 <b>detrimental</b> [1] - 57:23 <b>developed</b> [2] - 34:36, 54:31 <b>developer</b> [3] - 40:8, 41:9, 51:31 <b>developers</b> [2] - 13:31, 51:42 <b>developing</b> [1] - 54:13 <b>development</b> [10] - 13:29, 32:13, 32:24, 50:44, 51:6, 51:7, 51:20, 51:25, 51:27, 52:11 <b>developments</b> [2] - 42:27, 56:10 <b>deviate</b> [1] - 40:18 <b>deviations</b> [1] - 49:33 <b>dialogue</b> [1] - 35:34 <b>dictates</b> [1] - 5:37 <b>differ</b> [1] - 61:11 <b>difference</b> [1] - 24:15 <b>differences</b> [2] - 18:22, 26:12 <b>different</b> [12] - 10:27, 10:29, 10:30, 28:40, 28:41, 47:36, 49:39, 55:36, 59:47, 60:18, 66:3, 71:23 <b>differentials</b> [1] - 10:18 <b>difficult</b> [1] - 10:18 <b>dip</b> [1] - 11:3 <b>direct</b> [5] - 56:14, 56:31, 56:34, 62:38, 63:15 <b>directed</b> [3] - 40:40, 40:45, 51:41 <b>direction</b> [5] - 12:39, 13:1, 21:6, 24:45, 68:5 <b>directly</b> [3] - 3:11, 38:13, 38:15 <b>director</b> [1] - 39:45 <b>directs</b> [1] - 12:36 <b>disappointing</b> [1] - 13:8 <b>discharge</b> [3] - 45:18, 52:44, 65:1 <b>discharges</b> [1] - 52:40 <b>disclose</b> [1] - 52:16 <b>disclosure</b> [1] - 51:40 <b>discontinued</b> [1] - 56:20 <b>discontinuity</b> [2] - 47:42, 48:31 <b>discount</b> [17] - 10:5, 20:23, 20:25, 20:29, 33:11, 33:16, 33:18, 33:27, 33:39, 33:45, 34:10, 36:17, 36:21, 36:22, 36:32, 44:7 <b>discounts</b> [3] - 10:20, 39:15, 39:19 <b>discover</b> [1] - 36:7 <b>Discretionary</b> [1] - 54:3 <b>discretionary</b> [23] - 4:17, 53:24, 53:40, 54:9, 54:14, 54:17, 54:24, 54:31, 54:42, 54:45, 57:9, 57:21, 57:29, 57:42, 58:44, 60:46, 61:15, 61:27, 61:28, 61:35, 61:42, 62:6 <b>discuss</b> [7] - 4:18, 11:45, 17:16, 24:10, 53:22, 56:46, 72:23 <b>discussed</b> [5] - 20:45, 20:46, 31:40, 69:5, 71:35 <b>discussion</b> [15] - 12:2, 17:30, 17:40, 19:42, 21:37, 24:22, 29:14, 29:27, 29:42, 34:24, 36:18, 44:20, 47:10, 53:30, 72:12 <b>discussions</b> [3] - 23:43, 53:12, 53:32 <b>disgraceful</b> [1] - 43:37 <b>dishonour</b> [1] - 63:15 <b>dishonoured</b> [8] - 2:12, 4:20, 53:27, 53:47, 55:6, 56:30, 56:40, 62:35 <b>disincentive</b> [1] - 70:6 <b>dispersed</b> [2] - 5:21, 5:25 <b>distribution</b> [1] - 14:34 <b>diverse</b> [2] - 5:25, 7:40 <b>divert</b> [1] - 52:45 <b>divided</b> [1] - 3:40 <b>dividend</b> [2] - 13:18, 13:21 <b>document</b> [1] - 70:17 <b>domestic</b> [1] - 55:14 <b>dominant</b> [1] - 43:45 <b>dominated</b> [1] - 25:5 <b>done</b> [13] - 15:43, 16:46, 21:32, 25:35, 25:42, 32:25, 38:34, 42:22, 43:14, 46:40, 50:15, 50:18, 58:26 <b>doubt</b> [1] - 23:7 <b>Douglas</b> [9] - 10:39, 10:41, 22:3, 25:3, 25:29, 25:44, 26:18, 57:4, 62:30 <b>down</b> [18] - 8:41, 8:45, 9:6, 9:12, 9:26, 10:35, 15:13, 18:14, 25:33, 26:21, 29:7, 30:42, 32:2, 37:14, 40:31, 43:36, 48:18, 62:33 <b>downward</b> [2] - 10:44, 23:28 <b>downwards</b> [1] - 22:9 <b>DPIE</b> [2] - 14:41, 31:23 <b>draft</b> [4] - 3:13, 72:43, 73:9, 73:10 <b>draw</b> [1] - 53:2 <b>drawing</b> [1] - 30:22 <b>drew</b> [1] - 58:14 <b>drinking</b> [1] - 70:4 <b>drive</b> [7] - 5:40, 6:1, 6:6, 7:9, 7:23, 37:23, 44:37 <b>driven</b> [1] - 39:19 <b>drivers</b> [5] - 4:10, 5:1, 6:41, 26:28, 55:38 <b>driving</b> [1] - 50:25 <b>drop</b> [5] - 3:8, 29:6, 53:18, 71:35, 72:24 <b>drop-in</b> [4] - 3:8, 53:18, 71:35, 72:24 <b>dropped</b> [2] - 15:12, 15:16 <b>dropping</b> [1] - 15:14 <b>drought</b> [34] - 4:6, 5:11, 6:16, 14:44, 18:17, 19:32, 19:39, 19:44, 23:23, 23:31, 23:38, 24:5, 24:23, 24:24, 24:33, 26:24, 26:25, 26:30, 26:36, 27:8, 28:14, 28:20, 30:7, 30:11, 31:2, 31:20, 31:23, 31:24, 31:26, 32:27, 68:39, 69:11 <b>drought-related</b> [2] - 24:23, 24:24 <b>drove</b> [1] - 61:34 <b>dry</b> [1] - 30:17 <b>dryer</b> [1] - 23:11 <b>due</b> [6] - 14:4, 41:42, 49:15, 61:42, 68:18, 73:10 <b>Dungog</b> [1] - 5:23 <b>during</b> [6] - 3:9, 19:38, 19:44, 47:25, 71:35, 72:38 <b>dust</b> [1] - 30:28				
<b>E</b>				
<b>early</b> [2] - 17:4, 24:40 <b>earn</b> [1] - 35:25 <b>easy</b> [2] - 6:20, 50:47 <b>ecological</b> [1] - 32:19 <b>economic</b> [3] - 12:45, 58:27, 61:43 <b>EDGERTON</b> [8] - 39:47, 47:18, 62:16, 65:38, 65:43, 66:7, 67:18, 70:42 <b>Edgerton</b> [3] - 1:24, 2:20, 39:44 <b>EDLER</b> [8] - 14:14, 15:18, 25:22, 26:15, 50:31, 51:11, 51:34, 66:16 <b>Edler</b> [1] - 14:16 <b>effect</b> [5] - 18:42, 19:47, 20:1, 52:1 <b>effectively</b> [7] - 8:4, 8:37, 37:23, 40:17, 40:41, 68:3, 68:17 <b>effects</b> [2] - 22:40, 26:34 <b>efficiency</b> [18] - 5:44, 6:1, 6:6, 7:21, 7:23, 7:31, 8:6, 14:31, 27:31, 34:4, 34:23, 34:34, 36:27, 37:5, 37:32, 37:39, 38:14, 46:36 <b>efficient</b> [26] - 3:26, 3:32, 5:27, 7:24, 7:34, 7:41, 7:42, 8:5, 18:3, 18:20, 23:35, 32:6, 35:42, 35:46, 37:30, 37:35, 38:1, 40:17, 47:4, 54:42, 65:21, 66:1, 67:30, 70:7, 70:45, 71:1 <b>efficiently</b> [3] - 7:25, 48:11, 51:8 <b>effort</b> [1] - 60:26 <b>efforts</b> [1] - 72:14 <b>eggs</b> [1] - 71:45 <b>EIC</b> [5] - 21:4, 39:39, 66:47, 67:9, 68:12 <b>either</b> [5] - 6:32, 27:12, 27:20, 36:9, 41:8 <b>elders</b> [1] - 2:6 <b>electricity</b> [2] - 50:14, 62:26 <b>electronic</b> [2] - 50:4, 63:5 <b>element</b> [2] - 6:2, 7:20 <b>elements</b> [6] - 5:1,				

<p>5:45, 6:13, 7:21, 7:22, 29:10</p> <p><b>eligible</b> [2] - 15:46, 59:5</p> <p><b>eliminated</b> [1] - 63:28</p> <p><b>email</b> [1] - 60:35</p> <p><b>emails</b> [1] - 60:33</p> <p><b>embedded</b> [1] - 61:32</p> <p><b>Emma</b> [2] - 57:47, 62:17</p> <p><b>employed</b> [1] - 58:26</p> <p><b>employment</b> [1] - 35:25</p> <p><b>empty</b> [1] - 31:31</p> <p><b>enable</b> [1] - 50:3</p> <p><b>encourage</b> [1] - 73:7</p> <p><b>encouraged</b> [2] - 26:35, 33:30</p> <p><b>encouraging</b> [1] - 20:38</p> <p><b>end</b> [14] - 17:30, 19:11, 25:47, 31:41, 33:32, 35:22, 44:39, 53:29, 56:45, 58:46, 59:25, 62:33, 68:12, 68:18</p> <p><b>ended</b> [2] - 33:37, 69:23</p> <p><b>energy</b> [7] - 35:10, 35:29, 35:32, 37:8, 38:22, 50:11, 50:14</p> <p><b>engage</b> [4] - 37:27, 49:40, 60:26, 60:41</p> <p><b>engaged</b> [5] - 24:42, 33:33, 34:13, 37:28, 47:6</p> <p><b>engagement</b> [10] - 6:9, 6:28, 6:34, 6:38, 24:37, 26:27, 29:23, 33:30, 57:30</p> <p><b>engagements</b> [1] - 6:33</p> <p><b>engages</b> [2] - 45:20, 65:33</p> <p><b>engaging</b> [3] - 29:22, 44:21, 50:39</p> <p><b>enjoy</b> [1] - 10:37</p> <p><b>enshrined</b> [1] - 44:13</p> <p><b>ensure</b> [9] - 24:6, 32:6, 45:8, 47:4, 48:46, 49:7, 54:47, 58:29, 71:22</p> <p><b>ensuring</b> [3] - 14:43, 17:23, 36:3</p> <p><b>entail</b> [1] - 11:41</p> <p><b>enter</b> [2] - 3:1, 65:2</p> <p><b>enterprise</b> [3] - 5:40, 7:9, 48:43</p> <p><b>enthusiasm</b> [1] - 37:16</p>	<p><b>enthusiastic</b> [1] - 52:31</p> <p><b>entire</b> [3] - 52:11, 57:33, 60:45</p> <p><b>environment</b> [6] - 6:18, 23:3, 45:18, 54:10, 67:7, 71:28</p> <p><b>environmental</b> [24] - 3:28, 6:19, 11:27, 11:31, 12:9, 20:44, 21:1, 21:9, 25:40, 32:47, 39:4, 39:29, 39:47, 42:41, 45:13, 45:16, 45:28, 49:26, 62:8, 66:40, 67:4, 68:9, 68:24</p> <p><b>EPA</b> [3] - 11:34, 12:43, 49:27</p> <p><b>equitably</b> [1] - 39:32</p> <p><b>equity</b> [4] - 8:44, 25:27, 27:39, 36:44</p> <p><b>essence</b> [4] - 12:37, 15:5, 38:2, 51:19</p> <p><b>essentially</b> [8] - 18:10, 18:27, 18:30, 18:42, 20:10, 20:18, 21:28, 26:18</p> <p><b>established</b> [2] - 55:31, 67:26</p> <p><b>estimate</b> [8] - 9:6, 20:33, 22:40, 23:6, 26:3, 50:47, 58:37, 59:4</p> <p><b>estimates</b> [2] - 28:40, 29:3</p> <p><b>estimating</b> [1] - 11:9</p> <p><b>et</b> [3] - 60:19, 62:10, 72:2</p> <p><b>ethos</b> [1] - 70:25</p> <p><b>evaporates</b> [1] - 31:6</p> <p><b>evaporation</b> [5] - 30:20, 30:21, 32:9, 32:15, 32:25</p> <p><b>evening</b> [1] - 3:8</p> <p><b>event</b> [6] - 3:2, 17:37, 47:44, 47:45, 48:4, 50:5</p> <p><b>evidence</b> [9] - 42:19, 47:25, 47:32, 48:3, 48:6, 48:37, 48:40, 54:34, 71:17</p> <p><b>evidenced</b> [1] - 40:34</p> <p><b>ex</b> [1] - 61:21</p> <p><b>exact</b> [2] - 5:24, 13:12</p> <p><b>exactly</b> [2] - 5:24, 30:46</p> <p><b>example</b> [22] - 14:47, 17:18, 22:42, 36:7, 37:7, 38:29, 40:20, 47:26, 48:15, 49:16,</p>	<p>50:6, 51:30, 52:39, 55:34, 56:9, 56:23, 61:2, 61:23, 62:24, 64:22, 64:42, 67:44</p> <p><b>examples</b> [3] - 48:37, 50:10, 51:23</p> <p><b>exceeds</b> [1] - 55:14</p> <p><b>excellent</b> [1] - 17:2</p> <p><b>exceptional</b> [2] - 23:20, 23:23</p> <p><b>excess</b> [1] - 27:12</p> <p><b>excessive</b> [3] - 30:26, 39:20, 48:30</p> <p><b>Excuse</b> [1] - 42:10</p> <p><b>excuse</b> [1] - 16:37</p> <p><b>executive</b> [2] - 2:19, 39:44</p> <p><b>exercise</b> [1] - 28:37</p> <p><b>exerted</b> [1] - 31:34</p> <p><b>exhausted</b> [1] - 66:22</p> <p><b>existing</b> [5] - 13:38, 14:1, 28:45, 41:11, 50:34</p> <p><b>exists</b> [2] - 39:42, 56:9</p> <p><b>expand</b> [1] - 41:20</p> <p><b>expansion</b> [1] - 13:29</p> <p><b>expect</b> [2] - 10:19, 14:6</p> <p><b>expecting</b> [1] - 35:8</p> <p><b>expenditure</b> [84] - 4:9, 4:12, 5:1, 5:2, 5:14, 7:13, 7:46, 8:10, 8:12, 8:14, 9:24, 18:17, 19:25, 26:13, 29:13, 44:30, 44:33, 44:36, 44:37, 45:8, 45:24, 45:26, 45:38, 45:39, 45:40, 45:41, 45:46, 45:47, 46:5, 46:7, 46:8, 46:12, 46:13, 46:14, 46:18, 46:21, 46:22, 46:23, 46:30, 46:32, 46:36, 46:37, 46:38, 46:42, 46:44, 46:45, 46:46, 46:47, 47:4, 47:7, 47:20, 47:22, 47:26, 47:28, 47:29, 47:33, 48:16, 48:23, 53:41, 54:3, 54:5, 54:9, 54:14, 54:24, 54:31, 54:41, 54:42, 54:46, 57:9, 57:21, 57:29, 57:43, 60:12, 61:16, 61:27, 61:28, 61:35, 61:36, 62:6, 65:34, 65:39, 66:10</p> <p><b>expense</b> [2] - 8:3, 64:22</p> <p><b>expenses</b> [2] - 63:45,</p>	<p>64:35</p> <p><b>expensive</b> [2] - 12:25, 41:39</p> <p><b>experience</b> [1] - 32:10</p> <p><b>experiencing</b> [1] - 48:29</p> <p><b>expert</b> [4] - 23:4, 47:6, 52:31, 66:10</p> <p><b>expertise</b> [1] - 37:40</p> <p><b>experts</b> [3] - 9:29, 9:33, 58:27</p> <p><b>explain</b> [1] - 58:3</p> <p><b>explained</b> [2] - 16:24, 36:43</p> <p><b>explore</b> [5] - 19:37, 20:45, 50:40, 69:7, 69:16</p> <p><b>explored</b> [2] - 28:7, 28:21</p> <p><b>exploring</b> [2] - 19:31, 44:25</p> <p><b>exposes</b> [1] - 19:17</p> <p><b>expressed</b> [1] - 2:40</p> <p><b>extend</b> [1] - 19:13</p> <p><b>extended</b> [2] - 3:7, 21:5</p> <p><b>extending</b> [1] - 13:37</p> <p><b>extension</b> [3] - 13:30, 13:41, 14:2</p> <p><b>extensive</b> [1] - 27:41</p> <p><b>extent</b> [5] - 15:39, 20:33, 40:21, 70:47, 71:6</p> <p><b>external</b> [4] - 40:33, 40:36, 67:37, 68:23</p> <p><b>extra</b> [4] - 20:34, 27:21, 44:8, 63:8</p> <p><b>extraction</b> [1] - 62:9</p> <p><b>extraordinary</b> [1] - 36:37</p> <p><b>extreme</b> [2] - 23:34, 24:41</p> <p><b>extremely</b> [2] - 30:21, 52:32</p>	<p><b>failed</b> [1] - 48:4</p> <p><b>failure</b> [8] - 47:39, 47:43, 47:44, 47:45, 48:8, 48:11, 48:40, 63:16</p> <p><b>failures</b> [5] - 48:26, 62:39, 63:14, 63:34, 63:35</p> <p><b>fair</b> [5] - 16:20, 39:18, 39:24, 58:22, 62:17</p> <p><b>fairly</b> [2] - 48:33, 53:41</p> <p><b>faith</b> [1] - 22:19</p> <p><b>fall</b> [1] - 62:12</p> <p><b>falling</b> [1] - 14:26</p> <p><b>fan</b> [1] - 24:25</p> <p><b>fantastic</b> [2] - 37:5, 38:5</p> <p><b>far</b> [2] - 37:2, 66:30</p> <p><b>fast</b> [1] - 31:8</p> <p><b>favour</b> [2] - 8:24, 28:19</p> <p><b>feasible</b> [1] - 32:14</p> <p><b>fee</b> [3] - 56:40, 63:9, 63:15</p> <p><b>feedback</b> [16] - 2:41, 3:8, 3:10, 19:37, 19:42, 20:40, 21:12, 21:30, 21:38, 28:11, 28:16, 28:22, 58:15, 72:33, 72:39, 72:46</p> <p><b>fees</b> [16] - 2:13, 2:43, 3:17, 4:18, 4:20, 8:11, 53:27, 53:47, 55:7, 55:35, 56:30, 56:31, 62:35, 63:4, 63:6, 63:16</p> <p><b>fellow</b> [1] - 2:17</p> <p><b>few</b> [10] - 3:37, 37:12, 42:1, 43:22, 47:9, 49:38, 63:17, 63:18, 65:25, 72:18</p> <p><b>field</b> [2] - 5:24, 7:24</p> <p><b>fields</b> [1] - 42:24</p> <p><b>fifth</b> [5] - 15:12, 15:14, 15:15, 19:11, 19:13</p> <p><b>fighting</b> [2] - 65:21, 65:32</p> <p><b>figure</b> [4] - 26:9, 30:36, 31:6, 41:27</p> <p><b>figures</b> [4] - 22:7, 30:32, 30:33, 30:43</p> <p><b>final</b> [14] - 3:17, 3:19, 3:40, 14:4, 33:29, 53:3, 66:23, 66:27, 71:36, 72:6, 72:8, 73:1, 73:3</p> <p><b>finally</b> [4] - 6:23, 9:15, 54:44, 73:7</p> <p><b>finances</b> [1] - 60:23</p> <p><b>financial</b> [6] - 9:32,</p>
<b>F</b>				
