

OPINION SURVEY ON QUALITY OF WATER IN BUILDINGS 2006

Executive Summary

Objectives and survey methodology

1.1 This survey aims to address customers' views on the quality of tap water and the maintenance of plumbing systems in buildings, and their views on the "Fresh Water Plumbing Quality Maintenance Recognition Scheme" (FWPQMRS), both from the perception of the domestic customers and among property management companies (PMCs).

1.2 A random sample of 1 503 telephone interviews were successfully completed with the domestic customers, and the response rate was 68.1%. All PMCs in Hong Kong were mailed a self-administered questionnaire inviting their return and a total of 239 completed questionnaires were collected, with a response rate of 53.5%.

Perception of water quality

1.3 In general, the perception of quality of tap water is positive from both the domestic customers' and the PMCs' point-of-view. Most (91.4%) of the domestic customers rated the overall quality of tap water at home as "average" to "very satisfactory" by giving a score between 5 and 10 out of a 0 to 10 rating scale. Over 90% of the PMCs also believed that their clients/ residents would score 5 to 10 on the overall quality of tap water. A higher proportion of PMCs managing residential buildings (61.2%) indicated that their clients/ residents would give a high score between 7 and 10 than those (47.2%) managing non-residential buildings. [Charts 4.1 – 4.2]

1.4 When compared with the individual aspects of quality of tap water in the 2002 survey, domestic customers' satisfaction level has increased significantly in three aspects: "odour" (93.6% vs 91.2% in

2002), “clarity” (89.5% vs 86.6% in 2002) and “purity” (88.1% vs 83.9% in 2002). [Chart 4.1]

1.5 Domestic customers who are living in buildings at the age from 10 to less than 20 years were least likely to give a satisfaction score of 5 to 10 on the overall quality of tap water (87.4% vs 92.2%, 94.8% and 93.7% of those living in buildings less than 5 years, 5 to less than 10 years, and 20 years or above respectively). Similar observations were found in terms of the individual aspects of quality of tap water. This is probably because their water supply installations/ facilities are suffering from rusting and corrosion, but have not gone completely obsolete for replacement yet. [Chart 4.3]

1.6 When compared with the 2002 findings, domestic customers are now less likely to attribute water quality problems to WSD water treatment or Dongjiang water quality. This positive result probably reflects the impact of the improvement works in Dongjiang water and their better understanding on causes of water quality problems over the past few years. The launch of FWPQMRS and various publicity and education programmes delivered to customers may have also helped strengthen domestic customers’ confidence on water quality. [Chart 4.5]

Drinking directly from the tap

1.7 The majority (88.6%) of domestic customers boil water, or even filter and boil it before drinking. Merely 0.5% indicated that they drink “tap water directly” at home. The figures are consistent with those gathered in the 2002 survey. “Perceive that tap water is dirty” (despite a drop to 40.0% from 46.8% in 2002) is the most common reason for domestic customers not drinking tap water directly at home. Although customers’ perception on individual aspects of water quality has been improving over the years, it still needs to undergo a long term cultural change in living for adopting a habit of drinking directly from taps. On the other hand, PMCs at large also perceived that their clients/ residents would expect tap water to be colourless, clear and free from impurities and sediments, rather than expecting it to be suitable for direct drinking (77.6% and

69.1% of PMCs managing residential and non-residential buildings respectively). [Charts 5.1 – 5.3]

1.8 Slightly more than two-fifths of the domestic customers (42.3%) and the PMCs (44.8%) are aware that the tap water supplied by WSD is suitable for direct drinking. A higher awareness level is seen among larger PMCs (51.7%) and among those managing residential buildings (49.2%). [Charts 5.4 – 5.5]

1.9 About four-fifths of both the domestic customers (79.3%) and the PMCs (78.7%) considered that the current level of government's publicity programmes was not sufficient in disseminating the messages about the high quality of tap water supplied by WSD. 74.5% of the domestic customers and 76.6% of the PMCs considered it necessary to continue and strengthen the publicity programmes. Among them, most (89.5% of the domestic customers and 98.4% of the PMCs) suggested that mass media should be the most appropriate / effective channel. [Charts 5.6 – 5.7]

Expectation on repair and maintenance of water supply installations/ facilities (the plumbing system)

1.10 Domestic customers have apparently become more aware that WSD is not responsible for the repair and maintenance of plumbing installations/ facilities when compared with the 2002 findings (3.8% to the contrary vs 21.0% in 2002). However, there still exists a knowledge gap in the clear recognition of the building owners' responsibility on this issue (32.9% of them did not know the party responsible for such task vs 12.9% in 2002). [Chart 6.1]

1.11 Almost all domestic customers agreed that it is necessary to have regular cleaning of water tank (98.6% of those living in buildings with water tanks) and replacement of deteriorated water supply installations/ facilities (97.9%). Over 83.0% of PMCs also believed their clients/ residents have the similar expectation, but tend to consider that the expectation of non-residential clients/ residents would be slightly lower. [Charts 6.3 – 6.4]

1.12 Domestic customers (38.4%) perceived the renovation of water supply installations/ facilities as the most important building rehabilitation tasks. About importance of repair and maintenance aspect, PMCs ranked electric power supply installations/ facilities as the most important in both residential (62.5%) and non-residential (71.9%) buildings. 21.1% of those managing residential buildings and 7.9% of those managing non-residential buildings ranked water supply installations/ facilities as the most important aspect. [Charts 6.5 – 6.7]

Views on FWPQMRS

1.13 Generally speaking, awareness level of the FWPQMRS is reasonable in PMCs (58.2%) but low among the domestic customers (only 9.8% are aware) and even among those who are living in buildings that are currently participating in the Scheme (12.1%). [Charts 7.1 – 7.2]

1.14 The great majority (94.5%) of domestic customers who are aware of the FWPQMRS are in support of their buildings joining the Scheme. Almost two-thirds (63.7%) believed that the Scheme could “ensure the water quality of the building”. [Chart 7.7]

1.15 Among PMCs that are aware of the FWPQMRS, those managing 50 residential buildings or more had a higher participation rate (40.0%) in the Scheme. [Chart 7.5]

1.16 Despite a positive disposition towards the Scheme, the majority of PMCs that are aware of the FWPQMRS would only consider taking action subject to their clients’ / residents’ preference (44.3% of PMCs managing residential buildings and are aware of the Scheme and 33.7% of PMCs managing non-residential buildings and are aware of the FWPQMRS). [Charts 7.8 – 7.9]

1.17 Among PMCs that are participating in the Scheme, “strengthening clients’ / residents’ confidence in water quality” is the major reason behind participation in the FWPQMRS (81.1% and

80.0% of these PMCs managing residential and non-residential buildings respectively). [Chart 7.10]

1.18 On the contrary, most PMCs which are not renewing the certificates considered that “their repair and maintenance works will be carried out regularly anyway” as the major reason (64.7% and 71.4% of these PMCs managing residential and non-residential buildings respectively). [Chart 7.12]

1.19 Similarly, most PMCs which are not participating in the Scheme explained that their repair and maintenance works will be carried out regularly anyway (61.0% and 57.1% of these PMCs managing residential and non-residential buildings respectively). [Chart 7.13]

Recommendations

1.20 Domestic customers have high expectation on internal plumbing maintenance in buildings. Participation in the FWPQMRS would help them to achieve their expectation. To further promote the Scheme so as to ensure compliance of plumbing maintenance standards, WSD should:

- spell out more concrete benefits from PMC’s angle and motivate them to take the initiative to propose the Scheme to their clients/ residents;
- focus more on residential buildings, where clients/ residents are more discerning about water quality;
- prioritise the promotion to buildings aged 10 to less than 20 years; and
- target more efforts to reach the smaller PMCs which tend to have less exposure to these information.

1.21 Since the majority of the PMCs would only consider taking action subject to their clients’ preference, WSD should also consider

boosting the awareness of the Scheme among the domestic customers in the long run, and the recognition of the FWPQMRS as an assurance of water quality in consumers' mind. In particular, WSD can:

- arouse the consciousness of property owners and users that they have a say in maintaining the water quality in their buildings; and
- encourage buildings that participate in the Scheme to display their certificates in prominent places.

1.22 To help speeding up the process of disseminating the messages, WSD should also try to:

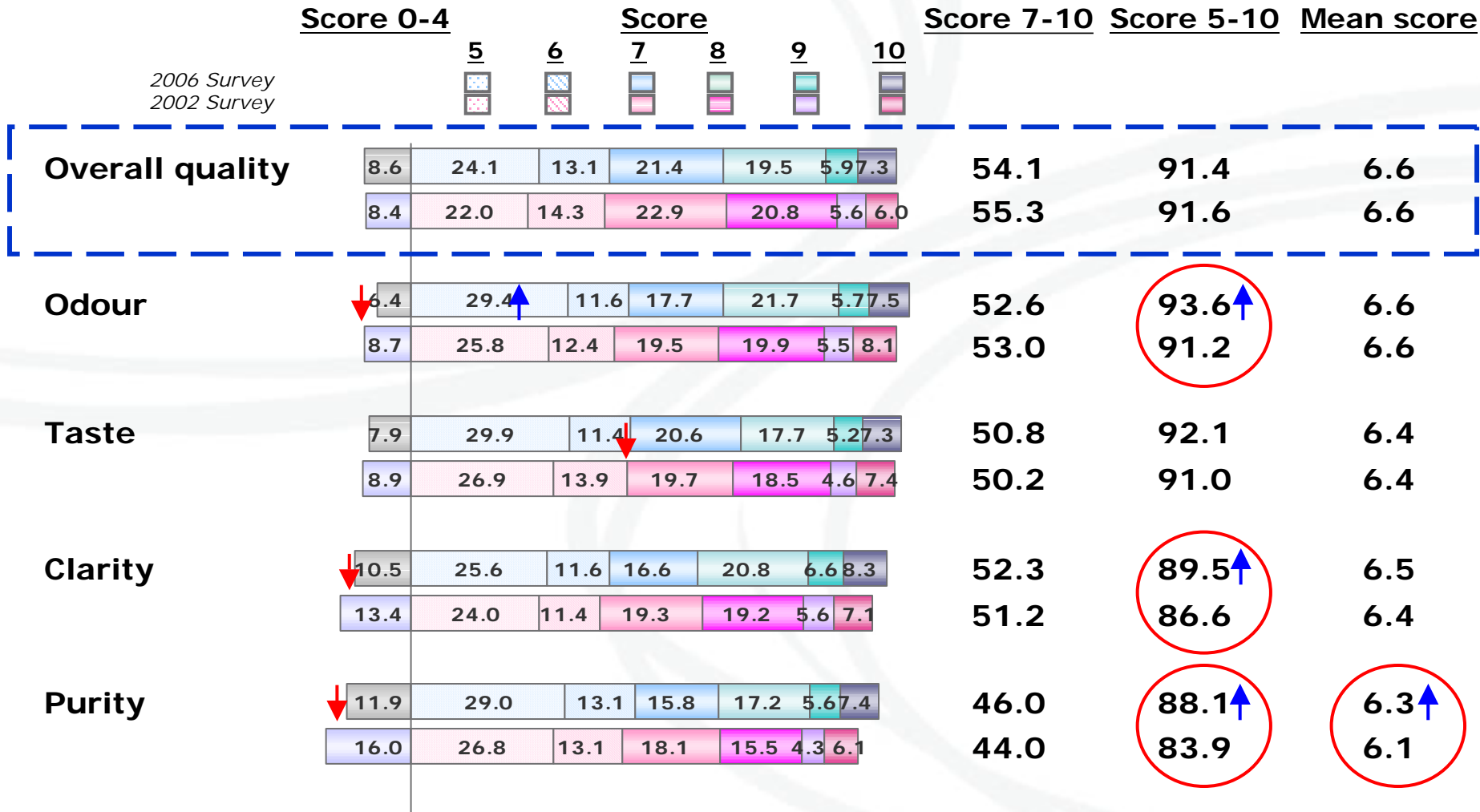
- identify channels to more effectively reach and educate the group of key decision makers, like the owners' committees/ corporations and other opinion leaders.

Chart 4.1 Satisfaction with quality of tap water at home (%)



Ref.: A1a-d, A4

Domestic Customers



Base: All respondents

2006 Survey 1 503

2002 Survey 1 504

↑/↓ Significant higher / lower than the 2002 Survey results at 95% confidence level

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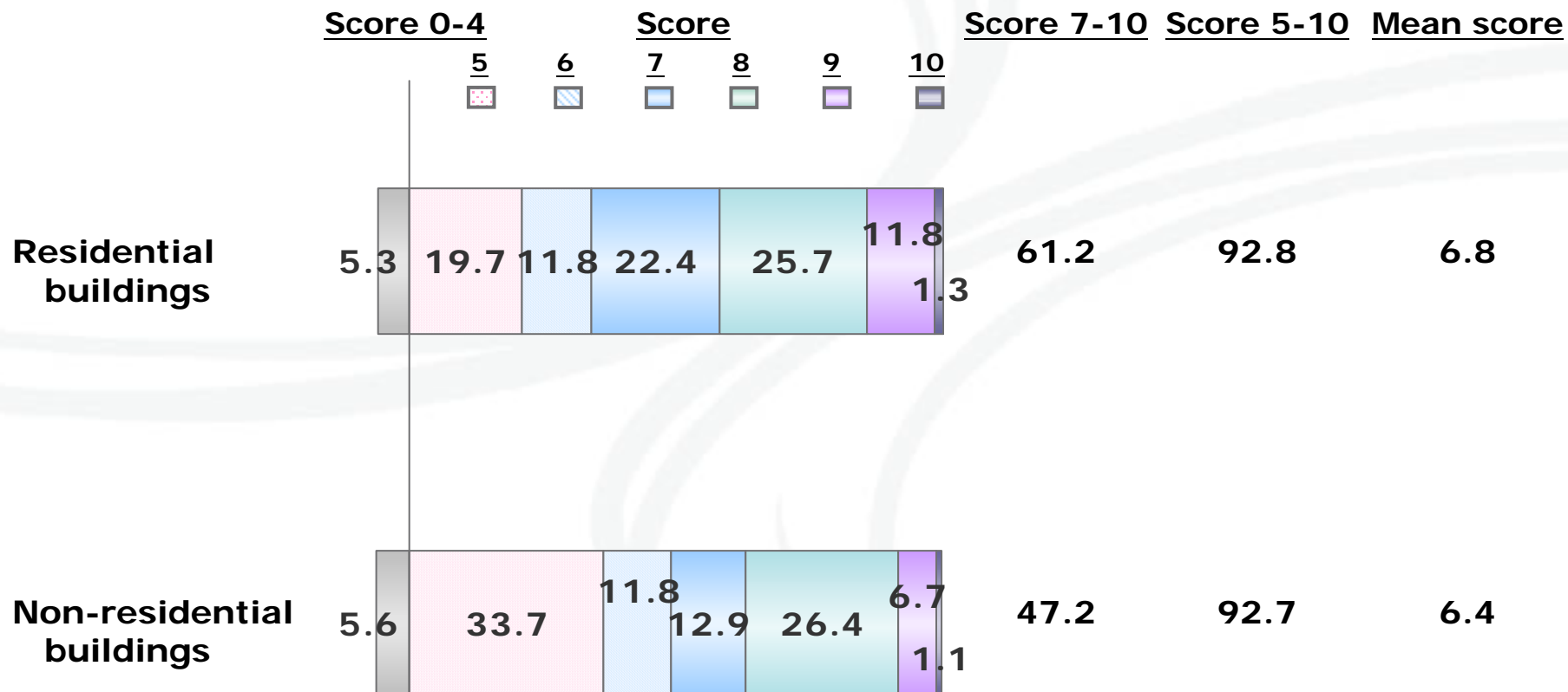
Chart 4.2

Perception of clients'/ residents' satisfaction with quality of tap water (%) – Overall scoring



Ref.: B1

Property Management Companies



Base: All respondents
Residential buildings
Non-residential buildings

152
178

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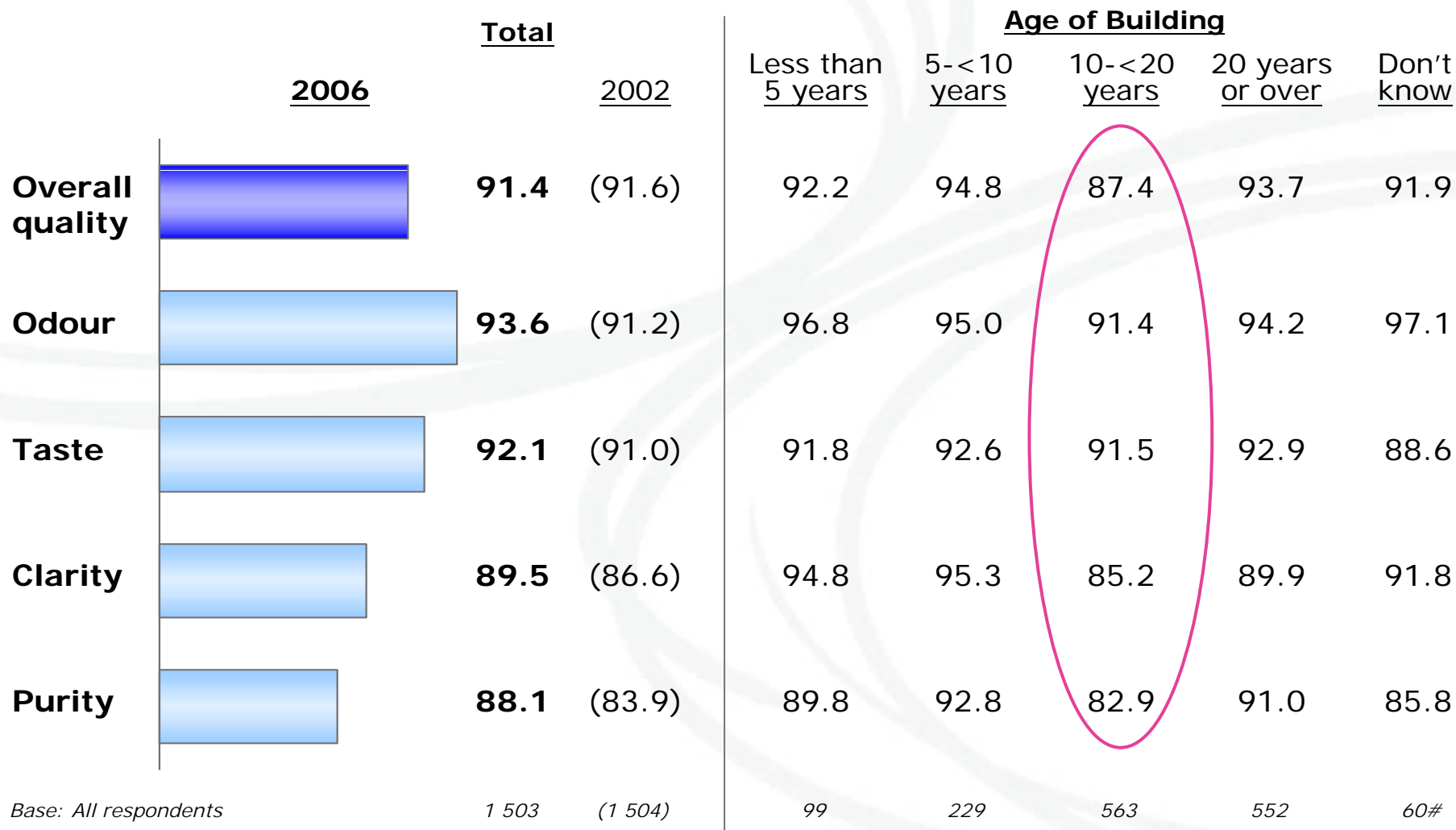
Chart 4.3

Satisfaction with quality of tap water at home (% Scoring 5-10)



Ref.: A1a-d, A4

Domestic Customers



Figures inside () are the relevant data obtained in the 2002 Survey
small base – i.e. no significant test has been conducted

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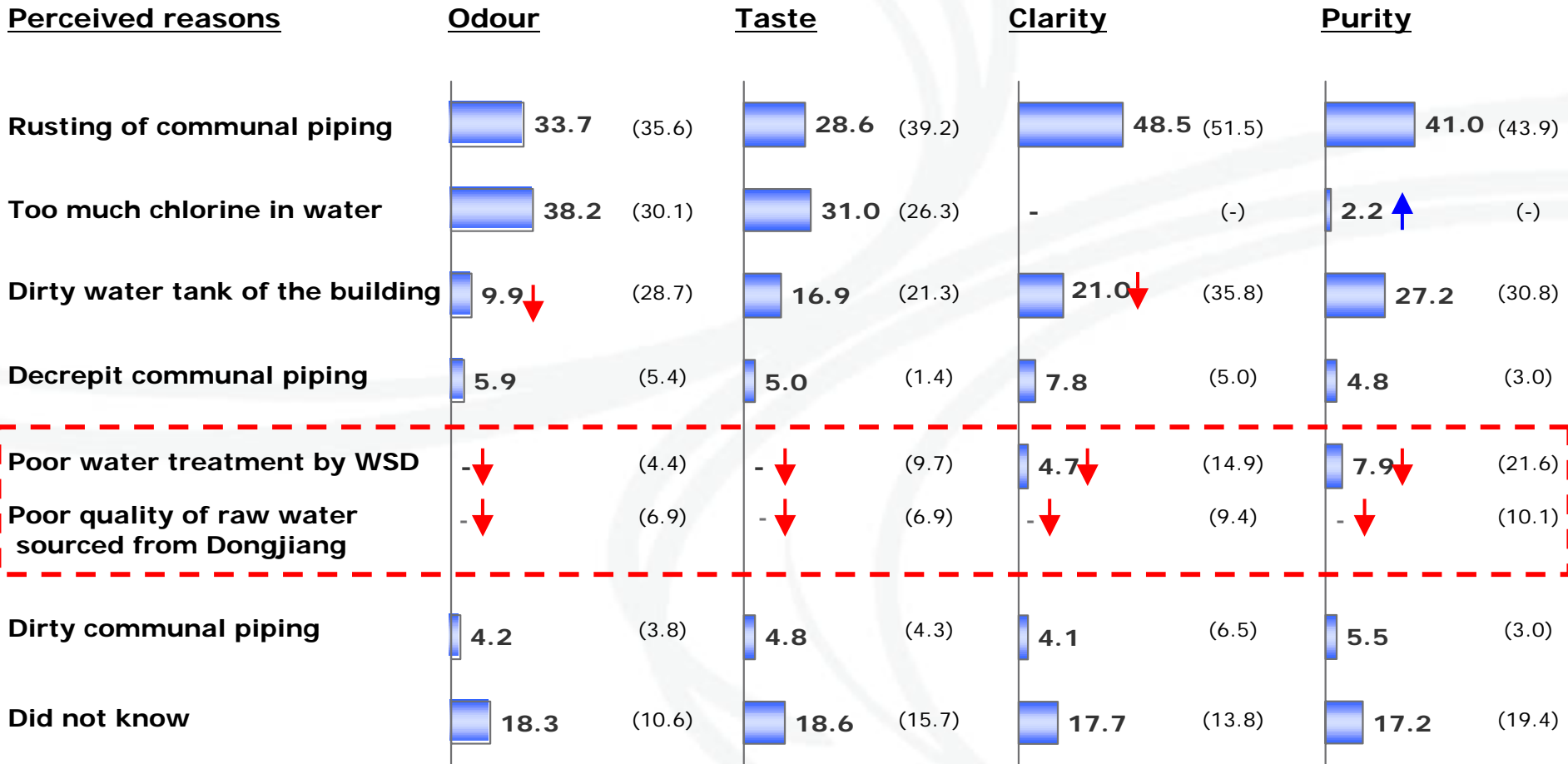
Chart 4.5 Perceived reasons for water quality problems at home (%)