<p><b>face</b> [1] - 60:42</p> <p><b>facet</b> [1] - 5:41</p> <p><b>facets</b> [1] - 5:39</p> <p><b>facilities</b> [2] - 55:12, 55:39</p> <p><b>facility</b> [1] - 17:37</p> <p><b>fact</b> [8] - 19:11, 29:35, 34:30, 34:33, 48:40, 66:1, 68:11, 70:36</p> <p><b>factors</b> [1] - 22:14</p> <p><b>fail</b> [3] - 47:42, 48:31, 49:21</p>				



13:12, 13:23, 62:44, 63:4, 63:39 <b>financing</b> [1] - 67:14 <b>fine</b> [1] - 24:12 <b>fingertips</b> [1] - 15:38 <b>finished</b> [2] - 11:39, 51:47 <b>finite</b> [1] - 5:43 <b>Fire</b> [1] - 65:13 <b>fire</b> [2] - 65:21, 65:32 <b>fire-fighting</b> [2] - 65:21, 65:32 <b>firms</b> [1] - 55:47 <b>first</b> [21] - 4:1, 5:7, 7:37, 10:6, 12:16, 17:15, 19:45, 21:44, 21:47, 25:38, 30:6, 34:36, 39:30, 44:39, 54:14, 54:18, 57:9, 69:32, 70:19, 71:15, 72:13 <b>first-hand</b> [2] - 10:6, 72:13 <b>fits</b> [1] - 54:25 <b>five</b> [11] - 5:10, 15:11, 18:14, 19:3, 20:30, 21:19, 36:10, 46:8, 59:19, 63:45, 64:35 <b>five-year</b> [3] - 5:10, 20:30, 21:19 <b>fixed</b> [15] - 3:31, 8:41, 8:43, 8:45, 8:47, 19:8, 19:10, 19:30, 19:40, 26:11, 26:24, 31:14, 43:29, 70:3, 70:6 <b>flagged</b> [2] - 12:26, 28:2 <b>flat</b> [1] - 59:5 <b>fleetingly</b> [1] - 64:39 <b>flexibility</b> [1] - 5:17 <b>flip</b> [1] - 19:44 <b>flip-side</b> [1] - 19:44 <b>flooding</b> [1] - 59:30 <b>floor</b> [9] - 3:46, 4:25, 15:20, 16:34, 29:47, 47:16, 52:26, 66:13, 66:29 <b>Flow</b> [3] - 14:16, 51:23, 51:30 <b>flow</b> [1] - 31:22 <b>focus</b> [8] - 5:36, 6:21, 14:36, 41:34, 44:32, 52:19, 65:35, 68:16 <b>focused</b> [2] - 3:40, 71:24 <b>focusing</b> [1] - 49:30 <b>following</b> [4] - 3:13, 67:1, 73:1, 73:10 <b>foot</b> [1] - 21:45	<b>footage</b> [1] - 42:12 <b>footprint</b> [1] - 62:24 <b>FOR</b> [1] - 1:14 <b>force</b> [1] - 7:24 <b>forced</b> [1] - 52:41 <b>forecast</b> [16] - 8:1, 8:2, 8:33, 8:35, 8:36, 9:22, 10:43, 11:5, 11:8, 11:12, 11:19, 17:26, 22:8, 22:34, 23:41, 46:30 <b>forecasting</b> [6] - 10:7, 22:18, 22:20, 22:37, 22:45, 23:14 <b>forecasts</b> [10] - 4:5, 8:31, 10:42, 10:47, 14:20, 21:16, 22:8, 23:32, 24:12, 45:36 <b>forgive</b> [1] - 69:46 <b>form</b> [2] - 33:17, 59:47 <b>formal</b> [3] - 53:18, 54:13, 64:23 <b>formally</b> [1] - 58:15 <b>format</b> [1] - 3:7 <b>former</b> [2] - 22:44, 66:46 <b>forms</b> [1] - 62:10 <b>formula</b> [3] - 40:10, 40:16, 40:19 <b>forth</b> [1] - 56:15 <b>fortunate</b> [1] - 7:2 <b>forum</b> [2] - 28:17, 28:23 <b>forums</b> [1] - 6:30 <b>forward</b> [14] - 4:38, 5:39, 7:11, 7:42, 11:41, 23:47, 41:5, 41:27, 41:28, 43:35, 48:34, 69:12, 70:10, 71:34 <b>four</b> [17] - 3:15, 4:13, 5:8, 5:11, 5:16, 6:13, 9:21, 14:27, 15:11, 18:15, 21:19, 23:10, 30:13, 46:46, 56:27, 59:37, 72:45 <b>four-year</b> [7] - 5:8, 5:11, 5:16, 9:21, 14:27, 23:10, 59:37 <b>fourth</b> [1] - 19:11 <b>framework</b> [8] - 23:28, 23:36, 27:10, 27:22, 48:44, 54:37, 69:2, 71:13 <b>fraught</b> [1] - 38:10 <b>free</b> [1] - 72:23 <b>frequently</b> [1] - 43:3 <b>FROM</b> [1] - 1:14 <b>front</b> [2] - 41:9, 46:43 <b>full</b> [3] - 15:32, 33:38,	39:33 <b>fully</b> [2] - 25:16, 61:16 <b>function</b> [2] - 31:24, 32:21 <b>Function</b> [1] - 1:28 <b>fund</b> [7] - 21:2, 21:6, 39:18, 39:32, 40:27, 40:37, 68:13 <b>fundamental</b> [4] - 6:16, 6:23, 6:38, 64:34 <b>fundamentally</b> [1] - 6:8 <b>funded</b> [9] - 11:31, 40:5, 40:21, 40:25, 40:29, 40:32, 67:23, 67:28, 68:6 <b>funding</b> [6] - 42:8, 42:16, 67:34, 67:43, 67:47, 68:11 <b>funds</b> [1] - 26:3 <b>future</b> [11] - 7:46, 22:27, 25:16, 25:25, 26:5, 26:6, 29:35, 45:27, 68:39, 69:29, 69:31	40:40, 40:45, 40:46, 50:43, 67:12, 67:45, 68:4, 68:5 <b>Graham</b> [7] - 4:42, 9:39, 10:22, 18:6, 18:21, 48:43, 58:7 <b>Graham's</b> [1] - 47:19 <b>Grahamstown</b> [3] - 30:15, 32:16, 32:24 <b>grant</b> [1] - 67:45 <b>graph</b> [2] - 7:14, 46:4 <b>graphics</b> [1] - 16:24 <b>gravity</b> [1] - 48:19 <b>great</b> [7] - 18:46, 19:47, 21:21, 37:11, 52:31, 57:44, 72:13 <b>greater</b> [6] - 19:25, 47:7, 47:34, 48:30, 50:3, 55:12 <b>green</b> [1] - 18:31 <b>ground</b> [1] - 37:24 <b>grounds</b> [1] - 57:34 <b>group</b> [1] - 71:47 <b>groups</b> [2] - 6:30, 70:11 <b>grows</b> [1] - 66:3 <b>growth</b> [15] - 7:20, 8:2, 8:4, 8:6, 9:25, 14:44, 46:33, 50:37, 50:42, 50:44, 50:45, 51:1, 51:13, 52:8 <b>guess</b> [10] - 19:9, 26:18, 26:28, 29:13, 40:4, 47:20, 51:40, 52:14, 69:21, 71:46 <b>guidance</b> [4] - 34:38, 42:21, 42:25, 68:26 <b>guidelines</b> [3] - 34:43, 42:3, 69:8	<b>harvesting</b> [4] - 68:35, 68:38, 68:47, 69:16 <b>hate</b> [1] - 25:32 <b>HAUES</b> [11] - 10:14, 16:37, 16:44, 17:2, 35:6, 36:6, 36:35, 38:5, 39:1, 41:16, 41:46 <b>Haues</b> [1] - 10:14 <b>Hayes</b> [3] - 9:32, 10:4, 13:16 <b>HAYES</b> [10] - 10:4, 13:16, 15:10, 16:31, 33:9, 34:9, 34:27, 35:2, 36:16, 49:37 <b>head</b> [1] - 37:13 <b>Health</b> [1] - 12:44 <b>health</b> [4] - 6:32, 11:35, 67:4, 68:24 <b>hear</b> [5] - 10:6, 36:12, 37:20, 72:13, 72:40 <b>heard</b> [2] - 50:17, 73:1 <b>hearing</b> [19] - 2:8, 2:11, 2:39, 3:3, 3:6, 3:7, 3:13, 3:37, 3:39, 4:27, 4:34, 6:23, 9:36, 42:13, 56:29, 56:30, 71:37, 72:17, 72:22 <b>hearings</b> [2] - 58:16, 72:40 <b>Height</b> [1] - 69:35 <b>Held</b> [1] - 1:28 <b>help</b> [6] - 26:29, 37:21, 38:28, 38:33, 38:36, 52:18 <b>hence</b> [2] - 17:23, 31:34 <b>Hexham</b> [4] - 66:42, 67:4, 67:7, 67:13 <b>hi</b> [4] - 17:11, 55:3, 63:12, 68:31 <b>hierarchy</b> [1] - 42:8 <b>high</b> [13] - 5:12, 6:9, 20:9, 29:43, 30:21, 30:36, 32:11, 48:8, 50:17, 55:37, 56:1, 70:6, 70:26 <b>high-risk</b> [1] - 48:8 <b>high-strength</b> [1] - 56:1 <b>higher</b> [22] - 7:47, 10:45, 11:13, 11:19, 19:4, 19:24, 21:18, 22:38, 23:37, 24:13, 29:25, 29:37, 42:30, 45:45, 46:12, 46:23, 46:30, 49:34, 50:11, 54:38, 55:11, 71:7 <b>highest</b> [3] - 29:17,
<b>G</b>				
<b>g'day</b> [1] - 65:13 <b>gaining</b> [1] - 20:40 <b>gains</b> [2] - 7:31, 8:7 <b>garden</b> [1] - 69:34 <b>gardens</b> [1] - 59:45 <b>gender</b> [1] - 59:15 <b>general</b> [6] - 3:23, 10:7, 10:17, 16:46, 25:14, 70:44 <b>generalisation</b> [1] - 10:33 <b>generally</b> [5] - 35:7, 57:17, 61:39, 65:8, 71:13 <b>generated</b> [2] - 40:33, 40:36 <b>genuine</b> [1] - 27:23 <b>genuinely</b> [1] - 58:8 <b>Gillieston</b> [1] - 69:34 <b>given</b> [14] - 5:11, 8:26, 9:23, 16:8, 19:44, 20:2, 20:13, 34:11, 46:31, 48:7, 60:18, 63:14, 63:35 <b>goalposts</b> [1] - 11:39 <b>goods</b> [1] - 61:10 <b>government</b> [18] - 5:22, 11:34, 12:36, 12:39, 12:47, 13:11, 21:6, 27:41, 40:26,				
<b>H</b>				
<b>half</b> [1] - 5:30 <b>hand</b> [6] - 7:14, 7:29, 10:6, 17:6, 56:46, 72:13 <b>handle</b> [1] - 52:44 <b>happy</b> [5] - 10:41, 38:41, 38:45, 59:8, 72:40 <b>Harbourview</b> [1] - 1:28 <b>hard</b> [6] - 6:24, 26:19, 50:1, 50:2, 52:32, 52:36 <b>harder</b> [2] - 10:28, 33:31 <b>hardship</b> [3] - 63:23, 63:24, 63:29				

<p>48:47, 63:16  <b>highlighted</b> [1] - 65:20  <b>historic</b> [3] - 11:1, 47:20, 50:22  <b>historical</b> [1] - 45:34  <b>historically</b> [1] - 62:47  <b>history</b> [3] - 29:16, 33:15, 34:6  <b>hit</b> [1] - 37:24  <b>hitting</b> [1] - 23:37  <b>hold</b> [2] - 56:29, 61:24  <b>holder</b> [1] - 63:47  <b>hope</b> [3] - 21:37, 41:21, 61:24  <b>hopefully</b> [1] - 58:2  <b>horizons</b> [1] - 28:41  <b>hose</b> [1] - 37:13  <b>hot</b> [2] - 23:9  <b>hotels</b> [1] - 56:4  <b>hotter</b> [1] - 11:15  <b>hours</b> [2] - 3:10, 72:38  <b>house</b> [7] - 9:4, 9:15, 14:6, 16:1, 16:24, 43:20, 59:5  <b>household</b> [7] - 15:47, 29:38, 35:24, 37:12, 43:16, 58:36, 58:37  <b>household's</b> [1] - 54:22  <b>households</b> [2] - 27:11, 38:16  <b>houses</b> [4] - 8:41, 16:9, 19:23, 43:17  <b>huge</b> [2] - 8:1, 30:22  <b>Hunter</b> [199] - 2:9, 2:13, 2:27, 2:31, 2:35, 2:43, 3:17, 3:26, 3:31, 3:38, 4:1, 4:2, 4:8, 4:11, 4:16, 4:36, 4:37, 4:42, 4:43, 4:47, 7:34, 9:27, 10:1, 10:14, 10:26, 11:30, 12:36, 13:9, 13:11, 13:16, 13:39, 14:15, 14:20, 14:31, 14:42, 15:1, 15:30, 15:33, 15:37, 16:8, 16:31, 17:8, 17:17, 17:26, 17:46, 18:6, 18:7, 18:12, 18:20, 18:25, 18:37, 18:45, 19:2, 19:12, 19:18, 19:21, 19:29, 19:45, 20:6, 20:16, 20:32, 20:38, 20:47, 21:9, 21:11, 21:16, 21:24, 21:35, 23:45, 24:36, 24:43, 25:23, 25:37, 26:10, 26:26, 27:32, 27:40, 28:25,</p>	<p>28:36, 30:13, 30:19, 30:31, 31:2, 31:5, 31:26, 32:6, 33:30, 34:22, 34:31, 35:8, 35:18, 35:28, 35:36, 36:32, 36:37, 37:4, 37:11, 37:40, 38:8, 38:32, 39:23, 40:13, 40:19, 40:31, 40:40, 41:11, 41:19, 41:34, 41:40, 43:6, 43:7, 43:20, 43:36, 44:10, 44:13, 44:21, 44:30, 44:32, 44:34, 45:7, 45:12, 45:19, 45:23, 45:25, 45:35, 45:45, 46:6, 46:10, 46:21, 46:22, 46:23, 46:26, 46:31, 46:44, 47:3, 47:6, 47:18, 51:41, 52:8, 52:30, 53:13, 53:23, 53:26, 53:42, 54:16, 54:34, 55:18, 55:20, 55:21, 55:24, 55:30, 55:32, 55:37, 56:7, 56:17, 56:34, 56:36, 56:39, 57:39, 57:47, 58:8, 58:28, 59:31, 59:35, 60:36, 62:12, 63:12, 63:27, 64:23, 65:16, 65:17, 65:28, 65:46, 66:44, 67:9, 67:33, 67:35, 67:43, 68:4, 68:34, 68:36, 68:37, 69:3, 69:24, 69:26, 69:28, 70:3, 70:16, 70:45, 71:2, 71:8, 71:10, 71:22, 71:29, 71:45, 72:19  <b>HUNTER</b> [1] - 1:14  <b>Hunter's</b> [3] - 18:15, 21:39, 46:7  <b>Hunter-Water's</b> [1] - 17:8  <b>hypothecated</b> [1] - 38:15  <b>hypothecating</b> [1] - 38:31  <b>hypothetical</b> [1] - 28:38</p>	<p><b>ideas</b> [1] - 60:41  <b>identified</b> [1] - 53:15  <b>identifies</b> [1] - 63:28  <b>identify</b> [3] - 4:29, 52:2, 52:18  <b>immeasurable</b> [1] - 20:1  <b>immediate</b> [1] - 30:14  <b>immediately</b> [1] - 63:26  <b>impact</b> [20] - 5:13, 9:16, 10:15, 10:24, 19:31, 19:32, 20:27, 24:14, 24:27, 34:3, 35:41, 35:44, 35:45, 36:46, 37:24, 39:4, 59:9, 60:9, 64:8  <b>impacted</b> [1] - 20:41  <b>impacting</b> [1] - 8:37  <b>impacts</b> [8] - 9:4, 11:14, 15:29, 49:2, 55:41, 59:3, 60:17, 68:24  <b>impaired</b> [1] - 35:22  <b>impediment</b> [1] - 36:8  <b>imperatives</b> [1] - 37:22  <b>implement</b> [3] - 23:33, 27:4, 27:8  <b>implemented</b> [1] - 68:46  <b>implementing</b> [1] - 38:42  <b>implications</b> [1] - 47:25  <b>important</b> [28] - 2:39, 4:6, 6:31, 7:42, 13:18, 13:26, 13:37, 13:46, 17:18, 17:23, 17:27, 21:23, 22:19, 24:1, 24:3, 24:9, 24:22, 29:18, 32:18, 32:19, 32:41, 35:15, 36:29, 41:37, 49:38, 50:24, 52:21, 53:23  <b>importantly</b> [2] - 31:25, 69:2  <b>imposed</b> [2] - 56:42, 68:4  <b>imposition</b> [1] - 12:13  <b>impression</b> [1] - 35:35  <b>impressions</b> [1] - 60:38  <b>improve</b> [5] - 54:10, 65:20, 65:26, 65:47  <b>improvement</b> [12] - 11:27, 11:31, 12:10, 20:44, 21:1, 21:10, 32:47, 39:30, 40:1, 42:41, 66:41, 68:10</p>	<p><b>improvements</b> [3] - 59:43, 61:2, 65:29  <b>improving</b> [3] - 14:30, 62:11, 72:39  <b>inacceptable</b> [1] - 49:22  <b>incentive</b> [2] - 41:25, 71:29  <b>incentives</b> [1] - 70:13  <b>incentivised</b> [2] - 70:37, 72:2  <b>incidence</b> [1] - 35:20  <b>inclined</b> [1] - 38:11  <b>inclining</b> [8] - 27:5, 27:24, 27:30, 28:20, 28:31, 28:33, 32:36, 36:20  <b>include</b> [11] - 3:7, 17:17, 30:34, 30:41, 34:15, 40:45, 40:47, 58:3, 58:42, 65:32, 71:8  <b>included</b> [7] - 31:46, 40:10, 47:5, 53:23, 57:27, 62:1, 68:2  <b>includes</b> [9] - 4:4, 7:9, 31:14, 43:16, 43:17, 45:14, 54:5, 56:14, 57:35  <b>including</b> [14] - 4:16, 4:19, 10:8, 12:43, 19:3, 24:37, 31:26, 56:9, 61:20, 69:7, 69:10, 69:12, 69:39, 73:9  <b>income</b> [2] - 35:26, 59:15  <b>incorporate</b> [1] - 58:9  <b>increase</b> [25] - 8:1, 8:2, 9:26, 11:18, 18:36, 19:22, 19:29, 19:38, 20:30, 21:20, 21:21, 28:44, 28:46, 45:23, 47:29, 48:3, 48:16, 48:22, 49:15, 54:19, 55:26, 56:21, 56:23, 56:25  <b>increased</b> [6] - 7:13, 45:26, 47:22, 58:39, 61:4, 66:4  <b>increases</b> [8] - 10:8, 19:2, 23:32, 46:15, 53:43, 55:44, 55:46, 56:5  <b>increasing</b> [6] - 4:12, 7:10, 8:46, 19:46, 21:20, 22:34  <b>increasingly</b> [2] - 36:26, 63:5  <b>incredibly</b> [1] - 61:45</p>	<p><b>incur</b> [2] - 24:14, 64:22  <b>incurred</b> [3] - 63:46, 64:35, 64:40  <b>indeed</b> [2] - 32:17, 69:13  <b>INDEPENDENT</b> [1] - 1:11  <b>independent</b> [2] - 11:9, 65:33  <b>Independent</b> [1] - 2:16  <b>independently</b> [3] - 23:2, 23:5, 35:9  <b>indicate</b> [1] - 63:23  <b>indicated</b> [3] - 20:37, 28:18, 57:16  <b>indicates</b> [1] - 61:30  <b>indicating</b> [2] - 57:40, 59:27  <b>indication</b> [1] - 69:15  <b>indicative</b> [2] - 10:28, 28:39  <b>individual</b> [3] - 36:11, 38:21, 65:4  <b>individually</b> [3] - 35:18, 35:19, 36:46  <b>industrial</b> [9] - 10:31, 11:16, 20:7, 20:8, 20:24, 34:37, 55:10, 55:17, 55:47  <b>industries</b> [2] - 23:3, 35:31  <b>industry</b> [4] - 23:1, 37:18, 58:23, 59:24  <b>infancy</b> [1] - 58:24  <b>inflation</b> [5] - 6:25, 9:4, 9:17, 10:36, 19:3  <b>influence</b> [2] - 13:21, 30:16  <b>inform</b> [1] - 2:12  <b>informal</b> [1] - 59:25  <b>informally</b> [1] - 58:15  <b>information</b> [18] - 2:32, 6:5, 15:38, 22:13, 46:33, 51:36, 51:40, 52:6, 52:9, 52:16, 57:18, 57:20, 57:23, 59:13, 60:7, 62:37, 72:47, 73:8  <b>informed</b> [1] - 55:32  <b>informs</b> [1] - 57:19  <b>infrastructure</b> [5] - 18:26, 33:20, 34:31, 38:28, 51:9  <b>initial</b> [3] - 28:16, 28:22, 58:34  <b>initiative</b> [1] - 6:35  <b>initiatives</b> [5] - 8:13, 14:39, 36:28, 36:30,</p>