Ref.: A2a-d

Domestic Customers

Problems relating to quality of tap water at home



Base: Those respondents who were dissatisfied with the respective aspects of quality of tap water at home

100 (132) 119 (135) 159 (203) 180 (240)

Notes: Multiple answers were allowed

' - ' denotes 0%

↑/↓ Significant higher / lower than the 2002 Survey findings at 95% confidence level

Figures inside () are the relevant data obtained in the 2002 Survey

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Chart 5.1 Habit of drinking water at home (%)



Ref.: B1

Domestic Customers

Total

Overall satisfaction with quality of tap water at home

2006

2002

0-4

5-6

7-8

9-10

Water which is only boiled 65.1 (66.1)

33.1 ↓ 61.0 71.9 ↑ 76.3 ↑

Filtered and boiled tap water 23.5 (23.7)

51.4 ↑ 24.8 19.6 ↓ 13.4 ↓

Tap water which is only filtered 4.0 ↑ (1.8)

9.2 ↑ 6.1 1.8 ↓ 1.6 ↓

Beverages other than water 3.8 ↓ (5.3)

2.2 ↓ 4.4 4.0 2.6

Distilled water 2.4 (2.3)

3.6 ↑ 2.5 2.5 1.4 ↓

Mineral water 0.7 (0.5)

0.6 0.9 * 1.9 ↑

Tap water directly 0.5 (0.3)

- ↓ * - 2.8 ↑

Base: All respondents 1 503

(1 504)

131

563

615

194

Notes: ' * ' denotes less than 0.5%

' - ' denotes 0%

Figures inside () are the relevant data obtained in the 2002 Survey

↑ ↓ Significant higher / lower than the 2002 Survey findings at 95% confidence level

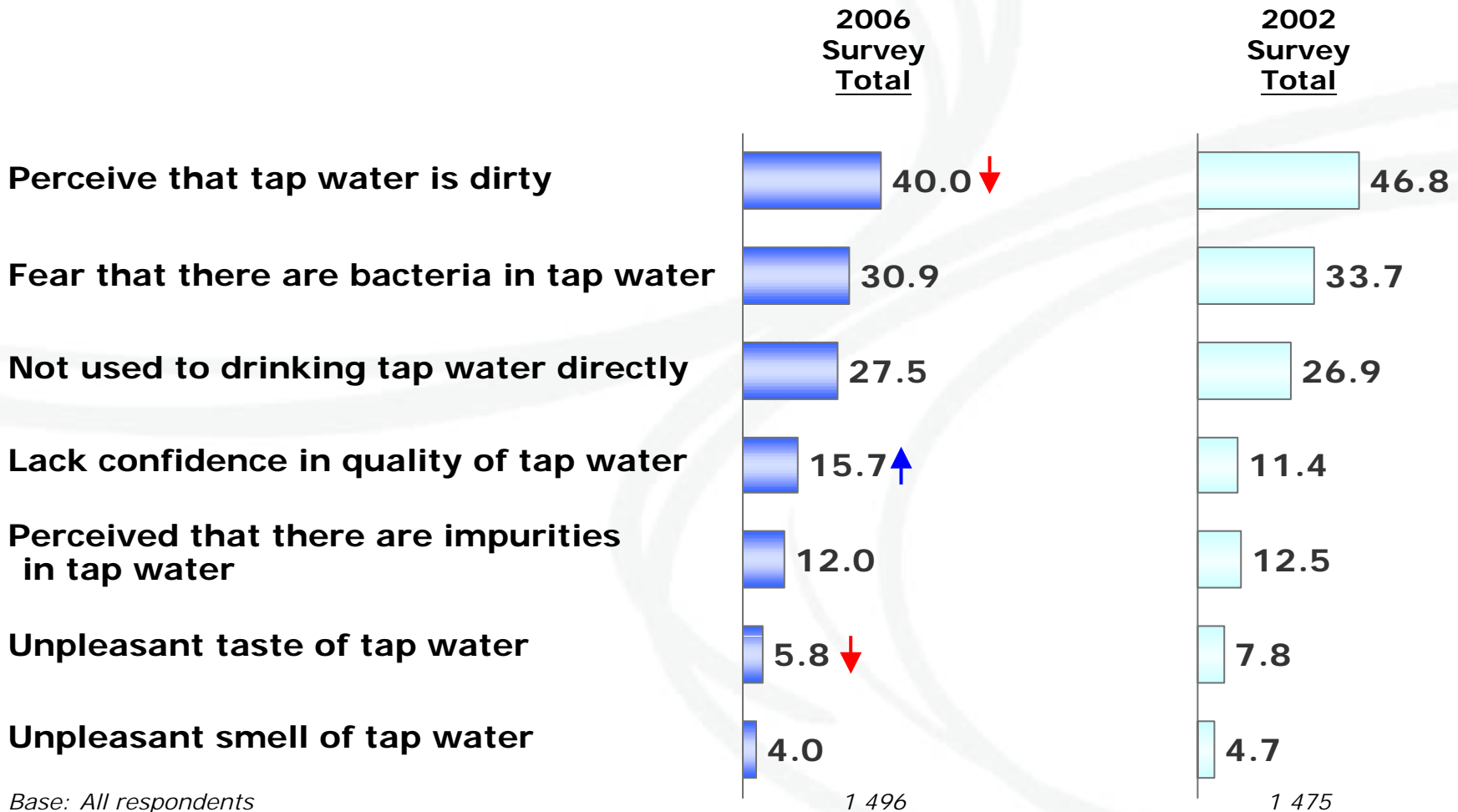
↑ ↓ Significant higher / lower than the total figure at 95% confidence level

Chart 5.2 Reasons for not drinking tap water directly at home (%)



Ref.: B2

Domestic Customers



↑ ↓ Significant higher / lower than the 2002 Survey findings at 95% confidence level

Chart 5.3 Perception of clients'/ residents' expectation on quality of tap water (%)

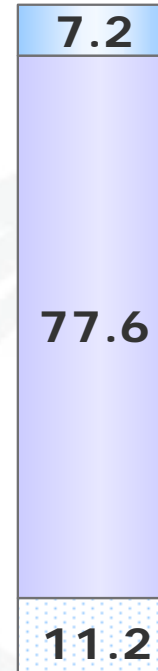


Ref.: B3

Property Management Companies

Residential buildings

Total



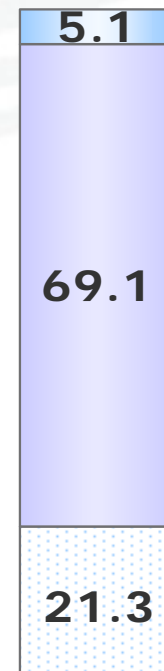
3.3

0.7

152

Non-residential buildings

Total



3.9

0.6

178

☐ Expect tap water to be suitable for direct drinking

☐ Expect tap water to be colourless, clear, free from impurities and sediments

☐ No special expectation, as long as regular water supply is maintained

Not sure

No answer

Base: All respondents

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Chart 5.4 Awareness of the fact that water supplied by WSD is suitable for direct drinking (%) – Domestic Customers



Ref.: C1, C2

Domestic Customers

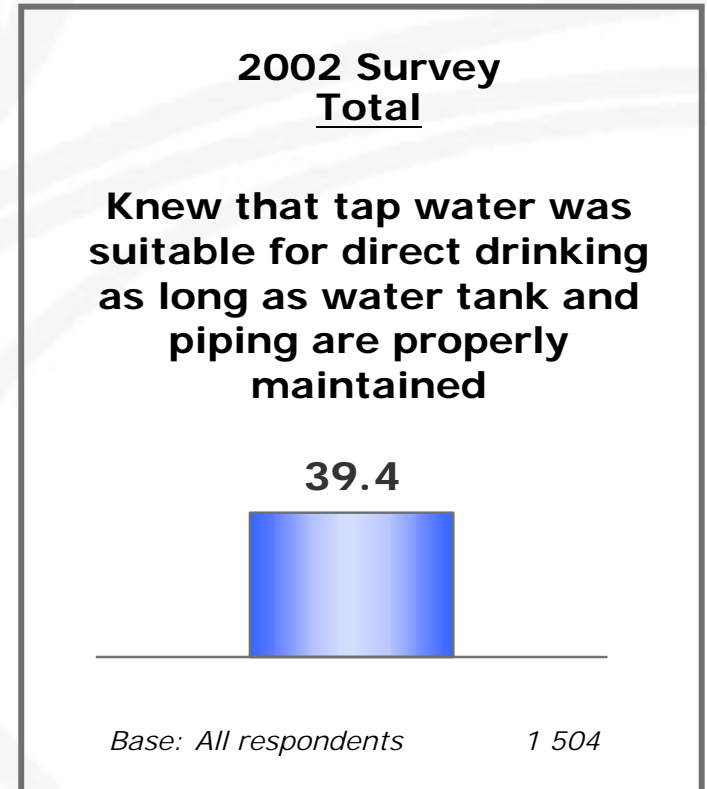
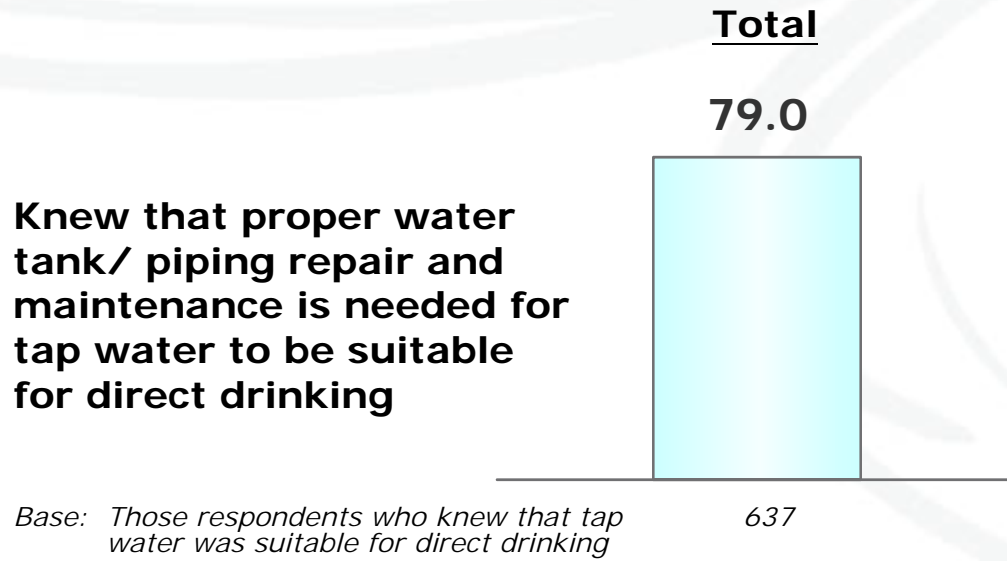
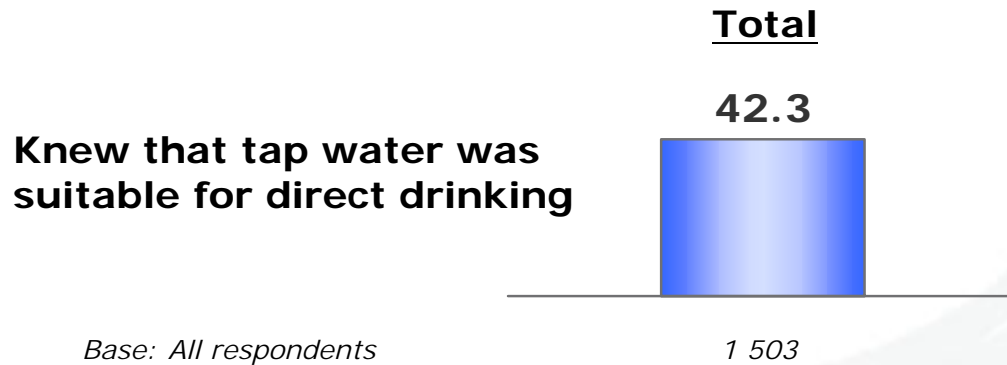
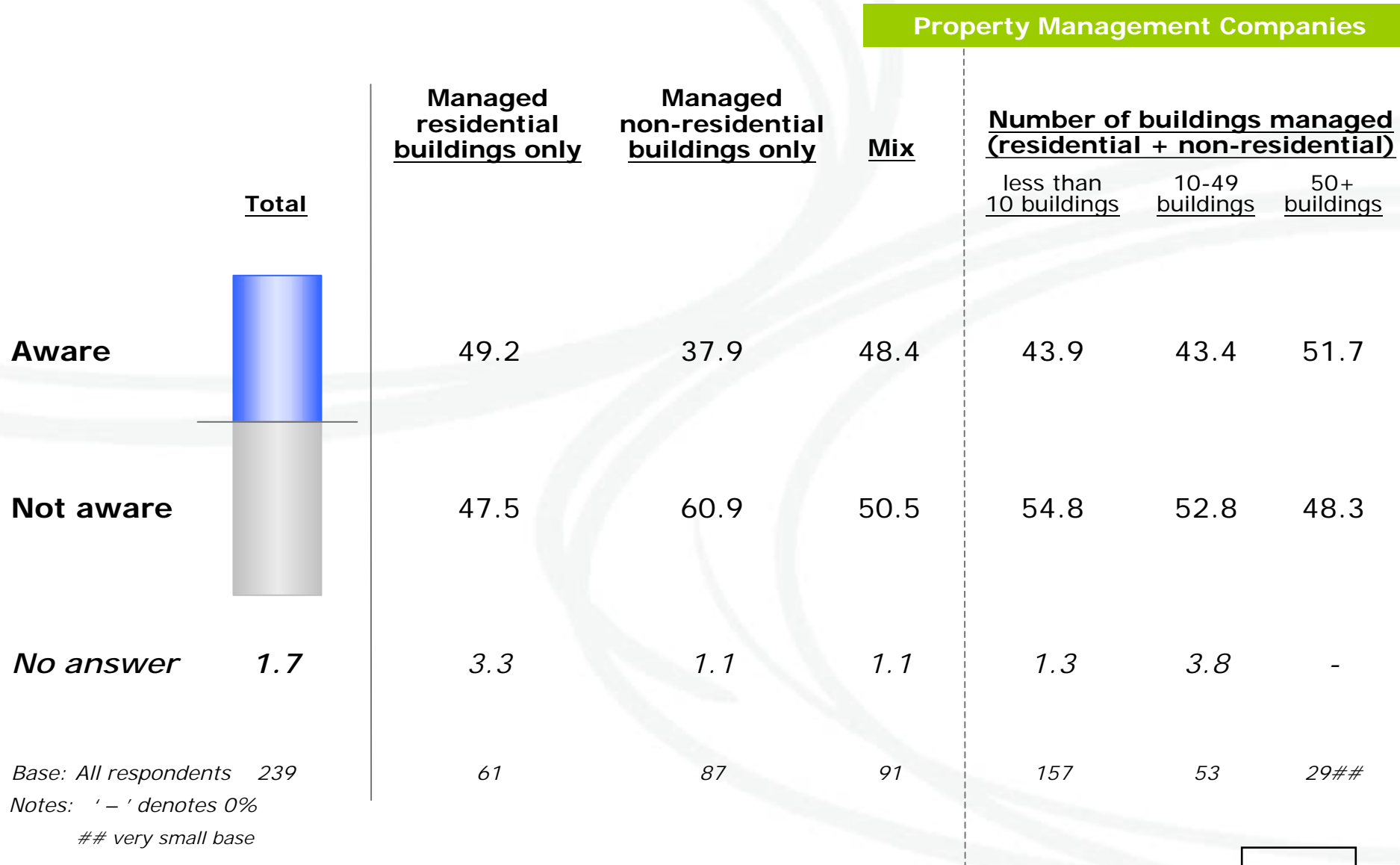


Chart 5.5

Awareness of the fact that water supplied by WSD is suitable for direct drinking (%) – PMCs



Ref.: C1



Base: All respondents 239

Notes: ' - ' denotes 0%

very small base

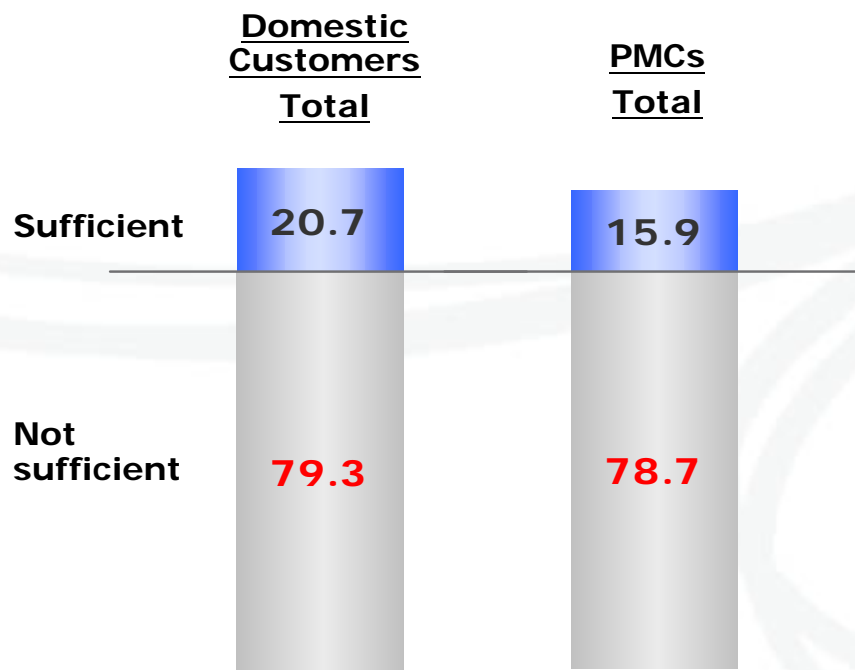
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Chart 5.6 Perception on government's publicity programmes



Ref.: C9, C10 (Domestic Customers)
E1, E2 (PMCs)

Perceived sufficiency of the current level of government's publicity programmes (%)



*No
answer*

-

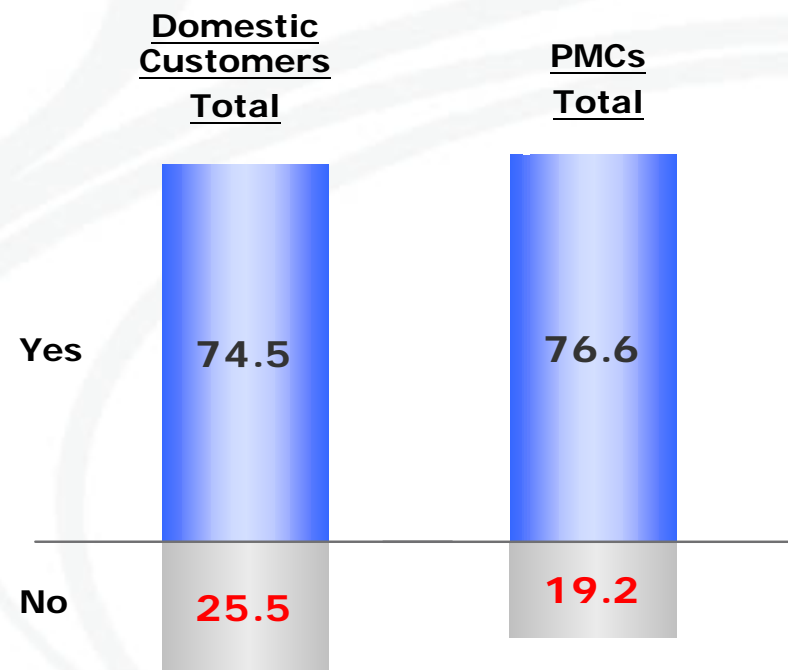
5.4

*Base:
All respondents 1 503*

239

Notes: ' - ' denotes 0%

Whether consider it necessary to continue the publicity programmes (%)



-

4.2

1 503

239

Chart 5.7 Media channels for disseminating publicity messages (%)



Ref.: C11 (Domestic Customers)
E2 (PMCs)

	<u>Domestic Customers</u>	<u>PMCs</u>		<u>Domestic Customers</u>	<u>PMCs</u>
Mass media	89.5	98.4	Promotion activities	7.1	17.5
TV	87.9	96.7	Exhibition / Sales booth	0.9	13.7
Newspaper	46.7	68.9	Seminar	*	8.2
Radio	39.4	62.8	Promotion activities in schools	5.0	-
Magazine	7.1	19.7			
Outdoor advertising	9.5	47.5	Publicity leaflets	17.1	2.2
Advertisement on public transport	4.5	32.8	Delivery of publicity leaflets on the street / outdoor areas	8.6	2.2
Outdoor advertisement board	4.9	26.8	Delivery of publicity leaflets by mail	6.5	-
Outdoor video board	*	13.1	Posters	3.2	-
Internet / Email/ SMS	9.7	42.6	Owners' corporations/ Management offices	6.0	1.1
Government's website	6.0	42.6			
Website (unspecified)	2.5	-	Others	1.4	-
			Don't know	6.7	0.5

Base: Those respondents who consider that the government needs to continue publicity programmes
Domestic Customers 1 114
PMCs 183