--	--	--	---	---

<p>37:7  <b>input</b> [1] - 35:11  <b>inputs</b> [1] - 22:14  <b>insignificant</b> [1] - 19:26  <b>instance</b> [2] - 8:11, 38:12  <b>institution</b> [2] - 62:44, 63:27  <b>institutions</b> [1] - 63:37  <b>instruction</b> [1] - 37:14  <b>insurmountable</b> [1] - 60:20  <b>integrated</b> [2] - 27:6, 27:10  <b>intellectual</b> [1] - 61:46  <b>intelligence</b> [1] - 52:10  <b>intend</b> [3] - 7:41, 8:43, 57:16  <b>intent</b> [3] - 63:25, 63:30, 63:38  <b>inter</b> [1] - 25:27  <b>inter-price</b> [1] - 25:27  <b>interact</b> [2] - 49:40, 49:47  <b>interacting</b> [1] - 51:41  <b>interacts</b> [2] - 26:46, 29:29  <b>interconnected</b> [1] - 25:7  <b>interest</b> [7] - 8:21, 8:26, 8:36, 9:22, 18:11, 18:43, 18:47  <b>interested</b> [7] - 10:6, 20:40, 21:12, 21:38, 37:20, 38:35, 41:26  <b>interesting</b> [1] - 38:34  <b>interfaces</b> [1] - 63:37  <b>intergenerational</b> [2] - 25:27, 27:39  <b>internal</b> [1] - 34:24  <b>internally</b> [2] - 50:25, 52:5  <b>internet</b> [1] - 31:25  <b>interrupt</b> [1] - 42:11  <b>introduce</b> [5] - 4:22, 4:43, 9:30, 17:39, 70:19  <b>introduction</b> [1] - 17:8  <b>invest</b> [5] - 46:39, 48:41, 49:7, 49:23, 70:7  <b>invested</b> [2] - 49:46, 50:11  <b>investigate</b> [1] - 20:38  <b>investigation</b> [1] - 69:1  <b>investigative</b> [1] - 14:45</p>	<p><b>investing</b> [3] - 18:26, 24:6, 48:46  <b>investment</b> [29] - 6:21, 6:42, 6:45, 6:46, 7:4, 7:10, 7:17, 7:23, 7:27, 7:30, 9:31, 14:29, 14:32, 14:46, 15:12, 31:47, 46:33, 48:4, 48:44, 48:47, 49:9, 49:31, 49:35, 50:2, 50:8, 51:2, 51:14, 51:15, 52:2  <b>investments</b> [4] - 5:41, 6:7, 15:7, 52:17  <b>invite</b> [8] - 3:45, 4:23, 17:33, 33:7, 39:44, 44:41, 57:5, 66:29  <b>invited</b> [1] - 4:25  <b>involve</b> [1] - 54:9  <b>involved</b> [6] - 6:29, 35:11, 40:3, 41:20, 63:3, 69:27  <b>IPART</b> [38] - 2:16, 2:18, 3:16, 12:17, 13:20, 20:37, 21:29, 21:35, 28:27, 28:33, 29:11, 30:42, 33:26, 33:29, 34:37, 34:39, 34:41, 40:3, 40:8, 40:45, 42:1, 44:34, 46:5, 46:19, 51:38, 52:15, 53:20, 55:3, 58:16, 65:24, 65:33, 67:19, 68:5, 68:25, 69:8, 70:11, 70:43, 72:10  <b>IPART's</b> [10] - 2:9, 2:19, 3:11, 33:34, 42:8, 42:16, 42:21, 42:25, 67:10, 73:7  <b>irrigate</b> [1] - 42:24  <b>irrigation</b> [2] - 54:20, 59:45  <b>Island</b> [1] - 41:19  <b>Israel</b> [1] - 31:16  <b>issue</b> [19] - 12:12, 16:27, 19:28, 23:17, 24:45, 25:12, 26:45, 32:9, 32:10, 32:26, 35:29, 35:30, 36:22, 43:26, 43:34, 44:13, 52:21, 63:26, 64:26  <b>issued</b> [1] - 42:25  <b>issues</b> [42] - 2:24, 2:25, 2:26, 2:29, 2:31, 2:36, 4:2, 4:15, 7:5, 11:46, 12:44, 14:10, 17:8, 17:16, 17:46, 18:10, 21:13,</p>	<p>21:35, 21:47, 22:1, 25:2, 25:7, 27:38, 28:5, 34:46, 35:13, 35:44, 39:4, 42:42, 42:45, 44:25, 53:8, 53:13, 53:15, 53:16, 53:20, 57:6, 62:31, 66:22, 72:34  <b>IT</b> [1] - 49:46  <b>item</b> [1] - 37:12  <b>itself</b> [1] - 26:12</p> <p><b>J</b></p> <p><b>Jen</b> [1] - 9:32  <b>Jenny</b> [1] - 13:16  <b>jobs</b> [1] - 35:23  <b>John</b> [2] - 1:24, 2:20  <b>join</b> [1] - 9:43  <b>joined</b> [1] - 2:17  <b>judgment</b> [1] - 33:40  <b>JULY</b> [1] - 1:14  <b>July</b> [11] - 2:11, 2:28, 3:21, 8:20, 18:8, 21:10, 30:43, 39:40, 67:10, 72:20, 73:5  <b>June</b> [2] - 3:20, 73:4  <b>justification</b> [2] - 41:41, 62:45  <b>justified</b> [2] - 33:26, 69:17</p> <p><b>K</b></p> <p><b>keen</b> [4] - 23:42, 60:40, 71:21, 71:28  <b>keep</b> [1] - 6:25  <b>keeping</b> [1] - 33:22  <b>key</b> [15] - 2:25, 4:2, 4:10, 5:37, 5:44, 7:26, 12:9, 12:12, 14:39, 17:8, 17:46, 18:10, 18:32, 41:34, 47:46  <b>kick</b> [1] - 44:27  <b>kicking</b> [2] - 25:33, 26:20  <b>kilolitre</b> [6] - 19:4, 19:5, 20:9, 20:19, 30:44, 33:10  <b>kilolitres</b> [6] - 9:5, 9:11, 9:16, 15:34, 15:42, 20:11  <b>kilometre</b> [1] - 48:20  <b>kind</b> [2] - 21:23, 25:47  <b>known</b> [2] - 16:18, 28:37  <b>Kooragang</b> [2] - 34:37, 41:19</p>	<p><b>Kumi</b> [5] - 1:26, 2:21, 53:46, 55:3, 57:2</p> <p><b>L</b></p> <p><b>label</b> [1] - 16:28  <b>labour</b> [4] - 46:16, 56:14, 56:36, 56:42  <b>Lake</b> [1] - 69:39  <b>land</b> [3] - 2:4, 13:32, 14:6  <b>landlord</b> [8] - 16:10, 43:18, 43:19, 43:22, 44:2, 44:3, 44:9, 64:29  <b>landlord's</b> [1] - 44:11  <b>landlords</b> [6] - 16:9, 43:44, 44:6, 44:7, 64:17, 64:20  <b>Lands</b> [1] - 66:46  <b>large</b> [19] - 20:7, 20:27, 20:32, 30:32, 32:16, 32:17, 33:10, 33:13, 33:45, 34:10, 35:32, 37:44, 39:16, 39:19, 41:32, 43:2, 47:44  <b>largely</b> [4] - 12:21, 13:29, 47:33, 55:47  <b>last</b> [14] - 4:13, 11:5, 13:11, 13:22, 27:28, 31:42, 33:29, 33:32, 34:41, 42:2, 46:19, 46:46, 50:20, 65:16  <b>late</b> [2] - 4:20, 69:46  <b>latest</b> [2] - 60:7, 61:29  <b>lead</b> [3] - 47:40, 47:45, 53:29  <b>leading</b> [3] - 23:17, 32:1, 55:25  <b>leak</b> [1] - 50:19  <b>leakage</b> [2] - 14:32, 14:33  <b>learning</b> [1] - 49:39  <b>least</b> [11] - 19:8, 19:15, 25:27, 40:32, 42:4, 42:29, 62:18, 62:23, 69:9, 70:47, 71:15  <b>leave</b> [3] - 11:45, 17:4, 29:5  <b>left</b> [1] - 7:14  <b>left-hand</b> [1] - 7:14  <b>legal</b> [1] - 62:7  <b>legally</b> [1] - 43:44  <b>legislation</b> [1] - 64:14  <b>length</b> [2] - 20:45, 31:40  <b>lens</b> [1] - 23:20</p>	<p><b>less</b> [9] - 14:5, 23:34, 23:35, 23:36, 33:10, 33:39, 38:8, 38:9, 47:28  <b>level</b> [16] - 5:12, 6:9, 7:4, 15:44, 17:18, 29:38, 30:33, 30:38, 31:4, 31:28, 32:1, 38:43, 49:34, 50:22, 53:27, 54:6  <b>levels</b> [14] - 4:9, 17:24, 28:32, 44:30, 44:33, 44:35, 44:36, 45:18, 45:21, 45:26, 50:22, 58:40, 65:39, 70:6  <b>liberty</b> [1] - 50:10  <b>library</b> [1] - 60:2  <b>licence</b> [18] - 39:9, 44:15, 44:16, 45:13, 45:14, 47:40, 49:19, 51:39, 51:47, 52:3, 52:22, 54:7, 62:8, 62:9, 65:17, 71:7  <b>licences</b> [3] - 45:14, 45:29, 49:27  <b>licensing</b> [1] - 45:16  <b>licensing</b> [1] - 58:11  <b>light</b> [1] - 6:43  <b>likelihood</b> [2] - 22:26, 23:33  <b>likely</b> [5] - 11:30, 12:30, 43:42, 52:11, 62:43  <b>limits</b> [1] - 52:2  <b>Linda</b> [1] - 68:31  <b>line</b> [10] - 6:25, 19:23, 19:24, 19:40, 46:4, 46:6, 46:7, 46:19, 46:20, 46:22  <b>lines</b> [1] - 5:46  <b>link</b> [3] - 23:43, 24:9, 52:38  <b>linked</b> [1] - 45:17  <b>list</b> [3] - 10:29, 11:30, 33:38  <b>listed</b> [4] - 61:36, 61:37, 61:41, 61:42  <b>listing</b> [1] - 61:15  <b>liveability</b> [3] - 15:6, 54:10, 58:18  <b>living</b> [1] - 14:18  <b>Livingstone</b> [2] - 1:24, 2:19  <b>Liz</b> [2] - 1:24, 2:19  <b>load</b> [2] - 50:14, 55:12  <b>local</b> [4] - 5:22, 49:44, 50:43, 52:9  <b>located</b> [1] - 33:19  <b>location</b> [9] - 10:5, 10:20, 10:37, 20:6,</p>
---	---	---	---	---

33:16, 33:26, 33:31, 33:36, 33:41 <b>location-based</b> [8] - 10:5, 10:20, 10:37, 20:6, 33:16, 33:31, 33:36, 33:41 <b>lodged</b> [1] - 8:20 <b>log</b> [1] - 17:36 <b>logic</b> [2] - 41:2, 41:5 <b>long-standing</b> [1] - 20:7 <b>long-term</b> [7] - 7:4, 14:42, 24:44, 28:13, 34:30, 41:43, 42:4 <b>look</b> [32] - 6:42, 6:43, 7:34, 7:36, 8:9, 8:10, 8:11, 8:31, 9:3, 9:9, 9:15, 11:1, 11:40, 18:30, 32:23, 33:31, 34:4, 34:6, 35:43, 38:1, 38:21, 40:29, 47:2, 47:6, 47:38, 47:40, 48:5, 49:9, 59:14, 69:24, 71:19, 72:46 <b>looked</b> [6] - 15:44, 59:35, 59:36, 61:9, 61:20, 68:45 <b>looking</b> [35] - 7:14, 19:31, 21:29, 22:41, 23:30, 24:32, 25:39, 33:38, 35:44, 37:27, 38:27, 38:40, 38:42, 38:45, 41:26, 41:31, 45:31, 46:38, 48:45, 50:12, 50:38, 51:8, 51:16, 56:7, 57:4, 58:17, 59:25, 61:40, 62:35, 71:23, 71:26, 71:32, 71:42, 71:47 <b>looks</b> [2] - 11:3, 66:22 <b>losses</b> [2] - 32:11, 32:18 <b>loudly</b> [1] - 4:31 <b>low</b> [7] - 6:7, 19:26, 31:6, 42:28, 49:6, 49:18, 49:25 <b>Lower</b> [14] - 14:42, 15:1, 24:36, 24:43, 27:40, 28:36, 31:2, 31:26, 41:34, 41:40, 43:36, 68:36, 69:3, 69:26 <b>lower</b> [10] - 8:1, 9:21, 9:25, 20:9, 20:13, 45:25, 46:12, 47:20, 47:26, 59:38 <b>lowered</b> [2] - 8:21, 8:23 <b>lowest</b> [6] - 7:38,	31:28, 49:4, 56:41, 58:45, 63:16 <b>LRMC</b> [1] - 28:33 <b>lunch</b> [2] - 52:25, 53:2 <b>LUNCHEON</b> [1] - 53:6  <b>M</b>  <b>Macquarie</b> [2] - 5:23, 69:39 <b>Madam</b> [4] - 14:14, 16:37, 25:22, 50:31 <b>Madden</b> [2] - 1:24, 2:20 <b>main</b> [12] - 30:13, 45:12, 47:44, 48:17, 48:19, 48:20, 48:23, 48:28, 48:31, 48:34, 50:5, 71:44 <b>mainstream</b> [1] - 34:31 <b>maintain</b> [1] - 5:34 <b>maintaining</b> [1] - 50:34 <b>maintenance</b> [2] - 46:16, 48:23 <b>Maitland</b> [2] - 5:22, 48:32 <b>major</b> [15] - 7:35, 7:39, 14:29, 14:46, 27:29, 28:1, 37:29, 37:37, 45:39, 46:32, 48:15, 48:17, 48:26, 55:43, 55:45 <b>majority</b> [1] - 70:20 <b>manage</b> [8] - 5:43, 7:24, 24:16, 26:29, 27:43, 47:22, 47:30, 50:13 <b>managed</b> [1] - 11:33 <b>management</b> [8] - 5:40, 7:9, 34:23, 37:32, 37:39, 48:13, 48:44, 66:43 <b>managing</b> [2] - 6:47, 69:11 <b>mandate</b> [1] - 62:7 <b>mandated</b> [1] - 45:9 <b>mandatory</b> [1] - 7:15 <b>manner</b> [4] - 58:28, 65:22, 66:1, 68:13 <b>maps</b> [1] - 31:23 <b>March</b> [2] - 3:14, 72:44 <b>marginal</b> [9] - 25:46, 26:2, 27:23, 28:29, 28:41, 29:12, 29:29, 29:33, 56:5 <b>marginally</b> [1] - 19:6 <b>Mark</b> [5] - 14:12,	14:16, 26:45, 50:29, 65:13 <b>mark</b> [3] - 14:33, 25:20, 66:14 <b>market</b> [1] - 49:42 <b>MASSEY</b> [1] - 66:33 <b>Massey</b> [1] - 66:33 <b>massive</b> [1] - 31:9 <b>match</b> [1] - 27:9 <b>material</b> [1] - 52:17 <b>materials</b> [1] - 56:14 <b>matrix</b> [1] - 7:9 <b>Matt</b> [7] - 2:20, 39:44, 47:16, 62:21, 67:16, 68:14, 70:40 <b>matter</b> [4] - 35:30, 37:9, 44:15, 44:16 <b>matters</b> [3] - 24:21, 36:16, 36:30 <b>Matthew</b> [1] - 1:24 <b>Matthew's</b> [1] - 42:37 <b>maximum</b> [3] - 2:9, 3:20, 73:4 <b>McCloskey</b> [14] - 10:41, 22:5, 23:16, 24:20, 24:47, 25:5, 26:41, 26:45, 29:21, 32:40, 57:8, 61:39, 62:33 <b>mean</b> [6] - 8:39, 9:17, 18:17, 29:7, 53:43, 68:12 <b>meaningful</b> [2] - 36:3, 53:11 <b>meaningfully</b> [1] - 44:21 <b>means</b> [6] - 9:3, 43:9, 62:18, 69:15, 71:1, 71:15 <b>meant</b> [2] - 10:47, 11:5 <b>measure</b> [2] - 52:42, 68:22 <b>measures</b> [5] - 34:4, 37:2, 38:15, 45:32 <b>mechanism</b> [8] - 12:10, 12:12, 12:34, 20:7, 21:1, 21:31, 23:46, 67:14 <b>mechanisms</b> [5] - 12:15, 24:25, 39:32, 61:19, 68:21 <b>media</b> [2] - 60:35, 61:22 <b>medium</b> [1] - 56:4 <b>medium-sized</b> [1] - 56:4 <b>meet</b> [4] - 2:5, 11:35, 45:9, 46:33 <b>meeting</b> [2] - 41:43,	69:10 <b>meetings</b> [1] - 65:46 <b>megalitres</b> [2] - 37:38, 37:45 <b>member</b> [5] - 2:17, 15:24, 15:25, 17:12, 44:33 <b>Member</b> [1] - 1:20 <b>members</b> [5] - 2:18, 35:34, 43:16, 44:42, 72:37 <b>Members</b> [2] - 1:17, 1:22 <b>memory</b> [1] - 30:35 <b>mentality</b> [1] - 60:13 <b>mention</b> [2] - 10:5, 38:7 <b>mentioned</b> [10] - 7:22, 17:43, 18:6, 37:32, 37:43, 38:3, 48:43, 61:26, 67:18, 72:43 <b>message</b> [6] - 6:35, 27:18, 35:47, 37:22, 38:36, 50:24 <b>messages</b> [1] - 27:31 <b>messaging</b> [1] - 29:30 <b>met</b> [2] - 13:29, 65:17 <b>meter</b> [5] - 38:26, 38:30, 56:11, 64:28, 65:7 <b>metering</b> [4] - 52:39, 52:40, 52:41, 60:18 <b>meters</b> [1] - 52:42 <b>method</b> [4] - 11:9, 22:37, 22:44, 22:47 <b>methodology</b> [9] - 11:11, 12:16, 12:30, 18:2, 22:39, 23:5, 40:19, 67:27, 67:29 <b>methods</b> [1] - 28:40 <b>metrics</b> [1] - 6:45 <b>mid</b> [3] - 26:2, 43:40, 51:47 <b>mid-point</b> [1] - 26:2 <b>mid-year</b> [1] - 51:47 <b>might</b> [17] - 20:3, 21:30, 21:31, 21:43, 28:27, 28:33, 35:36, 37:21, 39:44, 41:21, 41:27, 41:28, 54:9, 55:44, 57:22, 66:23, 68:42 <b>Might</b> [1] - 26:41 <b>million</b> [15] - 13:10, 13:12, 13:21, 14:33, 15:13, 18:44, 31:47, 34:40, 42:23, 55:27, 68:17, 68:35 <b>mind</b> [4] - 18:4, 41:7, 58:11, 62:42	<b>minimise</b> [1] - 34:18 <b>minister</b> [1] - 31:16 <b>Minister</b> [1] - 66:46 <b>minister's</b> [1] - 67:5 <b>minor</b> [5] - 43:22, 49:31, 49:32, 55:43, 56:3 <b>miscellaneous</b> [7] - 4:19, 53:25, 53:46, 55:6, 56:7, 56:13, 56:17 <b>missed</b> [1] - 66:38 <b>mitigate</b> [1] - 49:1 <b>mix</b> [1] - 24:40 <b>mixed</b> [1] - 33:36 <b>model</b> [6] - 22:47, 23:2, 36:41, 38:9, 39:42, 42:16 <b>models</b> [3] - 22:20, 41:38, 60:6 <b>moderate</b> [3] - 34:2, 55:43, 55:44 <b>modest</b> [2] - 19:2, 60:10 <b>moisture</b> [1] - 31:25 <b>moment</b> [14] - 15:38, 19:19, 19:28, 21:29, 25:6, 28:12, 35:34, 38:19, 41:25, 49:40, 51:44, 52:23, 64:14, 69:44 <b>monetise</b> [1] - 68:23 <b>money</b> [10] - 18:40, 20:31, 37:17, 38:9, 38:25, 38:32, 44:6, 44:10, 61:22, 62:25 <b>monitor</b> [1] - 73:7 <b>monitoring</b> [1] - 48:2 <b>monopoly</b> [2] - 54:4, 70:46 <b>months</b> [3] - 30:8, 30:21, 42:2 <b>morning</b> [3] - 2:3, 4:41, 66:38 <b>morning's</b> [2] - 53:11, 69:47 <b>most</b> [10] - 11:30, 19:2, 37:3, 48:32, 51:8, 51:46, 56:19, 58:39, 64:38, 70:47 <b>mostly</b> [2] - 55:10, 55:45 <b>motor</b> [1] - 64:31 <b>MOU</b> [1] - 65:16 <b>move</b> [5] - 36:14, 45:38, 50:4, 58:8, 66:23 <b>moved</b> [1] - 11:40 <b>moves</b> [2] - 14:25, 27:5
--	---	---	--	---

<p><b>moving</b> <sup>[5]</sup> - 8:18, 11:38, 23:21, 28:30, 37:18</p> <p><b>MR</b> <sup>[107]</sup> - 4:41, 10:4, 10:14, 10:26, 10:41, 10:47, 11:23, 11:44, 12:4, 12:9, 13:4, 13:8, 13:26, 14:4, 14:14, 14:29, 15:18, 15:23, 15:42, 16:5, 16:20, 16:23, 16:37, 16:44, 17:2, 17:42, 22:5, 22:33, 23:16, 23:45, 24:20, 24:35, 24:47, 25:5, 25:14, 25:22, 26:15, 26:41, 26:45, 27:35, 28:25, 29:21, 30:5, 31:20, 32:40, 33:9, 33:15, 34:9, 34:13, 34:27, 34:36, 35:2, 35:6, 35:39, 36:6, 36:35, 37:27, 38:5, 38:38, 39:1, 39:7, 39:47, 41:16, 41:31, 41:46, 42:1, 42:16, 42:33, 42:37, 43:1, 43:39, 44:1, 44:13, 47:18, 47:32, 50:31, 50:42, 51:11, 51:19, 51:34, 51:46, 52:30, 57:8, 61:39, 62:16, 62:33, 63:12, 63:45, 64:8, 64:20, 64:28, 65:13, 65:32, 65:38, 65:41, 65:43, 65:45, 66:7, 66:16, 66:33, 67:18, 68:9, 68:42, 68:44, 69:31, 70:16, 70:42</p> <p><b>MS</b> <sup>[56]</sup> - 13:16, 15:10, 16:31, 17:11, 21:41, 25:2, 25:11, 25:20, 26:8, 26:43, 29:47, 32:29, 32:34, 32:44, 32:46, 33:2, 34:46, 35:4, 36:16, 39:3, 39:11, 39:15, 39:23, 39:29, 39:44, 41:13, 42:35, 42:45, 44:19, 45:2, 49:37, 53:10, 53:38, 55:3, 57:2, 57:47, 62:5, 62:21, 62:30, 63:41, 64:14, 64:26, 64:38, 65:10, 66:13, 66:18, 66:20, 66:22, 68:31, 69:21, 69:46, 70:33, 70:35, 71:39, 72:27, 72:29</p> <p><b>multiple</b> <sup>[2]</sup> - 10:27, 63:6</p>	<p><b>mystery</b> <sup>[1]</sup> - 6:34</p> <p style="text-align: center;"><b>N</b></p> <p><b>Nadja</b> <sup>[9]</sup> - 1:25, 2:20, 32:32, 32:44, 39:13, 39:27, 44:46, 47:12, 66:18</p> <p><b>name</b> <sup>[7]</sup> - 4:38, 4:42, 11:23, 15:23, 17:42, 43:9, 65:13</p> <p><b>narrow</b> <sup>[1]</sup> - 23:20</p> <p><b>narrowly</b> <sup>[1]</sup> - 71:24</p> <p><b>natural</b> <sup>[1]</sup> - 32:11</p> <p><b>naturalisation</b> <sup>[1]</sup> - 54:18</p> <p><b>nature</b> <sup>[4]</sup> - 7:40, 36:9, 48:7, 54:17</p> <p><b>near</b> <sup>[1]</sup> - 22:27</p> <p><b>necessarily</b> <sup>[6]</sup> - 19:47, 24:27, 43:30, 61:45, 64:20, 64:23</p> <p><b>need</b> <sup>[25]</sup> - 6:1, 6:5, 6:8, 8:22, 13:36, 13:44, 21:45, 22:19, 25:15, 25:34, 26:10, 26:19, 27:7, 27:15, 31:35, 36:18, 41:6, 48:3, 48:40, 49:22, 50:24, 52:17, 57:39, 62:44, 72:2</p> <p><b>needed</b> <sup>[3]</sup> - 47:21, 47:22, 62:36</p> <p><b>needs</b> <sup>[10]</sup> - 14:47, 25:41, 25:42, 27:22, 28:21, 30:26, 30:37, 43:27, 44:44, 45:23</p> <p><b>nervous</b> <sup>[1]</sup> - 72:31</p> <p><b>network</b> <sup>[6]</sup> - 13:29, 40:14, 40:17, 41:11, 45:41, 47:38</p> <p><b>networks</b> <sup>[2]</sup> - 7:25, 65:47</p> <p><b>neutral</b> <sup>[1]</sup> - 57:11</p> <p><b>never</b> <sup>[1]</sup> - 21:3</p> <p><b>new</b> <sup>[14]</sup> - 11:5, 14:46, 22:47, 37:13, 42:8, 42:25, 45:42, 51:20, 52:1, 52:2, 53:41, 55:41, 56:10, 56:26</p> <p><b>New</b> <sup>[1]</sup> - 13:21</p> <p><b>Newcastle</b> <sup>[6]</sup> - 1:29, 5:23, 15:24, 17:13, 66:34, 67:3</p> <p><b>newsletter</b> <sup>[1]</sup> - 50:2</p> <p><b>newsletters</b> <sup>[1]</sup> - 61:23</p> <p><b>next</b> <sup>[16]</sup> - 17:47, 19:3, 33:19, 33:41, 43:42,</p>	<p>44:28, 44:47, 46:8, 47:2, 48:24, 50:3, 50:12, 50:38, 52:22, 68:18, 68:27</p> <p><b>nine</b> <sup>[1]</sup> - 48:20</p> <p><b>nine-kilometre</b> <sup>[1]</sup> - 48:20</p> <p><b>nobody</b> <sup>[1]</sup> - 42:13</p> <p><b>noise</b> <sup>[1]</sup> - 30:6</p> <p><b>non</b> <sup>[46]</sup> - 10:27, 10:30, 10:35, 11:13, 11:17, 14:38, 21:46, 22:1, 30:31, 30:34, 30:35, 31:39, 31:40, 31:43, 32:1, 33:6, 33:34, 34:14, 34:16, 37:29, 37:34, 38:39, 41:32, 45:24, 47:40, 48:10, 48:12, 49:32, 50:18, 50:22, 55:19, 57:28, 57:31, 57:35, 58:3, 60:16, 60:26, 60:29, 60:42, 61:11, 61:13, 63:46, 64:3, 64:36, 69:34</p> <p><b>non-compliance</b> <sup>[1]</sup> - 45:24</p> <p><b>non-compliances</b> <sup>[1]</sup> - 49:32</p> <p><b>non-critical</b> <sup>[3]</sup> - 48:10, 48:12</p> <p><b>non-customer</b> <sup>[2]</sup> - 63:46, 64:3</p> <p><b>non-customers</b> <sup>[1]</sup> - 64:36</p> <p><b>non-potable</b> <sup>[1]</sup> - 69:34</p> <p><b>non-residential</b> <sup>[27]</sup> - 10:27, 10:30, 10:35, 11:13, 11:17, 14:38, 21:46, 22:1, 33:6, 33:34, 34:14, 34:16, 37:29, 37:34, 38:39, 41:32, 55:19, 57:28, 57:31, 57:35, 58:3, 60:16, 60:26, 60:29, 60:42, 61:11, 61:13</p> <p><b>non-revenue</b> <sup>[9]</sup> - 30:31, 30:34, 30:35, 31:39, 31:40, 31:43, 32:1, 50:18, 50:22</p> <p><b>normal</b> <sup>[7]</sup> - 10:19, 11:35, 61:33, 61:44, 62:12, 64:47, 71:3</p> <p><b>normally</b> <sup>[1]</sup> - 58:42</p> <p><b>North</b> <sup>[7]</sup> - 11:29, 11:32, 12:44, 13:46, 14:5, 39:34, 42:43</p> <p><b>note</b> <sup>[11]</sup> - 10:4, 13:18, 13:26, 21:44, 24:1,</p>	<p>29:32, 49:38, 60:27, 66:43, 67:9, 68:34</p> <p><b>noted</b> <sup>[4]</sup> - 12:25, 45:27, 45:38, 66:7</p> <p><b>nothing</b> <sup>[3]</sup> - 58:38, 64:16, 69:11</p> <p><b>notice</b> <sup>[1]</sup> - 16:11</p> <p><b>noticed</b> <sup>[1]</sup> - 10:15</p> <p><b>noting</b> <sup>[3]</sup> - 33:38, 33:43, 59:9</p> <p><b>notwithstanding</b> <sup>[1]</sup> - 57:29</p> <p><b>November</b> <sup>[2]</sup> - 1:31, 2:33</p> <p><b>NSW</b> <sup>[2]</sup> - 15:26, 65:14</p> <p><b>number</b> <sup>[29]</sup> - 5:5, 5:45, 6:29, 7:2, 8:23, 9:20, 9:29, 16:18, 22:39, 25:17, 27:29, 37:7, 43:2, 45:7, 45:15, 45:31, 46:27, 46:31, 47:35, 48:7, 48:26, 49:10, 50:46, 51:23, 52:33, 56:18, 56:21, 60:17, 70:11</p> <p><b>numbers</b> <sup>[4]</sup> - 4:5, 17:27, 28:39, 28:42</p> <p style="text-align: center;"><b>O</b></p> <p><b>objection</b> <sup>[1]</sup> - 42:14</p> <p><b>obligation</b> <sup>[2]</sup> - 12:37, 40:42</p> <p><b>obligations</b> <sup>[4]</sup> - 49:26, 52:2, 52:15, 69:10</p> <p><b>obscene</b> <sup>[1]</sup> - 13:14</p> <p><b>obviously</b> <sup>[4]</sup> - 13:32, 24:10, 40:26, 51:22</p> <p><b>occupying</b> <sup>[1]</sup> - 16:9</p> <p><b>occur</b> <sup>[2]</sup> - 51:1, 51:7</p> <p><b>occurring</b> <sup>[1]</sup> - 52:44</p> <p><b>October</b> <sup>[2]</sup> - 2:32, 18:9</p> <p><b>odour</b> <sup>[1]</sup> - 45:18</p> <p><b>OEH</b> <sup>[1]</sup> - 30:7</p> <p><b>OF</b> <sup>[1]</sup> - 1:14</p> <p><b>offer</b> <sup>[3]</sup> - 12:26, 33:44, 64:24</p> <p><b>offered</b> <sup>[1]</sup> - 58:38</p> <p><b>offering</b> <sup>[2]</sup> - 36:21, 37:46</p> <p><b>office</b> <sup>[1]</sup> - 63:1</p> <p><b>officer</b> <sup>[3]</sup> - 2:19, 9:31, 9:32</p> <p><b>offset</b> <sup>[5]</sup> - 19:7, 20:34, 21:28, 38:11, 46:12</p> <p><b>offsets</b> <sup>[2]</sup> - 42:17,</p>	<p>61:31</p> <p><b>offsetting</b> <sup>[1]</sup> - 8:6</p> <p><b>often</b> <sup>[3]</sup> - 31:9, 41:38, 41:39</p> <p><b>once</b> <sup>[3]</sup> - 20:9, 38:22, 38:35</p> <p><b>one</b> <sup>[40]</sup> - 9:44, 11:45, 12:10, 12:16, 16:38, 16:41, 19:36, 22:14, 22:44, 24:9, 30:19, 32:12, 32:34, 33:46, 34:40, 38:7, 39:15, 39:30, 41:40, 43:36, 46:19, 48:15, 52:25, 52:27, 56:33, 59:24, 60:17, 60:47, 61:36, 64:4, 64:45, 66:37, 68:11, 70:18, 70:35, 71:21, 71:31, 71:39, 71:44, 71:46</p> <p><b>ongoing</b> <sup>[3]</sup> - 18:16, 32:13, 36:4</p> <p><b>online</b> <sup>[3]</sup> - 2:24, 60:27, 72:46</p> <p><b>onsite</b> <sup>[1]</sup> - 66:43</p> <p><b>opaque</b> <sup>[1]</sup> - 51:44</p> <p><b>open</b> <sup>[6]</sup> - 3:40, 6:22, 9:36, 15:5, 51:21, 53:12</p> <p><b>Open</b> <sup>[1]</sup> - 66:25</p> <p><b>opening</b> <sup>[3]</sup> - 47:19, 51:15, 58:7</p> <p><b>Opening</b> <sup>[1]</sup> - 2:1</p> <p><b>operate</b> <sup>[2]</sup> - 5:27, 48:10</p> <p><b>operated</b> <sup>[1]</sup> - 61:46</p> <p><b>operating</b> <sup>[29]</sup> - 4:12, 4:47, 5:2, 7:46, 8:3, 9:24, 18:22, 18:24, 44:14, 44:16, 44:35, 45:13, 45:14, 45:40, 45:45, 45:46, 45:47, 48:8, 48:12, 49:19, 49:37, 50:34, 51:39, 51:46, 54:7, 59:39, 60:34, 62:9, 65:17</p> <p><b>operation</b> <sup>[3]</sup> - 5:21, 5:25, 5:26</p> <p><b>operations</b> <sup>[5]</sup> - 7:40, 34:5, 36:43, 52:12, 58:30</p> <p><b>operators</b> <sup>[1]</sup> - 11:16</p> <p><b>opinions</b> <sup>[1]</sup> - 43:13</p> <p><b>opportunities</b> <sup>[14]</sup> - 41:26, 41:29, 41:32, 50:39, 50:40, 51:16, 51:43, 61:6, 69:7, 69:16, 69:18, 69:38, 69:40, 69:43</p> <p><b>opportunity</b> <sup>[11]</sup> -</p>
--	---	--	--	---

<p>2:45, 3:10, 9:36, 25:8, 25:24, 33:6, 36:9, 37:6, 65:18, 66:38, 67:47</p> <p><b>opposed</b> [1] - 36:11</p> <p><b>optimal</b> [1] - 17:24</p> <p><b>option</b> [7] - 19:40, 29:37, 32:14, 58:43, 58:45, 64:18, 71:34</p> <p><b>options</b> [12] - 27:36, 28:7, 28:9, 42:4, 43:36, 50:4, 67:42, 71:25, 71:30, 71:31, 71:43, 72:1</p> <p><b>orange</b> [4] - 46:6, 46:7, 46:20, 46:21</p> <p><b>order</b> [2] - 11:38, 17:30</p> <p><b>organisation</b> [5] - 4:30, 6:22, 27:2, 29:15, 31:12</p> <p><b>organisation's</b> [1] - 60:13</p> <p><b>organisations</b> [1] - 15:24</p> <p><b>ORICA</b> [5] - 9:42, 9:44, 10:4, 34:27, 34:33</p> <p><b>original</b> [5] - 5:5, 8:20, 8:24, 8:32, 18:7</p> <p><b>originally</b> [1] - 47:34</p> <p><b>otherwise</b> [3] - 12:13, 13:1, 51:17</p> <p><b>ourselves</b> [1] - 33:13</p> <p><b>outages</b> [1] - 48:30</p> <p><b>outcome</b> [2] - 49:23, 65:29</p> <p><b>outcomes</b> [3] - 47:27, 54:6, 66:5</p> <p><b>outline</b> [9] - 4:2, 4:8, 4:44, 5:6, 5:16, 6:10, 6:13, 6:27, 17:26</p> <p><b>outlined</b> [4] - 4:11, 4:16, 31:46, 68:14</p> <p><b>outlines</b> [2] - 5:38, 7:41</p> <p><b>outlining</b> [1] - 3:39</p> <p><b>outside</b> [1] - 67:44</p> <p><b>over-recovered</b> [1] - 19:41</p> <p><b>over-recovery</b> [1] - 21:28</p> <p><b>overall</b> [13] - 5:2, 6:1, 10:34, 11:18, 26:12, 35:47, 36:43, 49:1, 50:45, 58:32, 59:8, 60:11, 60:38</p> <p><b>overflows</b> [1] - 45:16</p> <p><b>overheads</b> [1] - 56:15</p> <p><b>overview</b> [10] - 4:46,</p>	<p>12:4, 12:6, 16:46, 27:35, 34:32, 44:34, 45:4, 65:19, 70:43</p> <p><b>own</b> [12] - 15:31, 15:45, 16:6, 16:7, 16:24, 29:11, 29:26, 29:32, 52:10, 59:4</p> <p><b>owned</b> [1] - 16:9</p> <p><b>owner</b> [3] - 43:8, 43:25, 64:30</p> <p><b>owner/occupiers</b> [1] - 16:29</p> <p><b>owners</b> [2] - 2:4, 16:1</p> <p><b>Owners</b> [1] - 15:25</p> <p><b>owns</b> [2] - 16:24, 43:18</p>	<p>64:31</p> <p><b>pass</b> [4] - 43:25, 43:44, 44:27, 63:19</p> <p><b>passed</b> [2] - 13:31, 18:24</p> <p><b>passing</b> [2] - 24:24, 64:17</p> <p><b>past</b> [7] - 2:6, 6:8, 7:5, 15:43, 46:46, 50:15, 50:19</p> <p><b>path</b> [7] - 14:45, 37:14, 43:43, 45:46, 45:47, 46:6, 46:20</p> <p><b>patience</b> [1] - 33:5</p> <p><b>patronage</b> [1] - 61:4</p> <p><b>pattern</b> [1] - 52:11</p> <p><b>pay</b> [62] - 2:6, 12:19, 12:46, 13:31, 13:39, 13:42, 14:1, 15:31, 15:33, 19:22, 20:8, 20:18, 27:12, 31:14, 35:24, 37:12, 40:5, 40:11, 40:13, 40:16, 40:35, 40:43, 41:4, 41:6, 42:18, 42:20, 43:30, 43:31, 43:40, 44:4, 44:5, 44:9, 54:27, 54:30, 54:33, 54:36, 54:40, 55:17, 58:4, 58:12, 58:23, 58:47, 59:15, 59:20, 59:23, 59:28, 60:8, 61:9, 64:2, 64:3, 67:24, 67:30, 67:38, 67:40, 67:46, 70:10, 70:12, 70:37, 71:10, 71:18</p> <p><b>payer</b> [1] - 60:22</p> <p><b>payers</b> [1] - 58:28</p> <p><b>paying</b> [4] - 12:23, 16:10, 27:21, 64:42</p> <p><b>payment</b> [9] - 2:13, 4:20, 53:27, 53:47, 55:6, 56:30, 56:40, 63:29, 64:2</p> <p><b>payments</b> [2] - 56:31, 