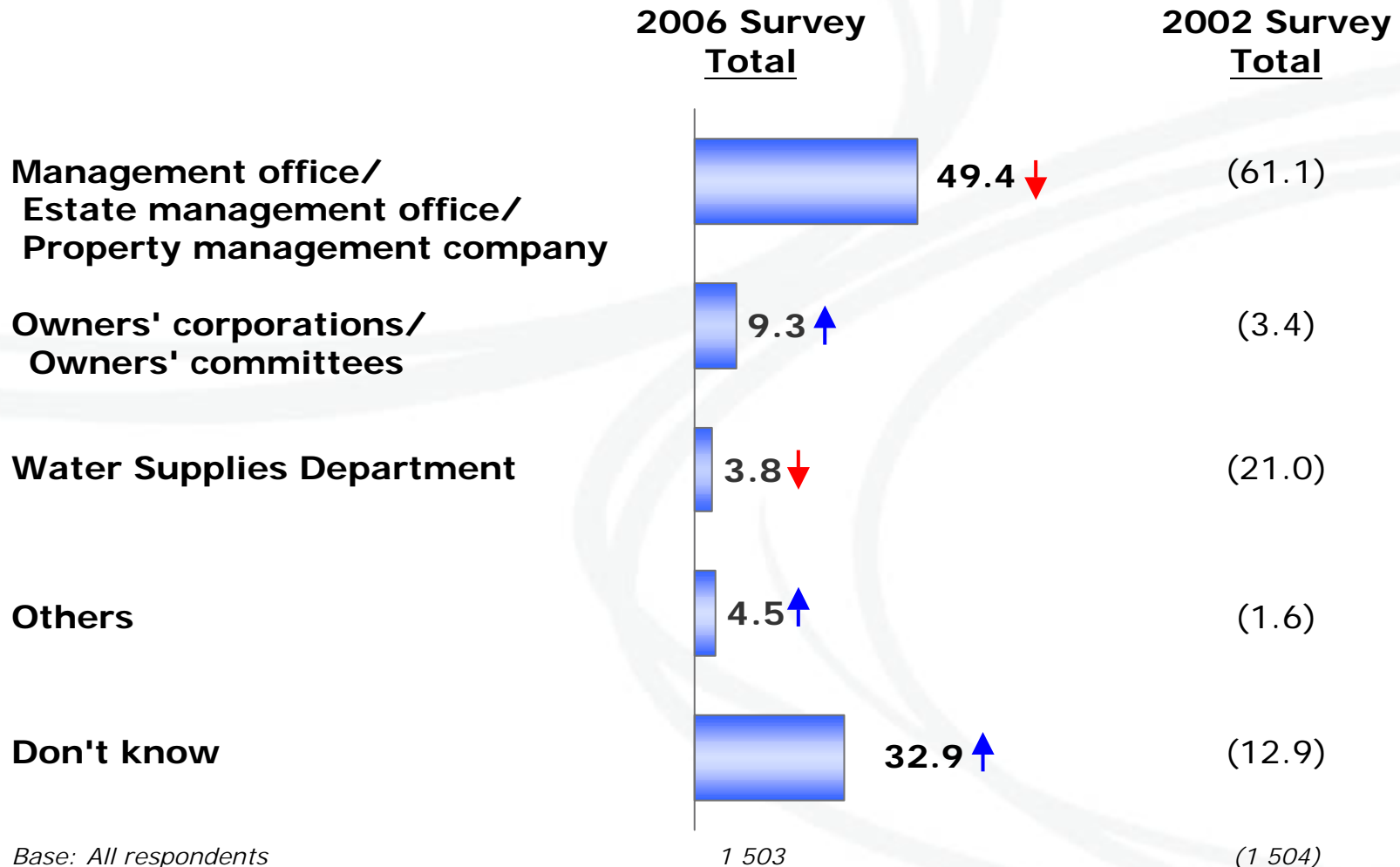
Notes: Multiple answers were allowed
' * ' denotes less than 0.5%
' - ' denotes 0%

Chart 6.1 Party perceived to be responsible for repair and maintenance of water supply installation/ facilities in buildings (%)



Ref.: C3

Domestic Customers



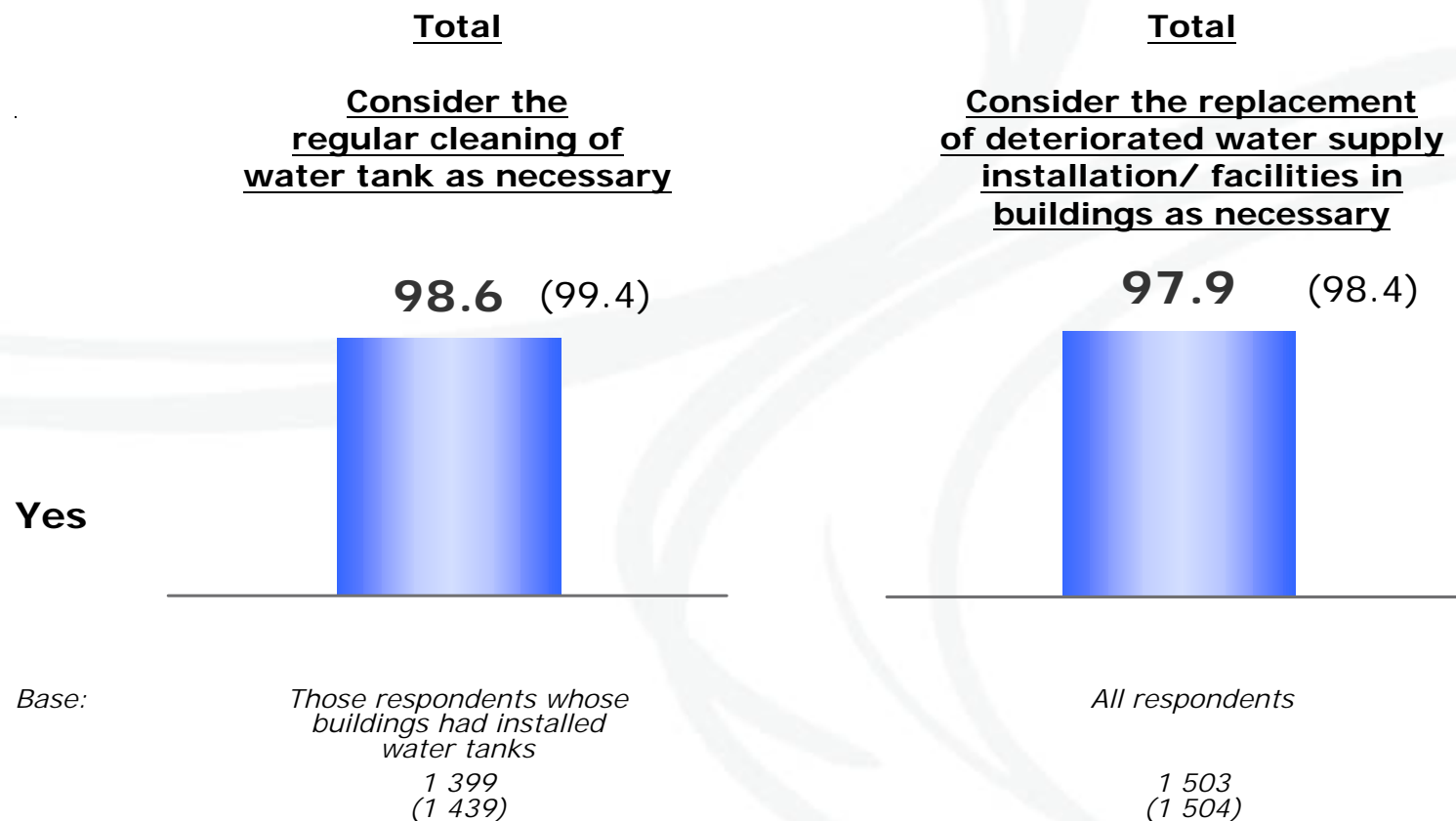
Base: All respondents

Figures inside () are the relevant data obtained in the 2002 Survey

↑/↓ Significant higher / lower than the 2002 Survey findings at 95% confidence level

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Domestic Customers



Figures inside () are the relevant data obtained in the 2002 Survey

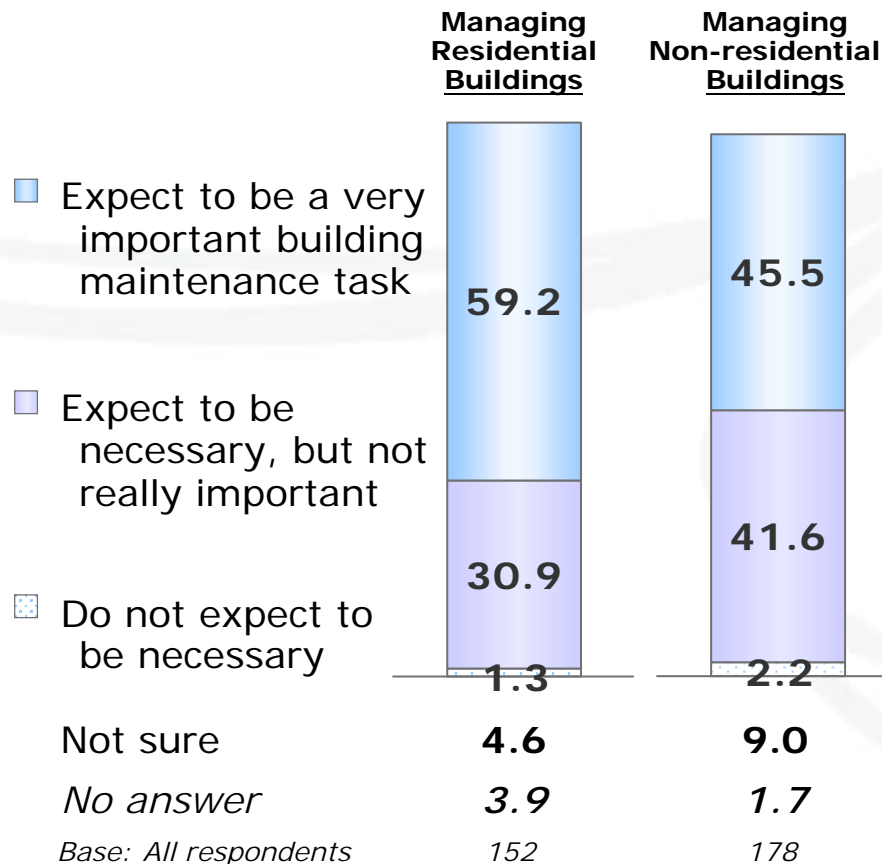
Chart 6.4 Perception of clients'/ residents' expectation on repair and maintenance of water supply installation/ facilities in buildings (%)