56:37</p> <p><b>pays</b> [10] - 30:47, 31:13, 31:15, 31:17, 43:28, 43:35, 44:3, 44:4, 70:17, 70:19</p> <p><b>pecking</b> [1] - 11:38</p> <p><b>peer</b> [3] - 8:34, 23:2, 23:5</p> <p><b>penalising</b> [1] - 23:37</p> <p><b>Pensioner</b> [1] - 16:29</p> <p><b>pensioner</b> [10] - 9:15, 10:16, 15:29, 15:31, 15:34, 15:43, 15:46, 16:23, 59:6, 59:16</p>	<p><b>pensioners</b> [8] - 15:30, 15:32, 15:45, 16:1, 16:6, 16:9, 16:15</p> <p><b>people</b> [37] - 2:5, 3:15, 11:32, 11:40, 14:5, 16:5, 17:33, 23:18, 23:37, 26:35, 31:13, 35:23, 38:9, 41:25, 42:11, 43:3, 43:15, 43:31, 51:22, 51:41, 52:28, 52:32, 57:41, 58:35, 58:43, 59:7, 59:23, 59:26, 60:1, 61:22, 62:37, 62:47, 63:6, 72:32, 72:34, 72:44</p> <p><b>people's</b> [1] - 43:13</p> <p><b>per</b> [63] - 7:16, 7:30, 7:47, 8:3, 8:12, 8:26, 8:28, 9:5, 9:6, 9:7, 9:11, 9:12, 9:13, 9:18, 11:42, 15:47, 19:4, 20:9, 20:11, 20:19, 20:30, 21:25, 21:27, 22:18, 28:45, 29:1, 29:7, 30:36, 31:4, 31:5, 31:13, 31:15, 31:17, 31:43, 32:2, 33:10, 33:39, 34:28, 36:36, 43:10, 43:28, 43:34, 43:35, 43:40, 46:1, 50:23, 54:20, 54:22, 55:19, 55:20, 55:22, 55:27, 55:46, 56:5, 56:25, 59:32, 59:43, 60:11, 64:1, 68:10, 70:22, 71:43</p> <p><b>percent</b> [2] - 20:28, 50:23</p> <p><b>percentage</b> [2] - 19:7, 34:10</p> <p><b>performance</b> [11] - 31:41, 45:28, 45:31, 45:32, 45:34, 47:27, 47:46, 48:2, 48:5, 48:38, 49:33</p> <p><b>perhaps</b> [10] - 14:9, 15:39, 19:37, 20:12, 30:10, 35:19, 35:37, 38:14, 70:36, 72:37</p> <p><b>period</b> [44] - 5:8, 5:10, 5:11, 5:17, 7:3, 14:21, 14:24, 14:25, 14:27, 17:47, 18:13, 18:33, 18:34, 18:45, 20:17, 20:31, 21:19, 21:25, 21:28, 22:41, 23:8, 23:10, 25:27,</p>	<p>28:47, 33:42, 34:40, 34:41, 35:16, 46:10, 46:26, 47:21, 47:26, 47:34, 48:35, 49:9, 50:3, 50:12, 50:38, 50:46, 55:25, 59:37, 68:26, 69:19, 70:22</p> <p><b>periods</b> [7] - 19:38, 26:6, 26:25, 26:29, 26:36, 31:9, 49:47</p> <p><b>permutations</b> [1] - 21:14</p> <p><b>person</b> [2] - 60:21, 60:22</p> <p><b>personally</b> [1] - 6:29</p> <p><b>perspective</b> [4] - 18:7, 20:47, 21:39, 51:38</p> <p><b>Perth</b> [1] - 70:18</p> <p><b>pertinent</b> [1] - 32:9</p> <p><b>Peter</b> [5] - 10:23, 10:26, 16:14, 28:25, 42:10</p> <p><b>phase</b> [5] - 20:16, 33:40, 34:2, 36:23, 37:43</p> <p><b>phasing</b> [1] - 36:31</p> <p><b>PIAC</b> [3] - 10:41, 32:36, 36:19</p> <p><b>pick</b> [3] - 14:9, 43:30, 52:4</p> <p><b>picking</b> [1] - 26:1</p> <p><b>picks</b> [2] - 25:29, 43:19</p> <p><b>pie</b> [1] - 8:9</p> <p><b>piece</b> [2] - 7:17, 44:8</p> <p><b>place</b> [7] - 8:13, 20:23, 21:4, 31:3, 34:30, 34:40, 37:41</p> <p><b>places</b> [5] - 13:10, 13:45, 39:34, 55:11, 60:27</p> <p><b>plan</b> [14] - 14:24, 24:44, 25:16, 25:17, 27:41, 37:5, 45:8, 56:24, 58:19, 63:30, 64:42, 65:45, 69:6, 72:43</p> <p><b>Plan</b> [10] - 14:42, 15:1, 24:36, 24:43, 27:40, 31:2, 41:34, 41:41, 43:37, 69:3</p> <p><b>planned</b> [2] - 48:22, 51:17</p> <p><b>planning</b> [8] - 24:3, 24:4, 28:36, 50:43, 51:12, 51:42, 52:10, 58:10</p> <p><b>plans</b> [9] - 25:32, 34:23, 36:27, 37:32, 37:40, 37:41, 41:20,</p>
---	--	---	--	--

<p>52:8, 69:26  <b>plant</b> [3] - 5:15, 34:29, 46:32  <b>plants</b> [4] - 5:34, 45:17, 45:19, 52:46  <b>play</b> [6] - 26:32, 28:12, 29:11, 40:1, 40:5, 67:21  <b>plays</b> [1] - 28:6  <b>pleasure</b> [2] - 4:43, 44:8  <b>pockets</b> [1] - 21:3  <b>point</b> [22] - 10:44, 11:29, 12:38, 13:4, 22:7, 22:28, 22:34, 23:45, 24:3, 24:24, 26:2, 27:13, 35:9, 47:28, 49:37, 57:22, 58:6, 62:16, 63:17, 68:22, 69:21, 70:46  <b>pointed</b> [2] - 21:35, 29:4  <b>points</b> [5] - 12:9, 22:15, 27:15, 49:38, 63:14  <b>policy</b> [3] - 13:19, 31:34, 67:12  <b>policymakers</b> [1] - 52:15  <b>pollutants</b> [1] - 55:39  <b>pollution</b> [1] - 66:45  <b>poor</b> [1] - 48:22  <b>population</b> [2] - 5:32, 21:20  <b>Port</b> [3] - 5:22, 5:23, 69:39  <b>PORTER</b> [3] - 65:13, 65:41, 65:45  <b>Porter</b> [1] - 65:13  <b>portfolio</b> [2] - 42:4, 72:1  <b>pose</b> [1] - 17:32  <b>position</b> [9] - 4:39, 11:18, 12:40, 20:39, 21:11, 27:11, 31:27, 67:26, 67:31  <b>positions</b> [1] - 31:36  <b>possibility</b> [1] - 38:11  <b>possible</b> [2] - 23:9, 53:3  <b>possibly</b> [6] - 6:27, 10:36, 26:15, 29:7, 61:4, 66:5  <b>Post</b> [1] - 56:35  <b>post</b> [5] - 2:45, 34:21, 61:21, 63:1, 72:46  <b>posted</b> [2] - 3:1, 3:46  <b>potable</b> [7] - 26:35, 30:27, 30:38, 34:32, 41:24, 41:39, 69:34</p>	<p><b>potential</b> [6] - 11:14, 24:14, 49:20, 49:32, 68:21, 69:1  <b>potentially</b> [12] - 20:2, 20:12, 20:29, 34:5, 34:25, 38:43, 40:25, 57:41, 63:2, 68:24, 68:46, 72:36  <b>practical</b> [1] - 58:22  <b>practice</b> [3] - 54:32, 54:36, 58:25  <b>PRASAD</b> [2] - 63:12, 64:8  <b>Prasad</b> [1] - 63:12  <b>precious</b> [1] - 5:44  <b>preference</b> [3] - 57:14, 57:40, 68:38  <b>preferences</b> [2] - 45:21, 61:11  <b>preliminary</b> [6] - 2:28, 20:39, 21:11, 44:40, 53:30, 67:10  <b>prepare</b> [2] - 37:39, 37:41  <b>present</b> [4] - 2:6, 44:46, 49:13, 63:3  <b>presentation</b> [20] - 3:38, 4:1, 4:23, 4:36, 4:39, 5:7, 10:1, 10:15, 14:15, 17:17, 17:31, 18:6, 18:21, 42:37, 44:40, 47:19, 53:29, 53:36, 56:45, 58:7  <b>presented</b> [5] - 16:23, 29:33, 29:39, 48:30, 53:45  <b>presenting</b> [1] - 63:1  <b>pressure</b> [1] - 6:46  <b>pretty</b> [4] - 11:11, 29:16, 30:36, 31:15  <b>preventing</b> [1] - 69:12  <b>previous</b> [7] - 22:36, 22:38, 49:46, 50:8, 53:31, 56:26, 58:16  <b>previously</b> [5] - 11:12, 11:19, 12:26, 18:14, 55:28  <b>price</b> [63] - 3:23, 5:16, 5:38, 7:1, 10:37, 14:45, 17:22, 19:6, 20:4, 20:19, 22:15, 24:16, 25:25, 25:27, 26:6, 26:9, 26:10, 26:11, 26:16, 26:23, 26:33, 26:34, 28:19, 28:28, 28:32, 28:45, 29:5, 32:37, 33:29, 33:41, 34:7, 34:40, 34:41, 35:45, 40:2,</p>	<p>40:4, 43:42, 43:43, 44:17, 45:46, 45:47, 46:6, 46:20, 46:40, 48:24, 48:35, 49:1, 49:9, 49:46, 50:3, 50:12, 56:20, 56:21, 60:25, 61:20, 67:19, 67:22, 67:44, 68:2, 68:27, 69:18, 70:22, 70:28  <b>PRICES</b> [1] - 1:14  <b>prices</b> [39] - 2:9, 2:43, 3:17, 3:20, 3:30, 4:3, 5:3, 6:25, 9:6, 13:23, 17:9, 17:28, 17:47, 18:3, 18:14, 18:19, 21:26, 21:44, 24:18, 26:8, 26:17, 33:3, 33:6, 40:30, 41:9, 43:28, 46:5, 46:11, 46:20, 46:27, 46:37, 50:11, 61:33, 70:45, 71:3, 71:8, 71:14, 72:20, 73:4  <b>PRICING</b> [1] - 1:11  <b>Pricing</b> [1] - 2:16  <b>pricing</b> [69] - 2:27, 2:29, 2:35, 3:39, 4:37, 4:44, 6:3, 7:11, 9:21, 10:5, 10:7, 10:28, 11:46, 13:19, 13:20, 13:23, 14:21, 14:24, 17:47, 18:8, 18:38, 20:6, 20:7, 21:1, 23:23, 23:24, 23:31, 23:43, 23:46, 24:9, 24:11, 24:23, 24:32, 24:33, 25:11, 25:24, 25:25, 27:8, 27:46, 28:6, 28:20, 28:44, 30:1, 30:40, 30:41, 31:46, 33:12, 33:31, 33:37, 34:21, 34:42, 39:45, 41:38, 42:3, 42:22, 43:2, 44:15, 44:16, 50:38, 52:23, 53:41, 55:31, 58:11, 59:37, 61:30, 65:19, 70:16, 70:22, 70:43  <b>primary</b> [2] - 23:3, 67:6  <b>principle</b> [3] - 20:39, 32:40, 38:3  <b>principles</b> [7] - 22:33, 23:12, 25:38, 28:28, 54:32, 54:37, 55:31  <b>prioritise</b> [1] - 49:1  <b>priority</b> [6] - 11:30, 29:44, 67:5, 69:25,</p>	<p>69:29, 69:31  <b>private</b> [1] - 59:27  <b>privilege</b> [1] - 17:11  <b>proactive</b> [1] - 48:13  <b>proactively</b> [1] - 49:13  <b>problem</b> [2] - 42:41, 43:1  <b>problematic</b> [1] - 23:21  <b>problems</b> [1] - 30:19  <b>proceed</b> [4] - 57:31, 57:32, 57:43, 61:41  <b>proceeding</b> [1] - 57:12  <b>proceedings</b> [2] - 3:36, 53:19  <b>proceeds</b> [1] - 57:24  <b>process</b> [14] - 2:40, 3:37, 22:39, 22:41, 24:36, 24:43, 28:17, 28:23, 29:42, 63:4, 65:35, 66:9, 69:32, 72:39  <b>produce</b> [1] - 28:42  <b>produced</b> [1] - 8:33  <b>producing</b> [1] - 62:28  <b>productive</b> [3] - 23:35, 24:27, 57:19  <b>profit</b> [1] - 39:19  <b>profit-driven</b> [1] - 39:19  <b>program</b> [13] - 14:30, 26:39, 37:27, 37:33, 37:41, 37:44, 37:46, 38:2, 49:15, 49:28, 65:33, 68:44, 69:13  <b>programs</b> [3] - 38:25, 38:38, 38:44  <b>progress</b> [2] - 68:13, 68:21  <b>project</b> [2] - 41:28, 67:1  <b>projections</b> [1] - 9:25  <b>projects</b> [14] - 41:21, 46:28, 46:29, 48:15, 50:14, 54:9, 54:17, 59:38, 60:47, 61:2, 61:41, 61:44, 62:1  <b>promote</b> [2] - 70:38, 71:22  <b>prompt</b> [1] - 21:37  <b>prone</b> [1] - 35:31  <b>properly</b> [1] - 23:27  <b>properties</b> [8] - 15:31, 39:41, 40:11, 40:12, 40:16, 41:10, 52:40, 67:29  <b>Property</b> [1] - 15:25  <b>property</b> [9] - 15:46, 16:2, 16:7, 41:9, 43:8, 43:9, 43:18,</p>	<p>64:16, 64:30  <b>proportion</b> [1] - 13:37  <b>proposal</b> [46] - 2:27, 2:35, 3:39, 4:10, 4:11, 4:16, 4:37, 5:8, 5:16, 10:29, 13:20, 13:24, 14:16, 15:3, 15:8, 15:13, 16:25, 17:46, 18:8, 18:33, 18:38, 21:12, 24:32, 27:39, 27:47, 28:2, 28:3, 28:44, 29:32, 31:46, 32:41, 34:21, 37:15, 39:35, 42:22, 45:25, 53:13, 53:42, 54:16, 54:25, 60:7, 65:19, 67:11, 70:16, 70:22, 71:2  <b>proposals</b> [1] - 60:10  <b>propose</b> [5] - 14:20, 32:36, 55:35, 59:39, 68:12  <b>proposed</b> [35] - 4:3, 4:9, 4:11, 4:18, 7:13, 11:26, 13:23, 14:29, 14:32, 18:12, 19:24, 20:16, 20:42, 21:9, 28:44, 39:39, 44:33, 44:35, 44:37, 45:45, 46:8, 46:13, 46:22, 46:30, 46:47, 53:23, 53:24, 53:27, 54:16, 54:31, 59:42, 60:11, 65:39, 66:41, 67:14  <b>proposes</b> [5] - 19:2, 19:12, 46:23, 56:39, 67:9  <b>proposing</b> [14] - 7:46, 16:44, 19:4, 19:21, 19:29, 21:16, 22:27, 23:46, 24:11, 24:18, 36:22, 36:33, 50:37, 51:14  <b>prosecuting</b> [1] - 27:1  <b>protect</b> [2] - 6:19, 27:20  <b>protected</b> [1] - 32:21  <b>protecting</b> [1] - 6:18  <b>protection</b> [5] - 6:19, 45:13, 45:16, 45:28, 49:27  <b>provide</b> [26] - 2:42, 3:10, 4:24, 4:46, 5:21, 12:4, 12:6, 12:36, 12:39, 17:31, 24:44, 33:15, 37:40, 38:46, 40:26, 41:41, 42:4, 44:42, 46:43, 48:28, 49:41, 54:5, 58:2, 58:45, 60:28,</p>
---	--	--	---	---

<p>70:6  <b>provided</b> [7] - 2:23, 2:31, 37:8, 41:3, 43:19, 54:34, 66:47  <b>providers</b> [5] - 7:35, 7:39, 51:16, 51:43, 56:35  <b>provides</b> [4] - 56:8, 57:18, 61:5, 70:5  <b>providing</b> [8] - 3:26, 13:10, 13:12, 36:17, 40:17, 40:23, 62:18, 67:30  <b>provision</b> [17] - 11:41, 12:12, 12:15, 12:18, 12:29, 12:34, 13:1, 13:28, 13:35, 13:40, 17:36, 28:13, 51:9, 51:35, 59:21, 65:20, 67:12  <b>proximity</b> [1] - 66:44  <b>public</b> [16] - 2:8, 2:11, 2:37, 2:39, 3:7, 3:13, 3:14, 4:34, 10:7, 42:12, 42:24, 54:20, 56:29, 60:2, 67:4, 72:44  <b>publish</b> [1] - 52:8  <b>publishes</b> [1] - 31:23  <b>punitive</b> [1] - 24:26  <b>purely</b> [1] - 15:15  <b>purple</b> [2] - 7:20, 7:29  <b>purposes</b> [1] - 69:34  <b>pursuing</b> [2] - 69:38, 69:42  <b>push</b> [1] - 48:23  <b>pushed</b> [1] - 38:19  <b>put</b> [19] - 16:11, 16:25, 20:17, 26:33, 26:47, 27:22, 27:47, 35:21, 41:5, 43:36, 44:40, 49:21, 52:16, 53:31, 58:31, 61:31, 66:11, 69:8, 71:45  <b>puts</b> [1] - 27:10  <b>putting</b> [1] - 23:47  <b>PYNSENT</b> [8] - 11:23, 13:4, 13:8, 14:4, 25:14, 39:7, 42:33, 42:37  <b>Pynsent</b> [1] - 11:23</p>	<p><b>quantum</b> [1] - 63:9  <b>quarter</b> [2] - 19:46, 30:9  <b>quasi</b> [1] - 33:17  <b>quasi-form</b> [1] - 33:17  <b>questions</b> [60] - 2:46, 3:3, 3:34, 3:41, 3:45, 3:46, 9:30, 9:41, 10:1, 15:20, 16:11, 16:34, 16:37, 17:32, 17:33, 17:36, 21:36, 21:45, 22:6, 22:16, 25:8, 27:22, 30:1, 32:29, 32:32, 32:46, 33:2, 34:14, 38:31, 39:13, 41:13, 42:45, 44:41, 44:43, 47:9, 47:15, 53:15, 53:30, 56:46, 57:6, 58:14, 58:20, 58:29, 58:31, 58:38, 59:11, 59:19, 63:41, 65:10, 66:13, 66:18, 66:28, 66:29, 68:29, 70:33, 71:35, 71:36, 72:6, 72:34  <b>quick</b> [2] - 18:39, 52:27  <b>quickly</b> [7] - 8:9, 8:18, 15:10, 31:7, 31:31, 31:37, 32:13  <b>quite</b> [12] - 9:9, 14:18, 18:11, 18:36, 19:7, 23:9, 23:47, 30:10, 31:7, 37:7, 41:37, 55:42  <b>quo</b> [1] - 58:45  <b>quoted</b> [1] - 70:16</p>	<p>38:38, 38:42, 38:44, 41:31, 53:15  <b>ranges</b> [1] - 20:28  <b>rankings</b> [1] - 7:36  <b>rapidly</b> [1] - 31:31  <b>RAPMUND</b> [1] - 53:38  <b>Rapmund</b> [2] - 1:26, 2:21  <b>rate</b> [5] - 12:21, 18:37, 30:46, 41:24, 44:7  <b>rates</b> [9] - 8:21, 8:26, 8:37, 9:22, 18:11, 18:43, 18:47, 30:20, 30:21  <b>rather</b> [5] - 20:4, 30:16, 63:22, 67:46, 70:37  <b>rationale</b> [1] - 33:22  <b>re</b> [5] - 8:44, 9:10, 19:9, 60:6, 63:3  <b>re-balance</b> [1] - 8:44  <b>re-balancing</b> [2] - 9:10, 19:9  <b>re-present</b> [1] - 63:3  <b>re-run</b> [1] - 60:6  <b>reach</b> [1] - 20:9  <b>read</b> [1] - 6:32  <b>reading</b> [1] - 61:29  <b>real</b> [8] - 10:35, 17:11, 25:24, 26:33, 43:1, 44:8, 47:29, 50:47  <b>realise</b> [1] - 24:31  <b>reality</b> [2] - 22:21, 52:35  <b>really</b> [34] - 5:12, 7:1, 7:21, 7:31, 7:40, 13:18, 22:19, 23:42, 24:44, 25:34, 25:37, 25:47, 26:19, 26:26, 26:27, 30:27, 30:28, 35:9, 36:13, 40:4, 40:30, 44:15, 44:19, 44:22, 50:24, 51:40, 52:42, 53:11, 64:10, 67:21, 71:7, 71:45, 72:14, 72:40  <b>reason</b> [7] - 5:10, 5:26, 10:6, 22:38, 32:17, 43:28, 61:1  <b>reasonable</b> [2] - 10:33, 23:6  <b>reasonably</b> [1] - 59:36  <b>reasoning</b> [1] - 22:29  <b>reasons</b> [5] - 32:12, 46:28, 46:31, 60:17, 60:47  <b>rebate</b> [2] - 15:46, 59:16  <b>rebates</b> [1] - 59:6  <b>receipt</b> [1] - 59:16</p>	<p><b>receive</b> [3] - 20:24, 20:25, 40:11  <b>received</b> [5] - 17:20, 18:7, 18:8, 58:15, 68:5  <b>receives</b> [1] - 46:44  <b>receiving</b> [3] - 20:29, 21:38, 50:1  <b>recent</b> [4] - 18:46, 30:21, 45:26, 51:46  <b>recently</b> [1] - 30:43  <b>recognition</b> [1] - 29:34  <b>record</b> [2] - 4:39, 57:8  <b>recorded</b> [1] - 4:27  <b>recover</b> [5] - 3:32, 42:30, 43:45, 55:13, 55:26  <b>recovered</b> [11] - 3:30, 12:20, 18:28, 19:41, 43:41, 54:24, 54:39, 54:46, 62:2, 71:3, 71:14  <b>recovering</b> [3] - 12:10, 18:39, 44:4  <b>recovery</b> [3] - 21:28, 29:28, 70:43  <b>recreational</b> [1] - 61:6  <b>recycled</b> [42] - 4:17, 15:4, 29:36, 34:42, 41:23, 41:29, 41:31, 41:39, 41:42, 42:2, 42:3, 42:20, 42:27, 53:24, 54:21, 54:37, 54:38, 59:44, 60:1, 60:10, 61:27, 61:29, 61:30, 61:34, 62:11, 62:17, 62:26, 69:7, 69:9, 69:25, 69:28, 69:33, 69:43, 70:36, 70:38, 70:44, 70:47, 71:6, 71:13, 71:31, 72:1  <b>recycling</b> [9] - 34:25, 34:27, 34:34, 41:17, 41:18, 42:23, 42:28, 59:24, 69:38  <b>redefining</b> [1] - 19:9  <b>reduce</b> [18] - 6:46, 14:33, 14:37, 19:30, 20:12, 20:33, 26:35, 30:28, 31:47, 32:15, 32:25, 35:42, 45:24, 56:39, 65:26, 66:2, 70:7, 70:13  <b>reduced</b> [7] - 8:21, 8:26, 18:44, 31:43, 56:20, 62:26, 66:5  <b>reduces</b> [2] - 27:7, 34:31</p>	<p><b>reducing</b> [4] - 14:31, 19:40, 20:3, 62:24  <b>reduction</b> [10] - 9:10, 9:17, 10:7, 18:11, 18:12, 18:13, 18:46, 19:8, 56:18, 58:42  <b>reductions</b> [1] - 10:20  <b>reference</b> [2] - 14:21, 28:28  <b>referred</b> [1] - 41:19  <b>referring</b> [1] - 64:20  <b>refined</b> [1] - 48:44  <b>reflect</b> [6] - 27:42, 28:1, 55:35, 55:38, 59:6, 70:45  <b>reflected</b> [4] - 18:15, 25:42, 29:23, 29:38  <b>reflecting</b> [1] - 29:35  <b>reflective</b> [2] - 31:27, 31:35  <b>reflects</b> [4] - 5:39, 18:37, 18:46, 20:12  <b>regard</b> [7] - 13:30, 15:47, 25:30, 25:44, 39:8, 48:21, 71:42  <b>regarding</b> [2] - 4:4, 67:12  <b>regardless</b> [1] - 20:19  <b>regime</b> [2] - 33:17, 36:44  <b>region</b> [5] - 5:21, 27:44, 35:7, 50:45, 55:18  <b>regulated</b> [1] - 16:17  <b>regulations</b> [1] - 62:14  <b>regulators</b> [2] - 12:43, 28:29  <b>Regulatory</b> [1] - 2:16  <b>regulatory</b> [15] - 3:28, 8:10, 22:27, 33:42, 40:41, 41:38, 42:6, 45:7, 45:10, 55:25, 61:31, 62:7, 68:3, 68:25, 69:2  <b>REGULATORY</b> [1] - 1:11  <b>reinstated</b> [1] - 70:12  <b>reiterate</b> [6] - 9:20, 26:47, 43:39, 57:10, 61:39, 67:18  <b>reiterating</b> [1] - 58:6  <b>rejected</b> [1] - 69:22  <b>relate</b> [2] - 38:12, 56:31  <b>related</b> [5] - 24:23, 24:24, 25:12, 56:8, 56:10  <b>relates</b> [1] - 24:33  <b>relation</b> [7] - 22:13, 36:6, 36:38, 36:47,</p>
<p><b>Q</b></p>	<p><b>R</b></p>			
<p><b>qualified</b> [1] - 52:31  <b>quality</b> [1] - 45:15  <b>quantify</b> [1] - 12:45  <b>quantity</b> [2] - 15:35, 63:13</p>	<p><b>rain</b> [1] - 30:9  <b>rainfall</b> [6] - 23:29, 30:8, 31:21, 31:22, 31:24, 31:31  <b>rains</b> [1] - 31:8  <b>raise</b> [17] - 18:20, 20:31, 24:25, 25:2, 25:8, 25:12, 29:45, 34:47, 35:12, 39:3, 47:15, 57:5, 57:26, 62:31, 62:34, 66:14, 66:31  <b>raised</b> [5] - 19:15, 19:16, 21:36, 26:45, 28:5  <b>ramp</b> [1] - 50:20  <b>ran</b> [1] - 60:25  <b>range</b> [9] - 25:47, 28:42, 29:32, 35:44,</p>			



<p>39:4, 64:44, 65:7  <b>relationship</b> [3] - 16:2, 16:15, 64:10  <b>relative</b> [2] - 58:36, 59:3  <b>relatively</b> [7] - 11:4, 19:22, 19:26, 31:33, 50:47, 58:24, 60:10  <b>release</b> [3] - 3:13, 72:43, 73:9  <b>released</b> [3] - 2:25, 3:19, 73:4  <b>relevant</b> [2] - 3:46, 66:36  <b>rely</b> [1] - 70:26  <b>remain</b> [1] - 12:42  <b>remainder</b> [1] - 13:38  <b>remains</b> [1] - 46:30  <b>Remarks</b> [1] - 2:1  <b>remiss</b> [1] - 29:44  <b>removal</b> [1] - 33:11  <b>remove</b> [1] - 67:9  <b>removed</b> [2] - 21:10, 39:39  <b>renewable</b> [1] - 50:14  <b>renewables</b> [1] - 50:11  <b>renewals</b> [1] - 45:42  <b>renewing</b> [1] - 49:14  <b>rent</b> [1] - 16:1  <b>replace</b> [2] - 48:11, 65:8  <b>replacement</b> [3] - 48:17, 48:34, 56:11  <b>report</b> [8] - 3:14, 3:19, 33:30, 72:44, 73:3, 73:5, 73:9, 73:10  <b>reporting</b> [1] - 52:1  <b>represent</b> [4] - 10:47, 11:5, 55:18, 56:26  <b>representative</b> [2] - 4:37, 62:42  <b>representatives</b> [1] - 44:22  <b>represents</b> [2] - 60:12, 66:45  <b>reputation</b> [1] - 6:33  <b>request</b> [2] - 3:44, 33:34  <b>require</b> [3] - 48:13, 48:47, 54:29  <b>required</b> [4] - 54:4, 54:6, 56:29, 62:7  <b>requirement</b> [12] - 8:23, 28:46, 29:2, 29:3, 33:25, 36:1, 43:41, 43:46, 46:2, 62:8, 68:3, 70:21  <b>requirements</b> [14] - 3:29, 4:9, 5:3, 7:16,</p>	<p>8:18, 8:37, 22:10, 28:1, 44:37, 45:8, 45:10, 45:12, 49:19, 52:4  <b>Rescue</b> [1] - 65:14  <b>research</b> [2] - 32:13, 32:24  <b>reserves</b> [1] - 33:24  <b>resetting</b> [1] - 19:9  <b>reshuffling</b> [1] - 15:15  <b>residence</b> [1] - 11:42  <b>residences</b> [2] - 13:9, 13:13  <b>residential</b> [47] - 10:15, 10:27, 10:30, 10:35, 11:11, 11:13, 11:17, 14:38, 15:5, 21:44, 21:46, 21:47, 22:1, 25:11, 25:24, 30:1, 32:38, 33:2, 33:6, 33:33, 33:34, 34:13, 34:14, 34:16, 37:29, 37:34, 38:39, 39:18, 39:41, 41:17, 41:32, 41:33, 55:19, 57:28, 57:31, 57:35, 58:3, 60:16, 60:26, 60:29, 60:42, 61:10, 61:11, 61:13, 69:33  <b>residents</b> [4] - 12:22, 12:32, 13:41  <b>residual</b> [2] - 26:11, 29:5  <b>resilience</b> [3] - 6:15, 65:27, 66:4  <b>resource</b> [5] - 5:43, 24:28, 25:15, 27:19, 27:24  <b>resourced</b> [1] - 38:33  <b>resources</b> [2] - 37:40, 37:47  <b>respect</b> [13] - 13:26, 14:4, 14:30, 14:39, 15:7, 28:5, 31:20, 31:39, 35:10, 49:5, 49:19, 50:42, 69:8  <b>respects</b> [1] - 2:6  <b>respond</b> [9] - 15:39, 24:7, 24:16, 26:41, 27:35, 31:30, 39:23, 39:45, 60:21  <b>responded</b> [2] - 20:47, 39:24  <b>responding</b> [2] - 24:5, 24:41  <b>response</b> [5] - 13:8, 24:4, 32:26, 62:38, 70:42  <b>responses</b> [12] - 3:44, 4:24, 58:31, 58:36,</p>	<p>59:11, 59:14, 59:35, 59:47, 60:29, 60:30, 60:31, 60:39  <b>responsibilities</b> [3] - 25:40, 54:26, 62:13  <b>responsibility</b> [3] - 38:21, 59:32, 64:29  <b>responsible</b> [1] - 60:23  <b>responsive</b> [1] - 31:32  <b>rest</b> [1] - 8:11  <b>restrict</b> [1] - 5:14  <b>restrictions</b> [9] - 19:45, 20:3, 26:32, 26:47, 27:9, 28:18, 31:3, 31:34, 38:44  <b>restructured</b> [1] - 55:42  <b>rests</b> [1] - 64:16  <b>result</b> [4] - 47:43, 50:7, 65:16, 71:10  <b>resulting</b> [1] - 56:18  <b>retained</b> [1] - 33:37  <b>retention</b> [1] - 33:26  <b>reticulated</b> [1] - 21:3  <b>return</b> [6] - 8:22, 18:28, 18:32, 18:42, 18:43, 46:44  <b>returned</b> [1] - 56:32  <b>returning</b> [1] - 7:3  <b>revenue</b> [41] - 5:3, 5:13, 8:18, 8:23, 8:37, 18:17, 18:20, 19:14, 19:18, 19:41, 20:35, 21:27, 22:10, 25:42, 26:9, 26:17, 26:19, 27:47, 28:46, 29:2, 29:3, 29:8, 30:31, 30:34, 30:35, 31:39, 31:40, 31:43, 32:1, 33:25, 43:41, 43:46, 46:2, 47:5, 50:18, 50:22, 55:21, 55:22, 55:25, 70:20, 70:30  <b>reverse</b> [1] - 63:26  <b>REVIEW</b> [1] - 1:14  <b>review</b> [37] - 2:9, 2:12, 2:26, 3:23, 14:41, 15:1, 25:25, 28:1, 28:8, 29:10, 29:13, 29:42, 33:29, 34:41, 41:35, 41:41, 42:2, 44:15, 44:16, 44:17, 45:40, 47:2, 51:47, 52:22, 52:23, 53:42, 54:12, 54:13, 61:21, 61:29, 65:35, 65:36, 66:10, 67:19, 67:22, 68:27, 69:6</p>	<p><b>reviewed</b> [5] - 8:34, 23:2, 23:5, 55:24, 56:17  <b>reviewers</b> [1] - 65:34  <b>reviewing</b> [1] - 58:16  <b>reviews</b> [2] - 25:25, 61:20  <b>revise</b> [1] - 59:10  <b>revised</b> [7] - 8:33, 14:15, 18:9, 18:45, 29:3, 59:1, 69:8  <b>revolves</b> [1] - 11:26  <b>Rick</b> [4] - 15:21, 15:23, 52:26, 64:10  <b>rid</b> [1] - 63:30  <b>right-hand</b> [1] - 7:29  <b>rise</b> [1] - 8:42  <b>risk</b> [25] - 5:40, 6:47, 7:6, 7:9, 7:10, 18:16, 19:18, 25:38, 26:1, 45:24, 45:26, 47:23, 47:30, 48:8, 48:31, 48:43, 48:46, 49:6, 49:8, 49:12, 49:13, 49:18, 50:6, 50:7, 66:46  <b>risk-based</b> [1] - 25:38  <b>risks</b> [2] - 26:21, 49:34  <b>River</b> [3] - 34:29, 66:44, 68:31  <b>RLMC</b> [1] - 26:16  <b>road</b> [2] - 25:34, 26:21  <b>Road</b> [1] - 1:29  <b>robust</b> [4] - 11:9, 22:20, 42:19, 58:28  <b>role</b> [4] - 26:32, 28:6, 28:12, 58:17  <b>rolling</b> [4] - 37:33, 37:44, 38:2, 38:45  <b>room</b> [1] - 21:38  <b>Rothbury</b> [7] - 11:29, 11:32, 12:45, 13:46, 14:5, 39:34, 42:43  <b>roughly</b> [2] - 5:30, 11:11  <b>round</b> [1] - 53:32  <b>roundtable</b> [1] - 21:39  <b>run</b> [18] - 19:34, 21:34, 25:46, 26:2, 27:23, 28:29, 28:41, 29:12, 29:29, 29:32, 31:8, 31:10, 38:40, 41:25, 60:6, 62:28, 72:24, 72:32  <b>run-off</b> [2] - 31:8, 31:10  <b>running</b> [4] - 24:37, 35:11, 45:41, 49:8</p>	<p><b>S</b></p> <p><b>safeguard</b> [1] - 25:17  <b>safety</b> [5] - 8:13, 49:5, 49:7  <b>sales</b> [1] - 4:5  <b>sample</b> [3] - 15:43, 34:16, 34:19  <b>sandpits</b> [1] - 32:17  <b>sandwich</b> [1] - 52:28  <b>satisfied</b> [1] - 33:34  <b>Save</b> [1] - 68:31  <b>saving</b> [5] - 30:37, 37:13, 37:16, 37:17, 38:13  <b>savings</b> [2] - 56:42, 59:39  <b>scale</b> [3] - 20:13, 20:25, 28:18  <b>scarce</b> [1] - 27:6  <b>scarcer</b> [1] - 19:39  <b>scarcity</b> [6] - 23:31, 23:46, 24:11, 24:18, 24:29, 28:20  <b>scheme</b> [8] - 34:37, 37:11, 41:17, 41:18, 68:16, 68:17, 69:9, 71:6  <b>schemes</b> [17] - 12:25, 41:42, 42:5, 42:21, 42:24, 42:29, 42:31, 54:38, 68:13, 68:21, 68:45, 69:1, 69:12, 69:33, 69:35, 69:41, 71:14  <b>scope</b> [4] - 36:8, 40:18, 42:28, 46:28  <b>Scott</b> [7] - 1:25, 2:20, 17:39, 17:43, 21:41, 45:38, 46:42  <b>screen</b> [5] - 15:28, 16:21, 18:24, 21:36, 47:9  <b>screening</b> [1] - 58:29  <b>second</b> [6] - 4:8, 11:30, 39:37, 44:32, 53:45, 54:20  <b>secondly</b> [1] - 71:16  <b>secretariat</b> [5] - 2:18, 17:31, 44:34, 44:40, 53:31  <b>Secretariat</b> [1] - 1:22  <b>secretariat's</b> [1] - 4:23  <b>section</b> [5] - 44:32, 48:17, 48:20, 48:34, 70:17  <b>sections</b> [1] - 15:33  <b>sector</b> [1] - 37:8  <b>sectors</b> [1] - 28:30</p>
--	--	---	--	---