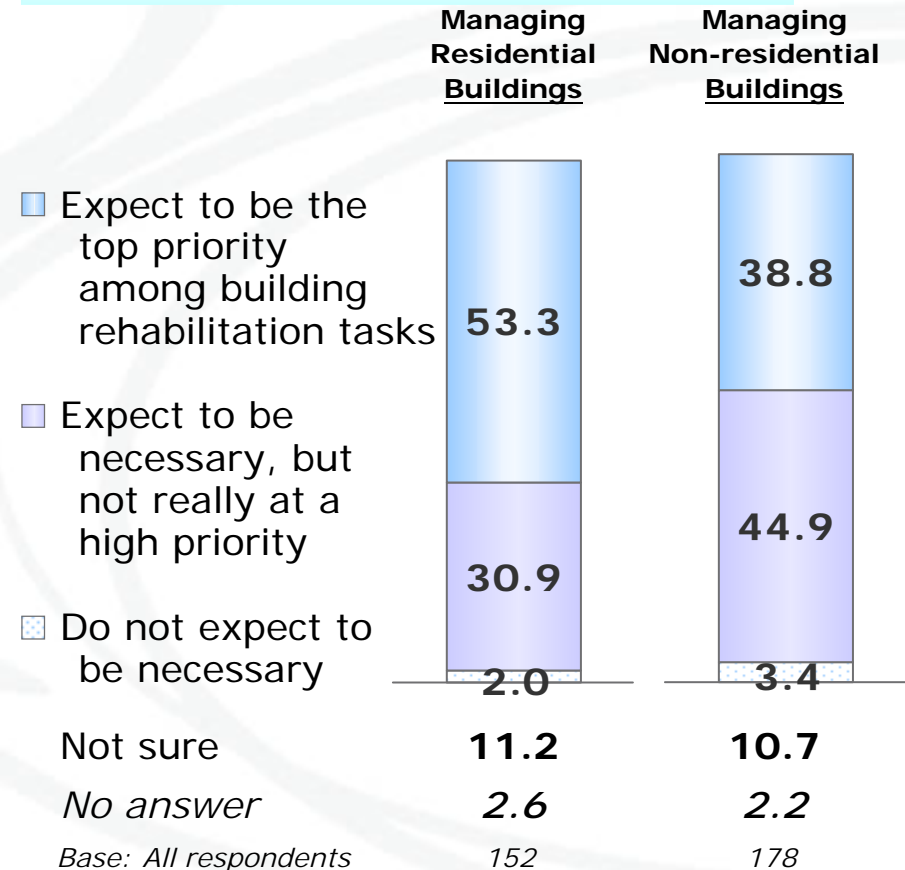
Ref.: C2, C3

Property Management Companies

Regular cleaning of water tank



Replacement of deteriorated water supply installations/ facilities

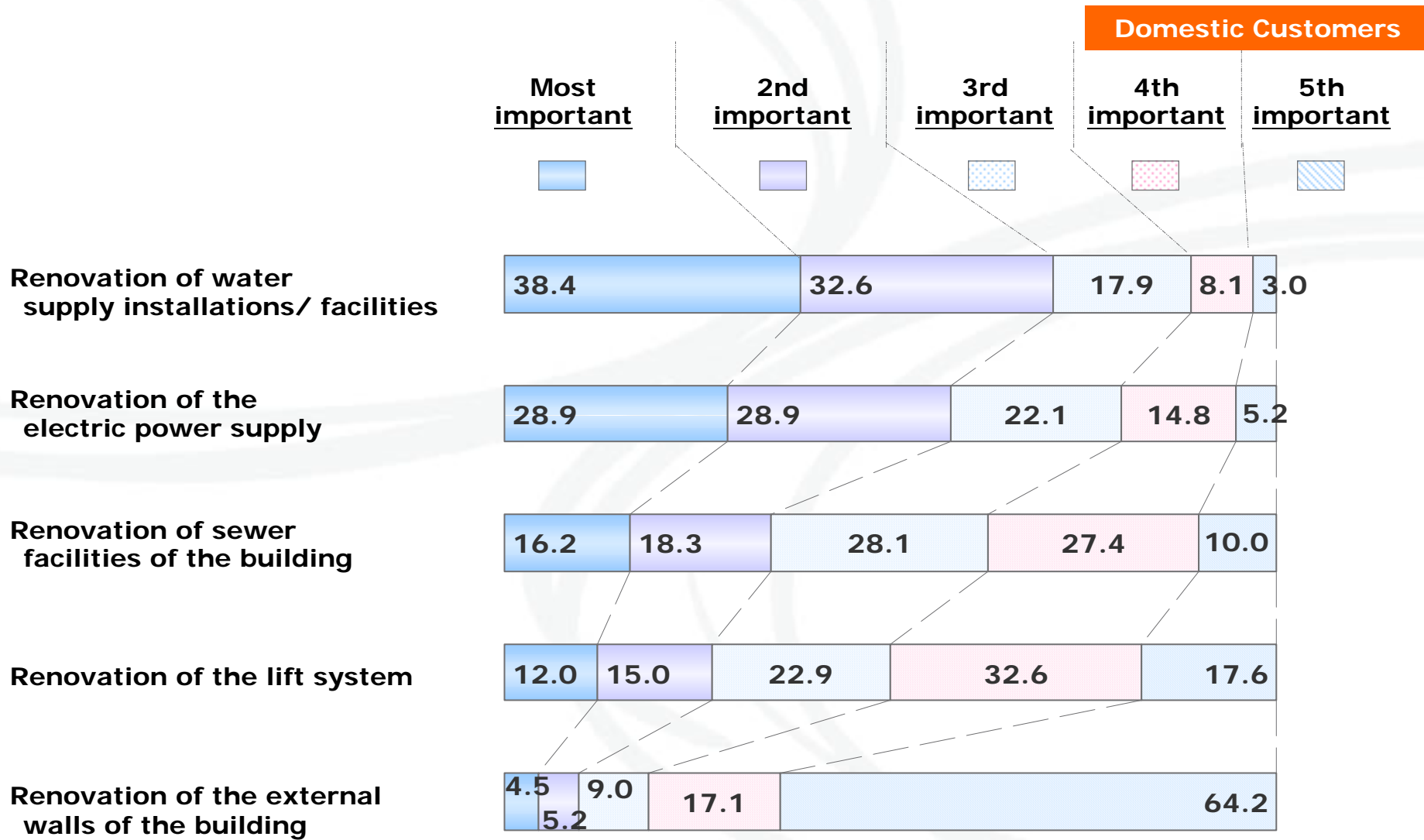


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Chart 6.5 **Priority of 5 large-scale building rehabilitation tasks**
from domestic customers' point of view (%)



Ref.: C8



Base: All respondents 1 503

Chart 6.6

Priority of repair and maintenance tasks of communal facilities from PMCs' point of view (%) – those managing residential buildings



Ref.: C4

Property Management Companies Managing Residential Buildings

Most important **2nd important** **3rd important** **4th important** **5th important** **No answer**

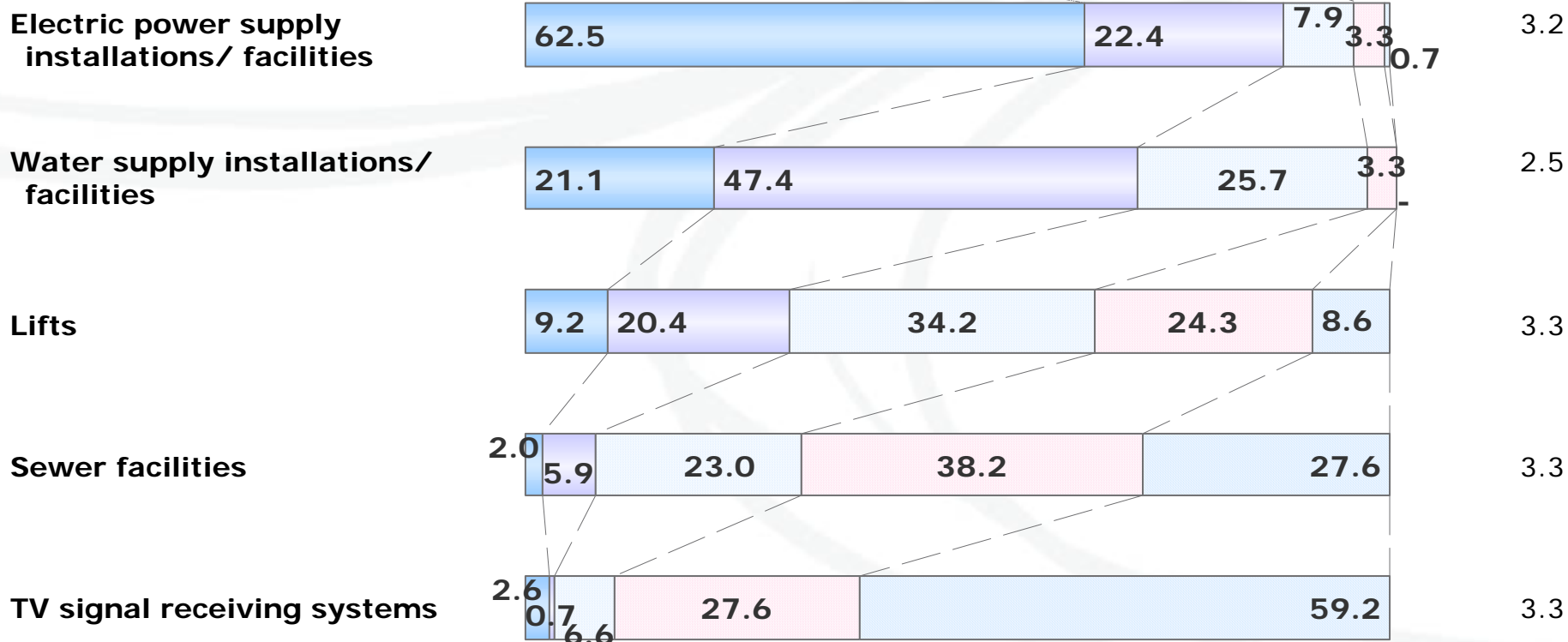


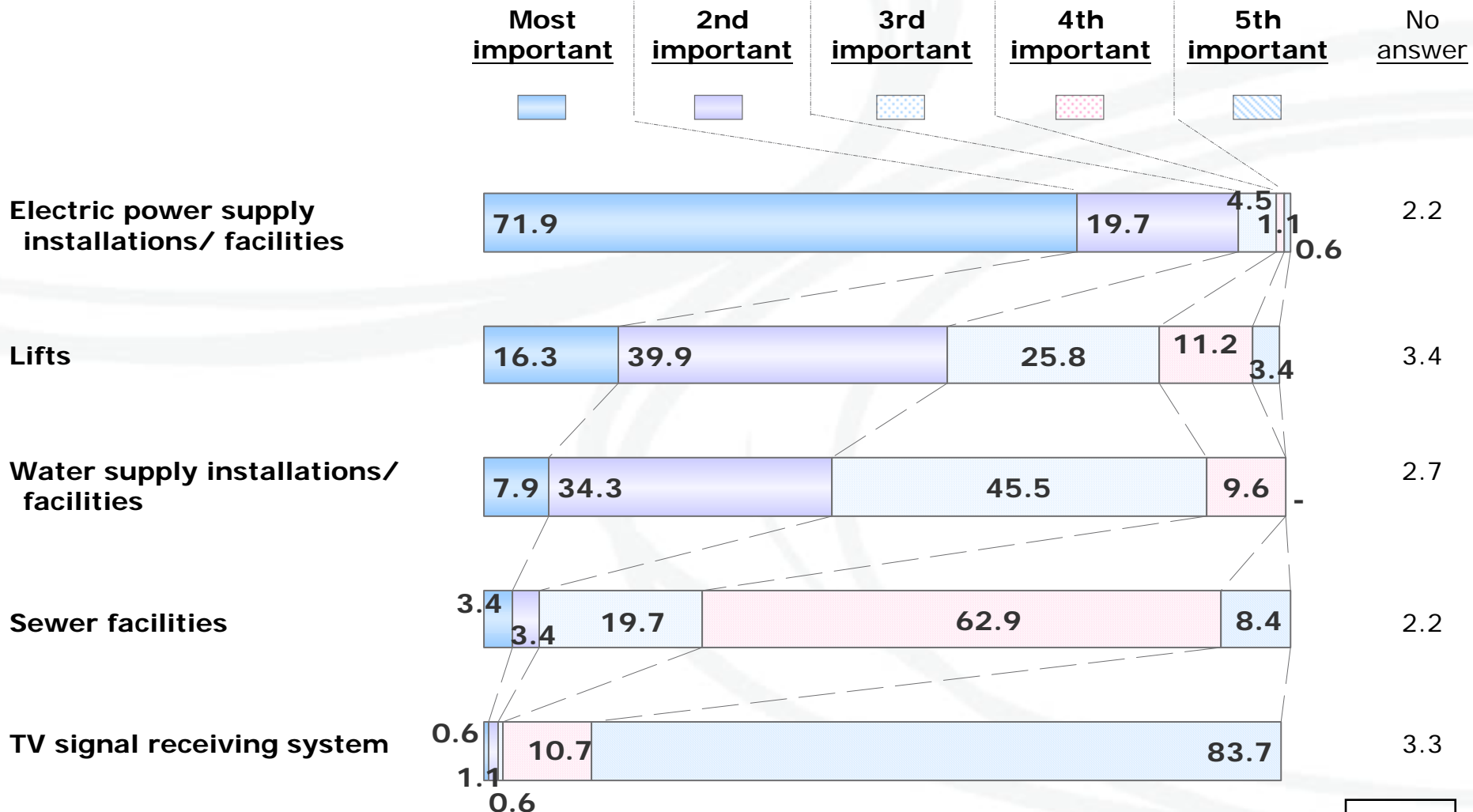
Chart 6.7

Priority of repair and maintenance tasks of communal facilities from PMCs' point of view (%) – those managing non-residential buildings