<p><b>security</b> <sup>[13]</sup> - 14:26, 14:30, 14:39, 15:7, 25:32, 26:3, 27:38, 27:43, 28:14, 41:43, 42:5, 68:40, 69:11</p> <p><b>see</b> <sup>[31]</sup> - 6:43, 7:15, 7:37, 8:24, 8:40, 10:41, 11:3, 11:17, 14:7, 16:2, 17:32, 18:23, 18:43, 25:33, 26:33, 29:47, 30:19, 37:6, 37:15, 46:4, 52:38, 55:16, 55:32, 55:45, 57:31, 58:35, 59:3, 61:4, 62:45, 69:27, 70:23</p> <p><b>seeing</b> <sup>[4]</sup> - 7:10, 8:27, 23:19, 69:28</p> <p><b>seek</b> <sup>[3]</sup> - 3:2, 3:34, 44:43</p> <p><b>seeking</b> <sup>[3]</sup> - 3:23, 28:10, 68:26</p> <p><b>seem</b> <sup>[1]</sup> - 18:24</p> <p><b>select</b> <sup>[1]</sup> - 58:43</p> <p><b>selected</b> <sup>[1]</sup> - 59:3</p> <p><b>sells</b> <sup>[1]</sup> - 21:24</p> <p><b>send</b> <sup>[2]</sup> - 33:42, 70:26</p> <p><b>sends</b> <sup>[1]</sup> - 29:18</p> <p><b>sense</b> <sup>[6]</sup> - 12:45, 21:47, 33:47, 62:47, 63:5, 63:8</p> <p><b>sent</b> <sup>[2]</sup> - 37:3, 60:33</p> <p><b>separate</b> <sup>[10]</sup> - 13:19, 29:27, 36:30, 54:47, 57:15, 61:16, 61:18, 64:44, 65:2, 67:27</p> <p><b>separately</b> <sup>[2]</sup> - 57:16, 61:36</p> <p><b>September</b> <sup>[1]</sup> - 2:25</p> <p><b>series</b> <sup>[1]</sup> - 57:38</p> <p><b>serious</b> <sup>[1]</sup> - 36:8</p> <p><b>seriously</b> <sup>[2]</sup> - 27:32, 43:27</p> <p><b>server</b> <sup>[1]</sup> - 38:30</p> <p><b>service</b> <sup>[29]</sup> - 4:4, 4:9, 7:26, 7:32, 12:37, 13:30, 13:40, 13:42, 14:44, 19:12, 29:1, 29:4, 29:15, 44:30, 44:33, 44:36, 45:4, 45:9, 45:21, 45:32, 48:12, 51:8, 56:3, 58:42, 64:24, 64:41, 70:3, 71:1, 71:2</p> <p><b>serviced</b> <sup>[4]</sup> - 48:27, 51:27, 66:43, 67:30</p> <p><b>services</b> <sup>[48]</sup> - 2:11, 3:27, 12:11, 12:13, 12:16, 12:18, 12:29, 12:35, 12:36, 12:38,</p>	<p>12:40, 13:2, 13:27, 13:28, 13:36, 13:38, 14:2, 21:4, 21:7, 24:17, 28:13, 40:12, 40:23, 40:27, 40:38, 40:41, 41:2, 41:8, 43:19, 54:4, 54:5, 56:8, 56:9, 56:10, 56:11, 58:44, 59:1, 59:21, 59:23, 61:10, 62:18, 66:47, 67:7, 67:13, 67:31, 70:46, 71:16</p> <p><b>servicing</b> <sup>[3]</sup> - 51:24, 71:23, 71:26</p> <p><b>Session</b> <sup>[3]</sup> - 17:8, 44:30, 53:8</p> <p><b>session</b> <sup>[34]</sup> - 2:47, 3:3, 3:8, 3:41, 4:1, 4:8, 4:15, 4:22, 14:10, 16:38, 16:41, 17:15, 17:26, 21:43, 44:23, 44:28, 44:39, 44:47, 53:2, 53:11, 53:12, 53:18, 53:22, 53:40, 53:45, 66:23, 66:25, 66:27, 66:37, 67:19, 69:47, 71:36, 72:24</p> <p><b>sessions</b> <sup>[5]</sup> - 3:40, 3:44, 53:4, 53:17, 53:32</p> <p><b>set</b> <sup>[27]</sup> - 2:25, 2:28, 12:17, 16:17, 18:3, 18:14, 18:19, 23:6, 24:44, 26:8, 26:9, 26:10, 26:11, 26:17, 27:15, 28:7, 28:28, 30:43, 41:18, 46:5, 46:11, 46:19, 46:27, 62:13, 64:15, 70:45</p> <p><b>sets</b> <sup>[4]</sup> - 14:42, 26:16, 27:9, 27:18</p> <p><b>setting</b> <sup>[7]</sup> - 17:28, 21:26, 22:10, 22:15, 45:21, 55:33, 68:44</p> <p><b>settings</b> <sup>[2]</sup> - 25:26, 25:45</p> <p><b>seven</b> <sup>[7]</sup> - 34:9, 58:14, 58:20, 58:38, 59:11, 59:19, 72:29</p> <p><b>seven?</b> <sup>[1]</sup> - 34:11</p> <p><b>several</b> <sup>[1]</sup> - 4:15</p> <p><b>sewage</b> <sup>[2]</sup> - 45:19, 66:43</p> <p><b>sewer</b> <sup>[12]</sup> - 12:16, 12:38, 13:27, 13:28, 14:7, 39:33, 39:42, 45:15, 66:47, 67:6, 67:13, 67:38</p>	<p><b>sewerage</b> <sup>[14]</sup> - 11:41, 12:11, 13:10, 13:13, 21:2, 21:4, 40:13, 40:23, 41:8, 42:42, 62:18, 67:31, 68:13, 71:3</p> <p><b>sewered</b> <sup>[3]</sup> - 40:3, 67:21, 67:22</p> <p><b>sewering</b> <sup>[7]</sup> - 40:6, 40:12, 67:24, 67:27, 67:35, 67:46, 68:6</p> <p><b>sewers</b> <sup>[1]</sup> - 68:11</p> <p><b>share</b> <sup>[1]</sup> - 30:31</p> <p><b>shareholder</b> <sup>[1]</sup> - 13:22</p> <p><b>sheet</b> <sup>[1]</sup> - 37:14</p> <p><b>Sheridan</b> <sup>[4]</sup> - 1:26, 2:21, 53:35, 61:26</p> <p><b>SHIELDS</b> <sup>[17]</sup> - 10:26, 11:44, 15:42, 16:23, 28:25, 33:15, 34:13, 34:36, 42:1, 42:16, 43:39, 44:13, 51:46, 65:32, 68:9, 68:42, 70:16</p> <p><b>Shields</b> <sup>[2]</sup> - 10:26, 28:25</p> <p><b>shift</b> <sup>[1]</sup> - 60:13</p> <p><b>shock</b> <sup>[1]</sup> - 6:24</p> <p><b>shocks</b> <sup>[1]</sup> - 26:6</p> <p><b>shopper</b> <sup>[1]</sup> - 6:34</p> <p><b>shopping</b> <sup>[2]</sup> - 56:1, 56:4</p> <p><b>shops</b> <sup>[1]</sup> - 61:5</p> <p><b>short</b> <sup>[1]</sup> - 27:8</p> <p><b>short-term</b> <sup>[1]</sup> - 27:8</p> <p><b>shorter</b> <sup>[2]</sup> - 14:20, 14:25</p> <p><b>show</b> <sup>[6]</sup> - 10:28, 30:33, 38:41, 64:3, 71:9, 71:10</p> <p><b>showed</b> <sup>[5]</sup> - 47:20, 47:28, 47:41, 58:46, 63:18</p> <p><b>shower</b> <sup>[1]</sup> - 37:13</p> <p><b>showing</b> <sup>[3]</sup> - 15:28, 22:36, 60:17</p> <p><b>shown</b> <sup>[1]</sup> - 49:11</p> <p><b>shows</b> <sup>[7]</sup> - 18:30, 29:24, 46:18, 46:20, 46:22, 52:10, 71:45</p> <p><b>side</b> <sup>[7]</sup> - 7:29, 9:1, 19:21, 19:44, 38:26, 43:39, 70:29</p> <p><b>sign</b> <sup>[1]</sup> - 34:33</p> <p><b>signal</b> <sup>[4]</sup> - 17:22, 29:19, 33:42, 70:26</p> <p><b>signalled</b> <sup>[1]</sup> - 27:24</p> <p><b>signalling</b> <sup>[4]</sup> - 24:28, 26:23, 26:46, 27:9</p>	<p><b>signals</b> <sup>[3]</sup> - 26:34, 27:6, 28:19</p> <p><b>significant</b> <sup>[12]</sup> - 7:17, 18:36, 19:7, 27:29, 31:8, 48:1, 48:6, 48:33, 60:13, 60:30, 63:2, 66:45</p> <p><b>significantly</b> <sup>[7]</sup> - 11:2, 49:11, 49:42, 49:43, 60:8, 61:12</p> <p><b>silent</b> <sup>[1]</sup> - 52:3</p> <p><b>similar</b> <sup>[6]</sup> - 37:15, 41:24, 44:39, 46:18, 52:4, 61:47</p> <p><b>similarly</b> <sup>[1]</sup> - 62:26</p> <p><b>Simon</b> <sup>[1]</sup> - 66:33</p> <p><b>simply</b> <sup>[5]</sup> - 14:27, 15:11, 15:13, 23:37, 23:41</p> <p><b>single</b> <sup>[5]</sup> - 47:39, 47:43, 47:44, 54:46, 57:15</p> <p><b>sitting</b> <sup>[1]</sup> - 57:4</p> <p><b>situation</b> <sup>[5]</sup> - 25:33, 26:5, 35:21, 38:29, 38:33</p> <p><b>situations</b> <sup>[1]</sup> - 23:19</p> <p><b>six</b> <sup>[2]</sup> - 5:22, 56:23</p> <p><b>size</b> <sup>[2]</sup> - 38:30</p> <p><b>sized</b> <sup>[1]</sup> - 56:4</p> <p><b>slide</b> <sup>[6]</sup> - 7:36, 15:28, 47:19, 55:16, 55:32, 63:18</p> <p><b>slido</b> <sup>[11]</sup> - 3:46, 4:25, 16:34, 17:37, 32:32, 32:34, 32:44, 39:13, 44:43, 53:33, 66:18</p> <p><b>slido.com</b> <sup>[2]</sup> - 2:46, 3:1</p> <p><b>slight</b> <sup>[3]</sup> - 8:32, 8:42, 11:3</p> <p><b>slightly</b> <sup>[8]</sup> - 8:42, 8:47, 11:13, 11:18, 11:19, 22:38, 26:2, 44:23</p> <p><b>slowly</b> <sup>[1]</sup> - 20:17</p> <p><b>small</b> <sup>[7]</sup> - 5:27, 5:33, 21:3, 21:21, 31:33, 43:24, 56:21</p> <p><b>smaller</b> <sup>[1]</sup> - 33:11</p> <p><b>smart</b> <sup>[1]</sup> - 52:42</p> <p><b>smeared</b> <sup>[1]</sup> - 57:33</p> <p><b>SMS</b> <sup>[1]</sup> - 50:5</p> <p><b>social</b> <sup>[2]</sup> - 60:35, 61:22</p> <p><b>soil</b> <sup>[1]</sup> - 31:25</p> <p><b>solid</b> <sup>[1]</sup> - 22:29</p> <p><b>solo</b> <sup>[1]</sup> - 57:4</p> <p><b>solution</b> <sup>[3]</sup> - 42:29, 42:40, 42:42</p>	<p><b>solutions</b> <sup>[2]</sup> - 71:23, 71:26</p> <p><b>sometimes</b> <sup>[1]</sup> - 43:13</p> <p><b>somewhat</b> <sup>[2]</sup> - 23:21, 24:26</p> <p><b>somewhere</b> <sup>[1]</sup> - 32:15</p> <p><b>soon</b> <sup>[2]</sup> - 4:34, 24:20</p> <p><b>sorry</b> <sup>[6]</sup> - 41:14, 42:10, 62:16, 62:21, 65:38, 66:38</p> <p><b>sort</b> <sup>[7]</sup> - 6:39, 22:5, 49:23, 57:11, 63:9, 63:29, 65:24</p> <p><b>sorts</b> <sup>[3]</sup> - 26:28, 63:4, 64:32</p> <p><b>sought</b> <sup>[1]</sup> - 34:38</p> <p><b>source</b> <sup>[2]</sup> - 14:46, 50:26</p> <p><b>sources</b> <sup>[3]</sup> - 34:6, 35:43, 45:12</p> <p><b>South</b> <sup>[1]</sup> - 13:22</p> <p><b>space</b> <sup>[3]</sup> - 15:5, 42:28, 65:25</p> <p><b>spaces</b> <sup>[1]</sup> - 54:20</p> <p><b>speaker</b> <sup>[1]</sup> - 50:17</p> <p><b>speaking</b> <sup>[4]</sup> - 4:30, 8:40, 57:17, 61:47</p> <p><b>special</b> <sup>[1]</sup> - 13:21</p> <p><b>specific</b> <sup>[2]</sup> - 24:32, 54:1</p> <p><b>specified</b> <sup>[1]</sup> - 31:2</p> <p><b>spend</b> <sup>[8]</sup> - 50:42, 51:4, 51:5, 62:25, 65:35, 68:34, 68:37, 69:17</p> <p><b>spending</b> <sup>[3]</sup> - 4:17, 52:34, 65:28</p> <p><b>spent</b> <sup>[5]</sup> - 26:20, 46:10, 46:26, 47:3, 55:36</p> <p><b>spokesperson</b> <sup>[1]</sup> - 66:37</p> <p><b>sporting</b> <sup>[1]</sup> - 42:24</p> <p><b>spot</b> <sup>[1]</sup> - 9:43</p> <p><b>spouses</b> <sup>[1]</sup> - 43:16</p> <p><b>spraying</b> <sup>[1]</sup> - 30:27</p> <p><b>spreading</b> <sup>[1]</sup> - 33:25</p> <p><b>stack</b> <sup>[1]</sup> - 69:41</p> <p><b>staff</b> <sup>[3]</sup> - 3:11, 53:20, 72:31</p> <p><b>stage</b> <sup>[1]</sup> - 22:12</p> <p><b>stakeholder</b> <sup>[2]</sup> - 20:40, 24:38</p> <p><b>stakeholders</b> <sup>[3]</sup> - 28:11, 51:5, 60:40</p> <p><b>stamp</b> <sup>[1]</sup> - 64:42</p> <p><b>stand</b> <sup>[1]</sup> - 9:4</p> <p><b>stand-alone</b> <sup>[1]</sup> - 9:4</p> <p><b>standard</b> <sup>[3]</sup> - 45:32,</p>
--	---	--	--	---

47:42, 47:43 <b>standards</b> [12] - 11:35, 44:36, 45:5, 45:9, 45:14, 45:27, 45:36, 47:27, 47:46, 48:12, 49:33, 54:7 <b>standing</b> [2] - 20:7, 52:27 <b>start</b> [6] - 10:2, 10:43, 16:41, 45:4, 53:35, 58:6 <b>started</b> [3] - 17:16, 47:10, 50:20 <b>starting</b> [7] - 7:45, 11:18, 22:7, 22:34, 31:17, 68:21, 70:46 <b>state</b> [2] - 4:38, 31:24 <b>statement</b> [1] - 25:14 <b>statements</b> [1] - 57:38 <b>states</b> [1] - 45:23 <b>stations</b> [1] - 56:3 <b>statistically</b> [1] - 60:30 <b>status</b> [1] - 58:45 <b>stay</b> [3] - 48:11, 53:19, 72:23 <b>Steel</b> [1] - 34:29 <b>Stevens</b> [2] - 5:22, 69:40 <b>still</b> [9] - 3:10, 12:26, 12:31, 14:47, 22:6, 28:37, 29:10, 39:41, 49:40 <b>stock</b> [1] - 18:27 <b>stockpiles</b> [1] - 30:28 <b>stop</b> [1] - 64:17 <b>storage</b> [4] - 30:33, 31:27, 31:28, 32:26 <b>storages</b> [4] - 30:13, 31:23, 31:30, 33:24 <b>stores</b> [1] - 10:31 <b>storms</b> [1] - 31:10 <b>stormwater</b> [18] - 2:10, 3:27, 4:3, 19:24, 49:10, 49:15, 54:18, 59:44, 60:9, 61:3, 61:33, 62:12, 68:35, 68:37, 68:47, 69:16, 69:38, 70:28 <b>straight</b> [1] - 18:25 <b>strategic</b> [1] - 24:45 <b>strategies</b> [2] - 68:39 <b>strategy</b> [9] - 5:36, 5:37, 5:41, 5:45, 6:38, 7:8, 14:42, 48:8, 58:19 <b>stream</b> [1] - 31:22 <b>strength</b> [5] - 22:18, 55:11, 55:14, 55:37, 56:1 <b>stress</b> [1] - 26:30	<b>strictly</b> [1] - 59:31 <b>strip</b> [1] - 30:14 <b>strong</b> [4] - 14:36, 27:31, 61:45, 71:29 <b>stronger</b> [2] - 23:35, 33:42 <b>strongly</b> [2] - 28:18, 62:34 <b>structure</b> [9] - 3:31, 27:5, 27:6, 27:25, 27:30, 28:27, 29:28, 36:40, 60:25 <b>structured</b> [1] - 27:4 <b>structures</b> [2] - 28:20, 34:15 <b>stuck</b> [1] - 71:25 <b>stuff</b> [2] - 38:26, 52:45 <b>subject</b> [1] - 45:7 <b>submission</b> [28] - 2:31, 4:44, 5:2, 5:6, 5:39, 6:3, 6:41, 7:1, 7:11, 8:19, 8:20, 8:25, 8:29, 8:33, 8:35, 9:17, 9:21, 9:23, 9:27, 11:28, 17:46, 18:9, 18:45, 27:1, 34:7, 57:10, 59:37 <b>submissions</b> [10] - 2:24, 2:36, 2:41, 3:16, 16:25, 17:20, 58:16, 72:45, 73:10 <b>submitted</b> [1] - 2:28 <b>subsequent</b> [1] - 2:35 <b>subsidise</b> [1] - 67:46 <b>subsidy</b> [1] - 40:26 <b>substantial</b> [1] - 10:8 <b>sucking</b> [1] - 8:4 <b>suggest</b> [2] - 30:45, 32:40 <b>suggesting</b> [1] - 35:28 <b>suggests</b> [1] - 62:37 <b>summarised</b> [1] - 2:27 <b>summer</b> [3] - 38:43, 48:27, 48:32 <b>summertime</b> [1] - 31:9 <b>supplementary</b> [1] - 2:32 <b>supplied</b> [1] - 16:11 <b>supply</b> [15] - 6:15, 14:43, 23:30, 24:39, 28:6, 28:37, 30:20, 30:22, 32:12, 33:9, 33:11, 33:13, 37:4, 48:29, 71:44 <b>supplying</b> [1] - 19:33 <b>support</b> [15] - 20:39, 21:11, 25:16, 25:41, 27:31, 29:18, 29:25, 29:27, 42:23, 59:20, 59:43, 62:3, 65:39, 65:45, 67:11 <b>supported</b> [1] - 28:18 <b>supportive</b> [6] - 29:21, 34:33, 36:44, 57:11, 61:17, 65:28 <b>supports</b> [2] - 61:12, 67:5 <b>suppose</b> [4] - 24:21, 40:1, 57:11, 57:38 <b>supposed</b> [1] - 11:38 <b>surprised</b> [1] - 63:23 <b>surrounding</b> [3] - 61:3, 61:7, 66:45 <b>survey</b> [14] - 33:33, 34:14, 42:19, 58:4, 58:12, 58:25, 58:34, 59:25, 60:16, 60:22, 60:25, 60:28, 60:31, 62:22 <b>surveys</b> [5] - 6:33, 43:14, 58:17, 58:23, 61:9 <b>sustain</b> [1] - 6:19 <b>sustainability</b> [1] - 37:18 <b>sustainable</b> [1] - 28:13 <b>sustainably</b> [1] - 14:44 <b>sweated</b> [1] - 6:46 <b>sweating</b> [1] - 48:19 <b>switch</b> [1] - 41:26 <b>Sydney</b> [6] - 5:31, 29:24, 51:39, 51:46, 54:12, 60:27 <b>system</b> [14] - 5:40, 14:31, 14:34, 16:17, 20:26, 26:1, 31:7, 32:6, 33:19, 43:31, 52:3, 52:18, 64:46 <b>Systems</b> [1] - 14:16 <b>systems</b> [3] - 32:10, 66:43, 66:44	28:27, 33:33, 33:44, 34:14, 34:15, 52:41 <b>tariffs</b> [5] - 27:3, 28:31, 28:34, 29:38, 36:20 <b>taxes</b> [1] - 8:11 <b>team</b> [1] - 52:31 <b>tease</b> [1] - 22:30 <b>technically</b> [1] - 32:14 <b>technologies</b> [2] - 46:34, 71:23 <b>technology</b> [1] - 6:6 <b>tenant</b> [6] - 43:23, 44:2, 44:3, 44:5, 44:9, 64:15 <b>tenants</b> [8] - 15:32, 16:16, 43:17, 43:29, 43:40, 43:44, 64:18, 64:21 <b>tend</b> [1] - 61:11 <b>tended</b> [1] - 59:26 <b>tenth</b> [1] - 5:31 <b>term</b> [22] - 7:4, 14:42, 15:25, 23:28, 23:34, 23:36, 24:21, 24:28, 24:29, 24:39, 24:44, 25:32, 27:8, 28:13, 34:30, 41:43, 42:4, 50:26, 58:19, 65:25, 66:2, 66:5 <b>termed</b> [1] - 43:3 <b>terms</b> [38] - 3:23, 5:1, 6:12, 7:37, 8:15, 8:40, 8:44, 9:3, 9:24, 9:25, 10:35, 13:20, 14:46, 15:11, 17:47, 18:1, 22:33, 24:3, 25:26, 25:45, 27:36, 27:38, 32:26, 36:27, 41:28, 50:18, 50:38, 51:15, 55:30, 55:36, 55:41, 63:12, 63:33, 67:20, 70:44 <b>test</b> [4] - 13:36, 13:37, 13:44, 63:8 <b>testing</b> [1] - 42:25 <b>THE</b> [33] - 2:3, 9:39, 10:11, 10:22, 10:39, 11:21, 12:1, 12:6, 13:6, 14:9, 15:20, 15:37, 16:14, 16:27, 16:33, 16:41, 16:46, 17:4, 42:10, 44:32, 47:12, 50:28, 52:21, 53:1, 66:27, 67:16, 68:29, 70:40, 71:34, 72:4, 72:10, 72:31, 73:14 <b>themselves</b> [2] - 59:28, 63:29	<b>therefore</b> [16] - 3:34, 4:28, 8:22, 12:28, 12:46, 15:31, 15:32, 16:10, 41:3, 49:6, 49:14, 51:1, 51:31, 61:32, 65:27, 67:5 <b>thinking</b> [3] - 34:7, 41:27, 71:25 <b>third</b> [5] - 4:15, 7:37, 7:38, 56:34, 64:31 <b>thirdly</b> [1] - 71:17 <b>thousands</b> [1] - 49:21 <b>three</b> [7] - 3:40, 30:13, 31:42, 47:42, 56:26, 56:41, 58:39 <b>threshold</b> [3] - 20:10, 33:46, 35:9 <b>throughout</b> [5] - 3:3, 3:44, 23:1, 23:8, 28:9 <b>throw</b> [1] - 68:42 <b>Tillegra</b> [1] - 69:22 <b>timetable</b> [1] - 73:8 <b>timing</b> [3] - 14:27, 24:22, 46:28 <b>TO</b> [1] - 1:14 <b>today</b> [20] - 2:5, 2:17, 2:18, 2:42, 2:45, 3:4, 3:36, 4:36, 10:11, 17:12, 35:13, 55:5, 56:24, 66:37, 69:5, 72:11, 72:15, 72:19, 72:32, 73:1 <b>today's</b> [3] - 3:6, 4:27, 72:17 <b>together</b> [2] - 27:47, 68:22 <b>Tomago</b> [3] - 30:14, 32:17, 32:18 <b>tonight</b> [1] - 72:25 <b>took</b> [1] - 18:10 <b>top</b> [2] - 7:21, 11:39 <b>topic</b> [2] - 24:17, 53:16 <b>topics</b> [2] - 4:24, 53:23 <b>total</b> [6] - 26:17, 46:2, 55:22, 59:1, 59:8, 63:33 <b>touch</b> [4] - 17:15, 18:2, 19:36, 63:14 <b>touched</b> [1] - 46:43 <b>towards</b> [7] - 13:40, 14:1, 15:6, 27:6, 35:47, 58:8, 60:14 <b>towers</b> [1] - 11:17 <b>towns</b> [1] - 21:2 <b>township</b> [2] - 21:7, 66:42 <b>trade</b> [21] - 4:19,
--	--	--	--

<p>53:25, 53:46, 55:5, 55:9, 55:17, 55:21, 55:24, 55:26, 55:30, 55:34, 55:46, 56:1, 64:21, 64:22, 64:24, 64:26, 64:44, 64:45, 64:47, 65:2</p> <p><b>traditional</b> [2] - 2:4, 71:26</p> <p><b>trailed</b> [1] - 70:18</p> <p><b>transcriber</b> [2] - 4:27, 4:28</p> <p><b>transcript</b> [2] - 4:33, 72:17</p> <p><b>transfer</b> [2] - 30:44, 43:23</p> <p><b>transferred</b> [1] - 30:42</p> <p><b>transparency</b> [3] - 55:1, 61:17, 61:19</p> <p><b>transparent</b> [1] - 6:22</p> <p><b>Treasury</b> [1] - 13:22</p> <p><b>treat</b> [1] - 52:45</p> <p><b>treated</b> [1] - 26:1</p> <p><b>treating</b> [3] - 30:37, 55:13, 55:38</p> <p><b>treatment</b> [8] - 5:34, 34:29, 45:17, 45:19, 46:32, 52:46, 55:12, 55:39</p> <p><b>trees</b> [1] - 32:20</p> <p><b>trend</b> [1] - 45:33</p> <p><b>tribunal</b> [4] - 2:17, 2:18, 16:12, 17:12</p> <p><b>TRIBUNAL</b> [2] - 1:11, 73:14</p> <p><b>Tribunal</b> [3] - 1:17, 1:20, 2:16</p> <p><b>truly</b> [1] - 35:20</p> <p><b>trunk</b> [4] - 33:19, 47:44, 48:17, 48:19</p> <p><b>trusted</b> [1] - 6:22</p> <p><b>try</b> [7] - 5:6, 18:19, 19:23, 22:40, 52:32, 68:22, 70:37</p> <p><b>trying</b> [8] - 6:24, 6:36, 23:6, 36:25, 37:23, 37:24, 58:8, 58:25</p> <p><b>Tuesday</b> [1] - 1:31</p> <p><b>turn</b> [1] - 6:6</p> <p><b>TURNER</b> [6] - 57:47, 62:5, 62:21, 64:14, 64:26, 64:38</p> <p><b>Turner</b> [1] - 57:47</p> <p><b>TV</b> [1] - 42:11</p> <p><b>two</b> [16] - 3:6, 12:15, 32:46, 36:16, 39:29, 45:12, 45:39, 48:26, 50:20, 54:16, 56:33, 59:23, 59:42, 64:44, 69:23, 69:32</p>	<p><b>type</b> [1] - 20:20</p> <p><b>types</b> [5] - 10:27, 10:29, 24:25, 64:44, 65:2</p> <p><b>typical</b> [6] - 15:44, 15:47, 28:47, 54:19, 54:22, 70:27</p> <p><b>typically</b> [2] - 18:19, 20:8</p>	<p>41:9, 41:18, 43:19, 43:26, 43:30, 43:42, 44:40, 46:1, 46:43, 50:20, 51:31, 52:4, 53:31, 55:25, 55:46, 56:33, 63:34, 66:27, 68:44, 69:41, 70:23, 70:27</p> <p><b>up-front</b> [2] - 41:9, 46:43</p> <p><b>update</b> [1] - 50:33</p> <p><b>updated</b> [2] - 18:8, 40:8</p> <p><b>updates</b> [1] - 73:8</p> <p><b>upgrades</b> [2] - 45:43, 46:33</p> <p><b>upper</b> [1] - 31:41</p> <p><b>upvote</b> [1] - 2:47</p> <p><b>urban</b> [2] - 27:29, 71:44</p> <p><b>usage</b> [49] - 3:32, 8:42, 8:46, 9:5, 9:11, 17:19, 17:22, 19:4, 19:10, 19:16, 19:28, 19:29, 19:32, 19:38, 19:47, 20:10, 20:11, 24:27, 26:9, 26:10, 26:16, 26:25, 26:28, 27:4, 27:16, 27:21, 28:28, 28:45, 29:1, 29:2, 29:5, 29:6, 29:8, 29:14, 29:17, 29:25, 29:26, 29:28, 32:37, 35:42, 43:23, 57:19, 62:2, 70:4, 70:26, 70:28, 70:30</p> <p><b>user</b> [10] - 31:13, 31:15, 31:17, 43:28, 43:35, 44:5, 70:10, 70:12, 70:17, 70:19</p> <p><b>users</b> [12] - 32:42, 33:10, 33:11, 33:13, 33:19, 33:45, 35:16, 35:32, 37:3, 37:9, 37:37, 37:44</p> <p><b>uses</b> [1] - 22:47</p> <p><b>usual</b> [5] - 3:7, 61:44, 62:1, 62:10, 62:19</p> <p><b>utilising</b> [1] - 41:29</p> <p><b>utilities</b> [7] - 22:20, 27:29, 29:16, 31:41, 49:43, 52:18, 70:19</p> <p><b>utility</b> [4] - 28:10, 28:30, 33:43, 54:29</p> <p><b>utility's</b> [4] - 54:4, 54:6, 54:26</p>	<p><b>V</b></p> <p><b>valid</b> [3] - 22:8, 32:10, 63:8</p> <p><b>validate</b> [1] - 12:46</p> <p><b>valley</b> [2] - 30:16, 30:17</p> <p><b>valuable</b> [1] - 44:23</p> <p><b>value</b> [8] - 6:12, 19:33, 24:28, 27:7, 27:19, 27:20, 29:37, 57:20</p> <p><b>values</b> [1] - 58:10</p> <p><b>variable</b> [4] - 24:4, 24:16, 55:13, 70:29</p> <p><b>variances</b> [1] - 23:8</p> <p><b>variation</b> [1] - 23:28</p> <p><b>variations</b> [3] - 22:16, 22:17</p> <p><b>varied</b> [1] - 55:42</p> <p><b>varies</b> [1] - 11:2</p> <p><b>variety</b> [1] - 53:16</p> <p><b>various</b> [2] - 29:10, 51:4</p> <p><b>vegetation</b> [1] - 32:19</p> <p><b>vehicle</b> [1] - 64:31</p> <p><b>versus</b> [3] - 24:40, 28:33, 36:21</p> <p><b>via</b> [3] - 29:8, 56:31, 71:3</p> <p><b>viability</b> [1] - 35:22</p> <p><b>viable</b> [5] - 28:8, 69:41, 71:25, 71:30, 71:43</p> <p><b>Victor</b> [1] - 63:12</p> <p><b>view</b> [11] - 18:37, 23:27, 25:45, 34:17, 39:7, 47:21, 49:37, 54:46, 66:1, 67:3, 67:10</p> <p><b>views</b> [11] - 2:28, 2:40, 2:42, 3:34, 24:38, 27:42, 33:36, 53:16, 70:43, 72:13</p> <p><b>village</b> [1] - 11:29</p> <p><b>villages</b> [1] - 11:28</p> <p><b>virtually</b> [1] - 34:28</p> <p><b>volume</b> [1] - 63:13</p> <p><b>volumetric</b> [3] - 43:42, 43:45, 70:21</p>	<p><b>W</b></p> <p><b>waiting</b> [2] - 33:5, 48:39</p> <p><b>Wales</b> [1] - 13:22</p> <p><b>Wallsend</b> [1] - 59:31</p> <p><b>warm</b> [1] - 11:4</p> <p><b>warranted</b> [1] - 69:17</p>	<p><b>WAS</b> [1] - 73:14</p> <p><b>washing</b> [1] - 37:14</p> <p><b>waste</b> [24] - 4:19, 30:26, 53:25, 53:46, 55:5, 55:9, 55:11, 55:18, 55:21, 55:24, 55:26, 55:30, 55:34, 55:46, 56:1, 64:21, 64:22, 64:24, 64:26, 64:44, 64:45, 64:47, 65:2, 69:27</p> <p><b>wastewater</b> [23] - 2:10, 3:27, 4:3, 5:33, 8:43, 9:1, 9:10, 11:33, 19:21, 45:17, 46:32, 49:28, 52:3, 52:17, 55:12, 55:14, 61:33, 64:46, 65:1, 68:10, 70:27, 71:1</p> <p><b>wasting</b> [1] - 43:32</p> <p><b>WATER</b> [1] - 1:14</p> <p><b>Water</b> [145] - 2:9, 2:13, 2:31, 3:38, 4:11, 4:38, 4:43, 4:47, 6:15, 7:34, 9:27, 10:26, 11:30, 12:36, 13:9, 13:11, 13:16, 14:15, 14:20, 14:42, 15:1, 15:30, 15:34, 16:8, 16:31, 18:12, 18:25, 19:2, 19:12, 19:18, 19:45, 20:6, 20:16, 20:32, 20:38, 20:47, 21:9, 21:16, 21:24, 21:36, 23:45, 24:36, 24:43, 25:23, 26:10, 26:26, 27:33, 27:40, 28:25, 28:36, 29:24, 30:13, 30:31, 31:2, 32:6, 33:30, 34:22, 35:8, 35:18, 35:28, 35:36, 36:33, 36:37, 37:4, 37:11, 37:40, 38:8, 38:32, 39:23, 40:19, 40:31, 40:40, 41:19, 41:34, 41:41, 43:6, 43:7, 43:20, 43:37, 44:10, 44:13, 44:21, 45:7, 45:19, 45:23, 45:25, 45:45, 46:10, 46:23, 46:26, 46:31, 46:44, 47:3, 47:18, 51:39, 51:42, 51:46, 52:8, 52:30, 54:12, 54:16, 54:34, 55:18, 55:22, 55:24, 55:32, 55:37, 56:7, 56:17, 56:34, 56:39, 57:39, 57:47, 58:8, 58:28, 59:31,</p>
--	--	---	---	--	--

<p>59:35, 63:12, 63:27, 64:23, 65:17, 65:28, 65:46, 66:46, 67:9, 67:33, 67:35, 67:43, 68:4, 68:34, 68:37, 69:3, 69:24, 69:26, 69:28, 70:3, 70:16, 70:45, 71:9, 71:10, 71:22, 71:29, 71:45</p> <p><b>water</b> <sup>[224]</sup> - 2:10, 3:27, 4:3, 4:5, 4:17, 5:21, 5:33, 5:44, 7:35, 7:39, 8:31, 8:41, 8:46, 9:5, 9:11, 14:26, 14:30, 14:39, 15:4, 15:7, 17:19, 17:22, 17:24, 17:40, 18:1, 19:4, 19:5, 19:10, 19:12, 19:15, 19:17, 19:28, 19:30, 19:31, 19:33, 19:38, 19:39, 19:46, 20:2, 20:3, 20:19, 20:30, 21:16, 21:18, 23:1, 24:29, 24:39, 25:15, 25:17, 25:31, 25:46, 26:3, 26:30, 26:32, 26:36, 27:7, 27:29, 27:38, 27:43, 28:13, 28:28, 28:30, 28:45, 29:2, 29:12, 29:36, 30:13, 30:20, 30:22, 30:26, 30:27, 30:31, 30:34, 30:35, 30:37, 30:41, 30:45, 31:4, 31:6, 31:14, 31:35, 31:39, 31:40, 31:43, 32:1, 32:12, 32:16, 32:20, 32:37, 33:25, 33:43, 33:45, 34:4, 34:6, 34:23, 34:28, 34:32, 34:34, 34:37, 34:42, 35:16, 35:32, 35:42, 35:43, 35:46, 35:47, 36:17, 36:20, 36:21, 36:27, 36:30, 36:32, 36:42, 37:13, 37:16, 37:30, 37:32, 37:35, 37:39, 37:45, 38:1, 38:8, 38:13, 38:14, 39:21, 39:45, 41:18, 41:23, 41:24, 41:29, 41:32, 41:39, 41:40, 41:42, 41:43, 42:2, 42:3, 42:4, 42:6, 42:20, 42:27, 43:23, 43:26, 43:32, 43:35, 43:39, 43:40, 43:41, 43:46, 44:2, 44:11, 45:15, 47:38, 47:41, 48:18, 48:29,</p>	<p>48:32, 49:8, 49:19, 49:21, 49:43, 50:5, 50:18, 50:22, 51:39, 53:24, 53:43, 54:21, 54:25, 54:37, 54:38, 56:8, 58:23, 59:44, 60:1, 60:10, 61:28, 61:29, 61:30, 61:35, 62:9, 62:11, 62:17, 62:18, 62:27, 62:28, 64:28, 65:21, 68:36, 68:39, 69:7, 69:9, 69:11, 69:25, 69:28, 69:33, 69:43, 70:4, 70:5, 70:7, 70:13, 70:20, 70:27, 70:28, 70:29, 70:36, 70:38, 70:44, 70:47, 71:1, 71:3, 71:6, 71:14, 71:31, 71:44, 72:1</p> <p><b>Water's</b> <sup>[48]</sup> - 2:27, 2:35, 2:43, 3:17, 3:26, 3:31, 4:1, 4:2, 4:8, 4:16, 4:36, 13:39, 14:31, 17:8, 17:17, 17:26, 17:46, 18:7, 18:20, 18:37, 18:45, 21:11, 25:37, 30:20, 34:31, 40:13, 41:11, 44:30, 44:33, 44:35, 45:13, 45:35, 46:6, 46:21, 46:22, 47:6, 53:13, 53:23, 53:26, 53:42, 55:20, 55:30, 56:36, 62:12, 65:16, 71:2, 72:19</p> <p><b>water-efficient</b> <sup>[1]</sup> - 70:7</p> <p><b>water-saving</b> <sup>[1]</sup> - 37:13</p> <p><b>watering</b> <sup>[1]</sup> - 69:34</p> <p><b>ways</b> <sup>[4]</sup> - 19:17, 38:27, 49:39, 72:39</p> <p><b>weak</b> <sup>[1]</sup> - 52:38</p> <p><b>weaknesses</b> <sup>[1]</sup> - 22:44</p> <p><b>weather</b> <sup>[1]</sup> - 21:18</p> <p><b>website</b> <sup>[6]</sup> - 2:37, 2:41, 4:34, 60:37, 72:18, 73:7</p> <p><b>wedge</b> <sup>[1]</sup> - 61:34</p> <p><b>weeks</b> <sup>[3]</sup> - 3:15, 69:36, 72:45</p> <p><b>weighted</b> <sup>[2]</sup> - 8:25, 8:27</p> <p><b>welcome</b> <sup>[6]</sup> - 2:8, 17:42, 25:37, 26:26, 53:10, 53:19</p> <p><b>well-accepted</b> <sup>[1]</sup> - 23:4</p>	<p><b>well-qualified</b> <sup>[1]</sup> - 52:31</p> <p><b>wet</b> <sup>[2]</sup> - 22:42, 22:43</p> <p><b>wetlands</b> <sup>[1]</sup> - 66:45</p> <p><b>wetter</b> <sup>[1]</sup> - 23:11</p> <p><b>Wharf</b> <sup>[1]</sup> - 1:29</p> <p><b>whole</b> <sup>[6]</sup> - 27:40, 35:10, 36:1, 52:38, 57:35, 61:42</p> <p><b>willful</b> <sup>[1]</sup> - 65:7</p> <p><b>Williams</b> <sup>[1]</sup> - 68:31</p> <p><b>willing</b> <sup>[10]</sup> - 12:42, 40:35, 42:20, 58:47, 59:23, 59:33, 60:8, 67:38, 71:9, 71:18</p> <p><b>willingness</b> <sup>[14]</sup> - 40:34, 42:18, 54:27, 54:30, 54:32, 54:36, 54:40, 58:4, 58:12, 58:23, 59:15, 59:20, 61:9, 70:37</p> <p><b>wind</b> <sup>[1]</sup> - 11:26</p> <p><b>wind-back</b> <sup>[1]</sup> - 11:26</p> <p><b>winter</b> <sup>[1]</sup> - 30:8</p> <p><b>wish</b> <sup>[4]</sup> - 2:5, 3:41, 51:26, 68:37</p> <p><b>withdrew</b> <sup>[1]</sup> - 34:41</p> <p><b>withstand</b> <sup>[1]</sup> - 14:44</p> <p><b>wonder</b> <sup>[1]</sup> - 21:46</p> <p><b>WOOD</b> <sup>[1]</sup> - 4:41</p> <p><b>Wood</b> <sup>[1]</sup> - 4:42</p> <p><b>word</b> <sup>[2]</sup> - 23:29, 24:29</p> <p><b>words</b> <sup>[3]</sup> - 3:37, 43:8, 63:46</p> <p><b>workers</b> <sup>[2]</sup> - 49:5, 49:8</p> <p><b>works</b> <sup>[5]</sup> - 14:25, 21:2, 38:28, 59:40, 69:13</p> <p><b>worse</b> <sup>[1]</sup> - 63:25</p> <p><b>worth</b> <sup>[2]</sup> - 28:16, 44:24</p> <p><b>written</b> <sup>[4]</sup> - 2:23, 2:41, 3:16, 72:45</p> <p><b>Wyee</b> <sup>[5]</sup> - 11:39, 12:35, 21:7, 67:1, 68:16</p>	<p>20:30, 20:34, 21:19, 23:10, 29:6, 30:8, 30:43, 33:32, 37:38, 37:46, 40:9, 42:25, 46:14, 51:47, 54:20, 54:22, 59:37, 63:14, 63:35, 68:10, 68:18</p> <p><b>years</b> <sup>[29]</sup> - 4:13, 15:11, 15:15, 18:14, 18:15, 19:3, 20:23, 22:40, 22:42, 22:44, 23:9, 23:11, 25:17, 27:28, 29:43, 31:28, 31:43, 36:10, 37:11, 45:26, 46:8, 46:46, 47:42, 48:26, 50:20, 65:25, 69:23, 70:11</p> <p><b>yesterday</b> <sup>[1]</sup> - 31:5</p> <p><b>yourself</b> <sup>[2]</sup> - 4:29, 57:5</p> <p><b>yourselves</b> <sup>[1]</sup> - 29:24</p>
<b>Z</b>			
<p><b>zero</b> <sup>[2]</sup> - 20:28, 59:20</p> <p><b>zoning</b> <sup>[1]</sup> - 66:3</p>			
<b>Y</b>			
<p><b>year</b> <sup>[48]</sup> - 5:8, 5:10, 5:11, 5:16, 6:2, 7:47, 8:20, 9:5, 9:12, 9:16, 9:21, 11:4, 11:5, 13:12, 13:23, 14:27, 15:12, 15:14, 15:16, 18:21, 18:44, 19:7, 19:11, 19:13, 19:14,</p>			