Ref.: C4

Property Management Companies
Managing Non-Residential Buildings



Base: All respondents

178

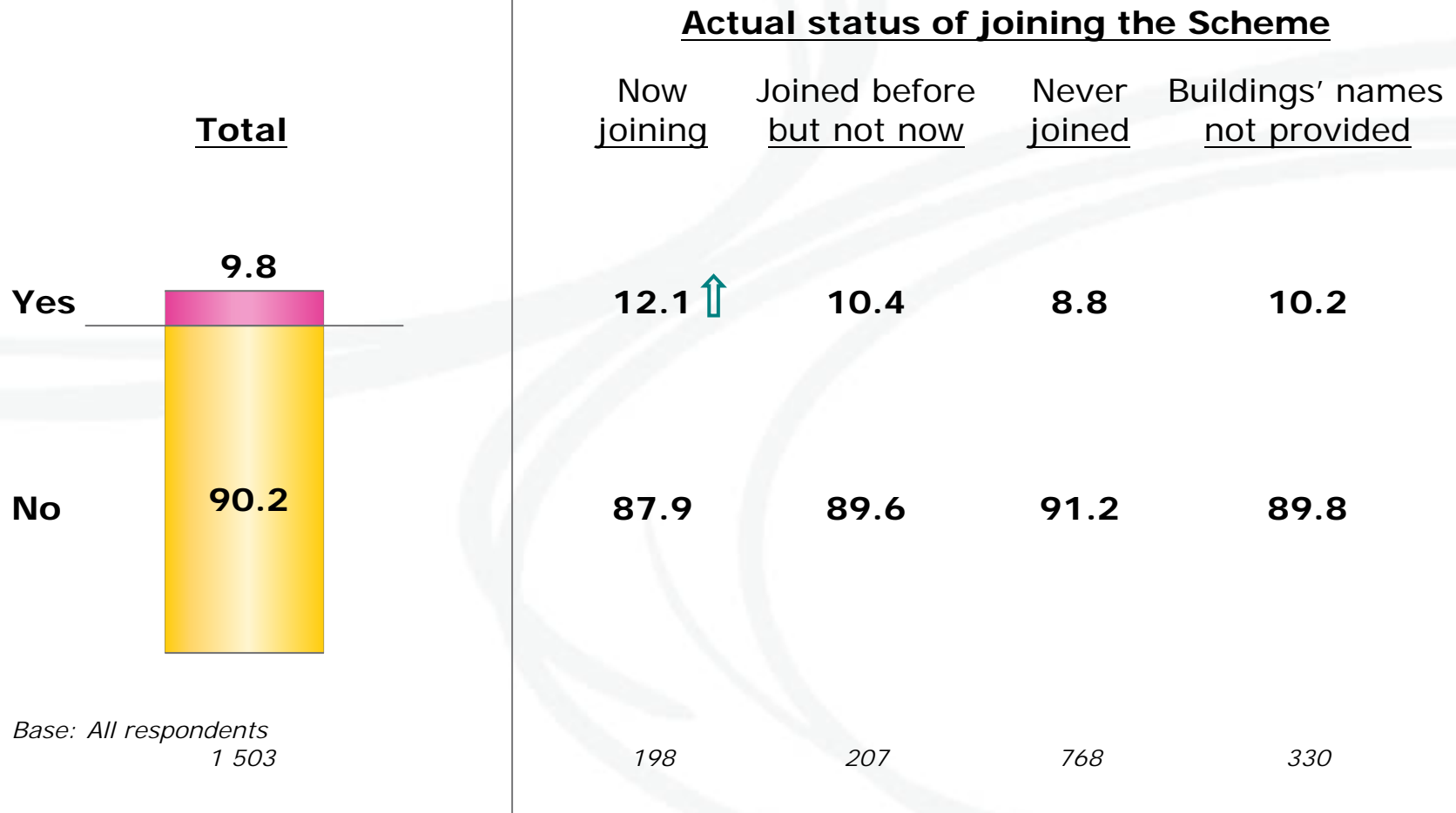
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Chart 7.1 Awareness of FWPQMRS (%) – Domestic Customers



Ref.: D1

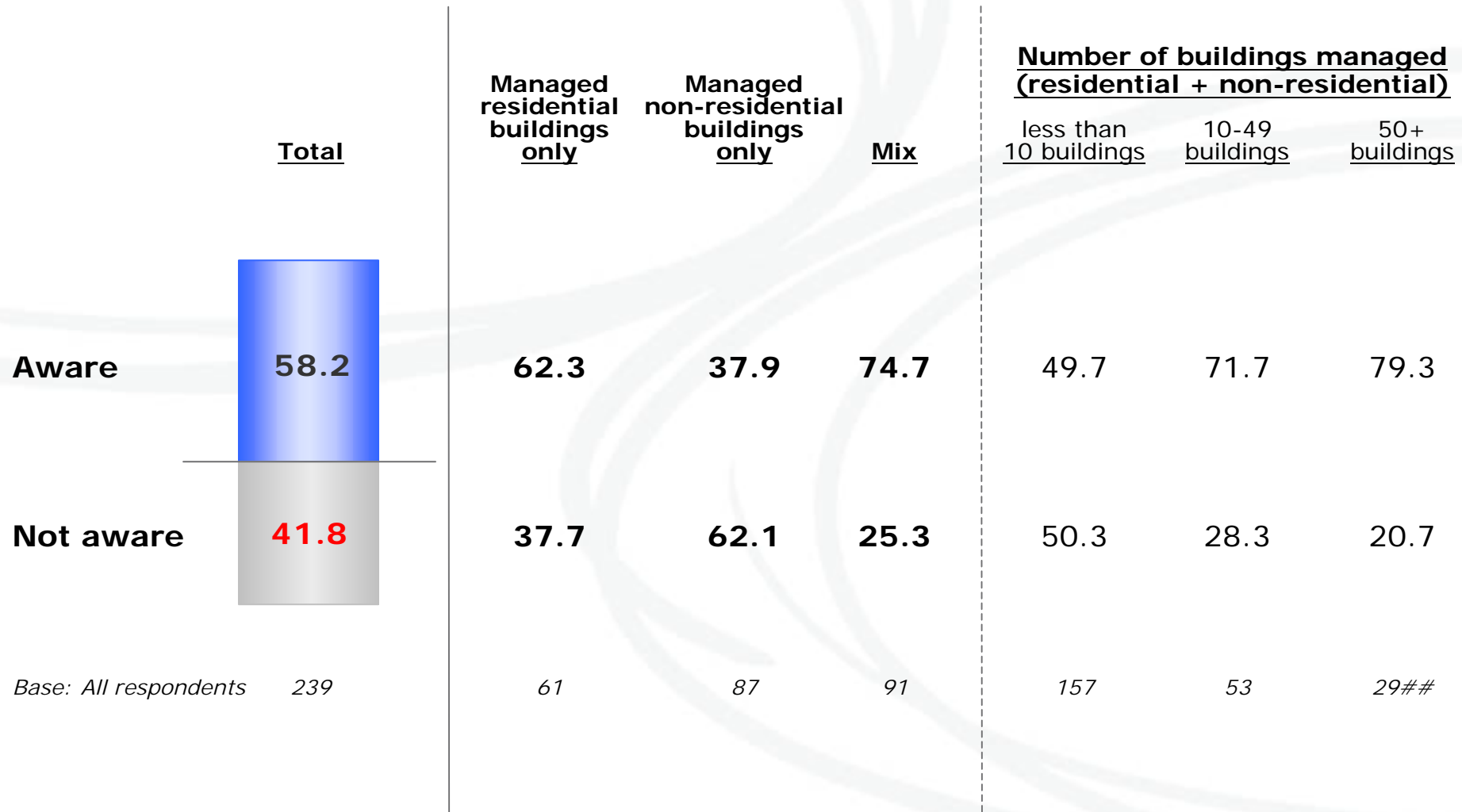
Domestic Customers



↑↓ Significant higher / lower than the total figure at 95% confidence level



Property Management Companies



very small base

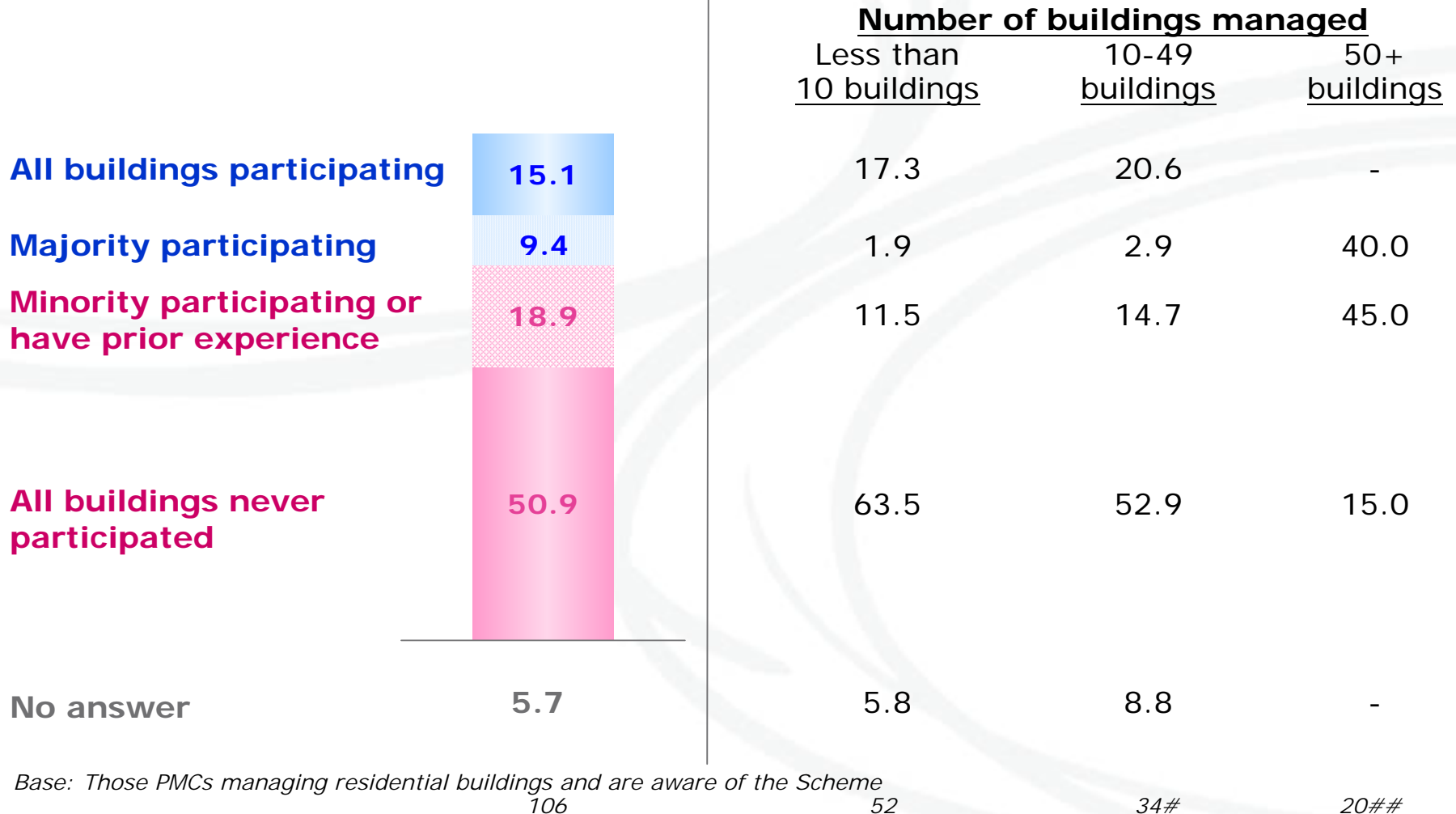
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Chart 7.5 Participation in FWPQMRS (%) - residential buildings managed by PMCs



Ref.: D1, D2

Property Management Companies Managing Residential Buildings



Notes: ' - ' denotes 0%
small base; ## very small base

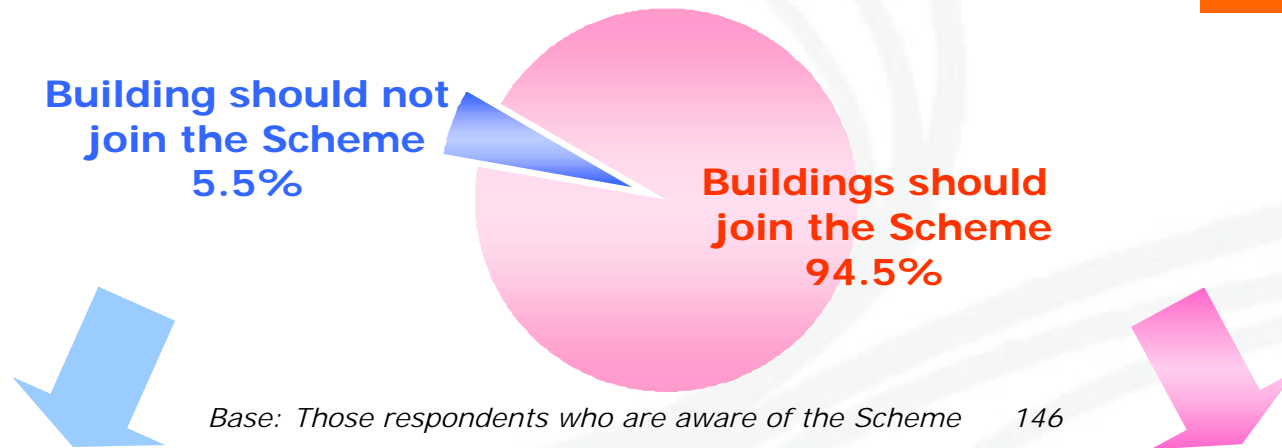
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Chart 7.7 Views of domestic customers on FWPQMRS



Ref.: D4, D5

Domestic Customers



Reasons for NOT JOINING the Scheme

	<u>%</u>
Water quality of the building is good enough	40.4
Application procedure is complicated	23.6
The Scheme will not help increase the value of the building	19.4
Need to pay too much for the repair and maintenance of the water supply installations/ facilities	10.3
Don't know	16.9

Base: Those respondents who considered that the building should not join the Scheme

very small base

Note: Multiple answers were allowed

Reasons for JOINING the Scheme

	<u>%</u>
Ensure the water quality of the building	63.7
Protect the health of the residents	20.8
Water quality of the building is not good	12.6
The Scheme will help increase the value of the building	4.7

Base: Those respondents who considered that the building should join the Scheme

137

Note: Multiple answers were allowed

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Chart 7.8 Disposition of PMCs towards FWPQMRS (%) – those managing residential buildings



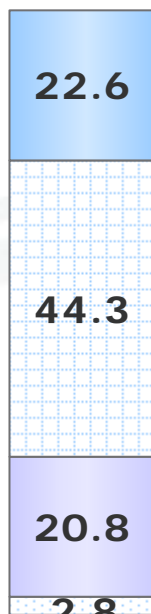
Ref.: D12

Property Management Companies

Residential buildings

Total

- ☒ In support of the Scheme and keen to encourage the clients/ residents to participate
- ☐ In support of the Scheme, but still will depend on the clients'/ residents' preference
- ☐ Taking no stance, all depend on the clients' / residents' preference
- ☐ Not in support of the Scheme, as no concrete benefits are expected



No answer

9.4

Status of joining the Scheme

All buildings never participated

Prior experience/ minority participating

>50% buildings currently participating

Number of buildings managed

less than 10 buildings

10-49 buildings

50+ buildings

9.3

25.0

53.8

21.2

20.6

30.0

40.7

65.0

38.5

36.5

47.1

60.0

35.2

5.0

-

26.9

20.6

5.0

3.7

-

-

3.8

2.9

-

11.1

5.0

7.7

11.5

8.8

5.0

Base: Those PMCs managing residential buildings and are aware of the Scheme

106

54

20##

26##

52

34#

20##

Notes: ' - ' denotes 0%
small base; ## very small base

Chart 7.9 Disposition of PMCs towards FWPQMRS (%) – those managing non-residential buildings



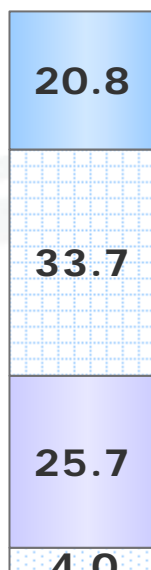
Ref.: D12

Property Management Companies

Non-residential buildings

Total

- ☒ In support of the Scheme and keen to encourage the clients/ residents to participate
- ☐ In support of the Scheme, but still will depend on the clients'/ residents' preference
- ☐ Taking no stance, all depend on the clients' / residents' preference
- ☐ Not in support of the Scheme, as no concrete benefits are expected



No answer

15.8

Status of joining the Scheme

All buildings never participated

Prior experience/ minority participating

>50% buildings currently participating

Number of buildings managed

less than 10 buildings

10-49 buildings

50+ buildings

5.2

25.0

76.5

19.7

16.7

42.9

43.1

58.3

5.9

30.3

44.4

42.9

32.8

8.3

-

30.3

16.7

-

5.2

-

-

3.9

-

14.3

13.8

8.3

17.6

15.8

22.2

-

Base: Those PMCs managing non-residential buildings and are aware of the Scheme

101

58

12##

17##

76

18##

7##

Notes: ' - ' denotes 0%
very small base

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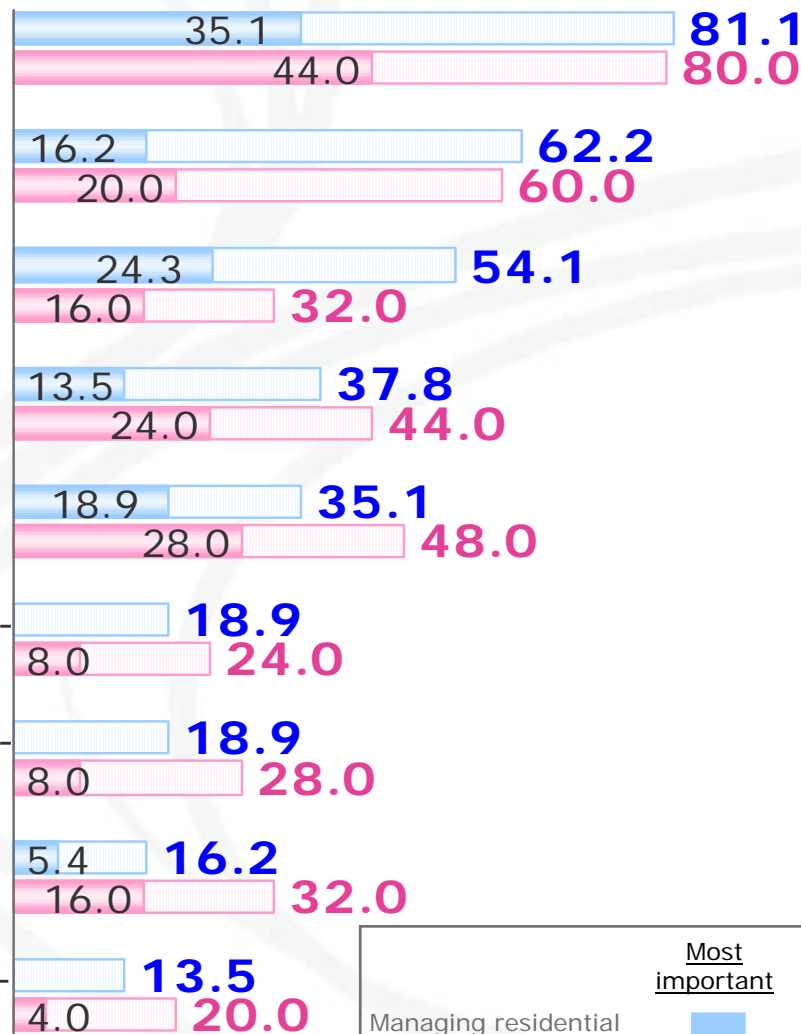
Chart 7.10 Reasons for participating in FWPQMRS (%)



Ref.: D3

Property Management Companies

- To strengthen the clients'/residents' confidence in the water quality
- To attain an objective certification on the water quality in buildings
- To enhance the water quality in buildings
- To enhance the corporate image of the property management company
- The repair and maintenance systems that are currently in place are up to the standard of the Scheme, easy to be awarded the certificates
- To support the Water Supplies Department on the Scheme
- Not involving much expenditure
- To increase the market value of the buildings
- Application procedures are simple



Base: Those PMCs that are currently participating in the Scheme

- managing residential buildings 37#
- managing non-residential buildings 25##

Notes: ' - ' denotes 0%

small base; ## very small base

	Most important	Most+second+third important
Managing residential buildings		
Managing non-residential buildings		

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Chart 7.12 Reasons for not renewing the certificates (%)



Ref.: D7

Property Management Companies

Repair and maintenance works will be carried out regularly anyway

29.4 64.7
42.9 71.4

Not willing to pay extra expenses

17.6 58.8
14.3 57.1

Application procedures are too complicated

11.8 29.4
14.3 57.1

Scheme not help increasing market value of the buildings

23.5
-

Being awarded the Scheme certificates does not mean that the tap water is suitable for direct drinking

11.8
-

Having confidence on water quality in buildings even without the certificates

5.9 5.9
-

Owners/ Owners' corporation not willing to renew/ participate

5.9 5.9
-

Guidelines/ requirements of the Scheme are too strict

- 14.3





Base: Those PMCs that have participated in the Scheme before but have not renewed

- managing residential buildings 17##

- managing non-residential buildings 7##

Notes: ' - ' denotes 0%

very small base

	Most important	Most+second+third important
Managing residential buildings		
Managing non-residential buildings		

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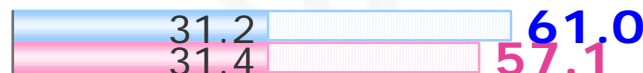
Chart 7.13 Reasons for not participating in FWPQMRS (%)



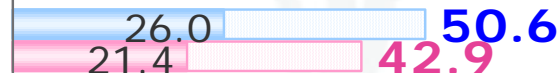
Ref.: D8

Property Management Companies

Repair and maintenance works will be carried out regularly anyway



Not willing to pay extra expenses



No manpower and time to spare to handle the application



Being awarded the Scheme certificates does not mean that the tap water is suitable for direct drinking



Application procedures are too complicated



Scheme not help increasing market value of the buildings



Not clear about the details of the Scheme



The Scheme would not help strengthening the clients'/ residents' confidence in the water quality in buildings



The water quality and the water supply installations/ facilities in buildings cannot meet the standard of the Scheme



Guidelines/ requirements of the Scheme are too strict



The Scheme would not help enhancing the corporate image of the property management company



Base: Those PMCs managing buildings that have not participated in the Scheme

- managing residential buildings 77

- managing non-residential buildings 70

Notes: ' - ' denotes 0%

	Most important	Most+second+third important
Managing residential buildings		
Managing non-residential buildings		

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